PART B GENERAL PROVISIONS

Contents

B1 WASTE

~~This Part aims to minimise waste and maximise resource recovery during the demolition, construction and ongoing management of a property, and facilitate safe and efficient waste and recycling collection from all premises throughout Waverley.~~

This Part applies to all works requiring a development application (DA) and is to be read in conjunction with Council's relevant policies and guidelines.

General Objectives

(a) To support the delivery of the targets and outcomes of the *Waverley Sustainable Waste Strategy 2015-2020* and the *Waste Avoidance and Resource Recovery Act 2001*.
(b) To minimise waste 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.

General Controls

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

1.1 DEMOLITION AND CONSTRUCTION

~~Construction and demolition contribute significantly to all waste going to landfill. Much of this waste is clean excavated material, concrete, bricks and timber. This waste is an inevitable part of a project but does present a significant opportunity to increase efficiency and profitability while encouraging sustainable practices.~~

Objectives

(a) To minimize the amount of construction waste that is sent to landfill
(b) To minimise waste generated during demolition and construction.
~~(a)~~(c) To increase efficiency of development and encourage sustainable practices.
~~(b)~~(d) To maximise the re-use of clean excavated material, concrete, bricks and timber.
~~(c)~~(e) To ensure the safe removal and disposal of hazardous building materials.

Controls

(a) ~~All~~ A construction waste storage area is~~s are~~ to be located within the property boundary ~~-~~and is to be identified on the site plans as part of the *SWRMP* ~~Site Waste & Recycling Management Plan (SWRMP)~~.
(b) Separate construction waste collection bins *or* construction waste storage areas are to be provided giving consideration to slope, drainage, vegetation, access and handling requirements and may include:
    (i) Landfill waste;
    (ii) Recyclable waste;
    (iii) Materials to be re-used on-site; and / or
    (iv) Excavation materials (refer to *Annexure B1-1* for common building materials that can be re-used and recycled).

(c) Waste that can be recycled or reclaimed is to be identified in the SWRMP, as well as the intended methods for recovery and reclamation.

~~(c)~~(d) All sandstone must be re-used on site or reclaimed through an appropriate contractor.

~~(d) Where on-site space is limited, approval may be granted by Council to place a skip bin on a footpath or other public area (refer to Annexure B1-7).~~

~~(e) Waste and recycling containers/skips may only be provided by persons/companies holding a current permit granted by Council.~~

~~(f)~~(e) Asbestos and other hazardous material is to be managed under the *Protection of the Environment Operations Act 1997* and Council's Asbestos Policy ~~2005~~.

(f) Materials that cannot be reused or recycled ~~should be~~ must be:

(i) D~~d~~isposed of at a State Government~~n~~ approved facility ~~landfill site~~ and specified in the SWRMP; and

~~(g)~~(ii) Disposed of via a contractor that operates in accordance with the Proximity Principle outlined in State Government Legislation.~~.~~

~~(h)~~(g) Records are to be retained on-site demonstrating lawful disposal of waste.

~~(i)~~(h) Easy vehicular access to waste and recycling material storage areas must be provided and detailed in the SWRMP.

~~(j)~~ Construction materials are to be stored away from waste and recycling materials to enable easy access for waste collectors.

(i) Skip bins are to be utilised and located in accordance with Council's building waste and hoardings policy.

(j) All ~~waste and recycling~~materials ~~is~~are to be stored in way that:

(i) ~~P~~prevents damage from the elements, and reduces odour, health risks and windborne litter; and

~~(k)~~(ii) Prevents impacts to the environment under State Government Legislation (including stormwater pollution and runoff).

1.2 ONGOING MANAGEMENT

~~Waste is a key consideration in the design and ongoing management of all developments to ensure the efficient use and reuse of waste and ensure that it does not impact on the amenity of the surrounding area.~~

Objectives

(a) To ensure new developments and changes to existing developments are designed to minimize waste generation and maximize resource recovery.
(b) To encourage waste storage facilities that are designed to enable source separation for recovery
~~(a)~~(c) To ensure waste and recycling systems are easy to use and complement Council's waste and recycling services.
~~(b)~~(d) To promote safe practices for storage, handling and collection of waste and recycling.
~~(c)~~(e) To prevent stormwater pollution that may result from poor waste and recycling storage and management practices.
(f) To minimise amenity impacts during the storage, use and collection of waste and recyclables.
(g) To prevent impacts to the environment that may result from litter, excess waste and illegal dumping.
(h) To minimise interference of waste collection on pedestrian access, safety and amenity.
~~(d)~~(i) To minimise interference of waste collection on local traffic.

Controls

(a) Development must comply with the relevant controls in *Parts B1.3 – B1.6.*

1.3 STORAGE

1.~~2.1~~3.1 ~~Storage~~General Controls

~~*All Development*~~

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

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

~~(a)~~ Waste storage rooms or areas are to be located a maximum 10m from pick up point.

~~(b)~~(c) Waste rooms are not to be used for any purpose other than the storage of waste.

~~(c)~~(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*.

~~(d)~~(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.

~~(e)~~(f) Council will supply and service 140L and 240L bins. ~~Where a building consists of 40 or more units, 660L bins can be used, subject to negotiation with Council.~~ The use of 660L bins will only be considered where:

(i) T~~t~~he building has more than 20 units; and

(ii) A~~a~~dequate off site access for waste collection vehicles is provided and is in accordance with relevant Australian Standards, the National Construction Code and Annexure B1-3.

(g) For developments with ~~over~~ 240 units or more, ~~a compactor may be used subject to negotiation with Council.~~ advice must be obtained from a waste solution expert to incorporate optimal waste storage solutions that minimise space required for storage, and recover as much material as possible. Such solutions can be in the form of compactors, chute systems, and/or problem waste collections. Strategies for waste minimisation, and the reduction of waste storage space are to be outlined in the SWRMP.

~~(f)~~

~~(g)~~(h) Any volume reducing equipment must be installed in accordance with the manufacturers design specifications ~~. The equipment must be installed on either a concrete plinth 75mm high or on legs at least 150mm high~~ 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.

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

~~(i)~~(j) ~~No incineration devices are allowed.~~Incineration devices are not permitted.

~~(j)~~(k) Waste and recycling storage rooms must be:

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

(ii) Designed to store the entire fleet of bins plus 0.2m between bins to allow adequate maneuverability room;
(iii) Designed with a 1.8m unobstructed clearance zone between the stored bins and the entrance for access and maneuverability;
(iv) Designed with suitable door and corridor access to enable bin movement;
~~(i)~~(v) Constructed of concrete or other approved materials at least 75mm thick;
~~(ii)~~(vi) Finished with a smooth even surface to be easily cleaned;
~~(iii)~~(vii) Coved at the intersection with walls and plinths with a ramp to the doorway where necessary;
~~(iv)~~(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 naturally/mechanical ventilation to meet Building Code of Australia 2016 requirements;
~~(v)~~(xi) Fitted with smoke detectors in accordance with the relevant Australian Standards.
~~(vi)~~(xii) Equipped taps supplying ~~of~~ hot and cold water, mixed through a centralised mixing valve with a hose cock and fitted with an aerator to increase water efficiency;
~~(vii)~~(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;
~~(viii)~~(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
~~(ix)~~(xv) Fitted with childproof compacters or mechanical devices where used in the storage of waste.

1.3.2 Additional Controls relating to Residential Components of Development

(a) A room or caged area with a minimum floor space ~~volume~~ of 4m^{2}~~3~~ must be ~~allocated~~ provided for the storage of discarded bulky items~~, such as old furniture,~~ and problem waste, awaiting ~~Council pick up~~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 floor space required is 1 m^2 per 50 units to a maximum 2 m^2. This space should be in or attached to the storage area.

~~(a)~~(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 (see Annexure B1-6); and

(ii) 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.

(d) Both waste and recycling bins/crates must be stored together in the allocated waste storage room.

(e) Waste, recycling and garden organics receptacles must be stored at all times within a building. 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.

(f) If a waste storage area is visible from the public domain, the design must complement the primary building.

1.3.3 Additional Controls relating to ~~—~~Commercial Components of Development

(a) Waste storage space is to be designed with flexibility to accommodate a future change in use with a higher waste generation rate.

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

~~(b)~~(c) 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.

~~(c)~~(d) Sufficient space must be allocated ~~on site~~within the building for the storage of reusable items such as crates and pallets.

~~(d)~~ Separate space must be allocated for the storage of liquid wastes and oils etc. The liquid waste storage areas must be undercover, bunded and drained to a grease trap. The area is preferably to be within the building, however if circumstances do not permit, an area that is screened from the public and commercial domains may be negotiated with Council.

(e)

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

(f)

(g) All new developments are to provide adequate storage for waste to accommodate future change of uses including grease traps.

~~(f) All new developments are to provide adequate storage for waste to accommodate future change of uses including grease traps is to be provided.~~

~~(g)~~(h) For commercial premises whose waste contains 20% or more food waste, or other waste which is considered by Council to have potential amenity impacts, a daily waste collection is required, unless an alternative is agreed upon with Council.

1.3.4 Additional Controls relating to All Mixed Use Development

(a) In addition to the relevant application of controls from B1.3.2 and B1.3.3, this section also applies to any mixed use development.

~~(a)~~ There must be at least two separate ~~centralised~~ 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.

(b) A separate bulky waste storage room is also to be provided for residents that is inaccessible to commercial premises.

1.~~42.2~~ACCESS AND COLLECTION

1.4.1 General Controls

~~*All Development*~~

(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 and kerbs.

~~(c) Collection from within the boundary of the property is only possible upon prior negotiation with Council.~~

(c) Council's preferred waste service for multi-residential and mixed-use development is an on-site collection service. Where the imposition of this control will result to a poor urban outcome, an alternate solution is to be negotiated with Council.

~~(d) Where collection vehicles are required to drive into a property to collect waste and recycling, the site must be designed to allow collection vehicles to enter and exit the property in a forward direction and have adequate vehicle clearance.~~

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

1.4.2 Additional Controls relating to On Site Collection

(a) On-site 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 or vehicle movement within the development.

(b) The on-site waste collection area must be designed to allow collection vehicles to enter and exit the property in a forward direction, and have adequate vehicle clearance.

(c) The 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) A separate bulky household waste collection point is also to be provided.

1.52.3AMENITY

1.5.1 All DevelopmentGeneral

(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, and 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.

1.5.2 Additional Controls relating to All Mixed Use Development

(a) Noise and odour generated from the commercial component of the development must not impact on residents in the same site.

Residential units must be insulated from noise if adjacent or above the waste and recycling storage facility, compaction equipment or collection and vehicle access points.

1.62.4MANAGEMENT

1.6.1 General ControlsMulti Unit, Multi Dwelling, Commercial and Mixed Use Development

(a) A current copy of the SWRMP is to be stored on site and available at all times.

(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.

(c) 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.

~~(a)~~(d) The ~~design of the waste and recycling management system~~SWRMP must identify responsibility for cleaning of waste receptacles and storage areas and for transfer of bins within the property, to the collection point and back to the storage areas.

(e) Clear and easy to read signs identifying the different waste receptacles and where in the storage area these should be positioned must be displayed.

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

1.6.2 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.

(b) The waste and recycling management (including composting) and collection system, along with allocated responsibilities should be clearly outlined in contracts with cleaners, building managers and tenants and included in the SWRMP.

B2 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

~~Energy efficient buildings, through their design, construction and choice of appliances and heating and cooling systems not only reduce the consumption of non renewable resources and the level of green house gas emissions into the atmosphere, they are also more economically efficient and increase the level of all year round comfort for its users.~~
This Part applies to all development in the Waverley LGA.

Ecologically Sustainable Development (ESD) relates to the following principles:

- The minimization of greenhouse gas emissions;
- The use of co- or tri-generation systems where appropriate;
- The use of renewable or low carbon energy;
- The reduction of water usage;
- The minimization of reliance on mains water supply through the collection and treatment of rainwater and greywater;
- The implementation of climate adaptation measures;
- The reduction of waste during construction and the ongoing use of the building;
- The increased recycling of waste and use of recycled products;
- The improvement of indoor environmental quality;
- The environmental impact from building materials will be reduced through the reduction, re-use and recycling of materials, resources and building components;
- The biodiversity of the site and the surrounding area will be maintained and improved.

Residential Development and BASIX

State Environmental Planning Policy (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: www.basix.nsw.gov.au.

Mandatory Commercial Building Disclosure

In 2010 the Federal Government's Department of Climate Change and Energy Efficiency implemented a Mandatory Commercial Building Disclosure program. 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 Department of Climate Change and Energy Efficiency.

~~Applicants are encouraged to exceed minimum BASIX scores.~~

Objectives

(a) To encourage applicants to integrate the principles of ecologically sustainable development (ESD) early into all development types.
(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 encourage all development to reduce water consumption and greenhouse gas emissions.
(e) To reduce the waste of resources in the built environment.
(f) To reduce the causes of, and reverse the impact of, the urban heat island effect.
(g) To reduce greenhouse gas emissions from the construction and ongoing use of developments.
(h) To respond to and prepare for changes in the climate and resource consumption.
(i) To promote the implementation of new technologies that can be used to sustainably manage the built environment.
(j) To encourage the use of environmentally sustainable building materials.

2.1 PASSIVE ~~ENERGY~~ DESIGN

Passive buildings are designed so that windows, walls, and floors are able to collect, store, and distribute solar energy in the form of heat in winter and reject solar heat in the summer. A passive~~ly designed~~ house reduces the need for the use of mechanical and electrical (active heating and cooling) systems, saving energy and costs. For more information on passive design refer to: http://www.yourhome.gov.au/passive-design

Objectives

(a) To encourage passive design to be integrated into every development from the design stage.
(b) To encourage passive ~~solar~~ design through site layout, design and construction to reduce the need for active heating and cooling systems.
(c) To reduce the energy used in buildings to maintain internal air quality and thermal comfort.
(d) To improve the energy efficiency of developments.
(e) To maximise daylight within developments to minimise the use of electric lighting.
~~(a)~~

Controls

(a) Development is to be designed and constructed to reduce the need for active heating and cooling system~~s~~ by incorporating passive design measures through site design and analysis.
~~(a) Considerations include:~~
~~(i) Physical characteristics of the site;~~
~~(ii) Site context, such as adjacent buildings or structures affecting the site, relationship of the site to the street, identification of key features such as views and orientation;~~
~~(iii) Overshadowing caused by existing buildings;~~
~~(iv) The orientation of true solar north, and a range of 30 degrees east and 20 degrees west of true north;~~
~~(v) Trees on, or affecting the site, identifying location, type, size and condition; and~~
~~(vi) Prevailing seasonal winds, sun and shade characteristics.~~
(b) Development is to ~~should~~ be orientated to ~~ensure~~ achieve optimum solar access and natural ventilation ~~is achieved~~. To achieve this:
~~(c)~~(i) Shade north and west facing windows from direct summer sun with~~by~~ external horizontal shading devices such as awnings, upper floor balconies, eaves and overhangs; ~~.~~and
(ii) ~~Minimise east~~Utilise vertical shading devices such as vertical louvres or fins on east and west facing windows that consider the oblique angles of the sun.
~~(d) as they are difficult to shade. Where this is not possible use vertical shading devices such as blinds and shutters.~~
(c) Shading devices may be fixed or adjustable.

(d) Insulation ~~should~~ is to be used in external walls and roofs to reduce heat escaping from a building in winter and to maintain a lower internal temperature in summer.

(e) Utilise operable natural ventilation to evacuate heat from roof or underfloor cavities in summer, and to retain warmth in winter.

(f) Utilise cross-ventilation or stack-ventilation to minimise the use of mechanical ventilation.

~~(e)~~ To minimise use of air-conditioning, all new dwellings must have ceiling fans installed in habitable rooms.

(g) Position internal walls and partitions to allow for any prevailing passage of air through the building.

(h) Maximise direct solar access to thermal mass in winter, and shade thermal mass in summer.

(i) Utilise trees and planting as an additional method of shading a surface or window. Evergreen varieties provide shade throughout the year, while perennial plants allow increased sunlight to pass through during winter, and provide shade during summer.

(j) Utilise large trees to shade roof surfaces and minimise the amount of energy absorbed and re-radiated into the environment (otherwise known as the Urban Heat Island Effect).

~~(f)~~

(k) ~~Minimise undue passive solar impacts especially for east-west running blocks for properties to the south.~~Development must not unduly impact upon the ability of surrounding properties to achieve passive design strategies.

(l) The façade should be well sealed to avoid draughts and air leakage.

(m) The use of green roofs or walls to reduce heat absorption and provide thermal mass to a development is encouraged. Refer to *Part B3 Landscaping and Biodiversity* for additional information.

(n) Innovative tools for supplementing passive design within developments are encouraged, and include:

  (i) Radiant cooling and heating through chilled ceiling bars or underfloor materials;

  (ii) Phase Change Materials (PCM) that store and re-release larger amounts of energy including heat or coolth;

  (iii) Building Management Units (BMU) that monitor and adjust the use of lighting and mechanical cooling/heating in response to the environment; and

  (iv) Automated blind and window controls.

2.2 WATER CONSERVATION

For more information about water conservation refer to:
http://www.yourhome.gov.au/water/rainwater
http://yourenergysavings.gov.au/water

~~Water is our most valuable natural resource. Fresh water only makes up a small percentage of all the earths' water and therefore must be used in a sustainable way. Businesses account for nearly one third of Sydney's daily water use. Reducing water consumption reduces not only water costs but can reduce wastewater, energy and chemical treatment costs.~~

Objectives

~~(a) To reduce water consumption.~~
(a) To encourage sustainable water use practices.
(b) To encourage on-site water recycling and treatment to prevent wastewater and runoff from entering waterways.
~~(b)~~(c) To reduce the use of potable water, and increase the use of recycled water.

Controls

~~(a) All new development is to demonstrate the measures proposed to reduce water consumption.~~
~~(b)~~(a) All new fittings and fixtures are to be installed with the highest Water Efficiency Labelling and Standards (WELS) scheme star rating available at the time of development.
(b) Rainwater ~~tanks or~~ storage in tanks or bladders must be installed in all ~~new~~ developments ~~and major alterations/additions to provide water for non-potable uses~~. ~~If this is not feasible, justification for this must be provided.~~
(c) Leaf-shedding grills must be fitted over gutters and downpipes to increase efficiency of rainwater collection.
(d) Water for non-potable uses is encouraged to be provided by a rainwater, stormwater, treated greywater or blackwater system.
(e) Greywater and blackwater systems are encouraged in all new developments to recycle water on site.
(f) Dual piping for future use of greywater or blackwater systems is to be provided in all new commercial and multi-residential development.
~~(c)~~(g) Sub-meters are to be provided for individual tenants or floors in new commercial developments.
~~(d)~~(h) Dry basket arrestors are to be provided to floor wastes in commercial food preparation areas and be shown on plans submitted.
~~(e)~~(i) Premises shall have a floor waste point (drainage) to prevent polluted water from reaching the footpath.
(j) Dehumidification from air conditioning systems must be harvested and reused on site provided it is treated to an adequate level suitable for the reuse application, otherwise a piped connection to Council's stormwater drainage system is required and there is to be no discharge to the footpath.

2.34 ~~ACTIVE ENERGY~~ RENEWABLE ENERGY AND ENERGY EFFICIENCY

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
~~Unlike passive heating and cooling, active heating, cooling and energy systems involve the use of mechanical and electrical systems. Where active systems are required it is encouraged that these are in the form of active solar technologies which convert solar energy into usable light and heat, cause air-movement for ventilation or cooling, or store heat for future use rather than air conditioning units and the like.~~

Objectives

(a) To encourage the installation and use of ~~active solar~~renewable energy technologies.
(b) To ensure development takes into consideration neighbouring ~~active~~ solar technologies in the design of the building.

Controls

(a) The use of solid fuel heating in all new dwellings is ~~prohibited~~ not permitted.
(b) Solar hot water systems are encouraged to be installed in all new developments and major alterations and additions. Where solar access is poor, alternative high efficiency systems are to be used, such as:
    (i) High efficiency gas storage system;
    (ii) High efficiency electric heat pump; or
    (iii) Instantaneous gas hot water for premises with low level hot water usage or intermittent water usage.
(c) Ceiling fans and passive cooling systems are preferred over air-conditioning systems.
(d) Where mechanical ventilation or air-conditioning is required it must:
    (i) Have sufficient manual or automated controls so it is used only when required;
    (ii) ~~Should b~~Be an energy efficient reverse cycle air conditioning system that achieves as a minimum one star less than the maximum possible under the Australian Government air conditioning energy rating standard.
    (iii) New or replacement air conditioning units are to have a minimum 2-star rating for cooling only. Reverse cycle air conditioning units are to have a minimum of 2-star rating on one cycle and 2-star rating on the alternate cycle.
    (iv) Dehumidification from air conditioning systems must be harvested and reused on site provided it is treated to an adequate level suitable for the reuse application, otherwise a piped connection to Council's stormwater drainage system is required and there is to be no discharge to the footpath.
(e) The installation ~~and expansion~~ of photovoltaic panels is encouraged in ~~new and existing~~ all developments.
(f) Where photovoltaic panels are proposed it ~~would~~ is~~be~~ desirable that the panels be parallel and ~~flush with the pitch of the roof and~~ incorporated into the design of the building.

