# COUNCIL MEETING

# ATTACHMENTS UNDER SEPARATE COVER

**7.00 PM, TUESDAY 20 MAY 2025**

Waverley Council
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# ATTACHMENTS

**CM/7.9/25.05 Waverley Development Control Plan 2022 (Amendment No. 5) and Solar Panels and Heritage Guidelines - Exhibition**



**CM/7.10/25.05 Walking Waverley - The Waverley Walking Strategy 2025-2035 - Exhibition**

# PART B GENERAL PROVISIONS

# B1 WASTE

This Part applies to all works requiring a development application (DA) and is to be read in conjunction with the waste minimisation and recycling clause in the *Waverley Local Environmental Plan 2012* alongside Council's relevant policies and guidelines.

**General Objectives**

(a) To support the delivery of the targets and outcomes of the adopted Council environmental action plan, relevant waste and resource recovery strategy, *Waste Avoidance and Resource Recovery Act 2001 and Protection of the Environment Operations Act 1997.* ~~Environmental Action Plan, the Waste and Sustainable Materials Strategy 2020-2041,~~ and the ~~*Waste Avoidance and Resource Recovery Act 2001* and the *Protection of the Environment Operations Act 1997*~~.
(b) To reduce the amount of waste generated and maximise resource recovery during the demolition, construction and ongoing management of a property.
(c) To facilitate safe and efficient waste and recycling collection from all premises.
(d) To ensure waste management, removal and disposal is in accordance with the relevant State Government Legislation.
(e) To support innovative and circular solutions for avoiding waste to landfill in the built environment.
(f) Minimise ongoing operational waste management costs to property owners, occupants, and the Council.
(g) Minimise developments' waste management and collection service impacts on occupants and surrounding areas.
(h) Reduce other impacts on occupants and surrounding areas related to waste management such as traffic congestion, truck movements, greenhouse gas emissions, noise from frequent collections.

**General Controls**

(a) The *Site Waste & Recycling Management Plan* (SWRMP) is to be submitted in accordance with the *Waverley Development Application Guide*.

## 1.2 ONGOING MANAGEMENT

**Objectives**

(a) To ensure new developments and changes to existing developments are designed to minimise waste generation and maximi~~s~~se resource recovery.
(b) To encourage waste storage facilities that are designed to enable the reuse of materials and source separation ~~for~~ to facilitate appropriate recycling.~~recovery~~
(c) To ensure waste and recycling systems are easy to use and complement Council's waste and recycling services.
(d) To promote safe practices for storage, handling and collection of waste and recycling.
(e) To prevent stormwater pollution that may result from poor waste and recycling storage and management practices.
(f) To ensure waste storage areas have sufficient volume, are easily accessible, safe, hygienic and are aesthetically incorporated into the design of the development.

(g) To prevent impacts to the environment that may result from the incorrect use of bins, litter, excess waste and illegal dumping.

(h) To minimise impacts of waste and waste bins presented on public land for collection on pedestrian and vehicle access, safety and amenity.

(i) To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste and recycling services.

**Controls**

(a) Development for the purposes of any of the following must comply with Part B1.3:

- Dwelling houses;
- Dual occupancies;
- Secondary dwellings;
- Semi-detached dwellings;
- Attached dwellings;
- Multi-dwelling housing.

(b) Development for the purposes of any of the following must comply with Part B1.4:

- All other residential accommodation not listed in (a) above;
- Tourist and visitor accommodation;
- Commercial development; and
- Any other development not listed in (a).

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## 1.3 LOW DENSITY RESIDENTIAL DEVELOPMENT

This section applies to development for the purposes of Dwelling houses; Dual occupancies; Secondary dwellings; Semi-detached dwellings; and/or Attached dwellings.

### 1.3.1 General Controls

(a) Details of ongoing waste management strategy are to be documented within a *Site Waste & Recycling Management Plan* (SWRMP).
(b) A waste and recycling storage area for each dwelling must be located on the relevant lot in a position convenient for both users and waste collection personnel.
(c) Sufficient space must be provided to accommodate the storage of waste and recycling likely to be generated on the premises between collections and any associated equipment.
(d) Waste and recycling receptacles must be stored at all times within the boundary of the site and screened from the public and commercial domains unless otherwise approved by Council under Section 68 of the *Local Government Act 1993*.
(e) All waste and recycling must be inside Council approved bins or skips, with lids closed to reduce littering, stormwater pollution, odour and vermin. Waste and recycling not presented in the correct manner will not be collected.
(f) Council will supply and service 140L and 240L bins.
(g) Organic waste should be either treated in a composting or worm farming system or collected separately ~~stored~~ in a Council approved bin or skip (refer to Annexure B1-5).
(h) Incineration devices are not permitted.

### 1.3.2 Amenity

(a) Waste and recycling storage areas must be visually and physically integrated into the design of the development.
(b) Waste and recycling storage areas must be designed and located to avoid adverse impacts on the amenity of adjoining sites including noise, odour and visual impacts.
(c) All waste and recycling receptacles must be put out for kerb-side collection no earlier than the previous evening.
(d) All waste and recycling receptacles must be removed from the kerb-side or laneway as soon as possible on the same day as the collection service.

### 1.3.3 Ongoing Management

(a) Ongoing management of the property is to be in accordance with the approved SWRMP to ensure that appropriate waste and recycling services are provided.
(b) Waste generated by a development must not exceed the maximum permitted generation rates for the building use.

## 1.4 ALL OTHER DEVELOPMENT

This section applies to development for the purposes of the following: all residential accommodation not affected by *1.3 Low Density Residential Development* above; Tourist and visitor accommodation; Commercial development; and/or any other development.
Please note that:

- Backpacker accommodation is a commercial property use and requires a commercial waste service.
- Boarding houses/time shares/co-living housing, serviced apartments, retirement village, and independent living are residential uses and require a domestic waste service, incurring a Domestic Waste Charge.

### 1.4.1 Waste Storage Areas

#### 1.4.1.1 GENERAL CONTROLS

(a) Details of ongoing waste management strategy are to be documented within the SWRMP and reviewed every 5 years (or earlier when needed) to employ updated waste reduction strategies and technologies.

(b) Sufficient space must be provided to accommodate the storage of waste and recycling likely to be generated on the premises between collections and any associated equipment. Minimum waste and recycling generation rates for various commercial and residential developments are provided in Annexure B1-2.

(c) Ensure bins can be placed side-by-side and can be easily manoeuvred (no stacking).

(d) Bin-carting route from the storage area to the collection point is safe and convenient with no steps or steep gradients.

(e) Waste storage rooms or areas are to be easily accessible by residents and users of the waste system (<30 m from collection point).

(f) Waste rooms are not to be used for any purpose other than the storage of waste and/or waste infrastructure.

(g) Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.

(h) Waste and recycling receptacles must be stored at all times within the boundary of the site and concealed from the public and commercial domains unless otherwise approved by Council under Section 68 of the *Local Government Act 1993*.

(i) All waste and recycling must be inside Council approved bins or skips, with lids closed to reduce littering, stormwater pollution, odour and vermin. Waste and recycling not presented in the correct manner will not be collected.

(j) Council will supply and service 140L, 240L and 660L bins. The use of 660L bins will only be considered where:

  (i) The collection point has enough space to present 660L bins without impacting pedestrian access to the footpath and/or driveway of the development;

  (ii) The collection point is level; and,

  (iii) Council waste collection vehicle can access the collection point either within the property boundary or at the kerb-side and the collection point meets requirements in Annexure B1-3.

(k) For developments with 20 dwellings or more, or mixed-~~-~~use developments with more than 200sqm of commercial floor space and a minimum of 10 residential dwellings, advice must be obtained from a waste management consultant to incorporate optimal waste storage and management solutions that recover as much material as possible. Such solutions can be in the form of compactors, chute systems, and/or problem waste storage and collections. Strategies for waste minimisation, and the reduction of waste storage space are to be outlined in the SWRMP.

(l) Additional space in the bin room is required for waste compactors, chutes, and other infrastructure to easily manoeuvre bins.

(m) Any volume reducing equipment must be installed in accordance with the manufacturer's design specifications and have a space between the unit and the walls to enable easy access for cleaning and maintenance. Compaction rates must not be set higher than 2:1.

(n) Organic waste should be either treated in a composting or worm farming system or collected separately ~~stored~~ in a Council approved bin or skip (refer to Annexure B1-5).

(o) Incineration devices are not permitted.

(p) Waste and recycling storage rooms must be:

(i) Enclosed to prevent noise, odour and visual impacts;

(ii) Designed to store the entire set ~~fleet~~ of bins plus 0.2m between bins to allow adequate manoeuvrability;

(iii) Designed with a 1.8m unobstructed clearance zone between the stored bins and the entrance for access and manoeuvrability;

(iv) Designed with suitable door and corridor access to enable bin movement;

(v) Constructed of concrete or other approved materials at least 75mm thick;

(vi) Finished with a smooth even surface to be easily cleaned;

(vii) Coved at the intersection with walls and plinths with a ramp to the doorway where necessary;

(viii) Graded and drained to the sewerage system and approved by Sydney Water;

(ix) Fitted with a close fitting and self-closing door that can be opened from within the room;

(x) Designed with adequate lighting and natural/mechanical ventilation;

(xi) Fitted with smoke detectors in accordance with the relevant Australian Standards.

(xii) Equipped taps supplying hot and cold water, mixed through a centralised mixing valve with a hose cock and fitted with an aerator to increase water efficiency;

(xiii) Designed to include a clear and easy-to-read "NO STOPPING" sign and "DANGER" sign on the external face of waste storage rooms where appropriate;

(xiv) Designed to ensure waste-water from the cleaning of the waste storage area and bins, is not to drain into the stormwater system; and

(xv) Fitted with childproof compacters or mechanical devices where used in the storage of waste.

### 1.4.1.2 ADDITIONAL CONTROLS RELATING TO RESIDENTIAL COMPONENTS OF DEVELOPMENT

(a) A room or caged area with a minimum floor space of 4m$^2$ must be provided for the storage of discarded bulky items, awaiting collection. The doorway of this storage area must be at least 1.5m. The following minimum floor space requirements apply:
  (i) Between 6 and 20 units: 4m$^2$
  (ii) Between 21 and 40 units: 4m$^2$ +1m$^2$ for every 10 additional units above 20 units
  (iii) Between 41 and 100 units: 8m$^2$ + 1m$^2$ per 20 additional units above 40 units
  (iv) Over 101 units: 12m$^2$ +1m$^2$ per 50 additional units above 100 units

(b) Additional space is required for recycling problem waste such as textiles or electronic waste. The minimum floor space required is 1 m$^2$ per 50 units to a maximum 2m$^2$. This space should be within or attached to the waste storage area.

(c) Developments containing more than 3 habitable storeys must:

  (i) Provide a system for convenient transportation of waste and recyclable material to the communal waste and recycling storage area; Provide a waste and recycling compartment/area on each floor with sufficient capacity to store at least 1 day volume of waste and recycling likely to be generated on that floor; and

  (ii) Where a chute system is provided, the ~~both~~ waste chute for garbage material, and an area for bins relating to ~~bins~~ for separated recycling and organic materials must be located ~~stored~~ together in an allocated communal waste and recycling area on each floor.

(d) Waste, recycling and ~~garden~~ organics receptacles must be stored at all times within a building in a designated storage room. Exceptions can be made:
  (i) Where storage space is available at the side or back of the building, away from public accessibility, and the area can be screened from public and commercial domains; or
  (ii) Where the storage area at the front of the property is completely enclosed with no risk of public accessibility.
  (III) If a waste storage area is outside of the building, the design must complement the primary building and the storage location must be >1m from windows and balconies.

### 1.4.1.3 ADDITIONAL CONTROLS RELATING TO COMMERCIAL COMPONENTS OF DEVELOPMENT

(a) All new developments are to provide adequate storage for waste to accommodate future change of use, including increased waste generation rates and grease traps.

(b) If the commercial use of the property is undecided, minimum waste and recycling generation rates must be applied as per Annexure B1-2.

(c) Kitchens, office tea rooms, and the like are to be designed with sufficient space for the interim storage of recyclable, organic and general waste in separate receptacles.

(d) A waste service compartment (waste and recycling area) is to be provided on each floor of the building and have sufficient capacity to store at least 1 day's volume of waste and recycling likely to be generated on that floor.

(e) A minimum of 2m$^2$ floor space for developments under 100m$^2$ and 4m$^2$ floor space for developments over 100m$^2$ must be allocated within the building for the

storage of reusable items such as crates and pallets, and bulk waste such as cardboard or soft plastics.

(f) Separate space must be allocated for the storage of trade wastewater (within the building where applicable). Trade wastewater must be managed in accordance with a Sydney Water permit and any pre-treatment equipment such as grease traps must meet Australian standards and be properly installed and maintained.

(g) Liquid waste from grease traps must only be removed by licensed contractors approved by Sydney Water and NSW EPA.

(h) Waste cooking oil must be stored in sealed containers and stored in a bunded area (an area where leaking oil can't escape). Space must be allocated to store the waste cooking oil and the location must be in an area easily accessible to the oil recycler for servicing.

(i) For commercial premises that generate 20% or more food waste, or other waste which is considered by Council to have potential amenity impacts, a daily ~~general~~ waste or organic[1] collection is required ~~(depending on timing in relation to the State Government mandate) ,~~ unless an alternative is agreed upon with Council.

(j) For premises that use 660L bins or larger bins, the bins must be lockable and have wheels with working brakes.

(k) All commercial kitchens in cafes and restaurants or similar must include space for a dishwasher to ensure plates, cutlery and crockery can be washed to reduce reliance on single use items.

~~(k)~~(l) All relevant commercial businesses subject to the requirement of the separation and collection of organic materials, must abide by the relevant State Government mandate per the *Protection of the Environment Operations Act 1997*. ~~(FOGO Recycling Bill 2025).~~

#### 1.4.1.4 ADDITIONAL CONTROLS RELATING TO ALL MIXED-USE DEVELOPMENT

(a) In addition to the relevant application of controls from B1.3.3, this section also applies to any mixed use development.

(b) There must be at least two separate waste and recycling storage rooms or areas, one for commercial waste and recycling, and one for residential waste and recycling. Storage rooms are to be self-contained and have separate keys and locking systems. A separate bulky waste storage room is also to be provided for residents that is inaccessible to commercial premises.

(c) Mixed-use developments that require the equivalent of 20 x 240L of Mobile Garbage Bins to store their waste and recycling must organise onsite collection or a wheel in/out service.

### 1.4.2 Access and Collection

#### 1.4.2.1 GENERAL CONTROLS

(a) Waste and recycling storage areas must be located in a position convenient for both users and waste collection personnel.

~~(b)~~ The path for bins between the waste and recycling storage area and the vehicle collection point must be free of steps, narrow gates, vegetation, stepping-stones, loose material, ~~and~~ kerbs, and not exceed a grade of 1:14 at any point.~~.~~

[1] Pending the rollout of the NSW Government FOGO mandate for Waverley Council.

~~(c)~~(b) Multi-residential and mixed-use development with more than 20 residential units must accommodate an on-site domestic waste collection service.

~~(d)~~(c) Access roads must comply with the Building Code of Australia, all relevant Australian Standards and *Annexure B1-3*.

### 1.4.2.2 ADDITIONAL CONTROLS RELATING TO ON SITE WASTE COLLECTION

(a) On-site waste collection is to be accommodated within a basement or at grade within the building from a dedicated collection point or loading bay that does not impede pedestrian, cycleway, or vehicle movement.

(b) The on-site waste collection must be designed to allow collection vehicles to enter and exit the property in a forward direction and must have adequate vehicle clearance. Exceptions may be considered where the collection vehicle can back into a driveway safely without impeding pedestrian or vehicle access.

(c) The on-site waste collection loading point is to comply with the provisions of *Annexure B1-3*.

(d) The on-site waste collection point may be the same as, or separate to, the waste storage room. Unimpeded and level access is to be provided between the waste collection point and the loading bay.

(e) The on-site waste collection point is to be of a sufficient size to store all bins to be collected without interruption to the functioning of the development.

(f) The on-site waste collection point must include a bulky household waste collection point separate (or next to) to the bin collection point.~~.~~

### 1.4.2.3 ADDITIONAL CONTROLS RELATING TO WHEEL-IN AND WHEEL-OUT COLLECTION SERVICE

A wheel-in and wheel out service is subject to approval by Council and will only be approved where on-site collection is deemed not feasible for the premises. Council will consider providing wheel-in, wheel-out collection service for residential bins and bulky household waste under the following (but not limited to) circumstances:

(a) The presentation of the bins at the property would impact on pedestrian access or other safety issues;

(b) A roller door or similar to access the bin room or a temporary holding area is available on the boundary of the property where the bins would be collected from;

(c) There is a maximum of 15~~8~~m between the designated Council waste collection vehicle access point and designated collection point;

(d) Collection point is accessible from the street, including from a driveway or a designated parking area;

(e) The waste collection point does not impede traffic or pedestrian flow whilst engaged in the collection of bins/bulky waste;

(f) Council waste collection vehicle access is available either within the property boundary or street access and meets requirements in Annexure B1-3; and,

(g) The path for bins between the designated bin storage area and the vehicle collection point must have a flat surface and be free of steps, narrow gates, vegetation, stepping-stones, and loose material.

### 1.4.3 Amenity

#### 1.4.3.1 GENERAL

(a) Waste and recycling storage areas must be visually and physically integrated into the design of the development.
(b) Waste and recycling storage areas must be designed and located to avoid adverse impacts on the amenity of adjoining sites including noise, odour and visual impacts.
(c) All waste and recycling receptacles must be put out for kerb-side collection no earlier than the previous evening.
(d) All waste and recycling receptacles must be removed from the kerb-side or laneway as soon as possible on the same day as the collection service.

### 1.4.4 Management

#### 1.4.4.1 GENERAL CONTROLS

(a) A current copy of the approved SWRMP is to be ~~stored on site and~~ available to the- building manager and owner's corporation at all times.
(b) Ongoing management of the property is to be in accordance with the approved SWRMP to ensure that appropriate waste and recycling services are provided.
(c) Waste generated by a development must not exceed the maximum permitted generation rates for the building use.
(d) Where a change of use, change of tenant or change in waste management practices will result in a variation to the SWRMP, an application is to be made to Council to revise the approved SWRMP.
(e) The SWRMP must identify responsibility for:
    (i) cleaning of waste receptacles and storage areas
    (ii) for transfer of bins within the property, to the collection point and back to the storage areas.
    (iii) regular monitoring of bins for contamination and educating residents on how to use the waste and recycling services
    (iv) inspect, maintain and repair all waste management equipment, such as chutes, bin lifts, compactors and other equipment
    (v) liaising with the council or the collection contractor on waste management issues and service requests.
(f) Clear and easy to read signs identifying the different waste receptacles and where in the storage area these should be positioned must be displayed.

(g) The building manager or owner's corporation is to review every 5 years (or earlier when needed) the methods for waste storage, treatment and collection and implement any relevant changes to reduce waste and increase recycling.

### 1.4.4.2 ADDITIONAL CONTROLS RELATING TO COMMERCIAL COMPONENTS OF DEVELOPMENT

(a) All businesses must have written evidence~~, held on site,~~ of a valid and current contract with a licensed collector of waste and recycling.

~~(a)~~(b) The evidence must include details of each bin size and frequency of collection of each waste stream.

~~(b)~~(c) The management of waste and recycling ~~management~~ (including organic collection and/or composting) and any collection system for other waste material, ~~along with allocated responsibilities~~ should be clearly outlined in contracts with cleaners, building managers and tenants, along with allocated responsibilities, and included in the SWRMP.

# B2 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

This Part applies to all development in the Waverley LGA.

Waverley Council is committed to the highest standards of environmental performance and stewardship of our local area. Council has established long-term environmental targets for Council and Community, covering greenhouse emissions, transport, climate resilience, urban ecology, water management and the sustainable management of waste and materials. Our targets are informed by the best available science and support Ecologically Sustainable Development (ESD) through the following objectives:

- Reducing greenhouse gas emissions to net zero;
- Increasing the use of renewable energy sources;
- Conserving water resources;
- Reducing reliance on mains water supply through the collection and treatment of rainwater and greywater;
- Adapting and responding to climate change to reduce community vulnerability to local climate change impacts and managing climate risks;
- Reducing waste during construction and the ongoing use of the building;
- Increasing recycling of waste and use of recycled products;
- Reducing the environmental impact from building materials through the reduction, re-use and recycling of materials, resources and building components;
- Protecting and improving local biodiversity of sites and surrounding areas.

Residential Development and BASIX

*State Environmental Planning Policy (Sustainable Buildings) 2022* ~~*(Building Sustainable Index: BASIX) 2004*~~ applies to residential developments only and aims to ensure homes or apartments are designed to minimise potable water usage and energy usage.

An applicant is required to lodge a BASIX certificate with their development application with Council for:

- New residential buildings;
- Alterations and additions to existing residential buildings where the estimated construction cost of the work is more than $50,000 and where development approval is required; and
- New swimming pool (or pool and spa) with a capacity of 40,000 litres or more.

More information is available at the following link: https://www.planningportal.nsw.gov.au/development-and-assessment/basix

Mandatory Commercial Building Disclosure

In 2010 the Australian Government implemented a Mandatory Commercial Building Disclosure program under the *Building Energy Efficiency Disclosure Act (2010)*. This program applies to commercial buildings with a net lettable floor area of 1,000sqm or more, and requires owners to disclose energy efficiency information to purchasers and lessees when the space is to be sold, leased or subleased. More information is available from the Australian Government's Department of Industry, Science, Energy and Resources (or equivalent).

## Ecologically Sustainable Development B2

**Objectives**

(a) To encourage applicants to apply principles and processes that contribute to ecologically sustainable development (ESD) in Waverley.
(b) To ensure that the design, construction and operation of development minimises adverse impacts on the natural and built environment.
(c) To improve the quality of life, health and wellbeing of residents and workers.
(d) To ensure that all development will reduce water consumption and can reduce greenhouse gas emissions to net zero.
(e) To encourage the replacement of intensive carbon power sources with low carbon and renewable energy.
(f) To improve indoor air quality.
(g) To ensure that waste will be reduced and to increase the use of products from recycled sources
(h) To reduce the environmental impact from building materials through reduction, re-use and recycling of materials, resources and building components
(i) To reduce urban heat island effect by maintaining and increasing tree canopy, permeable surfaces and deep soil.
(j) To reduce greenhouse gas emissions from the construction of developments.
(k) To respond to and prepare for changes in the climate and resource consumption.
(l) To ensure that development can adapt to climate change.
(m) To improve local biodiversity.
(n) To accommodate changing technologies in the design of developments that will provide sustainability outcomes in the built environment for future users.

**Controls**

1) A Statement of Environmental Effects is required to outline how the objectives of ecologically sustainable development will be achieved

## 2.2 WATER CONSERVATION

Council is strongly committed to conserving water and improving water quality, in order to enhance water security under climate change, protect our waterways and support cooling and greening in Waverley.

Residential developments should implement measures to actively reduce potable water consumption. Residential water conservation measures are required under the State Environmental Planning Policy (Building Sustainable Index: BASIX) 2004.

**Objectives**

(a) To encourage sustainable water use practices.
(b) To reduce the use of potable water.
(c) To encourage on-site water detention to prevent wastewater and runoff from entering waterways.

**Controls**

(a) Rainwater tanks connected to outdoor use and toilets and laundry are strongly encouraged for all residential developments.
(b) Rain tanks must be fitted with a first-flush device that causes initial run-off rainwater to bypass the tank, and
(c) Rain tanks must be fitted with a screened rain head designed to prevent leaf litter entering into the water tank, and
(d) Leaf-shedding grills fitted over gutters and downpipes to increase efficiency of rainwater collection are encouraged, and
(e) All rainwater tanks plumbed for internal water use must have a filter installed to prevent sediment from entering toilets and washing machines, and
(f) Pumps attached to the development must be housed in an enclosure that is soundproofed, and
(g) Rain tanks must have its overflow connected to an existing stormwater drainage system that does not discharge to an adjoining property, or cause a nuisance to adjoining owners
(h) Rain tanks must have a sign affixed to it stating the water in it is rainwater

**Design Guidance**

For more information about rainwater tanks and water conservation refer to:
~~https://www.basix.nsw.gov.au/iframe/~~
http://www.yourhome.gov.au/water/rainwater
~~http://yourenergysavings.gov.au/water~~

## 2.4 RENEWABLE ENERGY AND ENERGY EFFICIENCY

Waverley Council has set an ambitious target to reduce community greenhouse emissions to net zero by 2035. In order to meet this reduction target, all new homes are required to have future capacity to be an all-electric building, powered only by renewable energy.

To achieve net zero by 2035, installing natural gas appliances in new developments is not recommended.

Fluorescent and compact fluorescent lamps contain small amounts of mercury, a highly toxic agent which bioaccumulates in the environment. Recycling rates of fluorescent lamps are as low as 2% (Environment Victoria, 2022). For this reason, Waverley Council supports energy efficient alternatives to fluorescent lamps, such as Light Emitting Diodes (LEDs).

Energy efficiency measures for new residential developments are stipulated under the State Environmental Planning Policy (Building Sustainable Index: BASIX) 2004. Commercial energy efficiency measures are stipulated under the National Construction Code Section J.

**Objectives**

(a) To enable all development to contribute to net zero greenhouse emissions by 2035.
(b) To reduce the energy demand of all developments.
(c) To ensure a building can be 100% powered by renewable energy.
(d) To encourage the installation and use of renewable energy technologies to reduce greenhouse emissions and peak demand.
(e) To ensure development takes into consideration neighbouring solar technologies in the design of the building.

**Controls**

Solar photovoltaic system and battery

(a) The installation of photovoltaic panels with battery storage is strongly encouraged in all developments.
~~(a)~~(b) Developments proposing to install photovoltaic panels in heritage conservation areas must refer to the Heritage on Solar guidelines on Council's website.

Domestic hot water

~~(b)~~(c) An electric hot water system is strongly encouraged in all developments. Recommended systems include:
- Electric heat pump (most efficient)
- Solar thermal with electric boost (most efficient)
- Electric storage

## Ecologically Sustainable Development B2

Where a gas hot water system is proposed, specific inclusions shall be provided so that an electric hot water system can be easily retrofitted in the future. See **Design Guidelines** below for recommended requirements for different building types.

Swimming pool heating

~~(c)~~(d) Recommended swimming pool heating systems include:

- Solar thermal only
- Solar thermal boosted with electric heat pump
- Electric heat pump

Gas cooking and space heating

~~(d)~~(e) Gas cooktops, gas ovens and gas space heating systems are not permitted in residential development as outlined is WDCP *Part 2.3 Indoor Air Quality*.

Solar access

~~(e)~~(f) Shading from nearby buildings and canopy trees should maintain solar access to existing photovoltaic solar panels and solar hot water heaters.

Lighting

~~(f)~~(g) Recommended lighting systems include LEDs with controls, such as motion sensors, step-dim controls and daylight sensors.

For more information about renewable energy and energy efficiency refer to:
http://www.yourhome.gov.au/energy
~~http://yourenergysavings.gov.au/energy~~
~~http://www.waverley.nsw.gov.au/environment/energy_and_climate_change~~

**Design Guidelines**

Class 1 building (Single dwellings) – inclusions for future electric system
If a gas instantaneous or gas storage domestic hot water system is proposed then the following inclusions shall also be provided, so that an electric hot water system can be easily retrofitted in the future:

i) A suitable location to place the future electric hot water system, assuming the relevant setback requirements in Section C2 Low Density Residential 2.3.2 are adhered to.
ii) An additional electrical circuit and breaker for an electric hot water system rated at a minimum of 20 Amps shall be installed at the switchboard.
iii) Appropriate electrical cabling in situ from the existing electrical switchboard to the future electric hot water system.

Class 2 building (Multi-unit development) – inclusions for future electric system

## Ecologically Sustainable Development B2

If multiple gas instantaneous hot water systems or a centralised gas storage hot water system is proposed then the following inclusions shall also be provided, so that an electric hot water system can be easily retrofitted in the future:

i) A suitable location and sufficient space for the future electric hot water system(s) to meet the hot water demand of the residents. This must meet all current Australian Standards for electrical and plumbing installation.
ii) The existing capacity of the electrical switchboard can meet the electrical demand of the future hot water systems.
iii) Appropriate electrical cabling is in situ from the existing electrical switchboard to the future electric hot water systems.

# B5 WATER MANAGEMENT

This Part contains planning controls relating to the management of all aspects of the water cycle in an integrated and consistent manner. The planning controls promote the need for long-term sustainable social, ecological and economic outcomes.

This Part is to be read in conjunction with Council's *Water Management Technical Manual* (Technical Manual) which provides further details on controls outlined in this Part. For more detailed information on flood related risks, refer to the *Waverley LGA Flood Study 2021*.

This Part applies to all development (excluding minor alterations and additions, retro-fits, and the like).

## 5.1 STORMWATER MANAGEMENT AND WSUD

~~For information on how to implement WSUD refer to the Sydney Metropolitan Catchment Management Authority website, accessible at the following link: www.wsud.org.~~

**Objectives**

(a) To promote the implementation of Water Sensitive Urban Design (WSUD).
(b) To minimise the impacts of development upon the water cycle.
(c) To encourage sustainable development through the integration of stormwater management systems into the landscape.
(d) To ensure that development considers flooding, coastal water and groundwater protection, habitat creation and improves visual amenity.
(e) To integrate water sensitive urban design with landscape and building design.
(f) To reduce the volume of stormwater run-off.
(g) To promote increased on-site stormwater retention, detention, and recycling.
(h) To improve catchment water quality.
(i) To minimise the impacts of urban development upon water balance and surface and groundwater flow regimes.
(j) To promote infiltration within the "Infiltration zone" and reduce stormwater run-off (refer to Annexure B in the *Water Management Technical Manual* ).
(k) To encourage the use of soft landscaping and permeable paving as an alternative to impervious surfaces.
(l) To prevent stormwater from overflowing into basement garages of residences.
(m) To protect existing natural groundwater flows and downstream properties from seepage.

**Controls**

(a) A stormwater management plan is required to be submitted with all development applications (except minor alterations, retrofits and the like).
(b) WSUD principles are to be integrated into the development through the design of stormwater drainage, on-site detention and landscaping and in the orientation of the development rather than relying on 'end of pipe' treatment devices prior to discharge (refer to Figure 1).

(c) WSUD measures are to be employed to prevent contamination of stormwater.

(d) Development is to be sited and built to minimise disturbance of the natural drainage system.

(e) WSUD elements should be located and configured to maximise the impervious area that is treated.

(f) On site detention is to be designed, installed and maintained in accordance with the *Water Management Technical Manual*.

(g) Council consent is required for temporary/permanent dewatering and groundwater extraction and use prepared in accordance with the *Water Management Technical Manual*. The proposal is assessed on merits and where appropriate, referred by Council to the relevant Government department for an access licence.

(h) Applications for roof water and stormwater harvesting and reuse and grey water or black water treatment systems will be assessed on merit in accordance with the WM Technical Manual.

(i) Methods of disposal of stormwater from the site must be provided using one or a combination of the following:

(i) Infiltration;
(ii) Gravity connection to Council's stormwater system;
(iii) Charged system; and / or
(iv) Pump system.

**Note:** A stormwater system must be constructed in accordance with *AS/NZS 3500.3:2021 Plumbing and drainage* ~~*AS/NZS 3500:2003 National Plumbing & Drainage and Water Management Technical Manual.*~~

(j) Depending on the extent of disturbed area, the following plans to manage erosion and sedimentation must be submitted with the development application:

(i) For areas of disturbance less than 250m$^2$, a marked up plan of proposed works and control measures is required;
(ii) For disturbed areas between 250m$^2$ and 2,500m$^2$, an erosion and sediment control plan is required; and
(iii) For disturbed areas greater than 2,500m$^2$ soil and water management plan is required.

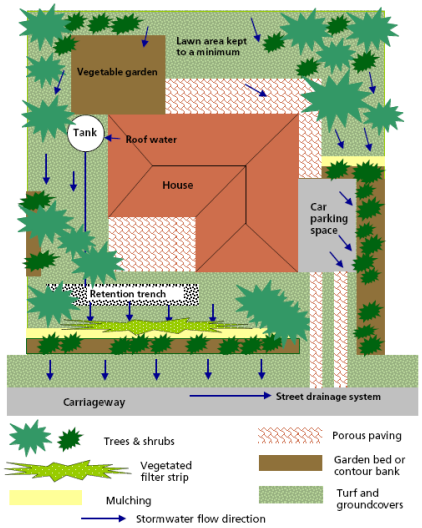



**Figure 1** Example of an integrated stormwater strategy for a dwelling

# B6 ACCESSIBILITY AND ADAPTABILITY

This section applies to all development excluding dwelling houses and other low-density residential development.

*Livable Housing Design Guidelines*

Livable Housing Australia drives industry best practice through the *Livable Housing Design Guidelines.* A livable home is designed and built to meet the changing needs of occupants across their lifetime. Livable homes include key easy living features that make them easier and safer to use for all occupants including: people with disability, ageing Australians, people with temporary injuries, and families with young children.

*Disability Discrimination Act 1992 (DDA 1992)*

The *DDA 1992* makes it unlawful to discriminate against a person with a disability in regards to the provision of access to public buildings for the provision of goods and services, accommodation and employment unless this would cause 'unjustifiable hardship'.

Where an applicant believes that complying with the DCP would cause "unjustifiable hardship," or detract from the significance of a Heritage Item, an application can be made to be exempted from a particular provision or to provide access for people with disabilities in some other way than provided for in the DCP. It is the responsibility of the applicant to ensure that the development meets the requirements of the *DDA 1992*.

*Access to Premises - Australian Standards*

Access to Premises - Australian Standards provides the technical specifications for access design requirements in the built environment. The Australian Standards clarify the accessibility requirements for premises as implied under the *DDA 1992* and are incorporated within the National Construction Code (NCC) ~~Building Code of Australia (BCA).~~

## 6.1 ACCESSIBILITY

**Objectives**

(a) To ensure that buildings and public spaces provide for equitable access for all, including people with a disability, ageing people with mobility difficulties, parents with prams, and other people with temporary disabilities.
(b) To provide an accessible, continuous path of travel to all developments.
(c) To provide equitable access within all developments.
(d) To ensure major alterations and additions to existing buildings provides upgraded levels of access and facilities for all people.
(e) To establish accessible dwelling standards for easy modification to cater for occupants with a disability or impairment.
(f) To ensure that the siting, design and construction of premises available to the public are to ensure an appropriate level of accessibility, so that all people can enter and use the premises.

**Controls**

*All Development*

(a) Access is to meet the requirements of the *DDA 1992*, the relevant Australian Standards and the ~~BCA.~~NCC.
(b) Accessible parking for people with a disability must be provided in accordance with the ~~*BCA*~~ *NCC* and *AS/NZS 2890.1: 2004 Parking Facilities – Off Street Parking*, *AS2890.6:2009 Off Street Parking for People with Disabilities* and *AS 1428: Set 2003* including *AS 1428.1:2009 Design for Access and Mobility*.
(c) An Access Management Plan for alterations and additions to existing buildings only, may be required as a means of helping to provide services or facilities to people who would be unable to gain access to the premises.

*Commercial Development*

(a) The main entrance should provide direct, level access from the street and from any parking area.
(b) A lift must be provided at ground floor to upper floors in developments with three or more storeys and where aggregate floor area above the ground floor is 400m$^2$ or greater.

## 6.4 UNJUSTIFIABLE HARDSHIP

It is the responsibility of the applicant to ensure that the development meets the intent of the *DDA 1992*, and the requirements of the Premises Standards and this DCP. However, it is recognised under the *DDA 1992* that in some circumstances the provision of access may cause unjustifiable hardship by being unreasonable, impractical or uneconomical.

Where a developer believes that compliance with the provisions of this DCP and intent of the *DDA 1992* would cause unjustifiable hardship, an application can be made to Council to be exempted from a particular provision, or to provide access in some other way than that specified in this DCP. The information that must be supplied by the applicant is set out in detail under the Controls section of this Part.

In accordance with the *DDA 1992*, Council's assessment of an application for exemption will consider the extent to which people will benefit or be detrimentally affected by non-compliance with this DCP, the cost of compliance and the ability of the developer to meet the cost. Each claim will be considered by Council on its merits as there is no general formula that can be applied to guide what might be considered to be Unjustifiable Hardship.

It must be emphasised that there is always a requirement to provide whatever access is possible up to the point of unjustifiable hardship.

**Objectives**

(a) To have public buildings accessible to all people, consistent with requirements under the *DDA 1992* and the ~~BCA~~NCC.

**Controls**

(a) Claims of unjustifiable hardship will be considered on a case by case basis and on the merit of the case put forward by the applicant.
(b) Unjustifiable hardship is not supported in new developments.
(c) An application of unjustifiable hardship must be accompanied by a statement that includes the following information:
    (i) The nature of the benefit or detriment likely to occur or be suffered by any persons in relation to the proposed development;
    (ii) Two independent quotes from tradespeople or suppliers for the cost of works to meet the principles of the *DDA 1992*;
    (iii) The space required to carry out works and the effect this may have upon the viability of the proposed work;
    (iv) The impact on the heritage significance of the premises or conservation area (where applicable) and details of the work required to provide access;
    (v) Typographical, technical, operational and safety issues;
    (vi) Details of investigations into different ways in which the space could be configured or used so as to comply with the applicable access requirements; and
    (vii) Details of investigations into design alterations so that future works to improve access are not compromised.

# B7 TRANSPORT

Car parking is one of the most critical planning and transport issues in Waverley. Wherever possible, Council strongly encourages the use of alternative modes of transport such as walking, cycling and public transport and continues to work towards providing better transport connections to the area.

The provision of private (on-site) and public (on-street) parking must be managed in an equitable and environmentally sensitive manner that benefits the community as well as the individual. Where objectives may conflict, Council has a duty to consider broader community benefits in the provision of parking.

*Waverley's People, Movement and Places*
This Part has been prepared in the context of the Waverley Transport Plan 2017 '*Waverley's People, Movement and Places.'* The aim of *Waverley's People, Movement and Places* is to:

- Create a transit hierarchy for movement in the LGA that prioritises pedestrians and active transport, followed by public transport, service vehicles, shared mobility and private motor vehicles;
- Identify signature projects to invest in; and
- Identify short, medium, long term actions that Council can undertake.

**Objectives**

(a) To prioritise trips taken by pedestrians, bicycles and other forms of active transport, followed by public transport, and private vehicles.
(b) To ensure that new development promotes active and public modes of transport through car share facilities, end of trip facilities, and effective links to public transport.
(c) To encourage reduced rates of car parking where adequate modes of public or active transport are available.
(d) To ensure that parking and access do not dominate or adversely impact upon the character of the streetscape, landscape and the development.
(e) To prioritise and maintain pedestrian amenity and safety.
(f) To ensure on-street parking supply is protected by minimising impacts of additional vehicular kerb crossings.
(g) To encourage on site car parking that considers flexibility in the design to allow easy transition to alternate uses in the future.
(h) To discourage podium or above ground car parking.
(i) To prevent on street car parking being utilised by occupants with allocated car parking bays.
(j) To provide convenient and accessible parking that is appropriately designed and located.
(k) To achieve a high standard of urban design and contribute to the amenity of streetscapes and landscapes.

## 7.1 STREETSCAPE

**Objective**

(a) To ensure the provision of off-street parking is subject to considerations of urban design, streetscape and heritage conservation.
(b) To balance car parking provision and access with urban design and amenity outcomes.

**Controls**

(a) A Streetscape Analysis is to be submitted in accordance with the *Waverley Development Application Guide*.
(b) Where off street parking is not characteristic of the streetscape, vehicular access from the street is not permitted.
(c) Car parking and vehicular access must not dominate the streetscape. Landscaping is to be used to soften the impact of such structures/areas.
(d) Car parking and driveway design is to preserve mature or significant trees and vegetation on the site and in the surrounding streetscape. A significant tree refers to a tree identified on the Waverley Significant Tree Register, or a tree or vegetation that forms part of a Heritage Item or is within a Heritage Conservation Area.
(e) Existing natural rock faces and heritage listed sandstone walls must not be removed for the purpose of car parking.
(f) Entry gates and structures for car parking should be an open design to allow for improved security by way of street surveillance and to reduce any impact on the streetscape.
(g) Parking structures are to maximise natural light and ventilation.
(h) Separate and clearly differentiate pedestrian and vehicle access to the site.
(i) Basement parking areas and structures:
    (i) In Bondi Junction must not protrude above the level of the adjacent street or public domain;
    (ii) In other areas, must not protrude more than 1.2m above the level of the adjacent street or public domain.
(j) Where visible, basement structures and vent grills are to be integrated into the building and landscape design. Ventilation grills are to block views into basement areas and where possible be screened by landscaping in garden beds with a minimum soil plan depth of 1m.

## 7.2 ON-SITE PARKING

Waverley is divided into two Parking Provision Zones based on proximity to existing public transport services, proximity to services and where the provision of parking is constrained. These zones are summarised in Table 3 and available via Council's Online Mapping Tool.

| Waverley Online Mapping Tool | |
|---|---|
| ~~https://planning.waverley.nsw.gov.au/connect/analyst~~https://discover.waverley.nsw.gov.au/ | |
| Map Configuration | Planning |
| Layer | Parking Provision Zone |

| Parking Zone | Description | Location | Rate of Provision |
|---|---|---|---|
| **1** | High accessibility to public transport and services, high density and prone to traffic congestion. | Within 800m of Bondi Junction railway station where multi-residential development is permissible. | Low |
| **2** | Good to fair accessibility to public transport and services, mainly low and medium density, with some high density, and varied on-street parking pressures. | Properties outside Zone 1. | Moderate |

**Table 3** Parking Provision Zones

**Objectives**

(a) To ensure on-site parking is usable, safe and integrated into the design of the building.

**Controls**

(a) Car park design must be in accordance with relevant Australian Standards.
(b) Car space dimension, driveway grades, vehicular ramp width/grades and passing bays must be in accordance with the relevant Australian Standards. ~~Vehicular ramps less than 20m long within developments and parking stations must have a maximum grade of 1 in 5 (20%).~~ Car parking spaces are not to unduly exceed typical widths in Australian Standards.
(c) Vertically stacked parking is only permitted where site constraints (such as horizontal dimensions or vertical relief) prevent full provision of conventional parking.
(d) Stacked parking spaces are to comply with the dimensions for individual spaces and are not acceptable for visitor parking. The templates provided in Australian Standards indicate the paths swept by maneuvering vehicles and must be used by applicants to design access to parking and loading facilities. A minimum clearance of 300mm between the swept path and any building and obstruction is to be maintained.
(e) Consolidate basement car parking areas under building footprints to maximise the area available for soft landscaping.
(f) Design parking structures that minimise reliance on artificial lighting and mechanical ventilation.

(g) Provide marked pedestrian pathways with clear lines of sight and safe lighting.
(h) Parking areas must not be located within the front building setbacks for new development.

### 7.2.1 Vehicle Access

**Objectives**

(a) To prioritise pedestrian movements and the public domain over vehicular access.
(b) To design vehicle access to required safety and traffic management standards.
(c) To minimise the impact of vehicle access points and driveway crossovers to retain streetscape continuity and reinforce a high quality public domain.
(d) To ensure vehicle entry points are integrated into building design and contribute to high quality architecture.
(e) To integrate vehicle access with site planning and local traffic patterns.
(f) To minimise potential conflict between vehicles and pedestrians.
(g) To minimise the size and quantity and visual intrusion of vehicle access points.

**Controls**

(a) One vehicle access point per development (including any access for service vehicles and parking for non-residential uses within mixed use developments) is permitted.
(b) Vehicle access is to be from lanes and secondary streets where available, and not from primary street fronts or streets with major pedestrian activity.
(c) Vehicle access points are to be integrated into the building design.
(d) Vehicle access is to be designed to minimise the impact on the street, site layout and the building façade design.
(e) Doors to vehicle access points are to be tilting doors fitted behind the building façade and to be of materials that integrate with the design of the building and contribute to a positive public domain.
(f) Vehicle entries are to have high quality finishes and detailing. No service ducts or pipes are to be visible from the street.
(g) Vehicle access may not be required for, or may be denied to some heritage buildings, and developments where this is uncharacteristic of the streetscape.~~.~~
(h) New developments are to utilise existing vehicle access points in adjoining developments where possible~~,~~ and provide shared access where they are being concurrently developed.~~.~~
(i) New developments are to provide vehicle access points that are capable of underground shared access at a later date. Internal on-site signal equipment is to be used to allow for safe shared access.
(j) Vehicle access should be:
    (i) Located taking into account any services within the road reserve, such as power poles, drainage inlet pits and existing street trees and adhere to any required clearances~~.~~
    (ii) Located a minimum of 10m from the intersection of the two tangent points of the intersecting kerb faces of any two roads and otherwise not located within any exclusion zone per Australian Standards ~~perpendicular of any intersection of any two roads.~~
    (iii) Locate vehicle access a minimum of 3m from pedestrian entrances.
(k) Wherever practicable, vehicle access is to be a single lane crossing with a maximum width of 2.7m over the footpath, and perpendicular to the kerb alignment. In

exceptional circumstances, a double lane crossing with a maximum width of 5.4m may be permitted for safety reasons.

(l) Driveway widths must comply with the relevant Australian Standards.

(m) Car space dimension, driveway grades, vehicular ramp width/grades and passing bays must be in accordance with the relevant Australian Standards. ~~Vehicular ramps less than 20m long within developments and parking stations must have a maximum grade of 1 in 5 (20%).~~

(n) Vehicle access ramps parallel to the street frontage will not be permitted.

(o) Vehicular access must not ramp along boundary alignments edging the public domain, streets, lanes parks, water frontages and the like.

(p) Access ways to underground parking should not be located adjacent to doors or windows of the habitable rooms of any residential development.

~~(q) Access ways and driveways are to enable vehicles to enter the parking space in a single movement, and to leave the space in a maximum of two turning movements.~~

### 7.2.2 Car Parking Provision Rates

**Objectives**

(a) To provide car parking rates which reflect the proximity of development to existing public transport, services and the availability of on-street parking.

(b) To balance the need to meet parking demand on site with the need to contain parking and promote sustainable transport.

(c) To establish controls for parking that reflect the characteristics of the area in terms of urban form, land use and proximity to public transport.

**Controls**

(a) Approval for on-site parking will only be granted where the site and locality conditions permit.

(b) Car parking must be designed to complement the design of the building and streetscape to which it relates and incorporate a range of appropriate materials and design.

(c) Car parking structures are to be located behind the front building line to reduce visual impact upon the streetscape.

(d) Driveways and vehicular access should be designed to minimise the loss of on-street parking wherever possible.

(e) Car park access is to be provided from secondary streets or lanes where possible.

(f) Adjacent properties are to share driveways and vehicle crossings where possible to minimise service entries and increase safety for pedestrians.

(g) Where a DA involves a change of use, the parking rate for the new use is to be calculated as the difference between the parking rates required for both the present and proposed uses (under this Part).Council reserves the right to require a parking provision rate based on the total requirement for the use if, in its opinion, the DA involves a re-construction of the building.

(h) When calculating the provision of parking spaces or loading facilities, the following method is to be applied:

  (i) The number of spaces for each use on the site is to be calculated separately; and

(ii) The total number of facilities or spaces to be provided is to be rounded to the nearest whole number, i.e. 2.15 spaces equals a requirement for 2 spaces and 2.50 spaces equals a requirement for 3 spaces.

Car parking rates developed in line with the most recently published Transport for New South Wales guidelines relating to transport impact assessment. ~~are based on the *RMS Guide to Traffic Generating Developments*, and are provided in Table 4.~~

(i) For developments requiring more than 50 car parking spaces, a maximum of 2% of the required parking spaces may be specified as "small car spaces", with a minimum length of 5 metres. Such spaces are to be indicated on the plans submitted and clearly indicated when completed.

(j) Council may also require on-site parking provision be reduced or removed for development fronting secondary streets or laneways in Centres to achieve the relevant objectives of *Part E Site Specific Development*. The exact reduction in on-site parking provision will be determined by Council on a case-by-case basis. Developments that have a single frontage to a primary street will not be permitted on-site parking.

**Note:** Gross Floor Area is defined as per the definitions in the WLEP, with 'car parking' and 'access to that car parking' in the WLEP definition referring to the minimum dimensions and access required in order to comply with requirements of AS2890 and the National Construction Code (NCC) – ~~Building Code of Australia (BCA)~~. Car parking spaces above the 'maximum' stated in the below table, and components of parking and access areas greater than the minimum dimensions required to meet the AS2890 and the NCC ~~BCC/BCA~~ will contribute to the Gross Floor Area calculation.

| Land Use | Parking Zone 1 | Parking Zone 2 |
|---|---|---|
| ***Private Vehicle Parking*** | | |
| *Low Density Residential parking space rate per dwelling* | ≤2 Bedrooms – *Maximum 1*<br>≥3 Bedrooms – *Maximum 2* | ≤2 Bedrooms – *Maximum 1*<br>≥3 Bedrooms – *Maximum 2* |
| *Medium density residential (3-19 dwellings) parking space rate per dwelling* | *Minimum* - 0<br><br>*Maximum* | *Minimum* - 0<br><br>*Maximum* |
| Studio | 0 | 0 |
| 1 bedroom | 0.4 | 1.0 |
| 2 bedroom | 0.7 | 1.2 |
| 3 bedroom + | 1.2 | 1.5 |
| Visitor | 3-6 Units – 0 spaces<br>6+ Units - 1 space per 7 units<br>~~1 space per 7 units~~ | 3-4 Units – 0 spaces<br>5 Units+ - 1 space per 5 units<br>~~1 space per 5 units~~ |
| *High density residential (20+ dwellings) parking space rate per dwelling* | *Minimum* - 0<br><br>*Maximum* | *Minimum* - 0<br><br>*Maximum* |
| Studio | 0 | 0 |
| 1 bedroom | 0.4 | 0.6 |
| 2 bedroom | 0.7 | 0.9 |
| 3 bedroom + | 1.2 | 1.4 |
| Visitor | 1 space per 7 units | 1 space per 5 units |
| *Business and office premises* | Minimum 0<br>Maximum 0.66/100m² GFA | Minimum 0<br>Maximum 1.0/100m² GFA |
| *Retail premises* | Minimum 0<br>Maximum 2.0/100m² GFA | Minimum 0<br>Maximum 3.3/100m² GFA |
| ***Other Parking*** | | |

| | |
|---|---|
| *Motorcycles* | 1 motorcycle parking bay per 3 car parking bays (including visitor) |
| *Car Share* | A minimum of 1 car share space is to be provided for every 90 residential units.<br>A minimum of 1 car share space be provided for every 50 commercial car parking spaces.<br>1 car share space can be provided in lieu of 4 car spaces. |
| *Accessible Car Parking Spaces* | A minimum of 1 accessible car parking space is to be provided for every adaptable residential unit and be a part lot in the strata plan.<br>For non-adaptable residential units, if car parking spaces are provided, then a minimum 10% of all car spaces need to be accessible car parking spaces. |

**Table 4** Car Parking Rates

### 7.2.3 Variations to Parking Rates

(a) Variations to the relevant parking standards will only be accepted where the applicant can demonstrate that the requirement cannot be reasonably achieved (provision of less than the standard); or that exceeding the standard is in the public interest.
Matters that the Council may consider in assessing variations include, but are not limited to, any of the following as are relevant:

- Particular site design requirements such as setbacks, landscaping, solar access and streetscape controls.
- Site and building constraints such as the physical and topographical nature of the site.
- Impacts of any increased building bulk on the streetscape or adjoining land, including overshadowing and loss of views.
- Compliance with deep soil landscape area requirements (side and rear boundary setbacks).
- Impacts of excavation, including land form, structural integrity of buildings and structures on adjoining land, and stability of land on the subject site and adjoining sites.
- Impacts from any increase in hard surface driveways and the building footprint on the availability of water permeable ground spaces.

(b) Variations to the car parking standards will only be supported where the applicant can demonstrate that the development is unlikely to create significant additional demand for on-street car parking in surrounding streets.
When a development application seeks to vary the car parking provisions, the following priority is to be adopted:

1. Residential parking
2. Visitor parking
3. Commercial Parking (i.e. business, office, retail).

### 7.2.4 Parking for Low Density Residential Development

**Controls**

(a) For new dwellings, car parking should not exceed the rates outlined in Table 4.

(b) Notwithstanding the above, a reduced rate (or no parking) may be required in the following circumstances, where:

(i) Parking may have a detrimental impact on the character of the streetscape, heritage item or heritage conservation area, or health of a mature or significant tree.

(ii) A driveway cannot comply with maximum gradients and design standards required by the Australian Standards.

(iii) Vehicle entry and exit may have a detrimental impact on pedestrian and traffic movements and safety or nearby services or infrastructure.

(iv) The access to the on-site car parking will result in the loss of more than 1 on-street car parking space or equivalent available kerb space, as measured cumulatively along the entire block.~~.~~

~~(iv)~~(v) The streetscape has limited existing off-street vehicular access and/or consists of a narrow carriageway that does not facilitate efficient vehicular turning movements into off street car parking areas (two or less movements).

~~(v)~~(vi) There is low on-street parking availability and no net car parking public benefit.

(c) Where an applicant proposes to provide more than the number of on-site car spaces specified in (a) the additional spaces will contribute to the Gross Floor Area calculation and additional justification must be provided to cover matters such as, but not limited to the impact of:

(i) Parking compared to alternatives such as landscaping;

(ii) Any increased building bulk on the streetscape;

(iii) Any increased building bulk on the amenity of adjoining properties;

(iv) The loss of existing on-street parking illustrating existing and proposed off street parking;

(v) The level and impact of any excavation; and

(vi) Access to public transport.

### 7.2.5 Motorcycle parking

**Objectives**

(a) To encourage alternative forms of transport.

(b) To ensure the quantity of motorcycle parking available is enough to meet growing demand.

**Controls**

(a) Motorcycle parking spaces are to have dimensions of 1.1m x 2.5m.

(b) Motorcycle parking is to be provided in accordance with Table 4.

(c) Motorcycle spaces are to be indicated on the plans submitted, and clearly identified for motorcycle use only when the development is completed.

### 7.2.6 Bicycle Parking

This part should be read in conjunction with *AS2890.3.2015 Parking Facilities – Part 3: Bicycle parking* and the *Bicycle Parking Facilities: Updating the Austroads Guide to Traffic Management.*

**Objectives**

(a) To provide safe and convenient end of trip facilities for residents as well as commuters and employees.