(g) The use and location of photovoltaic panels and solar hot water heating systems should take into consideration the potential permissible building form on the subject property and/or adjoining properties.

(h) Development and major tree plantings should maintain solar access to existing photovoltaic solar panels and solar hot water heating systems. ~~having regard to their performance, economic viability and reasonableness of the location.~~

(i) ~~For developments with multiple floors, multiple tenants or that are strata subdivided, electrical sub-metering is required.~~Electrical sub-metering is required by strata lot, tenancy and floor in multi-residential and mixed-use developments.

(j) Buildings are to incorporate energy saving systems for lighting. This includes the use of:

(i) Natural lighting where possible;

(ii) Energy efficient lights such as T5 fluorescents, CFLs, or LEDs; and

(iii) Sensor lighting so that lights are only used when necessary.

(k) All shared areas within developments such as corridors, lobbies, and car parks are to utilise energy efficient lighting and movement sensors.

~~(k) New roofs and/or ceilings are to be insulated with a minimum R3.2 rating, and new walls must be insulated to a minimum R2.8 rating.~~

(l) All new development shall be designed to include an internal ventilation shaft to ensure future alterations do not place the shaft in an unsuitable location.

~~(m) Lighting technologies i.e. sensors, timing switches, dimmers, two way lighting, diffused light, use of high efficiency lamps are encouraged.~~

~~(n)~~(m) New gas heaters must be rated no less than one energy star below the maximum available at the time of installation.

2.~~5~~4 ~~GREEN STAR~~RATING TOOLS

Green Star is a comprehensive national rating system that evaluates the environmental design, construction or performance of buildings. Green Star certification ensures a building will be designed to perform better than a comparable building that complies with the National Construction Code and BASIX, where applicable, and encourages innovative environmental solutions tailored to each development.

Achieving a Green Star rated building of 4 stars or higher has been demonstrated to increase the cost of development by approximately 2%, however the return on investment can result in lifecycle savings of 20% total construction costs.[1]

Objectives

(a) To encourage the use of rating tools to achieve and maintain quality sustainable development.

Controls

(a) Green Star~~t~~ certification is encouraged for all developments with a cost of works of $3 million or greater.

(b) Development should be designed to~~,~~ register~~ed~~ and ~~obtain~~ maintain a minimum of a 4 star Green Star Certified Rating in accordance with the Green Star ~~Design~~ Communities, ~~and/or the~~ Green Star Design & As-Built, and/or Green Star Performance assessment tools or equivalent certification.

(c) Council requires proof of registration for a Green Star ~~Design~~ Communities and/or Green Star Design & As-Built Rating for the proposed development.

Note: If the Green Star certification provision has been satisfied, an additional energy assessment is not required as per ~~*section*~~ *Part B2.5~~6~~ Energy Assessment* of this DCP. However if the Green Star provision has not been satisfied, an energy assessment report is required as part of the development application.

[1] GBCA 2013, The Business Case for Green Building. Available at: https://www.gbca.org.au/uploads/63/34623/Evolution_2013_Business_Case_for_Green_Building.pdf

2.5 ~~2.6~~ ENERGY ASSESSMENT

~~(a)~~ Applications which have satisfied section *2.5 Green Star* ~~will be~~are deemed to have fulfilled criteria under *2.5~~6~~ Energy Assessment*.

An *Energy Assessment Report* is a report that demonstrates that the proposed development's predicted greenhouse gas emissions are 30 percent less than those of a reference building. A reference building is a hypothetical building of the same size, shape, floor area and glazing areas as the proposed development, but whose building fabric and building services characteristics are based on the current National Construction Code Section J deemed to satisfy provisions. Any consent will include a condition to require an Energy Assessment Report prior to the issue of any Construction Certificate.

Controls

(a) A commitment to the provision of an~~n~~ *eEnergy Aa~~a~~ssessment R~~r~~eport* must accompany a development application for new mixed use and commercial development with a cost of works of $3 million or greater. The commitment is to demonstrate:

(i) A draft proposal of how the project will deliver a development with greenhouse gas emissions that are 30% less than those of a reference building; and

~~(b)~~(ii) That an adequately qualified professional has been engaged at the inception of the project to ensure that integrative sustainability measures have been implemented, and that the professional has been contracted to oversee the delivery of the building to these standards.

~~(b) The energy assessment report is to demonstrate that the proposed development's predicted greenhouse gas emissions are 30 percent less than those of a reference building. A reference building is a hypothetical building of the same size, shape, floor area and glazing areas as the proposed development, but whose building fabric and building services characteristics are based on the current National Construction Code Section J deemed to satisfy provisions.~~

(b) An Energy Assessment Report will be required as part of any development consent for works of $3 million or greater, to be submitted prior to the issue of a construction certificate for the development.

(c) The energy assessment report is to include a completed Green Building Council of Australia's Green Star Design ~~and~~ & As Built Greenhouse Gas Emissions Calculator available at http://new.gbca.org.au/green-star/rating-system/design-and-built/ ~~Energy Calculator Path 2.3 Class 2-9 Reference Building. This is available online at http://www.gbca.org.au/green-star/green-star-design-as-built/the-rating-tool/#Calc%20and%20guides%202.~~

This includes:

(i) Modelling of the predicted operational energy demand and greenhouse gas emissions of the proposed development.

(ii) Proposed solutions to reduce the predicted operational energy use and greenhouse gas emissions of the site and calculations to show the energy use and greenhouse gas emission reductions attributable to each proposed solution.

(iii) Potential solutions include:

- Design of site, buildings and services.
- Use of on-site energy efficient technologies.
- Use of decentralised energy where feasible, such as district heating and cooling and combined heat and power.
- Use of on-site renewable energy technologies where feasible.

B3 LANDSCAPING AND BIODIVERSITY

3.1 LANDSCAPING

Objectives

(a) To enhance the amenity and visual setting of the site, streetscape, and surrounding neighbourhood.
(b) To ensure development contributes to the urban canopy.
(c) To retain and increase remnant populations of endemic flora and fauna.
(d) To maximise on site stormwater infiltration and minimise off site stormwater runoff.

3.1.1 General Controls

(a) A Landscape Plan is required to be submitted in accordance with the *Waverley Development Application Guide* and include:
~~(b)~~(i) A schedule of the common name and scientific name of species to be planted, the size and number; and
~~(c)~~(ii) A plan showing the location of the plants in the schedule.
~~(d)~~(b) Existing significant vegetation is to be retained and enhanced.
~~(e)~~(c) The landscaping should maintain and increase vegetation and urban tree canopy in Waverley.
~~(f)~~(d) Species should be retained, selected and placed in order to help achieve the following:
(i) Cool buildings in summer;
(ii) Intercept glare from hard surfaces;
(iii) Channel cooling air currents into the dwelling in summer;
(iv) Allow sun into living rooms in cooler months; and
(v) Provide windbreaks where desirable.
(i) Existing natural features including sandstone and rock features are to be retained and incorporated as landscape features on the site in order to maintain the natural character of the landscape. Sandstone walls and finishes fronting the public domain are to match the traditional pattern and colour of sandstone in the area.
(j) Landscaping is to be designed to minimise non-porous areas and maximise on-site infiltration of stormwater. Paved areas are to be semi-porous or graded to maximise on-site infiltration.
(k) Landscaping must relate to the building scale and assist integration of the development with the existing street character.
(l) Landscaping should give precedence to species with low water needs, include native plant species and select and position trees to maximise control of sun and winds.
(m) All development proposals are to be designed to eliminate the impact upon significant trees on site, street trees and trees on adjoining land including public open space and bushland.

3.1.2 Landscape on Structures

Objectives

(a) To encourage engaging communal open spaces to be created above basement or podiums, or on roof tops.
(b) To ensure that adequate provision is made for soil depths, structural provisions to support planting, and drainage and waterproofing requirements.

Controls

(a) Where set downs are provided, ensure the depth is suitable for paving thickness or the required soil depth for the proposed plants.
(b) Minimise visual and physical clutter through the careful design of planter beds and mounds.
(c) Innovative design strategies that allow integrated seating to be provided through planter beds at 450mm high are encouraged.
(d) Provide raised platforms or mounding to achieve greater soil depth to support planting of larger trees in appropriate areas.
(e) Demonstrate that adequate drainage and waterproofing is provided for the species and volumes of plants and soil.
(f) Provide appropriate methods for capturing, storing and treating run off from landscapes on structures for reuse on the site.
(g) Utilise lightweight soil mixes that are porous, able to drain freely, and suitable for the selected plant species. Seek suitable professional advice regarding appropriate soil depths and types. As a guide, Table 1 provides minimum soil depth requirements.

Plant Size	Minimum Soil Requirements	
Large Trees (16m canopy diameter at maturity)	Volume Depth Area	150 cubic metres 1.3 metres 10m x 10m area (or equivalent)
Medium Trees (8m canopy diameter at maturity)	Volume Depth	35 cubic metres 1 metre
Shrubs	Depth	500mm-600mm
Ground cover	Depth	300mm-450mm
Turf	Depth	100mm-300mm

Table 1 Minimum soil requirements

3.1.3 Green Roofs and Walls

Objectives

(a) To encourage the use and installation of green roofs and walls to increase building performance, thermal comfort, fauna habitat, localised air temperature and aesthetics of the urban environment.
(b) To encourage green roofs and walls in commercial and mixed use zones.
(c) To encourage green roofs and walls to be integrated into existing and new developments.
(d) To ensure green roofs are non-trafficable areas which do not cause adverse visual or acoustic privacy impacts on neighbouring properties.

Controls

(a) Council will determine if a green roof will be considered as landscaped area on a site-by-site basis.
(b) Green roofs are not to be used as recreational areas.
(c) The selection of plant species must give consideration to sun access, wind, views, overshadowing and other environmental conditions.
(d) Utilise lightweight soil mixes that are porous, able to drain freely, and suitable for the selected plant species. Seek suitable professional advice regarding appropriate soil depths and types.
(e) Visual impact:
    (i) Where a green roof or wall affects views, careful consideration is to be taken to ensure the chosen species of plants will not interrupt or diminish views from adjacent properties.
    (ii) Green roofs must be contained within the overall building height limit.
    (iii) Green roofs or walls are not to detract from the heritage significance of a building or heritage conservation area.
(f) Any access is to be for servicing the green roof only.
(g) To discourage recreational use of the roof, a balustrade at the perimeter is not permitted.
(h) The green roof is to have a minimum soil depth of 300mm.
(i) Demonstrate that adequate drainage and waterproofing is provided for the species and volumes of plants and soil.
(j) Provide appropriate methods for capturing, storing and treating run off from landscapes on structures for reuse on the site.
(k) Consideration should be given to the strength of a waterproofing membrane through the following method:
    (i) Flood testing
    (ii) Electrical filed vector mapping (EVFM)
    (iii) Destructive testing.
(l) The overall design of the green roof should minimize wind uplift.
(m) Sub-surface drip irrigators should be used to direct moisture to plant roots.
(n) Irrigation should be provided from rainwater harvesting, treated grey water or treated black water.

3.21 BIODIVERSITY ~~REMNANT VEGETATION~~

Waverley contains 5.9 hectares of remnant bushland, occurring as scattered pockets on cliff edges, in parklands, road reserves and within private property, providing habitat and food for native wildlife. Since European Settlement, Waverley has lost over 99% of its original vegetation. Due to their local significance, these remnants must be protected. These areas also contain the threatened plant species, Sunshine Wattle, and the threatened ecological community, Eastern Suburbs Banksia Scrub.

Areas of introduced native and non-native vegetation have also been recognised as providing important habitat for native wildlife. Habitat corridors link areas of remnant vegetation with recognised habitat areas.

Council acknowledges the intrinsic value of remnant vegetation or bushland, as well as the habitat and other environmental values of revegetated areas and the need to protect them from the degrading influences of surrounding development.

3.2.1 Remnant Vegetation

Within Waverley's remnant vegetation, the plant species Sunshine Wattle, *Acacia terminalis* ssp *terminalis*, and the ecological community, Eastern Suburbs Banksia Scrub (ESBS) are listed as threatened in~~on~~ the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, and in~~on~~ the NSW ~~*Threatened Species Conservation Act 1995.*~~ *Biodiversity Conservation Act 2016.*

The following objectives and controls relate to land identified in the Terrestrial Biodiversity M~~m~~aps located within WLEP 2012 as remnant vegetation, or land adjoining remnant vegetation. ~~Note, d~~Definitions are included at the end of this DCP.

Objectives

(a) To retain, protect and enhance remnant native vegetation for local wildlife and benefits to the community.
(b) To protect and promote the recovery of threatened species, populations, and endangered ecological communities.

Controls

(a) A minimum of 90% of the proposed plantings (not including turfed areas) are to be indigenous or local native plants listed in *Annexure B2 - 1*.
(b) All noxious weeds on the property at the time of development are to be removed by a suitably qualified person.
(c) Trees with hollows are to be retained for habitat wherever possible to provide habitat for arboreal fauna. Consideration must be given to the potential risk of damage to public or private property as determined by a suitably qualified arborist.

~~(c)~~(d) Sites that are undeveloped should be protected to encourage regeneration from the seed bank. *Sunshine Wattle* has a persistent soil seed bank which may last for up to 50 years (DECCW, 2007:8).

~~(d)~~(e) Council may require additional supporting information for an application including the following:

(i) Vegetation management/protection plan; and

(ii) Flora or fauna impact assessment.

~~(e)~~(f) Remnant vegetation is to be protected unless:

(i) Trees and vegetation are removed/trimmed in accordance with the *Roads Act 1993*;

(ii) The work needs to be carried out by Council, the State Emergency Services, the Rural Fire Service of NSW, or a public authority in response to an emergency;

(iii) Works are carried out by State or Federal Government Departments or Authorities under current legislative requirements; or

(iv) The tree or vegetation is a recognised noxious weed (*Noxious Weeds Act 1993*). The applicant must first seek advice from Council and Council must be notified in writing seven (7) days prior to the commencement of removal work.

3.21.2 Habitat Corridors and Recognised Habitat

Wildlife movement allows dispersal, interbreeding and recolonisation to occur, improving long-term viability of the species. Wildlife movement also facilitates pollen and seed dispersal, thus enhancing the viability of plant populations. Continuous Habitat Corridors are preferable, but discontinuous corridors still contribute to fauna movement and can potentially be improved through habitat enhancement.

This part refers to land identified in the 'Biodiversity Habitat Corridor' Layer on Council's mapping website. ~~Figure 1 and Figure 2 as Habitat Corridors and Recognised Habitat.~~

~~Waverley Online Mapping Tool~~	
https://planning.waverley.nsw.gov.au/connect/analyst	
Layer	Biodiversity Habitat Corridor

~~Note, d~~Definitions are included at the end of this DCP.

Objectives

(a) To ensure development contributes to the landscape character of the area.
(b) To enhance planted native vegetation and the ecological functions of habitat corridors.
(c) To reconstruct habitat in non-vegetated areas of designated wildlife corridors that will as far as possible, represent the combination of plant species and vegetation structure of the original community.

Controls

(a) A minimum of 50% of the proposed trees, 50% of the shrubs and 50% of the grasses and groundcovers (not including turfed areas) are to be indigenous or local native plants listed in *Annexure B2-1*.
(b) All noxious weeds on the property at the time of development are to be removed by a suitably qualified person.
(c) Trees with hollows will be retained for habitat wherever possible to provide habitat for arboreal fauna. Consideration must be given to the potential risk of damage to public or property as determined by a suitably qualified arborist.
(d) Council may require additional supporting information for an application including the following:
    (i) Vegetation management/protection plan; and/or
    (ii) Flora or fauna impact assessment.

3.2.3 Vegetation Requiring a Clearing Permit

State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 (the Vegetation SEPP) regulates the clearing of vegetation that is below the Biodiversity Offset Scheme threshold referred to in the *Biodiversity Conservation Act 2016*.

Controls

(a) In accordance with Part 3 of the Vegetation SEPP, a permit is required from Council to clear any vegetation in an area identified as 'Biodiversity' on the Terrestrial Biodiversity Map in WLEP 2012.

B4 COASTAL RISK MANAGEMENT

Coastal risks include risks from erosion, inundation and geotechnical instability. Erosion refers to the wearing away of the land by the action of natural forces. Coastal or tidal inundation is the flooding of coastal lands by ocean waters, which is generally caused by large waves and elevated water associated with severe storms and the peak of the high tide. Geotechnical risks in the coastal zone refer to coastal cliff or slope instability.

This part refers to land identified in the 'Geotechnical Risk' or 'Coastal Inundation' Layers on Council's mapping website.

Waverley Online Mapping Tool	
https://planning.waverley.nsw.gov.au/connect/analyst	
Layer	Geotechnical Hazard
	Coastal Inundation

Any application for new buildings, significant alterations and/or additions to existing buildings and/or new swimming pools on properties identified as affected by 'Coastal Inundation' or 'Geotechnical Risk'~~in Figures 3 and 4~~ are required to submit the following with a development application (refer to ~~DCP Part A2 - Documentation Requirements~~the *Waverley Development Application Guide*):

(a) Coastal Risk Assessment; and/or
(b) Geotechnical Risk Assessment.

Refer to Council's *Coastal Risk Management Policy 2012* for further information.

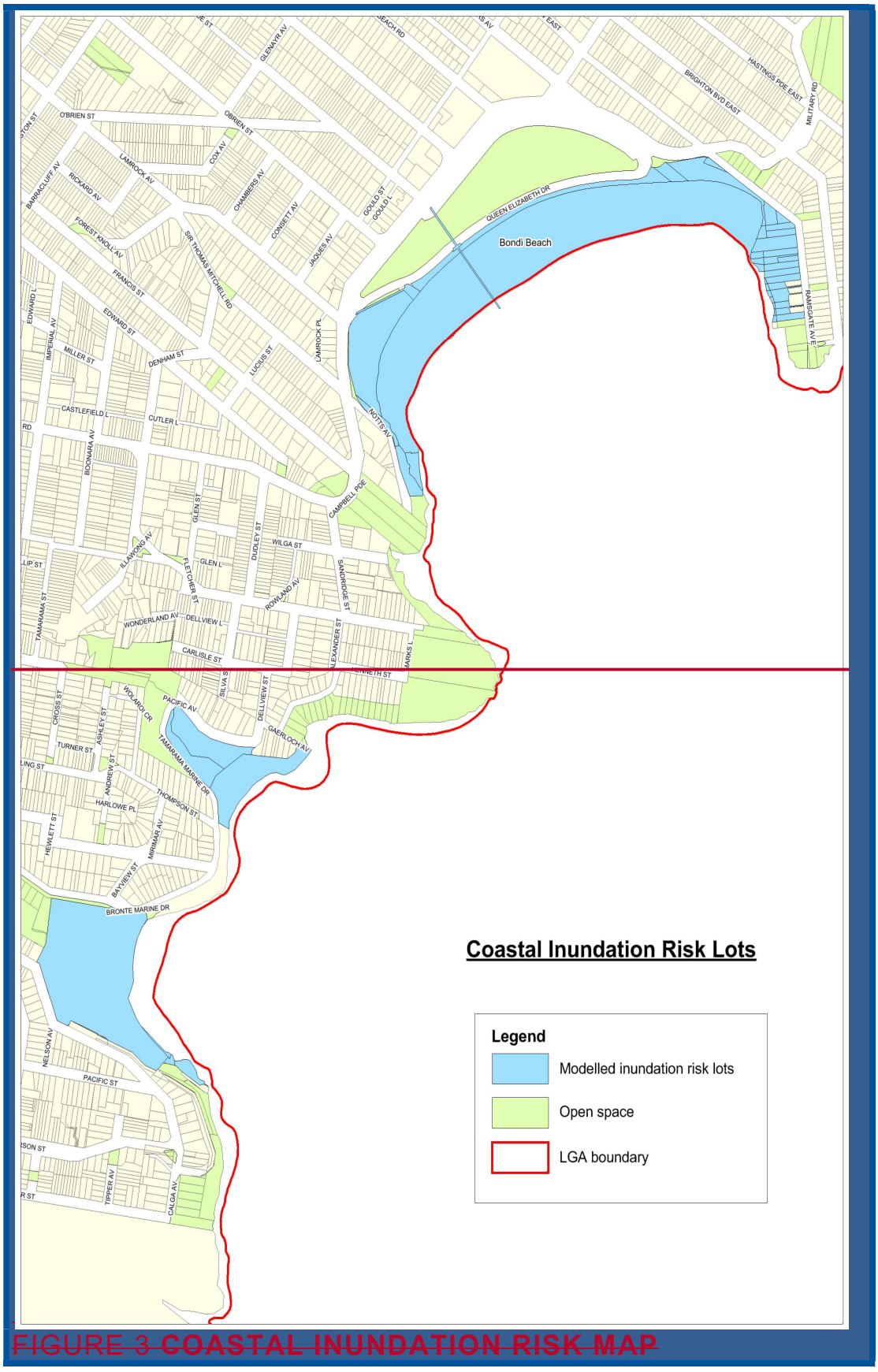


FIGURE 3 COASTAL INUNDATION RISK MAP

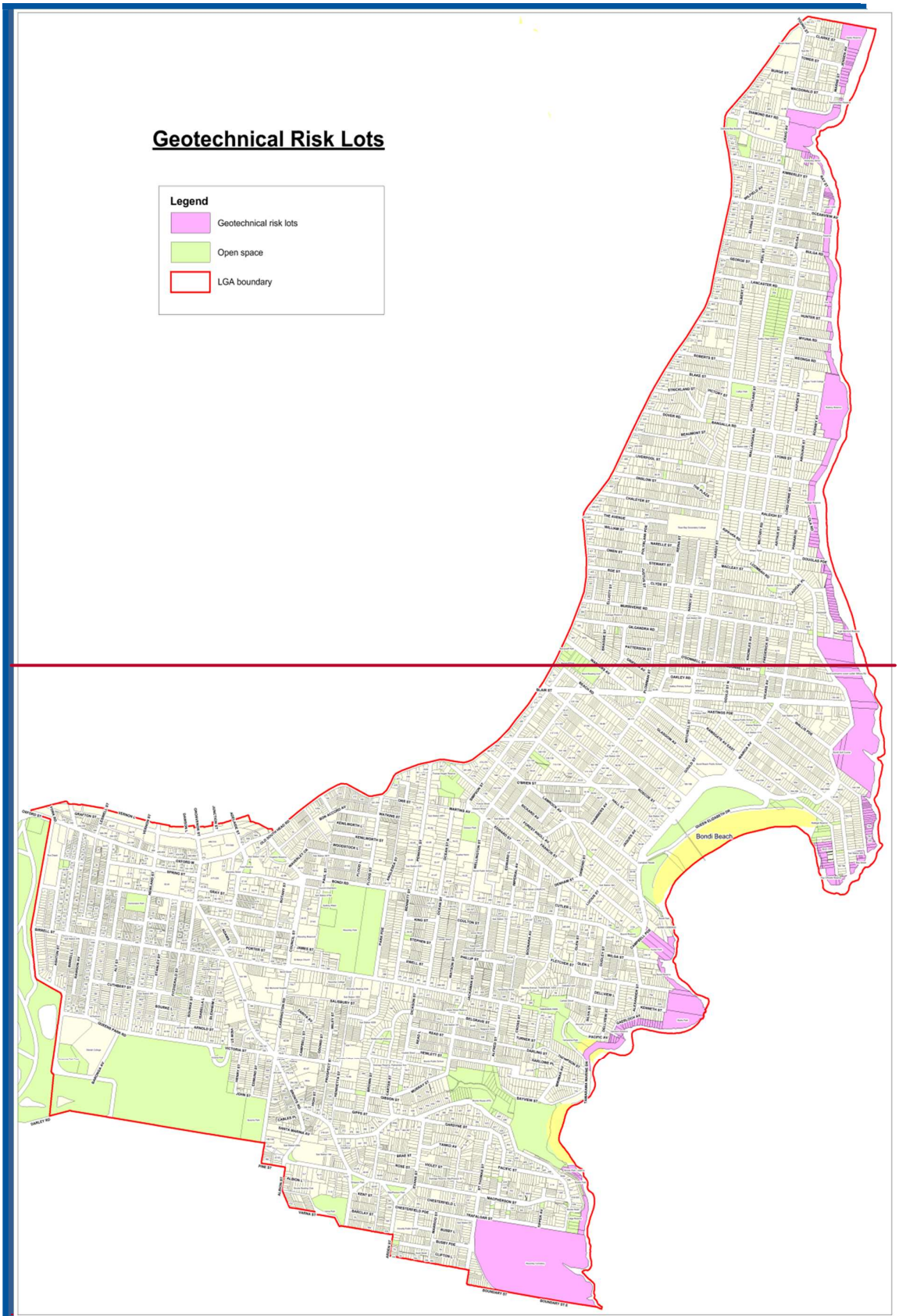


FIGURE 4 GEOTECHNICAL RISK MAP

B5 TREE PRESERVATION

Trees are an integral component of the urban environment. They provide habitat for animals, create a distinctive character for an area, visually soften the built environment and improve the natural environment through improved water infiltration, soil stability and air quality.

This part is to be read in conjunction with *State Environmental Planning Policy (Vegetation) 2017* ~~Clause 5.9 Preservation of Trees of Waverley Local Environmental Plan (WLEP)~~ which outlines additional provisions relating to the protection and preservation of trees and vegetation.

The ~~'~~*Waverley Tree Management Policy*~~'~~ (WTMP) outlines the requirements for all tree and vegetation related activity. Please refer to the WTMP for additional information relating to the protection of trees and the requirements for applicants.

The objectives and controls in this section apply to trees and vegetation on all land. In the first instance, refer to the WTMP for the relevant requirements. Where there is any inconsistency between the WTMP and this DCP, the WTMP prevails.

5.1 GENERAL PROVISIONS

Objectives

(a) To ensure the conservation of trees of ecological, environmental, heritage and aesthetic significance.
(b) To ensure development does not impact on the health of a tree on the site or adjoining properties or street trees.
(c) To ensure all works to trees are conducted in accordance with the relevant Australian Standards.

5.1.1 When consent is required

Controls

(a) Where a development has any potential impact on existing trees an arborist report must be submitted.
~~(a)~~(b) ~~An application~~ Consent is required to do work on any part of a tree above or below ground. This applies to any tree with a:
  (i) Height of five metres or greater and trunk width of 300mm or greater at ground level; or
  (ii) Canopy spread of five metres or greater and trunk width of 300mm or greater at ground level; or
  (iii) Listing on the Waverley Register of Significant Trees.
~~(b)~~(c) An applicant may be able to apply for a complying development certificate if the provisions of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* are satisfied.
~~(c)~~(d) If the tree or other vegetation is, or forms part of a Heritage Item or is within a Heritage Conservation Area, then development consent is required. (Refer to Clauses ~~5.9 and~~ 5.10(3) of WLEP 2012).
~~(d)~~(e) Any person who contravenes, or causes to be contravened, the provisions of ~~this part of this plan~~*Part B5 -Tree Preservation* shall be guilty of an offence. In any proceedings under this plan, it shall be sufficient defence to prove that the tree or trees and vegetation were dying or dead or had become dangerous.

5.1.2 Trees considered to pose an imminent danger

(a) Except for specified emergency situations, expert advice should always be obtained with respect to hazardous trees to confirm their condition.
(b) Where a hazardous tree is removed (in an emergency situation) due to obvious instability or hazard (e.g. following a storm), Council's Rangers must be notified prior to removal. It is recommended that evidence of the tree's condition be retained for a period of at least six (6) months after the event and produced at Council's request if needed. Such evidence might include a:
  (i) Report by a consulting arborist including photographs; and/or
  (ii) Written statement from the State Emergency Services, if the Service carried out the emergency work at the owner's request.

(c) If trees are removed for the above reasons it is a requirement to plant replacement trees of a suitable native species to maintain canopy cover in Waverley.

5.2 PROTECTING TREES ON DEVELOPMENT SITES

Damage to trees on development sites is often caused because of a failure to appreciate their vulnerability, particularly the root system which can decline in health over several seasons following detrimental alterations to the soil environment. It is necessary that development takes into consideration trees both on the site and those on adjoining sites including street trees.

Objectives

(a) To ensure development does not impact on the health of a tree on the site or adjoining properties or street trees in accordance with *Australian Standard – AS 4970 – 2009 - Protection of Trees on Development Sites*.

Controls

(a) When a proposed development may have an impact on trees on the site, on adjoining properties or public trees within 4 metres of the site, the following information is required at these stages:

(i) Pre Development Application.

- Preliminary Tree Assessment.

~~(i)~~(ii) Lodgement of Development Application.

- Arboricultural Impact Assessment (include data if previous preliminary tree assessment submitted);
- Tree ~~Retention Value Report~~Protection Plan – for trees identified as moderate to high retention; and
- ~~For trees identified as moderate to high retention and to be protected an Arboricultural Impact Assessment (includes a tree protection plan).~~Root mapping report if construction works will occur in structural root zone (SRZ) or there is major encroachment in the tree protection zone (TPZ) of trees to be retained.

~~(ii)~~(iii) Prior to Construction Certificate.

- Final Tree Protection Plan (if modifications are required);
- ~~Tree Monitoring Report.~~Tree Protection Certification during works.

(iv) Prior to Occupation Certificate.

- ~~(i)~~ Tree Monitoring Report / Final Tree Protection Certification.

(b) Details of requirements of the above reports are listed in the Waverley Tree Management Policy appendices. Development proposals must show all associated building works (including stormwater, hydraulic and sewerage works) located within any tree protection zone.

(c) Selective pruning or removal of trees that conflict with proposed building works may be approved where redesign of the building work is not possible or will result in inferior building performance. However, Council may require the redesign of a development proposal to retain or lessen the impact on a significant or prominent tree.

5.2.1 Penalties

Any works carried out without approval, not in accordance with an approval or that is not exempt will be dealt with in accordance with the relevant legislation. This may result in a Penalty Infringement Notice or legal action through either the Local Court or the Land and Environment Court against all parties involved in any breach of WLEP or any conditions of approval.

Where a person is guilty of an offence involving the destruction of, injure or damage to a tree or vegetation, the court dealing with the offence may, in addition to or in substitution for any pecuniary penalty imposed or liable to be imposed, direct that person to:

(a) Repair or remedially prune damaged trees;
(b) Plant new trees and vegetation and maintain those trees and vegetation to a mature growth/or minimum height of five (5) metres; and
(c) Provide security for the performance of any obligation imposed under paragraph (a) & (b) above.

Note: *injure a tree means but is not limited to:* poisoning; spilling or washing off toxic chemicals; applying herbicides to a tree or within its Tree Protection Zone; damage to tree roots from stockpiling materials, soil compaction, filling, excavation or altering soil levels within its Tree Protection Zone; wounding to tree trunks or the breaking or tearing of roots or branches; wounding to trunks or branches from fixing objects using nails, wires, staples or similar fastening materials e.g. attaching signs, swings, platforms or cubby houses.

B6 STORMWATER

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.

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

6.1 STORMWATER MANAGEMENT AND WSUD

~~Water Sensitive Urban Design (WSUD) aims to minimise the impacts of development upon the water cycle and achieve more sustainable forms of urban development by integrating stormwater management systems into the landscape. WSUD provides multiple benefits including stormwater retention and detention and water efficiency, whilst addressing the pre-development considerations of flooding, coastal water and groundwater protection, habitat creation and improving visual amenity.~~

For ~~more~~ 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.
~~(a)~~(e) To integrate water sensitive urban design with landscape and building design.
(f) To reduce the volume of stormwater run-off.
~~(b)~~(g) To promote increased on-site storwater retention, detention, and recycling.
~~(c)~~(h) To improve catchment water quality.
~~(d)~~(i) To minimise the impacts of urban development upon water balance and surface and groundwater flow regimes.
~~(e)~~(j) To promote infiltration within the "Infiltration zone" and reduce stormwater run-off (refer to ~~a~~Annexure B in the *Water Management Technical Manual* ~~Technical Manual~~).
~~(f)~~(k) To encourage the use of soft landscaping and permeable paving as an alternative to impervious surfaces.

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 ~~5~~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* ~~WM Technical Manual~~.

(g) Council consent is required for temporary/permanent dewatering and groundwater extraction and use prepared in accordance with the *Water Management* ~~*WM*~~ *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 3500:2003 National Plumbing & Drainage* and *Water Management* ~~*WM*~~ *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.

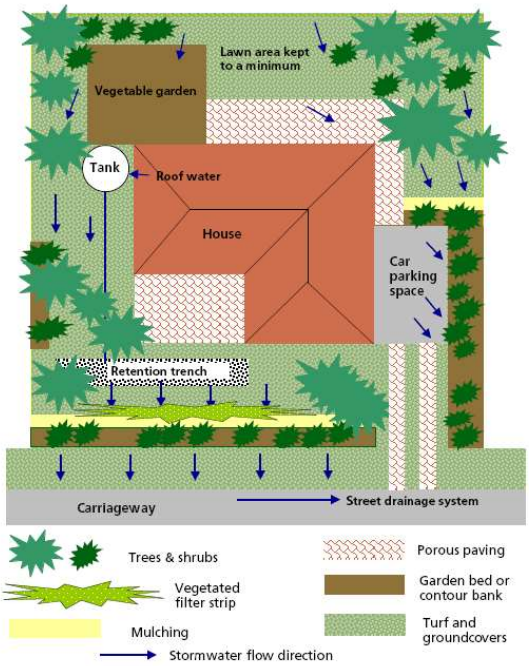


Figure 15 Example of an integrated stormwater strategy for a dwelling

6.2 FLOODING

The WLEP 2012 identifies areas within Waverley that are prone to flooding in a 1 in 100 year Average Recurrence Interval (ARI) flood event. These controls are to be read in conjunction with the WLEP 2012 and the *Water Management Technical Manual*.

Objectives

(a) To ensure that development is not subject to undue flood risk.
(b) To ensure all development in areas identified as 'flood planning area' in WLEP 2012 will minimise the impact of stormwater and flooding on other developments and the public domain.

Controls

(a) In 'flood planning areas', floor levels other than basements must be set at a minimum of 300mm above the predicted design flood level for a 1 in 100 year storm event.
(b) Automatic flood gate systems must be installed for basements in 'flood planning areas'.
(c) For all other areas habitable floor levels must be set at a minimum of 150mm above the level of adjacent ground for habitable areas.
(d) A reduction in the required floor level will only be considered if the development includes the installation of an automatic flood gate system.
(e) Designs must be undertaken in accordance with the *Water Management Technical Manual*.

B7 ACCESSIBILITY AND ADAPTABILITY

~~It is important that buildings are designed to ensure they are safe, accessible and adaptable.~~

This section applies to all development excluding~~This section does not apply to~~ dwelling houses and~~or~~ other ~~similar~~ 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 ~~developer or builder~~ 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 Building Code of Australia (BCA).

7.1 ACCESSIBILITY

~~This Part provides controls for access to buildings and spaces to provide for equitable access for all people including people with a disability, ageing people with mobility difficulties, parents with prams and other people with temporary disabilities, by providing a continuous path of travel through the built environment.~~

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.

~~(a)~~(b) To encourage an accessible path of travel to all development.

~~(b)~~(c) To provide equitable access within all developments.

~~(c)~~(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.

~~(d)~~(f) To ensure ~~T~~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

~~(a) *All Development*~~

~~(b)~~(a) Access is to meet the requirements of the *DDA 1992*, the relevant Australian Standards and the BCA.

~~(c)~~(b) Accessible parking for people with a disability must be provided in accordance with the *BCA* and *AS/NZS 2890.1: 2004 ~~p~~Parking ~~f~~Facilities – Off Street ~~p~~Parking* and *AS 1428: ~~2003 – Design for Access and Mobility Set~~Set 2003* including *AS 1428.1:2009 Design for Access and Mobility*.~~.~~

~~(d)~~(c) An Access Management Plan 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) 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.

7.2 ADAPTABLE DWELLINGS

~~Adaptable housing is accommodation that is specifically designed to enable easy modification in the future for occupation and visitation by people with a current disability or people who will acquire disabilities gradually as they age.~~ This section is to be read in conjunction with *Australian Standard AS 4299-1995 Adaptable Housing.*

Objectives

(a) To ensure adequate adaptable housing is provided for within new residential development to accommodate occupants' changing needs over time.

~~(a)~~(b) To ensure adaptable ~~units~~ dwellings are included within residential development in accordance with the relevant Australian Standards.

Controls

(a) Plans identifying adaptable housing are to be submitted in accordance with the *Waverley Development Application Guide.*

~~(a)~~(b) Adaptable dwellings are to be allocated to all ~~unit sizes~~ dwelling typologies to accommodate various household sizes.

(c) In developments with ~~three or more habitable storeys and~~ 10~~10~~ or more ~~units~~dwellings, 20~~a percentage~~% of ~~units~~ dwellings (rounded to the nearest whole number) shall comply with the provisions of a ~~Class A~~ n adaptable unit as specified in accordance with the *Australian Standard AS 4299-1995 Adaptable Housing*~~Australian Standards~~.

~~(b) , as follows:~~

~~(i) Up to 9 units, the provision does not apply;~~

~~(ii) 10 – 15 units, 1 adaptable unit;~~

~~(iii) 16 – 20 units, 2 adaptable units;~~

~~(iv) 21 – 30 units, 3 adaptable units; and~~

~~(v) 30+ Units - 10% of units.~~

~~(c)~~(d) One accessible car parking space is to be provided for every adaptable residential unit and be a part lot in the strata plan.

~~(d) Adaptable units must be certified as 'adaptable housing units' by an independent, suitably qualified person.~~

7.3 UNIVERSAL HOUSING DESIGN

~~Universal housing design refers to dwellings that are able meet the changing needs of people of different ages and abilities over time.~~ A dwelling of universal design incorporates elements that are 'designed in' from the beginning, thus not requiring subsequent modification or adaptation through the lifecycle of occupants.

~~Universal housing design is different to adaptable housing which is governed by *Australian Standard AS 4299-1995 Adaptable Housing* and is specifically designed to allow for the future adaptation of a dwelling to accommodate the occupant's changing needs over time.~~

This section is ~~intended~~ to be read ~~together~~ in conjunction with the ~~*Apartment Design Guide, which requires the inclusion of universal design features, and the*~~ *Livable Housing Design Guidelines* produced by Livable Housing Australia.

Objectives

(a) To increase the supply of universal housing.
(b) To ensure a suitable proportion of dwellings include universal design features to accommodate the changing needs of occupants over their lifetimes.
~~(c)~~ To promote sustainable development by extending the usability of a dwelling to ~~o~~ meet 'whole of life' needs of the community.
(c) To ensure that residential accommodation includes universal design features as best practice.

Controls

(a) All ~~minimum of 20% of units in a new development~~ dwellings in any new medium or high density residential accommodation are to incorporate ~~the following Liveable Housing Design Guideline's silver level~~the universal design features as outlined below (modelled on the *Livable Housing Design Guidelines Silver Level)*:
    (i) A safe and continuous and step free path of travel from the street entrance and/or parking area to a dwelling entrance that is level;~~.~~
    (ii) At least one level entrance into the dwelling;~~.~~
    (iii) Internal doors and corridor widths that facilitate comfortable and unimpeded movement between spaces;~~.~~
    (iv) A toilet on the ground (or entry) level that provides easy access~~.~~;
    (v) A bathroom that contains a hobless (step-free) shower recess;~~.~~
    (vi) Reinforced walls around the toilet, shower and bath to support the safe installation of grab rails at a later date;~~.~~
    (vii) A continuous handrail on one side of any stairway where there is a rise of more than one metre; and~~.~~
    (viii) Stairways are designed to reduce the likelihood of injury and also enable future adaptation.
~~(b) Where proposed, a~~All universally designed dwellings must be clearly identified on the submitted DA plans.
(b) The incorporation of Gold and Platinum Level design features is strongly supported.

7.4 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.

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 developer.

(b) 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.

B8 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.

Waverley's People, Movement and Places

This Part has been prepared in the context of the Waverley Transport Plan 2017 '*Waverely'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.