(b) To ensure the quantity of bicycle parking available is sufficient to meet growing demand.

(c) To promote cycling as a healthy and environmentally friendly way to make commuter, shopping and recreational trips.

(d) To prioritise the location and design of bicycle parking facilities within ~~as part of~~ parking areas ~~in~~of developments.

(e) To balance ease of use and convenience with security.

~~(c)~~(f) To promote innovative approaches to providing high-quality and attractive bicycle facilities.

**Controls**

(a) Parking for bikes is to be provided at the minimum rates outlined in Table 4, except where an apartment in a residential building has a basement storage area on title that is large enough to accommodate a Class 1 bike locker.

(b) Areas for bicycle parking will not be included as part of gross floor area or gross leasable area (GLA) for the purpose of calculating car parking provision.

(c) Council reserves the right to require a greater provision of bicycle parking than indicated in Table 5, where in Council's opinion, the particular nature of the development will generate an increased demand for bicycle parking. This is a particular consideration in areas located close to the bicycle network, and areas of higher density.

(d) Bicycle parking is to be provided in accordance with requirements for layout, design and security as set out in the Australian Standard AS 2890.3-2015- Part 3: Bicycle Parking, and with regards to the appropriate Security Class, ensuring the required parking space envelope is provided for all Security Levels. Security Class B spaces must be shown on architectural plans, and provide:

(i) A secure room(s) or structures (s).

(ii) Convenient entrance/exit doors, such as sliding doors.

(iii) Indicative parking layouts including aisles and parking configurations, and the overall area allocated.

~~Bike parking is to be provided in accordance with requirements for layout, design and security as set out in the Australian Standard *AS 2890.3 -1993 Parking facilities – Bicycle parking facilities*, including:~~

~~(i) Security Class 1 bike lockers for occupants of residential buildings;~~

~~(ii) Security Class 2 bike enclosures for staff/employees of any land use; and~~

~~(iii) Security Class 3 bike rails/ racks for visitors of any land use.~~

~~(d)~~(e) Bicycle parking is to be located:

(i) Close to street level entry/exit points; and

(ii) Subject to security camera surveillance where such security systems exist.

~~(ii)~~(iii) In visible, easily accessible areas of the building, and at ground level or the first level of any multilevel car parking in its entirety.

~~(e)~~(f) A safe path of travel from bike parking areas to entry/exit points is to be marked.

~~(f)~~(g) Access to bike parking areas are to be:

(i) A minimum of 1.8m wide to allow pedestrians and bikes to pass each other (access ways can be shared with vehicles within buildings and at entries to buildings, for larger developments a dedicated ramp may be required);

(ii) Accessible via a ramp;

(iii) Clearly identified by signage; and

(iv) Accessible via appropriate security / intercom systems.

~~(g)~~(h) Bicycle parking for visitors is to be provided in an accessible on-grade location near a major public entrance to the development and is to be signposted.

~~(h)~~(i) For retail premises provide ~~minimum 50% of~~ the required bicycle parking at an accessible location near the entry to the retail premises.

~~(i)~~(j) For non-residential uses, the following additional end-of-trip facilities are to be provided at the following rates:

(i) 1 personal locker for each bike parking space;

(ii) 1 shower/change cubicle for up to 10 bike parking spaces;

(iii) 2 shower/change cubicles for 11 to 20 bike parking spaces are provided;

(iv) 2 additional showers/cubicles for each additional 20 bike parking spaces or part thereof.

(k) Locker, change room and shower facilities are to be located close to the bike parking area, entry/exit points, and within an area of security camera surveillance where there are such building security systems.

~~(j)~~(l) Where innovative parking approaches are proposed, including those for cargo bikes or e-bikes, Council may consider variations to bicycle and/or other parking provisions.

| Land Use | Bicycle Parking Rates | |
|---|---|---|
| | Long-stay / resident/ employee | Short-stay/ Visitor |
| Residential Development | *All residential development*<br><br>~~1 space per dwelling~~<br><br>A minimum of 1.25 spaces per 1 bedroom dwelling and an additional 0.25 spaces for each additional bedroom in each dwelling.<br><br>A maximum of 30% may be vertical or tiered/stacked spaces or be supplied by Security Level A spaces | *Medium and High Density (3+ dwellings)*<br>1 space per 5~~10~~ dwellings (Security Level C) |
| Office | *Employee*<br>0.5~~45~~ spaces per 100m$^2$ GFA | *Visitor*<br>1.25~~-~~space per 2000m$^2$ GFA |
| Retail | *Employee*<br>0.2~~1~~ spaces per 100m$^2$ NFA | *Visitor*<br>0.4 spaces per 100m$^2$ GFA |
| Education (primary, secondary, tertiary) | *Employee*<br>0.4~~3~~ spaces per staff | *Student*<br>0.5~~3~~ spaces per student |

| | | |
|---|---|---|
| Tourist Accommodation | *Staff and Long Stay*<br>0.1 spaces per staff / long stay visitor | *Visitor*<br>1 space per 10 units |
| Places of assembly / sports facilities / community centres | *Staff*<br>0.15 spaces per staff | *Visitor*<br>0.15 spaces per seat (Security Level C) |
| Food and drink premises | *Staff*<br>0.15 spaces per staff | *Visitor*<br>0.15 spaces per seat (Security level C) |
| Healthcare, Childcare, Other | *Staff*<br>0.15 spaces per staff | *Visitor*<br>0.1~~05~~ spaces per visitor (Security Level C) |

**Table 5** Bicycle parking rates

# B8 HERITAGE

This Part applies to all land identified, and land adjacent to site identified, under Schedule 5 of WLEP where development consent is required.

Applicants are advised to refer to the *Waverley Heritage Policy*.

Where there are inconsistencies between this Part and other Parts of this DCP, this *Part B8 Heritage* will prevail. For development within the Charing Cross and Queens Park Heritage Conservation Areas, also refer to Annexures B8-1 and B8-2.

This DCP is consistent with the Australia International Council on Monuments and Sites (ICOMOS) Charter for Conservation of Places of Cultural Significance (The Burra Charter). In the event of any inconsistencies between the Burra Charter and this DCP, this DCP will prevail.

*State Heritage Listing*
The State Heritage Register maintained by the NSW Department of Planning and Environment Heritage Branch includes items of Local and State Significance. Works to items identified as being of State Significance require a submission to the NSW Heritage office in conjunction with submission of a Development Application to Council.

*Listings with the National Trust of NSW*
Where a building or conservation area is also listed by the National Trust, it is Council's practice to refer applications to the Trust for comment. Council will consider submissions made by the National Trust however; Council is not obliged to follow the Trust's advice.

*National Heritage Register*
Where a place or object is included in the Register of the National Estate, Council is the designated consent authority for all identified buildings.

**General Objectives**

(a) To provide a framework for heritage and conservation planning in Waverley.
(b) To provide detailed guidelines to manage change and ensure the preservation of history and heritage in Waverley.
(c) To ensure that appropriate heritage documentation is provided to inform the assessment of development.
(d) To ensure that Aboriginal heritage and archaeology are taken into consideration, and respectfully incorporated where appropriate.
(e) To ensure that development enhances the character and significance of any heritage item, conservation area, artefact or place.
(f) To ensure development reflects and promotes an understanding and appreciation of heritage significance.
(g) To promote sustainable development through the retention and repurposing of existing building stock.

## 8.19 SOLAR PANELS

For specific guidance on solar panels in heritage conservation areas, refer to the Solar Panels and heritage guidelines and part B2 Ecological Sustainable Development of this

## Annexures

### Annexure B1-2
### Waste and Recycling Generation Rates

This section provides waste and recycling generation rates for different types of developments. In cases where a mixed-use development is proposed, developments should use each sections generation rates for the residential and commercial components of the building.

**Residential Generation Rates**

~~Based on a survey of waste and recycling generation rates used across Sydney and Melbourne Councils in 2018, and NSW EPA Best Practice Resource Recovery in Residential Developments (2019) the minimum waste and recycling generation rates for residential dwellings are as follows:~~

Waste generation rates apply to all types of residential development unless specifically listed in the tables below (for example boarding houses).

A NSW State Government mandate applies from 1 July 2030 requiring local government to collect organic materials (food and garden waste) from residential premises. Waste generation rates in this section are structured in a way to future proof new development and to facilitate this mandate in relation to current (Non-FOGO) and future (FOGO) waste generation rates.

New development must demonstrate that they can provide for adequate storage waste capacity, based on the specified waste generation rates for current and future services, as outlined below.

| Non-FOGO g~~G~~eneration r~~R~~ates | | | | |
|---|---|---|---|---|
| **Dwelling type** | **General Waste (L/week)** | **Container Recycling (L/week)** | **Paper and cardboard Recycling (L/week)** | **Garden Organics Recycling (L/week)** |
| Single Unit Dwelling (House) | 120 | 60 | 60 | 50 |
| 1 bedroom or studio | 80 | 40 | 40 | 10 |
| 2 + bedroom unit | 120 | 60 | 60 | 20 |
| | | | | |

| FOGO generation rates | | | | |
|---|---|---|---|---|
| **Dwelling type** | **General Waste (L/week)** | **Container Recycling (L/week)** | **Paper and cardboard Recycling (L/week)** | **Organics (Food and Garden) Recycling (L/week)** |
| Single Unit Dwelling (House) | 120 | 60 | 60 | 25 |
| 1 bedroom or studio | 80 | 40 | 40 | 25 |

## Annexures

| | | | | |
|---|---|---|---|---|
| 2 + bedroom unit | 120 | 60 | 60 | 25 |

The following types of land uses ~~properties are~~ considered residential under the *Local Government Act 1993*: Boarding houses/Time shares, Serviced apartments, Retirement village, and Independent living, and as such require a domestic waste service, incurring a Domestic Waste Charge. Co-living housing is also considered residential. Appropriate waste generation rates are provided below for a number of these types of land uses.

| **Generation Rates** | | | | |
|---|---|---|---|---|
| **Dwelling type** | **General waste L/unit/week** | **Container Recycling L/unit/week** | **Paper and cardboard recycling L/unit/week** | **Organics (Food and Garden) Recycling (L/week)** |
| Boarding House/co-living housing/ Time Share studios with kitchen | 60/apartment | 30/apartment | 30/apartment | 20/apartment |
| Boarding House/co-living housing/ Time Share studios without kitchen | 50/apartment | 20/apartment | 20/apartment | 15/apartment |
| Serviced Apartments | 35/apartment | 20/apartment | 20/apartment | |
| ~~Retirement Village~~ | ~~60/apartment~~ | ~~30/apartment~~ | ~~30/apartment~~ | |
| ~~Independent Living~~ | ~~80/apartment~~ | ~~40/apartment~~ | ~~40/apartment~~ | |

Use the figures above to quantify the total waste and recycling ~~and food/garden organics generation over a week and recycling generation~~ over a fortnight. This will assist you to calculate the number of bins and hence the storage space required.

**Commercial Generation Rates**

Waste generation rates for commercial development are to be calculated using the rates below. Floor space includes patron usage area such as seating (indoor and outdoor). To ensure building flexibility for future uses, Council may require a higher generation rate than the proposed use. Where type of premises is not listed, consideration will be given on a case by case basis.

A NSW Government Mandate applies that businesses must provide for an organics collection service over a phased timeline up until July 2029, depending on the level of waste generation. Commercial businesses must comply with the mandate and new development must be designed in a way to facilitate compliance with the mandate.

~~Note: The generation rates for food organics were extracted from the City of Melbourne Guidelines published in 2021. Appropriate case study/empirical data may be used in place of generation rates below.~~

## Annexures

| Type of Premises | ~~Garbage~~ General Waste Generation | Food Organics Generation | Recycling Generation |
|---|---|---|---|
| | **Food Premises** | | |
| Restaurants (Including food component of licensed premise). | ~~660L~~528L*/100m² floor area/day | 132L/100m² floor area/day | 200 L/100m² floor area/day |
| Supermarkets | ~~660L~~528L*/100m² floor area/day | 132L/100m² floor area/day | 240 L/100m² floor area/day |
| Greengrocer/Wholefoods store | 620~~60~~L*/100m² floor area/day | 30L/100m² floor area/day~~N/A~~ | 120 L/100m² floor area/day |
| Convenience Store | 240~~300~~ L/100m² floor area/day | 30L/100m² floor area/day N/A | 150 L/100m² floor area/day |
| Café | ~~300~~240 L/100m² floor area/day | 60L/100m² floor area/day | 200 L/100m² floor area/day |
| Take away/Café (pre-packaged | 1~~5~~20 L/100m² floor area/day | 30L/100m² floor area/day | 150 L/100m² floor area/day |
| Butcher | ~~300~~240 L/100m² floor area/day | 30L/100m² floor area/day | 50 L/100m² floor area/day |
| Delicatessen | 240~~300~~ L/100m² floor area/day | 30L/100m² floor area/day ~~N/A~~ | 50 L/100m² floor area/day |
| Fish shop | 240~~300~~ L*/100m² floor area/day | 30L/100m² floor area/day | 50 L/100m² floor area/day |
| Minimum generation when no food business type is specified | 150 L/100m² floor area/day | 30L/100m² floor area/day | 50 L/100m² floor area/day |
| | **Non Food Premises** | | |
| Education and training | 5L/100m² floor area/day or 0.5L/student/week | | 5L/100m² floor area/day or 0.5L/student/week |
| Offices | 10L/100m² floor area/day | | 10L/100m² floor area/day |
| Shop (less than 100m² floor area) | 50L/100m² floor area/day | | 25L/100m² floor area/day |
| Shop (greater than 100m² floor area) | 50L/100m² floor area/day | | 50L/100m² floor area/day |
| Showroom | 40L/100m² floor area/day | | 10L/100m² floor area/day |
| Warehouse | 10L/100m² floor area/day | | 10L/100m² floor area/day |
| Childcare | 80L/100m² floor area/day | | 80L/100m² floor area/day |
| Gym | 10L/100m² floor area/day | | 10L/100m² floor area/day 50L (Penrith) |
| Hairdresser/Beauty Salon | 60L/100m² floor area/day | | 60L/100m² floor area/day |
| | **Accommodation** | | |

## Annexures

| | | | |
|---|---|---|---|
| Student housing/Backpacker | 40L/occupant/week | | 40L/occupant/week |
| Guesthouse | 60L/occupant/week | | 60L/occupant/week |
| Hotel/Motel/Licensed club | 5L/bed/day<br>50L/100m2 bar area/day<br>400L/100m2 dining area/ day | | 5L/bed/day<br>50L/100m2 bar area/day<br>280L/100m2 dining area/day |
| Minimum generation when no non-food business type is specified | 10L/100m$^2$ floor area/day | | 10L/100m$^2$ floor area/day |

*~~Decrease by half when organics recycling is implemented and i~~Increase by 10% if waste oil is generated (from deep frying). ~~.~~

For commercial waste streams that are not outlined above, supporting documentation is required to validate the proposed volumes for the respective waste streams.

The generation rates for food organics were extracted from the City of Melbourne Guidelines published in 2021. Appropriate case study/empirical data may be used in place of generation rates above.

~~*The above generation based on Randwick City Council's Waste Management Plan Guidelines, City of Melbourne Council's Guidelines for Waste Generation RatesManagement Plans (2015)2021) , Penrith City Council's Commercial Waste Generation Rates Guideline, and the NSW EPA Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (2012)*~~

~~*For commercial waste streams that are not outlined above, supporting documentation is required to validate the proposed volumes for the respective waste streams.*~~

~~**Mixed Use Developments**~~

~~Waste generation rates for mixed-use developments should use the above generation rates to estimate the combined waste generation from the residential and commercial components of the building.~~

## Annexures

### Annexure B1-3
### Design Specification for Council Waste Collection Vehicles

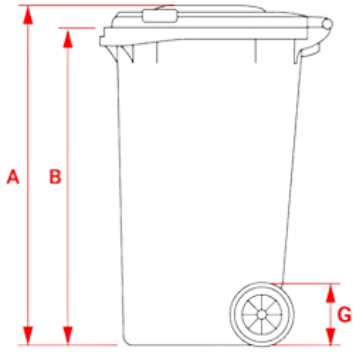
**Onsite Waste Facility Design Requirements** For residential or mixed developments proposing on-site collection, the site entry point, vehicle route of travel and manoeuvring envelopes shall comply in general with the requirements of Australian Standard AS 2890.2 Parking Facilities Part 2: Off Street Commercial Vehicle Facilities (AS 2890.2).
The onsite waste facility shall cater for the following:

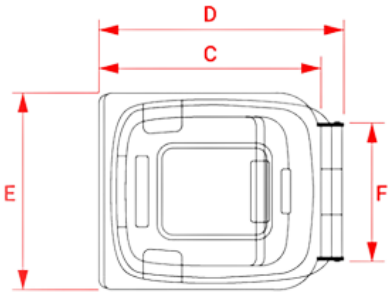
| Design Vehicle | Requirement |
|---|---|
| Overall Length (m) | 10.5 |
| Operational Length (m) | 12.5 |
| Design Width (m) | 2.8 |
| Design Height (m) | 3.7 |
| Clearance (travel height) (m) | 4.5 |
| Weight Fully Loaded (tonnes) | 22.5 |
| Capacity ($m^3$) | 24 |
| Front Chassis Clearance | 13° |
| Rear Chassis Clearance | 16° |

## Annexures

### Annexure B1-4
### Council Supplied Bin Dimensions

| Bin Type | 80L | 140L | 240L | 660L |
|---|---|---|---|---|
| A (TOTAL HEIGHT) | 840mm | 915 mm | 1060 mm | 1220 mm |
| B (BIN HEIGHT) | 795mm | 870 mm | 990 mm | 1090 mm |
| C (BIN DEPTH) | 480mm | 550 mm | 660 mm | 740 mm |
| D (TOTAL DEPTH) | 510mm | 615 mm | 730 mm | 780 mm |
| E (WIDTH) | 450mm | 535 mm | 585 mm | 1210 mm |
| F (HANDLE WIDTH) | 300mm | 395 mm | 400 mm | 980 mm |
| G (WHEEL DIAMETER) | 200mm | 200 mm | 200 mm | 200 mm |




**Source:** Sulo Waste Management

## Annexures

### Annexure B1-5
### Composting and Worm Farming Guidelines

A composting facility must be provided in all residential use developments. Such facility may comprise either:

- A dedicated area on the site for the accommodation of a sufficient number of commercially available compost bins or worm farms, or
- A purpose designed compost area incorporated in the landscaped (low waste garden) area of the site.

**Location**

Conveniently accessible from all dwellings and reasonably close to the waste storage area. The facility should be located so as not to cause any nuisance to the occupants of the building on this or neighbouring sites.

**Size**

The capacity of compost bins for single dwellings is discretionary and will depend on the circumstances in the individual case. In new dwelling houses, an area of 1000mm x 1000mm should be provided.

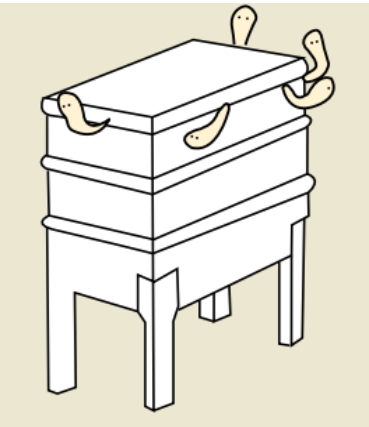
In multi-residential buildings, provision should be made for:

- A dedicated area to accommodate sufficient compost bins having a minimum capacity of 30 litres for each dwelling unit; or
- A purpose designed compost structure having a minimum capacity of 1 cubic metre for every 6 dwelling units or part thereof.

**Construction**

A permanent compost facility may be three-sided, two-compartment structure made of solid timber or masonry, with a cover for weather protection.

**Compost Bin**



**Worm Farm**

Examples of composting and worm farming containers and structures

**Note:** More information is available at http://compostrevolution.com.au/

Where outdoor space is unavailable, smaller indoor composting systems are encouraged to be utilised within dwellings, and disposed of via Council's organic waste collection service.

## Annexures

### Annexure B1-6
### Garbage Chutes, Compactors and Service Lifts Guidelines

**Garbage chute design**

- Garbage chutes must be constructed in accordance with the requirements of the ~~*Building Code of Australia (BCA).*~~*National Construction Code.*
- Garbage chutes must be located and insulated in a manner that reduces noise impacts.
- Chutes, service openings and charging devices must be constructed of material (such as metal) that is smooth, durable, impervious, non-corrosive and fire resistant.
- Chutes, service openings and charging devices must be capable of being easily cleaned.
- Chutes must be cylindrical and should have a diameter of at least 500mm.
- There must not be any bends (or sections of reduced diameter) in the main shaft of the chute.
- Internal overlaps in the chute must follow the direction of waste flow.
- Chutes must deposit rubbish directly into a bin or compactor located within a waste/recycling storage room.
- A cut-off device must be located at or near the base of the chute so that the bottom of the chute can be closed when the bin or compacting device at the bottom of the chute is withdrawn or being replaced.
- The upper end of a chute should extend above the roofline of the building.
- The upper end of a chute should be weather protected in a manner that doesn't impede the upward movement of air out of the chute.

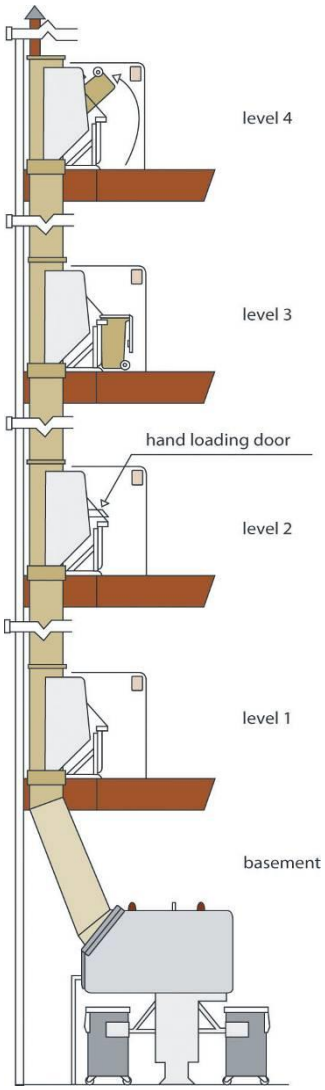



**Figure 34** Example of a garbage chute system

**Garbage chute service room design**

- The service opening (for depositing rubbish into the main chute) on each floor of the building must be located in a dedicated service room.
- The charging device for each service opening must be self-closing and must not project into the main chute.
- Branches connecting service openings to the main chute are to be no more than 1m long.
- Each service room must include containers for the storage of recyclable materials. Signage regarding the materials that can be recycled should be displayed near these containers.
- Each service room must be located for convenient access by users and must be well ventilated and well lit.
- The floors, walls and ceilings of service rooms must be finished with smooth, durable materials that are capable of being easily cleaned.
- Service rooms must include signage that clearly describes the types of materials that can be deposited into the garbage chute and the types of materials which should be deposited into recycling bins.

## Annexures

**Management**

- Garbage chutes are not to be used for the disposal of recyclable materials. Signage to this effect should be displayed near service openings.
- Arrangements must be in place for the regular maintenance and cleaning of garbage chutes and any associated service rooms, service openings and charging devices.
- Arrangements must be in place for the regular transferal of recyclable materials (which are stored in service rooms) to the main waste/recycling storage room.

**Service Lifts**

- A service lift (or service elevator) may be appropriate in place of a waste chute in developments where a caretaker is to be employed.
- A service lift is a dedicated elevator system for the transport of waste and recycling containers and other equipment required for the operation of the development.
- A waste service compartment must be provided on each floor of the development to allow residents to store waste and recyclables.
- Residents place their waste and recyclables in bins provided and these are transported daily by the caretaker to the waste storage room.
- Each service room must be designed with sufficient space for the storage of two days waste and recycling for all residents on that level.
- Applicants will need to check with Council whether this option is acceptable.

**Compactors**

- Compactors are used to compress the waste (or recyclables) into smaller collection containers.
- The compaction ratio is typically set at around 2:1. Higher ratios are not used as they may result in heavier bins, causing OH&S problems, mechanical damage and breakage of recyclable materials.
- Best practice compaction systems compact directly into a 240 litre bin or a skip, reducing the requirement of manually loading the compacted waste into bins or skips.
- Compactors are extremely useful for mixed garbage, if used for recyclables extreme care must be taken not to cross contaminate the recycling streams.
- Compactors are less useful for steel containers and should not be used for glass.
- Compactors require regular maintenance. In particular, systems fed from a chute can be prone to blockages or failure of the “electronic eye”, which can result in garbage overflowing or backing up the chute. As a result if the 2:1 compaction ratio, the requirement for garbage storage bins is halved. This information was sourced from: Resource NSW (The Department of the Environment and Conservation), “Better Practice Guide for Waste Management in Multi-Unit Dwellings”, 2002.

Source: *Better Practice Guide for Waste Management in Multi-Unit Dwellings, DECC, 2008.*

## Annexures

### Annexure B1-7
### Placing a Waste Storage Container in a Public Place

To place a waste storage container (skip) in a public place, such as on a roadway or footpath, a Building Waste Container Company registered with Council must be used.

For the purposes of this Part, a waste storage container means a bulk container, commonly known as a skip, that is used for the temporary storage and transportation (by a registered vehicle) of waste and recycling materials generated by building demolition and construction activities, as well as general household rubbish. Also for the purposes of this Part, a public place means the whole of a public roadway, including any footway and grass verge, but does not include a public park or reserve which is land used for public recreation and like purposes.

A waste container may be placed in a public place, only where there is no suitable space available on the user's premises. Council permits this to encourage source separation and recycling of waste materials. Council encourages the use of multiple containers or careful scheduling of single container collections to enable separation of re-useable and recyclable materials. Details of the container must be marked on the plans presented to Council when applying for a construction certificate.

**Approval Requirements**

Permission to supply and locate a building waste container / skip is granted subject to compliance with the following conditions:

1. The Company holds a current Council permit to place a waste storage container in a public place;
2. The Company have lodged an appropriate security deposit with Council to cover the costs for repair of any damage caused to public property;
3. Containers will be positioned in conformity with the "Interim Guidelines for the Placement of Building Waste Containers" as prepared by the Roads and Traffic Authority of N.S.W;
4. Containers shall not exceed a width of 2.5m;
5. No containers shall be located in a public reserve without the prior approval of Council;
6. Containers shall not be left on a roadway longer than seven (7) days;
7. Containers shall bear the name and telephone number of the supplier;
8. Suppliers agree that the site where containers are being placed will be left in a clean and tidy condition with all spillage removed from the area;
9. Suppliers are to be responsible for any incidence of damage arising from poor placement of containers or spilt debris; and
10. Suppliers are to agree in writing to indemnify Council against any public liability claim arising from the placement of containers on Council's roadways and such insurance cover to indemnify Waverley Council for a minimum amount of $10,000,000.

When placing a waste storage container / skip in a public place the following provisions must be complied with:

1. Public safety and convenience must be preserved;
2. The container will not cause any damage to public property;
3. The container is a size appropriate to the location;
4. The container is clearly identifiable;
5. The container is clearly visible to traffic;
6. The container does not restrict or obstruct traffic visibility;
7. The container does not disturb or obstruct the free flow of pedestrian or vehicular traffic; and
8. The container does not disturb normal stormwater flow.

# PART C RESIDENTIAL DEVELOPMENT

# C1 LOW DENSITY RESIDENTIAL DEVELOPMENT

This Part applies to any type of low density residential development proposing a new building or alterations and additions to an existing building or buildings in the Waverley LGA. For the purposes of *Part C1 Low Density Residential Development* the term lower density residential accommodation includes the following types of development:

- Dwelling house;
- Dual occupancy;
- Semi-detached dwelling;
- Attached dwelling (terrace styled development); and
- Secondary dwelling.

Each type of lower density residential accommodation is defined in the WLEP.

Development is to comply with the provisions of this part, as well as all other relevant parts of the WDCP. Parts C1.1 – C1.12 are general controls, and Parts C1.13 – C1.16 of this Part apply to specific development types, in addition to the general controls.

## 1.1 HEIGHT

The WLEP outlines the maximum permissible building height of a site. Achieving the maximum building height may not be appropriate in all cases and should not be considered as prescribed or allowable regardless of circumstance. Amenity or streetscape impacts may require a lower height or additional setbacks. Nothing in this part restricts Council's ability to require the height of a building to be less than the maximum height as specified in the LEP.

**Objectives**

(a) To provide appropriate building heights for flat or pitched roof forms for lower density residential accommodation.
(b) To ensure the height and scale of development relates to the topography and street character.
(c) To ensure the height and scale of development does not unreasonably impact on views enjoyed by neighbouring and nearby properties.
(d) To ensure that the height and scale of development does not result in unreasonable overshadowing of neighbouring and nearby properties.
(e) To minimise loss of views from, and overshadowing of, public places.
(f) To ensure development in excavation areas does not add to the overall visual bulk of the dwelling.

**Controls**

(a) For a building with a pitched roof the maximum wall height is 7m above existing ground level (refer to Figures 4 and 5), except as determined in Control (b) below.
(b) For a building with a flat roof, the maximum wall height is 7.5m above existing ground level.
(c) Where it is permissible for buildings to be built to a height greater than 9.5m under WLEP, the wall height will be determined by a merit assessment of the design of the building and its relationship to adjoining dwellings.
(d) Buildings on steep sites are to be stepped down to avoid high columns, elevated platforms and large under croft areas.
~~(d)~~(e) The maximum building height (LEP) is calculated from beneath the basement floor for sites with an existing basement. This is typically 200mm beneath the finished floor level when there is a concrete slab, or 300mm beneath the finished floor level for timber floored properties (such as terraces). The maximum external wall height only includes the portion of wall above ground.

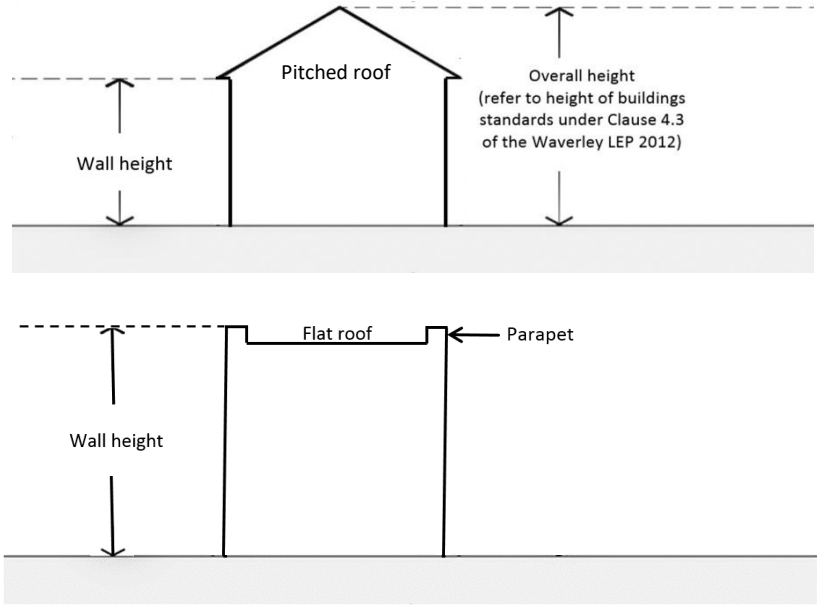



**Figure 4** How to measure wall height for dwellings with pitched and flat roofs

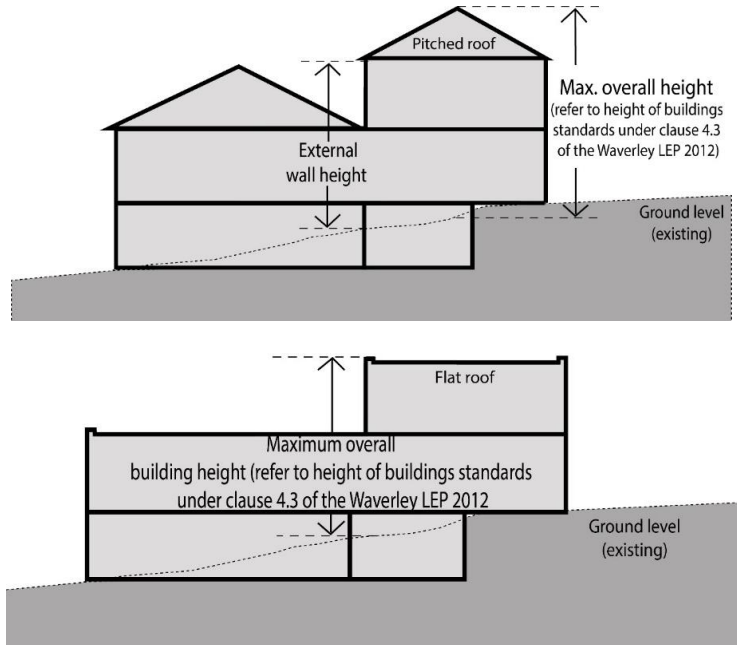



**Figure 5** How to calculate height on sloping land

~~Note: The maximum building height (LEP) is calculated from the basement floor for sites with an existing basement. The maximum external wall height only includes the portion of wall above ground.~~

## 1.2 SETBACKS

**Objectives**

(a) To ensure that the bulk and appearance of the proposed development is appropriate to the streetscape.
(b) To set a rhythm and character to residential streets.
(c) To ensure the distance between buildings on adjacent properties allows adequate solar access, ventilation and privacy.
(d) To ensure that the amenity of rear yards, their function as private open space, and their visual and landscape contribution to the surrounding area is protected and enhanced.
(e) To accommodate flexibility in the siting of buildings, where appropriate.
(f) To ensure the front and rear setbacks of buildings are consistent with surrounding buildings and do not visually detract from the streetscape.
(g) To ensure significant views and view corridors available from the public domain and existing properties are considered as part of the local context of any development. Refer to *Part C1.10 Views*.
(h) To ensure buildings on corner lots are consistent with the predominant building lines of adjoining sites.

**Controls**

### 1.2.1 Front and rear building lines

(a) New buildings and extensions to existing buildings are to extend no further than the front and rear predominant building lines (refer to Figures 6 and 7). The predominant building line can be considered to be the three adjacent neighbours on either side.
(b) The predominant rear building line is determined separately for each floor level. Notwithstanding (a) above, development at first floor level and above shall be set back from the rear building line of the ground floor level in order to minimise bulk and scale impacts and provide visual relief for the open space and living areas at adjacent properties (refer to Figure 6).
(c) The siting of dwellings on corner lots should take reference from the setbacks of dwellings on adjacent sites.
(d) Where it is proposed to build beyond the predominant front and/or rear building line at any level, or where there is no predominant front and/or rear building line, or where it is not possible to setback from the rear building line at first floor level, then greater consideration must be given to the following;
    (i) Compliance with applicable development standards, including Floor Space Ratio and Building Height;
    (ii) Compliance with the landscaped and open space controls;
    (iii) Compliance with side setback controls;
    (iv) Emergence of a new front and/or rear building alignment beyond the dwellings either side of the subject site (note that any reliance on an emerging front and/or rear building alignment as a precedent can only be justified where the emerging alignment is itself based on compliant development with respect to building height, FSR and side setback controls);
    (v) Location and retention of existing significant vegetation;

(vi) Visual aspect of the bulk and scale as viewed from the private open space and living areas of adjoining properties;
(vii) Acceptability of amenity impacts on adjacent properties with regard to solar access, and visual and acoustic privacy;
(viii) Views available from the subject site and adjoining properties including an assessment against the Land and Environment Court Views Planning Principle in *Tenacity Consulting v Warringah Council [2004] NSWLEC 140 at 25-29*;
(ix) In areas of heritage significance, the importance of preserving the front portion of the building by providing an additional setback from the front building line.

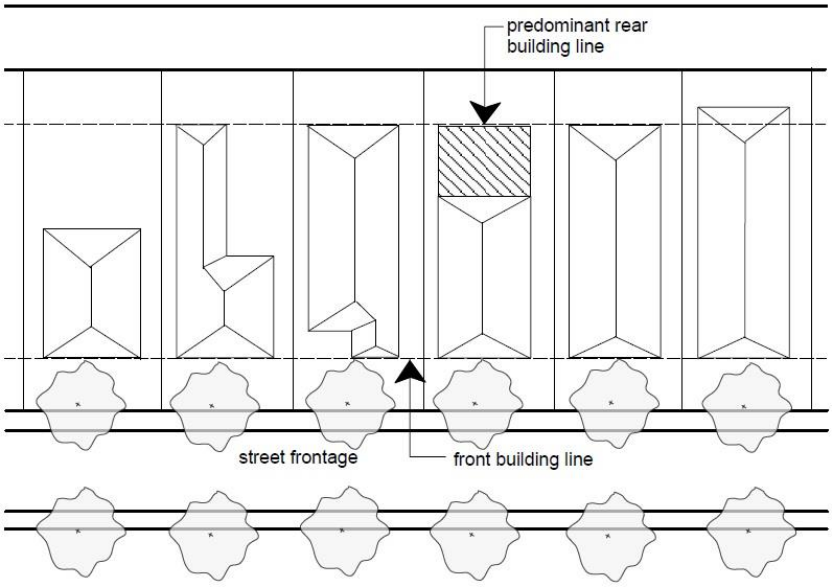



**Figure 6** Example of front and rear predominant building lines on regular shaped lots

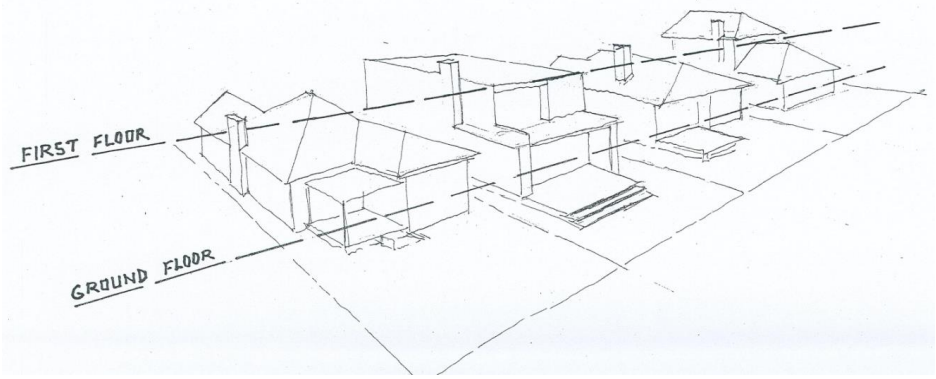



**Figure 7** Example of ground and first floor level predominant rear building lines

### 1.2.2 Side Setbacks

**Controls**

(a) Comply with the minimum setbacks as follows:

| Location of proposed works | Side setback (min.) |
|---|---|
| Ground Floor | 0.9m |
| First Floor | 0.9m |

| | |
|---|---|
| Second Floor | 1.5m |
| Third Floor | On merit |

Table 1 Minimum side setbacks

~~**Note:**~~

(b) The side setbacks may be reduced if the proposed dwelling or alteration adjoins another dwelling without a setback along the shared boundary. This applies only to that section of the boundary which the neighbouring dwelling is built.

~~•~~(c) The 'ground floor' is considered the lowest floor on site when considering which side setback floor to apply. Where a site slopes, the ground floor should be taken from the lowest floor on the site from each end of the site.

~~•~~(d) Greater side setbacks may be required to achieve compliance with Parts C1.3, C1.5, C1.6, C1.7 and C1.9 of this DCP.

~~•~~(e) Side setbacks for components of existing buildings being retained do not need to be changed to comply with Table 1, however, new works proposed to an existing building do need to be changed to comply.

~~•~~(f) Where a brand new three storey structure is proposed, all floors must be setback by 1.5m.

## 1.3 STREETSCAPE AND VISUAL IMPACT

**Objectives**

(a) To enhance the built form by encouraging quality design that corresponds harmoniously with the surroundings.
(b) To encourage and facilitate lower density residential accommodation of a high architectural and aesthetic standard, that acknowledges and responds to the architectural style, scale, materials and character of the existing built environment.
(c) To ensure development provides a clear distinction between private and public space and encourages casual surveillance of the street.
(d) To ensure views to and from a public place including parks, reserves, beach or the ocean are preserved.

**Controls**

(a) New development should be visually compatible with its streetscape context. It should contain or at least respond to essential elements that make up the character of the surrounding area.
(b) When replacing existing windows, the style is to complement the style and proportions of the existing dwelling when viewed from the street.
(c) Contemporary alterations and additions should include windows characteristic of the style of the addition.
(d) Development must not dominate or erode the character of the streetscape, particularly when viewed from a public place such as parks, reserves, beach or the ocean.
(e) New development as well as alterations and additions to existing dwellings are to maintain the established character of the building in terms of significant landscaping. Existing ground levels and significant landscaping is to be maintained.
(f) Existing verandahs and balconies fronting the street are not to be enclosed.
(g) Porticos above a fence or entrance way are to minimise bulk and are only appropriate where it can be demonstrated that they are consistent with the existing street character.

## 1.8 CAR PARKING

**Objectives**

(a) To provide convenient and accessible parking that is appropriately designed and located.
(b) To achieve a high standard of urban design and retain the visual quality of lower density residential accommodation, streetscapes and landscapes.
(c) To protect the amenity and safety of pedestrians.
(d) To ensure that car parking accommodation does not dominate or adversely impact on the existing built or landscape character of the street.
(e) To encourage the use of alternative modes of transport in areas well serviced by public transport.
(f) To ensure on-street parking supply is protected by minimising impacts of additional vehicular kerb crossings.

**Controls**

### 1.8.1 Design Approach

(a) Approval for on-site parking will only be granted where the site and locality conditions permit.
(b) Car parking must be designed to complement the design of the building and streetscape to which it relates and incorporate a range of appropriate materials and design.
(c) Car parking structures are to be located behind the front building line to reduce visual impact upon the streetscape.
(d) Driveways and vehicular access should be designed to minimise the loss of on-street parking wherever possible.
(e) Access to car parking and car parking structures are to be provided from secondary streets or lanes where possible.

### 1.8.2 Parking Rates

(a) Development is to comply with the provisions of Table 4 in *Part B7 Transport*.
(b) Notwithstanding the above, a reduced rate (or no parking) may be required in the following circumstances, where:
    (i) Parking may have a detrimental impact on the character of the streetscape, heritage item or heritage conservation area, or health of a significant tree.
    (ii) A driveway cannot comply with maximum gradients and design standards required by the Australian Standards.
    (iii) Vehicle entry and exit may have a detrimental impact on pedestrian and traffic movements and safety or nearby services or infrastructure.
    (iv) The access to the on-site car parking will result in the loss of more than 1 on-street car parking space or equivalent available kerb space, as measured cumulatively along the entire block.

(v) The streetscape has limited existing off-street vehicular access and/or consists of a narrow carriageway that does not facilitate efficient vehicular turning movements into off street car parking areas (two or less movements).

(vi) There is low on-street parking availability and no net car parking public benefit.

(c) Where an applicant proposes to provide more than the number of on-site car spaces specified in (a), additional justification must be provided to cover matters such as, but not limited to the impact of:

(i) The visual impact of parking accommodation compared to alternatives such as landscaping;

(ii) Any increased building bulk on the streetscape;

(iii) Any increased building bulk on the amenity of adjoining properties;

(iv) The loss of existing on-street parking illustrating existing and proposed off street parking;

(v) The level and impact of any excavation; and

(vi) Access to public transport.

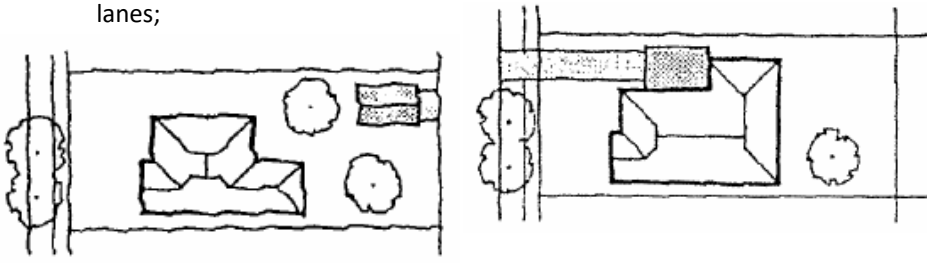
### 1.8.3 Location

(a) For new dwellings all on-site car parking is to be located behind the front building line.

(b) For existing development, car spaces should be sited having regard to the following hierarchy (refer to Figure 11):

(i) Hardstand, carport or garage located at the rear of the site with access from secondary streets or lanes;

(ii) Hardstand, carport or garage located at the side of the dwelling behind the building alignment; or



(iii) Hardstand car space forward of the front building line.

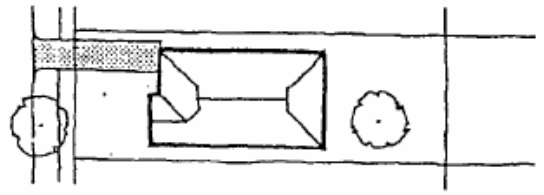


**Figure 11** Hierarchy of preferred car parking locations

(c) Garages on rear lanes must not create conflict with parking in the lane and result in the loss of laneway parking for any property other than the subject site.

(d) A hardstand (in the form of wheel strips) or carport forward of the building line may be permitted where:
  (i) There is no rear access;
  (ii) The site is of sufficient width where the car space will not dominate the existing building (i.e. does not exceed 45% of the width of the site frontage);
  (iii) It is no greater than a single car space;
  (iv) The distance between the building and the front property boundary is a minimum of 5.4m so as to provide sufficient space for a standard car;
  (v) Public views would not be adversely affected;
  (vi) There is a predominance of this form of off street car parking in the immediate vicinity of the site;
  (vii) It is designed so that it does not detract from the heritage significance of the building or area;
  (viii) There is limited availability to public transport;
  (ix) The safety of vehicles, pedestrians and cyclists is maintained; and
  (x) There is adequate bin storage space other than on the hardstand.

(e) Where an allotment is subdivided to create a "battleaxe" shaped allotment, the access "handle" is to have a minimum width of 3.5m.

(f) On-site car parking (other than from rear lanes) is not acceptable in heritage conservation areas where it will:
  (i) Break a consistent building line;
  (ii) Introduce uncharacteristic elements within an established streetscape; and/or
  (iii) Adversely impact on the integrity of the listed or contributory building or setting.

### 1.8.4 Design

(a) All car parking should be designed to complement the style, massing and detail of the dwelling to which it relates.

(b) Car parking is to be sympathetically integrated into the design of residences and to be secondary in area and appearance to the primary residence and related site.

(c) No element of the street façade/frontage of a building, including verandahs and window awnings are to be removed or demolished in order to accommodate car parking.

(d) Car parking is to preserve the natural features of the site and incorporate substantial screen planting to both the surrounds and any structure facing the street.

(e) Exposed natural rock faces and heritage listed sandstone walls must not be removed for any car parking.

(f) Vehicle access is not to remove existing street planting without consent. Any street tree approved for removal is to be replaced with two like mature species or Council- approved alternate species, where practicable in front of the subject site. If only one replacement tree is practicable in front of the subject site, the second replacement tree is to be planted preferably in another Council determined location in the street, or on the site itself.

(g) Where parking is provided for dual occupancies parking is to utilise shared access ways. Parking to dual occupancies is to be located behind the front

building line and to utilise open spaces between residences preferably screened from the street.

(h) Where existing retaining walls form part of the streetscape any new garage is to have single vehicle width entries. Entry set within stone faced exterior walls of matching stone work to that in the streetscape. Stone facing to new garages is to incorporate whole stone return corners and not mitred or butt jointed veneer.

(i) Where gates are proposed they should have an open design to allow for improved security by way of street surveillance and are not to open over the footpath, public nature strip or pedestrian path to the front door.

(j) All parking accommodation is to be constructed or installed so that any roof or surface water is disposed of into the existing stormwater drainage system.

(k) The surface and slope of driveways must be designed to facilitate stormwater infiltration on site such as the use of wheel strips or alternatively porous materials.

### 1.8.5 Dimensions

(a) Hardstand spaces, carports and garages should have minimum dimensions of 5.4m x 2.4m per vehicle.

(b) All car spaces are to accommodate the vehicle within the site without the vehicle or vehicle appendages overhanging the public domain.

(c) Internal sliding or hinged gates are to be provided to hardstands/carports to ensure enclosure of the vehicle within the site.

### 1.8.6 Driveways

(a) Where possible driveways to off-street car parking should be located so they may provide vehicle access to adjacent properties.

(b) Provide a maximum of 1 vehicle crossing per property. Properties with more than 1 dwelling, are required to share a vehicle crossing to reduce the impact to street parking and allow more space for street trees.

(c) Driveways are to be 3.0m wide at the gutter (excluding any ~~the~~ splay) and may splay to the property boundary on a case-by-case basis ~~as required.~~

(d) Vehicle crossings will not be permitted where one off street parking space will result in the loss of two or more on street parking spaces.

(e) A street analysis is required illustrating the number of on-street spaces provided before and after the proposed vehicle crossing.

## 1.13 SEMI-DETACHED DWELLINGS & TERRACE STYLE DEVELOPMENT

Semi-detached dwellings form a significant percentage of Waverley's existing housing stock and are being increased in numbers in the form of dual occupancies. Examples of semi-detached dwellings dating from the 1850's to the present are characterised by the principle of providing cohesive residences having the appearance of a more substantial single dwelling.

This section of the DCP predominantly relates to alterations and additions for semi-detached dwellings & terrace style development. New builds (such as knockdown rebuild) should refer to controls outlined in previous sections of this chapter.

**Objectives**

(a) To ensure alterations and additions visually read as a cohesive part of the existing dwelling from the streetscape.
(b) Materials and detailing of design elements such as roof features are to be of a high quality and reference existing architectural style and features.
(c) To maintain the original style, form and detail of development to provide cohesion between semi-detached or attached buildings.
(d) To maintain the appearance of semi-detached development as one of a pair, demonstrating consistent scale, character and established streetscape values.
(e) To retain the ability of the adjoining residence to undertake comparable cohesive additions.
(f) To ensure that additions present as an extension of the historic form of the existing building envelope.
(g) To ensure that the design of first floor additions provides for cohesion, both at the interface of dwellings resulting from additions to one dwelling and the overall form resulting from additions to both adjoining semi-detached dwellings.
(h) To ensure that development affecting common or shared walls upholds the integrity and quality of the walls on all properties affected.

**Controls**

### 1.13.1 Built Form

(a) To protect the street frontage of the pair of semi-detached dwellings, demolition of one semi-detached dwelling of a semi-detached dwelling pair is not supported.
(b) Where demolition of the building is required due to structural inadequacy or the like, the replacement building is to be a semi-detached dwelling and complement the character of its pair.
(c) To protect the street frontage of the pair of semi-detached dwellings, the demolition of one existing semi-detached dwelling must not be carried out for the front 6m of the dwelling, or forward of the roof ridge line (whichever is greater).
(d) The style of the built form must be identified and maintained across the pair or group of buildings.
(e) The existing original style of the subject semi-detached dwelling is to form the basis of additions visible from the street.
(f) The use of an attic room in the existing roof void of a semi-detached dwelling is permitted provided:
    (i) Design controls for dormers are met;

(ii) No external balconies are proposed for the attic room;
(iii) The attic room maintains the existing roof form as the dominant aspect of the street frontage;
(iv) New works do not exceed the existing ridge height; and
(v) New works remain cohesive with the existing roof form, pitch and finish.

(g) Alterations to front verandahs are to be minimal and to maintain the existing verandah form, detail and finish and the relationship of the verandah to the front verandah of the adjoining semi-detached dwelling.

### 1.13.2 First Floor Additions to Semi-detached Dwellings

(a) First floor additions are to be complementary to the overall building size and style.
(b) Any first floor addition is to be set back 6m or behind the roof ridge line (whichever is greater) from the principal street frontage in order to maintain a substantial portion of the existing front roof slope and any front verandah.
(c) Where an existing roof incorporates a main gable oriented to the street, frontage additions are to be located a minimum of 1000mm behind the main gable front.
(d) Where an existing roof has a principal transverse ridgeline, the bulk of the additions are to be located behind the ridgeline with the exception of secondary dormers or gables set into the front roof slope.
(e) Where first floor additions extend forward of the existing ridgeline or apex of a hipped roof:
(i) The width of additions is limited to no more than 50% of the existing roof of the subject dwelling; and
(ii) Architectural elements of semi-detached dwellings are to be retained; and
(iii) The extent of the existing roof form is to be contiguous with the attached dwelling.
(f) The bulk of any first floor addition is to be located to the rear areas of the dwelling.
(g) Flat roof forms should only be employed where not seen from the street or surrounding an important viewing position in Heritage Conservation Areas.
(h) Uncharacteristic roof forms and details are not considered appropriate if these impact on the streetscape character of adjoining or nearby semi-detached dwellings.
(i) Roof forms which contribute excessively to the visual bulk of the building such as high skillion roof forms will not be permitted.
(j) First floor additions are to limit the rise of walls at the interface with the adjoining semi-detached dwelling to a height of 600mm.
(k) Any raised party wall is to be set behind the principle ridge line and / or mitigated by detailed design.
(l) Contemporary roof forms to the rear of traditional semi-detached dwellings may be acceptable if the visual impact to the street and the adjoining dwelling is minimised.
~~(m) Where first floor additions exist to the adjoining semi-detached dwelling, the original style and form of the semi-detached dwelling is to form the basis of first floor additions.~~
(m) Where first floor additions exist to the adjoining semi-detached dwelling, the style and form of the adjoining first floor addition is to form the basis of any new first floor additions
(n) Where symmetry or asymmetry is the dominant aspect of the original semi-detached dwelling pair, this is to be acknowledged in first floor additions.

### 1.13.3 Material Finishes and Detail for Semi-detached Dwellings

(a) Additions are to be cohesively integrated with the finishes and detail of the existing building.
(b) The style, pitch, profile and colour of roofs to proposed additions are to match and complement the existing roof form of the dwelling.
(c) Historic features of the existing roofscape are to be identified and where appropriate be incorporated into the proposed addition.
(d) Dormer roof forms are to be used in a manner characteristic of the original style of the subject dwelling.
(e) New roofing is to match the original roofing in material colour and profile. Where roofs of adjoining semi-detached dwellings are currently different to each other, new additions are to match the roofing of the adjacent semi-detached dwelling.
(f) Windows to first and ground floor additions are to be in scale and proportionate to the original windows in the semi-detached dwelling.
(g) Upper wall finishes are to reflect the style and character of the original building finishes.