~~*When considering applications, the following general principles shall apply:*~~

~~***Strategies***~~

- ~~*New development that generates the need for car parking should provide adequate parking on the site (refer to Table 2).*~~

- ~~*Where it can be demonstrated that new development either does not generate the need for car parking; or that adequate alternate modes of transport are easily available, then on-site car parking may be reduced (refer to Table 2).*~~
- ~~*The provision of car parking on-site may not be appropriate in all locations or circumstances and approval will only be granted where the site and locality conditions permit.*~~
- ~~*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.*~~
- ~~*Where site conditions allow, car parking structures should be located behind the front building line. In some circumstances, car parking structures in front of the building line may not be appropriate for streetscape or design reasons.*~~
- ~~*Driveways and vehicular access should be designed to minimise the loss of on-street parking wherever possible.*~~
- ~~*Car parking for multi storey and other large scale development (residential flat buildings, commercial buildings, mixed use buildings and the like) should be located below ground level.*~~

~~*Waverley Transport Plan 2011*~~

~~This Part has been prepared in the context of the Waverley Transport Plan 2011. The vision of the Waverley Transport Plan 2011 is:~~

- ~~People regularly use public transport particularly for trips to work and our beaches;~~
- ~~Roads and intersections are safer and less congested;~~
- ~~Parking both on street and off street is equitably accessed and effectively managed;~~
- ~~People frequently walk and ride their bikes particularly for local trips;~~
- ~~Public transport, cycling and pedestrian alternatives are improved and encouraged;~~
- ~~All pedestrian routes are high quality, safe and accessible;~~
- ~~Our bike network and facilities are safe and connected; and~~

~~All stakeholder needs for improvement to transport effectiveness and usefulness are appropriately planned and delivered.~~

8.1 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 and significant trees and vegetation on the site and in the surrounding streetscape.
(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:
  ~~(j)~~(i) In Bondi Junction must not protrude above the level of the adjacent street or public domain;
  ~~(k)~~(ii) In other areas, must not protrude more than 1.2m above the level of the adjacent street or public domain.
~~(l)~~(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.
~~(m)~~

8.21 ~~PARKING RATES~~ON-SITE PARKING

~~The controls for car parking vary across Waverley but are generally~~ 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. ~~Based on this, Waverley is divided into two Parking Provision Zones.~~ These zones are summarised in Table 21 and ~~the~~ available via Council's Online Mapping Tool.
~~Parking Zone Map in Figure 6~~

Waverley Online Mapping Tool	
https://planning.waverley.nsw.gov.au/connect/analyst	
Layer	Parking Provision Zone

~~. Note that parking rates and controls relating to dwelling house development are contained in WDCP Part C1 Dwelling House, Dual Occupancy, Secondary Dwelling, Semi-Detached Dwelling and Terrace Development.~~

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-~~dwelling housing~~ 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 ~~Medium~~

Table 21 Parking Provision Zones

Objectives

(a) To provide guidance on the design of on-site car parking.

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%).
~~(a)~~ Vertically stacked parking is only permitted where site constraints (such as horizontal dimensions or vertical relief) prevent full provision of conventional parking.
~~(b)~~(c)
~~(c)~~ S~~S~~tacked parking spaces are to comply with the dimensions for individual spaces and are not acceptable for visitor parking.
(a) 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.

(b) Consolidate basement car parking areas under building footprints to maximise the area available for soft landscaping.
(c) Design parking structures that minimise reliance on artificial lighting and mechanical ventilation.
(d) Provide marked pedestrian pathways with clear lines of sight and safe lighting.

8.2.1 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.
~~(a)~~(e) To integrate vehicle access with site planning and local traffic patterns.
~~(b)~~(f) To minimise potential conflict between vehicles and pedestrians.
~~(c)~~(g) To minimise the size and quantity and visual intrusion of vehicle access points.

Controls

~~(d)~~(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.
~~(a)~~(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.
~~(b)~~(c) Vehicle access points are to be integrated into the building design.
(a) Vehicle access is to be designed to minimise the impact on the street, site layout and the building façade design.
(b) 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.
(c) Vehicle entries are to have high quality finishes and detailing. No service ducts or pipes are to be visible from the street.
(d) Vehicle access may not be required for, or may be denied to some heritage buildings.
(e) New developments are to utilise existing vehicle access points in adjoining developments where possible.
(f) 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.
(g) Vehicle access should be:
  ~~i.~~(i) Located taking into account any services within the road reserve, such as power poles, drainage inlet pits and existing street trees.
  ~~ii.~~(ii) Located a minimum of 10m from the perpendicular of any intersection of any two roads.
  ~~iii.~~(iii) Locate vehicle access a minimum of 3m from pedestrian entrances.
~~(e)~~(h) 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.
~~(f)~~(i) Driveway widths must comply with the relevant Australian Standards.
~~(g)~~(j) 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%).

~~(h)~~(k) Vehicle access ramps parallel to the street frontage will not be permitted.

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

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

~~(k)~~(n) 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.

8.~~21~~.~~21~~ 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.

~~(a)~~ 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).

~~(b)~~(g) 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.

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

(i) T~~t~~he number of spaces for each use on the site is to be calculated separately; and

(ii) T~~t~~he 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.

~~(d)~~ Car parking rates are based on the *RMS Guide to Traffic Generating Developments*, and are provided in Table ~~2~~3. ~~Each parking zone is identified in the Parking Zone Map in Figure 6.~~

~~(a)~~ 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.

~~(b)~~(i)

~~(e)~~ Council may also require on-site parking provision be reduced or removed for development fronting secondary streets or laneways in ~~the Bondi Junction~~ Centres to achieve the relevant objectives of *Part ~~E1.4.2~~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.

(j)

Land Use	Parking Zone 1	Parking Zone 2
Private Vehicle Parking		
Low Density Residential parking space rate per dwelling	≤2 Bedrooms – *Maximum 1* ≥3 Bedrooms – *Maximum 2*	≤2 Bedrooms – *Maximum 1* ≥3 Bedrooms – *Maximum 2*
Medium density residential (2-19 dwellings) parking space rate per dwelling ~~flat building~~ *~~(less than 20 dwellings)~~* Studio 1 bedroom 2 bedroom 3 bedroom +	*Minimum* - 0 *Maximum*~~1.0~~ ~~1.2~~ ~~1.5~~ 0 0.4 0.7 1.2	*Minimum* - 0 *Maximum*~~1.0~~ ~~1.5~~ ~~2.0~~ 0.5 1.0 1.2 1.5
Visitor	1 space per ~~7~~5 units	1 space per 5 units
High density residential ~~flat building~~ (20+ dwellings) parking space rate per dwelling Studio 1 bedroom 2 bedroom 3 bedroom +	*Minimum* - 0 *Maximum*~~0.6~~ ~~0.9~~ ~~1.4~~ 0 0.4 0.7 1.2	*Minimum* - 0 *Maximum*~~1.0~~ ~~1.5~~ ~~2.0~~ 0 0.6 0.9 1.4
Visitor	1 space per 5 units	1 space per 5 units
Business and office premises	Minimum 0 Maximum 0.66/100m² GFA	Minimum 0 Maximum 1.0/100m² GFA
Retail premises	Minimum 0 Maximum 2.0/100m² GFA	Minimum 0 Maximum 3.3/100m² GFA
Other Parking		
Motorcycles	1 motorcycle parking bay per 3 car parking bays (including visitor)	
Car Share	1 car share space can replace a maximum of 4 car spaces in new developments	
Accessible Car Parking Spaces	10% of all car spaces will be accessible in accordance *Part B7 Accessibility and Adaptability.*	

Table 3~~2~~ Car Parking Rates

~~(f)~~
~~(g)~~

8.2.3 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).

8.2.4 Parking for Low Density Residential Development

Controls

~~(i)~~(a) For new dwellings, car parking should not exceed the rates outlined in Table 3.

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

(a) 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) 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.

8.2.5 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 3.
(c) Motorcycle spaces are to be indicated on the plans submitted, and clearly identified for motorcycle use only when the development is completed.

8.21.62 Bicycle Parking

This part should be read in conjunction with *AS2890.3 Bicycle Parking Facilities* 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.

Controls

(a) Parking for bikes is to be provided at the ~~following~~ 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. ~~(refer to Table 3).~~
(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.

~~**Table 3** Bicycle parking rates~~

(c) Council reserves the right to require a greater provision of bicycle parking than indicated in Table 43, where in Council's opinion, the particular nature of the development will generate an increased demand for bicycle parking.
(d) 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.
(e) ~~Where bike parking for tenants is provided in a basement, it~~Bicycle parking is to be located:
    ~~(i) On the uppermost level of the basement;~~
    ~~(ii)~~(i)Close to street level entry/exit points; and
    ~~(iii)~~(ii) Subject to security camera surveillance where such security systems exist.
(f) A safe path of travel from bike parking areas to entry/exit points is to be marked.
(g) Access to bike parking areas are to be:
    (i) A minimum of 1.8m wide to allow ~~passage of a~~ pedestrians and bikes to pass each other (access ways can be shared with vehicles within buildings and at entries to buildings);
    (ii) Accessible via a ramp;
    (iii) Clearly identified by signage; and
    (iv) Accessible via appropriate security / intercom systems.
(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.

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

(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.

Land Use	Bicycle Parking Rates	
	Long-stay / resident/ employee	Short-stay/ Visitor
Residential Development	*Low Density* 1 space per dwelling	*Medium and High Density* 1 space per 10 dwellings
Office	*Employee* 0.45 spaces per 100m^2 GFA	*Visitor* 1 space per 2000m^2 GFA
Retail	*Employee* 0.1 spaces per 100m^2 NFA	*Visitor* 0.4 spaces per 100m^2 GFA
Education (primary, secondary, tertiary)	*Employee* 0.3 spaces per staff	*Student* 0.3 spaces per student
Tourist Accommodation	*Staff and Long Stay* 0.1 spaces per staff / long stay visitor	*Visitor* 1 space per 10 units
Places of assembly / sports facilities / community centres	*Staff* 0.1 spaces per staff	*Visitor* 0.1 spaces per seat
Food and drink premises	*Staff* 0.1 spaces per staff	*Visitor* 0.1 spaces per seat
Healthcare, Childcare, Other	*Staff* 0.1 spaces per staff	*Visitor* 0.05 spaces per visitor

Table 4 Bicycle parking rates

8.32 LOADING FACILITIES

~~There is a need to balance parking and loading and ensure that each development has adequate loading and unloading facilities without impacting on amenity and safety.~~

Objectives

(a) To balance parking and loading requirements.

(b) To provide for adequate loading/unloading facilities without impacting upon amenity and safety.

~~(a)~~(c) To ensure that ~~A~~adequate off street loading and servicing facilities ~~shall~~ are to be provided for all ~~commercial development and any other use~~development where regular delivery of goods are made to or from the site.

~~(b)~~(d) To ensure that ~~T~~the number of loading bays to be provided ~~shall~~ is appropriate for ~~be determined having regard to~~ the scale and type of the use proposed.

Controls

(a) Loading and unloading facilities should be ~~provided~~ available for all commercial premises.

These facilities are to be provided on-site where the provision of such will not adversely affect the character of the streetscape, pedestrian safety or amenity. A nearby off-site loading bay may be negotiated to minimise adverse impacts.

(b) Where possible access to a loading facility must be provided via a laneway or secondary frontage.

(c) ~~.~~The number of loading bays shall be determined having regard to the scale and type of uses proposed. In this regard, details of anticipated volumes and frequency of deliveries is to be provided within the Statement of Environmental Effects submitted with the DA. Table 54 provides for minimum loading requirements.

~~(a)~~(d) The following design principles should be considered in the design of loading facilities including:

(i) The size and layout of the service area must be designed to facilitate operations relevant to the development;

(ii) A service area must be a physically defined area not used for other purposes, such as storage of goods and equipment or parking;

(iii) All vehicles must enter and exit the property in a forward direction;

(iv) Internal circulation must be adequate for the largest vehicle anticipated to use the site; and

(v) Loading facilities must be designed to comply with the requirements of *AS 2890.2 -2002 Part 2: Off-Street Commercial Vehicle Facilities*.

~~(b)~~(e) A development application shall include the following:

(i) The class and dimensions, including height, of the design vehicle accessing the service area.

(ii) Clearance heights between the access driveway and the loading dock(s).

(iii) The dimensions of the loading dock(s).

(iv) Swept wheel paths between the access driveway and the loading dock and the required ~~manoeuvring~~maneuvering areas for both entry and exit movements.

~~(iv)~~ Use	Rate
Offices, commercial premises & professional consulting rooms	1 per 4000m^2 up to 20,000m^2 plus 1 per 8000m^2 thereafter
Residential flat buildings	1 per 50+ dwellings
Retail	1 per 400m^2 GFA
Other uses	Merit Assessment

Table 5 Minimum Commercial Loading Rates

8.43 PEDESTRIAN/BICYCLE CIRCULATION AND SAFETY

~~Everyone is a pedestrian at some stage in their journey. This means pedestrians are a highly diverse road user group which includes children, older people, teenagers, joggers, the disabled and mobility impaired. Pedestrians and cyclists are particularly vulnerable in the road environment because most other road users are moving significantly faster, and pedestrians and cyclists have little or no bodily protection in the event of a collision. As a result, Council places a very strong focus on pedestrian and cyclist safety.~~

Objectives

(a) To ensure priority is given to pedestrian and bicycle movements.
(b) To maintain bicycle and pedestrian safety.
(c) To provide safe and easy access to buildings.
(d) To provide a safe and accessible public domain.

Controls

(a) The location of parking spaces is not to obstruct pedestrian and bicycle access to the premises or major pedestrian and cycling routes.
(b) Within parking areas of ~~larger~~ more than 10 car spaces, segregated routes for main pedestrian and bicycle movements must be created making use of line marking, pedestrian crossings, signage and where appropriate speed humps.
~~(b)~~(c) Provide safe lighting during the day and night. Utilise motion sensors to minimise power consumption.
~~(c)~~(d) Exit points of parking areas of more~~larger~~ than 10 car spaces require the following safety devices installed within the boundary of the property:
    (i) Two stop signs;
    (ii) A white, unbroken line at the exit point appropriate to accompany stop signs;
    (iii) Two fish eye mirrors to improve sighting of pedestrians traversing the public footpath area;
    (iv) Either a boom gate or a speed hump, or both, within 8 metres of the exit point; and
    (v) Clear signage and enforcement of an 8 km per hour speed limit and vehicles' lights being left on within the property.

8.5 GREEN TRAVEL PLANS

A Green T~~t~~ravel P~~p~~lan is a package of actions designed to encourage safe, healthy and sustainable travel options. By reducing car travel, Green Travel Plans can improve health and wellbeing, free up car parking space, and make a positive contribution to the community and the environment.

Objective

(a) To reduce car dependency and encourage safe, healthy and sustainable travel options.
~~(a)~~(b) To remove barriers to active travel for all users of developments.
~~(b)~~(c) To maximise the number of people who walk, cycle or take public transport to and from the development.

Controls

(a) A Green Travel Plan or Workplace Travel Plan is mandatory for all ~~new~~ developments:
  (i) With over 2,500m² for office / commercial/ retail land uses;
  (ii) Including 15 units or more;
  (iii) Where 50 or more employees are proposed; or
  (iv) As deemed necessary by Council.

(b) A Green T~~t~~ravel ~~p~~Plan must include:
  (i) Targets – this typically includes the reduction of a single occupant car trips to the site for the journey to work and the reduction of business travel.
  (ii) Travel data – an initial estimate of the number of trips to the site by mode is required.
  (iii) Measures – a list of specific tools or actions to support and achieve the targets.

For further information on how to prepare a Green Travel Plan or Workplace Travel Plan go to: www.pcal.nsw.gov.au and www.travelsmart.gov.au and the Sustainable Transport Calculator from the Green Building Council of Australia Design & As Built Tool.

8.6 TRAFFIC AND TRANSPORT MANAGEMENT PLANS

A Traffic and Transport Management Plan sets out the procedures to mitigate and minimise the impacts of the development (both construction and operation) on the capacity, performance and safety of the local road network and traffic systems and also addresses the impacts on pedestrians, public transport, parking and cyclists.

Objectives

(a) To ensure an adequate assessment is made of the traffic and parking impacts of development on the surrounding road network and adequate measures to ameliorate the impacts are considered.

Controls

(a) A traffic and transport management plan is required to accompany a development application for the following developments:
  (i) Child care centre;
  (ii) Residential development over 15 units or more;
  (iii) Commercial development with over 2,500m²; or
  (iv) Other development at the discretion of Council.

(b) The study should provide an assessment of the traffic and parking impacts the development proposal may have on the surrounding road network and must address matters such as:
  (i) Current on street parking restrictions and availability;
  (ii) Time of peak demand;
  (iii) Proportion of people using facilities on site;
  (iv) Hours of operation;
  (v) Current traffic conditions;
  (vi) The likely impact of the proposed development on existing traffic flows and the surrounding street system;
  (vii) Safety of pedestrian and vehicular movements in and around the centre;
  (viii) How impacts of drop-off and pick up will be accommodated; and
  (ix) Deliveries to the site.

8.7 CAR SHARE

~~Car sharing enables individuals to reduce or eliminate the need for ownership of a private vehicle. This in turn reduces the space required for car parking and promotes the use of sustainable forms of transport such as walking, cycling and public transport. There is extensive use of car share vehicles in Waverley.~~

Objectives

(a) To provide off-street parking opportunities for car share groups, in balance with competing parking demands.

(b) To support alternative methods of transport and reduce the demand on private car ownership.

(c) To reduce the reliance on private vehicles and the corresponding traffic impact on the road network.

(d) To increase uptake and awareness of car share schemes.

~~(b)~~(e) To encourage share car schemes to locate within developments to provide easy access for residents and workers.

Controls

(a) T~~hat t~~he maximum amount of car parking spaces for a development is inclusive of ~~the minimum number of parking spaces allocated for~~ car sharing spaces.

~~(b) A minimum of 1 car share space is to be provided for every 90 residential units.~~

~~(c) A minimum of 1 car share space be provided for every 50 commercial car parking spaces.~~

(b) Car share parking spaces must be publicly accessible at all times, adequately lit and sign posted and located off the street.

(c) Car share spaces must be in optimum positions within the parking area to allow ease of access to car share vehicles by residents and the public.

(d) Where appropriate, Council may consider the provision of on-street car share spaces in lieu of car parking on site.

~~(e) 1 car share space can be provided in lieu of 3 car parking spaces.~~

~~(f) Car share spaces must comply with the design principles and standards in the DCP and Australian Standards.~~

~~(g) Car share spaces must be in optimum positions within the parking area to allow ease of access to car share vehicles by residents and the public.~~

~~(h)~~(e) ~~C~~Car share spaces must ~~be~~ always be under the ownership of a building's Owners' Corporation as common property.

~~(i)~~(f) Car share spaces must be used and have authorised use by car share vehicles only.

~~(j)~~(g) If a car share space is not taken up by a genuine car share provider, ~~they~~ the space cannot be permanently or temporarily designated for alternative purposes.

8.8 ELECTRIC VEHICLE CHARGING POINTS

Objectives

(a) To accommodate changing technology in the design of developments to provide services for future users.
(b) To accommodate hybrid and electric vehicles by ensuring that adequate charging points for these vehicles are provided in off-street private and public car parking areas.

Controls

(a) For commercial development with car parking, a dedicated space for electric vehicles to be charged should be provided.
(b) Charging point locations are to be identified on DA Plans.
(c) Electric charging points are to have clear signage identifying:
  (i) Location;
  (ii) Fees and charges, if any; and
  (iii) Whether the bay is for public or private use only.
(d) The installation of two 'Level 2' AC fast charging EV charging point/s is required in the common parking areas. The circuit is to be suitably located to provide for convenient, shared access for residential and commercial users. The charging point should:
  (i) Be equipped with 62196-2 Type 2 socket;
  (ii) Provide up to 22kW or 32A three phase charging per port;
  (iii) Be installed on a dedicated circuit;
  (iv) Allow for monitoring and individual billing payment through an OCPP compatible software back end; and
  (v) Provide dedicated space for electric vehicles to park and charge.
(e) The installation of appropriate electrical infrastructure and capacity to allow at least 20% of Lot Owners (Eligible Lot Owner) to charge an electric vehicle at any one time in their own car space. Such infrastructure should:
  (i) Allow for a minimum of 16A single phase charging per Eligible Lot Owner;
  (ii) Be easily accessible for any Lot Owner to run a dedicated circuit to their own car space for the purposes of EV charging;
  (iii) Be monitored by the Owners Corporation or a 3rd party on behalf of the Owners Corporation;
  (iv) Include capacity for a billing system to account for the amount of electricity used; and
  (v) Measure electricity used by using utility grade, NMI registered electricity meters.

B9 HERITAGE

This Part applies to all land identified, and land adjacent to site identified, under Schedule 5 of WLEP 2012~~,~~ where development consent is required.~~When proposing a development in the QPCA applicants need to address Clause 5.10 – Heritage conservation of Waverley LEP 2012 (LEP).~~

Applicants are to achieve the provisions of this Part, and the provisions of the *Waverley Heritage Policy*. Where there are inconsistencies between this Part and other Parts of this DCP, this *Part B9 Heritage* will prevail.

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.

~~The performance criteria and controls in this section prevail over any similar provisions in Part C1 – Residential Development.~~

~~for certain works. This section aims to ensure that all new works are sensitive and cohesive to the identified significance of the heritage item or conservation area.~~

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.

9.1 DEFINING HERITAGE

~~The heritage aspects of Waverley are shaped by nature and local history. They consist of many diverse elements such as parks, beaches, headlands and trees that contribute to Waverley's distinctive character but to a greater extent it relates to buildings and other manmade structures.~~

9.1.1 Heritage Items

A heritage item has cultural significance meaning aesthetic, historic, scientific and / or social value for future generations. All heritage items have been assessed as having significance under the criteria established by the NSW Heritage Branch of the Department of Planning and Environment. The basic criteria of assessment include historic, aesthetic, scientific and social significance, rarity and association with institutions, groups or individuals of importance to the community.

Council supports the retention of heritage items in their significant form and setting whilst allowing sympathetic development to occur. As significance includes the setting, grounds and often the interior of buildings these aspects must be addressed in development applications.

Where new buildings or new building work is to be carried out in the context of a heritage site it is important that the character, quality and value of the setting, streetscape and listed item be maintained.

9.1.2 ~~General~~ Heritage Conservation Areas

A ~~General~~ Heritage Conservation Area contains a group of buildings where historical origins and relationships between various elements create a distinctive character of heritage. The heritage significance may include subdivision and street pattern, form and scale, the consistency of building materials or the common age of the building stock.

~~General~~ Heritage Conservation Areas often contain both Contributory Items and Non Contributory Items. Heritage Conservation Areas respond to natural features including topography, vegetation and views. Such features are considered contributory to the cultural significance of the Heritage Conservation Area and are acknowledged as contributory items. Note, definitions are included at the end of this DCP.

Council encourages the alteration and or replacement of Non Contributory Items in a manner enhancing the defined heritage significance of the Conservation Area. The existence of non-~~-~~contributory items in a Conservation Area is not considered a basis for the introduction of development which is not cohesive with the identified significance of the Conservation Area.

All new development in a heritage conservation area is treated as 'infill development.'~~.~~

Details of Waverley's Heritage Conservation Areas are provided on Council's website.

9.1.3 Landscape Items and Landscape Conservation Areas

A substantial number of items in Waverley are identified as having Landscape Heritage Significance. These include natural and manmade or cultivated elements both of planted and ~~non-biological~~non-biological forms. Landscape ~~i~~items and Landscape C~~c~~onservation A~~a~~reas are to be treated as are other identified heritage items or conservation areas with any development required to maintain and enhance the significance of the landscape item or conservation area.

9.1.4 Archaeological Sites

Evidence of past indigenous and ~~non-indigenous~~non-indigenous land use remains throughout Waverley. Evidence located below ground or concealed within later works is identified as an archaeological site. Many of these sites are identified on the basis of previous land uses providing the potential for discovery of archaeological evidence of past activities. Others contain known subterranean deposits or artefacts identified in the listing.

9.2~~1~~ DEMOLITION & EXCAVATION

Demolition requires Council consent and supporting documentation in accordance with the Heritage Act 1977.

Objectives

(a) To ensure both listed items and buildings which contribute to the significance and character of Heritage Conservation Areas are conserved.
(b) To discourage demolition so as to preserve the value of heritage items and Heritage Conservation Areas for the local community.
(c) That replacement development enhances the character of the conservation area.

Controls

(a) Unless identified alternately, heritage listing of buildings encompasses the whole building and site including outbuildings and boundary enclosures.
(b) Demolition of a heritage item or contributory building in a conservation area will generally not be supported, unless there are overriding reasons such as extreme structural damage.
(c) Demolition of a non-contributory building that detracts from a Conservation Area and replacement with an appropriately designed infill building is generally supported provided the proposed infill development is consistent with the objectives and controls outlined in this Part.
(d) Excavation beneath and/or adjacent to heritage items and/or buildings in heritage conservation areas will only be permitted if it is supported by both a Geotechnical Engineering report and a Structural Engineering report.
(e) Excavation will not be permitted if:
    (i) It will occur under common walls and footings to common walls, or freestanding boundary walls, or under any other part of adjoining land; or
    ~~(c)~~(ii) It will occur under or forward of the front facade.

9.3~~1~~ ABORIGINAL SITES

The *National Parks and Wildlife ~~(NPW)~~ Act 1974 (NPW Act)* is the primary legislation for the protection of some aspects of Aboriginal cultural heritage in New South Wales. Under the *NPW Act*, anyone carrying out an activity must exercise due diligence to determine whether they should apply for consent in the form of an Aboriginal Heritage Impact Permit (AHIP).

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales sets out the steps to be taken in order to:

- I~~i~~dentify whether or not Aboriginal objects are, or are likely to be, present in an area
- ~~d~~Determine whether or not activities are likely to harm Aboriginal objects (if present)
- D~~d~~etermine whether an application for an AHIP is required.

A number of Aboriginal cultural heritage sites occur within Waverley and have been included within the WLEP 2012. Further information on Waverley's Aboriginal Cultural Heritage can be found in the Waverley Aboriginal Cultural Heritage Study on the Council website.

As per W~~averley~~ LEP 2012 clause 5.10, development consent is required to disturb or excavate an Aboriginal place of heritage significance, land known to contain Aboriginal objects, or land which is suspected to contain Aboriginal objects. This Part provides controls to ensure the ongoing management of these sites (refer to Figure 20).

Objectives

(a) To effectively manage and protect currently identified Aboriginal heritage sites.
(b) To protect any undetected aboriginal heritage sites.

Controls

(a) Development on land where there is an identified Aboriginal object as identified in WLEP 2012; is likely to be an Aboriginal object; or is an Aboriginal place of heritage significance; must be supported by an Aboriginal cultural heritage assessment prepared in accordance with the requirements of the ~~*National Parks and Wildlif*~~*NPWe Act* ~~*1974*~~ and include appropriate recommendations to inform the long term management of the item of significance.

(b) Development must be in accordance with the Table 6~~following~~:

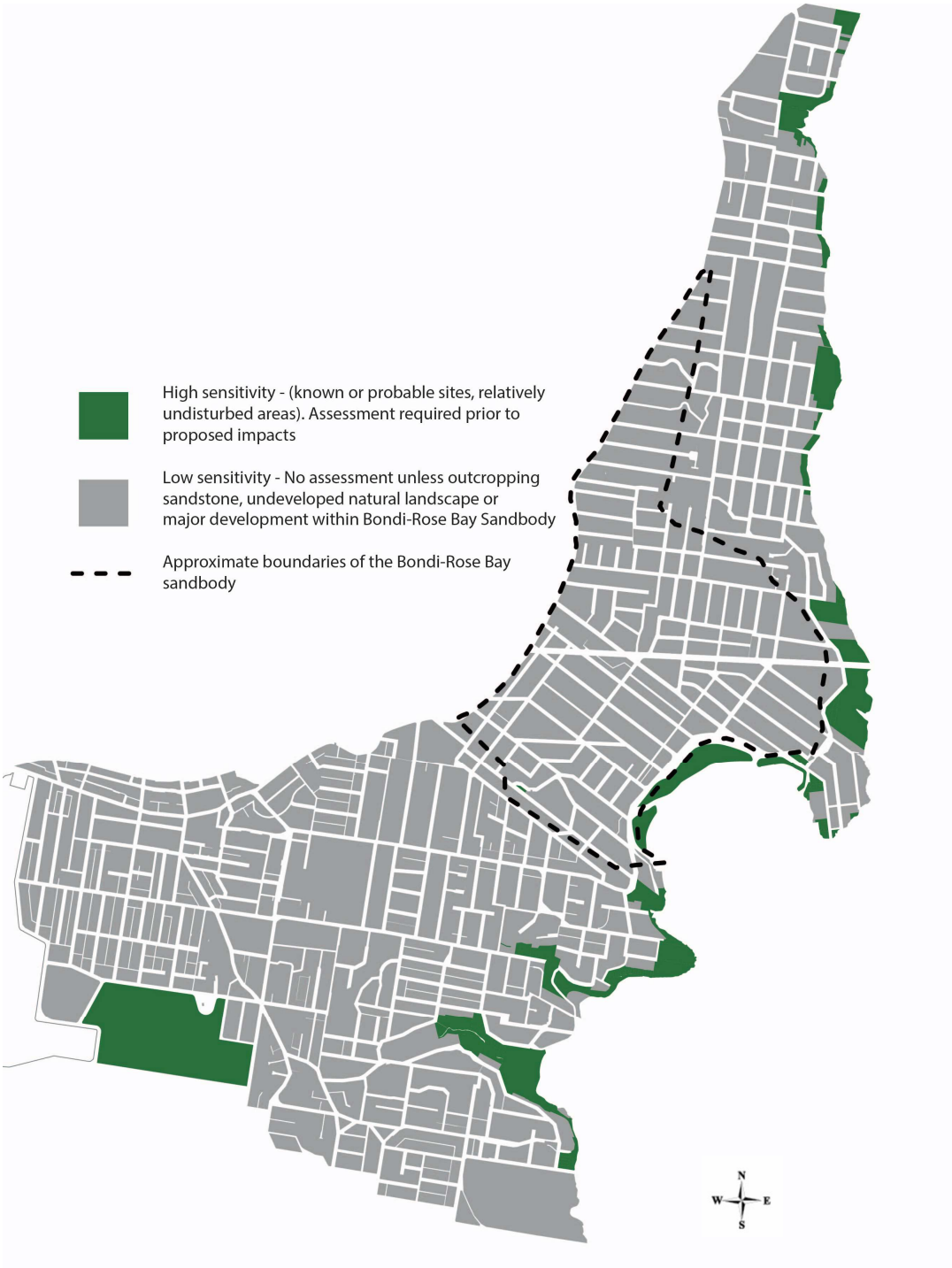
~~(b)~~

Site category	Action required
High sensitivity: Sites identified in the LEP as containing an Aboriginal object or Aboriginal Place of heritage significance, or relatively undisturbed areas where artefacts are most likely located.	(a) Due diligence must be exercised to determine whether an AHIP is required. (b) Development consent required.
Low sensitivity: Any area with outcropping sandstone, undeveloped natural landscape or the Bondi Rose-Bay ~~Sandbody~~Sand body.	(c) Due diligence must be exercised to determine whether an AHIP is required.

Little likelihood: All areas not included in one of the categories above.	(d) No pre-emptive action required.

Table ~~6~~5: Guideline for Aboriginal Cultural Heritage and Development

(c) An applicant must refer to the ~~*National Parks and Wildlife Act 1974*~~*NPW Act* should an Aboriginal object(s) be discovered when undertaking development.



9.~~41~~ HERITAGE CONSERVATION AREAS

Objectives

(a) To promote high quality design that respects and enhances the heritage significance of the conservation area.
(b) To ensure that development respects the original built form, architectural style and character of the conservation area.
(c) To ensure that contributory items are retained and improved.
(d) To promote development that will remove uncharacteristic items, or reduce the extent of their intrusion.

Controls

(a) Development must demonstrate that it achieves any recommendations for the area as detailed in *Annexure B9-1*.
(b) Development is to be compatible with the surrounding built form and urban development pattern by addressing the Statement of Significance outlined in *Annexure B9-1*.
(c) A Context and Streetscape Analysis is to be provided that identifies common elements and features of the area including:
    (i) Topography and landscape;
    (ii) Views to and from the site;
    (iii) Signficiant subdivision patterns, layout, front and side setbacks;
    (iv) The type, siting, form, height, bulk, roofscape, scale, materials and details of adjoining or nearby contributory buildings;
    (v) The interface between the public domain and building alignments and property boundaries; and
    (vi) Colour schemes that have a hue and tonal relationship with traditional colour schemes.
(d) Contemporary design is encouraged and is to incorporate the elements and features as identified in the Context and Streetscape Analysis.
(e) New development is not to be designed as a copy or replica of other buildings in the area.
(f) Development must not include garages or car access to the front elevation of the development where these are not characteristic of the area.
(g) The removal of significant public domain features will only be considered if their retention in situ is not feasible and has been demonstrated in a Heritage Impact Statement.
(h) If significant public domain features are to be removed, they are to be replaced in one of the following ways:
    (i) Detailed and made of materials to match the period and character of the street or park in which they are located; or
    (ii) A contemporary interpretation of traditional elements.

9.5~~13~~ LANDSCAPE CONSERVATION AREAS

Objective

(a) Retain all aspects of Landscape Conservation Areas ~~which~~ that contribute to the identified heritage significance of the area.

Controls

~~*All Development*~~

(a) New works in the vicinity of Landscape Conservation Areas and natural settings are to acknowledge the significant character, detail and context of the setting.

(b) Any new works must consider the visual and physical impact upon the setting.

(c) Any new work should avoid the removal of fabric whether plant material, manmade feature or natural formation and any works likely to cause long or short term impact upon the setting e.g. change in ground water flow, reflected light, illumination of natural planting and stability of natural or manmade features.

(d) The removal of significant public domain features will only be considered if their retention in situ is not feasible and has been demonstrated in a Heritage Impact Statement.

(e) If significant public domain features are to be removed, they are to be replaced in one of the following ways:

(i) Detailed and made of materials to match the period and character of the street or park in which they are located; or

~~(c)~~(ii) A contemporary interpretation of traditional elements.

9.62 CHARACTER AND STREETSCAPE

- ~~To maintain the significance of listed heritage items and conservation areas, development should be designed to ensure any contributory features and characteristics of the building and the streetscape in which they are located are both understood and addressed within the design.~~

Objectives

(a) To reinforce the existing street character, through appropriate dwelling facades, building setbacks, fence and landscaping.

~~(a)~~(b) To ensure t~~T~~hat alterations and additions to the external appearance of heritage items and contributory buildings respect the contributory features and characteristics of the existing building and streetscape.

(c) ~~T~~To allow ~~hat~~ infill development that respects and ~~harmonises with~~complements the existing character of the area.

~~(b)~~(d) To reinforce existing views along streets and from the public domain.

Controls

9.6.1 All Development

(a) Development should identify and respect the contributory features and characteristics of the item or the conservation area and incorporate these features into the design.

(b) The established landscape character of the locality including the height of canopy and density of landscaping should be retained.

(c) Development near a heritage item should respect the visual curtilage of the item.

9.6.2 Heritage Items and Contributory Buildings

(a) Additions should be located to the rear to minimise the impact from the street (refer to Figure 7).

(b) Where the building form, detailing or use of individual buildings of historic character have been inappropriately altered and changed, any application to up-grade or re-use the buildings must clearly demonstrate that the architectural and streetscape value of the building will be enhanced by the proposal.

Figure 7 Sympathetic additions located to the rear

9.6.3 Infill Development

(a) New development and alterations and additions to existing dwellings should be compatible and consistent with development both in the immediate vicinity and in the overall context of the street.

~~(a)~~(b) Contemporary design is acceptable in a conservation area where it is sympathetic to, and respects the context of the conservation area and any heritage item in the vicinity (refer to Figure 8).

(c) New buildings adjacent to buildings of historic character or heritage items should be secondary in prominence to the existing streetscape fabric and draw on the predominant pattern of the existing streetscape.

(d) Where properties have side street or rear lane frontages, alterations and additions reinforce the desirable side or rear streetscape.

(e) Appropriate landscape species and plantings are used to reinforce and frame existing vistas, particularly in the typical north-south street corridors.

Figure 8 Sympathetic infill development

9.74 SITING

~~Front and side boundary setbacks are a major contributor to the character and significance of a heritage item or conservation area. It is important to note the general pattern of setbacks and site planning in the street when siting new buildings or additions.~~

Objectives

(a) To ensure that the existing heritage character of the streetscape including setbacks, siting and landscaping is maintained.
~~(a)~~(b) To maintain the general pattern of setbacks within a street.
~~(b)~~(c) To ensure that adequate curtilage and landscape setting is provided.
~~(c)~~(d) To ensure that the siting of alterations and additions to existing and new buildings retains the integrity of the heritage item, its setting, and the conservation area.

Controls

9.7.1 All Development

(a) Development should conform to the predominant front setbacks in the streetscape.
(b) Front and rear setbacks should ensure the retention of the existing landscape character of the heritage item or conservation area.
(c) Any significant historical pattern of subdivision and lot sizes is to be retained.
(d) Development should respect or utilise the topography and existing vegetation of the land such as rock outcrops and mature trees.
~~(d)~~(e) Building setbacks, terraces, balconies and rooflines are to be consistent within the defined street corridor and provide uniformity to a group of attached dwellings, or mirror an attached semi.

9.7.2 Heritage Items and Contributory Buildings

(a) Extensions should be kept to the rear of the site to minimise the impact upon the streetscape ~~where possible~~.
~~(a)~~(b) If there is insufficient space for a rear extension, side extensions should be setback as far as possible from the street.
(c) Subdivision or site amalgamation involving heritage items or contributory buildings should not compromise the setting or curtilage of buildings on or adjoining the site.
~~(b)~~ .
~~(c)~~(D) Construction, demolition or modification should not adversely affect the existing setting of the item or area.

9.83 SCALE AND PROPORTION

~~Scale and proportion are essential to the character and quality of heritage listed items or buildings in a conservation area. Scale refers to the size of the whole building or any of its parts in relation to each other and to people. Proportion refers to the relationship of height to width or depth of each element or the whole building. A large second storey addition to a single storey house will almost always compromise its scale and proportion and therefore its character and value. Scale and proportion are as important for the smaller elements of a building as they are for the larger elements.~~

Objectives

(a) To ensure that alterations and additions to heritage item and contributory building are~~is~~ consistent with the scale and proportion of the item and/or streetscape.

(b) To encourage infill development that ~~infill development~~ recognises the predominant scale and proportion of the setting and responds sympathetically.

~~(b)~~(c) To promote development that is respectful of the scale of the surrounding buildings and area.

Controls

9.8.1 Heritage Items and Contributory Buildings

(a) Alterations and additions should not visually dominate, compete with or conceal the original scale and proportion of the ~~existing~~ heritage item, contributory building or conservation area.

(b) Alterations and additions should respect the proportions of major elements including doors, windows, roof forms and verandahs (refer to Figures 9-11).

9.8.2 Infill Development

(a) Infill development should be cohesive in scale, proportion and finish to the surrounding streetscape and buildings (refer to Figure 12).

(b) Infill development should maintain and enhance the skyline profiles of established settings.

(c) Where the scale of the roof is much larger than that of adjacent buildings, the roof should be broken up into smaller elements to reduce bulk.

(d) Setbacks should be provided to upper levels.

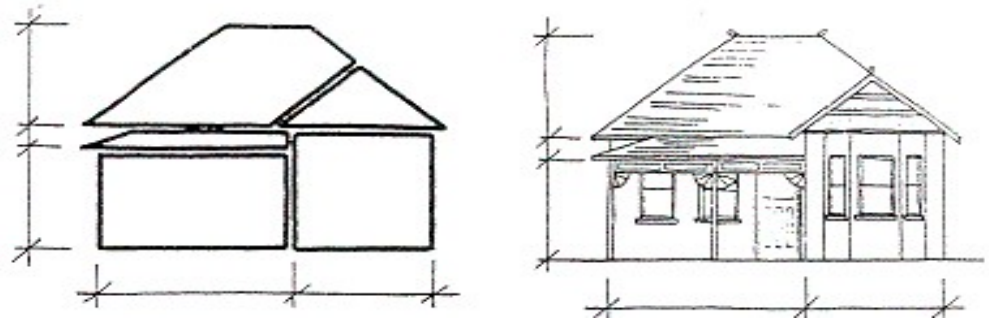


Figure 9 Consideration of scale and proportion

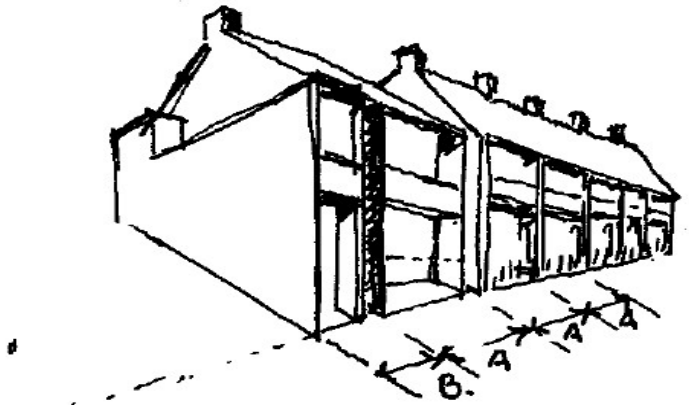


Figure 10 Consideration of scale and proportion within a row of terrace houses

Figure 11 Unsympathetic additions in relationship to the scale of the original dwelling

Figure 12 Sympathetic infill development

9.9 ARCHITECTURAL STYLE

Objectives

(a) To reinforce the various established architectural styles of dwellings through sensitive alterations and additions and appropriate new developments.
(b) To emphasise balance and symmetry in alterations and additions to detached, semi-detached and attached dwellings.
(c) To reinforce the existing pitched roofscape as the desired character of conservation areas and promote consistency in roofing materials.