### 1.13.4 Side setback and courtyard design controls for terraces

(a) The common (or party) wall between a pair of terraces can be built with no side setback along the common boundary where it abuts an existing wall to the neighbouring property or where it can be reasonably expected that a wall to the neighbouring property would be constructed in the future.
(b) The outer side wall of the building (i.e. the wall that is not a shared wall or party wall), should be set back a minimum of 900mm from the outer side boundary (refer to Figure 12).
(c) Part of the outer side wall may be built to the outer side boundary to create an internal courtyard. The wall on this boundary should generally be a maximum of 2.1m in height. Refer to Figure 12.
(d) Internal courtyards must have a minimum 1.5m dimension depth and should be the same width as the outrigger projection (Figure 12) ~~.~~
(e) No openings are permitted for walls built to the side boundary.
The extension should not encroach beyond the predominant rear building line (refer to Figure 12).

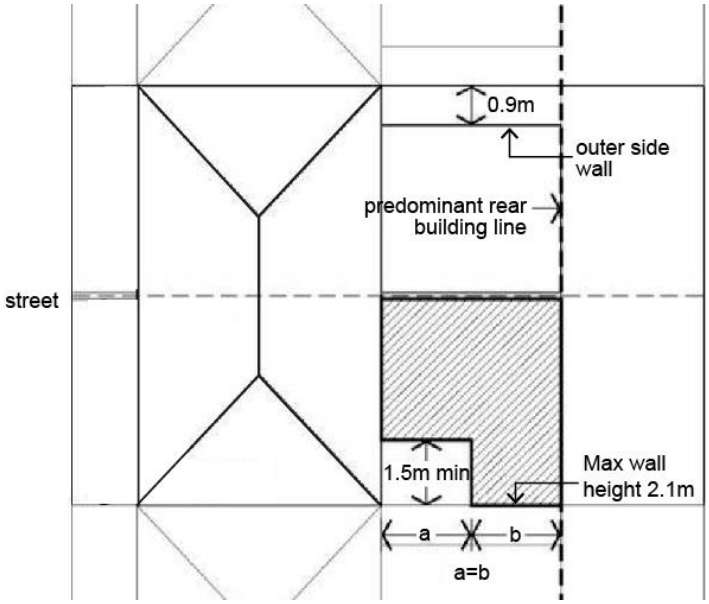



**Figure 12** Example of rear extension to terrace.

### 1.13.5 Streetscape and visual impact controls for terraces

(a) Where there is a mix of 1 and 2 storey terrace style dwellings within a terrace group, additions to one of the single storey terrace style dwellings may be acceptable if the new storey reflects the character and detail of the ground floor facade.

(b) Extensions to the rear of an existing single storey terrace dwelling are to be no higher than the existing ridge.

(c) In the case of attic conversions, the main roof envelope of the existing dwelling should remain intact and any dormers should be proportional in size and scale with the existing roof.

(d) For further guidance, refer to *Part C1.3 Streetscape and Visual Impact*.

### 1.13.6 Common or shared party walls

a) Subject to appropriateness on heritage grounds, where a previously interior party wall with no cavity becomes exterior then an appropriate second skin, and damp-proof course and waterproofing treatment will be required at the expense of the applicant.

b) Where new common walls are constructed, they should be constructed as cavity walls with a damp-proof course.

## 1.14 DUAL FRONTAGE DEVELOPMENT

For the purposes of this section, the following definitions apply:

*Dual frontage development*
Where a lot has two frontages the development is dual frontage development.

*Laneway development*
Laneway development is a type of dual frontage development, and comprises a lot that has one primary frontage, and a secondary frontage to a lane where the predominant use of that lane is vehicle access and waste collection.

**Objectives**

(a) To ensure dual frontage development addresses the character of both frontages appropriately.
(b) To maintain and improve the key function of a lane being the provision of access to and from a site.
(c) To ensure bulk, scale and form of dual frontage development does not have a detrimental impact on the established character of Heritage Conservation Areas.
(d) To activate rear laneways:
  (i) Through improved passive surveillance;
  (ii) Through improved quality of construction and design; and
  (iii) By establishing opportunities for improved landscaping.
(e) To maintain and enhance aesthetic qualities of Conservation Areas.
(f) To maintain the amenity of all existing residences. ~~within the Conservation Area.~~

**Controls**

### 1.14.1 General Controls

(a) In the case of a single occupancy on a dual frontage lot, the development is to nominate the primary and secondary frontage. Where the secondary frontage is to an otherwise primary road, consideration is to be given to the design and proposed uses of the development to maintain and improve amenity for the surrounding properties.
(b) The proposed use of development on a dual frontage or laneway development is to be specified. Any proposal for the development to be used as a separate occupancy must comply with the relevant provisions for this type of use.
(c) Detached dual occupancy development and detached secondary dwelling development is to locate built forms appropriately to each frontage.
(d) Ancillary structures including garages are to contribute to the predominant streetscape of the surrounding area.
(e) Orientation of ridgelines is to consider and minimise impact upon neighbours' amenity.
(f) Dormer or other roof projections are to be set a minimum of 600mm from outer garage walls and to be set a minimum of 300mm below the garage ridgeline (refer to Figure 14).
(g) Dormers or other roof projections are to have a maximum combined width not exceeding 50% of the associated roof width.
(h) Dormers or other roof projections and openings to gable ends are to be detailed to minimise overlooking of neighbours properties.
(i) To maintain neighbours privacy and amenity, windows and glazed doors to above garage accommodation and storage areas are to incorporate privacy screening,

translucent glazing, offset windows or other discrete detailing, cohesive to the design of the building and setting.

(j) Single width garage doors should incorporate an adjacent pass door for pedestrian usage.

(k) Pass doors should incorporate off street enclosure for waste bin storage.

(l) Garage studios and rear lane garage developments are to incorporate landscape planting. Landscaping is to include but not be limited to:
  (i) Inset pockets for tree, shrub or vine planting;
  (ii) Overhanging planters;
  (iii) Setback planters; and
  (iv) Green walls utilising mesh supported climbers or vertical emphasised tree or shrub species.

### 1.14.2 Laneway design provisions

(a) The external wall height of laneway development shall not exceed 3.6m and maximum height to the roof ridge shall not exceed 6m (refer to Figure 13).

(b) Gabled roof ends facing side boundaries are only appropriate where the impact on neighbours is considered acceptable in terms of solar access, bulk and scale, and visual and acoustic privacy impacts.

(c) Laneway development is to be designed with simple built forms, built at or very close to the lane alignment and is not to be seen from the primary street frontage (refer to Figures 14 and 15).

(d) Laneway development design should incorporate a pitched roof. Skillion roofs located behind parapets may be acceptable in some instances where the prevailing laneway development is consistent with such an approach and where it will result in fewer impacts to the amenity of adjacent properties.

(e) Development along lanes is to maintain the prevalence of mature, regularly spaced street trees and bushes, as well as mature and visually significant trees on private land. Laneway development should not occur if it will result in a significant alteration to the landscape character of the laneway.

(f) External stairs are not acceptable in order to protect the visual and acoustic privacy of adjoining properties and to maintain an appropriate aesthetic quality of the development.

(g) Rear lane garages are to employ gable ended and hipped roof forms with continuous roof pitch from outer walls to ridgeline.

### 1.14.3 Development in Heritage Conservation Areas

**Garage Articulation**

(a) Garage doors are to be limited to single vehicle widths, with central divide to double vehicle garages (refer to Figure 14).

(b) Roof forms are to reflect those of the Conservation Area in pitch and modulation.

(c) Garage/studio finishes are to reflect the finishes and proportions of traditional construction in the Conservation Area.

(d) Proportions of openings to studios are to maintain the proportions and voids to solid ratios of traditional construction in the Conservation Area.

(e) Windows to above garage studios are to be designed to minimise overlooking of surrounding properties both adjacent to the site and on opposing sides of

laneways. Outlook is to be directed into the associated property or into the rear lane.

(f) Treatment of windows and glazed openings to studios is to incorporate privacy screening to or from neighbouring sites including but not limited to obscure glazing, window hoods, awnings and recessed window planes.

(g) Garage studio structures are to be visibly separate from the associated residence. Yard areas and private open space areas are not to be roofed.

(h) The massing and roof line of garage/studio structures are to align with garage/studios on neighbouring sites. Box gutters on side boundaries are to be avoided. Solar collection panels are to be located to inner roof slopes facing the associated residence or to roof slopes facing side boundaries.

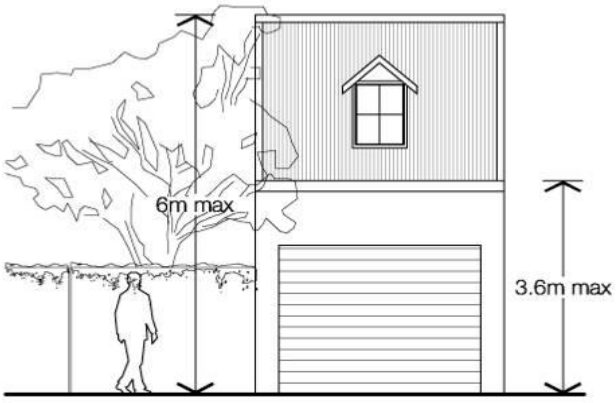



**Figure 13** Maximum overall and external wall height for laneway development


**Figure 14** Example of acceptable designs for laneway development

**Figure 15** Laneway development should not be visible from the primary street frontage

# C2 OTHER RESIDENTIAL DEVELOPMENT

Development is to comply with the provisions of this part, as well as other relevant parts of this DCP. Where there are inconsistencies, the provisions of this Part shall prevail to the extent of the inconsistency. This Part applies to the residential components of:

- Boarding Houses;
- Co-living housing;
- Group homes;
- Hostels;
- Manor Houses;
- Multi dwelling housing;
- Multi dwelling housing (terraces);
- Residential flat buildings;
- Seniors housing;
- Serviced apartments;
- Shop top housing; and
- Student accommodation.

*State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (Code SEPP).*

For the purposes of 'Low Rise Medium Density' development as permitted through Part 3B of the Code SEPP, this Part is to be considered in the design and assessment of manor houses and multi dwelling housing (terraces). Refer to the Code SEPP for the land use definitions of manor houses and multi dwelling housing (terraces).

*State Environmental Planning Policy (Housing) 2021 – Chapter 4 Design of residential apartment development (Housing SEPP)*

Development that is subject to Chapter 4 of the Housing SEPP is required to address the provisions of the Apartment Design Guide (ADG), in addition to this part of the DCP. As per Clause 149 of the Housing SEPP, if a DCP contains provisions that specify requirements, standards, or controls in relation to the following, those provisions are of no effect:

(a) visual privacy,

(b) solar and daylight access,

(c) common circulation and spaces,

(d) apartment size and layout,

(e) ceiling heights,

(f) private open space and balconies,

(g) natural ventilation,

(h) storage.

Where this is the case, a notation has been placed next to the relevant section of this Part. Given the nature of the existing and desired future character of Waverley, in many cases where the above provisions of the ADG cannot be achieved, the provisions of the relevant Part of this DCP are intended to provide additional guidance in achieving the relevant objectives.

## Other Residential Development C2

**CONTENTS**

## 2.2 HEIGHT

**Objectives**

(a) To ensure future development responds to the desired scale and character of the street and local area.
(b) To minimise the impact of attics and basement car parks on the overall building height.
(c) To provide good residential amenity for dwellings.

**Controls**

(a) The maximum building height is as set by Clause 4.3 of the WLEP and the Height of Buildings Map.
(b) Development must comply with the maximum external wall height (refer to Figures 16 - 18), as set in Table 2 below:

| Zoning | WLEP Height | Max external wall height |
|---|---|---|
| R3 | 9.5m | 7m |
| R3 | 12.5m | 9.5m |
| R4 | 20m | 17m |
| R4 | 28m | 25m |

**Table 2** Height requirements

(c) Council may consider a varied wall height where the following matters are addressed:
  (i) Compliance with Floor Space Ratio development standard;
  (ii) Compliance with Height development standard;
  (iii) Compliance with side setback controls;
  (iv) Visual aspect of the bulk and scale, as viewed from the private open space and living areas of adjoining properties;
  (v) Amenity of adjacent properties with regard to sunlight, visual and acoustic privacy and views; and
  (vi) A high design quality is achieved.

(d) The maximum building height (LEP) is calculated from beneath the basement floor for sites with an existing basement. This is typically 200mm beneath the finished floor level when there is a concrete slab, or 300mm beneath the finished floor level for timber floored properties (such as terraces). The maximum external wall height only includes the portion of wall above ground.

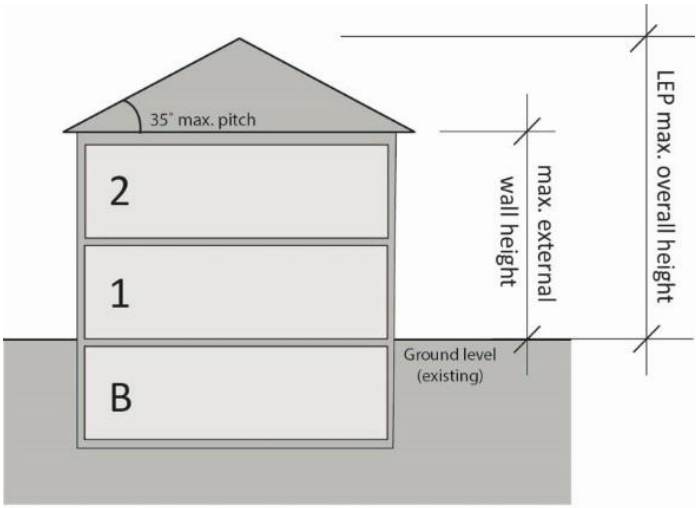



**Figure 16** How to measure height for a pitched roof building

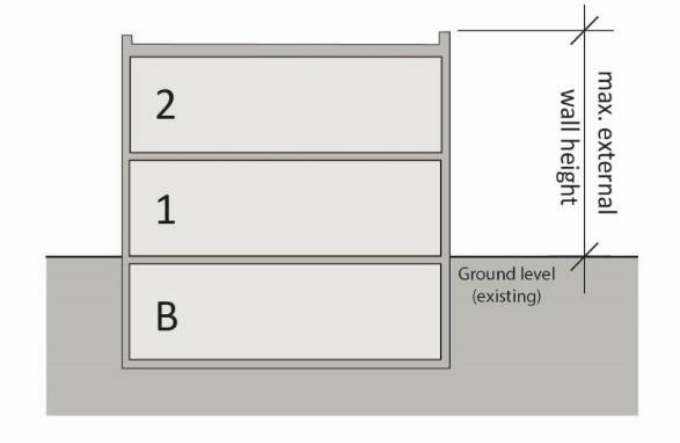
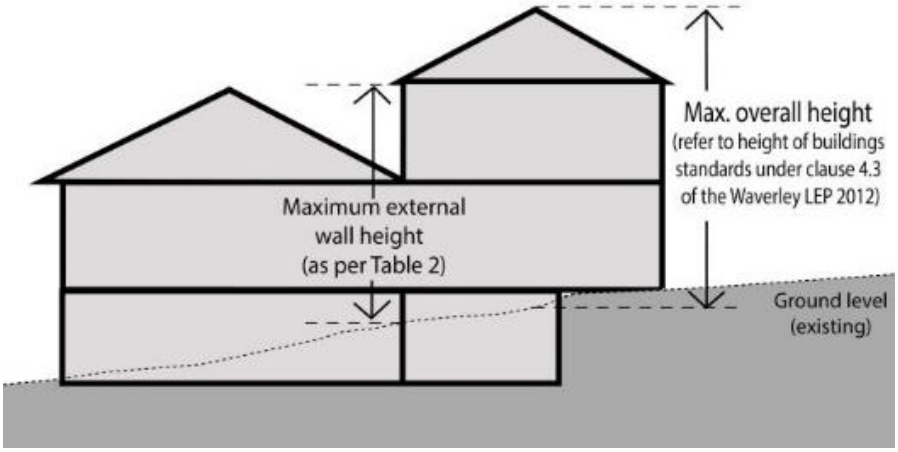
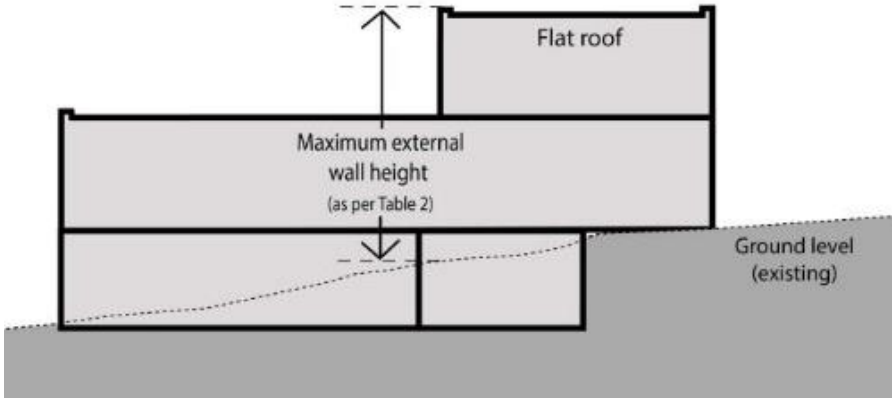



**Figure 17** How to measure height for a flat roof building

~~Note: The maximum building height (LEP) is calculated from the basement floor for sites with an existing basement. The maximum external wall height only includes the portion of wall above ground.~~

## Other Residential Development C2



## 2.22 RETENTION OF AFFORDABLE RENTAL HOUSING

When a development site contains an existing residential flat building or an existing boarding house Chapter 2 Part 3 of the *State Environmental Planning Policy (Housing) 2021* (Housing SEPP) is relevant for consideration.

**Objective**

(a) To ensure that applicable Development Applications can be accurately assessed under the Housing SEPP.

**Controls**

(a) When a development site contains an existing residential flat building or an existing boarding house, the Statement of Environmental Effects report submitted with a DA is to include an assessment against Chapter 2 Part 3 of the Housing SEPP.

(b) Where 5-years' worth (counted back from the date of lodgement) of rental data is provided by the applicant to confirm whether a dwelling is or is not a low-rental dwelling as defined by the Housing SEPP, the data should be provided in one of the following two ways:

   a. Executed leases and rental increase or decrease letters; or
   b. Information from the leasing agent accompanied by an executed statutory declaration.

   Without rental data being provided in one of these two forms it will be assumed that the dwellings without such data are low-rental, as it cannot be reliably proven otherwise.

   Where a dwelling is identified by the applicant as being owner-occupied for all or some of the 5-year period, a statutory declaration confirming such as well as a copy of a utility bill from every 6 months that the dwelling was owner-occupied should be provided.

   Where Council are not satisfied with the rental data, further information may be requested.

(c) Affordable housing provided under the Housing SEPP in relation to the in-fill FSR bonuses is not considered to offset the loss of existing low rental units as described in the Housing SEPP by the proposal.

# PART D COMMERCIAL DEVELOPMENT

# Commercial and Retail Development D1

## D1 COMMERCIAL AND RETAIL DEVELOPMENT

This Part applies to commercial and retail premises throughout Waverley.

### 1.1 OTHER POLICIES, STRATEGIES AND STANDARDS

Applicants are to ensure that the proposed development is in compliance with the relevant Australian Standards, including:

- The *National Construction Code* (NCC)
- Australian Standard *AS/NZS 1158 3.1:20*2005 ~~05~~ *Pedestrian (P) Lighting*
- The *Food Act 2003*
- The *Food Standards Code*
- The *Noise Guide for Local Government*
- The *Protection of the Environment and Operations Act 1997*

# Commercial and Retail Development D1

## 1.3 HOURS OF OPERATION

**Objectives**

(a) To ensure trading does not impact on the amenity of the area or disrupt nearby residential properties.
(b) To outline the application of review~~trial~~ periods for~~of~~ extended trading hours.

**Controls**

(a) Pre-works and clean-up of the premises (**operational hours**) can exceed the maximum approved **trading hours** up to a maximum of one hour before and one hour after trading hours, provided trading does not occur within this time.
(b) Where an application is received for the refurbishment of an existing licensed premises without trading hours regulated by a condition of consent, a new condition of consent will be imposed in accordance with this Part to regulate trading hours of the premise.
(c) Deliveries and the operation of loading docks shall be limited to the approved trading hours depending on the use and nearest residential properties.
(d) The prescribed trading hours within Table 1 are subject to all other aspects of the development being satisfactory. Where residential uses are in close proximity, more restrictive trading hours may be applied.

| ZONE | Trading Hours |
|---|---|
| All residential zones | (a) General base trading hours:<br>(i) 7.00am to 10.00pm, 7 days a week<br><br>(b) Extended trading hours are subject to a review after ~~on a~~ 1 year ~~trial basis~~ and will be considered up to 6.00am to 11.00pm, Fridays and Saturdays only.<br>~~(b)~~<br>(i) |
| All zones | (a) Special New Years Eve trading hours:<br>(i) 10.00pm New Years Eve – 1.00am New Years Day. |
| **CENTRE NAME - see Part E for maps** | **Trading Hours** |
| Bondi Junction (MU1 Zone portions)<br>Bronte Road, Bondi Junction<br>Bondi Beach<br>Bondi Road<br>Rose Bay North<br>Charing Cross | (a) General base trading hours:<br>(i) Monday to Saturday: 6~~7~~.00am to 11.00pm; and<br>(ii) Sunday: 6~~7~~.00am to 10.00pm.<br><br>(b) Extended trading hours are subject to a review after ~~on a~~ 1 year and ~~trial basis~~ will be considered up to:<br>(i) Monday – Sunday: 6.00am to midnight. |

# Commercial and Retail Development D1

| | |
|---|---|
| Curlewis Street<br><br>Rose Bay South | |
| Oxford Street Mall (also includes 4A Bronte Road, Bondi Junction) | (a) General base trading hours:<br>(i) Monday to Sunday: 6.00am to 3.00am. |
| Bondi Junction (E2 Zone portions excluding 4A Bronte Road, Bondi Junction) | (a) General base trading hours:<br>(i) Monday to Saturday: 67.00am to 11.00pm; and<br>(ii) Sunday: 67.00am to 10.00pm.<br>(b) Extended trading hours are subject to a review after ~~on a~~ 1 year and ~~trial basis~~ will be considered up to:<br>(i) Sunday to Wednesday: 6.00am to midnight; and<br>(ii) Thursday, Friday and Saturday: 6.00am to 1.00am. |
| Macpherson Street | (a) General base trading hours:<br>(i) 67.00am to 10.00pm, 7 days a week.<br>(b) Extended trading hours are subject to a review after ~~on a~~ 1 year ~~trial basis~~ and will be considered up to:<br>(i) 11:00pm on Thursdays, Fridays and Saturdays only; and<br>~~(ii) Monday – Sunday from 6.00am.~~ |
| Wairoa Avenue | |
| North Bondi | |
| Seven Ways | |
| Bronte Beach | |
| Belgrave Street | |
| Flood Street | |
| Murriverie Road | |
| OSH Road, at Murriverie Road | |
| Vaucluse | |
| Blake Street | |
| Fletcher Street | |

**Table 1** Hours of operation

### 1.3.1 Extended Trading Hours

(a) Council recognises that a number of uses may require longer trading hours than outlined in Table 1, particularly earlier opening times. In these instances, an application to extend or modify trading hours will undergo an additional merit assessment.

# Commercial and Retail Development D1

(b) Extended trading hours will be considered on a temporary, reviewable basis, to enable Council to assess the ongoing management performance of the premises and the impact on the neighbourhood amenity.

(c) Council's assessment of extended trading hours will consider the following:
- (i) The location of the premises, including proximity to residential and other sensitive land uses;
- (ii) The specific use of the premises, i.e. pub, nightclub, restaurant. Licensed premises are not eligible for extended trading hours on Sunday nights;
- (iii) The existing hours of operation of surrounding business uses;
- (iv) Size and patron capacity of the premises;
- (v) Security and general management of the premises;
- (vi) Number and nature of substantiated complaints regarding the operation of the premises;
- (vii) Compliance with conditions of consent;
- (viii) Evidence that the applicant has taken a pro-active position in terms of industry best practice;
- (ix) Record of successful waste management on site and clean up and management of waste in adjacent public domain;
- (x) Length of time the premises has traded under current operator;
- (xi) Availability of transport for patrons including taxis, buses and car parking areas;
- (xii) Plan of Management submitted detailing how operations and impacts will be managed (refer to the *Development Application Guide* on Council's website for requirements);
- (xiii) Likely noise impacts from the proposal, particularly during the proposed extended hours (mechanical ventilation, amplified noise, patrons' egress, etc.) and how these will be mitigated; and
- (xiv) Any other matters considered relevant to the environmental evaluation of the premise.

(d) Extended trading hours may initially be granted for a 1-year fixed term.

(e) Following the completion of a satisfactory fixed term, a reviewable term may be permitted as follows:
- (i) First reviewable term – up to a maximum of 2 years.
- (ii) Second reviewable term – up to a maximum of 3 years.
- (iii) Third and subsequent terms – up to a maximum of 5 years.

### 1.3.2 Review of Extended Trading Hours

(a) Applications for a reviewable term are to be lodged between 6 months and 3 months before the end date of the current term.

(b) If an application is lodged within the time frame specified in (a) but is not determined by the end date of the current term, the premises can continue to operate as per the current term hours until the application is determined.

(c) If an application is lodged less than 3 months prior to the end date of the current term, the premises shall revert to its approved based hours on that end date.

(d) If Council determines no further extension period shall be granted the premises must revert to its approved base hours.

(e) If the operator of the premises changes, the extended trading hours may be returned to a fixed term of 1 year.

# Commercial and Retail Development D1

(f) Council's assessment of extended trading hours will consider the criteria set out in 1.3.1 (c)

Annexures

# PART E SITE SPECIFIC DEVELOPMENT

*Part E Site Specific Development* is to be read in conjunction with *State Environmental Planning Policy (Housing) 2021 – Chapter 4 Design of residential apartment development*, the associated *Apartment Design Guide* and all relevant provisions of this DCP. Where there is an inconsistency between Part E and another Part, Part E prevails to the extent of the inconsistency.

# Annexures

## 1.21 CHARACTER AREAS

Bondi Junction contains a number of areas that contain similar characteristics and development potential, and are known as Character Areas as shown in Figure 29.

These include:

- A – West Oxford Street
- B – Oxford Street Mall
- C – Ebley Street Transition Corridor
- D – Bronte Road Village Centre

The additional provisions provided in Part E1 apply to these Areas.

*Note: Character Area B - Oxford Street Mall also includes 4A Bronte Road, Bondi Junction for the purposes of Part D 1.3 Hours of Operation of this DCP.*

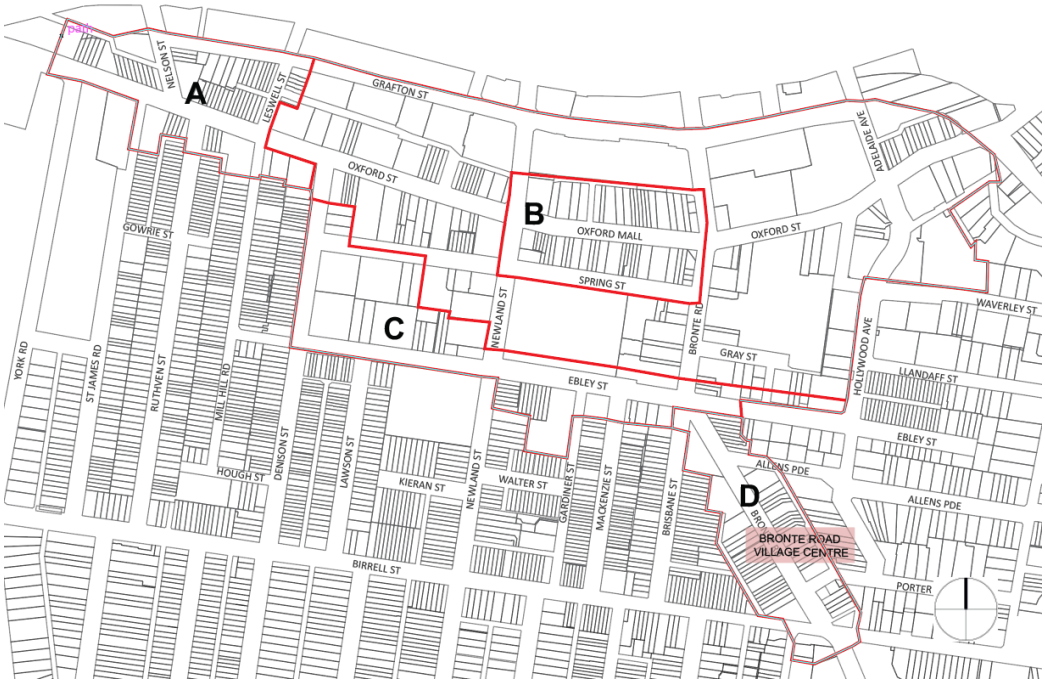



**Figure 29** Neighbourhood Areas

**Objectives**

(a) To ensure that development is consistent with the desired future character of the Bondi Junction centre.

**Controls**

(a) Development within the Bondi Junction centre must be consistent with the desired future character objectives for that area.

# Annexures

## ~~ANNEXURE E3-1 TYPICAL BUILT FORM FOR TWO STOREY CENTRES~~

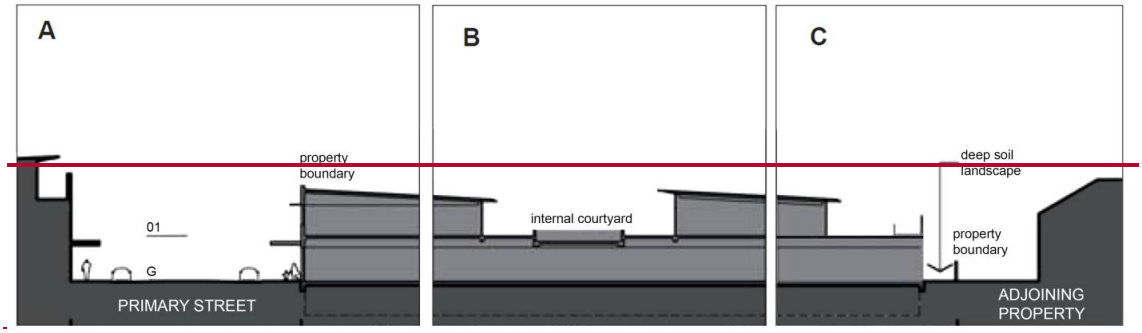
~~Annexure E3-1 applies to the following centres:~~

~~1. Murriverie Road Centre.~~
~~2. Belgrave Street Centre.~~
~~3. Macpherson Street Centre (properties east of 38-40 Macpherson Street, not including)~~

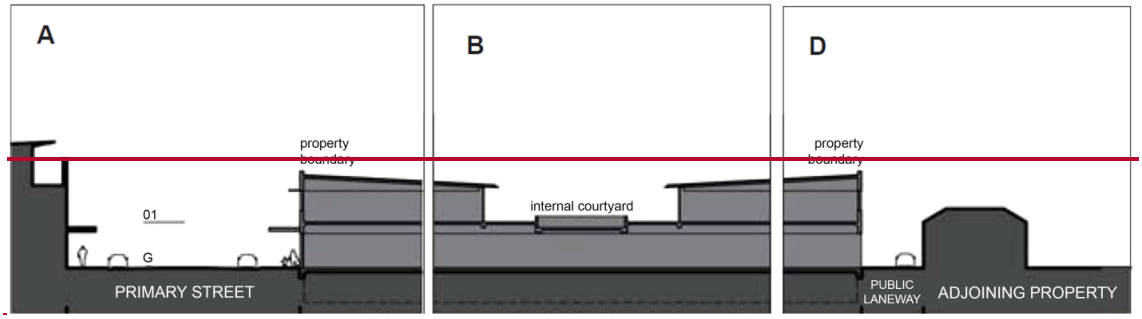
~~There are two typical built forms for two storey Local Village Centres which are dependent on whether the property has access to a rear lane.~~

~~a) Properties without rear laneway: Control Diagram A, B and C.~~
~~b) Properties with rear laneway access: Control Diagrams A, B and D.~~

**~~Two storey section – without rear laneway~~**

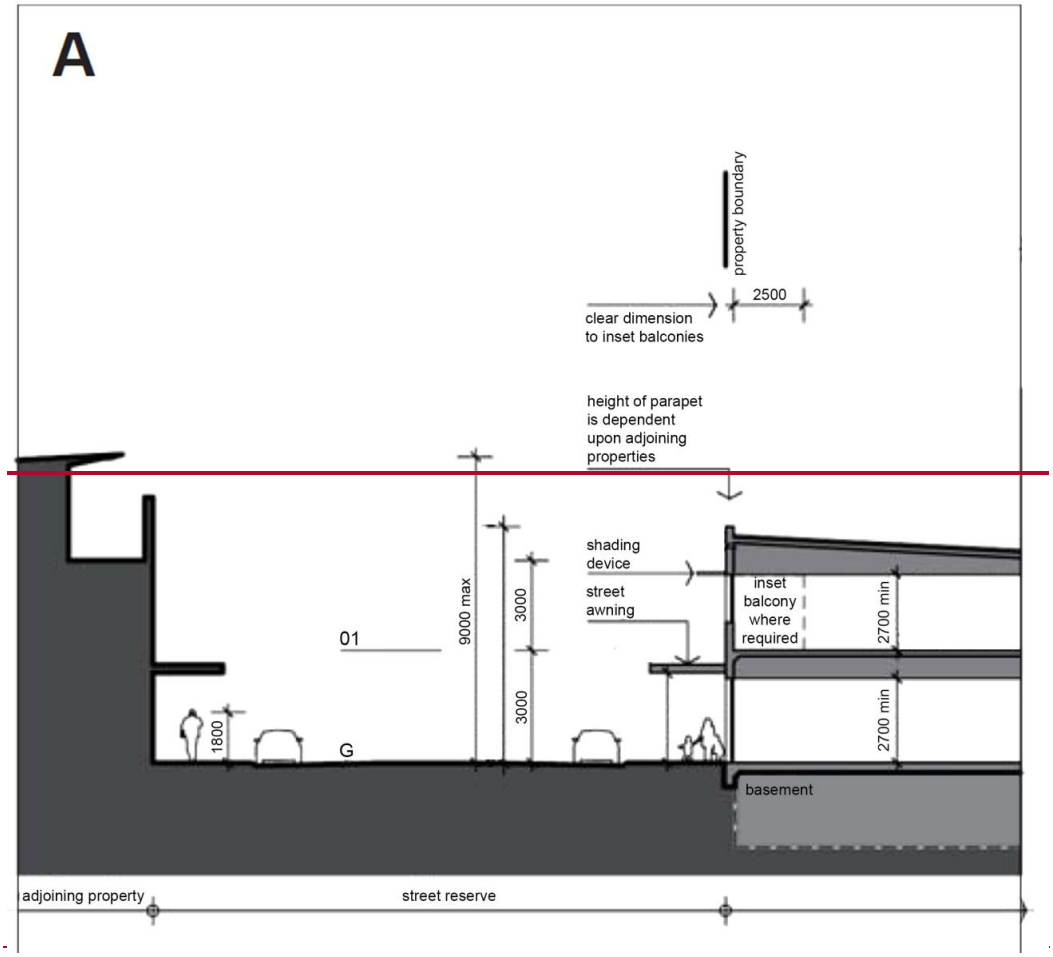



**~~Two storey section – with rear laneway~~**



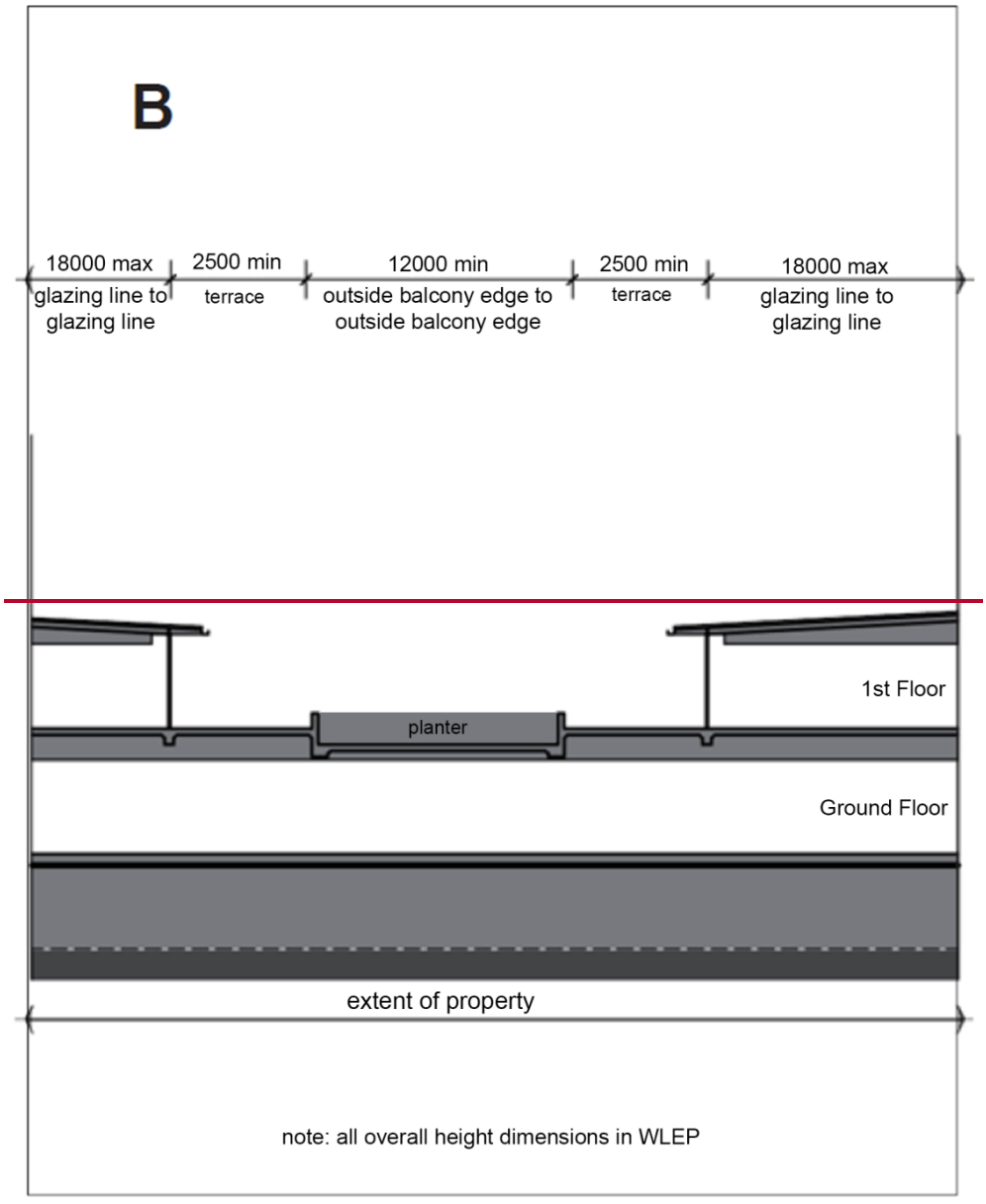
# Annexures

~~Two (2) storey detailed street frontage and internal floor to ceiling heights~~



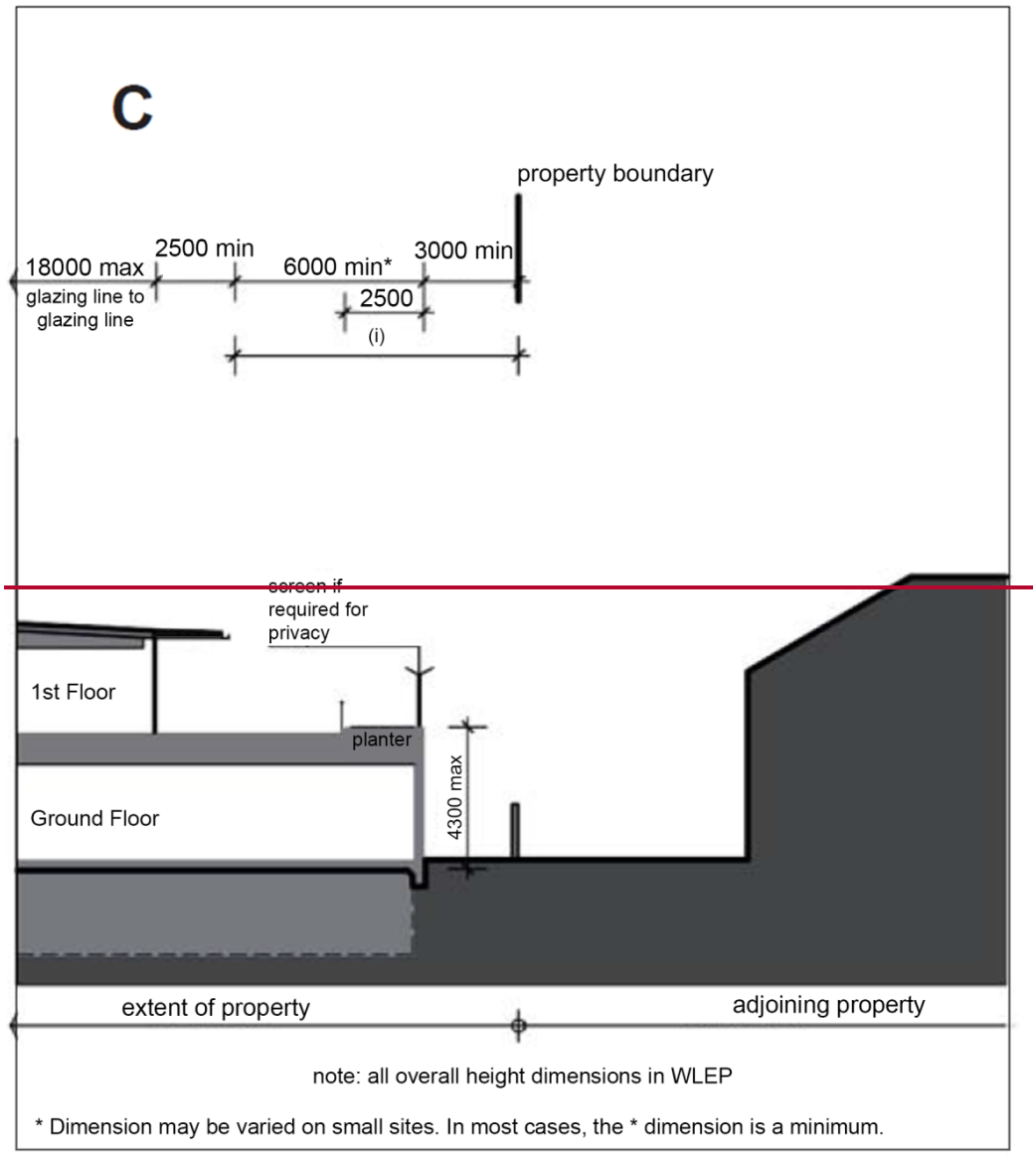
# Annexures

~~Two (2) storey detailed internal courtyard~~



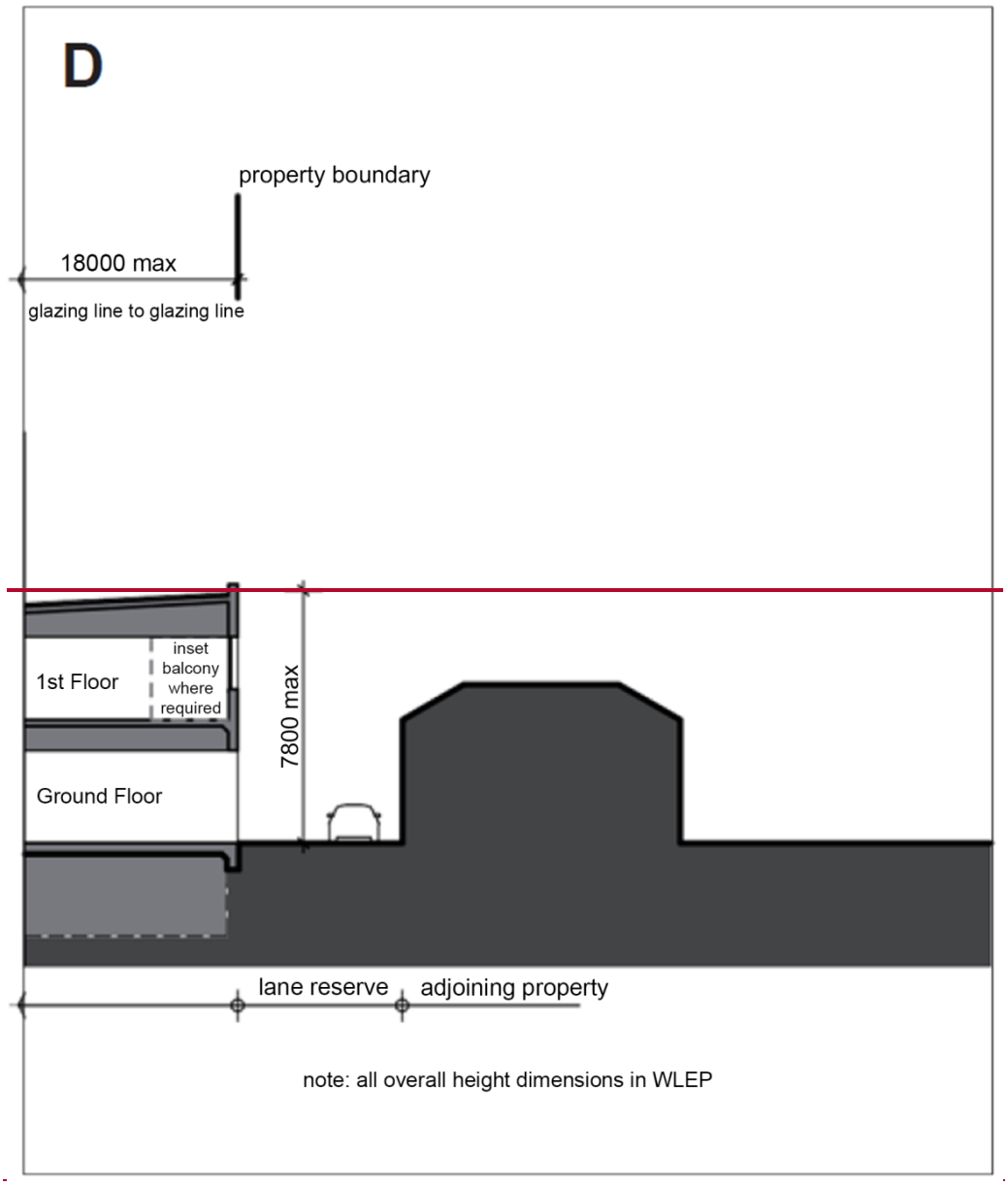
## Annexures

~~Two (2) storey detailed rear setback without rear laneway~~



## Annexures

~~Two (2) storey detailed section with rear laneway~~



# Annexures

## ~~ANNEXURE E3-2 TYPICAL BUILT FORM FOR THREE STOREY CENTRES~~

~~Annexure E3-2 applies to the following Local Village Centres:~~

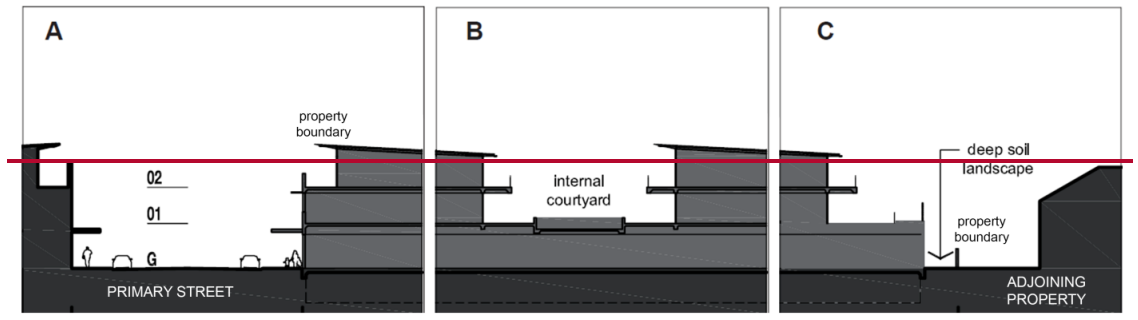
1. ~~Bondi Road Centre (properties east of Boonara Avenue)~~
2. ~~Charing Cross Centre~~
3. ~~Rose Bay North Centre~~
4. ~~Rose Bay South Centre~~
5. ~~North Bondi Centre~~
6. ~~Blake Street Centre~~
7. ~~Bronte Beach Centre~~
8. ~~Macpherson Street Centre (properties west of 38-40 Macpherson Street, inclusive)~~
9. ~~Curlewis Street Centre~~

~~There are two typical built forms for three storey Local Village Centres which are dependent on whether the property has access to a rear lane.~~

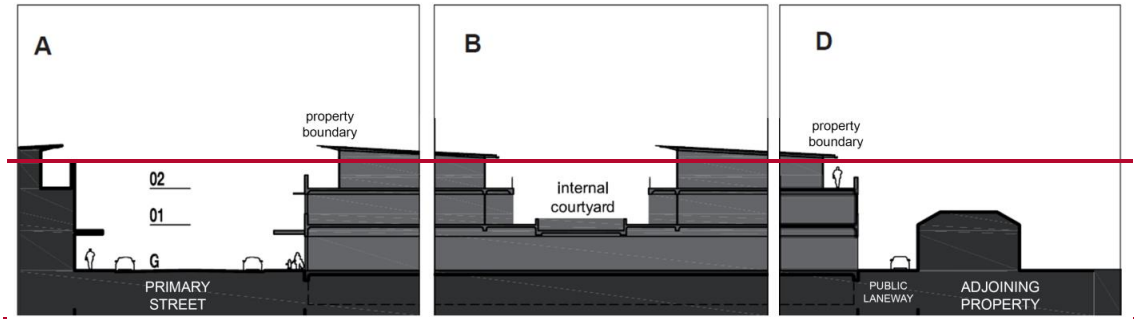
~~(a) Properties without rear laneway: Control Diagram A, B and C.~~
~~(b) Properties with rear laneway access: Control Diagrams A, B and D.~~

~~For applicable properties refer to the associated maps in Section 3.1 – Specific Controls.~~