Controls

(a) New development is to be sympathetic to the established architectural style in the vicinity and preserve the area's character.
(b) Where the existing building or structure contributes to a historical or coherent theme of the street, re-use or refurbishment of the existing building is encouraged.
(c) Alterations and additions to existing dwellings must incorporate appropriate or compatible architectural vocabulary, consistent with the period of the building's original development.
(d) Where a building sits in a row with similar architectural style and details (such as gable, roofscape, entrance, terrace roof, chimney, windows, door, fences), the bulk and rhythm of these details are to be maintained.
(e) Where terrace (attached) and semi-detached dwellings have a small front setback, their façade detail and building elements, such as doors, windows, balustrades, mouldings or tiles are to be sensitively integrated with the streetscape character.
(f) Flat roofs are to be avoided where they detract from the established roof character of the locality. Where they are visible from the street, roofing materials and details shall be compatible with the established streetscape character.

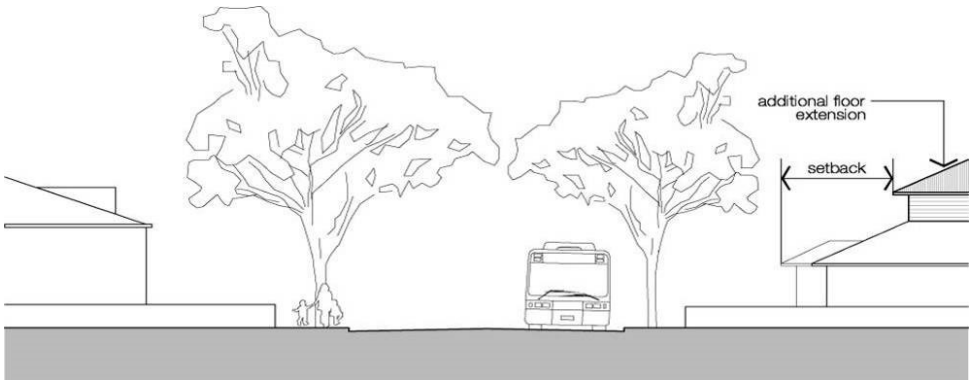


Figure ~~6~~134 An example of alterations and additions which are sensitively undertaken. ~~and are within the existing envelope.~~ First floor additions are set back in order to minimise the impact upon the street character.

9.105 MATERIALS AND COLOUR

~~The construction of the majority of older buildings was solid and well executed. Areas of consistent and notable heritage value are characterised by predominant building materials, textures and ranges of colour, detail and decoration. Detailing and decoration in consistent materials, finishes and colours provide aesthetic quality to listed heritage items and identified conservation areas (refer to Annexure B9-1).~~

Objectives

(a) To ensure that the selection of materials and colours is harmonious with the item or conservation area.

(b) To ensure infill development considers the materials and colours characteristic ~~s~~ of the conservation area.

~~(b)~~(c) To ensure that d~~D~~etailing and decoration is provided in consistent materials, finishes and colours ~~provide aesthetic quality~~ to listed heritage items and identified conservation areas (refer to *Annexure B9-1*).

Controls

9.10.1 Heritage Items and Contributory Buildings

(a) Council may require a proposed colour palette to be submitted with the development application.

(b) Original construction and in particular original finishes ~~should~~ are to be maintained where possible.

(c) Changes to materials on elevations visible from the public domain are discouraged.

(d) Alterations and additions should use materials similar to or compatible with the original material used.

(e) The selection of materials and colours is to be ~~based on an understanding of the original finishes and matches, as closely as possible,~~consistent with those used in the item or conservation area.

(f) Colours for alterations and additions should be consistent or harmonious with existing building to help integrate new and old.

(g) Previously unpainted surfaces should not be painted. Painting of original stone or face brickwork causes fretting and eventually substantial damage as it traps moisture inside. Similarly, clear sealer such as silicone should be avoided.

(h) Original face brickwork and stonework ~~should~~is not to be rendered.

(i) Bricks should match the existing brick and mortar colours as well as the type of joint and brick laying pattern.

(j) New building work constructed of timber should match the existing building elements made of timber (e.g. frames, weatherboarding, fascias, brackets, columns, friezes, etc).

(k) Cast iron or wrought iron elements, should be reinstated where possible. ~~Decorative wrought iron was often used as a substitute early in the 20th century featured in both balustrading and fences.~~

9.10.2 Infill Development

(a) Infill buildings should recognise characteristics materials, textures and colours used locally and in adjacent buildings.

(b) Materials and colours of surrounding buildings need not be simply copied but used as a point of reference.

(c) Modern materials can be used if their proportions and details are harmonious within the surrounding historic context.

9.116 ROOFS AND CHIMNEYS

~~Characteristic roof forms materials and chimneys form part of the aesthetic qualities of buildings. Generally 19th and early 20th Century buildings feature distinctive chimneys and roof forms and finishes. Chimneys located to side and rear areas of buildings serve to provide cohesion to the overall building, the character of the setting and or Conservation Area. Later structures may also feature roof forms closely related to the style and period of construction.~~

Objective

(a) To retain and maintain the characteristic roof forms, finishes and chimneys of heritage items and conservation areas.

(b) To ensure new roof profiles are consistent with the established skyline profiles of the conservation area.

Controls

9.11.1 Heritage Items and Contributory Items

(a) Skyline profiles of original roofs and chimneys should be retained where possible.

(b) Original chimneys are to be retained.

~~(b)~~(c) Where chimneys are paired across party walls, treatment of finishes and detailing is to be consistent between properties.

~~(c)~~(d) Substitution of finishes and removal of details including chimneys is only permitted where Council approves a cohesive replacement finish or detail.

~~(d)~~(e) Attic rooms are to ~~use~~ be wholly within existing roof forms which retain the streetscape appearance of the existing building.

~~(e)~~(f) Roof extensions are to match the existing roof in form, pitch and eaves and be in proportion with the existing building.

~~(f)~~(g) The use of modern roofing materials is discouraged as they can significantly alter the character of the building.

~~(g)~~(h) New tiles or slates should match the existing tiles/slates as closely as possible and concrete tiles are not considered a suitable replacement material.

9.11.2 Infill Development

(a) New roof profiles are to be secondary to the established skyline profiles in the Heritage Conservation Area and are to enhance the established character of the existing skyline (refer to Figure 13).

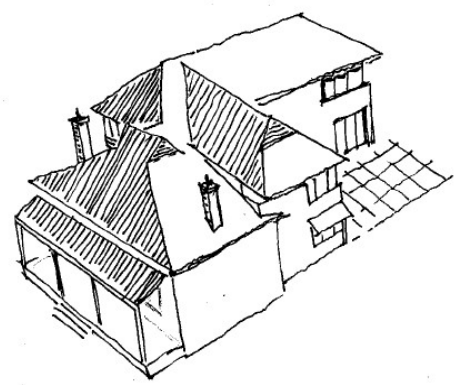


Figure 1~~43~~ New roof forms are to be secondary to the established skyline profile

9.127 VERANDAHS AND BALCONIES

~~Responding to the climate of Waverley, many of the listed buildings and contributory buildings within Conservation Areas retain verandahs and balconies detailed in the style of the original building. Verandahs and balconies form an integral aspect of heritage buildings particularly from the 19th and early 20th Century.~~

Objectives

(a) To ~~encourage~~ ensure the retention and reinstatement of early verandahs and balcony forms.
(b) To ensure that alterations and additions do not detract from original balconies and verandahs.

Controls

9.12.1 Heritage Items and Contributory Buildings

(a) All original verandahs and balconies should be retained and restored (refer to Figure 154).
(b) Infilling or enclosure of verandahs and balconies is not supported.
(c) Additional verandahs should not compete with an original verandah or balcony.

Figure 145 Original verandahs should be retained

9.13 GARAGES, PARKING AND SITE ACCESS

Objectives

(a) To retain the heritage character of the streetscape.
(b) To promote the retention of original front facades, fences, masonry and landscaping that may otherwise be removed for parking.

Controls

9.13.1 All Development

(a) Where car access is available to the rear or side of a property, parking is not permitted within the property frontage.
(b) Where rear lane access to a property exists or is provided, garages and driveways are to be located at the rear.
(c) No part of an existing building is to be demolished or altered in order to accommodate a carport, garage or car space within the front or side setbacks or facades.
(d) Original fences are not to be removed to create car access from the main street frontage unless there is sufficient space to access a side driveway.
(e) Car spaces are not supported between a building and the front boundary. Council may consider an unroofed parking space in exceptional circumstances where it is shown that the space does not dominate the setting of the house.
(f) The form, size, detailing and materials of any new structure are to complement the heritage item, contributory building, or character area.
(g) Where driveways are permitted, pavement materials should reflect the traditional character of the area. Large areas of continuous concrete or asphalt are not to be used, however these materials may be used in smaller areas if designed in appropriate ways. Preferred materials include dry laid paving. Stenciled concrete is not permitted.

9.13.2 Heritage Items and Contributory Buildings

~~(h)~~(a) Development to Heritage Items and Contributory Buildings must not include garages or driveways to the front of the property.

9.13.3 Infill Development

~~(i)~~(a) Infill Development must not include garages or driveways to the front of the property where these are not characteristic of the area.
~~(j)~~(b) Where no rear lane access is provided and it is consistent with the predominant character of the area, garages should be either setback behind the line of the dwelling frontage, or incorporated within the building design (for new dwellings).
~~(k)~~(c) Where the streetscape is dominated by garages located up to the front boundary, garages may be allowed in front of the dwelling. Driveway width shall be minimised to maximise on street parking availability and landscaping used to unify the garage and dwelling with the landform.

9.148 GARDEN ELEMENTS

~~Elements of hard and soft landscaping from the time of original construction form aspects of heritage listing and contribute to the character of Conservation Areas. Garden and boundary retaining walls using coursed local sandstone occur throughout Waverley and form a valued aspect of the areas heritage.~~

Objective

(a) To ensure that the landscape settings and elements of heritage items or buildings within a conservation area are retained or reinstated.
(b) To promote the retention of original soft and hard landscaping to maintain the character of the area.
~~(a)~~(c) To promote the retention of coursed local sandstone retaining walls that are characteristic of Waverley's heritage.

Controls

9.14.1 Heritage Items and Contributory Buildings

(a) Original and contributing elements of hard and soft landscaping are to be retained on heritage listed sites and where occurring in Conservation Areas.
~~(a)~~(b) Where a site contains existing coursed local sandstone retaining walls, the walls are to be retained and incorporated into the overall design.
~~(b)~~(c) High walls or fences and unsympathetic garden treatment (e.g. rockeries, dense plantings that are out of character) are discouraged.
~~(c)~~(d) New hard and soft landscaping is to be provided with regard to the:
  (i) S~~s~~tability of existing significant fabric;
  (ii) R~~r~~etention and enhancement of original hard and soft landscaping; and
  (iii) C~~c~~haracter of the site and/or Conservation Area.

9.~~9~~15 BUILDING FACADES

~~The facade is generally one side of the exterior of a building, especially the front, but also sometimes the sides and rear. The facade of a building is one of the most important elements of a building from a design standpoint, as it sets the tone for the rest of the building.~~

Objective

(a) To retain the existing façades of ~~the~~ original heritage items, contributory buildings or buildings consistent with the character of the area.

Controls

9.15.1 Heritage Items and Contributory Buildings

(a) Where a building façade provides the core character detail and aesthetic qualities of an item the extent of a cohesive alteration and addition may extend to removal of other areas of the listed structure provided the façade remains in conjunction with a full structural bay or room depth and there remains a cohesive interface of new and existing works.

(b) Alteration or removal of original facades which are of heritage significance is not supported.

(c) Proposed works are to be sympathetic to and not detract from the style and character of the building.

9.161 DETAILING

~~Common details within an area establish neighbourly resemblance and contribute to its significance. The significant features and elements of a heritage item or conservation area are often reflected in details such as windows, doors and decorative woodwork, metal work, stonework or cement render. Although it is rarely necessary to make exact copies of original features, attention to the quality of details is important.~~

Objectives

(a) To encourage the retention and maintenance of original detailing to preserve the character and significance of the area or item.

(b) To ensure alterations and additions have a level of detail that is appropriate to the architectural character and style of the heritage item or conservation area.

(c) To ensure infill development has regard to the architectural character and style of the conservation area.

~~(c)~~(d) To promote the retention of historic detailing styles and practices.

Controls

9.16.1 All Development

(a) Landscape details such as fences, garden walls and planting treatment which contribute to the area should be retained where possible.

(b) New windows should match the existing in size and detail, including the existing sill details, window heads, and stained or patterned glass type. Window should not be enlarged or altered.

9.16.2 Heritage Items and Contributory Buildings

(a) Development should be designed to enhance original detailing of buildings.

(b) Original details should be retained and repaired where possible.

(c) Where original details have been removed or replaced with modern materials, consideration should be given to reinstating original features.

(d) Decorative elements should not be introduced on heritage items and contributory buildings unless documentation or physical evidence indicates the elements previously existed.

(e) Alterations and additions should adopt a similar character, which uses external finishes, colours, and textures that complement the heritage fabric, rather than mimic inappropriate decoration or detailing (refer to Figure 16).

9.16.3 Infill Development

(a) Modern details should defer to, and be cohesive with, traditional details that contribute to the character of the area.

Figure 16 Sympathetic detailing of additions.

9.170 FENCING AND GATES

~~Fences and gates to street frontages historically reflected the aesthetic characteristics of associated buildings and provide an important element in the cohesion and quality of streetscapes. Appropriate fencing can unify and make a positive contribution to the character and quality of a street. Boundary fence designs can have a significant impact on the streetscape given their proximity to the street (refer to Figure 15).~~

Objectives

(a) To ensure new fencing is consistent with, and does not detract from, the heritage item or streetscape.

~~(a)~~(b) To retain, repair and reconstruct original fencing.

~~(b)~~(c) To ensure fencing makes a positive contribution to the character and quality of the street.

~~(c) To ensure new fencing is consistent with and does not detract from the heritage item or streetscape.~~

Controls

9.17.1 Heritage Items and Contributory Buildings

(a) Where original fences remain on~~to~~ listed ~~buildings~~ items or within Conservation Areas these are to be retained and enhanced by appropriate maintenance and sympathetic landscaping.

(b) Planting and maintenance of existing planting~~s~~ is to avoid tree or plant growth that damages existing fences or gates.

(c) Fences and boundary walls employing masonry (principally stone or face brick) construction are not to be rendered, painted or coated with other materials unless the finish is known to be a detail of the original construction.

(d) Front fences should not obscure building facades.

(e) New fence heights and form should be appropriate to the character of the heritage item or to the conservation area.

(f) Where an original fence has been lost, new fencing should ~~try to~~ match the original style.

(g) Sandstone fencing and~~,~~ foundations~~, etc~~ should be retained and sympathetically incorporated into any new additions or alterations. Restoration~~-~~/repair of slate /stone must be carried out by specialists.

(h) Low and transparent front fences in front yards are desirable, especially where setbacks are minimal.

(i) Front fences should be of a low or transparent style and where masonry is used it should be no higher than 600mm, while transparent fences may not exceed 1200mm in height.

~~(g)~~(j) Rear fences should be between 1.8m and 2m in height.

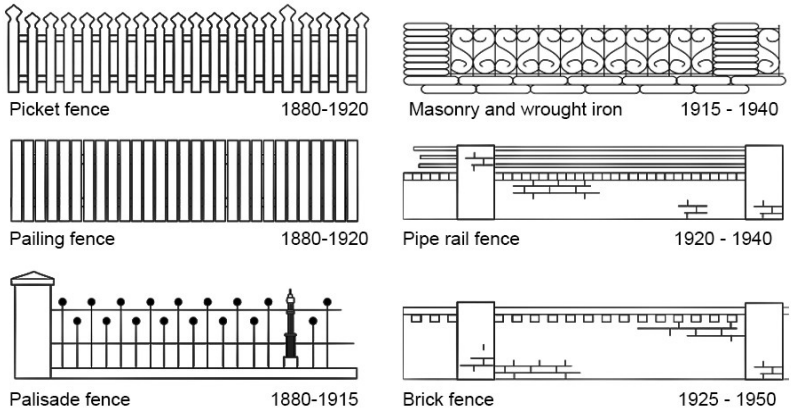


Figure 1~~5~~7 Examples of period fences

Figure 18 Low fences are desirable, especially where setbacks are minimal.

9.18 LANDSCAPING

Objectives

(a) To conserve the existing inner residential street landscape character and view corridors which have been established by the colonnades and canopy of existing street tree planting.

(b) To establish soft landscaping at the front setback compatible with the style and character of the area.

Controls

(a) Unless it is the predominant character, ~~O~~overly dense landscaping or large trees are not desirable in the front setback as they darken the street corridor and undermine the character of the existing street tree plantings (refer to Figure 19~~32~~).

(b) On steeply sloping or split level sites landscaping is to be planted so as to allow for a visual connection between the building facades and the street (refer to Figure 20~~33~~).

(c) Soft landscaping is used to reinforce important character elements in the front of dwellings, especially detached dwellings and larger sites.

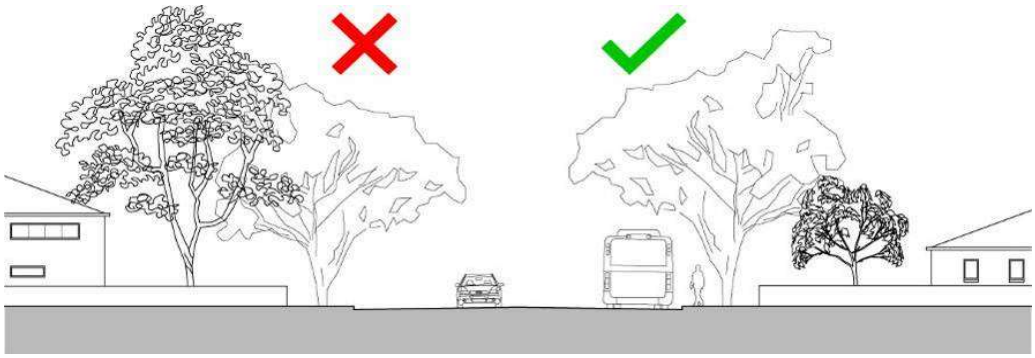


Figure 19~~32~~ Where mature street trees exist, avoid high and over dense landscaping in the front of dwellings.

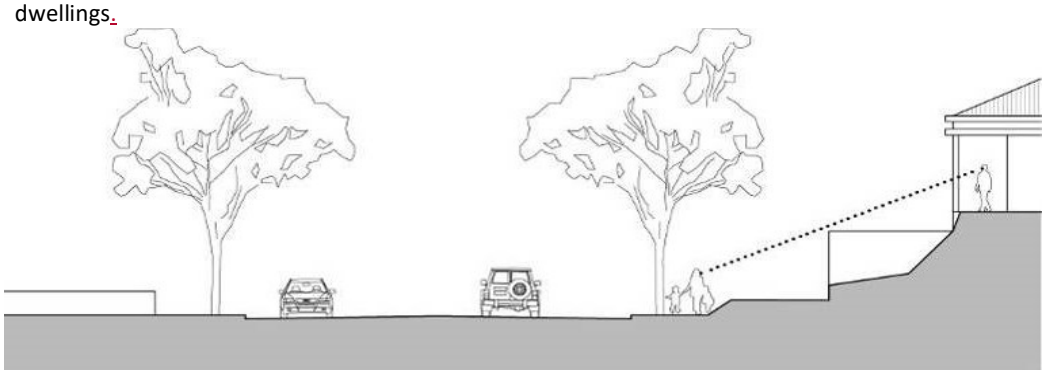


Figure 20~~33~~ A visual connection to the street is important to cultivate surveillance and is in keeping with the established character.