**~~Three (3) storey section without rear laneway~~**

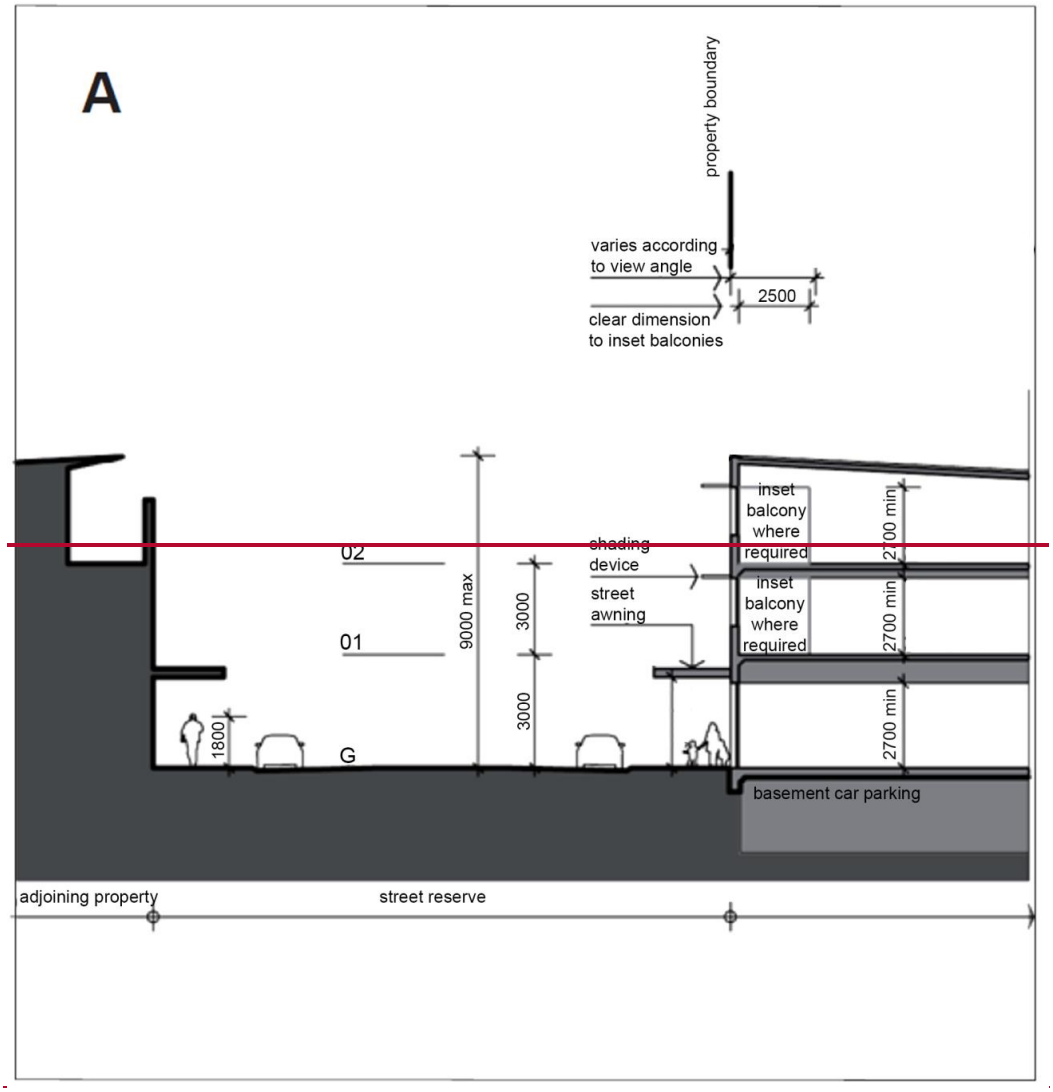



**~~Three (3) storey section with rear laneway~~**



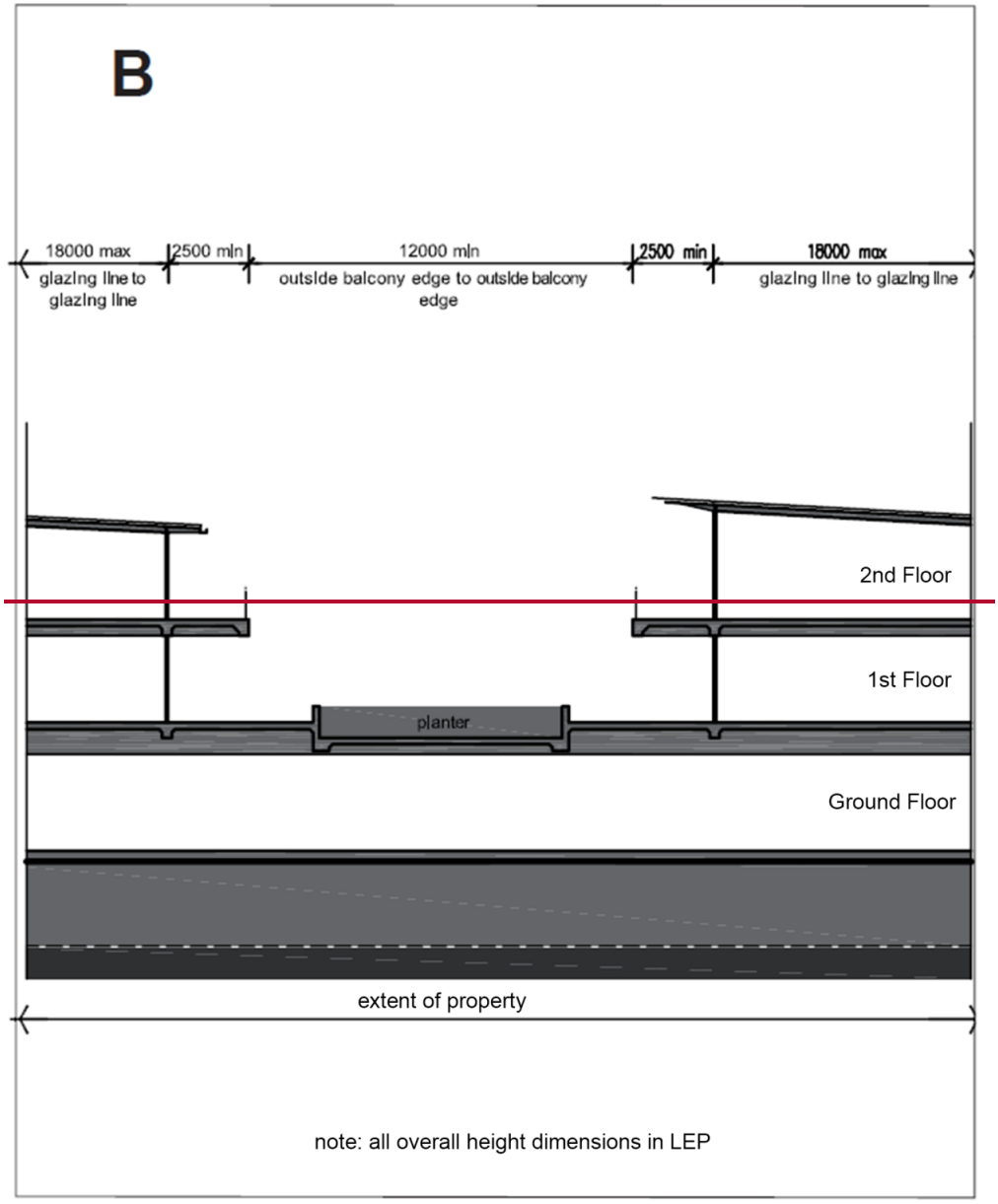
# Annexures

~~Three (3) storey detailed street interface and internal dimensions~~



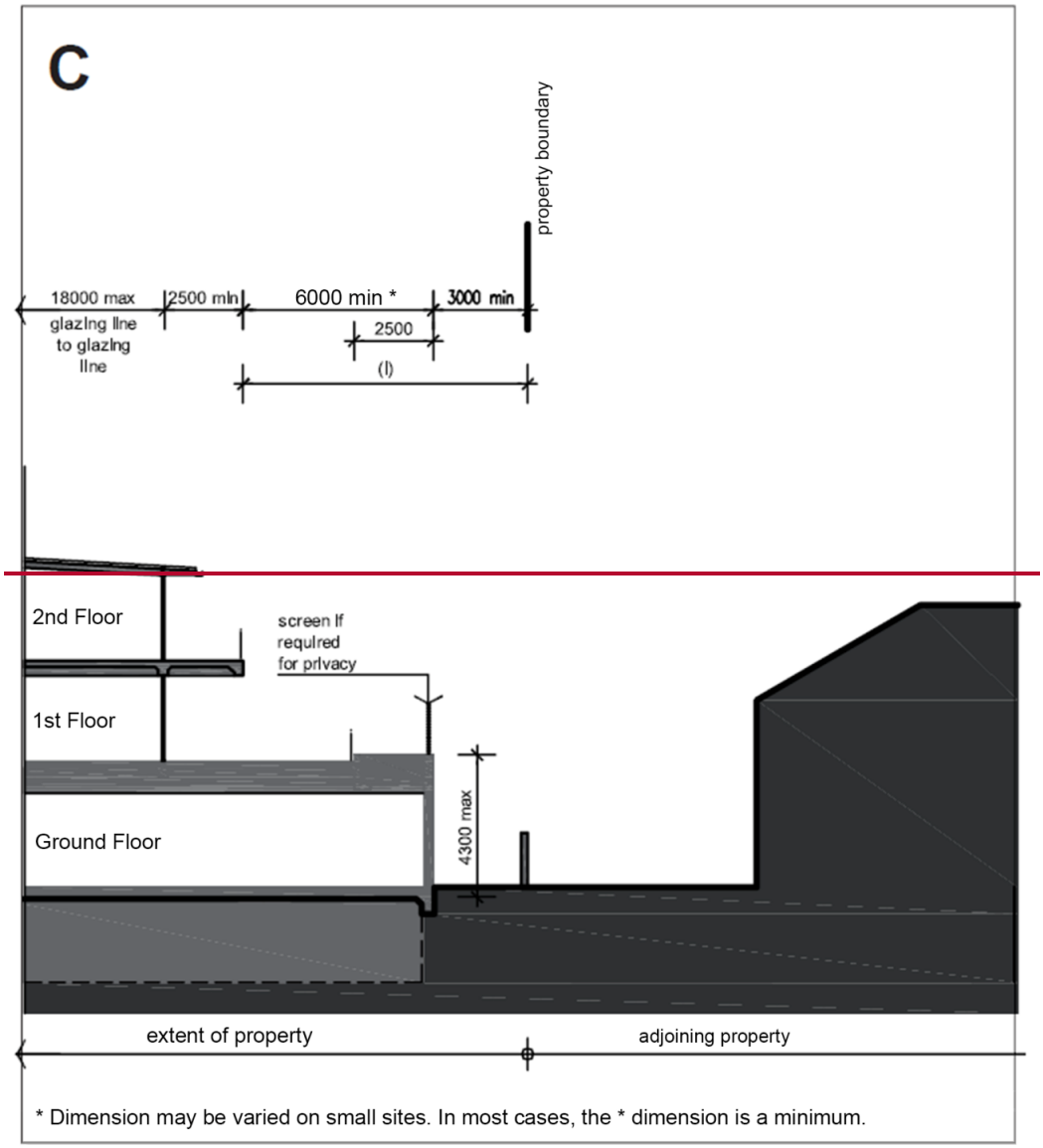
# Annexures

~~Three (3) storey detailed internal courtyard~~



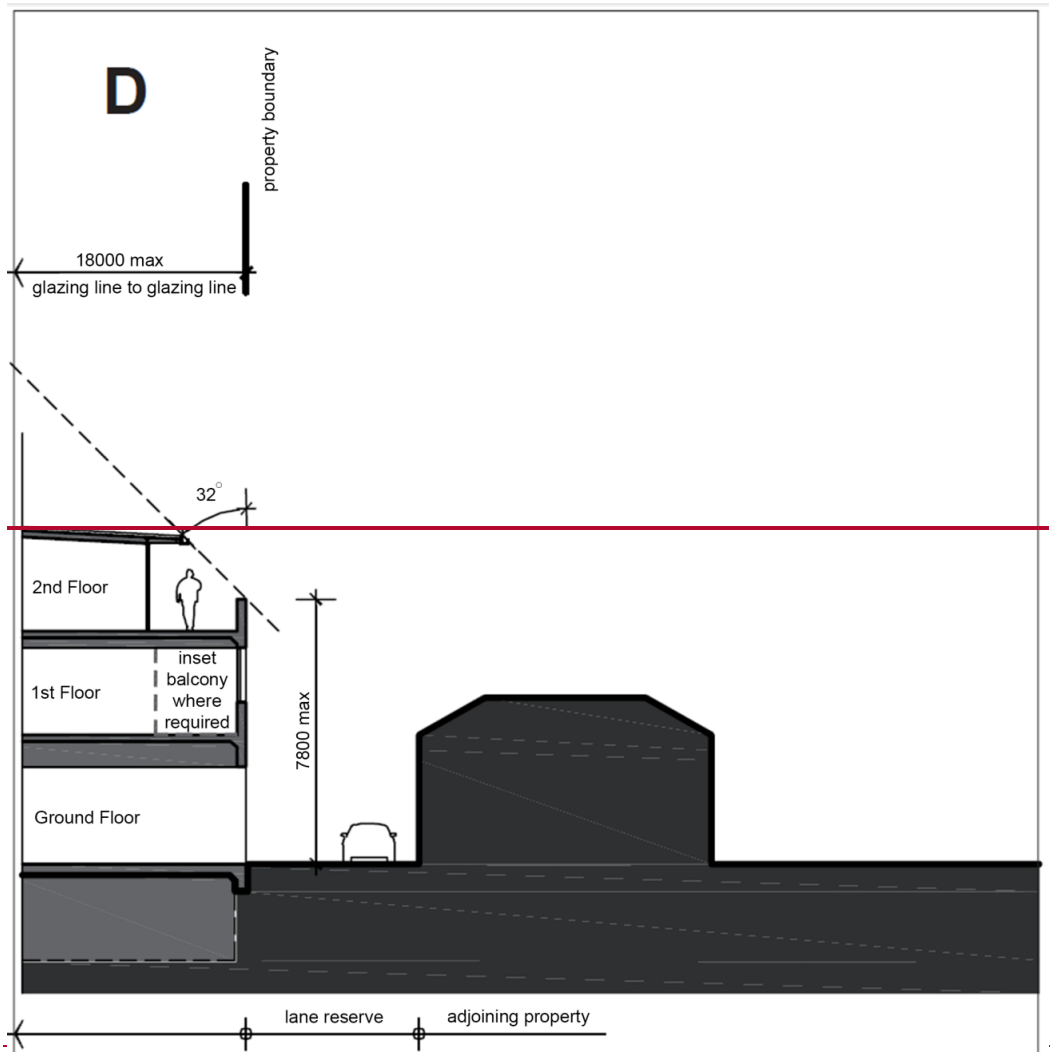
# Annexures

~~Three (3) storey rear setback details without rear laneway~~



# Annexures

~~Three (3) storey rear setback details with rear laneway~~



## Annexures

### ~~ANNEXURE E3-3 TYPICAL BUILT FORM FOR FOUR STOREY CENTRES~~

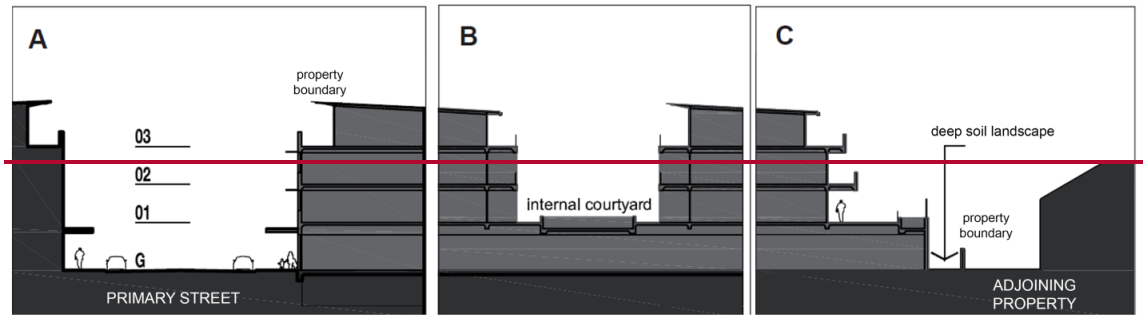
~~Annexure E3-3 applies to the following centres:~~

1. ~~Bondi Beach Centre~~
2. ~~Bondi Road Centre (properties west of Boonara Avenue)~~

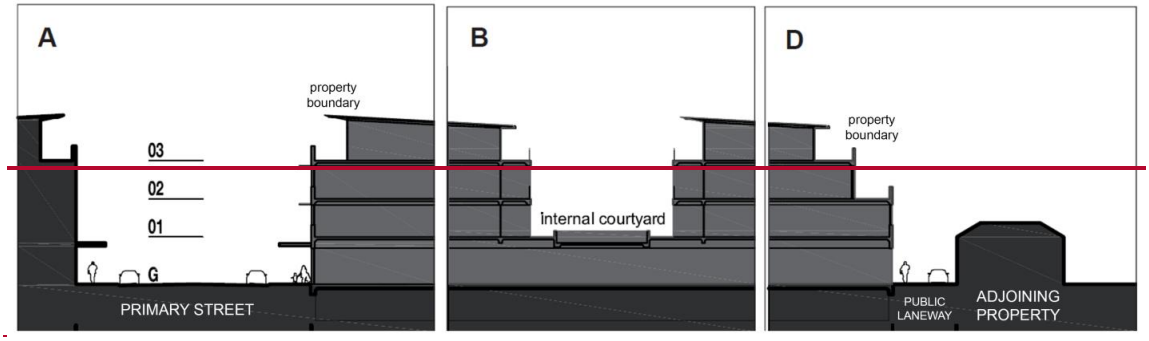
~~There are two typical built forms for four storey Local Village Centres which are dependent on whether a property has access to a rear lane.~~

1. ~~Properties without rear laneway: Control Diagram A, B and C.~~
2. ~~Properties with rear laneway access: Control Diagrams A, B and D.~~

**~~Four (4) storey section without rear laneway~~**

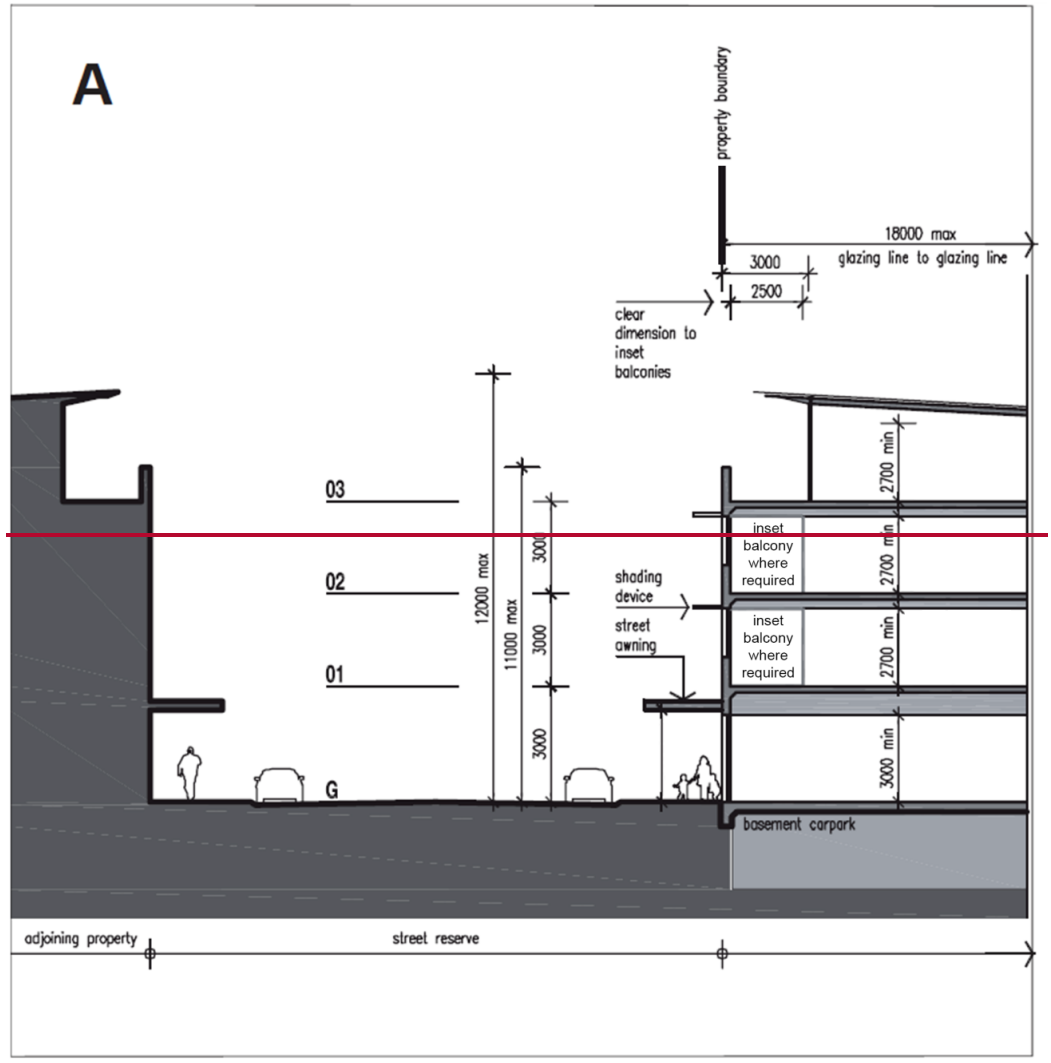



**~~Four (4) storey section with rear laneway~~**



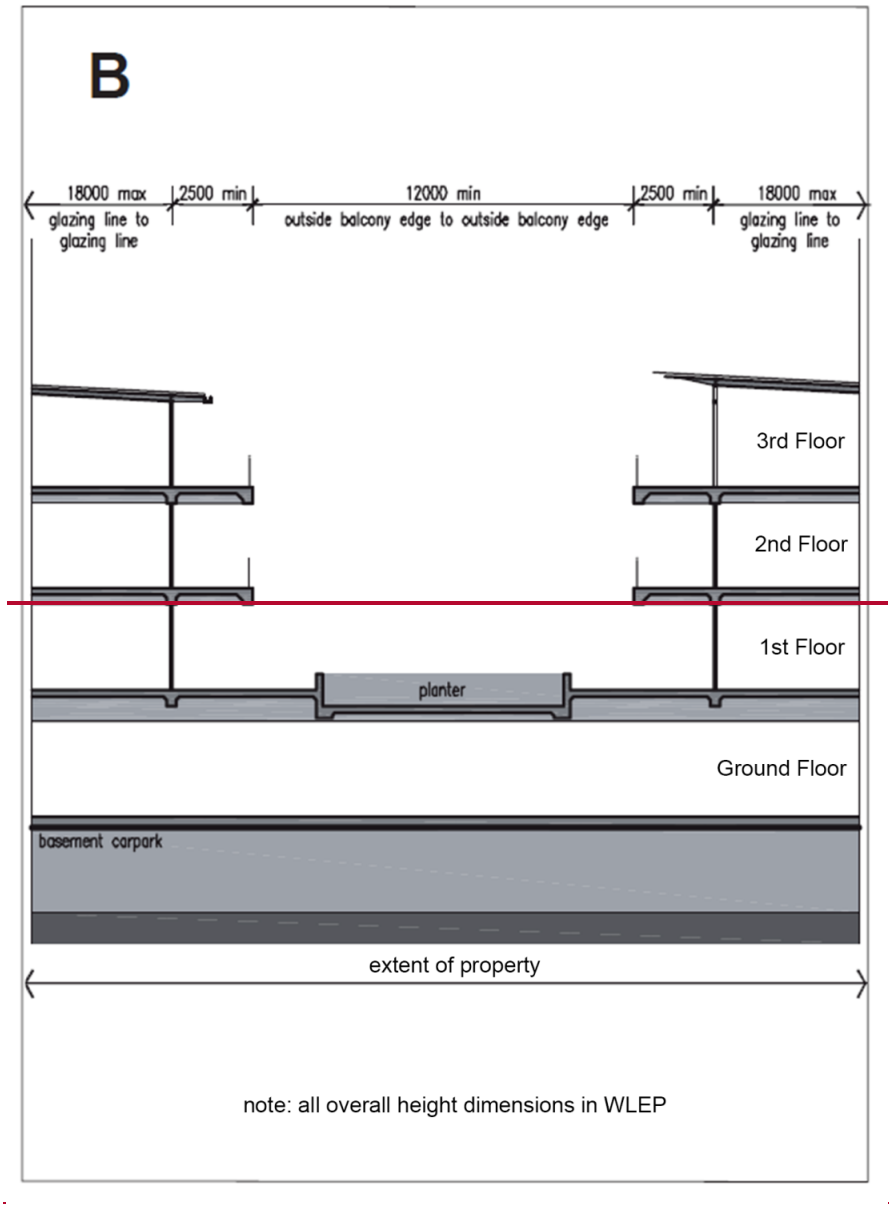
## Annexures

~~**Four (4) storey street interface details and internal dimensions**~~



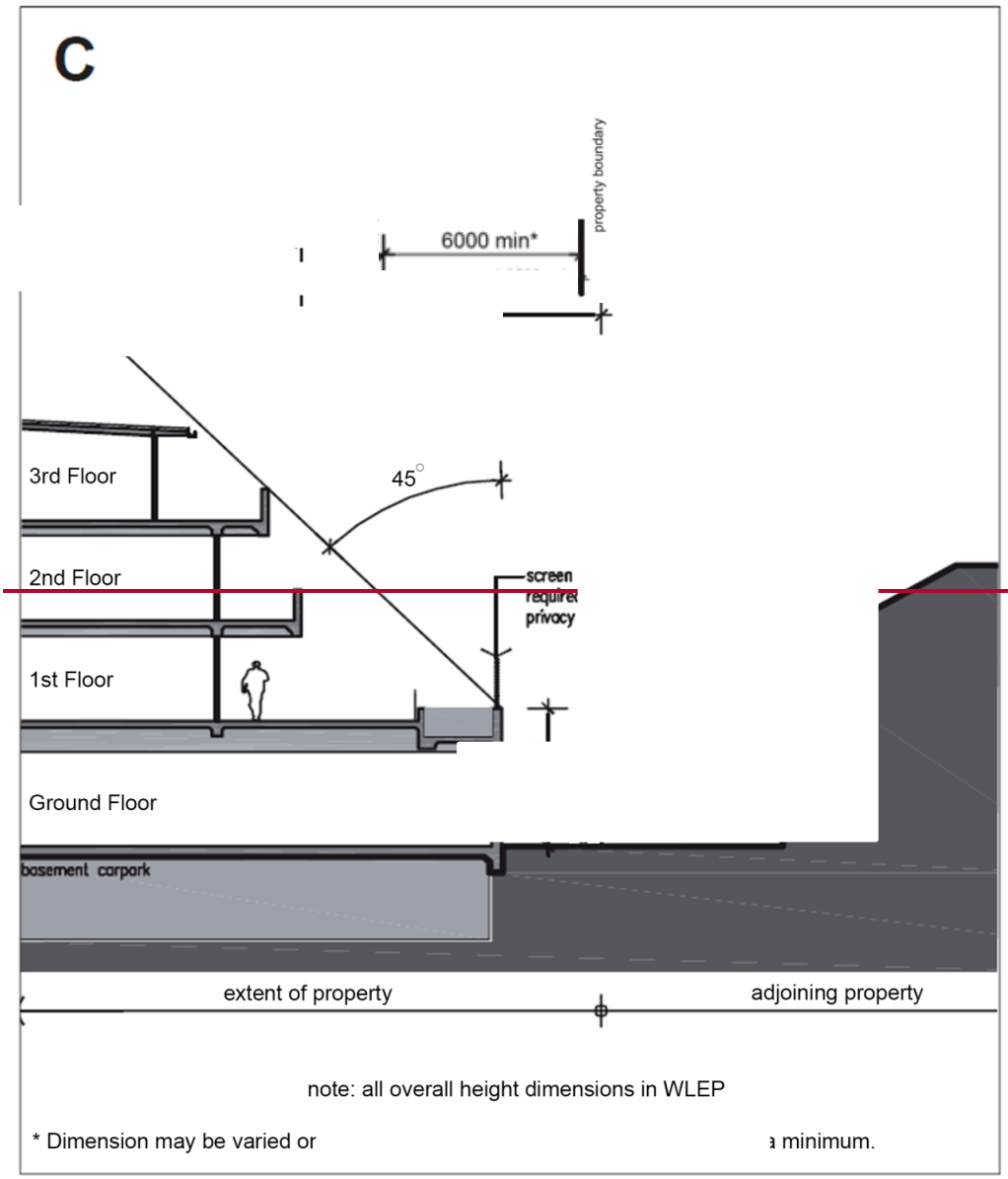
## Annexures

~~**Four (4) storey internal courtyard details**~~



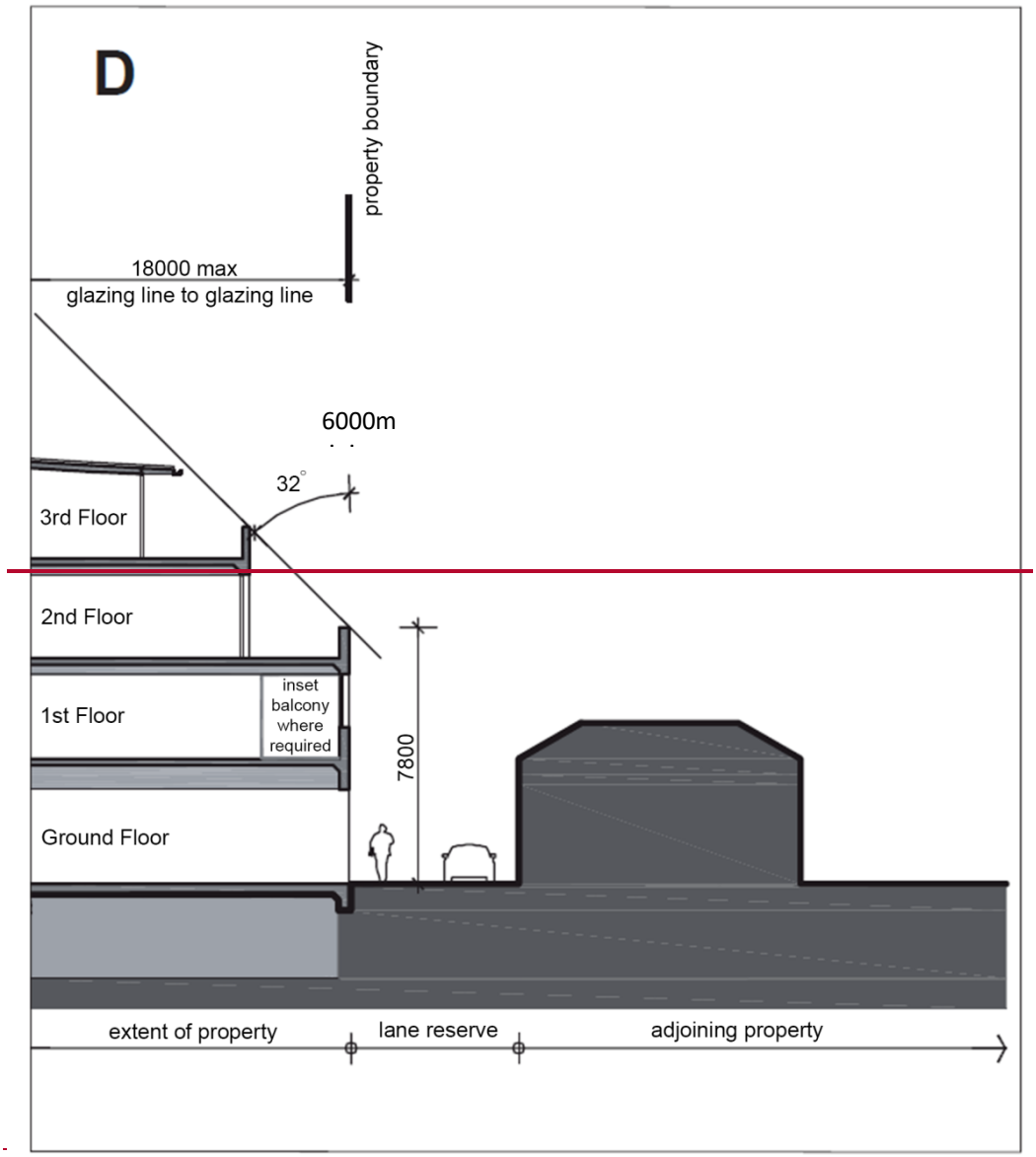
## Annexures

~~**Four (4) storey rear setback details without rear laneway.**~~



## Annexures

~~**Four (4) storey rear setback details with rear laneway**~~



# PART F DEVELOPMENT SPECIFIC

# F3 CHILD CARE CENTRES

**State Environmental Planning Policy (Transport and Infrastructure) 2021**

The *State Environmental Planning Policy (Transport and Infrastructure) 2021*, or the Transport and Infrastructure SEPP provides provisions for the exempt and complying development of education and child care facilities. The Transport and Infrastructure SEPP also provides provisions for the development of centre-based child care facilities and schools. To support the Education SEPP, the *Child Care Planning Guideline* *2021*~~*2017*~~ (CCPG) provides guidance to encourage design quality in the delivery of centre-based child care in NSW.

Development Applications for centre-based child care facilities are to comply with the provisions of the CCPG.

**Children and Young Persons (Care and Protection) Act 1998 and Education and Care Services Regulations 2011**

Child Care Services are managed under the *Children and Young Persons (Care and Protection) Act 1998 and* the *Education and Care Services Regulations 2011.* The Regulation covers areas such as the staff who work in services and their level of qualification, the size of a service and the ratio of staff to children, physical requirements of building spaces and equipment, health and safety and administrative requirements. An application for a license cannot be made until development consent has been granted.

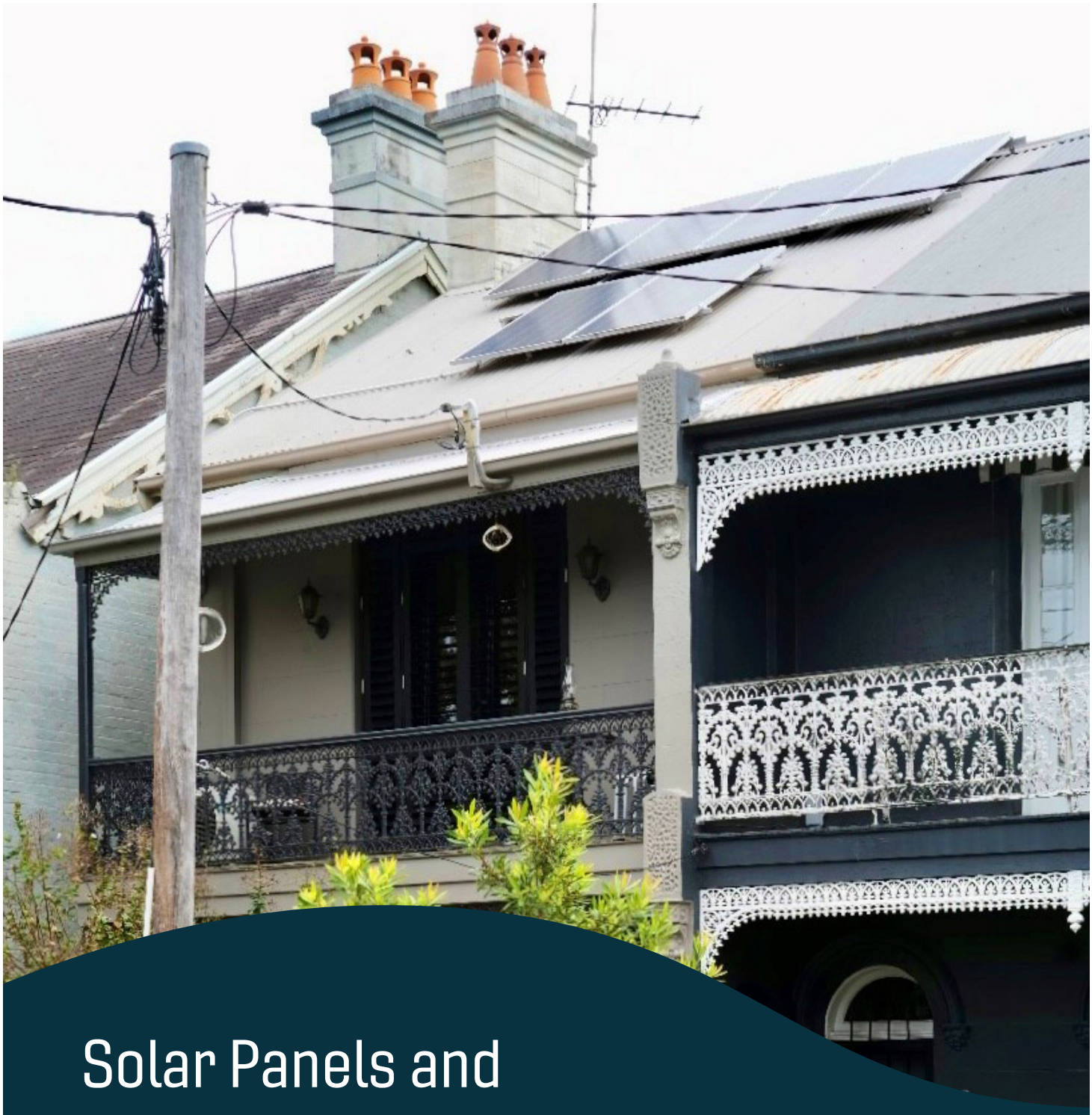
~~For more information go to: http://www.dec.nsw.gov.au/~~

**Licensing and Management**

Council has the responsibility for assessing child care centre applications and the NSW Department of Education is responsible for the regulation, licensing and monitoring of children's services in accordance with the state regulations under the *Children and Young Persons (Care & Protection) Act 1998* and *Education and Care Services Regulations 2011.*

An applicant must obtain a licence from the Department of Education to provide centre-based child care once a development application (DA) has been approved, or for a home-based child care centre. Before submitting a DA, the applicant should contact the Department of Education to address licensing issues. ~~Contact details are available at the following link:~~

~~http://www.dec.nsw.gov.au/contact-us~~



# Solar Panels and Heritage

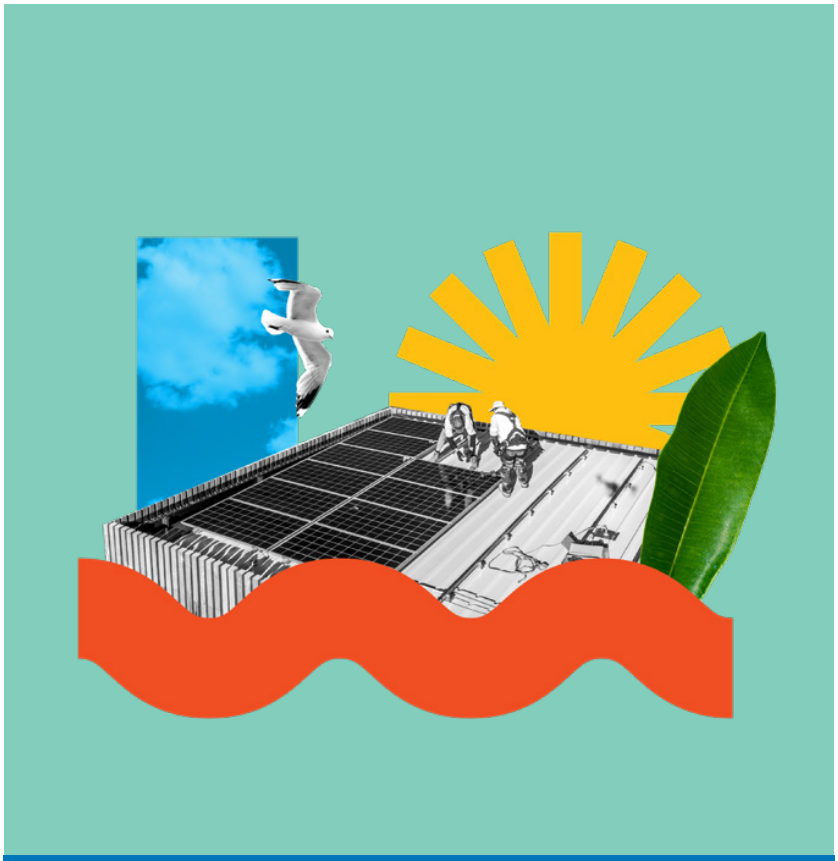
A Guideline to Approvals for Solar in Heritage Conservation Areas

WAVERLEY COUNCIL

# 1. Introduction

This Guideline provides information on how to get the correct approval to install solar panels in a way that protects the character of Waverley's Heritage Conservation Areas. It aims to conserve Waverley's heritage values as we respond to the climate emergency and assist residents to install onsite renewable energy, to help reach our community greenhouse reduction targets.

The State Environmental Planning Policy (Transport and Infrastructure) 2021 (Division 4, 2.41) does not permit the installation of solar panels on the primary street-facing roof of a building as exempt development if the land is within a Heritage Conservation Area. The SEPP does, however, exempt solar on roofs that are not primary street-facing.



**You do not need development consent to install solar panels on street-facing roofs in Heritage Conservation Areas if you are granted a Heritage Exemption Certificate from Council, who will assess whether the solar panels meet the requirements of this Guideline.**

**Instead of a Development Application, a Heritage Exemption Certificate (HEC) is required to qualify for an exemption.**

## Definition of solar panels

For the purpose of this Guideline:

i) "**Solar panels**" means a photovoltaic electricity-generating system and associated equipment, including fixings, conduit and other equipment like inverters and batteries. Hot water tanks are not covered by this definition.

ii) A "**primary street-facing roof**" refers to the roof of a building that faces the main street or road the property fronts onto. It's the roof that's most visible from the street and often forms part of the building's primary facade.

## Is your house in a Heritage Conservation Area (HCA)?

To check if your building is either a Heritage Item or in a Heritage Conservation Area, do an address search via the Waverley Council GIS Discover:

**1.**

Select address tab and insert address at top left of screen

**2.**

On the top right-hand side of the screen, select the Map Legend icon (three-layer icon).

**3.**

Under the Theme, select **"Planning"**.

Beneath this, deselect any irrelevant planning tabs.

Select **"LEP 2012 Heritage"**

Ensure that **"HER Conservation Area – General"**

**"HER general item (point)"** and **"HER general item (area)"** are selected.

If the address search results show your property in solid brown (Heritage Item) or diagonal red stripes (Heritage Conservation Area), then your property is affected by heritage.

Continue reading the Guideline to find out how to install solar on street-facing roofs in a Heritage Conservation Area, without submitting a Development Application (DA).

## The pathway to consent

Development consent is not required under Clause 5.10(3) of Waverley Local Environmental Plan 2012, as long as:

a) the applicant has notified the consent authority (Waverley Council) of the proposed development (located within a Heritage Conservation Area) and

b) the consent authority has advised the applicant, in writing, before any works are carried out, that it is satisfied that the proposed development is of a minor nature and would not adversely affect the heritage significance of the Heritage Conservation Area.

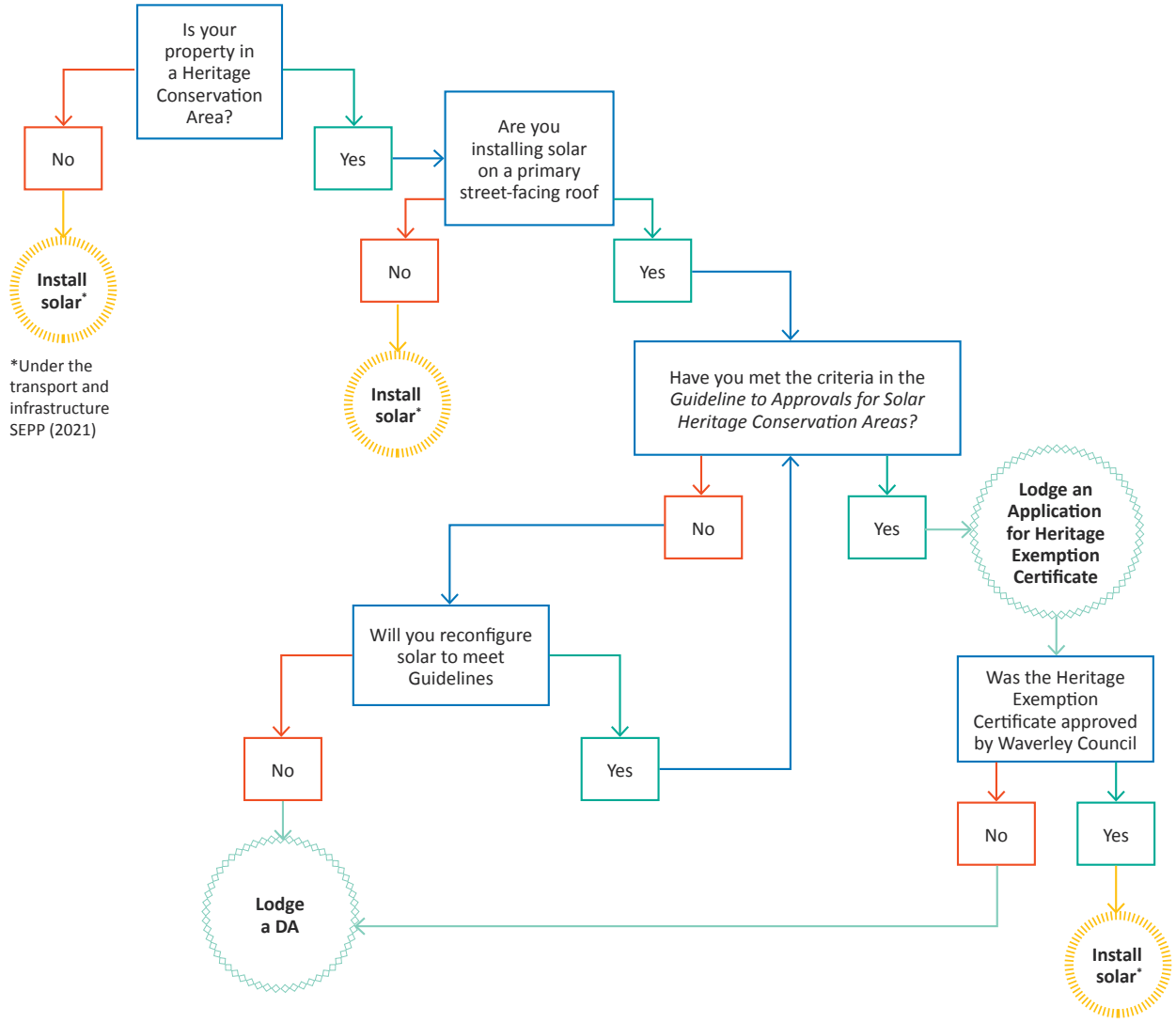
The above can be achieved by submitting a Heritage Exemption Certificate (HEC).

Solar panels that are not consistent with this Guideline will be rejected under a HEC, and you may be advised to submit a Development Application instead.

**Figure 1** (next page) outlines the different pathways for buildings in Heritage Conservation Areas or Heritage Items to seek approval to install solar.

Note: There is a risk that future nearby development will result in overshadowing of solar panels. To minimise this risk, owners are encouraged to check the planning controls that apply to surrounding land when considering where to locate their solar panels.

**Figure 1: Pathway for installing solar in a Heritage Conservation Area**




## Protecting the character of Heritage Conservation Areas

The roofscapes in most Heritage Conservation Areas are very important to their character.
The requirements of this Guideline ensure that solar panels will not substantially disrupt the form and character of roofs that are visible from the street.

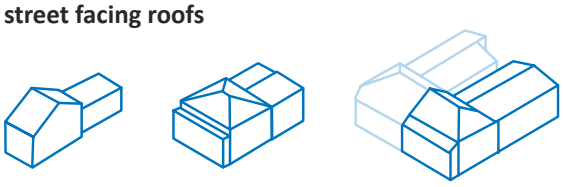
As a general principle, installation on rear roofs is preferred and while installation on front roofs is permitted, applicants are encouraged to consider if alternatives are available at the rear. It should be noted that whilst south-facing solar panels produce less energy than north, east and west-facing solar panels, they are still a workable option in certain circumstances.

## Which buildings would not qualify for a Heritage Exemption Certificate?

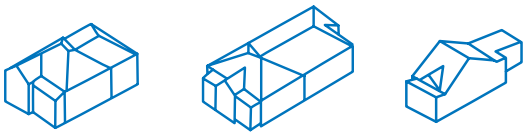
Installation of solar panels and associated equipment within a Heritage Conservation Area may qualify for an exemption on any building roof using this Guideline **except:**

- when terrace houses are heritage listed as a group. Note: individually listed terrace houses might be permitted to install solar;
- buildings with slate or timber-shingled roofs;
- buildings with complex primary street-facing roofs (see Figure 2);
- buildings with very small primary street-facing roofs (see Figure 2) **unless** a rectangular grid array of at least 4 solar panels can fit on the roof plane;
- buildings with primary street-facing roofs with dormer windows
- buildings where external structural alterations are required;
- buildings where the removal of roof elements, such as chimneys, capping, or parapet walls are required; *or*
- buildings that do not follow the installation requirements of this Guideline.

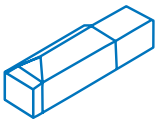
**Figure 2: Examples of simple and complex primary street facing roofs**



Simple primary street facing roofs - may be exempt

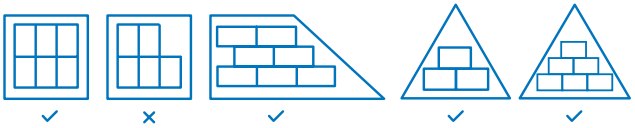


Complex primary street facing roofs - no exemption



Simple but very small primary street facing roof - may be exempt if a rectangular grid array of at least 4 solar panels can fit on the front roof plane

**Figure 3: Solar panel pattern guide**

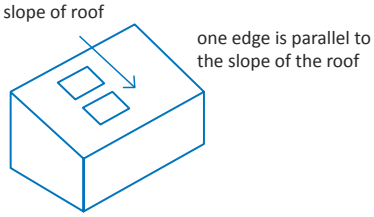


# 2. Solar panel installation requirements

## For primary street-facing roofs and parts of side boundary-facing roofs that are visible from the primary street:

- **Alignment:** mount solar panels with one edge parallel to the slope of the roof face (i.e. the panels must not be crooked to the slope of the roof face) (see Figure 4);
- **Projection:** solar panels must not extend over the roof edge or be located within 300mm of the roof ridge(s);
- **Maximum height:** solar panels should be flush-mounted (at the same angle as the roof plane) and must not protrude more than 250mm above the roof plane;
- **Location:** solar panels are not to be located on primary street-facing verandahs or dormer roofs;
- **Visibility:** where possible, conduit and other equipment like inverters should not be visible from the street. Solar racking/mounting rails should be trimmed to the extent of the panels. Choose racking/mounting rails and panel clips/fittings that have complementary or recessive colours.
- **Pattern:** solar panels are arranged in orderly rows with consistent offsets that are equidistant from the roof edges.

**Figure 4: Flush-mounted solar panel alignment**




## For all other roof planes (including primary street-facing roofs) that have a slope of less than 15 degrees:

- **Alignment:** mount solar panels with one edge perpendicular to the slope of the roof face (see Figure 5);
- **Projection:** solar panels must not extend over the roof edge or be located within 300mm of the roof ridge(s);
- **Maximum height:** solar panels and associated equipment can be tilt-mounted (Figure 5), but must not protrude more than 1m from the roof plane and not overshadow your neighbour's property; and
- **Position:** if solar panels protrude more than 0.5m from the roof plane, they must be located at least 1m from any property boundary.

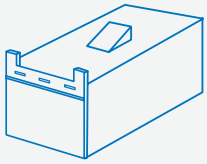
## On walls:

- **Location:** Associated equipment e.g. inverters and batteries must not be installed on a wall facing the primary street, but should be installed on the side wall of a front verandah. Solar equipment must not cover decorative building features like windows.

## Installation requirement notes:

- It is the applicant's responsibility to make sure that all building works are carried out in accordance with any applicable legislation or codes (for example the Building Code of Australia).
- Applicants are strongly encouraged to provide clear access paths around solar panels to allow for maintenance of the roof. Waverley Council recommends applicants provide at least 300mm clearance around the solar panels from boundaries and obstructions like chimneys and skylights.
- There is no limit on how much of the roof can be covered in solar panels except as noted in this Guideline.

**Figure 5: Tilt-mounted solar panel alignment**



# 3. How to complete the Application for Heritage Exemption Certificate form

A copy of the Heritage Exemption Certificate Application Form is available:

- on Council's website under Planning & Development > Application forms & Certificates > Heritage Exemption Certificate.
- Download here

## Description of the proposed work

Example text: "Propose to install solar panels on the roof. Works are in accordance with the requirements of the Development Application exception for solar panels in Heritage Conservation Areas – Guideline."

## What you'll need (supporting documentation)

Provide a scale plan or aerial photograph showing the location and arrangement of the proposed solar panels, noting the angle and maximum height of the panels protruding above the roof plane and location of associated equipment like inverters, meters, battery etc.

Your supplier may be able to provide this for you.

WAVERLEY
COUNCIL

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info@waverley.nsw.gov.au
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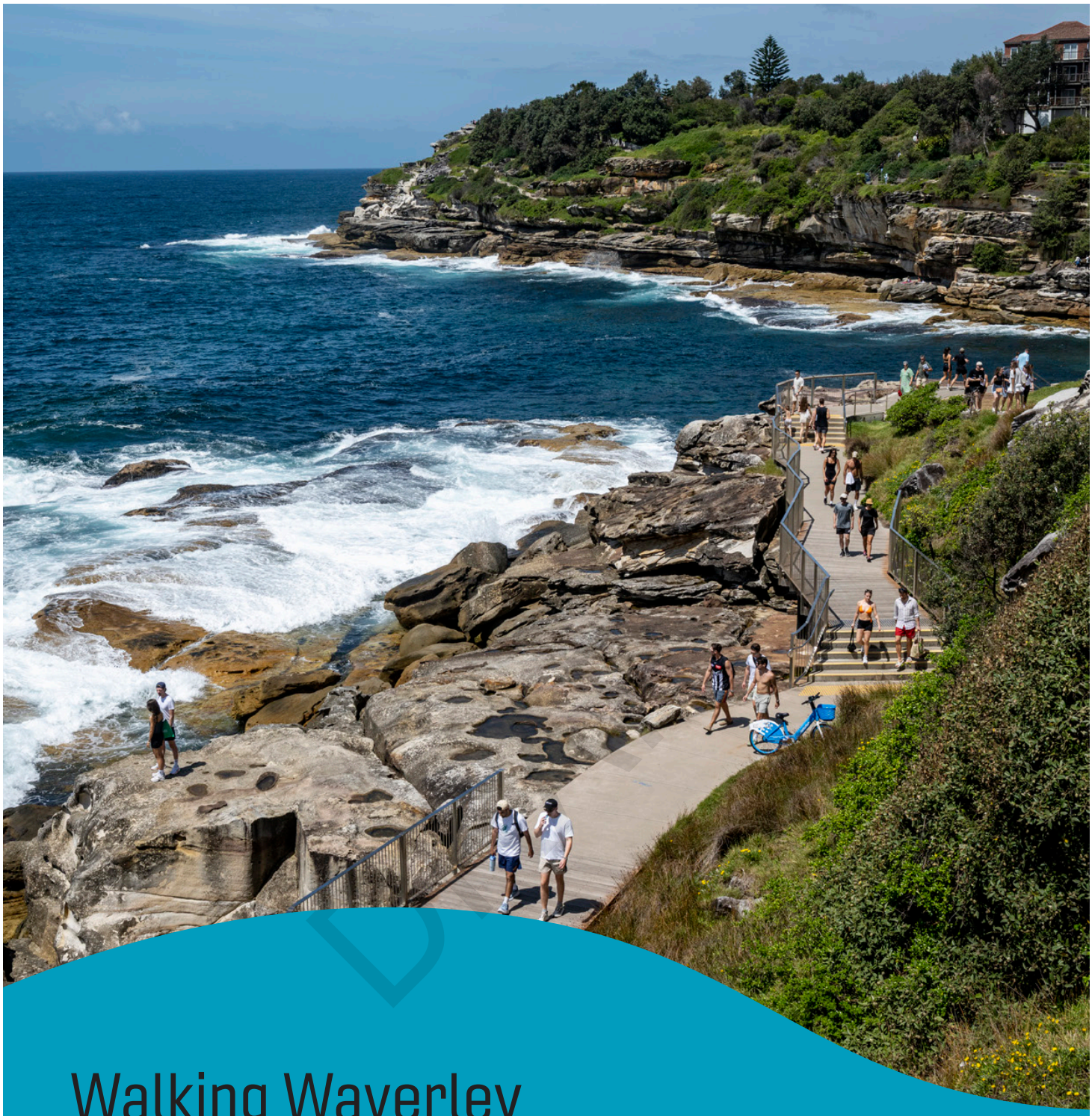
CUSTOMER SERVICE CENTRE
55 Spring St, Bondi Junction, NSW 2022



# Walking Waverley

## Waverley Walking Strategy

2025 - 2035

WALKING WAVERLEY

WAVERLEY COUNCIL

# Acknowledgement of Country

## And our reconciliation vision

We acknowledge that this Walking Strategy will connect the community across the Traditional lands of the Bidiagal, Birrabirragal and Gadigal. We pay our respects to Elders past and present.

Our vision for reconciliation within the Waverley community is to create a vibrant, resilient, caring and inclusive environment where Aboriginal and Torres Strait Islander peoples:

- Practice and celebrate their culture and heritage proudly
- Are honoured for their survival and resilience, and supported to continue to overcome adversity
- Are respected and acknowledged as first nations peoples with the right to determine their own futures.

In developing this Bike Strategy, Waverley Council remains committed to valuing and protecting our environment and respecting the intrinsic relationship Aboriginal and Torres Strait Islander people have with Country. The Bike Strategy enables a more sustainable environment, ensuring that future generations can enjoy Waverley's natural landscapes.



# Contents

Waverley inherits its high density and narrow streets from historical development, which creates an ideal environment for walking. Our compact land scape brings people closer to nearby shops, amenities, local attractions and transport hubs, making walking a convenient and an attractive transport option. One in every three trips in Waverley is made on foot, and when combined with public transport, walking accounts for half of all trips. More importantly, everyone walks at some point during a trip, even if they are driving.

Walking in Waverley is not only convenient, but also deeply imbedded in the local culture, offering a unique sense of place. Trodden pathways have been used by Aboriginal and Torres Strait Islander people for generations. And today Waverley's retail-based local economy relies on walking and public transport, and benefits greatly from a pedestrian friendly environment. As such, the Waverley Local Strategic Planning Statement seeks to encourage more walking within our LGA. Pedestrians are prioritised above other transport modes, as highlighted in the Waverley's People, Movement and Place plan, and TfNSW Road User Space Allocation Policy.

Waverley feels the impact of population growth across Greater Sydney, which places increasing pressure on our roads and streets. Areas of Waverley are covered by the NSW Government stage 2 Low and Mid-Rise Housing Policy which supports denser residential development. With limited space for transport infrastructure, we simply cannot add more roads to keep up with the rise in travel demand. Therefore, we focus on maximising the efficient use of limited road space, relying on active travel and public transport to manage congestion, and to support a sustainable transport system. We need to continue to prioritise walking to provide more transport options, enhance the walking experience, better integrate walking with public transport, and reduce car usage.

We face many challenges in improving walking. Historical vehicle-centric designs and planning made many of our roads difficult to navigate on foot. Many streets have excessive speeds, and with traffic volume that do not align with their functions. The lack of adequate pedestrian crossing opportunities creates barriers that divide our community. Various transport modes and on-street activities compete for the limited space on footpaths. Narrow footpaths in busy areas are often crowded with standing and moving pedestrians. Pedestrian infrastructure and crossings are inadequate in many parts of Waverley. There is increasing demand from the community to improve walking.

# Purpose of this document

Walking needs to take up a greater role in delivering sustainable transport options in Waverley, and to support our residents, schools and local businesses. To that end, the walking strategy document identifies our issues, challenges, and opportunities to improve walking.

At a strategic level, the Walking Strategy sets our long-term vision of a walkable community where walking is safe, convenient, and supports independent access for people of all ages and abilities. The strategy identifies current challenges to walking, and highlights focus areas where improvements are needed. Voice from the community including surveys and resident feedbacks, and data on the movement of people and vehicles played a key role in guiding this strategy.

This strategy identifies opportunities to make incremental improvements to our walking network, and to encourage more people to walk, or use walking as part of their journey. As Waverley's first strategic document focused on walking, this strategy places a strong emphasis on walking-related infrastructure. At a more actionable level, this strategy identifies specific walking related issues, and brings together a list of improvement opportunities. For issues beyond our direct control, the strategy includes policy and advocacy actions aimed at driving change. This strategy also outlines longer-term improvement opportunities that we will continue to explore.

This document institutionalises knowledge, experience, and best-practices accumulated through daily operations, and will serve as a guide for our future efforts. This document also defines focus areas and lays out a number of improvement opportunities with varying levels of priority. These opportunities aim to enhance walkability by addressing infrastructure gaps, improving pedestrian safety, and creating a more accessible and enjoyable walking environment.

# Why walking is important for Waverley?

## Transport and De-congestion

Waverley's limited road space and historical development patterns present unique transport challenges. Provision of more road space cannot scale with increase in travel demand, therefore a sustainable transport system in Waverley needs to rely on public and active transport to alleviate congestion, and to reduce parking stress and reliance on driving. Walking is an important mode of transport by itself, and a vital component in using public transport. Walking is also the most affordable mode of transport for getting around and explore the neighbourhood. We need to continue to improve walking to provide more transport options, enhance the walking experience, and reduce car usages.

## Health Benefits

Most residents recognise health benefits associated with walking. Physical inactivity is a leading cause of health issues. More than half of Australian adults, and two thirds of children do not meet physical activity guidelines[1]. Walking provides incidental exercise opportunities, and is linked with increased productivity, and mental health benefits[2]. Research has shown that each km a person walks produces the equivalence of more than four dollars in health and economic benefits[3].

## Benefits for Kids

Waverley is home to many schools and several education clusters, and being able to walk to school, activities or friends' houses makes children aware of their local neighbourhood and has many benefits. Walking to school contributes to healthy development of children and youth, raising self-esteem and happiness, and improving their physical and mental well-being [4].

## Environmental Benefits

A reduction in driving is targeted both by this strategy and our Environmental Action Plan (EAP) – and walking will play an important role towards that target. Promoting a shift towards walking (including public transport) and active transport reduces greenhouse gas emissions and other pollutants. Vehicles on short trips with cold engines emit several times more pollutants than during normal operations, and replacing these short trips with walking benefits the health of local residents, flora and fauna. As well, tire wear on asphalt, and brake pad wear creates hazardous particulate matter and microplastics that enter our bodies and our oceans.

## Social Benefits

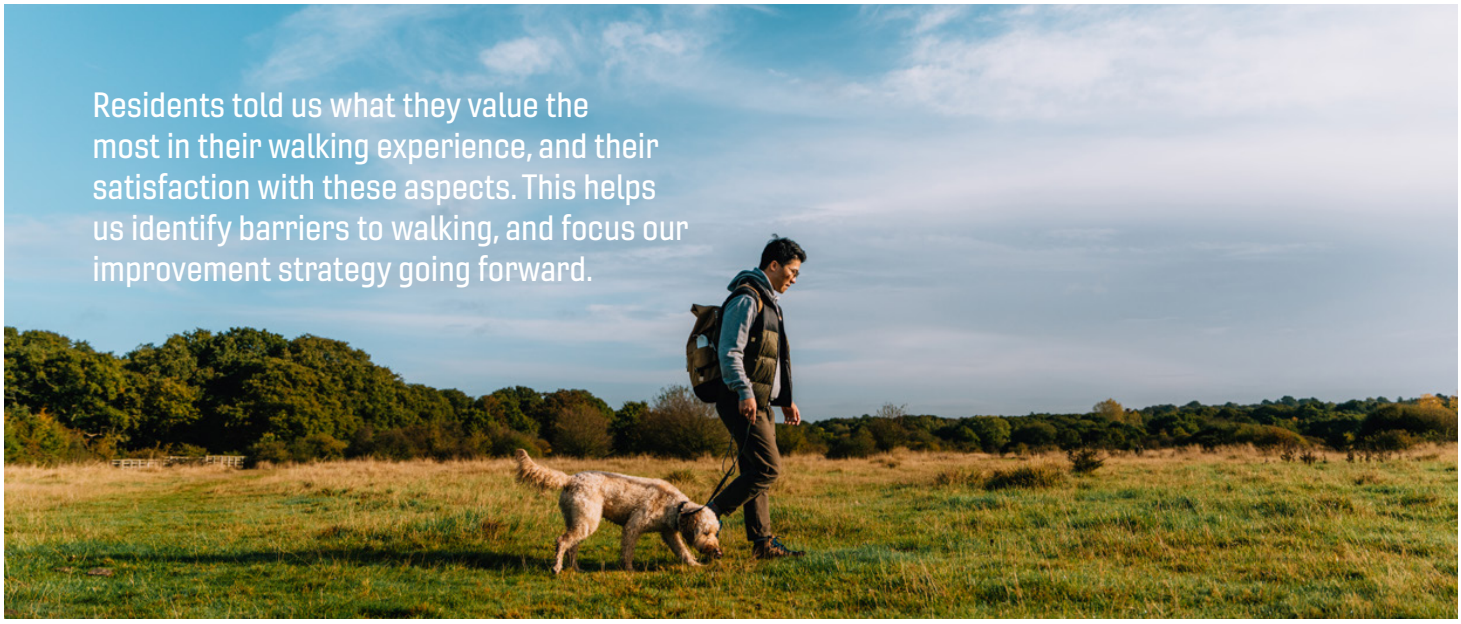
Walking creates more opportunities for face-to-face social contact, and fosters social connections and strengthens community bonds. Better walking conditions and opportunities increase the number of people using the street and in turn, helps others feel more comfortable walking.

## Economics

Visitors and residents being able to walk to local shops is crucial to the success of our town centres, villages, and our retail-based local economy. Even people who drive are more likely to notice shops and displays when they walk, which increases the likelihood of spending. Both Australian and global experience show that good walkability is linked to thriving retail businesses. Our community survey show most residents walk to local shops on a weekly basis.



1. Web report, Australia's children physical activity, Key findings. Australian Government Department of Health and Age Care, 2018
2. Del Rosario, Lauren, Hao Wu, Jinwoo Brian Lee, Lee Roberts, Tony Arnold, Sandeep Mathur, and Christopher Pettit. "Assessing the monetary value of active transport and e-micromobility: A systematic review." Transportation Research Interdisciplinary Perspectives 27 (2024): 101243.
3. Economic parameter values for economic modelling, appraisal and evaluation of transport projects, Transport for NSW, 2023
4. Berasategi, Naiara, Idoia Legorburu, Jone Aliri, and Israel Alonso. "The 'walking with friends to school" project and its contribution to independent mobility, self-esteem and happiness." Children & Society 36, no. 5 (2022): 768-778



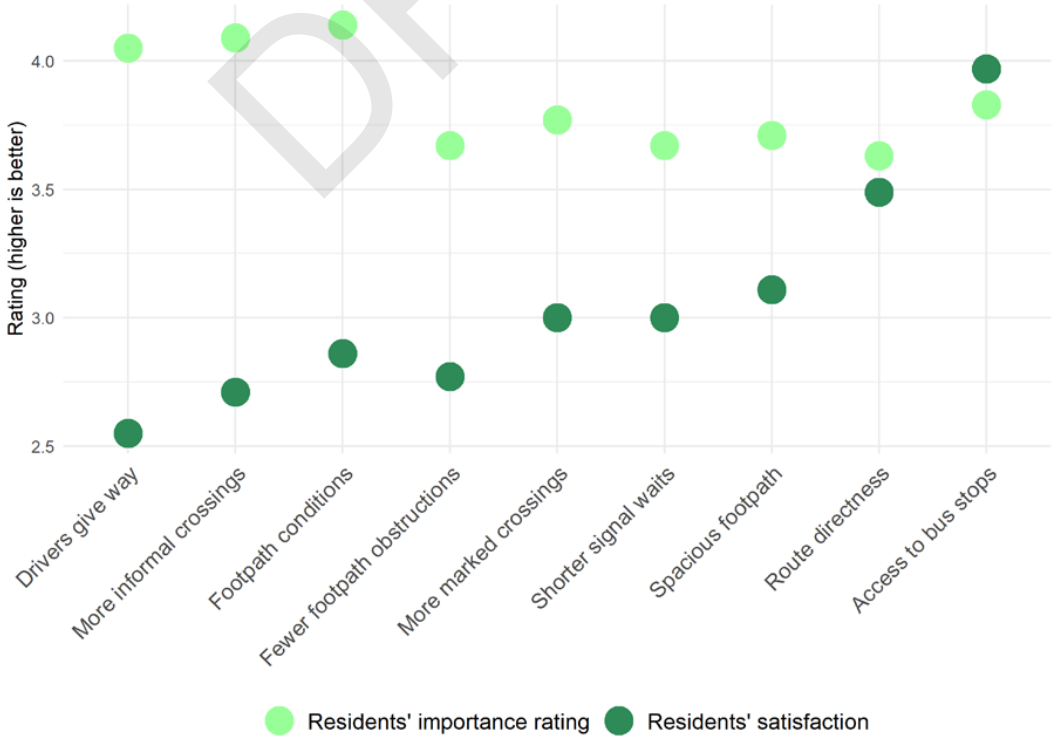

**Pedestrian priority and right-of-way** remains the most significant barrier to walking according to the community survey. Residents consider it crucial for vehicles to slow down and give way to pedestrians; however, most feel that drivers do not sufficiently reduce speed or give way to allow them to cross safely.

**Informal crossing opportunities** on high streets and residential streets are valued highly by the community. However, most residents do not feel safe crossing without signals or marked crossings. The lack of informal crossing opportunities can turn streets into barriers that divide the community, and is the second-largest obstacle to walking according to the survey. Residents also asked for more marked crossing points in the survey.

**Pavement conditions** are highly valued in the walking experience. There is room for improvement in footpath conditions, including footpath repairs, removing obstructions, and adding kerb ramps.

Additionally, the need for wider footpaths to reduce crowding, and shorter wait times at signalised crossings were also important considerations identified in the community survey. Access to bus services was highlighted as a positive aspect, with most residents finding bus stops conveniently located nearby.





# The walking scene in Waverley

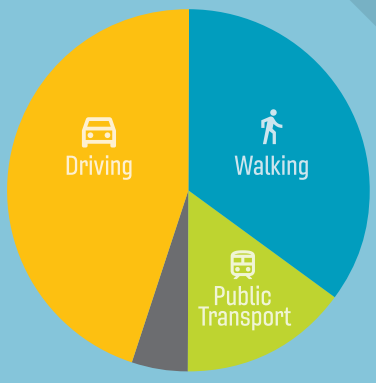
Waverley residents walk more often, and walk longer distances than an average resident in Greater Sydney[2]

**1.3**
Daily walking trips by Waverley residents

**0.65**
Daily walking trips by Greater Sydneyresidents

**900m**
Average walking distance by Waverley residents

**803m**
Average walking distance by Greater Sydney residents




Walking provides an important transport option. Over a third of all trips in Waverley are on foot[3]. Including trips that involve public transport, walking accounts for about half of all trips in Waverley.

**We aspire to have 50% of all trips in Waverley to be made on foot by 2035** [1]

1. By way of comparison, as of 2023, 56.8% of all trips in the City of Sydney are made on foot
2. Weighted average by the number of residents within each LGA
3. 36.3% - as of 2023 (Household Travel Survey)

# The walking scene in Waverley

Residents told us how they walk, and what they want us to improve.

Waverley residents walk both for transport, and to stay active. Based on our community survey, approximately 87% of residents engage in walking or jogging on a weekly basis. Many simply enjoy walking to explore the neighbourhood.

A positive walking experience benefits our local businesses. About one-third of residents walk (including using public transport) to visit retail shops, cafés, or restaurants daily, with this figure rising to nearly 90% on a weekly basis.

Beyond being a practical mode of transport, walking enhances social connections within the community[1] and provides incidental exercise opportunities with significant health benefits[2]. The community told us what they want for Waverley's walking future, including better conditions on footpaths, and an overall safer, more pleasant and hassle-free walking experience.

As such, we aim to cultivate a pedestrian-friendly community where walking is safe, convenient, and pleasant for people of all ages and abilities. We envision walking as a means of both connecting places, and enhancing social interactions within Waverley. We strive to establish walking as a preferred mode of transport, and an inviting experience and lifestyle, contributing to a vibrant, healthy, and sustainable community.



1 Recognised by 86% respondents
2 Agreed to by 96% respondents

# Why we prioritise pedestrians

## Waverley's People, Movement and Places (WPMP 2017) and TfNSW Road User Space Allocation Policy (2024) prioritise pedestrians above other modes. This hierarchy covers a range of issues, including pedestrian right-of-way, and allocation of road space.

- Pedestrians (inc. people using mobility aids / pushing prams)
- Bicycles
- Public transport
- Service vehicles
- Shared mobility
- Parking and general traffic

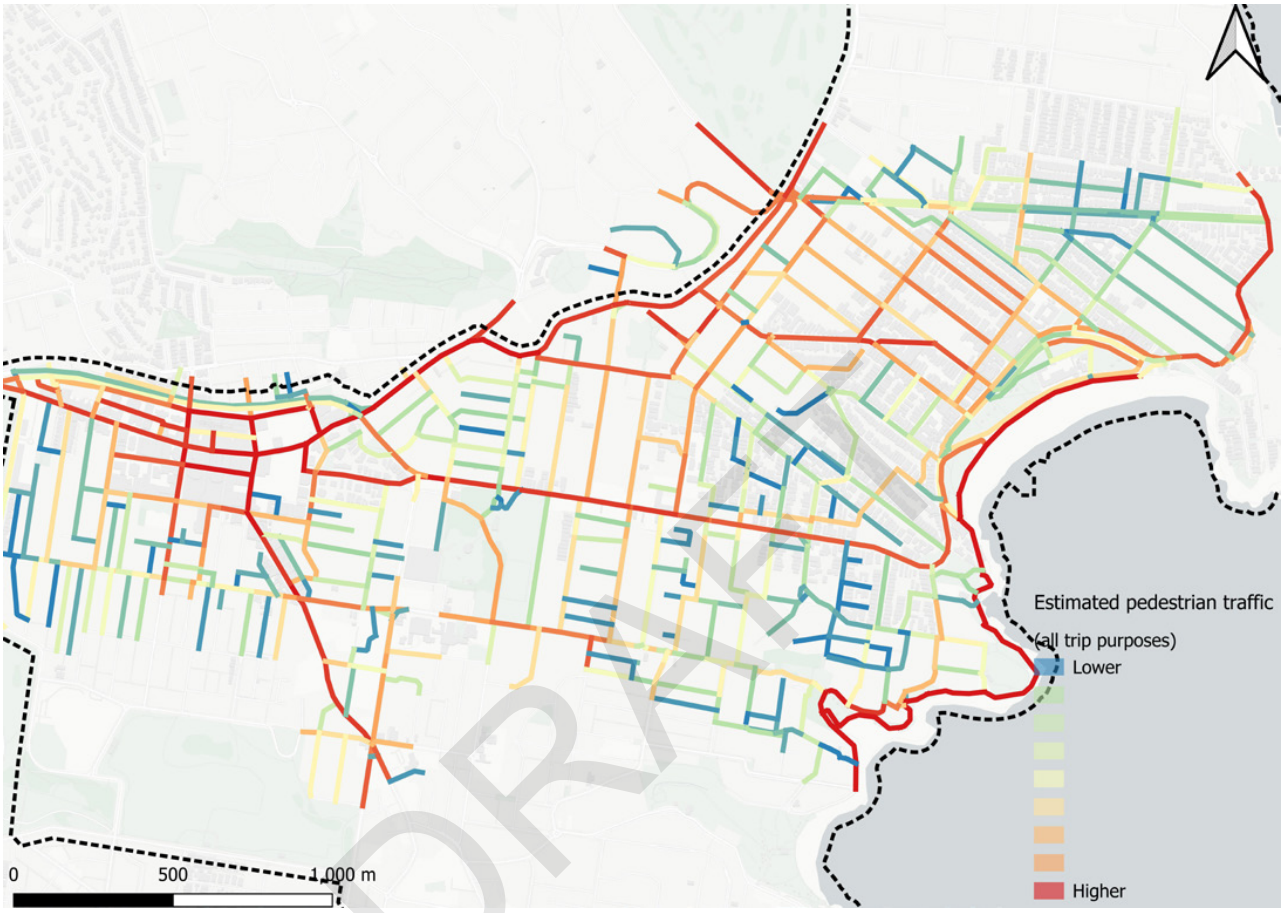
This strategy builds on the People, Movement and Places plan by further defining needs and specific actions that are needed to realise our strategic goals.

Many small local centres intersperse between town centres and other key destinations such as parks, beaches, schools and transport connections. Walking is convenient, and this is reflected in our relatively high proportion of walking to get around.

Pedestrians are more likely to live, work, or engage in activities near their walking routes. Negative impacts from nearby vehicles such as noise, emissions, and safety risks make walking and activities less enjoyable. This strategy underscores the need to mitigate these impacts and prioritise pedestrians and design local streets around their needs rather than those of vehicles.

The community sees drivers not slowing down and give way to pedestrians as the biggest barrier to walking, which not only discourages walking, but also poses potential safety risks for everyone, including people with mobility constraints, and school children who are less able to navigate around cars. While we continue to bring down traffic speeds on local, we also recognise that better walking infrastructure and a more integrated approach is needed to make our streets safer and more comfortable for walking.

# Where do people walk and what contributes to more walking in Waverley




Some of our streets have more people walking – which places greater need for wider footpaths, better amenities, and strategies to manage potential conflicts with vehicular traffic, and other active transport modes.

Factors that contribute to more walking in Waverley include:

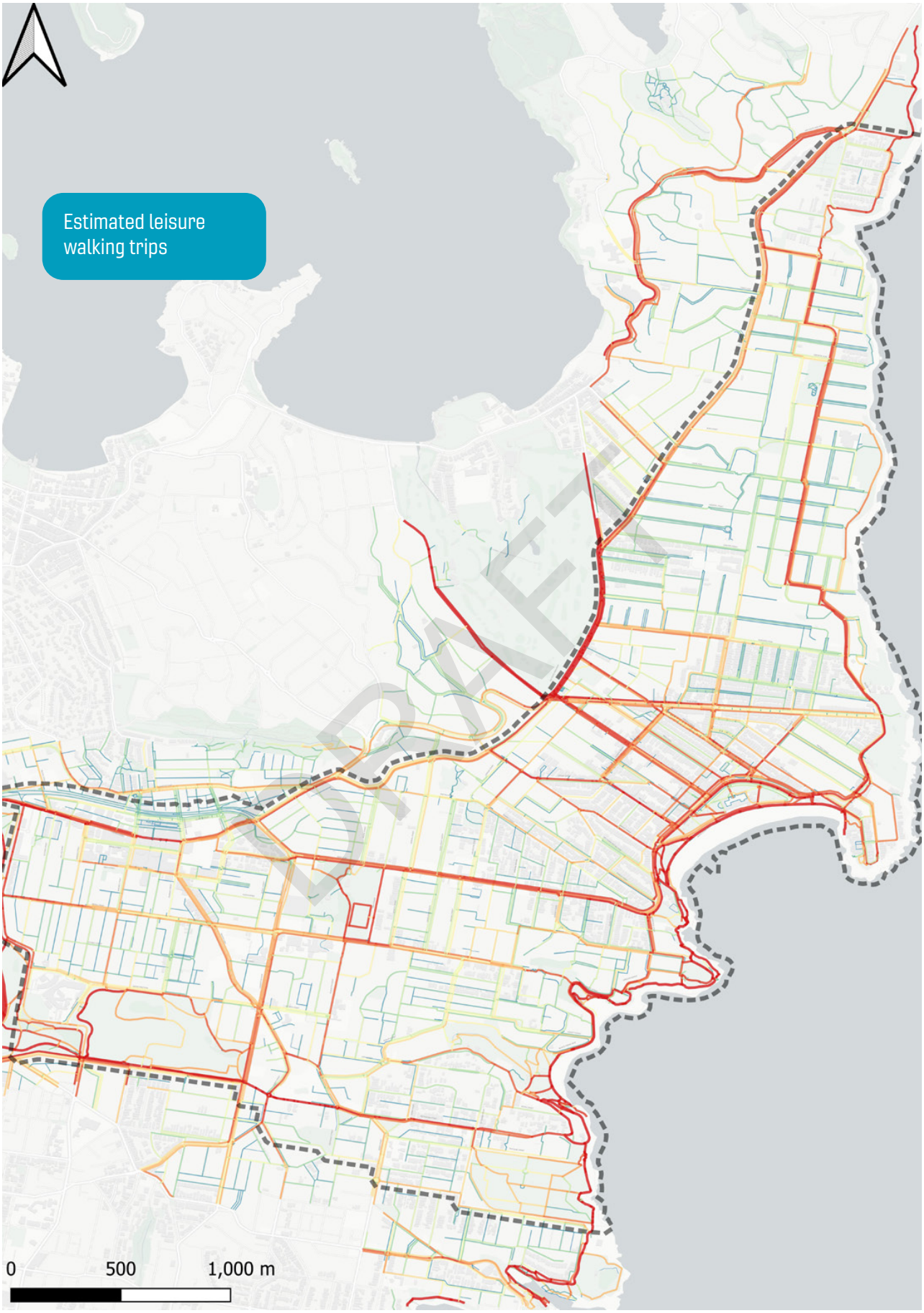
- High density housing
- Convenient train and bus services
- Concentrations of shops, restaurants, cafes & bakeries, and entertainment venues

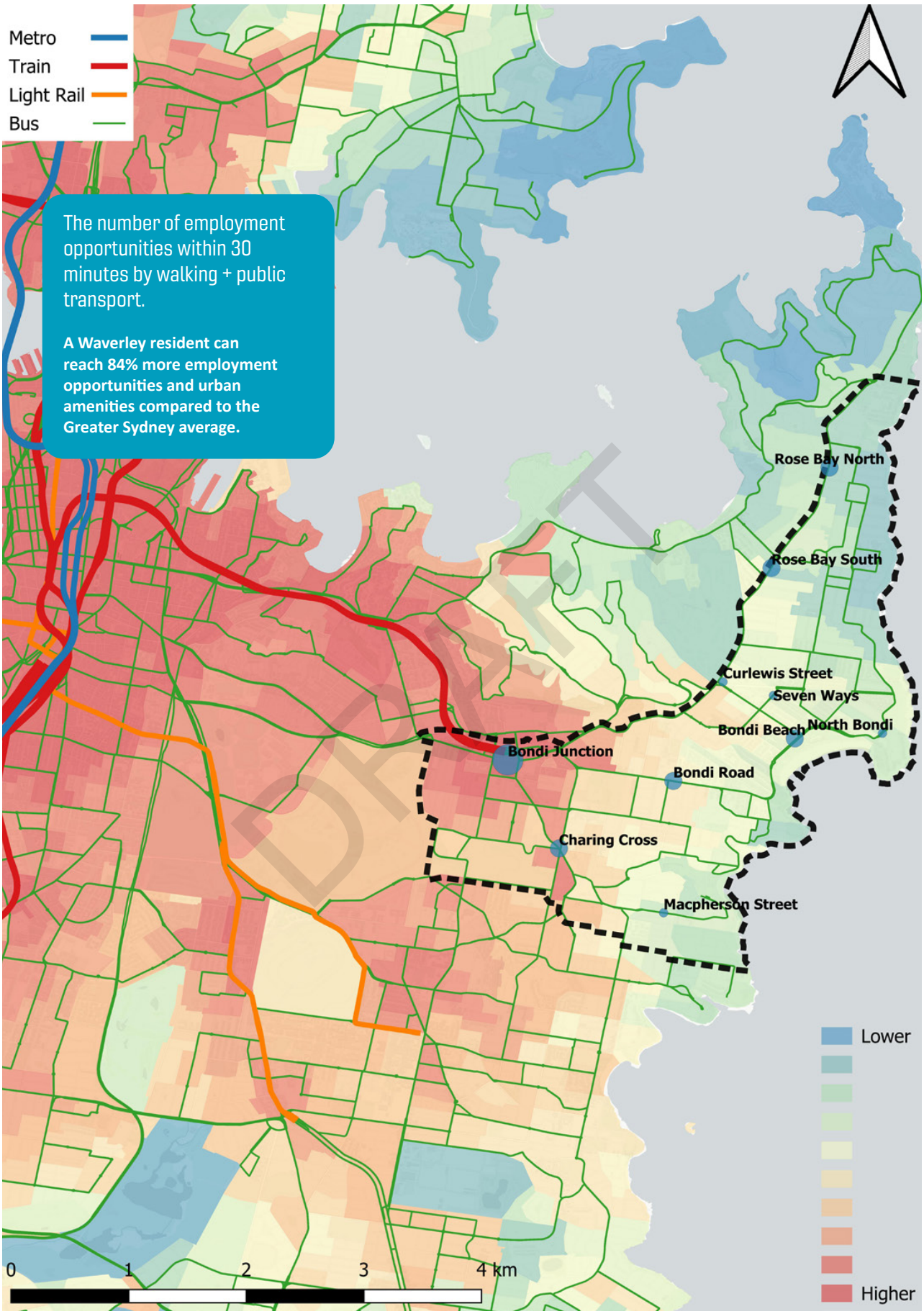
Our community survey identified additional factors that contribute to more people walking:

- Pedestrian priority and a safer walking environment
- More street crossing opportunities
- Improvement to footpath pavement, more space and less obstructions on footpaths

Our centres with high density, mixed-use development brings people closer to where they want to go. In these areas, urban amenities are conveniently located within a short walking distance from public transport hubs and population centres, creating an ideal environment for walking and transit use.

We will continue to remove barriers to walking, and encourage future development to maintain a compact and walkable urban landscape. This also minimises development impacts on our transport system.


Estimated leisure walking trips
0
500
1,000 m
DRAFT


Metro
Train
Light Rail
Bus
The number of employment opportunities within 30 minutes by walking + public transport.
A Waverley resident can reach 84% more employment opportunities and urban amenities compared to the Greater Sydney average.
Rose Bay North
Rose Bay South
Curlewis Street
Seven Ways
Bondi Beach
North Bondi
Bondi Junction
Bondi Road
Charing Cross
Macpherson Street
0
1
2
3
4 km
Lower
Higher
DRAFT

# Strategic Context

Walking has a symbiotic relationship with public transport, and together they form the backbone of the transport system in Metropolitan Sydney. At the state level it has been acknowledged that the provision of road space cannot scale with population and job growth, and that active transport and public transport will take up a greater role in delivering sustainable transport options, especially in high density areas and around public transport hubs.

Waverley enjoys strong public transport connectivity, with a well-serviced local bus network and direct train link to the CBD and broader Sydney via the train and metro systems. Together, walking and public transport provide residents with easy access to a wide range of employment opportunities and urban amenities, both within Waverley and across Greater Sydney. The Bondi Junction public transport hub has fast rail connection with the CBD, and connection with the local area by buses. Areas near Charring Cross and Bondi Road are also well connected by walking and public transport.

Waverley's retail-based economy benefits from its accessibility, drawing patrons and visitors from across Sydney and overseas.

To support our residents and local businesses, we will enhance walking to local destinations, and improve pedestrian access to public transport. This means better pedestrian permeability in our centres and higher density areas, and better linking public transport hubs with residential areas and major destinations. By improving walkability, this strategy is aimed at encouraging more walking in Waverley.

A significant amount of residential area in and around Waverley is covered by the newly introduced stage-2 Low and Mid-Rise Housing Policy (NSW Government 2025), which encourages higher residential density, and increases pressure on narrow streets and crowded footpaths. Walking will need to take on a greater role in providing sustainable transport options for new developments, and to minimise traffic impact.

We also acknowledge that walking is not yet a viable transport option in some areas within our LGA, namely Dover Heights[1], Vaucluse, and parts of Bronte. In alignment with the state planning objectives, we will enhance the walking experience near our centres, and improve walking as a more viable transport option in other parts of the LGA.

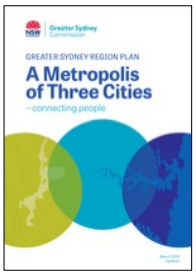


1. Part of Dover Heights near Rose Bay is covered by the Low and Mid-Rise Housing area under the state policy (2025). This area does not currently have good access by walking and public transport.

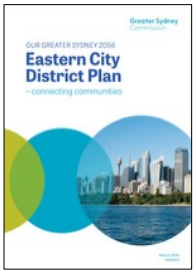
# State & local planning context

## State


NSW Long Term Transport Master Plan (2012) highlights the importance of walking in delivering short, local trips, and in integration with public transport. The plan noted the need to improve walking access to the nearest train station, integration of transport infrastructure with land use planning. The plan also brings forward the potential for replacing a significant amount of short driving trips with walking.




The Greater Sydney Region Plan - A Metropolis of Three Cities (2018) provides the roadmap for enhancing housing opportunities around strategic and local centres. Improving walkability around centres reduces congestion, contributes to liveability, leads to more successful businesses, and supports people to be more active and socially connected. A focus is on enhancing walkability within 2 km of a strategic centre, and 10 minutes walking distance of a local centre.



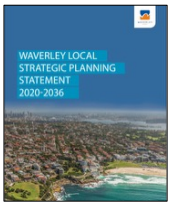

The Eastern City District Plan (2018) outlines the strategy to enhance the connection between walking and public transport, and to co-locate transport infrastructure with schools, retail and other businesses to improve walkability. Residential development will prioritise locations within walking distance of centres, and parking provision need to account for the availability of walking and access to public transport.


Future Transport Strategy 2056 (2022) highlights the importance of walking as a mode of transport, and in encouraging the use of public transport. Better integration between walking and public transport will be needed to make travel time competitive with private vehicles, and to encourage more people out of their cars. A vision is for most people to reach their nearest centre within 30 minutes without driving a car.


NSW Active Transport Strategy (2022) outlines visions and focus areas in improving active transport, including creating walkable neighbourhoods, improving pedestrian safety, and encouraging behaviour change to make walking the preferred mode of transport.

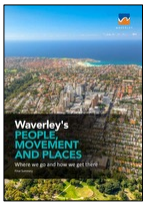
# State & local planning context

## Local




Waverley Local Strategic Planning Statement 2020 – 2036 outlines as our top planning principle to improve public and active transport to achieve the 30-minute city. This includes improving walkability, and working with the state government, businesses and new developments to support travel behaviour change and sustainable transport modes.

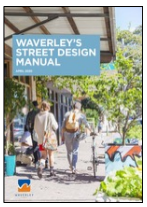

Waverley Community Strategic Plan 2022-2032 presents a community vision of having less traffic and more walkable streets in our community in the future. High density from historical development resulted in many transport issues. We will better manage crowding on footpaths, and deliver more walking and public transport options for our community.



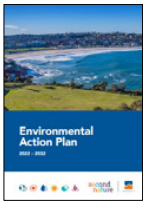

Waverley's People, Movement and Places - (2017) establishes the priority of pedestrians, bike riders, and public transport over private vehicles, and pedestrians are placed as the top priority. This plan outlines opportunities and challenges for walking in Waverley, including historical land use and street patterns, difficult terrain, limited road space, parking and congestion.

Our Liveable Places Centres Strategy 2020 – 2036 highlights the role of our centres, and the goal of having walkable neighbourhoods around our centres. Improving walkability and incorporating active street frontages, ground floor retail and commercial businesses in our centres improves liveability, and provides further opportunities for enhancing community connections, and economic benefits.


Waverley Disability Inclusion Action Plan 2022 – 2026 builds on actions taken by Council over many years to improve accessibility in Waverley. The plan identifies areas for further improvement, and strategies going forward.




Waverley's Street Design Manual (2020) outlines the principles and functions of streets in Waverley, including the hierarchy of streets and centres, and street design considerations. The manual highlights the function of streets as both to carry people and traffic, and to be a place for people to stay and enjoy. There are competing uses for limited street space, and the manual emphasises having a continuous footpath free of obstructions.




Environmental Action Plan 2022 – 2032 outlines Council's goal and commitment to reduce transport related emissions, and to encourage transport mode choice that support transition to Net Zero greenhouse gas emission.

# Challenges

**High density** in Waverley creates issues such as crowding on footpaths, and competing demand for limited street space. Waverley has highly trafficked roads that are both movement corridors, and also serve as major activity centres.

**Transport demand.** Both the population and demand for transport increases across Greater Sydney, and the significant numbers of visitor to Waverley each year contributes to our local economy, but also puts pressure on our transport infrastructure. With a proposed housing target of 3,400 additional dwellings by 2036[1] and the introduction of NSW stage 2 Low and Mid-Rise Housing Policy, population density in our LGA continues to rise. In particular, the number of additional residential units in our centres places additional pressure on already crowded footpaths.

The provision of additional road space cannot scale with the increase in vehicular traffic. Therefore we need to encourage more residents and visitors to walk and use public transport.

**Walking infrastructure** has been inadequate in many parts of the LGA, including the lack of pedestrian priority and crossings, narrow footpath in busy areas, and missing kerb ramps.

**Topography.** The hilly terrain, steep hills and cliffside paths in Waverley presents additional challenges for walking, especially for younger and older residents, and people with mobility constraint.

# Opportunities

**High density** makes it easier for people to walk to places. A great number of urban amenities are within short walking distance from public transport hubs and residential areas.

**Local walking culture, strong community support.** Waverley has strong local culture and heritage for walking. The abundance of local scenery, beaches and parks, shops and outdoor dining, make walking fun and enjoyable, and a great way to explore the LGA. The community supports more walkable and pedestrian friendly neighbourhoods with slower and reduced traffic. Walking ( inc. public transport) is the preferred mode of transport for most residents.

**Public transport.** Waverley has good public transport services by both trains and buses. A significant amount of people use walking and public transport to get to places.

**Low vehicle ownership.** Vehicle ownership rates in our LGA is lower than many other places in the Greater Sydney which presents opportunities for walking and public transport.

**Natural traffic calming.** Our narrow roads provide natural traffic calming, and grounds for further reducing vehicle speeds on local roads.

# Walking related needs and issues

A range of walking related needs and issues stemming from Waverley's population growth and its unique urban landscape have been identified. Data and feedback from the community played a key role in providing an up-to-date understanding of these issues, which also shapes how this strategy aims to address these issues.

**Crashes involving pedestrians, pedestrian right-of-way** – There are a number of pedestrian crash hotspots in the LGA. Pedestrian safety and right-of-way came up as a top concern in resident feedback and the community survey.

**Pedestrian permeability, crossings -** Many streets in our LGA lack crossing opportunities. Traffic signals are not optimised for pedestrians even in areas with high pedestrian activities. The lack of pathways through large land parcels increases walking distance, and discourages walking.

**Limited street space and reliance on public transport -** Waverley has limited road space due to high density and historical development. Both residents and visitors rely on public transport. Asymmetrical bus boarding and alighting numbers on different road sides places higher demand for space near bus stops and pedestrians crossings.

**Footpath conditions -** Footpaths are often narrow, and often crowded with standing and moving pedestrians. Various interruptions and conditions on footpath have been identified as a major barrier to walking by residents.

**Independent mobility –** Waverley is home to several schools and have a large number of older people, and people with disability. Uneven pavement, missing and non-compliant kerb ramps, footpath obstructions and unsafe spots make walking difficult for children and people with mobility limitations.

**Social and economic roles of walking –** Walking increases social interaction and bonds the community closer together. Good walkability benefits the local community, and the retail-based local economy.

**Conflict with other active transport users –** Narrow road space, crowded footpath, and a large number of people walking and riding means conflicts are inevitable between different active transport users, and between pedestrians and parked bicycles.

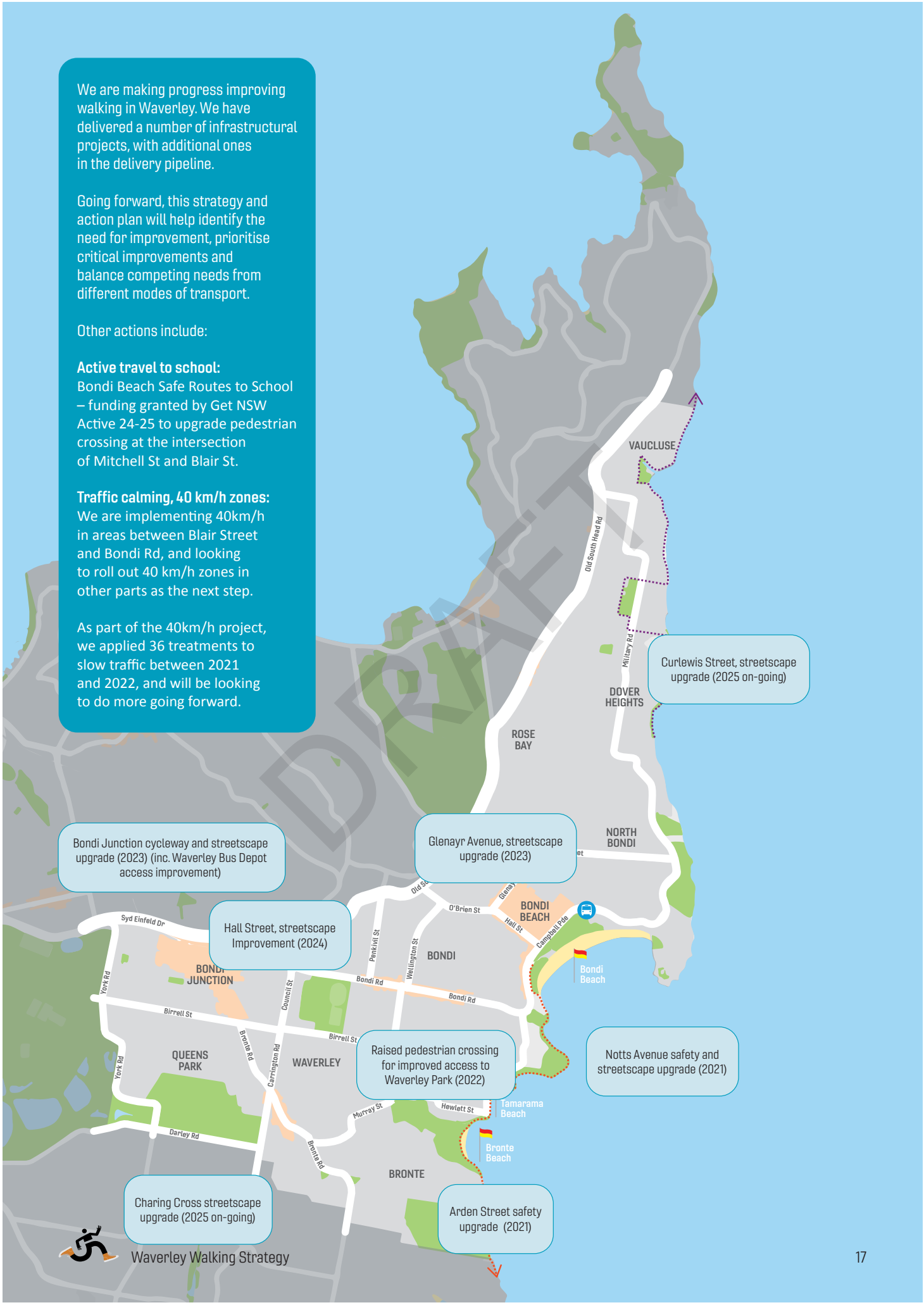
# About this strategy

Walking Waverley proposes infrastructural and non-infrastructural treatments to support walking in our LGA. This document identifies gaps and opportunities for improving walking, and sets our goals and priority areas going forward. This strategy will guide our walk related capital and maintenance works, and funding applications, as well as providing guidance at an operational level to align our short to medium-term actions with longer-term strategic objectives. As Waverley's first ever strategic document on walking, this strategy has a heavier emphasis on infrastructural improvement.

Development of this strategic document is aligned with other state, regional, and our local plans and policies. In particular, this strategy is influenced by the Waverley's People, Movement and Places (WPMP) plan (2017), which sets our transport vision, and establishes the priority of pedestrians.

Walking Waverley incorporates the Active Travel to Schools plan, which seeks to improve safety, and enable the independent mobility of school children. This document is developed in parallel with the 2025 Bike Strategy that guides the implementation of bike infrastructure.

This strategy is informed by, and will inform other local plans and policies. These include the management and maintenance of walk related transport infrastructure in the Strategic Asset Management Plan (SAMP 6).


We are making progress improving walking in Waverley. We have delivered a number of infrastructural projects, with additional ones in the delivery pipeline.
Going forward, this strategy and action plan will help identify the need for improvement, prioritise critical improvements and balance competing needs from different modes of transport.
Other actions include:
Active travel to school:
Bondi Beach Safe Routes to School – funding granted by Get NSW Active 24-25 to upgrade pedestrian crossing at the intersection of Mitchell St and Blair St.
Traffic calming, 40 km/h zones:
We are implementing 40km/h in areas between Blair Street and Bondi Rd, and looking to roll out 40 km/h zones in other parts as the next step.
As part of the 40km/h project, we applied 36 treatments to slow traffic between 2021 and 2022, and will be looking to do more going forward.
VAUCLUSE
Old South Head Rd
Military Rd
Curlewis Street, streetscape upgrade (2025 on-going)
DOVER HEIGHTS
ROSE BAY
NORTH BONDI
Glenayr Avenue, streetscape upgrade (2023)
Bondi Junction cycleway and streetscape upgrade (2023) (inc. Waverley Bus Depot access improvement)
Hall Street, streetscape Improvement (2024)
Syd Einfeld Dr
York Rd
BONDI JUNCTION
Old St
Glenayr
O'Brien St
Hall St
Campbell Pde
BONDI BEACH
Penkivil St
Wellington St
BONDI
Bondi Beach
Bondi Rd
Council St
Birrell St
QUEENS PARK
Bronte Rd
Carrington Rd
WAVERLEY
Raised pedestrian crossing for improved access to Waverley Park (2022)
Notts Avenue safety and streetscape upgrade (2021)
Murray St
Hewlett St
Tamarama Beach
Darley Rd
Bronte Beach
BRONTE
Charing Cross streetscape upgrade (2025 on-going)
Arden Street safety upgrade (2021)
DRAFT

# Working together towards our vision for walking in Waverley

## Roles and responsibilities

While Council directly controls many aspects of the walking infrastructure, we do not have control over many other street features. The state owns and manages state roads, and has more interest and influence over regional roads. Traffic signals are also managed by the state. Bus stops and operations are responsibilities of the bus operator, although Council provides and maintains bus shelters. Shared bikes operate on our streets, and under the current legislative framework, Council currently lacks the authority and resources to regulate their use effectively.

## Partners and stakeholders

Council will work to improve walking infrastructure that are within our direct control, and continue to monitor, evaluate, and work with the state to improve other walking related transport infrastructure, such as traffic signals and speed limits.

For areas beyond our direct control, we will continue to work with responsible parties and stakeholders, and advocate for positive changes to improve walkability.

| Partners and stakeholders | Organisation type | Area of cooperation |
|---|---|---|
| Transport for NSW (TfNSW) | State government | Collaboration on improving walking infrastructure on local roads, and advocate actions for positive changes with pedestrian signals, and walking infrastructure on state roads. |
| NSW Department of Planning | State government | Land use and zoning to support a walkable environment |
| Randwick, Woollahra, City of Sydney | Nearby local government | Coordination projects across council borders to ensure the continuity of walking corridors across LGA boundaries |
| Transdev John Holland | Local bus operator | Bus stops, routes and services, integration of walking and bus services |
| Schools and NSW Department of Education | Education sector | Support for students active travel to school |
| Bike East, Walk Sydney Bicycle NSW | Not-for-profit organisation, advocacy group | Community engagement, input and feedback |
| Shared bike operators | Private sector | Shared bike parking and interaction with people walking |

# How this strategy is structured

## Our Goals

- Make walking safe for all people, at all times
- Improve the permeability of the pedestrian network through streets and open space
- Facilitate seamless integration between walking & public transport
- Make walking pleasant and enjoyable
- Provide accessible streetscapes that support independent access
- Improve walking to promote vitality on streets
- Ensure walking harmonises with other transport modes



Stemming from our goals, specific actions have been developed to improve walking.

To apply our actions, 10 focus areas have been identified, each with a list of improvement opportunities identified. These focus areas and improvement opportunities are often interconnected, contributing to multiple goals.

# How this strategy is structured

| Goals | Focus Areas |
|---|---|
| Make walking safe for all people, at all times. The safety of pedestrians is prioritised and risks from vehicular traffic is mitigated. | **Slow streets** – Reduce speeds to improve pedestrian safety. This includes 40km/h throughout the LGA and aspirational 30 km/h zones in core areas in core areas and major walking routes and destinations<br><br>**Intersection normalisation** – Redesign and normalisation of vehicle centric intersections. This reduces stress, facilitates pedestrian movement, and provides more space for people walking and staying<br><br>**Vehicle entrances & exits** - Clarify pedestrian priority and improve safety where vehicles cross pedestrian paths<br><br>**Pedestrian safety initiatives** – Including both infrastructure treatment to improve safety at pedestrian crash hot spots, and non-infrastructural community engagement and education |
| Improve the permeability of the pedestrian network through streets and open space. Walking routes are direct, without unnecessary detour or difficult crossings. Walking is convenient, and the preferred transport option for short trips. | **Pedestrian crossing improvement** – Deliver pedestrian crossing improvements in alignment with a map of identified locations. This includes both marked crossings and informal pedestrian crossings<br><br>**Pedestrian signal priority** – Work with TfNSW to reduce pedestrian delays at intersections, especially in high pedestrian areas where the movement of people should be prioritised. Explore options such as “always-on” pedestrian signal, and diagonal (scramble) pedestrian crossings in high pedestrian areas |
| Facilitate seamless integration between walking & public transport | **Bus stops improvement** – More footpath space for pedestrians and standing passengers, easier street crossing near popular bus stops |
| Make walking pleasant and enjoyable for people of all ages and abilities | **Footpath surface improvement** – Improvements and upgrade to footpath surfaces, including highly trafficked and yet unpaved natural strips, connections through parks and open space |
| Provide accessible streetscapes that support independent access by school children and people with disability | **Active travel to school** – Continue to work with schools to improve the safety of walking to school, enable and encourage more children to active travel to school<br><br>**Continuous travel paths** - Identify and treat missing and non-compliant kerb ramps, and other pinch-points that impact the walking |
| Improve walking to promote vitality on streets, enhances social connection, and contributes to a sense of place and the local economy | Policies, planning controls and daily operations<br><br>Improve way-finding signages |
| Ensure walking harmonises with other transport modes | Advocate for greater control of street space and features by Council, including space allocation, speed limits, traffic signals, both the authority and resources to better manage share micromobility devices.<br><br>Trial pedestrian priority areas, and make permanent these changes with support from the community |

# Goal A: **Make walking safe for all people, at all times**

The goal of making walking safe responds to increasing traffic in our LGA, and a growing voice from the community to improve safety. This strategy developed a range of actions to improve safety with walking, including:

**A1.** Continue to reduce vehicular speeds, mitigate risks and impacts to pedestrians

**A2.** Reduce excessive vehicular traffic on residential streets and near town centres

**A3.** Indicate pedestrian priority, manage driver expectations and readiness to give way to pedestrians

**A4.** Transition from vehicular centric to people centric design, make every street walkable

**A5.** Improve pedestrian safety at identified collision hotspots, proactively address locations with potential for collisions

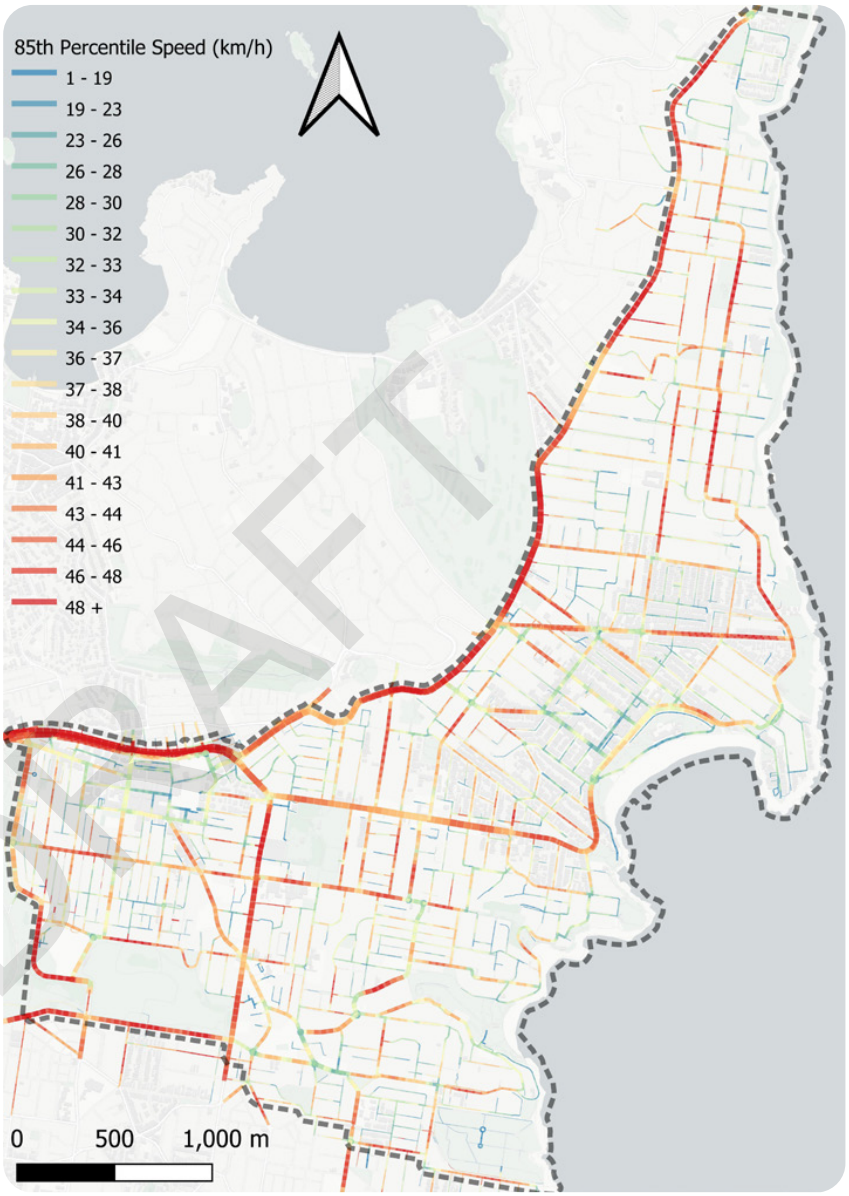
**A6.** Combine traffic calming with pedestrian crossings whenever possible

# A1. Continue to reduce vehicular speeds, mitigate risks and impacts to pedestrians

Not all roads serve the same purpose – some prioritises efficient vehicle movement, while others are meant for local traffic. As traffic continues to increase, some roads are taking on functions they were not intended to handle. Excessive vehicular traffic and speeds bring a range of issues, most notably:

- **Safety risks –** Vehicles at high speeds are less likely to notice or give way to pedestrians, which results in more serious collisions. Research show the likelihood of serious pedestrian injuries or fatalities increases with vehicle speeds. Fatalities become exponentially more likely to occur when speeds exceed 30 km/h[1].
- **Barrier effect –** Roads with fast moving vehicles make it more difficult for pedestrians to cross without signalised crossing points. This "barrier effect" is particularly significant when combined with high traffic volumes.
- **Noise and other negative impact –** Vehicular traffic diminishes the appeal of streets as places to stay and enjoy, and negatively affects nearby residential units and ground-level retail.

To enhance pedestrian safety and improve the livelihood of streets, we will continue to implement traffic calming to slow vehicles, reduce cut-through traffic in our core areas. This requires a strategic, systematic approach that considers the road hierarchy under the "Place and Movement" framework, and strategically place traffic calming devices and introduce network modifications that align traffic with the road function.