9.193 COMMERCIAL PROPERTIES

~~Waverley's heritage includes commercial and retail buildings and streetscapes from the later 19th and early 20th Century. They provide distinctive settings of grouped building frontages aligned to the street and characterised by distinctive detailing to ground level shopfronts, upper floor workrooms/ residences and parapet lines.~~

~~Shops and other main street structures of the 19th and early 20th Century frequently featured balconies and post supported verandahs extending over the public footpath. Removed in the late 1940's these elements provided key aesthetic aspects of early shopping streets and corner stores.~~

Objective

(a) To ensure that the original characteristics of traditional neighbourhood retail buildings are retained and enhanced.
(b) To encourage the retention of distinctive settings of grouped building frontages aligned to the street.
(c) To promote the retention of distinctive detailing on commercial properties.
(d) To retain original parapet continuity and detailing.
~~(a)~~(e) To retain architectural features and detailing that characterise the period of development.

Controls

9.19.1 All Development

(a) Generally, the facade at street alignment shall comprise a canopied shop front at ground level, and first floor facade above the awning.
(b) The height of the building at the facade shall take into consideration existing parapets and other facade details of established surrounding development.
(c) Additional floors should be setback from the street alignment to ensure a two storey elevation to the facade is maintained where appropriate (refer to Figure 18).
(d) Consideration will be given to a variation of the established alignment in the case of a comprehensive development incorporating a pedestrian open space function.
(e) Developments on corner sites should be designed to accentuate the corner, and provide the transition between one streetscape and the next. Existing corner splays shall be retained.
(f) Signage shall be restricted to under awning shop fronts, awning fascias and as suspended under awning signs.
(g) Signage above the awnings shall be limited to appropriate areas allocated for such a purpose in the original facade design (parapets for example).
(h) Flush mounted, or projecting wall signs shall not be permitted above the awning. Council will give consideration to the architectural qualities of the building when addressing the suitability of the proposed sign.
(i) Pitched or domed awnings of glass or canvas construction shall not be permitted where they interrupt a run of traditional awnings.

Figure 2117 Additional floors should be setback from the street alignment

9.19.2 Heritage Items and Contributory Buildings

(a) Details of earlier shop front features should be retained.

(b) The maintenance and restoration of detailing to commercial/–retail groups is encouraged (refer to Figure 2218).

(c) Horizontal proportions should be considered both in new development, and in the redevelopment of old facades. Consistency should be achieved through:

(i) Pparapet height;

(ii) Sstring course both at parapet level, and to the remainder of the facade;

(iii) Wwindow proportions (sill and lintel height);

(iv) Aawning height and continuity; and

(v) Ttop hamper proportions and window kick plate height.

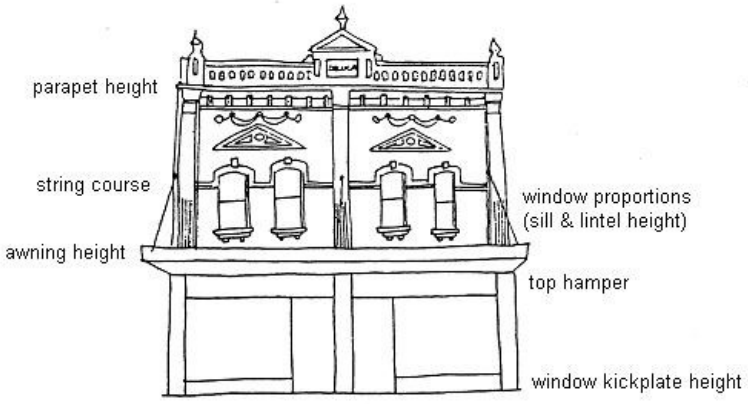


Figure 2218 Overall consistent design of elements

(d) Where shopfront groups are listed as heritage items the following issues are to be considered:

(i) tThe extent and quality of conservation and restoration of street frontages;

(ii) Tthe interface of new and existing works; and

(iii) Tthe impact of new works on the existing fabric, streetscape and overall setting.

(e) Where it is proposed to retain the street facade and construct new works to the remainder of the site, assessment will be based upon the above the impact of skyline profiles on the retained façade the setting and the cohesion of the works (refer to Figure 2319).

(f) Existing shop fronts should not be bricked up or replaced by roller shutters.

(g) Existing box section awnings, either cantilevered, or suspended by tie rods, should be retained.

(h) New awnings should match the form of adjacent awnings and maintain the same alignment, to ensure unity in streetscape details.

(i) Reinstatement of balconies and verandahs to street frontages is supported.

(j) Alterations to individual shop facades above awning level will not be permitted where that facade is part of a homogeneous or symmetrical group of facades.

(k) A row of shops which are homogeneous or symmetrical in style should adopt a uniform tonal distribution over the facade, without limiting the individual expression of colour on each shop.

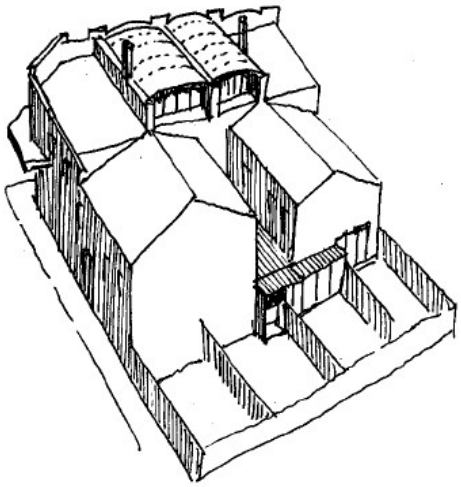


Figure 2319 Rear extensions to commercial properties

9.19.3 Infill Development

(a) New development should conform to the established street front building alignment for the extent of its height.

(b) New under awning shop fronts should be simply detailed with large areas of glazing and narrow mullions/framing.

(c) The height of new development at the street alignment should not exceed the height of existing buildings.

(d) New development should conform to the established street front building alignment for the extent of its height.

(e) New under awning shop fronts should be simply detailed with large areas of glazing and narrow mullions/framing.

B10 SAFETY

The aim of these controls is to ensure that the way in which the site and the buildings within the site are laid out, enhance security and feelings of safety and clearly delineate between private and public space.

This Part should be read in conjunction with NSW Government's Crime Prevention and the Assessment of Development Applications – Guidelines under Section 79C of the *Environmental Planning and Assessment Act 1979*.

The preparation of a Crime Prevention Through Environmental Design (CPTED) assessment is to be prepared in accordance with the *Waverley Development Application Guide*.

10.1 BUILT FORM

~~The design of a building can reduce opportunities for crime and contribute to the security and safety of residents and visitors.~~

Objectives

(a) To provide for a safe environment for residents, visitors and workers and minimise the opportunities for criminal and anti-social behaviour.
(b) To encourage the design and management of the built environment to reduce the opportunity for crime.

Controls

(a) Maximise casual surveillance by orientating buildings towards the street.
(b) Active spaces including windows of habitable rooms within the buildings are to be located to maximise casual surveillance of public spaces such as streets, laneways, parking areas and communal areas such as play areas, swimming pools, gardens and the like.
(c) The design of building details including the provision of fencing, drainpipes and landscaping is to be such that illegitimate access is not facilitated through the creation of footholds, concealment and the like.
(d) Minimise blind corners, recesses and other external areas which have the potential for concealment.
(e) Pathways and entries providing access to, around and within the site should be designed to ensure good visibility for and of the user.
(f) Building entries and mailbox entries are to be clearly visible, easily identifiable from the street and unobstructed.
(g) Pedestrian routes to and from car parking spaces including to lift lobbies are to be as direct as possible with clear sightlines.
(h) All entrance and exits, service areas must be clearly identifiable after dark by appropriate lighting.
(i) All lighting on the site should be designed so it doesn't produce areas of glare and shadow or create a nuisance for neighbours.

(j) Details of all lighting for public areas must be submitted with a development application for multi-~~unit housing~~residential development i.e. details of location, type and intensity.

(k) Ensure landscaping does not jeopardise security of the site by avoiding planting large trees/shrubs which obscures sightlines.

(l) Fencing which is used to delineate private space is to be used in a way which enhances safety by maximising opportunities for casual surveillance between the dwellings and the street frontage.

(m) Materials should minimise opportunities for vandalism.

(n) Flat or porous finishes should be avoided in areas where graffiti is likely to be a problem. Use non porous material such as glazed ceramics or treated masonry products.

(o) Where large blank walls are unavoidable, consider the use of a "green screen" i.e. planting vegetation in front of the wall or using vegetation to cover the wall itself. Alternatively use vandal resistant paint or artwork to reduce opportunities for graffiti or articulate or modulate the wall.

(p) Ensure individual dwellings are equipped with security devices.

B11 PUBLIC ART

~~The inclusion of quality public art and visual art within developments in Waverley contributes to the community's connection with their place and enhances their experience of the public and private domain.~~

This part applies to new developments and major alterations and additions and is to be read in conjunction with the *Waverley Council Public Art Policy* and the *Waverley Public Art in the Private Domain Guidelines* ~~2015 (as amended from time to time)~~.

11.1 PUBLIC ART IN THE PRIVATE DOMAIN

Objectives

(a) To ensure new public spaces include high quality, diverse and creative public art and visual art.
(b) To encourage developments to contribute to the ongoing development of public art and visual art within Waverley.
(c) To increase public art in Waverley for greater community cohesion and understanding of the history, culture and place

Controls

(a) Developments are to incorporate public art in highly visible areas such as public plazas, through site links, and external walls.
(b) Public art is to be integrated into the architectural integrity of a development.
(c) Applicants are encouraged to negotiate the value and type of public art during the Pre-Development Application process.
(d) All privately commissioned public art must be undertaken in accordance with the *Waverley Public Art in the Private Domain Guidelines* ~~2015 (as amended from time to time)~~.
(e) Murals do not require development consent, however must be undertaken in accordance with the *Waverley Public Art in the Private Domain Guidelines*.
(f) Murals that contain marketing or advertising material, or the like, will be treated as signage, and must seek development consent and comply with the provisions of *Part B15 Advertising and Signage*.
(g) Artworks on heritage items or within heritage conservation areas must also comply with the provisions of *Part B9 Heritage*.

B12 DESIGN EXCELLENCE

Applicants are to refer to the relevant design excellence policies as produced by the Government Architect New South Wales, as well as Clause 6.9 Design Excellence of the WLEP 2012.

12.1 DESIGN

Objectives

(a) To ensure development contributes to the architectural and overall urban design quality of Waverley.
(b) To encourage variety in architectural design and character across large developments to provide a fine grain which enriches and enlivens Waverley's public realm.
(c) To identify the key components of good urban design.
~~(a)~~(d) To increase the value of site and context analysis and promote site specific design responses.

Controls

(a) Development is to achieve a high standard of architectural design, materials and detailing appropriate to the building type and location.
(b) The form and external appearance of development is to improve the quality and amenity of the public domain.
(c) Development is to consider and retain view corridors. Development will not be supported where detrimental impacts upon views and vistas is imposed, particularly those views from the public domain.
(d) Development must not have a detrimental effect upon the amenity of public plazas and public open spaces.
(e) Development must consider the following:
    (i) T~~t~~he suitability of the land for development;~~,~~
    (ii) E~~e~~xisting and proposed uses and use mix;~~,~~
    (iii) H~~h~~eritage issues and streetscape constraints;~~,~~
    (iv) T~~t~~he relationship of the development to other development (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity, and urban form;~~,~~
    (v) B~~b~~ulk, massing and modulation of buildings;~~,~~
    (vi) S~~s~~treet frontage heights;~~,~~
    (vii) Environmental impacts such as sustainable design, overshadowing, wind and reflectivity;~~,~~
    (viii) The achievement of the principles of ecologically sustainable development;~~,~~
    (ix) P~~p~~edestrian, cycle, vehicular and service access, circulation requirements;~~,~~ and
    (x) ~~t~~The impact on, and any proposed improvements to, the public domain.

12.2 CONTEXT ANALYSIS

Objectives

(a) To increase the value of site and context analysis and promote site specific design responses.
(b) To ensure that development demonstrates an understanding of an appropriate response to the specific conditions of both the site and surrounds.
(c) To identify the key contextual features and characteristics of the surrounding urban form to which the design should respond.
(d) To ensure that the opportunities and constraints of a site are fully considered and incorporated into the design proposal.

Controls

12.2.1 Context Analysis

(a) A context analysis is to include an analysis of the urban form including but not limited to the following:
  (i) Urban structure - The relationship between buildings, spaces, infrastructure and connections, landform, topography and natural features.
  (ii) Urban grain - The subdivision pattern, the scale and configuration of streets and lots, and the rhythm of buildings and spaces.
  (iii) Density and Mix - The amount of development and the range of uses in relation to the site's location and size; and its accessibility and proximity to other uses.
  (iv) Height and massing - The scale, arrangement, volume and shape of buildings in relation to humans, other buildings, structures, spaces, skylines and views.
  (v) Building type - The building footprint, its layout, circulation and access, and its functional relationship to adjoining spaces and buildings.
  (vi) Façade and interface - The relationship and expression of the external faces of the building, its rhythm and pattern of openings, expression of entries, corners and roofscape, setbacks and boundary treatments.
  (vii) Details and materials - The techniques, craftsmanship and detail of building components, and how the proposed selection of materials relate to the context through colour, pattern and treatment of materials including durability, sustainability and contextual fit.
  (viii) Streetscape and landscape - The surrounding built and natural context, including street elevation, building typologies and their spatial and locational characteristics, treatment of street/boundary interfaces, microclimate, ecology and biodiversity. Relate the analysis to how the proposed development contributes to the streetscape and landscape of the area.
  Social and economic fabric - Non-physical aspects of urban form including the productive capacity and economy of the community, cultural and social factors such as health and wellbeing, and community interaction.

B13 SUBDIVISION

These ~~lot frontage controls~~subdivision provisions supplement the WLEP 2012 provisions on minimum lot size. The provisions apply to Torrens Title subdivision, not Strata Title Subdivision.

The WLEP2012 permits subdivision with consent, however applicants should also refer to *State Environmental Planning Policy (Exempt & Complying Development) 2008* which enables some forms of subdivision as exempt or complying development.

Objectives

(a) To maintain the established character of low density neighborhoods occupied by dwelling houses, semi-detached dwellings, attached dual occupancies or a mixture of these housing types.

~~(a)~~(b) To ensure that ~~land~~ subdivision or amalgamation respects the predominant ~~subdivision and~~ development pattern of the locality.

(c) To ensure that ~~land~~ subdivision or amalgamation results in~~creates~~ allotments that have adequate width and configuration~~,~~ to ~~devlier~~deliver suitable building design and to maintain the amenity of the neighbouring properties.

(d) To prevent the fragmentation of land that would prevent the delivery of permitted uses on the lot.

(e) To ensure that subdivision results in lot sizes that protect natural or cultural features including heritage items, protected ecological communities or species, and retain special features such as trees and views.

(f) To avoid increasing the community's exposure to coastal hazards by minimising the number of residents living within areas that are at risk from coastal hazards.

(g) To ensure that subdivision and amalgamation result in lots that can achieve compliance with all other relevant DCP controls.

(h) To ensure that the creation of new lots does not result in a reduction of pedestrian or vehicular connectivity within the existing street network and provides a safe network.

~~(b)~~

(i) To minimise any likely impact of subsequent development on the amenity of neighbouring properties.

Controls

(a) ~~The~~ Minimum lot size~~s controls~~ are contained in ~~the~~ WLEP 2012.

(b) Where a proposed development involves the creation of a new lot, or number of new lots, capable of accommodating new buildings, the development application should be accompanied by at least a conceptual plan of the new building(s).

~~(a)~~(c) Applications must demonstrate that the following has been considered:

(i) Site topography and other natural and physical features;
(ii) Existing services and easements, or the need for new easements;
(iii) Vehicle access;
(iv) Any land dedications required (e.g. road widening);
(v) Existing vegetation;
(vi) Potential flood affectation and stormwater management requirements;
(vii) Existing buildings or structures; and

(viii) Heritage Items, Conservation Areas and adjoining Heritage Items.

~~(b)~~(d) Any resulting lots must have characteristics similar to the prevailing subdivision pattern of lots fronting the same street, in terms of area, dimensions and orientation.

~~(c)~~(e) All resulting lots must have at least one frontage to the street, and adequate vehicle and pedestrian access.

~~(d)~~(f) Applications must demonstrate that any resulting allotments can facilitate development as per the zoning and controls on the land. This includes setbacks and open space provisions.

~~(e)~~(g) Subdivision or amalgamation must not result in the isolation of lots or reduce the development potential of adjoining land.

~~(f)~~(h) Applicants may be required to submit plans that clearly identify the future development potential of adjoining land to ensure its development potential will not be adversely impacted.

(i) Subdivision or amalgamation must not compromise any significant features of the existing or adjoining sites including streetscape character, landscape features or trees.

(j) Subdivision must not result in the creation of a new lot that contains significant site features that would render the land unable to be developed. For example the creation of allotments that are burdened by easements, flooding, or significant trees.

~~(a)~~(k) The isolation of parcels of land for the purpose of environmental protection only is not permitted. This land must be incorporated into any future development and maintained by the landowners.

(l) Public lanes and public pedestrian passageways are not to be amalgamated with private land.

(m) Where a rear lane is provided to adjoining land, the laneway configuration must be continued through any new allotments and existing access arrangements to adjoining land maintained.

(n) Subdivision must not create battle-axe or hatchet shaped allotments.

B14 EXCAVATION

Objectives

(a) To minimise the impact of excavation on the natural environment, neighbouring properties, and streetscape.
(b) To ensure the physical environment is preserved and enhanced through minimal site disturbance and the geotechnical stability of landfill and excavations.
(c) To minimise cut and fill on sloping sites.
(d) To encourage good quality internal environments including natural light and ventilation.
(e) To prevent use of subterranean spaces as habitable rooms.
~~(b)~~(f) To prevent development exceeding the maximum car parking controls.
~~(c)~~(g) To ensure excavation does not adversely impact land stabilisation, ground water flows and vegetation.
~~(d)~~(h) To minimise structural risks to adjoining structures.

Controls

(a) Minimise elevation of sloping landscaping and cutting into the street's stone wall.
(b) Minimise excavation of sloping landscaping on sites by avoiding raised garage platforms and landfill.
(c) Where excavation or land infill is inevitable, the work should minimise the loss of sloping landscaping, exposed bedrock, sandstone retaining walls and important remnant mature landscape species.
(d) Any habitable room of a dwelling must have ample openings to an external wall for light and air.
(e) Step retaining walls in response to the natural landform to avoid creating monolithic structures, particularly where visible from the neighbouring dwellings and the public domain.
(f) For sites with significant slopes a split-level building design is to be used to minimise excavation and backfilling.
(g) Fill is not to be used to raise the ground level.
(h) Excavation should not add to the visual bulk and scale of the building.
(i) Excavation should not result in the loss of naturally occurring sandstone.
(j) Excavation for garaging within sandstone walls facing the street must be minimised to preserve as much of the original wall as possible.
(k) Development should accommodate stormwater detention tanks and storage systems within the excavated area.
(l) Excavation is not permitted within 900mm of side boundaries and shall only occur within the building footprint, except where access to a basement car park is required.
(m) Basement car parking is to be located fully below natural ground level. Where this cannot be achieved due to topographic constraints, a maximum protrusion above ground of 1.2m is permissible (refer to Figure 25).
(n) Existing natural features including trees and sandstone walls should be retained and incorporated as landscape features on the site in order to maintain the natural character of the landscape.

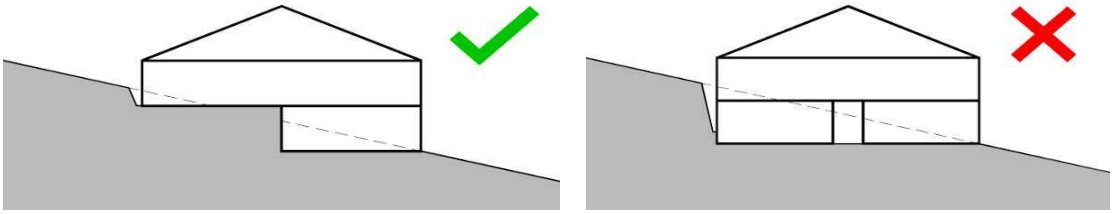


Figure 24 Habitable rooms are to have ample openings to an external wall for air and light.