85th Percentile speeds shown in colours
(Traffic volume is represented with line width)

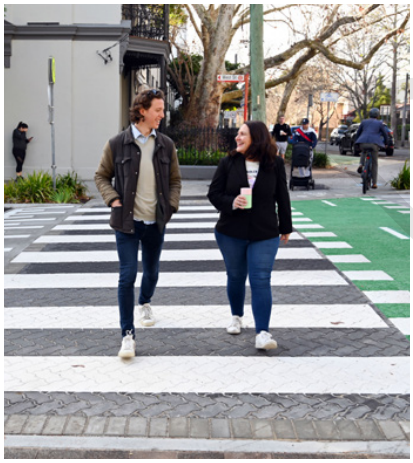


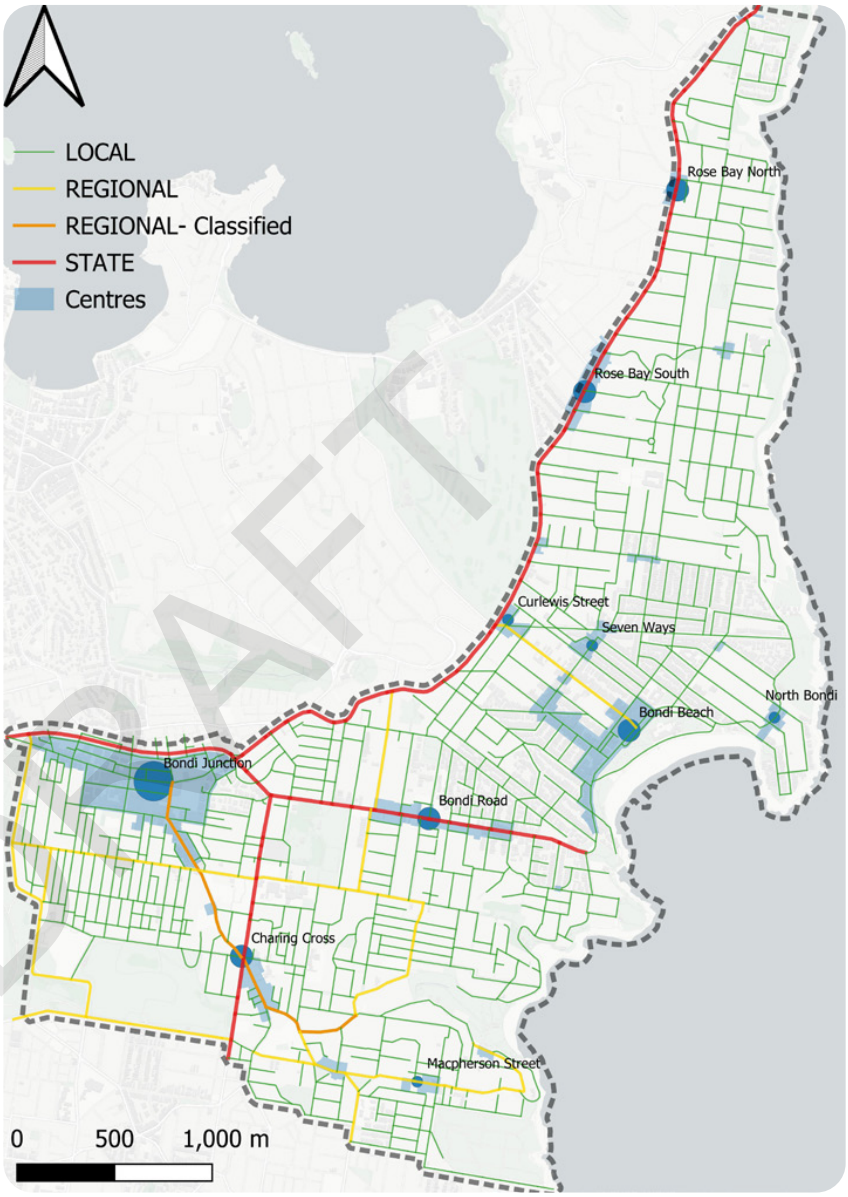
^1 Jurewicz, Chris, Amir Sobhani, Jeremy Woolley, Jeff Dutschke, and Bruce Corben. "Exploration of vehicle impact speed–injury severity relationships for application in safer road design." Transportation Research Procedia 14 (2016): 4247-4256.)

# **A2.** Reduce excessive vehicular traffic on residential streets and near town centres

While the road classification based on management arrangements (local, regional, state) largely aligns with traffic patterns, some state and regional roads – such as Bondi Road, Curlewis Street, and sections of Bronte Road and MacPherson Street have evolved to serve more as places for people, rather than purely as vehicle throughfares.

We will implement traffic calming measures to reduce speed and traffic in commercial centres and residential areas, particularly where road function and actual traffic conditions are misaligned. We will monitor and address any unintended spill-over effects from changes in traffic.






Road classification

# **Focus area:** Slow streets

Excessive speeds and traffic volume are not compatible with the characters of our neighbourhood. To make our LGA more liveable, and streets safer for people walking, staying or playing, we will implement infrastructural changes to reduce vehicle speeds and traffic volume. Measures include lower speed limits, raised crossings, pedestrian refuge, and further narrowing roadway at intersections to make sure drivers slow down when making turns.

## 40 km/h zone

We will continue to implement and monitor 40 km/h zones across the LGA. This will improve safety and contribute to more active transport.

Bondi Road is a state road but with extensive "place" functions and deep local connections. Vehicle speeds on Bondi Road are mostly within 45 km/h, which is suitable for 40 km/h zone.

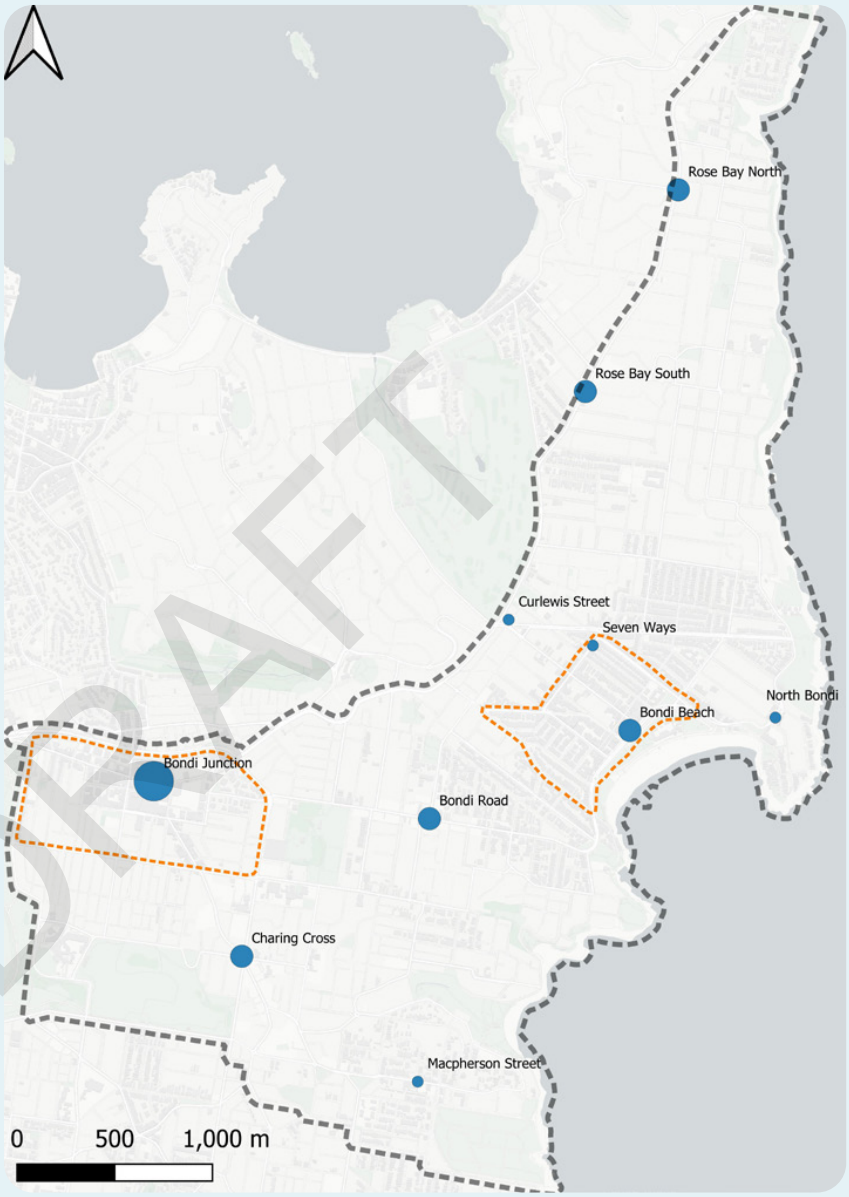
## Aspirational 30 km/h zone and pedestrian priority areas

In addition to the on-going implementation of 40 km/h zones, there are significant benefits to establishing 30km/h zones in commercial centres and high pedestrian areas in Bondi Junction and Bondi Beach area (shown in the map). Other major walking trip destinations would also benefit from vehicle speeds below 40 km/h.

## Lower traffic volume

Slower speeds in commercial centres also helps divert through traffic and reduce traffic volume around Bondi Junction[1] and across the LGA[2]. This helps match traffic conditions with the function of a road, and aligns with both Council's strategic plans, and the NSW Movement and Place Framework in managing roads and traffic.

We aim to reduce cut-through traffic on our streets, particularly where existing traffic volume does not match road function and local environment[3].




Indicative area for 30km/h

1. WPMP (2017)
2. Waverley Local Strategic Planning Statement 2036
3. Minimise volume of traffic along Newland Street with traffic calming and diversion (Waverley Local Strategic Planning Statement 2036); Discourage through-traffic in Bondi Junction (WPMP (2017))

# **A3.** Indicate pedestrian priority, manage driver expectations and readiness to give way to pedestrians

# **A4.** Transition from vehicular centric to people centric design, make every street walkable

## Designing our streets for people, not cars

Roads have varying purposes: some act mainly as movement corridors, while others, like high streets and residential streets, serve important 'place' functions where people can stay and enjoy. Despite these differing roles, vehicles remain the design priority on most roads. Road space allocation, road geometry, and signal priority have a focus on vehicles movement - in many cases encouraging vehicles to travel at excessive speeds, or use high streets and residential streets as cut throughs ("rat run").

Vehicles not giving way to pedestrians is recognised by the community as a major barrier to walking. Vehicle-centric designs reinforce the mistaken belief that cars have priority, even when they do not. Excessive speed also means drivers are less likely to notice, or give way to pedestrians.

We will reduce vehicle-centric designs on local roads to improve safety for pedestrians. Most notable examples include:

- Slip lanes
- Roundabouts (where there is heavy traffic)
- Street level vehicle entrances/exits that incorrectly signal vehicle priority
- Pedestrian barriers and fences

The use of slip-lanes, roundabouts and one-way streets will be minimised, and we will seek opportunities to remove existing ones. Where necessary, we will apply treatments to reduce vehicle speeds and signal pedestrian priority in road design. Kerb extensions, refuge islands are effective treatments to reduce crossing distance, especially for people who cannot walk as fast, or see or hear as clearly. Continuous footpath treatment provides clear signal to drivers that they are crossing a pedestrian path.

## Driver expectation, safety in numbers

Drivers' awareness of entering high pedestrian areas such as town centres, influence their driving behaviour. We will incorporate better pedestrian-aware designs and manage driver expectations to reduce the likelihood of pedestrian crashes. Effective traffic calming, and preparedness to stop or give way to pedestrians are key to pedestrian safety.

Encouraging more people to walk improves the safety of everyone[1]. As pedestrian numbers increase, they become more visible to drivers. Drivers also adapt to a high pedestrian environment by being more cautious, slowing down and paying more attention to people crossing the street. More people walking also justifies traffic calming and other infrastructure enhancements to improve safety. With this "safety in numbers" effect, more people walking improves not just their own safety, but also contributes to the safety of others.



1. Elvik, Rune, and Torkel Bjørnskau. "Safety-in-numbers: a systematic review and meta-analysis of evidence." Safety science 92 (2017): 274-282

# **Focus area:** Intersection normalisation

While the removal of slip lanes will cause a slight reduction in the level of service for motorists, this is expected to affect only a small number of vehicles and greatly improve the safety and overall walking experience. A review and removal of slip lanes was proposed by the WPMP (2017). The TfNSW Design of Roads and Streets (DORAS) manual[1] considers slip lanes as a vehicle centric design that discourages walking, and recommends avoiding them in areas with high place function and high pedestrian activity, as well as in urban centre and urban context where frequent street crossing opportunities are needed to access transit stops.

Several opportunities have been identified to normalise intersections, remove slip lanes and expand footpath space to facilitate pedestrian movement. In some cases, removal of slip lane provides more space for people waiting at signals, and for on-street activities.

We will look to remove the following slip lanes in the short to medium term:

- Council St & Waverley St/Bondi Rd
- Denham St & Bondi Rd[2]
- Bronte Rd & Birrell St
- Bronte Rd & Carrington Rd

We will explore longer term opportunities to treat the following slip lanes:

- Curlewis St & Old South Head Rd
- Penkivil St & Old South Head Rd
- Wellington St & Blair St
- Birrell St & Carrington Rd (south-west corner as priority)

To minimise traffic impact from slip lane removals, we will carefully analyse the origin-destination of vehicles utilising slip lanes and continuously monitor traffic before and after treatment.

## Redesign roundabouts

Vehicles typically travel at higher speeds approaching a roundabout than a traditional intersection, and exit at much faster speeds. The exit point for vehicles using a roundabout is difficult to determine, making crossing a roundabout particularly difficult for pedestrians and other non-motorized users.

We will redesign the following roundabouts and look to improve more roundabouts in the future.

- Campbell Parade near Lamrock Avenue[2]
- Leichhardt Street and MacPherson Street intersection

# **Focus area:** Vehicle entrances & Exits

## Treat street level vehicle entrances and exits

Many vehicle entrances and exits in Waverley incorrectly signal vehicle priority, which creates a significant issue for people walking, particularly in and around Bondi Junction, Bondi Beach area.

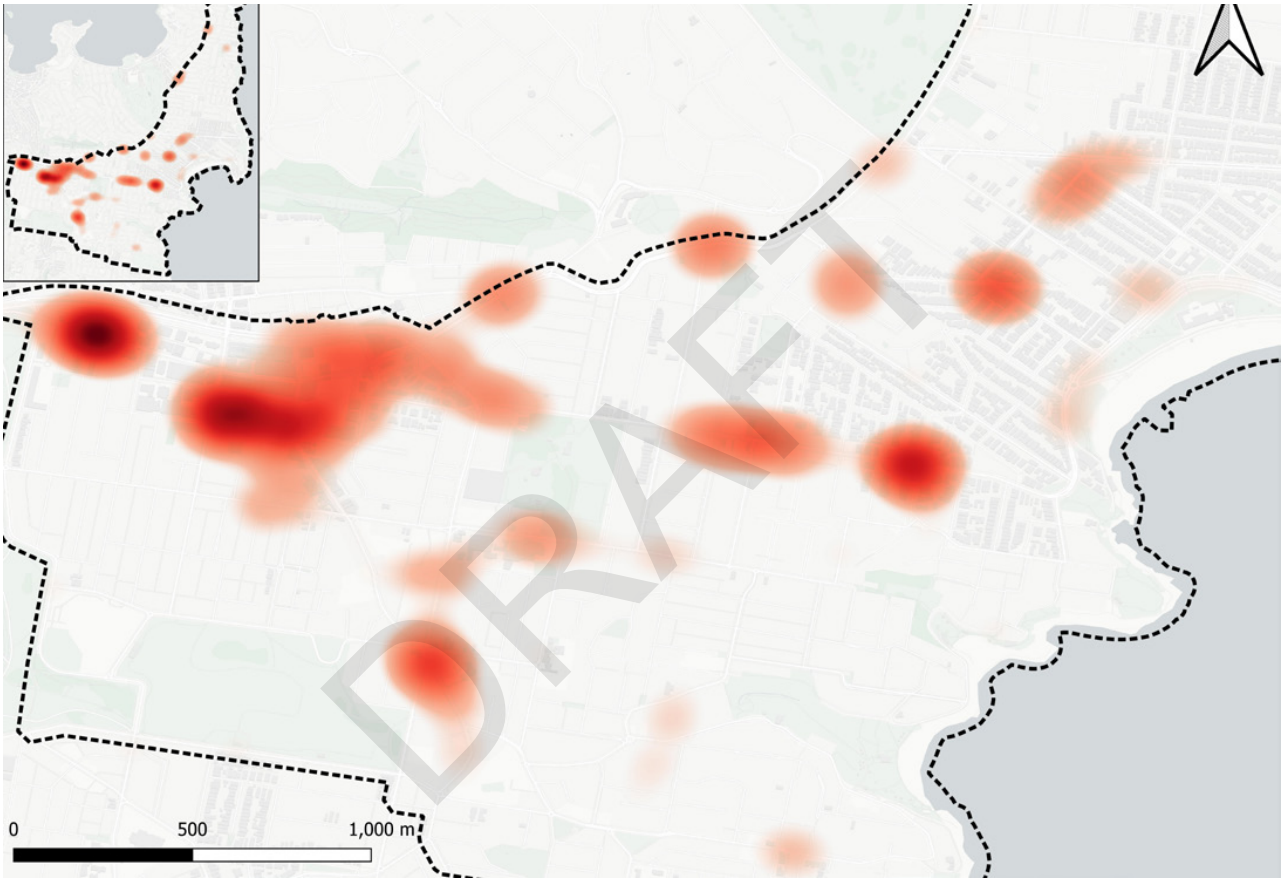
We will apply treatment at street level vehicle entrance/exit points, where vehicular traffic and conflict with pedestrians are common. The goal is to clarify pedestrian priority, and to encourage drivers give way to people walking.

1 Sec 8.3.6 & Sec 9.5.8
2 Noted in WPMP 2017

# **A5.** Improve pedestrian safety at identified collision hotspots, proactively address locations with potential for collisions

# **A6.** Combine traffic calming with pedestrian crossings whenever possible

Heatmap showing where pedestrians crashes are more likely (2016 - 2022)
Including areas with high pedestrian activities and/or elevated risks to pedestrians




## Pedestrian safety in our LGA

A pedestrian friendly neighbourhood should be forgiving of mistakes, and a misstep should not lead to collisions or injuries. This is particularly important for vulnerable road users such as school children, who are more active and less experienced in recognising risks.

While pedestrian safety statistics in Waverley is tracking reasonably well compared to other LGAs, there is still a long way to go towards a safe neighbourhood for pedestrians. Between 2016 and 2022, there were 125 reported crashes involving pedestrians in our LGA, including 52 serious injuries, and 4 fatalities. Pedestrians faced a markedly higher risk than drivers during collisions; 3.2% of reported pedestrian crashes resulted in fatalities, compared to 0.78% of vehicle crashes.

To make our LGA a safer place for pedestrians, we will work to enhance pedestrian priority, and reduce vehicle speed with the ongoing roll out of 40 km/h zones across the LGA. In commercial centres and high pedestrian areas, we aspire to implement 30 km/h zones to further enhance pedestrian safety. Lower speed limit makes cars more likely to slow down for pedestrians, and reduces the severity of any collision that do occur.

Pedestrian crash statistics does not include those resulting in minor or non-injury to pedestrians. Therefore a large number of incidents are likely not reported. We also heard from residents about near misses. We will continue to monitor and improve safety for people walking in our LGA.

# **Focus area:** Pedestrian safety

In conjunction with other improvements, we will look specifically at areas with a heightened risk for pedestrians. This includes both our local roads, and state roads such as Bondi Road, Council Street (Carrington Road) and Old South Head Road[1]. We will conduct further investigations at pedestrian crash hotspots, and where appropriate, apply targeted treatment or work with TfNSW to improve pedestrian safety.

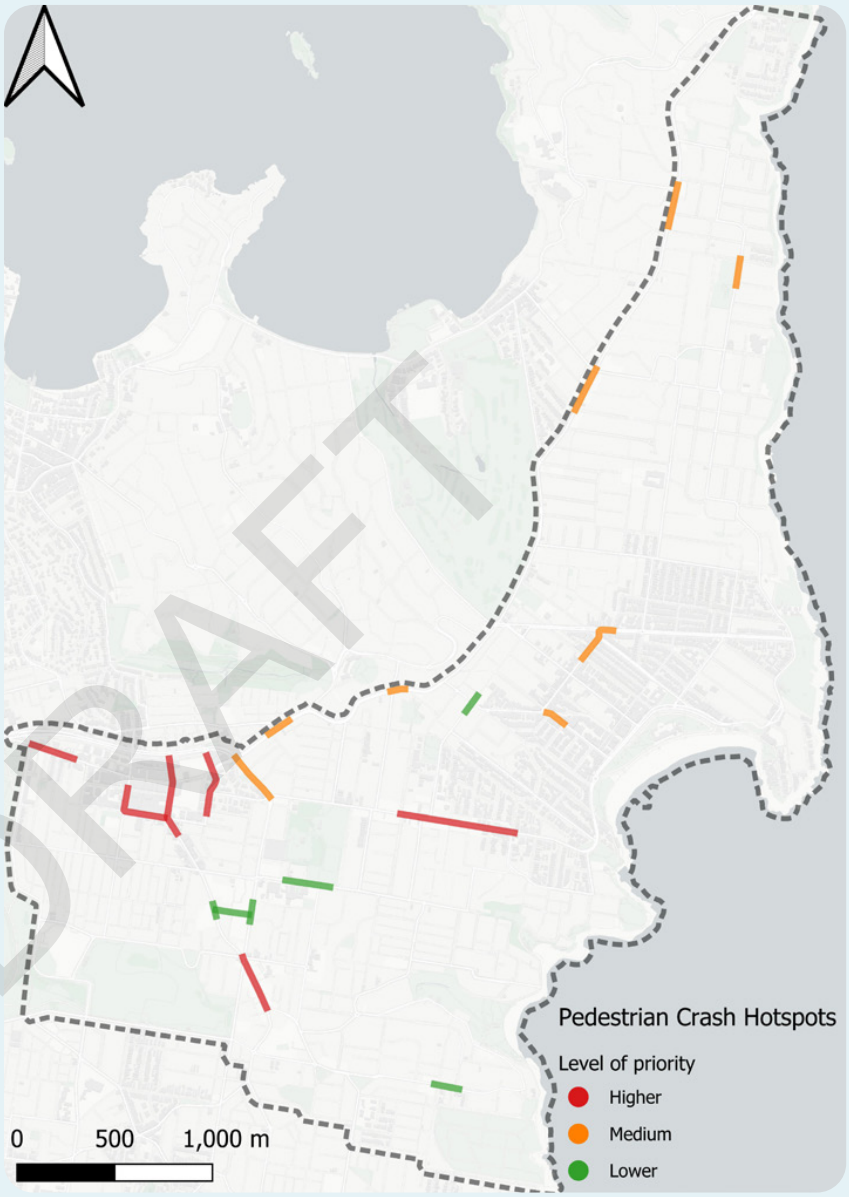
## Infrastructural treatment

Vehicle speeds play a significant role in both the likelihood and severity of crashes, making them a key focus of our efforts. Slow points and speed humps are effective at reducing speeds. Where feasible, we will combine these measures with pedestrian crossings to enhance effectiveness. Line markings and signages will be installed where appropriate to alert drivers of crash hotspots.

We will minimise the use of one-way streets – although a one-way street reduces traffic volume, the change in driver expectation may lead to increased speeds that are not consistent with the road environment[2], which increases the risk to active transport users.

## Community engagement and education (Non-infrastructural treatment)

We will actively engage the community to better understand their needs and preferences, and to educate the community on walking and driving safely. This includes engaging people with disabilities, school children and their parents to better understand needs and safety concerns.




Pedestrian crash hotspots

A number of locations where there is a cluster of pedestrian-related crashes have been identified. These clusters indicate high pedestrian activities and/or elevated traffic risks to pedestrians. The level of priority for investigating and treating a crash hotspot depends on factors such as the number of pedestrians exposed to traffic risks, the likelihood of future crashes, and the potential severity of crashes.



1. The need to improve quality, and increase pedestrian safety and amenity of Old South Head Road and Military Road is noted in Waverley Local Strategic Planning Statement 2020 - 2036.
2. Austroads 2016, Guide to Traffic Management Part 5: Road Management

# Goal B: **Improve the permeability of the pedestrian network**

A permeable pedestrian network allows walking straight from point A to point B, without too much detour around large blocks or roads lacking crossing opportunities. Ensuring pedestrian permeability means minimising detour and walking distances, which can make the difference between a pleasant walking experience, and a tedious one. Our actions towards pedestrian permeability include:

**B1.** Provide more pedestrian crossing opportunities, ensure all desire lines at intersections have crossings, facilitate informal crossings where conditions permit**B2.** Reduce excessive vehicular traffic on residential streets and near town centres

**B2.** Add cut throughs and modal filters to reduce walking distance. Improve connectivity through parks and coastal walk

**B3.** Strongly advocate to TfNSW to improve timing at key crossings to prioritise pedestrians, and introduce pedestrian scramble signals

**B4.** Support the Local Strategic Planning Statement's vision of a 30-minute city by promoting active and public transport, and encouraging compact and walkable development

**B6.** Encourage active and public transport to replace short driving trips, incorporate provision for walking in all streetscape projects

# **B1.** Provide more pedestrian crossing opportunities, ensure all desire lines at intersections have crossings, facilitate informal crossings where conditions permit

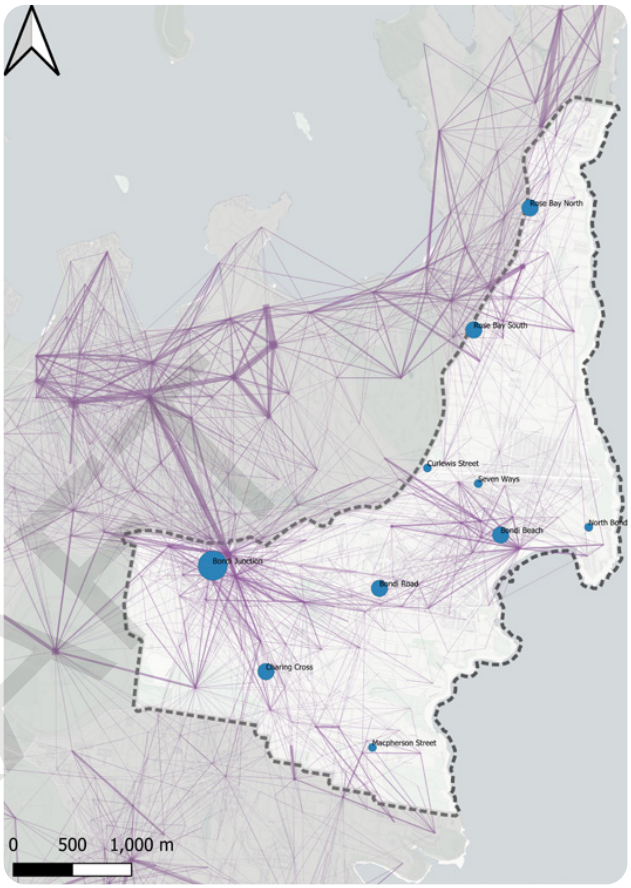
## Desire lines and challenges to pedestrian network permeability.

There is strong demand for walking connections between commercial centres, public transport hubs and their surrounding areas. A significant amount of trips stemming from Bondi Junction and Bondi Beach converge along Bondi Road, making it a linchpin for both centres. Walking connections between Bondi Junction and Charing Crossing, Charing Crossing , with Double Bay[1] (Woollahra) also stand out as popular connections for walkable trips.

There remain many challenges to pedestrian permeability in Waverley, including roads and intersections with heavy vehicle traffic, and large block sizes that lack a passageway. In addition, there are also many locations with high traffic volumes, and large numbers of people crossing the street but without a marked crossing. The need to "negotiate" passage with vehicles can be both dangerous and stressful for many.

We will work to improve the permeability of the pedestrian network, eliminate pinch points, and facilitate pedestrian movement in all directions.

1. Areas beyond a 800-metre walking catchment area from the Edgecliff train station.




Short distance trip desire lines (within a 20-min walking distance)

## Key walking corridors in Waverley

People walk for different trip purposes in Waverley – such as walk to get to places, walk for fun, or a combination of both. We aim to ensure a pleasant walking experience for all types of walking trips and walking corridors.

### Transportation

- Walking on major roads such as Bondi Road, Bronte Road Old South Head Road connecting population centres with the commercial centre and public transport hub at Bondi Junction
- Walking access to popular bus stops

### Recreational/tourist routes

- Walking routes to beaches, and coastal walks north and south of Bondi Beach
- Special Events – such as City to Surf, Sculptures by the Sea
- Walking amenities, places to stay, rest and enjoy

### Shopping and dining

- Walking routes connecting village centres and town centres

### Parks

- Access to parks and open spaces
- Through park connections

### Schools

- Including day care, primary, secondary and colleges
- Walking connections between schools and adjacent parks

# **B2.** Add cut throughs and modal filters to reduce walking distance. Improve connectivity through parks and coastal walk

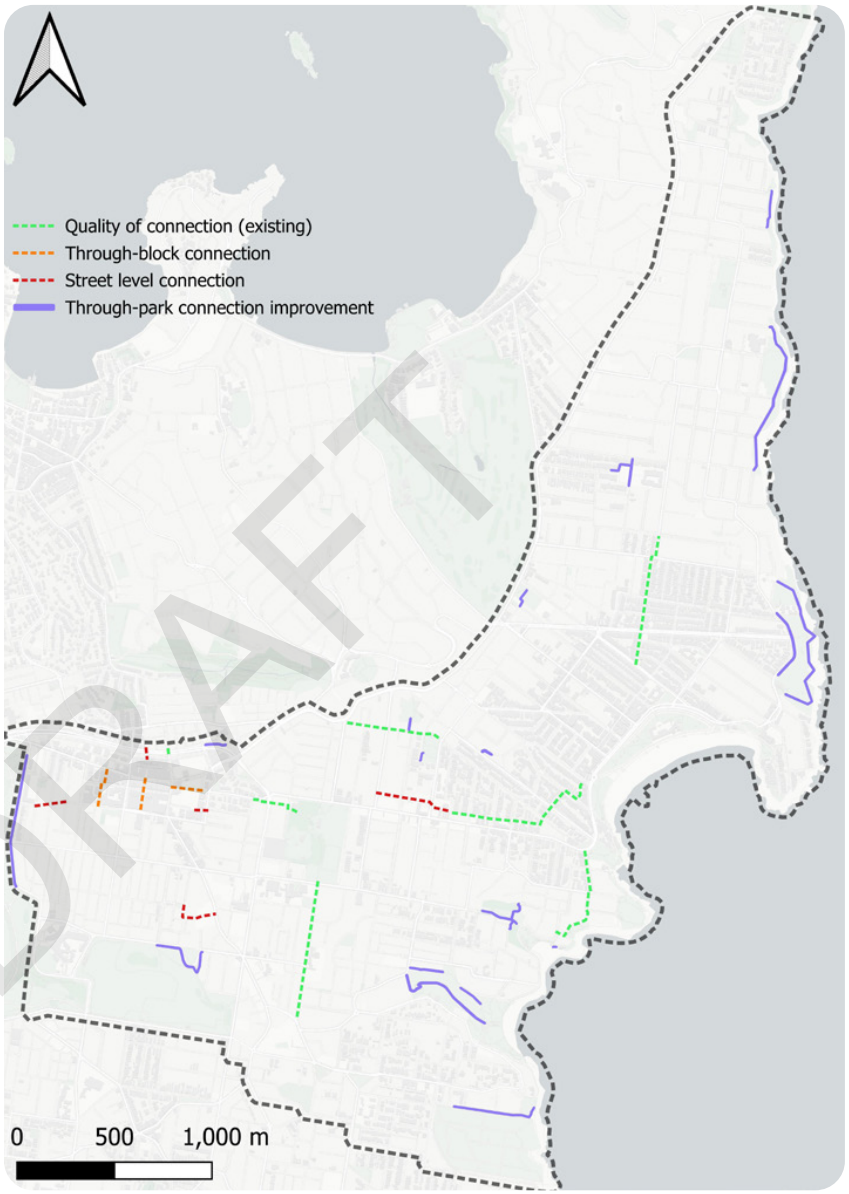
Walking is more sensitive to distance than other modes of transport. Ensuring walking routes are direct and without unnecessary detour is an importance step in encouraging more walking.

Along the desire lines that people frequently travel, a number of walking connections do not yet exist, but are essential for the permeability of the pedestrian network. On the other hand, some of these essential links already exist and are among the most heavily used walking routes in Waverley - however, many popular connections suffer from poor walkability due to narrow footpaths and low surface quality. We will enhance the walkability of existing through-block connections, and continue to assess the need for additional walking connections, identify opportunities to plug missing links.

The need for better connection has been identified in the following locations:

- Between Bondi Junction and Centennial Park, Queens Park[1]
- Between Bondi Beach and Bondi Junction[1]
- Connection to Randwick Health & Education Precinct[1]
- (Inside) Oxford Street Mall and the train station[2]
- Coastal walks and through-park connections

We will explore connections through parks and open space to enhance pedestrian network permeability. This includes repair and renewal of existing pavement, and installing paved footpath over frequently trafficked natural strips.




Potential connection improvements
Connections are indicative only, and show general directions



1. Waverley Local Strategic Planning Statement 2036
2. WPMP (2017)

# **Focus area:** Pedestrian crossing improvement

Pedestrian crossings are a key piece in ensuring the permeability of the pedestrian network. This is also an area where residents demanded more and safer street crossings. We have identified a list of locations with significant crossing demand while existing pedestrian infrastructure remain insufficient. We will delivery pedestrian crossing improvements in alignment with the map of identified locations.

## Informal crossing opportunities

While formal crossing opportunities reduce stress associated with crossing the street, network permeability and livelihood of our streets are further enhanced with informal crossing opportunities. Streets with lower speeds and shorter crossing distances make informal crossing easier and less stressful. We will focus on high streets, and streets with high pedestrian activities and low traffic functions to improve informal crossing opportunities.

## Reduce interruptions by traffic, continuous footpath

In our centres and densely populated residential areas, footpaths are frequently interrupted by vehicular traffic on minor roads. The need to negotiate right-of-way with intermittent vehicle traffic adds to the stress experienced by people walking, and breaks up what could otherwise be a continuous commercial street.

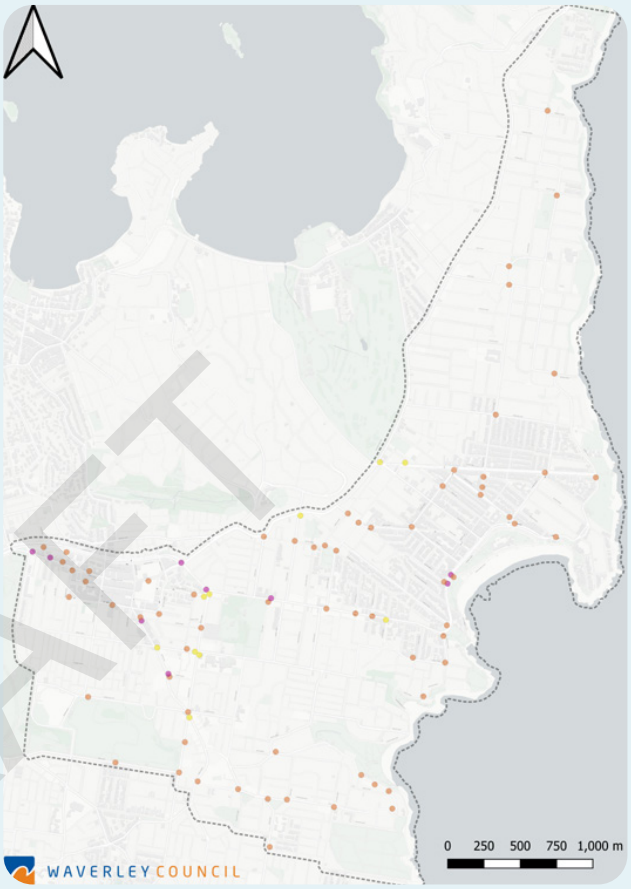
We will apply continuous footpath and other treatment where appropriate to enhance pedestrian priority and overall safety. The goal is to provide clear signals to drivers that instead of pedestrians crossing a road, it is the vehicles that are crossing a pedestrian path.

## Driver education campaign

Under NSW Road Rules[1], vehicles turning, entering or leaving a driveway must give way to pedestrians. These rules are frequently misunderstood, a situation exacerbated by implicit biases in road design.

In addition to infrastructural treatments to make road features self-explanatory, we will undertake education campaign to ensure that drivers properly understand and follow road rules. These campaigns will aim at both local residents, and a high number of visitors to Waverley each year.

1. Rules 72, 74 and 75




Opportunities to improve pedestrian crossing

# **B3.** Add cut throughs and modal filters to reduce walking distance. Improve connectivity through parks and coastal walk

## A case for shorter pedestrian wait times in Waverley

Traffic signals are an important part of walking experience. Signalised intersections with pedestrian phases reduce stress for some pedestrians crossings the street, but long wait times can make the walking experience frustrating and prohibitive.

There are a total of 55 locations with traffic signals across Waverley, of which 12 are dedicated pedestrian signals. Many crossings near our centres have a high number of people crossing[2]. Despite high pedestrian activities, traffic signals are optimised for vehicle movement, and pedestrian crossings came as a afterthought. This design approach is incompatible with areas with high density and pedestrian activity. Pedestrian wait times at signals are long even in high pedestrian areas in our LGA.

Signals with long pedestrian wait times do not work as intended - people are unwilling to spend a long times waiting, and tend to cross at unsignalised road sections, or simply cross against the light even in heavy traffic, posing a significant safety risk. Sydney-based research show it is very difficult to keep pedestrians waiting at signals - pedestrian compliance rate drops markedly once the wait time exceeds 30 seconds[3]. This shows that people are unwilling to spend longer times waiting at signals.

Shorter pedestrian wait times means overall shorter signal phases – which is more compatible with slower traffic where more frequent stops are expected. Pedestrians are also more likely to abide by traffic signals, if they know that the wait time are reasonably short.


1. Based on analysis by Vivendi for Waverley Council (2024)
2. Between 8,600 and 8,800 pedestrians cross the Bronte Rd from Oxford Street Mall to the Oxford Street on a typical day in 2024.
3. City of Sydney, Relationship of crossing timing and safety for people walking (2023)

# **Focus area:** Pedestrian signal priority

Pedestrian signals are another key piece in the permeability of the pedestrian network. Although Council does not directly manage traffic signals, we will strongly advocate and work with TfNSW to improve pedestrian signals in the LGA.

## Reduce pedestrian wait times

We will provide more safe crossing opportunities, and strongly advocate to TfNSW to reduce pedestrian wait time at key crossings to below 45 seconds, with a long -term goal of 30 seconds.

A scoping analysis identified a list of intersections and pedestrian crossings with high pedestrian activities that will require more favourable pedestrian wait times. Some of these crossings have relative low vehicle movement functions, and pedestrians should be further prioritised.

## Auto-on pedestrian signals

Following the precedent in Sydney CBD, we will advocate for auto-on pedestrian signals in high activity areas, and during hours with high pedestrian activities. Waverley has a high number of international visitors who may not know how to use these push buttons.

## Pedestrian scramble signals

Pedestrian scramble signals allow pedestrians to cross an intersection in all directions, including diagonally. We will explore opportunities to introduce pedestrian scramble signals at crossings with a high pedestrian volumes.

A number of intersections were identified that need more time for pedestrians:

- Campbell Parade & Hall Street
- Newland Street & Oxford Street (Scramble signal)
- Newland Street & Spring Street
- Oxford Street & Grosvenor Street (Scramble signal)
- Waverley Street & Bondi Road
- Waverley Street & Hollywood Avenue

Other intersections to consider in the medium to long term.

- Bondi Road & Penkivil Street
- Bondi Road & Watson Street
- Campbell Parade & Roscoe Street
- Newland Street & Grafton Street
- Oxford Street & Adelaide Street
- Oxford Street & Bondi Road
- Oxford Street & Nelson Street

We will work with neighbouring councils and strongly advocate to TfNSW to improve pedestrian signal timing at these locations.

# B4. Align with the Local Strategic Planning Statement's vision of a 30-minute city by active and public transport, encourage compact and walkable development to support future walking

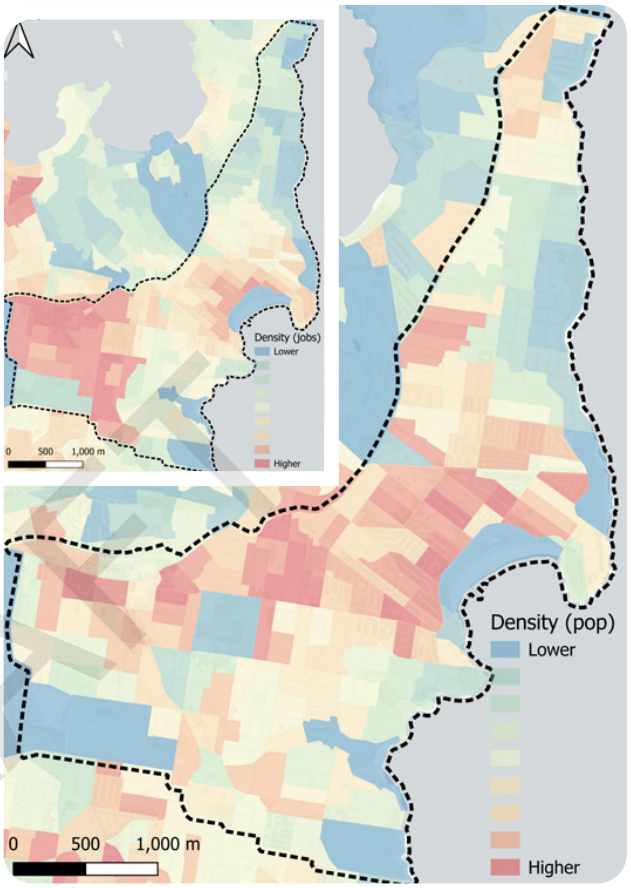
## Compact development makes Waverley a more walkable place

For walking to become a viable mode of transport, there needs to be an abundance of shops and other urban amenities near where people live, along with well-connected, inviting footpaths that encourage walking to these destinations. Compact land use in Waverley creates an ideal environment for walking and public transport. With the second-highest population density in Australia, surpassed only by the City of Sydney (2024), Waverley is well-positioned to support walking and other active transport modes.

## Connecting people with where they want to go

Population density in our LGA is highest near Bondi Junction, and in the area between Bondi Road and Blair Street. On the other hand, jobs in Waverley are concentrated near Bondi Junction, Charring Cross and also the Bondi Beach area. Job clusters represent not just employment opportunities, but importantly local retail and urban amenities for residents and visitors. It is our priority to improve footpath connecting where people live with where they want to go. This means connecting population centres with employment centres, transport hubs, food and recreation clusters, and also connecting visitors with popular destinations.

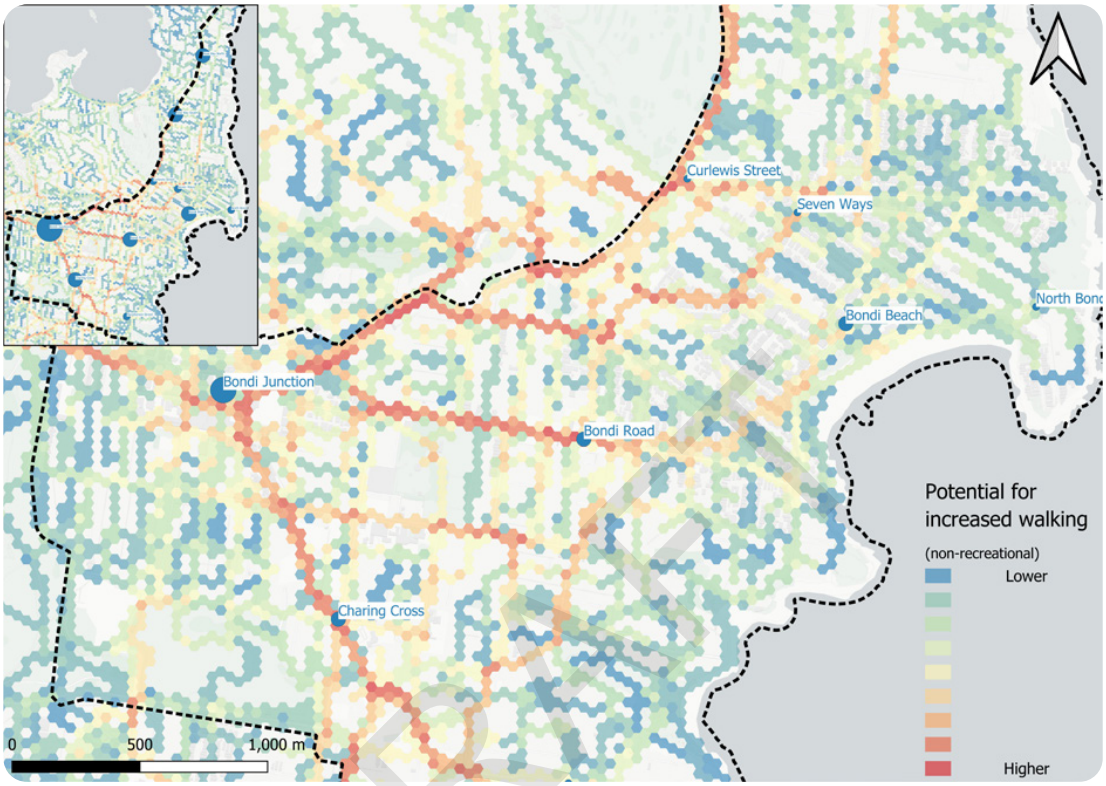
The connection between Bondi Junction and the densely populated area north of Bondi Road is among the most popular routes by walking (and by buses). Part of this connection can be made more direct, including additional entrances to the Bondi Junction transport interchange along the pedestrian desire line. As the backbone of this connection, the narrow footpath and heavy traffic on Bondi Road does not currently provide a pleasant walking experience. Footpaths near bus stops are narrow, and often do not provide sufficient space for both pedestrians and standing passengers. We will work on improving the walking experience along these routes, and explore rear laneway alternatives on either side of Bondi Road to provide a better walking experience[1].




Job (top) and population density in Waverley. Maps of walking access to shops and other amenities are included in Appendix.

1. An action in WPMP 2017 is to prepare a rear laneway strategy to provide car park / walk / cycle alternatives on either side of Bondi Road.

# **B5.** Encourage active and public transport to replace short driving trips, incorporate provision for walking in all streetscape projects




## We want more people to walk instead of driving to make our streets safer, and to reduce transport related emission.

There is strong demand from the community for more walking. Based on our community survey, about three out of four residents prefer walking (and public transport) over other modes of transport for getting around in Waverley, which is much higher than the current share of walking trips. Many residents would like to walk more, but often choose to drive due to various barriers to walking. Short distance driving trips are particularly inefficient for many reasons[1], and a key objective of this strategy is to identify 'latent' demand for walking, and make targeted improvement to walkability to enable more residents to walk.

Modelling shows which walking routes will be heavily used, if existing short driving trips were to be replaced by walking[2]. In the same vein that we wouldn't build a bridge based solely on the number of people swimming across – looking at desire lines helps identify important walking corridors, even if existing current walking demand is limited.

The permeability of the pedestrian network is key to more people walking instead of driving, particularly along walking routes where there is latent demand for walking.


Based on a sample of vehicle trips data, a significant amount of driving trips within our LGA can be replaced by walking.

1. Short car trips take up valuable street space for parking, and involve a significant amount of time spent searching for parking ,walking to and from the parking spot. Vehicles making short trips on a cold engine emit several times more pollutants than during normal operations, creating a substantial challenge for urban air quality.
2. Based on driving trips origin-destination data from Compass IoT (2024)

# Goal C: Facilitate seamless integration between walking & public transport

Walking is closely intertwined with public transport, and the convenience of using a public transport system depends greatly on the ease of accessing bus stops. Our actions towards this goal will make it easier for people to access bus services, and to improve buses where the current level of service is inadequate. Our actions include:

**C1.** Improve access to and crossing opportunities near high-usage bus stops, work with developers to ensure premises are easily accessible by walking and public transport

**C2.** Ensure sufficient footpath space near bus stops, provide adequate shelter and seating where people wait for buses

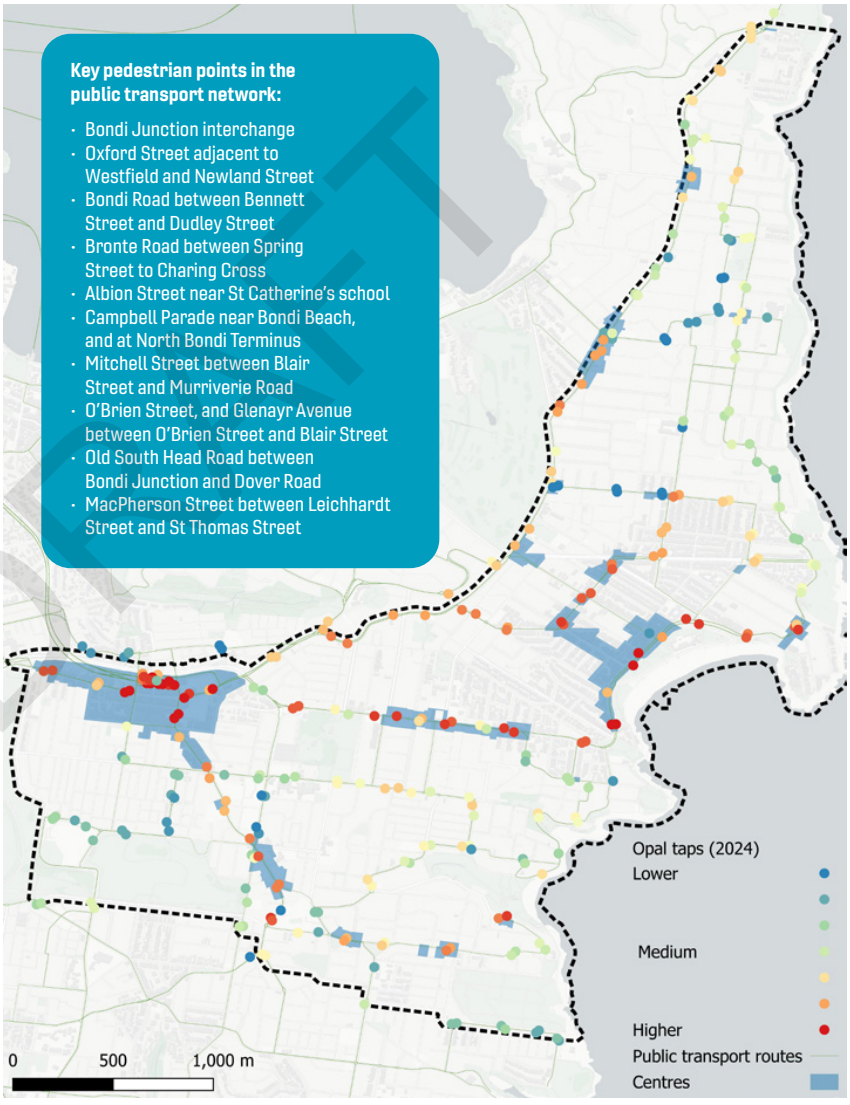
**C3.** Support walking and public transport to expand transport options, advocate for route change and additional services to support new and existing development

# C1. Improve access to and crossing opportunities near high-usage bus stops, work with developers to ensure premises are easily accessible by walking and public transport

# C2. Ensure sufficient footpath space near bus stops, provide adequate shelter and seating where people wait for buses

Walking access to bus stops. Convenient access to bus stops means ample street space to accommodate people both moving and staying, and improving the connection between bus stops and nearby residential areas, and major destinations. Walking access also includes sufficient footpath space near bus stops for both pedestrians and waiting bus passengers, and seamless connections between bus stops and final destinations and important . Parking lots, street level vehicle entrances and exits, and roads that are difficult to cross should not become barriers to waking near bus stops.

Pedestrian crossing opportunities near high usage stops is also needed to ensure that streets do not become barriers to bus riders. With strong bus travel demand between Bondi Junction and other parts of Waverley, boarding and alighting often take place on opposite sides of streets – meaning differing needs for footpath space on opposite street sides, and large volumes of people crossing during certain periods of the day.




Level of bus patronage at transit stops. More bus patronage maps in Appendix

# **Focus area:** Bus stops improvement

While the onboard riding experience rests with TfNSW and bus operators, we can make the whole bus experience more pleasant by improving the footpath and walking infrastructure near bus stops. This aligns with Council's strategic plans to work with NSW Government to improve public transport along key routes, and to improve public and active transport connections between centres[1].

## More footpath space near bus stops:

Provisions such as an in-lane bus stop (kerb extension) provide more space for both pedestrians and waiting passengers, support universal accessibility and at the same time serve as a bus priority measure that reduces bus delays. As a starting point, we will look to expand footpath space for high usage bus stops that currently lack sufficient footpath space. These include:

- Bondi Road, south side, near Dudley Street
- Bondi Road, south side, between Boonara Avenue and Denham Street
- Oxford Street, north side, near Newland Street
- Glenayr Avenue, north of Curlewis Street , east side
- Glenayr Avenue, near O'Brien Street
- Cambell Parade Opposite of Wairoa Avenue

## Improve crossing between different sides of the street near popular bus stops:

We will look to improve street crossings along some of our popular bus stops:

- Bondi Road, between Flood Street and Sandridge Street
- Glenayr Avenue, between O'Brien Street and Blair Street
- Campbell Parade, between Francis Street and Ramsgate Avenue

## Bus shelters

Some highly used bus stops do not current have adequate shelter. We will continue to monitor ridership at each bus stop, and provide appropriate bus shelters where necessary. We also look to provide in-lane bus stops together with bus shelters work to minimise disruption and reduce costs.



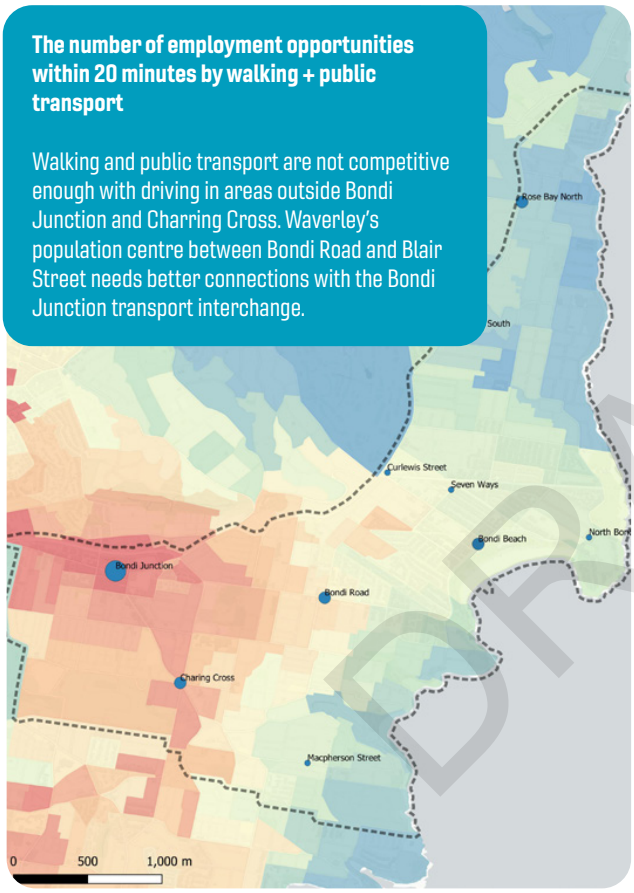
1. Waverley Local Strategic Planning Statement 2036

# C3. Support walking and public transport for new and existing development, including advocating for route change and additional services, ensure that connections between bus stops and destinations are direct and seamless

We will advocate to TfNSW and bus operators for adequate services in underserved areas, and better connections with where people want to go.

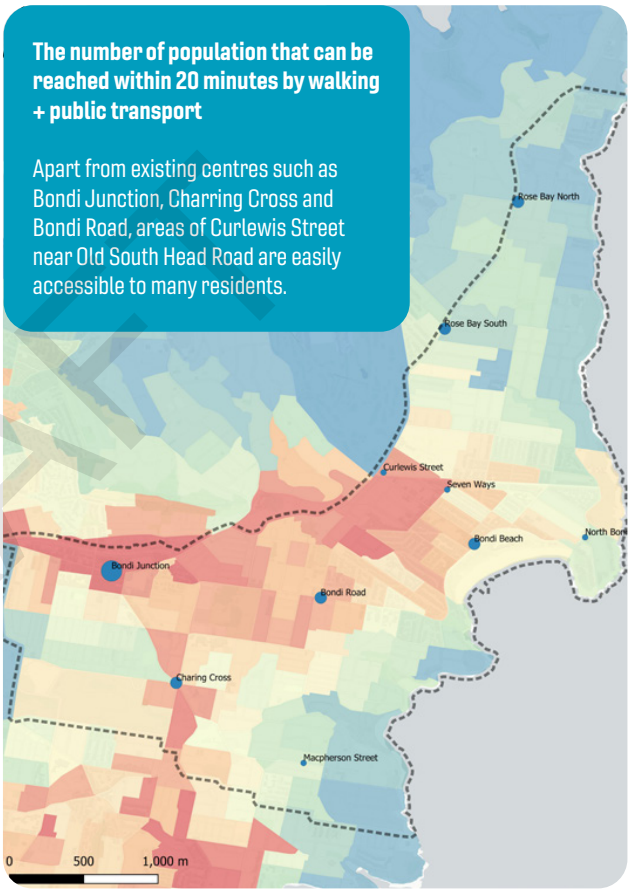
**The number of employment opportunities within 20 minutes by walking + public transport**

Walking and public transport are not competitive enough with driving in areas outside Bondi Junction and Charring Cross. Waverley's population centre between Bondi Road and Blair Street needs better connections with the Bondi Junction transport interchange.




**The number of population that can be reached within 20 minutes by walking + public transport**

Apart from existing centres such as Bondi Junction, Charring Cross and Bondi Road, areas of Curlewis Street near Old South Head Road are easily accessible to many residents.




The bus network in Waverley has good coverage. As of 2024, 94.8% of all employment opportunities, and 92.8% of all residents within Waverley are within a 5-minute walking distance to the nearest bus stop. Additionally, 22.2% of all employment opportunities, and 8.3% of all residents in Waverley are within a 10-minute walking distance to the Bondi Junction train station. This wide coverage of train and bus stops forms the backbone of the public transport network in Waverley, providing a vital link in how people access buses and trains by walking.

In Waverley, walking and public transport has a key role in supporting businesses by connecting them with a sizable number of potential patrons. Many areas of the LGA are easily accessible by residents without the need to drive.

Despite the overall convenient public transport services within LGA, some areas still lack good bus services, and their low density makes it difficult to walk to places. We will work to support new compact development in these "gap" areas, and work with TfNSW to provide faster and more frequent bus services to areas in need, and ensure adequate footpath connection to bus stops.

# Walkability & public transport gap

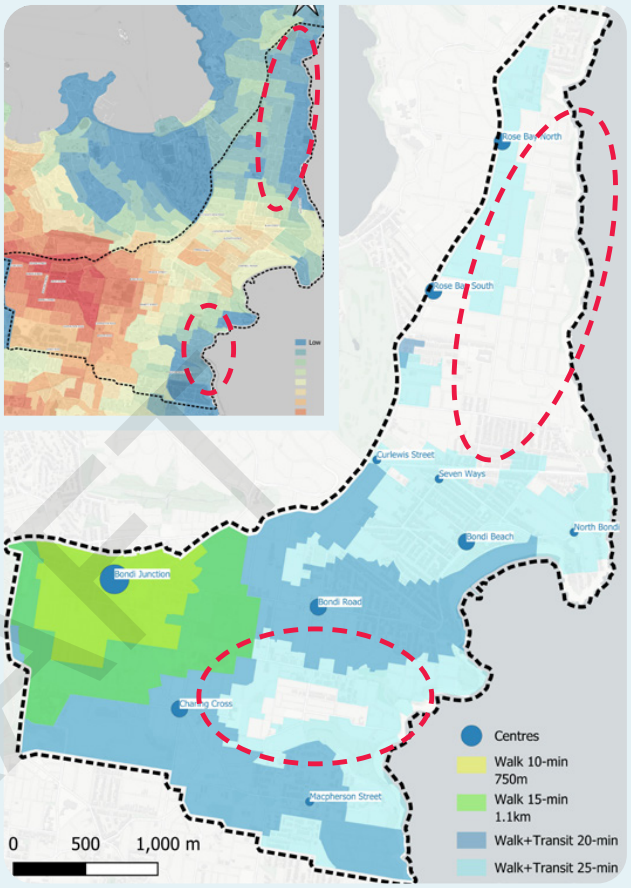
Enabling people to travel without the need to drive is a key focus of this strategy. This means being able to get to places by walking, and by taking public transport.

Walking and public transport is not yet a viable means of transport in parts of the LGA, such as parts of North Bondi, Dover Heights, Rose Bay, Vaucluse, and Bronte. These areas lack good walking access to local destinations and are not well connected by public transport with the Bondi Junction transport interchange. Low density in these areas make it more difficult for residents to walk to places, or to provide efficient public transport – low density forces buses to take circuitous routes to gather enough patronage, which also increases travel time and makes schedules less reliable.

Bus services on Old South Head Rd and Military Rd provide connection to the Bondi Junction interchange, but often incur significant delays, and on-time performance is often not satisfactory[1]. Additionally, areas of Bronte near the beach have low density and limited bus coverage. Bus routes in this area are circuitous, and travel time to Bondi Junction is considerable.

We will take the follow approaches to addressing walkability gaps:

- Seek to work with the community to encourage denser and more compact development around Bondi Junction transport interchange, and along public transport corridors such as Old South Head road[2].
- Advocate to TfNSW for better bus services along Old South Head Road, Military Road, and faster and more direct bus connections between Bondi Junction and Bronte
- For areas that are too far to walk, or too low density for public transport, we will facilitate and encourage the use of other active transport modes, such as bikes and scooters.




Top: The number of jobs within 15 minute by walking and public transport
Bottom: Connection with Bondi Junction via walking & buses
Gap in Walkability and access by transit

1. Based on analysis of 2024 BOAM data.
2. Density in this area is expected to increase following the roll out of stage 2 Low and Mid-Rise Housing Policy by the state.

# Goal D: Make walking pleasant and enjoyable

To make walking the preferrable way of getting around in Waverley, this strategy includes actions to improve the experience with walking.

**D1.** Ensure footpaths are well maintained, pavement defects are repaired timely.

**D2.** Improve footpath conditions, minimise interruptions by traffic, remove pinch points and footpath obstructions

**D3.** Provide shading and weather protection along key walking routes

**D4.** Ensure sufficient street space for both moving and standing pedestrians, and activities on footpaths. Re-allocate space and widen footpath where appropriate

# D1. Ensure footpaths are well maintained, pavement defects are repaired timely

# D2. Improve footpath conditions, minimise interruptions by traffic, remove pinch points and footpath obstructions

## Pavement quality

Footpath pavement quality is identified by residents as one of the most important aspects in the walking experience, and one of the areas where residents' satisfaction fell short of expectations.

Pavement in more heavily utilised footpaths deteriorate more quickly, and affect more people walking. Some of the footpaths in high pedestrian areas are already in a less than optimal conditions. With limited resources, it is important that we prioritise inspection and maintenance of these footpath sections, and to ensure footpath defects with the greatest impact on walking are repaired timely. We will incorporate footpath maintenance and upgrade into our Strategic Asset Management Plan (SAMP) for a more coherent approach.



# **Focus area:** Footpath surface improvement

We will continue to monitor and audit footpath conditions[1], and implement improvements. Inspection and maintenance of footpath in high pedestrian areas will be prioritised. In addition, several locations with natural strips in need of footpath pavement have been identified.

## Potential footpath renewal/upgrade projects

- Nelson Street (Waverley side across the foot bridge)
- Ebley Street southern side, between Bronte Road and Ann Street
- Bronte Road (between Ebley Street and Victoria Street)[1]
- Eastern side (Bondi Public School side) on Wellington St from Bondi Rd to Edward St[1]
- Old South Head Road south side (between Bondi Road and Bon Accord Avenue)

## Through park connections – renewal/ new pavement over natural strip

We will enhance pedestrian network permeability by improving connections through parks and open space. This includes repairing and renewal of footpaths in deteriorating conditions, and paving frequently trafficked natural strips.



1. Initially in Bondi Junction and Bondi Beach, and expanding to other high pedestrian areas, including both sides on Bronte Rd from Ebley St, to Victoria St, and pavement on the eastern side (Bondi Public School side) on Wellington St from Bondi Rd to Edward St.

# D3. Ensure footpaths are well maintained, pavement defects are repaired timely

## Shading and amenities

We heard from our residents that they want more shade to make walking comfortable during hot summer days[1]. We aim to provide more shade in areas where people walk and spend more time, such as near crossings, bus stops, and high-streets.

Some of our highly utilised streets do not currently have adequate shading and amenity, including

- Waverley Street
- Sections of Bondi Road
- Oxford Street (west of Denison St)
- Ebley Street
- MacPherson Street
- Campbell Parade

We will work towards providing more weather protection and other amenities at these locations.

## Balancing shading and street space

Waverley has high density and narrow streets. While trees provide shading, overgrown bushes and tree roots uplifting footpath can make walking difficult. We will take a context-sensitive approach to provide shading while minimising disruption to pedestrian pathways. Where trees are not feasible due to footpath width and other limitations, we will work with developers to provide shade using awnings from adjacent buildings.



1. Providing more natural shading on pedestrian routes is also one of the key deliverables in our Environmental Action Plan.

# D4. Ensure sufficient street space for both moving and standing pedestrians, and activities on footpaths. Re-allocate space and widen footpath where appropriate

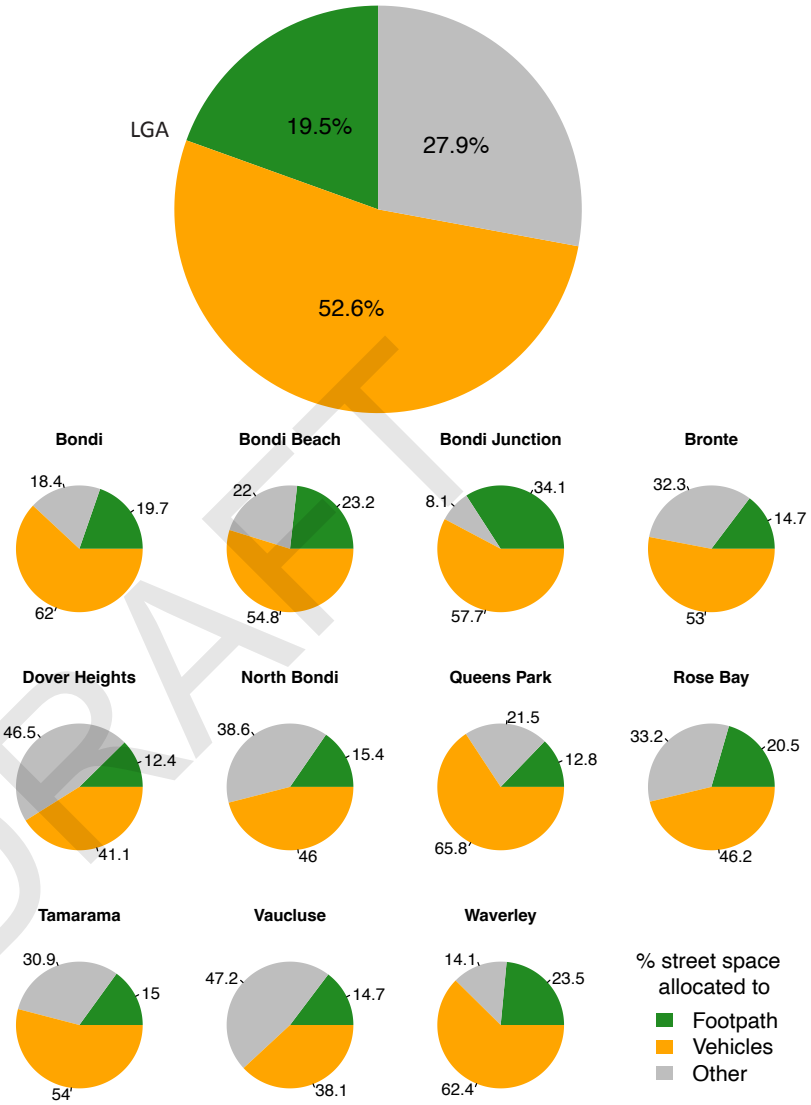
## Sufficient space for people walking

All people walk for at least part of the trip, and half of all trips in Waverley are either on foot or by public transport. Despite this, the majority of road space is allocated to drivers. Across the entire LGA, only about 20% of the available road reserve is allocated to footpath[1], and 53% is allocated to vehicles.

The provision of more road space cannot scale with increase in the demand for driving. In line with our transport strategy (WPMP 2017), we will not allocate additional space from the road reserve to vehicles. Based on community survey, 62% of residents support re-allocating street space from other transport modes to walking. Where feasible, we will gradually reallocate existing space to support active and public transport when there is need for more footpath space.

## Designing for peak hour pedestrian traffic

Waverley is home to some major trip generators, including the Bondi Junction commercial centre and transport interchange, bustling street level retail along Bondi Road, as well as global tourist destinations like Bondi and Bronte Beaches. Additionally, areas near schools experience high levels of traffic during peak hours. To accommodate pedestrian activities and to ensure a pleasant walking experience, we need to plan and design for the periods with the highest pedestrian activities.




Street space allocation – by suburb (%, approximate only). Dover Heights has the lowest street space allocation to footpath (12.4%). Bondi Junction has the highest % street space allocated to walking (34% - including the Oxford Street Mall)[2]



1. This limited footpath space also includes street furniture, utilities, and the actual space available to walking LGA wide is less than 20%.
2. By comparison, the centre of the City of Sydney has 40% of street space dedicated to walking (Based on City of Sydney's 2024 'A City for Walking' Strategy and Action Plan Continuing the Vision)

# Footpath space in high pedestrian areas

This strategy identifies some areas in LGA where current footpath width is insufficient to support the level of activities on the footpath. This includes areas where the walkable space cannot accommodate the volume of foot traffic, and also areas where streets are narrowed by bus stops and on-street dining. Some of these locations have limited road space, and may require innovative approaches to provide additional footpath space for people walking.

While this strategy highlights specific areas where footpath space is insufficient compared to other locations in the LGA, we also recognise that, overall, the current allocation of street space in Waverley disproportionately prioritises drivers over pedestrians. Moving forward, we will explore opportunities to reallocate more street space for pedestrians. The appendix includes recommended footpath width from a review and synthesis of relevant guidelines.

Locations identified as needing more footpath space allocation:

- Bronte Road west side, between Ebley Street and Spring Street
- Hollywood Avenue west side, between Oxford Street and Waverley Street
- Oxford Street north side, between Adelaide Street and Syd Einfeld Drive (retain existing pedestrian space)
- Bondi Road south side, near the Denham Street intersection
- Campbell Parade both sides, between Francis Street and Notts Avenue
- Bronte Road south side, commercial area between Nelson Avenue and Calga Place



# Goal E: **Provide accessible streetscapes that support independent access**

School children and people with disability or mobility limitations have different needs and requirements for road infrastructure. This strategy includes actions that support independent mobility for everyone.

**E1.** Improve walking infrastructure and crossings along "walk to school" routes, continue to work with schools to respond to and address issues (Including reducing crossing distance, and raised crossing for greater visibility for children)

**E2.** Support the implementation of the Waverley Disability Inclusion Action Plan (DIAP) by ensuring continuous travel paths for individuals with mobility limitations in commercial and village centres

# E1. Improve walking infrastructure and crossings along "walk to school" routes, continue to work with schools to respond to and address issues

**56%** of Students live within 1km of schools

**70%** of Students live within 1.5km of schools

Walking to school, activities or friends houses makes children aware of their local neighbourhood and provides an opportunity for parents and carers to pass on road safety skills and knowledge. Walking from a young age can also form healthy walking habits, and contribute to healthy development of children and youth, raising self-esteem and happiness, and improving their physical and mental well-being.

Recognising numerous benefits of active travel to school children, we are committed to establishing safe walk to school routes[1]. Ensuring that school children can safely walk to school is an important part of this strategy, and we will work to enable and encourage more school children to active travel to school.

Roads in Waverley are under pressure from over 3,500 daily trips to public schools, and many more to private schools in our LGA. More parents driving children to school contribute to congestion and increase their own travel time. More cars on the street during school hours also makes it less safe for everyone.

Most children attending school in Waverley live within a walkable distance to schools[2], and encouraging them to walk to school will take a notable amount of traffic off the road during school hours. In addition to improving walking to school infrastructure, we will also offer safety education and lessons to students to build confidence and their ability to navigate safely.

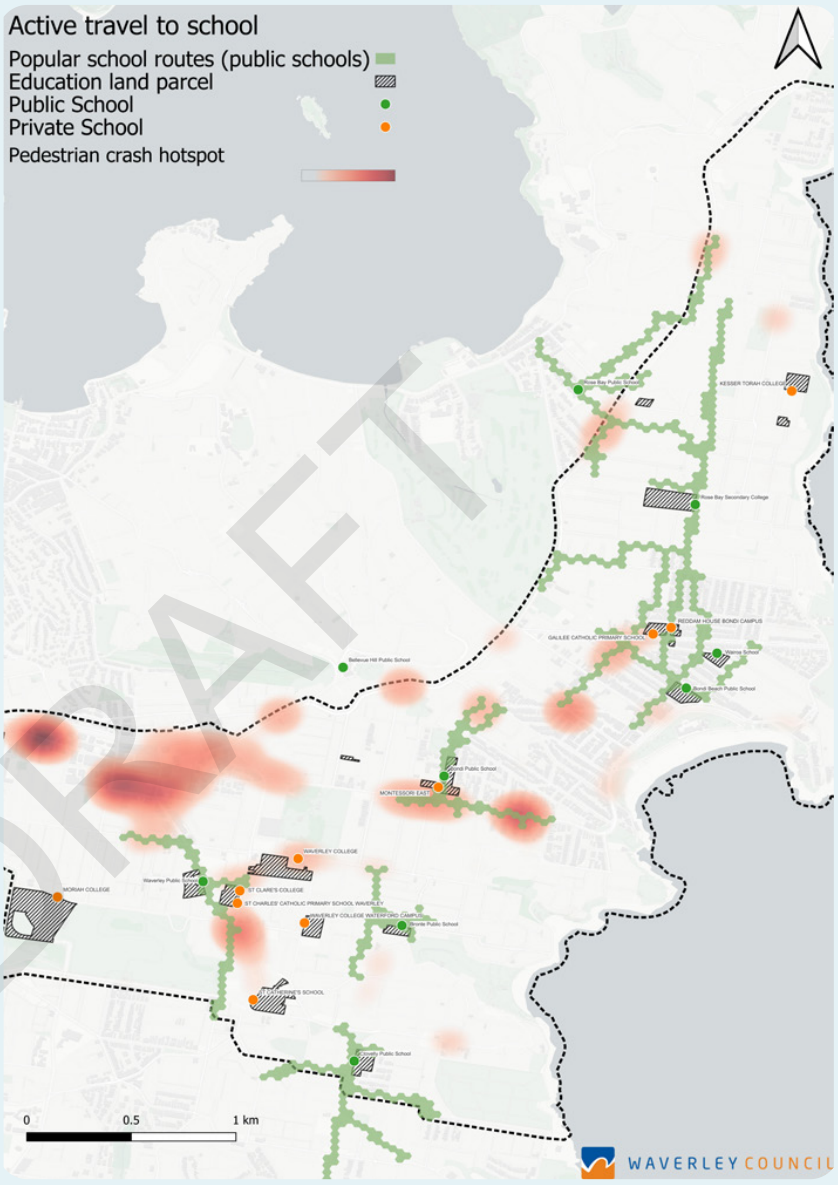
We will work to improve the safety of students both walking and riding to school. Under NSW road rules, children under 16 can legally ride on footpaths (as of 2024). Therefore, footpaths are crucial not only for children walking but also for those riding.

1. Council motion (CM/6.1/22.05)
2. Based on the shortest-path distance from students' home to schools. Public school students only.

# **Focus area:** Active travel to school

We are committed to continuing to work with schools to improve the safety of children walking to school. In collaboration with the NSW Department of Education and local schools, a preliminary list of popular school routes have been identified. Most of these routes connect schools with nearby population centres, and some of these routes are shared by students from different schools.

To deliver safe routes to school, we will focus on these routes as a starting point, and engage with schools to better understand their needs and concerns, and apply for state and federal funding to accelerate projects. We will continue to deliver Safe Routes to School workshops at local primary schools as a springboard for ongoing collaboration with local schools .



# **E2.** Support the implementation of the Waverley Disability Inclusion Action Plan (DIAP) by ensuring continuous travel paths for individuals with mobility limitations in commercial and village centres

## Minimum passable width

People with mobility limitations need more space, and more importantly – a continuous travel path free from obstructions or pinch points. Width of a footpath at its narrowest point often matters more than the average width. While narrow or uneven footpath segments are an inconvenience for the average person, they pose greater challenges for people with mobility limitation.

We will work to ensure minimum passable width for all footpaths in our LGA, and prioritise high pedestrian areas, commercial and village centres. This includes considerations for people carrying luggage, walking with children, and for wheelchair users to pass comfortably.

Near bus stops, we aim to ensure 1.5 metres of passable space either in front of, or behind the bus shelter[2]. Where space is inadequate near bus stops, we will explore options for widening footpath.

## Slopes

The hilly terrain in Waverley presents additional challenges to walking, especially for people with mobility limitations or pushing prams.

We will improve both signage and digital way-finding infrastructure to help people navigate around difficult terrain. In conjunction with this strategy, we are providing digital maps with slope gradients on council website to help the public navigate Waverley.

## Kerb ramps, access to destinations and mobility parking

Missing or misaligned kerb ramps are a significant issue for individuals with mobility limitations and those using prams. In some cases, the absence of a kerb ramp in the desired direction forces people to step into busy traffic to cross the road. The lack of kerb ramps near mobility parking is a particular issue in the Bondi Beach area[3].

We will focus on addressing these issues, and provide kerb ramps that are paired with mobility parking spots.

## Tactile Ground Surface Indicators (TGSIs)

**The standards:**

TGSIs provide cues about change in the walking environment and assist vision-impaired persons with orientation, and alter them when approaching hazards. Good designs will minimise the need for TGSIs (AS1428.4.1).

**Considerations:**

With future capital works, tactile pavement markers would be considered where a pedestrian crossing joins carriageway with shallow gradients (e.g. less than 1:10 from Guide to Road Design Part 6A: Paths for Walking and Cycling ).

Tactile pavement markers are generally not recommended for driveways or driveway-like vehicle crossings in pedestrian space (where pedestrians are the dominant user of the street space). The presence of TGSIs conveys (incorrectly) vehicle priority. The need for tactile pavement markers will also be reviewed on a case-by-case basis.

**Challenges:**

We recognise that certain footpath treatments benefiting a group of users may cause issues for other road users. For instance, tactile pavement markers aid vision-impaired people in navigation and alert them near intersections, or where vehicles cross their paths, but their application may negatively impact people using small-wheeled transport, such as push prams and mobility aids. Conversely, treatments such as flush thresholds provide level and continuous travel path for pedestrians, but may cause issues for people with vision impairments.

Going forward we will work with stakeholders to establish a guideline regarding the application of accessibility treatments, learn from world best experience to ensure equitable application of these devices, and to minimise their unintended impact on other road users (e.g. small-wheeled transport, such as push prams and mobility aids).



1. Australian Standards (AS1428.2 which sets a width of 1.2 m for a wheelchair user to navigate safely, and 1.8 m for two wheelchairs to pass each other. TfNSW Walking Space Guide (2020) suggests footpath width below 1.2 m as inadequate for people with mobility limitations, and should be prioritised for action. Waverley Street Design Manual also references 1.2 m as the minimum provision.
2. Transit Cooperative Research Program (TCRP) Report 19, Guidelines for the Location and Design of Bus Stops, Transportation Research Board 1996
3. Bondi Park, Beach, Pavilion Universal Access Study by Funktion for Waverley Council (2013)
4. Including Guide Dogs NSW, bike groups, wheelchair users.

# **Focus area:** Continuous travel paths

We are committed to ensuring continuous path of travel for people of all ages and abilities. This means all routes are passable, and people should not need to take detour or step into traffic because of something in their path.

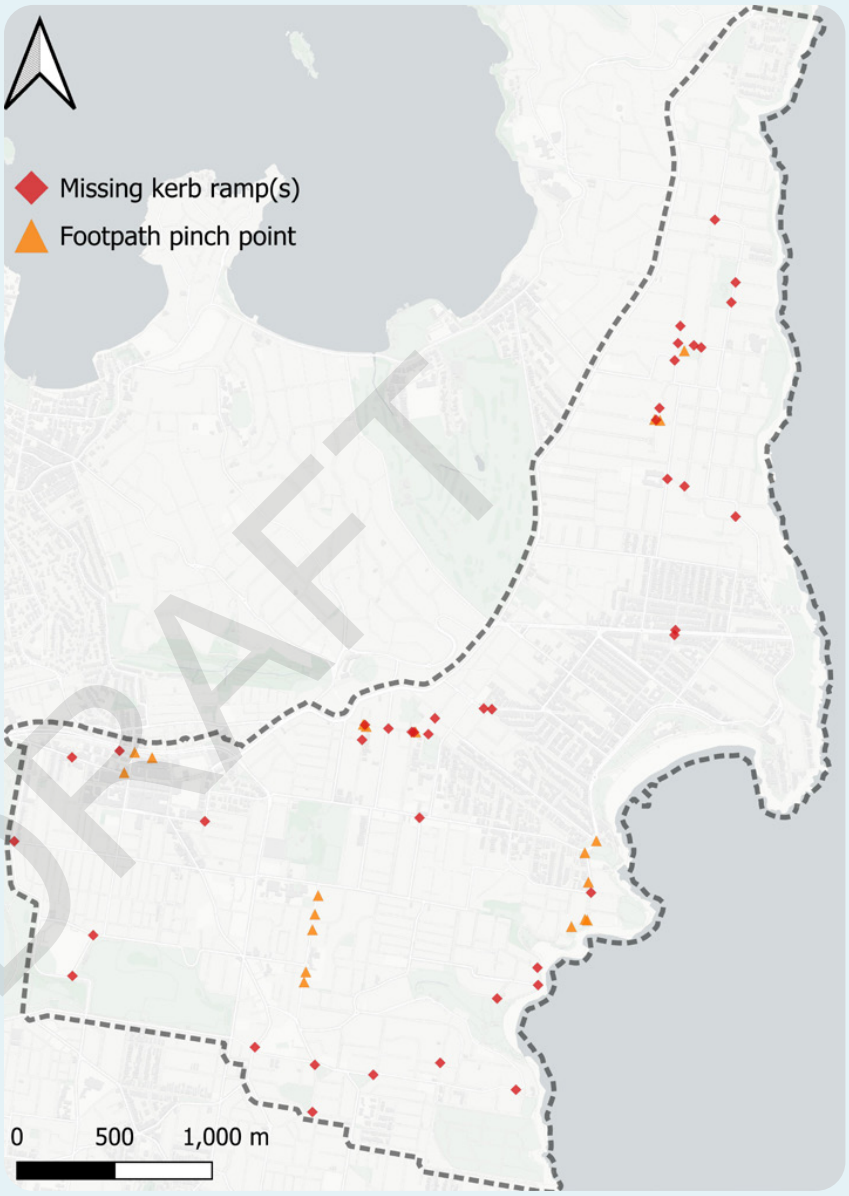
## Kerb ramps program

We will progressively identify and treat missing and non-compliant kerb ramps and other pinch-points that impact the walking experience. A preliminary scoping analysis has identified locations where kerb ramps are missing along pedestrian desire lines. We will allocate funding to install missing ramps, especially those in areas with significant pedestrian activity, such as near commercial centres, bus stops, schools, hospitals, and mobility parking spots to improve accessibility.

## Remove footpath obstructions[1]

We will work with stakeholders to clear footpath obstructions, especially on narrow footpath segments where such obstructions pose a greater issue.

We will also work to remove temporary obstructions that impedes continuous travel path. This includes clearing bins, illegally parked vehicles on footpaths, and working with shared bike operators to reduce instances of inappropriately parked bikes.




Issues with continuous travel paths
Identified locations are preliminary and non- exhaustive
- Does not include non-compliant kerb ramps



1. The need to remove footpath obstructions has been noted in previous plans and strategies:
Waverley Local Strategic Planning Statement 2036: Increase accountability for residents and businesses to keep bins off the footpath
Our Liveable Places Centres Strategy 2036 : Existing overhead powerlines to be undergrounded

# Goal F: **Improve walking to promote vitality on streets**

Walking has an active role in community life, and in promoting the vitality on streets. Waverley's retail-based local economy also benefits from a pedestrian friendly environment. Research show that improving active travel facilities typically has positive economic impacts on local retail and food businesses[1].

**F1.** Encourage active frontage, mixed use of commercial and residential units

**F2.** Provide places for people to stay and enjoy, trial re-allocating street space to on-street dining, and make permanent these changes with support from businesses

**F3.** Explore opportunities to pedestrianise identified street segments, focusing on access by walking and public transport

**F4.** Improve footpath quality and streetscape, enhance pedestrian wayfinding signages, amenities and lighting

**F5.** Develop a wayfinding strategy and action plan

## Wayfinding and amenity [2]

Walking is part of the culture of Waverley, and a great way to explore the neighbourhood. Waverley receives a large number of visitors each year, and both residents and visitors could benefit from a complete and consistent wayfinding system. Effective wayfinding improves the walking experience by reducing confusion and points to shorter bypass and through-routes that might not be immediately obvious to visitors. A well-designed wayfinding system connects tourist attractions, major destinations, and transport hubs. Additionally, information such as slope, stairs can also be incorporated into wayfinding signages to help people with mobility limitations, and to help guide people to nearby amenities.

## Places to stay and enjoy

To enhance street vitality, footpaths need to accommodate not just people passing through, but also to provide a place for people to stay. This means wider footpaths to reduce the friction between people passing by and people staying, as well as providing benches, shade, water fountains, and other amenities.

We will also look for opportunities to trial new technologies, such as noise cameras, to reduce excessive traffic noise, and make streets more pleasant to spend time in.

## Sense of safety day and night

Making sure people feel safe both day and night is essential for the vitality of the streets. Most residents (95%[3]), feel safe during the day in Waverley's streets and public places. While 75% of residents feel safe during night time, the sense of safety differs significantly between genders. People feel safest in activated public spaces that are well lit and bustling with activities and people nearby. An enhanced sense of safety encourages more people, especially women - who are more likely to feel unsafe after dark, to walk more and use public transport[4]. We will continue to improve nighttime safety, especially for women and other vulnerable people.

Improving lighting is one of the most straightforward step for improving nighttime safety. While providing adequate lighting, we will also be mindful of its impact on surrounding residential properties, flora and fauna[5]. Active frontage, and buildings adjacent to public places play an important role in passive surveillance ("eyes on the street"), especially during nighttime with fewer people on the street. Mixed-use development becomes especially important in this respect, as commercial and business buildings that often closed after hours, are complemented by residential units to ensure continuous surveillance. Additionally, mixed-use brings residents closer to businesses and urban amenities, which encourages walking and less driving.



1. Volker, Jamey, and Susan Handy. "Economic impacts on local businesses of investments in bicycle and pedestrian infrastructure: a review of the evidence." Transport reviews 41, no. 4 (2021): 401-431.
2. Improving wayfinding across the LGA is also included as an action item in the Waverley Local Strategic Planning Statement 2020 - 2036.
3. Waverley Community Strategic Plan 2022 – 2032
4. TfNSW Safer Cities Survey Report
5. Waverley Creative Lighting Strategy 2018 - 2028

# Goal G: **Ensure walking harmonises with other transport modes**

The high volume of people walking, riding, and narrow street space in our LGA means potentially more conflict between different active transport users. This issue was noted in WPMP, and often raised by our residents. The increasing popularity of e-bikes and e-scooters, and those used by delivery riders has amplified these challenges. Managing these conflicts requires a context-sensitive approach, as there is no one-size-fits-all solution.

**G1.** Implement context-sensitive approaches to reduce conflict between pedestrians and bike riders

**G2.** Better manage bike parking on footpaths, including both shared and privately owned bikes

**G3.** Consider potential effects of traffic calming devices on bike riders

**G4.** Signal pedestrian priority and reduce conflicts with vehicles near parking lot entrances and exits

## Sharing the footpath space with other active transport users

Shared zones suit low activity areas[1] but can be problematic if bike riders travel at excessive speeds, or if there is not enough space on footpath[2]. We will also consider compliance issues with dedicated bike lanes or paths where a large number of pedestrians cross path with bike riders. Low compliance with designated bike lanes in shared zones can lead to increased conflicts between pedestrians and bike riders, particularly in busy areas.

Bike speeds can be reduced more effectively where there is high pedestrian activity, and when there is need to negotiate the right-of-way with pedestrians[3]. Oxford Street Mall is a fully pedestrianised zone with a high volume of people walking and riding, and an example of conflict mitigation through "negotiated" right-of-way. The throughfare in Oxford Street Mall is narrowed by on-street amenities, and daily market which was set up to activate the space.

## Separate bikes with pedestrians and other road users wherever suitable

On streets without substantial on-street retail and other activities, we aim to provide designated bike zones with physical or grade separation from both motor vehicles and pedestrians. We will also install "give way to pedestrians" signages where a bike lane crosses a pedestrian path.

## Signages, Education campaigns

We will install signage to clearly delineate bike lanes, pedestrian paths, and shared zones. We will also engage bike riders through education campaigns to give way to pedestrians, and to discourage pedestrians from walking in bike paths.

## Bike parking, bike littering

Parked bikes obstructing footpath affects the walking experience, and residents have raised concerns about bike littering, particularly with shared bikes. To address this, we will look at more on-street parking opportunities for bikes so the footpath can remain clear. We will also work with shared bike operators to discourage inappropriate bike parking.

## Traffic calming devices sympathetic to bike riders

Treatments like chicanes, slow points, and kerb extensions can narrow the roadway, potentially forcing bike riders into traffic lanes, and increasing conflict with vehicles. This creates a trade-off between pedestrian safety and traffic stress experienced by bike riders, particularly on major cycling routes. When implementing traffic calming measures for pedestrians, we will also carefully consider their impact on bike riders to ensure a balanced approach.

## Treatment of vehicle entrances and exits

Parking lots attached to commercial uses with a high number of vehicles entering and exiting is a major issue for people walking. We will signal pedestrian priority, and encourage drivers to give way to people walking.



1. TfNSW Cycleway design toolbox (2020).
2. Austroads recommends a clear width of 2 metres as the minimum width for the operation of a shared path.
3. Beitel, David, Joshua Stipancic, Kevin Manaugh, and Luis Miranda-Moreno. "Assessing safety of shared space using cyclist-pedestrian interactions and automated video conflict analysis." Transportation research part D: transport and environment 65 (2018): 710-724.

# Monitoring and Evaluation Method

Measuring pedestrian activity, usage patterns, and collecting other performance metrics before and after a treatment are crucial for assessing their effectiveness and improving walking in our LGA. Data and community feedback are essential for understanding preferences and making informed decisions for the design and application of treatments. Post evaluation and monitoring help assess treatment effectiveness in the Waverley context and provide valuable insights for future projects. We will focus on the following areas going forward.

## Pedestrian data

Data on pedestrians and other active transport users are more difficult to obtain compared to public transport and private vehicles that have well established data collection methods. The increasing availability of crowd-source data has improved our understanding of pedestrian movement within the LGA, though gaps remain. Going forward we will continue to monitor the movement of pedestrians and other active transport users, and explore innovative data collection methods. We will conduct regular community surveys to better understand active travel needs and preferences of our residents.

## Public transport data

Trains and buses play an important role in how people get around in Waverley, and walking is part of each trip using public transport. Bus routes and schedules change from time to time, which affects their level of service and how people access bus services. We need to continuously monitor bus services in order to provide appropriate infrastructure to support people using buses in our LGA.

## Better classification of roads and streets under the "Movement and Place" framework

Context-sensitive footpath treatment requires a good understanding about the functions of roads and streets, and their relative place and hierarchy in the transport network. It has been recognised that the current functional, legal, administrative classification of our roads and streets has not been consistent and not very useful for transport planning[1]. To develop street hierarchy has also been identified as an action item in the Waverley's People Movement and Places (2017). We need a better data driven approach to develop a classification framework for our roads and streets that is able to respond to changes in community needs and usage patterns.



# Public Engagement Approach

Public participation and support underpin the course of transport and urban planning, and to a large extent, the success or failure of infrastructure projects. Transport projects can involve short-term disruptions and greater longer-term benefits. While active transport generally have great community support - indifference or even opposition to active transport projects for various reasons are to be expected.

Going forward we will endeavour to better communicate our projects and strategies to the community. Objectives of public engagement include:

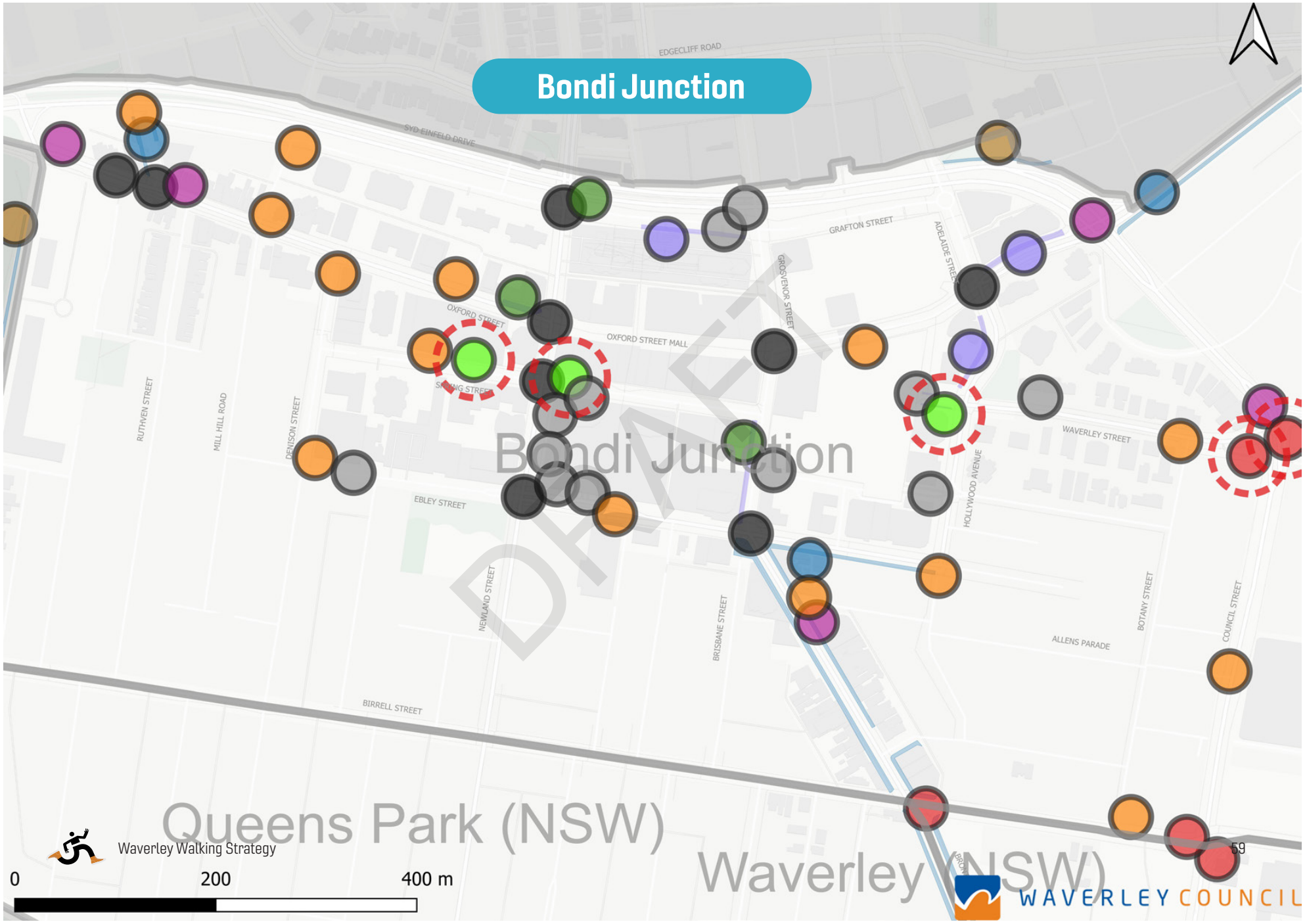
- Communicate to residents and exhibit what we are doing to improve walking in Waverley, and why we are doing these
- Public education on transport needs and constraints
- Road safety education (including school children)
- Better understand community needs and preferences, more effectively manage and respond to opposition
- Promote the cultural significance of walking and celebrate diversity in support of a strong and cohesive community
- Build public trust

1. Roads Act 1993 Issues Paper, TfNSW (2025).

# Improvement opportunities

Many of our roads are difficult to navigate on foot from historical vehicle-centric designs and planning. As Waverley's first Walking Strategy, there is a significant emphasis on improving walking related transport infrastructure, and to lay the foundation for good walkability in our LGA. This strategy identified a total of 162 walking related improvement opportunities throughout the LGA. These improvement opportunities fall into the following categories:

- **Crossing improvement:** Opportunity to install new crossing, or upgrade existing ones
- **Missing crossings (signal):** Locations identified as missing a signalised crossing in pedestrian desire line
- **Through park connection:** Improvement of walking paths in parks and open spaces to improve pedestrian permeability (inc. new connections)
- **Footpath surface treatment:** Upgrade or renewal of roadside footpath surfaces
- **More footpath space:** Street segments identified as needing more pedestrian space
- **Kerb extension/built out:** Opportunity to improve pedestrian experience and safety with extended footpath
- **Intersection normalisation:** Opportunities to redesign intersection and remove slip lanes
- **Roundabout redesign:** Roundabouts identified as causing issues for pedestrian movement, and opportunity for redesign
- **Pedestrian priority area/shared zone:** Road sections with high pedestrian activities and low vehicle movement functions that can benefit from changing how people and vehicles interact in the area
- **Street level veh access closure/treatment:** Street level parking lot entrances/exits in high pedestrian activity areas identified as needing treatment to reduce interruptions to people walking.
- **High priority projects:** Among these improvement opportunities, 15 have been identified as high priority projects. There projects are marked with red dotted circles in maps.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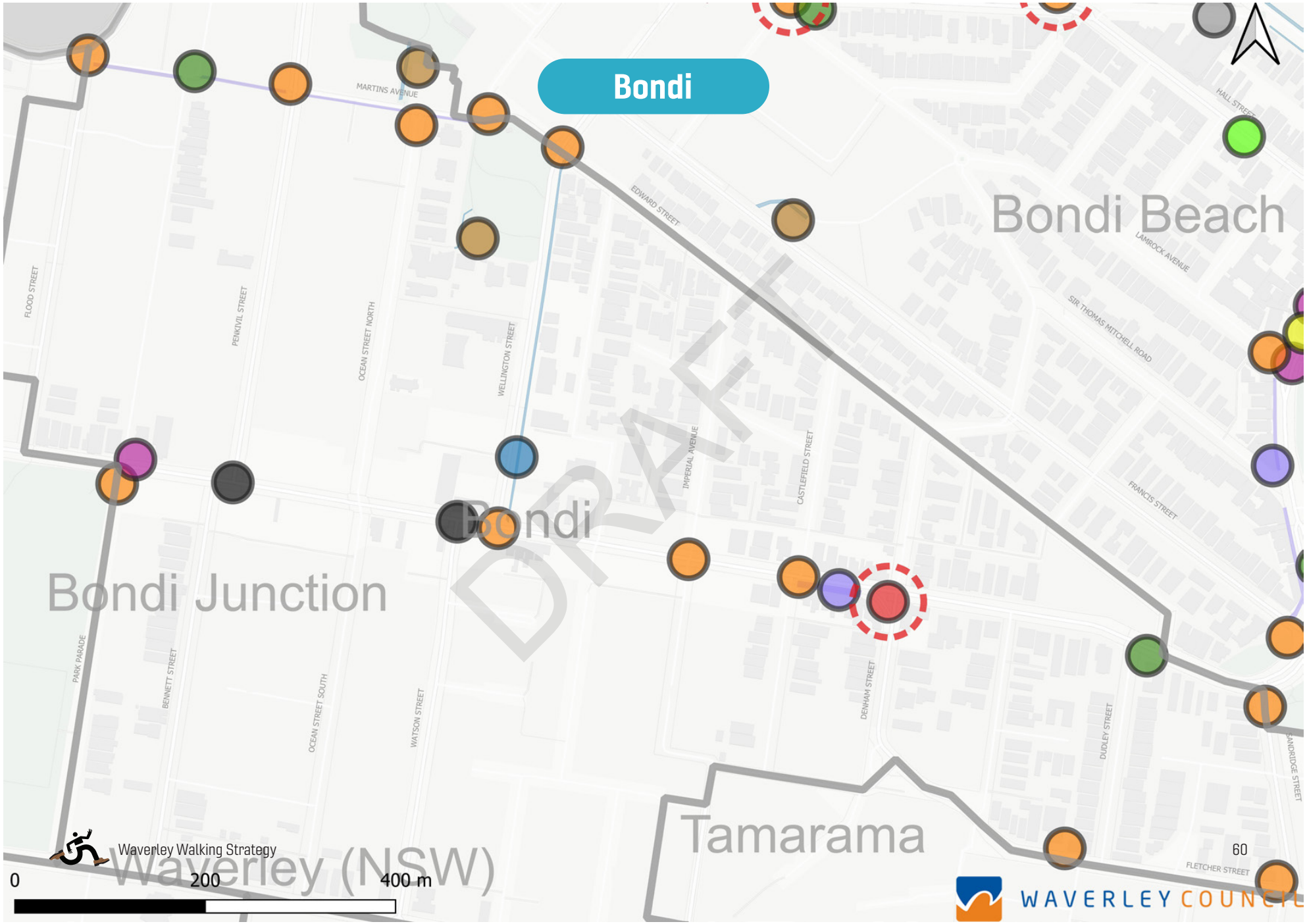
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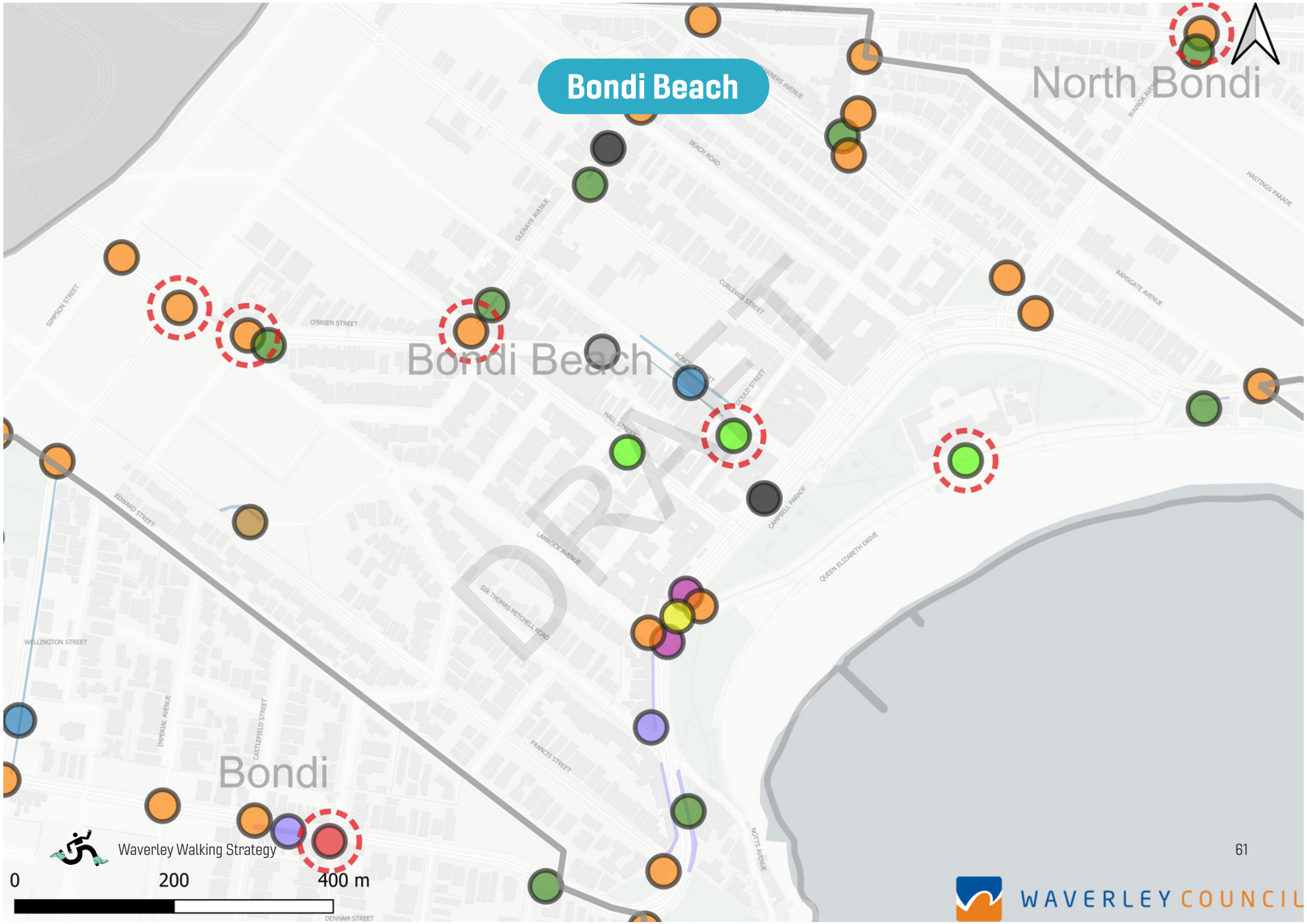
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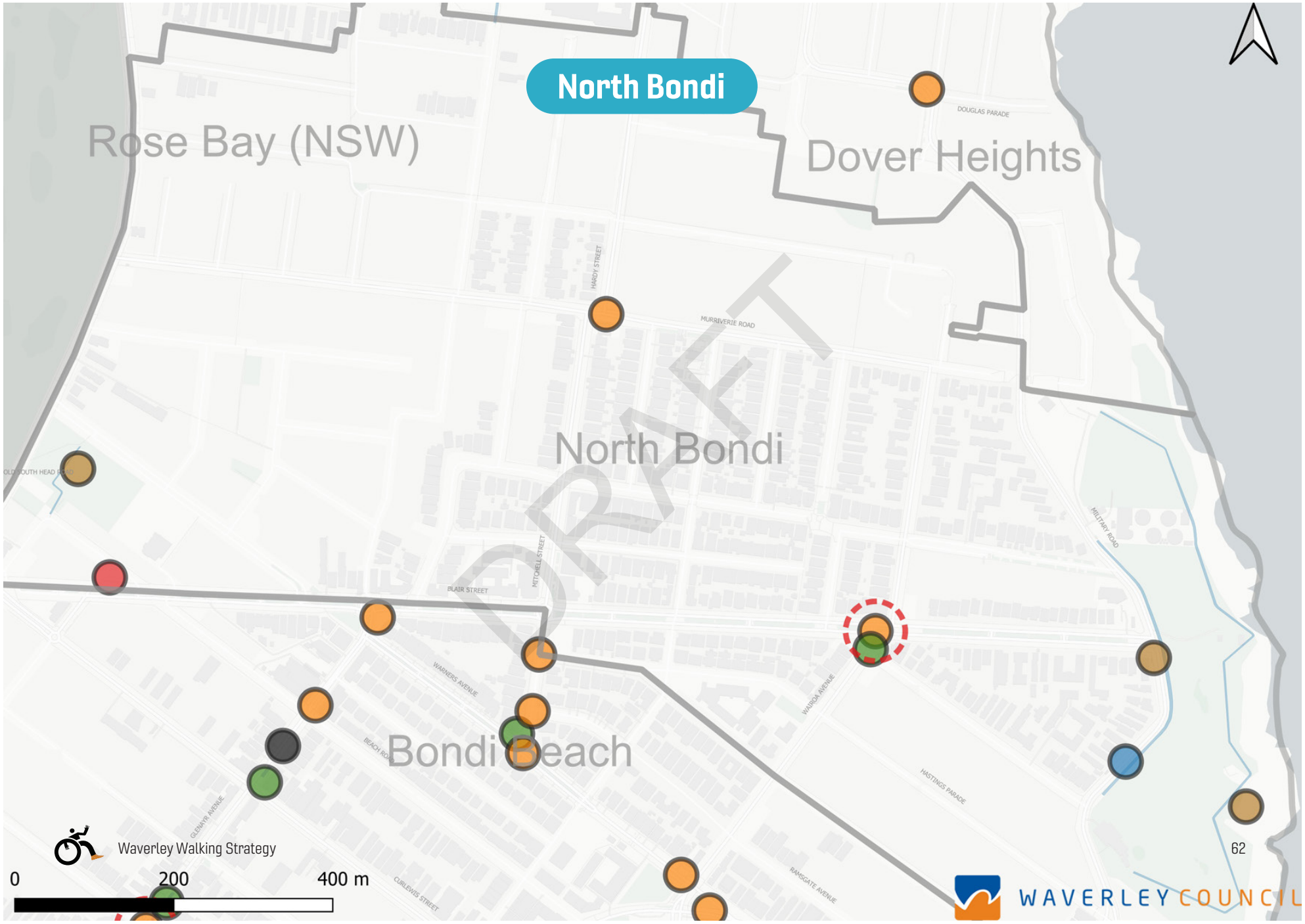
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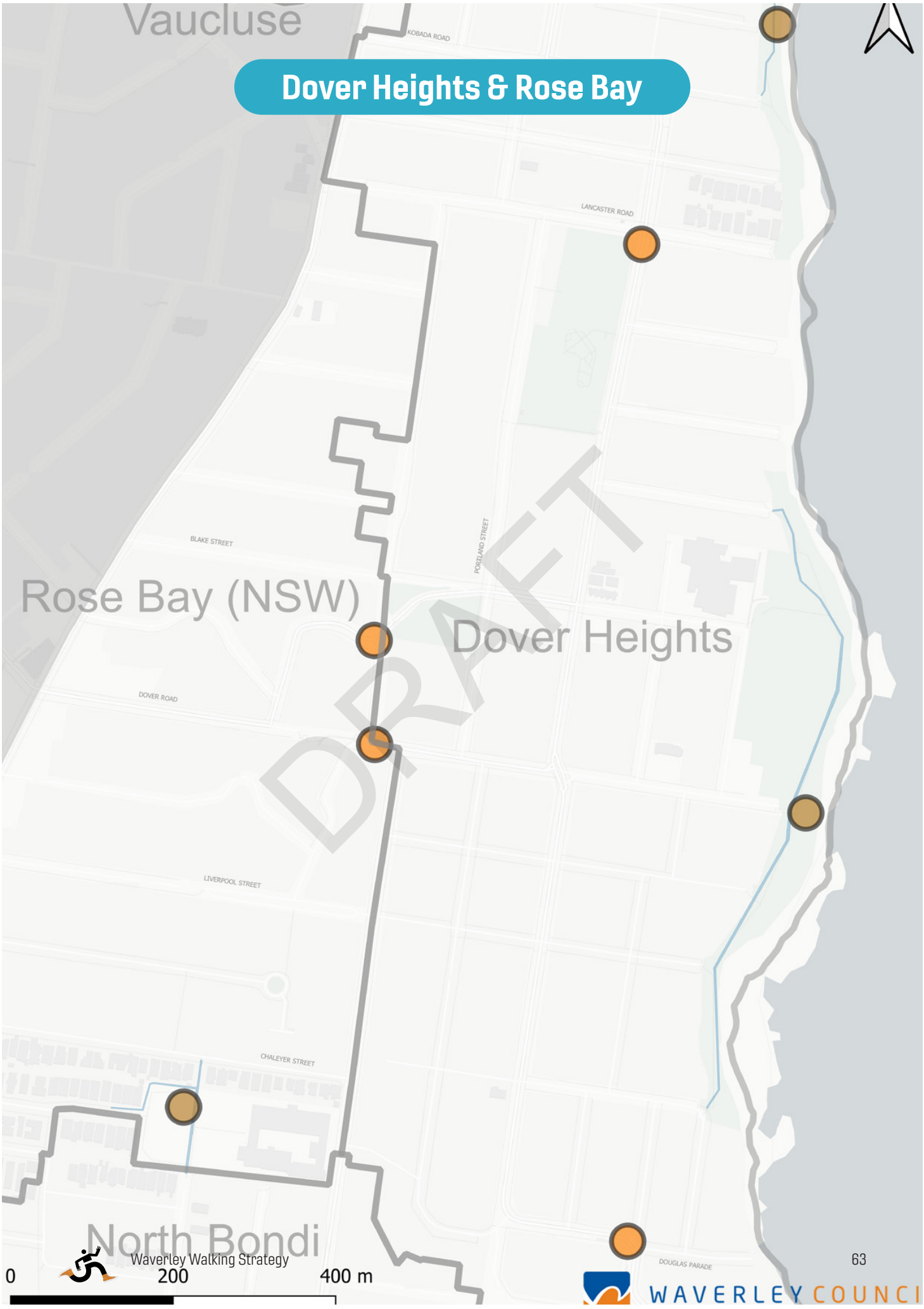
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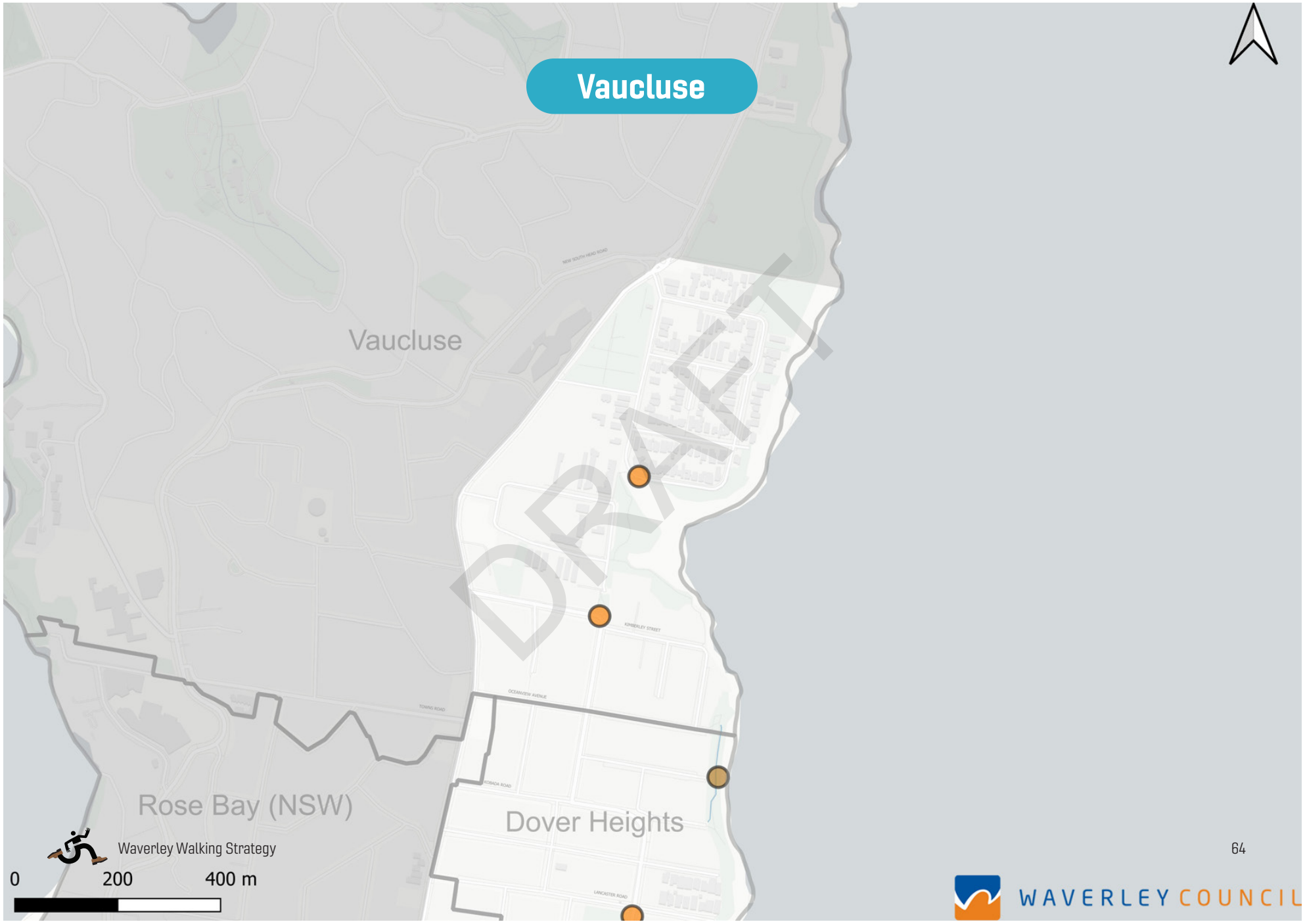
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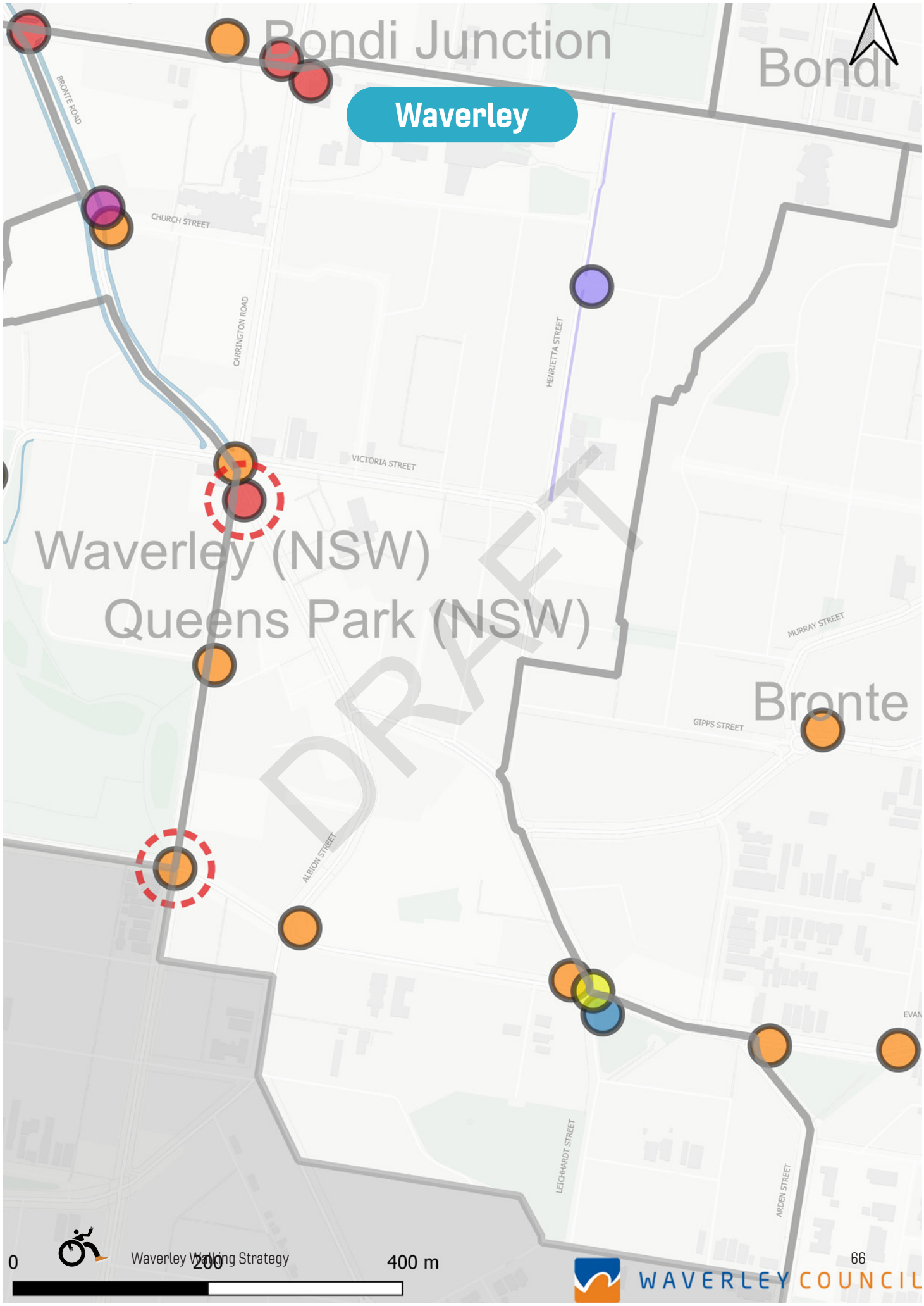
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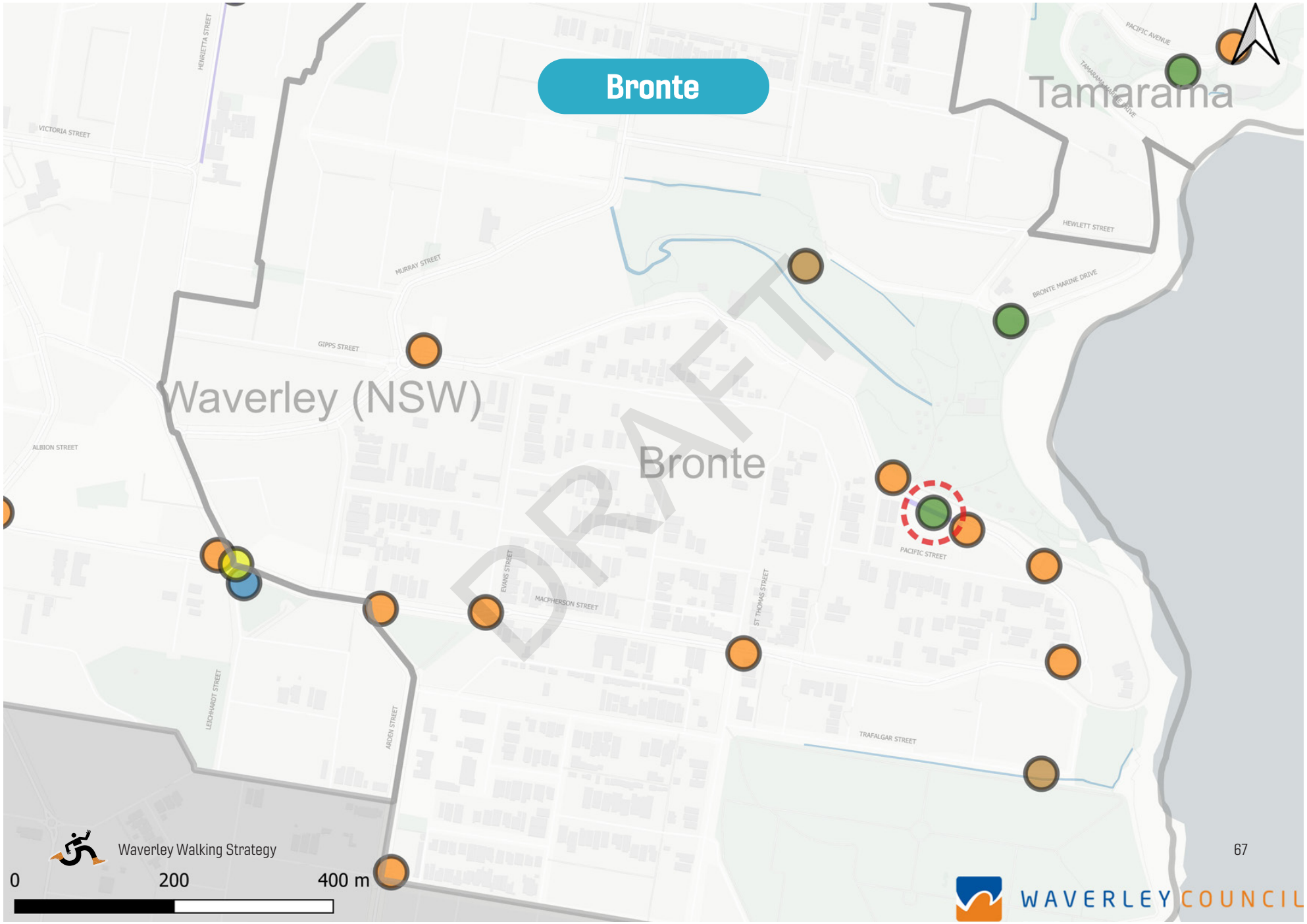
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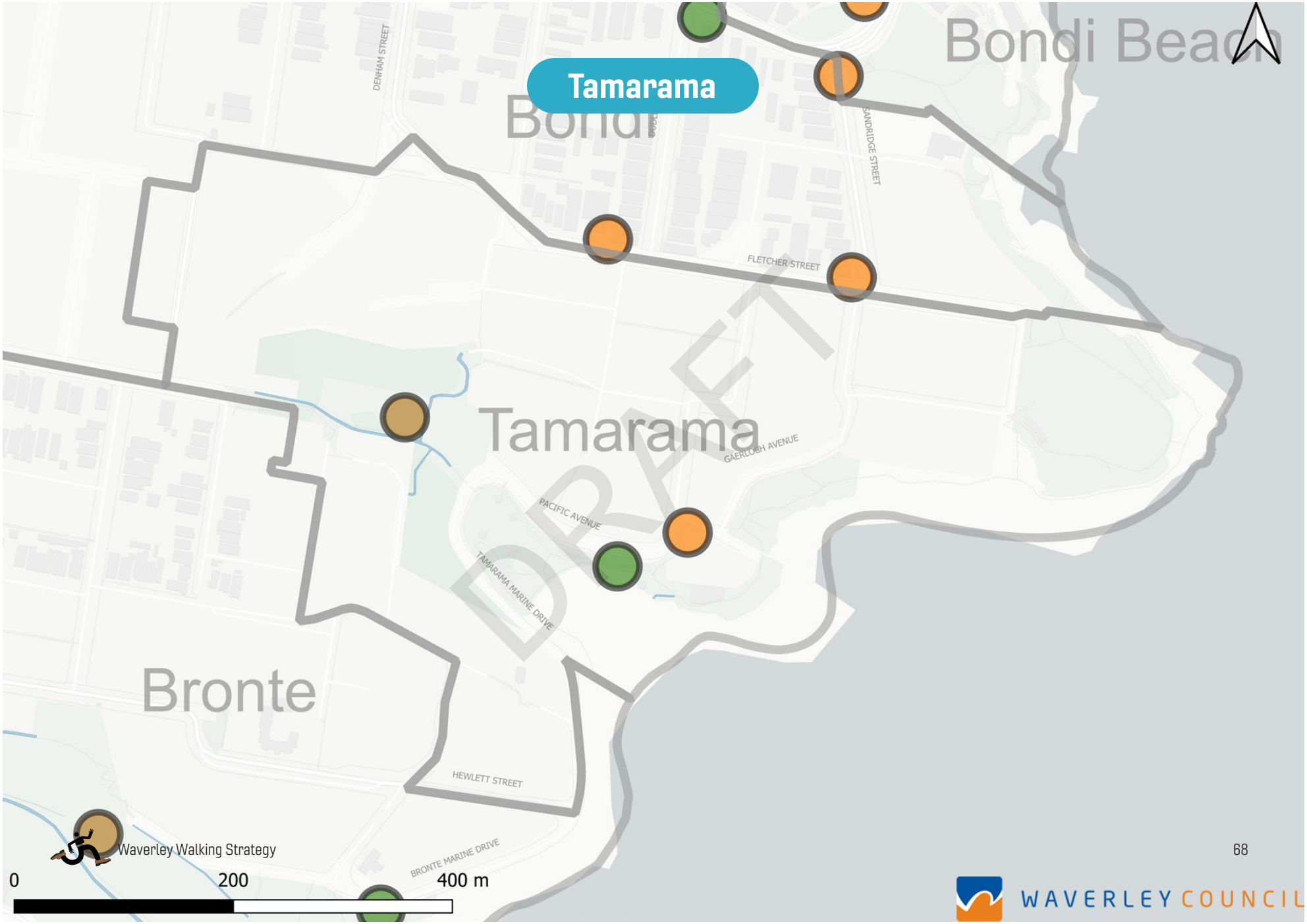
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Waverley Walking Strategy
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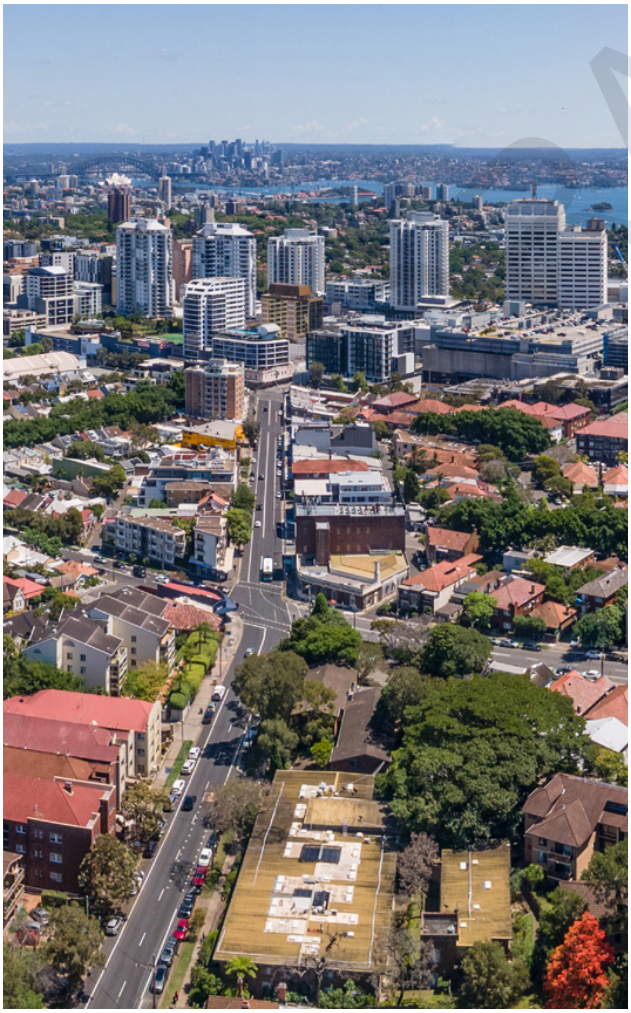
WAVERLEY COUNCIL

## Project Prioritisation

While all improvement opportunities benefit the community, not all projects can be carried out all at once. We will prioritise walking related improvements with the most significant impact and benefits.

This strategy sets project priorities based on the level of pedestrian activities, nearby bus usage patterns, school student traffic, speed and volume of vehicular traffic, and potential safety risks. We have developed a data-driven prioritisation framework to prioritise projects with the greatest benefit to Waverley residents, while balancing the need of different road users, input and feedback from residents. Based on these metrics, improvement opportunities are categorised into:

- High-priority projects/Critical fixes – Improvements aimed at issues affecting a large number of people walking, along key walking corridors, with significant benefits and impacts, and those with significant safety implications
- Important improvements – Improvements aimed at addressing issues affecting many people walking, potentially in areas with high vehicular speeds and traffic
- All improvement opportunities – Including improvements that make walking more pleasant and enjoyable



## High-priority projects/Critical fixes

### Pedestrian priority areas

- Spring Street
- Waverley Street
- Gould Street
- Hall Street

These opportunities are intended to encourage additional pedestrian movement and activity, provide attractive social spaces for people to walk, stay and enjoy, and promote economic vitality in commercial centres.

### Key intersection improvements

- O'Brien Street & Wellington Street
- O'Brien Street & Barracluff Avenue
- O'Brien Street & Glenayr Avenue
- Blair Street & Wairoa Avenue
- Charing Cross
- Carrington Road & Darley Road

These opportunities are intended to facilitate pedestrian crossings at key intersections and ensure formal crossing points along pedestrian desire lines to minimise stress and risks for people of all ages and abilities.

### Intersection normalisation

- Corner of Waverley Street & Council Street
- Corner of Bondi Road and Denham Street

These opportunities are intended to reduce the complexity of intersections and higher-speed vehicle turning movements, to improve pedestrian safety and experience, and to provide more footpath space.

### Pedestrian-friendly enhancements

- Queen Elizabeth Dr at Bondi Pavilion
- Campbell Parade & Queen Elizabeth Dr Roundabout

These opportunities are intended to transition the locations to more people centric designs and enhance walking experience by better managing vehicular traffic.

# Delivering improvement opportunities

## Indicative cost of project delivery

Cost estimates for delivering improvement opportunities identified in this strategy are based on estimated scale of projects, and unit rates based on previous projects undertaken by Council. Although actual costs may vary depending on market conditions, cost of traffic management and other contingencies, these estimates help shape our financial strategies and community expectations for the delivery of walking related projects.



| (Million AUD) | Total | Kerb ramps program | Lighting compliance (existing) | Footpath pavement renewal/ upgrade | Ped crossing improvement | Associated earth work | Ped/Shared zone |
|---|---|---|---|---|---|---|---|
| High-priority projects/ Critical fixes | 7.5 | 0.8 | 0.7 | 0 | 2.1 | 2.3 | 1.6 |
| Important improvements | 27.2 | 0.8 | 0.7 | 0.4 | 18.2 | 5.5 | 1.6 |
| All improvement opportunities | 70.6 | 0.8 | 0.7 | 4.9 | 21.5 | 8.7 | 34 |

# Financial Strategy

On a per person basis, it will take about $11 per resident per annum to deliver critical fixes identified by this strategy over the next 10 years (and $ 101 per resident to deliver all improvement opportunities over the next 10 years). This is a highly achievable target. By comparison, in the past 20 years, the federal government spent $ 714 per person annually on roads, with just 90 cents on walking and riding[1]; most walking and cycling infrastructure were funded by state and local governments.

## State and federal grants

A large number of international and domestic tourists visit Waverley each year, and walking has a significant role for everyone getting around in Waverley. In addition to local funding sources, we will seek external funding to accelerate projects. As of 2025, eligible external funding sources include:

- Active Transport Fund, ATF (Federal)
- Australian Government Black Spot Program, AGBS (Federal)
- Get NSW Active program (State)
- Safer Local Roads and Infrastructure Program (Federal)

Walking and cycling projects that improve connectivity to park lands are also eligible under the Metropolitan Greenspace Program (State)

## Development Contributions and Voluntary Planning Agreements (VPA)[2]

We will explore ways to include funding for active and public transport projects in development contribution and voluntary planning agreements, which are aimed directly at improving transport options, and mitigating negative impacts of new developments.

## Stable funding for walking infrastructure

- While state and federal grant funding and support from VPAs can help accelerate projects, a stable funding source will be more beneficial for a number of reasons, namely,
- More control over prioritising projects based on local needs rather than the specific requirements of grant programs. This also means a focus on long-term, sustainable development rather than short-term, grant-dependent initiatives.
- Less project delays while waiting for grant application outcomes
- More flexibility in project timeline, opportunities to negotiate better contracts, and greater flexibility in combining with other projects.

We will seek to allocate a fixed budget to deliver walking infrastructure for the community, and explore options to fund transport projects with more stable funding sources, especially for high priority projects that bring significant benefits our residents, but are less likely to get funding support at state or federal levels.



1. The Conversation - Australia spends $714 per person on roads every year – but just 90 cents goes to walking, wheeling and cycling (2025)
2. In alignment with Waverley Planning Agreement Policy 2014 (Amendment No. 4) , walking infrastructure quality as “infrastructure required directly as a result of density increases experienced or expected from the redevelopment of a site”.

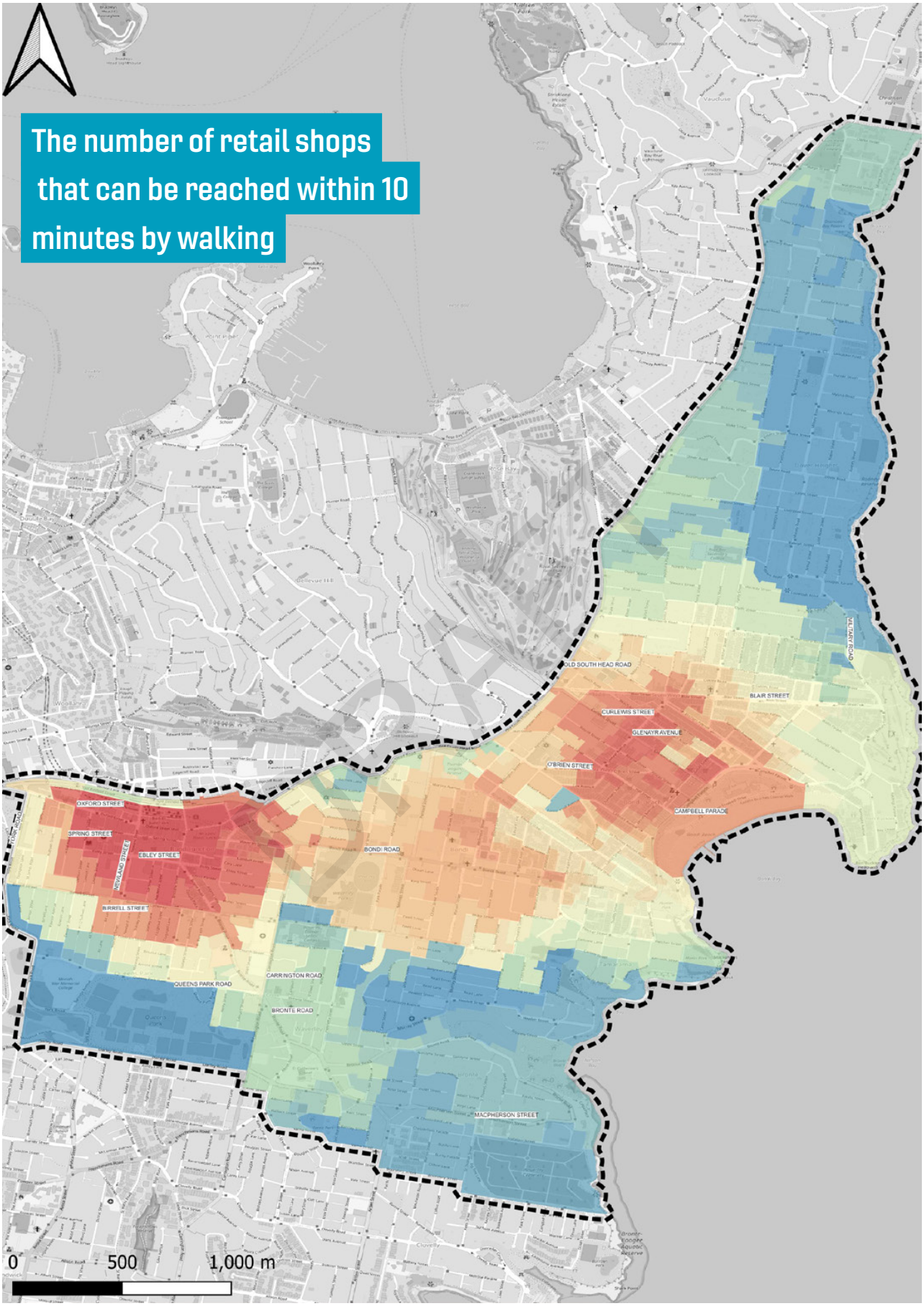
# Appendix

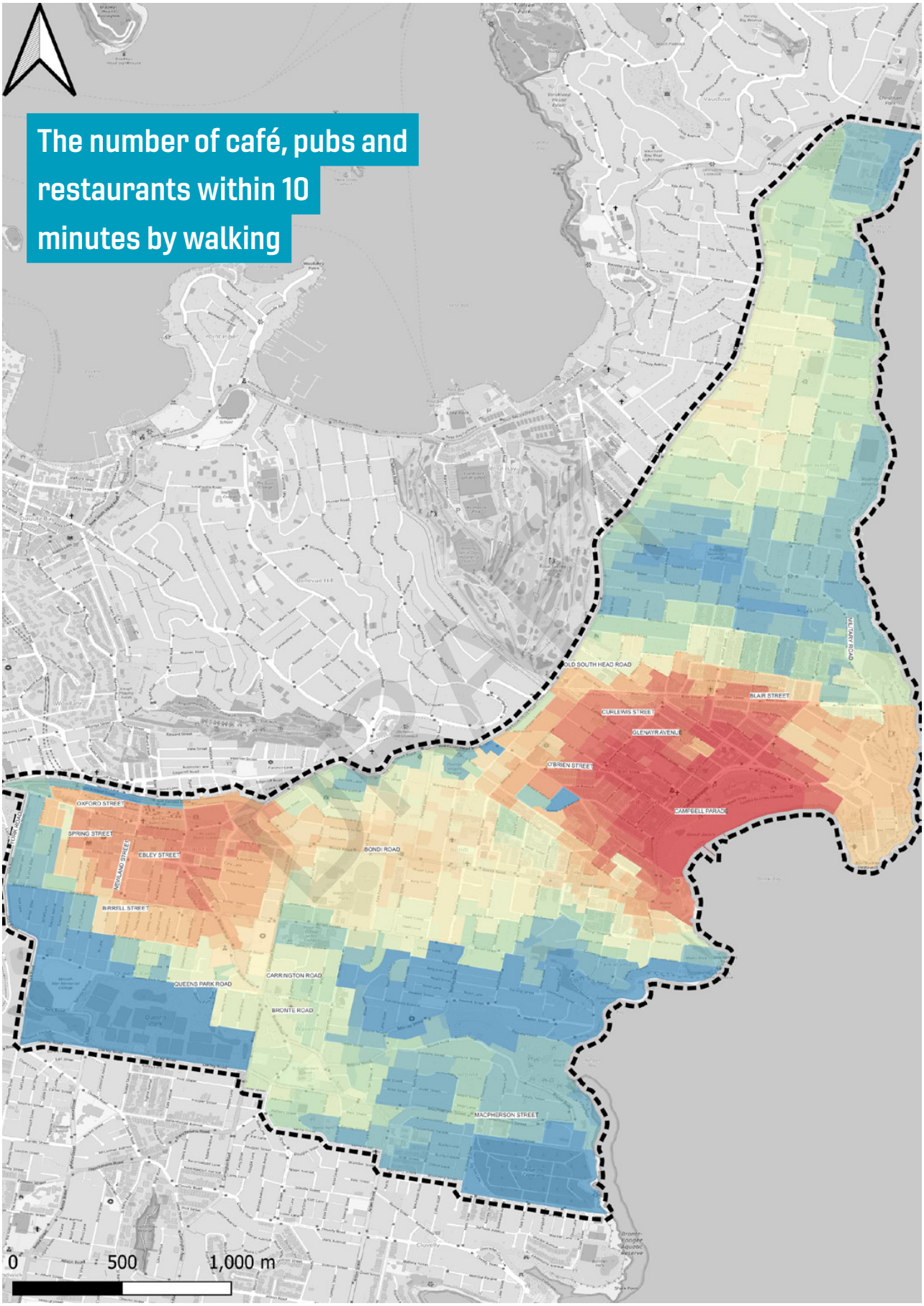
# Setting our strategy

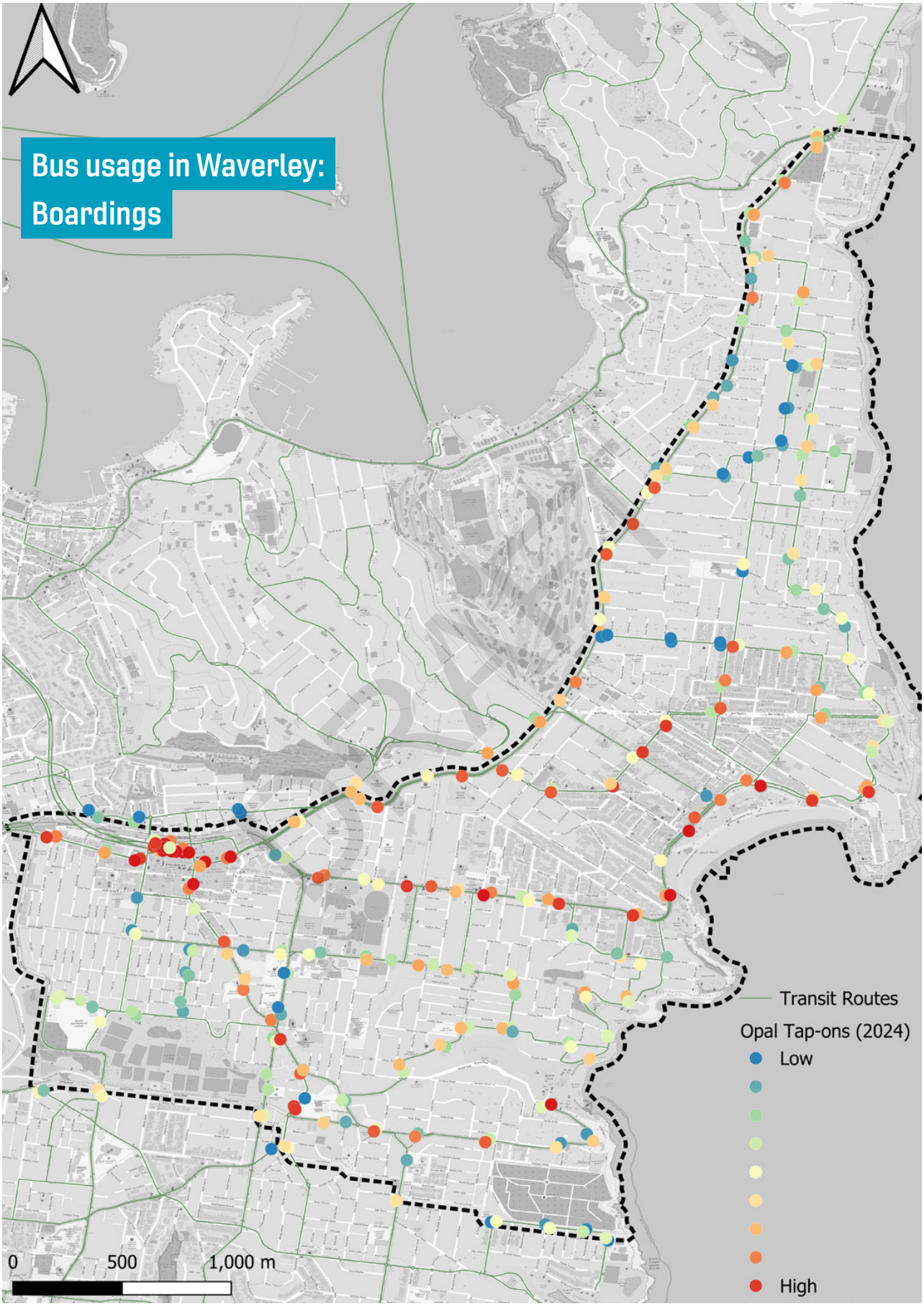
| | Goal | Action | Evaluation |
|---|---|---|---|
| A | Make walking safe for all people, at all times. The safety of pedestrians is prioritised and risks from vehicular traffic is mitigated. | **A1.** Continue to reduce vehicular speeds, mitigate risks and impacts to pedestrians. (This includes aspirational 30 km/h in high pedestrian areas)<br>**A2.** Reduce excessive vehicular traffic on residential streets and near town centres<br>**A3.** Indicate pedestrian priority, manage driver expectations and readiness to give way to pedestrians<br>**A4.** Transition from vehicular centric to people centric design, make every street walkable<br>**A5.** Improve pedestrian safety at identified collision hotspots, proactively address locations with potential for collisions<br>**A6.** Combine traffic calming with pedestrian crossings whenever possible | **EA1.** Vision zero – no pedestrian fatality by 2035<br>**EA2.** Reduced vehicular traffic volume near town centres<br>**EA3.** Reduced traffic speeds<br>**EA4.** Greater satisfaction with the walking environment (Waverley is considered a safe area for pedestrians by 65% of residents in 2021, with a target of 70% in 2032 - CSP) |
| B | Improve the permeability of the pedestrian network through streets and open space. Walking routes are direct, without unnecessary detour or difficult crossings. Walking is convenient, and the preferred transport option for short trips. | **B1.** Provide more pedestrian crossing opportunities, ensure all desire lines at intersections have crossings, facilitate informal crossings where conditions permit<br>**B2.** Add cut throughs and modal filters to reduce walking distance. Improve connectivity through parks and coastal walk<br>**B3.** Strongly advocate to TfNSW to improve timing at key crossings to prioritise pedestrians, and introduce pedestrian scramble signals<br>**B4.** Support the Local Strategic Planning Statement's vision of a 30-minute city by promoting active and public transport, and encouraging compact and walkable development<br>**B5.** Encourage active and public transport to replace short driving trips, incorporate provision for walking in all streetscape projects | **EB1.** Reduced pedestrian wait times at crossings<br>**EB2.** Walking accounts for a higher share of all trips within Waverley (HTS 36.3% walking along - target for 50% by 2035)<br>**EB3.** The number of urban amenities and employment opportunities reachable by walking |
| C | Facilitate seamless integration between walking & public transport | **C1.** Improve access to and crossing opportunities near high-usage bus stops, work with developers to ensure premises are easily accessible by walking and public transport<br>**C2.** Ensure sufficient footpath space near bus stops, provide adequate shelter and seating where people wait for buses<br>**C3.** Support walking and public transport to expand transport options, advocate for route change and additional services to support new and existing development | **EC1.** Public transport ridership in Waverley<br>**EC2.** The number of urban amenities and employment opportunities reachable by public transport |

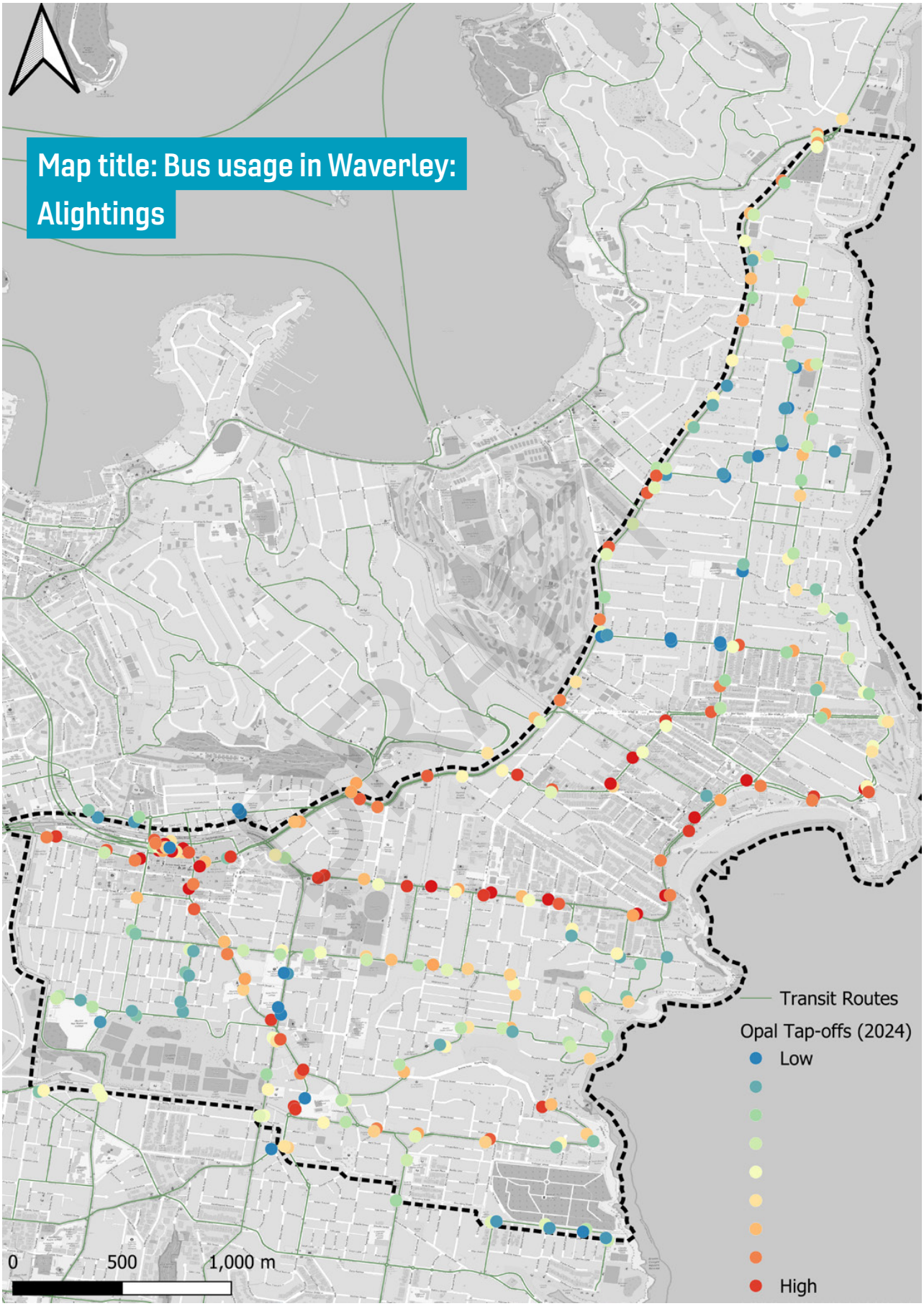
# Setting our strategy

| | Goal | Action | Evaluation |
|---|---|---|---|
| D | Make walking pleasant and enjoyable for people of all ages and abilities | **D1.** Ensure footpaths are well maintained, pavement defects are repaired timely.<br>**D2.** Improve footpath conditions, minimise interruptions by traffic, remove pinch points and footpath obstructions<br>**D3.** Provide shading and weather protection along key walking routes<br>**D4.** Ensure sufficient street space for both moving and standing pedestrians, and activities on footpaths. Re-allocate space and widen footpath where appropriate | **ED1.** A greater percentage of street space allocated to people walking<br>**ED2.** A higher portion of footpath with tree cover or weather protection<br>**ED3.** Higher pedestrian satisfaction with footpath quality (64% satisfied in survey – target for 75% by 2035) |
| E | Provide accessible streetscapes that support independent access by school children and people with disability | **E1.** Improve walking infrastructure and crossings along "walk to school" routes, continue to work with schools to respond to and address issues (Including reducing crossing distance, and raised crossing for greater visibility for children)<br>**E2.** Support Support the implementation of the Waverley Disability Inclusion Action Plan (DIAP) by ensuring continuous travel paths for individuals with mobility limitations in commercial and village centres | **EE1.** Percentage of school children walking or riding to school<br>**EE2.** Greater satisfaction from people with mobility limitation |
| F | Improve walking to promote vitality on streets, enhances social connection, and contributes to a sense of place and the local economy. | **F1.** Encourage active frontage, mixed use of commercial and residential units<br>**F2.** Provide places for people to stay and enjoy, trial re-allocating street space to on-street dining, and make permanent these changes with support from businesses<br>**F3.** Explore opportunities to pedestrianise identified street segments, focusing on access by walking and public transport<br>**F4.** Improve footpath quality and streetscape, enhance pedestrian wayfinding signages, amenities and lighting<br>**F5.** Develop a wayfinding strategy and action plan | **EF1.** More active frontage, greater mixed-use development<br>**EF2.** Less noise and transport related pollution<br>**EF3.** Residents' perception of night time safety (75% residents feel safe in CSP 2022-2032 – CSP has a goal of 78% by 2032) |
| G | Ensure walking harmonises with other transport modes | **G1.** Implement context-sensitive approaches to reduce conflict between pedestrians and bike riders<br>**G2.** Better manage bike parking on footpaths, including both shared and privately owned bikes<br>**G3.** Consider potential effects of traffic calming devices on bike riders<br>**G4.** Signal pedestrian priority and reduce conflicts between pedestrians and vehicles near parking lot entrances and exits | **EG1.** Percentage of people view bike riders and bike parking as a significant concern for walking (future community survey) |


The number of retail shops that can be reached within 10 minutes by walking
OLD SOUTH HEAD ROAD
BLAIR STREET
CURLEWIS STREET
GLENAYR AVENUE
O'BRIEN STREET
CAMPBELL PARADE
OXFORD STREET
SPRING STREET
EBLEY STREET
BONDI ROAD
BIRRELL STREET
QUEENS PARK ROAD
CARRINGTON ROAD
BRONTE ROAD
MACPHERSON STREET
0
500
1,000 m

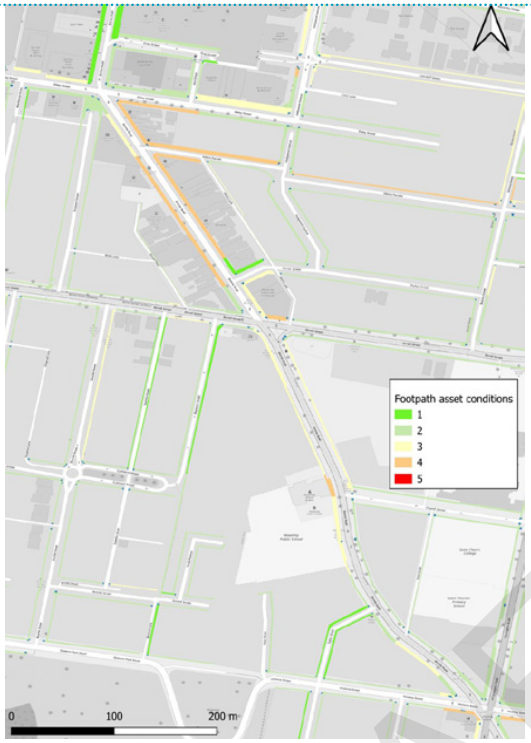

The number of café, pubs and restaurants within 10 minutes by walking
OLD SOUTH HEAD ROAD
BLAIR STREET
CURLEWIS STREET
GLENAYR AVENUE
O'BRIEN STREET
CAMPBELL PARADE
MILITARY ROAD
OXFORD STREET
SPRING STREET
EBLEY STREET
NEWLAND STREET
BIRRELL STREET
BONDI ROAD
QUEENS PARK ROAD
CARRINGTON ROAD
BRONTE ROAD
MACPHERSON STREET
0
500
1,000 m

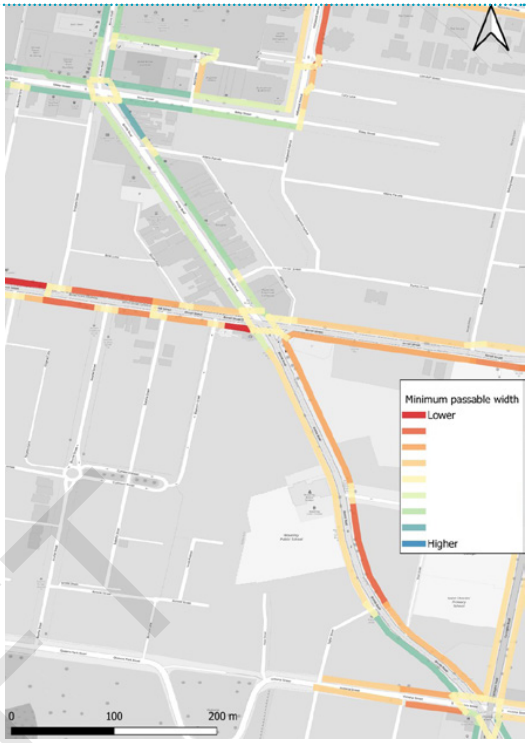

Bus usage in Waverley:
Boardings
Transit Routes
Opal Tap-ons (2024)
Low
High
0
500
1,000 m


Map title: Bus usage in Waverley: Alightings
Transit Routes
Opal Tap-offs (2024)
Low
High
0
500
1,000 m

# Footpath audit & evaluation

Over the last few years, there has been specific community interest to better understand footpath quality. Council officers investigated footpath quality using audit data. Results from footpath audits were further consolidated by pedestrian activity data to inform the need and priority for improvement. Examples of footpath auditing were presented in maps below.





# A review of guidelines for recommended footpath width under different scenarios

| Street Type | Description | Recommended Walkable Width* (metres) |
|---|---|---|
| Low activity, residential streets | Streets in a low density residential area that do not provide area-wide connections and mostly serve nearby residents. There is no major trip generators nearby. Occasionally there are bus stops along these streets, but generally do not have significant usage. | • 1.0 – 1.2 (Austroads 2021, Guide to Road Design Part 6A: Paths for Walking and Cycling)<br>• 1.2 as minimum for a person with mobility aids (TfNSW Walking Space Guide (2020) )<br>• 1.2 for a wheelchair user to navigate safely (Australian Standards AS1428.2 )<br>• 2.0 (TfNSW Walking Space Guide 2020 for low activity streets) |
| Medium to high density residential /Mixed-use streets/Pedestrian movement corridor | Streets that are used both by people passing through and nearby residents. There can be occasional but not continuous ground level retail activities along these streets. POIs with significant trip attractions might be nearby, but with no continuous shop front or on-street activities. The primary function of streets should be for people passing through, with occasional need for on-street activities. | • 1.5 (Healthy Streets checklist for new developments (2024) suggests this width as required by a single person with mobility aids)<br>• 1.5 (TfNSW Walking Space Guide 2020 suggest that passing others is uncomfortable for most people on footpath less than 1.5 wide)<br>• 1.5 either in front of, or behind bus shelters(Transit Cooperative Research Program (TCRP) Report 19, Guidelines for the Location and Design of Bus Stops, Transportation Research Board 1996)<br>• 1.8 (Australian Standards for 2 wheelchairs to pass each other)<br>• 2.0 (Healthy Streets checklist for new developments (2024) recommends this for all streets in order to accommodate people with different needs)<br>• 2.3 -3.2 (TfNSW Walking Space Guide 2020 for medium activity streets) |
| High pedestrian activity, high streets | These streets are located in commercial and shopping areas, with a high pedestrian volume. There can be substantial ground level retail activities, with continuous shopfront or on-street dining. These streets need to accommodate both people moving and staying. | • 2.4 and above, based on volume (Austroads 2021, Guide to Road Design Part 6A: Paths for Walking and Cycling)<br>• 2.5 ( Waverley DCP 2022)<br>• 2.85 (TfNSW Walking Space Guide 2020, most people feel comfortable passing others at this footpath width)<br>• 3.9 - 4.5 (TfNSW Walking Space Guide 2020 for high activity streets) |

•As a baseline, a person walking needs a width of 70cm (Healthy Streets checklist for new developments, May 2024), and people with mobility aids (1.5 m), carrying luggage, or walking with children would need more space (Healthy Streets checklist for new developments, 2024). In addition to the general footpath width above, a “minimum passable width” at the narrowest point along a footpath also needs to be considered for people with mobility limitations.

Footpath space includes street furniture, bus stops, poles, trees, utility boxes, and other obstacles, and not all footpath space is walkable. We will work with stakeholders to ensure adequate width for people of all ages and abilities, and for people moving and staying. People need more than the physical space to be able to comfortably pass each other. There is no one-size-fits-all footpath width for all streets, and much of the width consideration depends on the context of the street. The table summarises recommended footpath width from a review of guidelines and standards. The Waverley’s Street Design Manual (2020) also includes a review of minimum provisions for footpath width.

The recommended minimum width of a traffic lane is 3 metres [1], which is wider than existing footpaths in many parts of the LGA, including high pedestrian areas. We aim to provide more space for people walking whenever possible. We will work towards making walking pleasant and enjoyable for all people, regardless of their age or abilities.

1. Austroads 2021, Guide to Road Design Part 3: Geometric Design

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