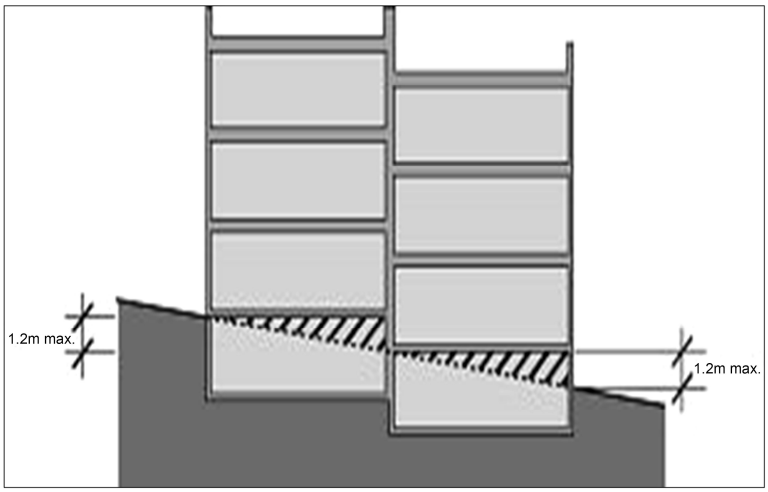


Figure 25 Basement parking level on sloping sites

B15 ADVERTISING AND SIGNAGE

This Part specifies objectives and requirements for the erection and display of advertising signs. The controls within this section should be read in conjunction with *State Environmental Planning Policy No.64 – Advertising and Signage* (SEPP 64), *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* (Codes SEPP) and WLEP 2012, which define what can be carried out as exempt development and override these controls.

15.1 DESIGN AND LOCATION

~~Signage helps people find their way, as well as provide an opportunity for businesses to be easily identified. It is necessary for the design and location of signage to consider the existing character of an area to ensure the signage complements the area.~~

Objectives

(a) To promote innovative, unique and creative signs that support retailers or businesses.
(b) To deliver and maintain a high quality and cohesive public domain.
(c) To maintain the architectural integrity of the subject building and adjacent buildings.
(d) To ensure signage respects the architectural style of the building, contributes to the character of streetscape and is consistent with land uses.
(e) To reduce energy consumption and minimise the negative amenity impacts of illuminated signs and advertisements.
(f) To ensure the amenity of any adjacent non-commercial or residential uses.
(g) To ensure the safety of pedestrians and traffic.
~~(h) To ensure outdoor advertising does not cause loss of amenity or have a detrimental effect on the natural or built environment or the safety, appearance or efficiency of any public area.~~
~~(i) To ensure advertising signs or structures do not intrude upon the use and enjoyment of any retail/commercial precinct by shoppers and adjoining residents~~
~~(j) To maintain the architectural integrity and unity of building facades, roofscapes, streetscapes.~~
~~(k)~~(h) To ensure the harmony of signage with other features, having particular regard to the ~~any sign has regard to the~~ size and juxtaposition of other signs in the immediate vicinity.

Controls

15.1.1 General Controls

(a) Signage is to relate to the use of the building on which it appears and be designed to complement the established streetscape character, and not detract from significant views or vistas.
(b) Signage is to be integrated into the architectural design of the building, awning or shop front~~. The signage must complement the materials, fenestration,~~

~~colours and architectural features of the relevant building, awning or shop front, without dominating or compromising the integrity of these components~~ (refer to Figure 26~~1~~).

(c) Where original sign panels have been incorporated into the parapet of the building facade, these should be used to identify the name or nature of the business only and not be used for advertising.

(d) Signs should not obscure decorative forms or moulding and should observe a reasonable separation distance from the line of windows, doors, parapets, piers and the like.

(e) The colour used in the design of a~~n advertising~~ a sign or structure should reflect the colour scheme of the building to which it will be attached.

(f) Corporate colours should be limited to the advertising sign or structure.

(g) Careful consideration should be given to the use of illuminated red, green and amber colours in proximity to signalised intersections.

~~(h) The following types of advertising and signage are not permitted:~~

~~(i) Bunting;~~

~~(ii) Banners;~~

~~(iii) Inflatable signs; and~~

~~(iv) Sky or roof signs.~~

~~(i)~~(h) Council may give consideration to temporary advertising in the form of bunting, banners, inflatable or canvas signs for special events provided that the temporary display period does not exceed four weeks.

~~(j)~~(i) Illuminated signage is to have no direct adverse impact on the amenity of residential properties.

~~(k)~~(j) Illumination of signs by floodlighting is preferable over the use of boxed fluorescent or neon lighting on buildings and places of architectural significance.

~~(l)~~(k) The use of neon tubing to highlight the features of a building is not permitted.

~~(m)~~(l) Flashing, moving or 3-D signs are not encouraged and will only be considered where permitted in ~~-~~this Part~~-~~ and after practical demonstration and a detailed assessment of any adverse impact on the amenity and character of the neighbouring area.

~~(n)~~(m) Signs are to be of a size and proportion that complement the scale of the existing façade, as well as surrounding buildings and signs.

~~(o)~~(n) Signage must not have a combined area in excess of 20m^2.

(n) The following will not be permitted:

(i) Wall signs projecting more than 300mm from the wall.

(ii) Flashing or moving signs.

(iii) Advertising on display window piers or below the display window sill/kick plate.

(iv) Sky, roof, or fin signs.

(v) The display of bunting, banners, canvas, or fabric signs.

(vi) Inflatable signs and the like.

(vii) Advertising on garbage bins, telegraph posts, telephone booths, or other surfaces of a public nature.

(viii) Any sign which in Council's opinion, would adversely affect the operation of traffic lights, motorists or obstruct their vision.

(ix) Third party advertising.

(x) A-Board (sandwich boards).

(xi) Advertising on canvas shade blinds.

(xii) Signs that extend over street frontage boundaries, unless approved in conjunction with a shop which is built to the street alignment.

~~(p)~~

Figure ~~1~~26 Types of signage

~~15.1.1 Siting~~

~~(a) A flush wall sign should not span across window openings or a facade bay.~~
~~(b) Signs should not extend over street boundaries, unless approved in conjunction with a shop which is built to the street alignment.~~
~~(c) Any sign which in Council's opinion would have an adverse impact upon traffic lights, or obstruct/distract motorists' vision at an intersection shall not be permitted.~~
~~(d) A-Board (sandwich boards) signage is generally not permitted on public footpaths or roadways. Council may however approve the use of A-Board signs on public footpaths and roadways where the placement of such a sign would not impede pedestrian or vehicular traffic.Shopkeepers located within shopping~~Shopping arcades are encouraged to ~~jointly~~ erect a business directory ~~instead of the incremental placement of A-Boards.~~at each entrance.

~~15.1.2 Size and Proportion~~

~~(a) Signs should not be of a size or proportion which significantly affects the existing façade.~~
~~(b) Signs having an area in excess of 20m^2 will not be permitted.~~
~~Signs are to have a maximum total area of 1.1m^2 for each metre of frontage (up to a maximum of 20m^2) of a building and part thereof to any public road. Where the site has a frontage to two streets the same factor shall apply to the second frontage.~~

15.1.~~3~~1 Third Party Advertising

(a) Advertising on garbage bins, telegraph posts and other surfaces of a public nature is ~~prohibited~~not permitted, except by prior contractual arrangement with Council.

(b) Advertising signage on buildings and shop fronts must only relate to businesses operating within the same building or shop. Third party advertising is ~~prohibited~~not permitted.

(c) Where multiple occupancies exist within a single building or shop front, a coordinated scheme for all advertising and signage is required.

~~(c)~~ Council will not approve third party advertising. Signage must relate to the use of the building or land it is on.

15.1.2~~4~~ Number of signs

(a) Signage should not dominate the façade of buildings.

~~(a)~~(b) The number of signs per building or site will be ~~based on~~ assessed~~ment~~ on~~of~~ the following ~~factors, the~~:

(i) N~~n~~umber of existing signs;

(ii) P~~p~~roportion of solid (wall surface area) to void (window and door openings) available for signage;

(iii) L~~l~~ength of frontage of the premises; and

(iv) E~~e~~xtent of facade detail and dimensional relief on the building which should not be obscured by signage.

15.2 SITE SPECIFIC CONTROLS

~~It is important that signage considers the existing character of the area and provide signage that complements this character.~~

Objectives

(a) To ensure ~~advertising~~ signage is compatible with the intensity of use in each land use zone and does not detrimentally affect the appearance of the site or adjoining land.

~~(a)~~(b) To ensure that signage complements the existing character of the area.

Controls

15.2.1 Residential Zones

(a) Any signage within a residential zone shall relate only to premises situated on the subject land and may specify any of the following:
  (i) T~~t~~he purpose for which the land is used;
  (ii) I~~i~~dentification and description of a person carrying on an occupation or business on the premises; and
  (iii) ~~p~~Particulars of the goods or services dealt with on the premises.

(b) Signs should be carefully designed to blend in with the established residential character ~~and not unduly attract attention~~.

(c) Illuminated~~ion~~ and electronic signs are~~is~~ not permitted.

(d) A sign must not exceed 1m x 0.7m in size. The sign shall be affixed to the front façade of the dwelling or to the front boundary wall or fence.

(e) In circumstances where there is no front fence, or where an existing fence does not have sufficient height to display a sign, and where the dwelling has a significant setback from the street front, Council will give consideration to the erection of a pole sign, having a height not greater than 2.8m. ~~Proportions of the sign shall not exceed 1m x 0.7m and not extend over the property boundary.~~

15.2.2 Bondi Junction

(a) Illuminated signage on buildings exceeding eight storeys is visible from the Harbour. Notwithstanding its regional significance, it is not intended that Bondi Junction compete with the established illuminated skylines of the City of Sydney or North Sydney. Any corporate advertising on the Bondi Junction skyline should only be for the purpose of serving the immediate region.

15.2.~~2~~3 Campbell Parade

(a) Projecting wall signs or flush wall signs above the awning of shops fronting Campbell Parade are ~~prohibited~~ not permitted with the exception of building identification signs.

~~(a)~~(b) Building identification signs ~~These~~ shall be ~~in~~ painted ~~form~~, identifying only the name of the building, and ~~shall~~ be traditionally located within the building parapet as a feature of the building.

~~(b)~~ Generally, neon signage is encouraged on window shop fronts and for under awning signs as an alternative to fluorescent illumination.

15.2.~~24~~ ~~.3~~ Wairoa Avenue in the vicinity of Wallis Parade

(a) Neon signage may be permitted inside the window display area, provided it is not animated or flashing, due to the proximity of these shops to adjacent residential development.

(b) No illumination or electronic signs above the awning will be permitted.

15.2.54 Neighbourhood shops

(a) In areas located within *Part E3 ~~—~~ Local Village Centres* or where shops or commercial premises exist in residential zones, such premises shall be restricted to the display of the following signs:
   (i) One under awning sign;
   (ii) An ~~A~~awning fascia sign;
   ~~(ii)~~(iii) Projecting wall sign;
   ~~(iii)~~(iv) Window signage; and
   ~~(iv)~~(v) One flush wall sign to each frontage or one top hamper sign having maximum dimensions 3m(W) x 1.5m(H).

(b) Flush wall signs shall not be permitted on side walls facing adjoining residences (refer to Figure 27~~2~~).

(c) Animated, flashing signs and lights are not permissible.

(d) Electrical conduits to illuminated signs are to be concealed or integrated into the relevant sign.

(e) Shops shall consider the use of branded canvas shade blinds under the awning, in place of above awning advertising signs, as a means of retaining an appropriate neighbourhood scale. Such signage shall relate to the display of product logos and not involve the promotion of sales or specials. Signage shall occupy a maximum of 60% of the surface area of the blind and not involve fluorescent or iridescent paints.

Figure ~~2~~27 -Inappropriate location for flush wall signs

15.2.56 Mixed development buildings

(a) Advertising signs and structures shall not be permitted above the awning on mixed development buildings unless they relate to activities conducted above ground floor level.

15.2.67 Development in excess of 15 metres in height

(a) Naming rights to the building, often in favour of the principal tenant, shall be limited to the form of one advertising sign above the awning. The sign shall be designed and positioned in a manner sympathetic to the design criteria of the building. Where no principal tenant exists, a coordinated approach shall be used

in meeting the ~~advertising~~ signage needs of the tenants of a building. This should generally be limited to a directory panel in the common area of the building.

(b) Roof signs shall not be permitted where they ~~result in an increase in~~exceed the height of the building, or where they are flashing or moving. The assessment of any proposed roof sign shall include an evaluation of its impact on adjacent residential development, in terms of intensity and duration of illumination.

15.2.8~~7~~ Automotive related activities

(a) Freestanding pole signs shall have a maximum height of 6 metres above ground level, and the sign itself shall not exceed 3.4m^2 in area.

(b) Pole signs shall not project more than 750mm beyond street alignment (refer to Figure 28~~3~~).

(c) A fin sign positioned as such shall have a maximum height of 1.5m above the roof structure (refer to Figure 28~~3~~). No portion of the sign shall project over Council's footpath. Fin signs shall have a maximum area of 9m^2 referring only to the name of the establishment. Only one fin sign shall be permitted on the premises.

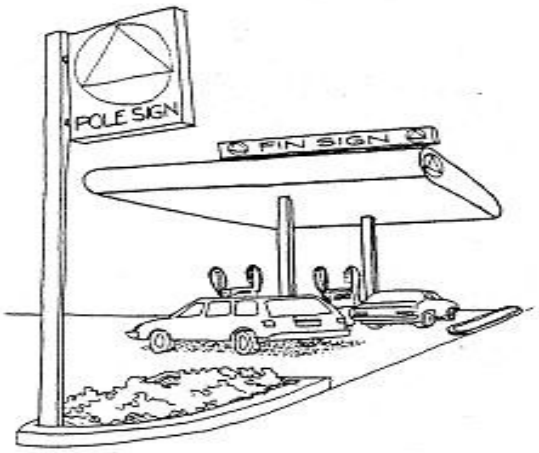


Figure 28~~3~~ Example of pole and fin signs

15.2.~~8~~9 Heritage Significant Buildings

(a) Council will give consideration to architectural qualities of building when addressing the suitability of any proposed signs.

(b) Signs must not conceal or obscure architectural features.

(c) Generally, on shop fronts signage will be restricted to suspended under awning ~~shop frontssigns, and~~ awning fascia signs ~~and as suspended under awning signs~~.

(d) Signage above the awnings must be limited to appropriate areas allocated for such a purpose in the original facade design (parapets, for example), and must not extend above the ~~awning~~parapet.

(e) Flashing, electronic, illuminated or animated signs will not be permitted.

(f) Council encourages restoration of original painted signs, and construction of new signs using traditional designs.

(g) In the absence of any shop front awnings, signage shall be kept below the height of awnings on adjacent buildings. In such circumstances, projecting wall signs should take the form of lantern signs, where appropriate.

15.3 SIGN SPECIFIC CONTROLS

~~There are a range of signage styles and sizes. Consideration needs to be given as to the appropriateness of the type of sign with the building in which the sign is proposed to be located as well as the surrounding character of the area.~~

Objectives

(a) To ensure that proposed signage is compatible the buildings and surrounding character of the area.

Controls

15.3.1 Under-~~-~~awning signs

(a) Under awning signs must ~~shall~~:
- ~~(a)~~(i) H~~h~~ave a minimum clearance of 2.6m above the footpath and be centrally positioned under the awning;
- ~~(b)~~(ii) Not exceed 1.8m(W) x 300mm(H);
- ~~(c)~~(iii) Be setback 600mm from the footpath edge;
- ~~(d)~~(iv) Not project beyond the width of the awning; and
- ~~(e)~~(v) Be separated from other under awning signs by 3m where practicable.~~.~~

~~(f) Under awning signs shall not exceed 2.4m x 450mm.~~

~~(g) Under awning signs shall not project beyond the width of the awning.~~

~~(h) A minimum separation distance of an under awning sign to another under awning sign is to be 3m where practicable.~~

15.3.2 Projecting Wall Signs

~~(a) Signs shall not extend above parapet height.~~

~~(b) Horizontally oriented signs will only be considered where the sign matches the other appropriately designed and approved signs and has an appropriately designed bracket.~~

~~(c)~~(a) Where permitted projecting wall signs shall:
- (i) E~~e~~xtend a maximum projection of 750mm~~m~~ from the face of the wall (refer to Figure 29~~4~~);
- (ii) H~~h~~ave a minimum clearance of 2.6m above the footpath;
- ~~(ii)~~(iii) Not extend above parapet height;
- ~~(iii)~~(iv) Al~~a~~ign with signs on adjacent buildings; and
- ~~(iv)~~(v) ~~t~~The vertical dimension of the sign shall be equal to or greater than the horizontal dimension.

~~(d)~~(b) Council will consider variations to the maximum projection requirement only where, in Council's opinion, the requirement for a sign of vertical proportion does not suit the style and character of the building, or details and proportions of the façade. In these instances square or circular signs may be considered, having a maximum projection of 1.5m~~m~~ from the facade. In such circumstances, buildings 3 storeys or greater are considered more appropriate to scale and proportion of such signs (refer to Figure 31~~5~~).

~~(e)~~(c) ~~Both panel and projecting s~~Signs ~~should~~ are to be attached to undecorated wall areas. Where projecting wall signs of vertical proportion are proposed, vertical engaged piers present on the facade of older buildings should be used.

~~Facade panels should align with the width dimensions of windows or doors and be centered on parapets (refer to Figure 6).~~

15.3.3 Awning fascia signs

(a) Fascia signs are to be flush with the awning and not illuminated.
(b) They shall not project above or below the awning fascia.
(c) Sign writing shall be limited to the street number, name and general nature of the business.
(d) Product identification on an awning fascia shall not be permitted.
~~(a)~~(e) Where a building comprises a number of tenants, such as in an arcade, the awning fascia should identify the name of the arcade only.
~~(b)~~

~~(c)~~ ### 15.3.4 Flush Façade Panels

~~(d)~~(a) Signs are to be attached to undecorated wall areas.
~~(e)~~(b) Facade panels should align with windows or doors or be centered on parapets (refer to Figure 30).
~~(f)~~(c) Opportunities may exist for flush wall signs on the blank side or rear walls of some buildings, provided that:
(i) The commodities or services advertised are sold within the premises to which the sign is affixed of painted;
(ii) The total area of signage is no greater than 4.5m^2; and
(iii) The number of such signs is limited to one only.

15.3.~~5~~4 Top hamper signs

(a) Top hamper signs:

~~(b)~~(i) May project up to 150mm from the building façade;

~~(c)~~(ii) Must have a minimum clearance of 2130mm above ground level;

~~(d)~~(iii) Shall have dimensions proportionate to the size of the top hamper fascia;

~~(e)~~(iv) Shall not exceed 600mm in height, with a maximum length of 4000mm;

~~(f)~~(v) Shall be restricted to one sign per premises, unless the Council considers the buildings frontage sufficient to accommodate more than one such sign;

~~(g)~~(vi) Should not extend below the level of the head or doorway or window to which they are attached;

~~(h)~~(vii) Should allow a proportion of the wall surface area of the top hamper to be exposed; and

~~(i)~~(viii) Shall be set back 600mm from side boundaries to satisfy fire regulations.

~~(j) Signs shall not project more than 150mm beyond the face of the building.~~

~~(k) Signs should not extend below the level of the head of doorway or window to which they are attached.~~

~~(l)~~(b) Signs are to be within the perimeter of the building walls.

~~(m)~~(c) Illumination is permitted.

15.3.6 Building Identification Sign

(a) Building identification signs are to be located at building parapet height, for the purpose of identifying the building.

(b) They will be permitted where, in Council's opinion, there is sufficient wall surface area to display the sign, and where the sign is proportionate to the façade area, and appropriate to the design and decoration of the building.

(c) Where the building comprises a number of tenants, only one identification sign will be permitted where that tenant occupies floor space above awning level.

(d) Building identification signs should be positioned at the local point of the building façade, generally central to the top parapet, and shall not project by more than 300mm from the wall.

(e) Building identification signs shall be integrated with the character and form of the building and not alter its roofline.

15.3.~~6~~7 Murals

(a) Council may consider the use of a mural as signage for the purposes of building identification and advertisement.

(b) A mural is to be sensitive to the character and amenity of the area.

(c) A mural must not be located on a heritage item or contributory building, or detract from the significance of a heritage conservation area.

(d) Any corporate branding, logos, markings or similar are not to occupy more than 5% of the total mural area.

~~(a)~~(e) No third party advertisements are to feature in a mural.

~~(b)~~(f) If the mural contains no advertising material and does not act as signage, it may be considered as public art. If the mural is public art, it does not require

development approval and is to be carried out in accordance with the Waverley *Public Art in the Private Domain Guidelines*.

15.3.8 Window signs

(a) Painted signs on shop front windows, particularly those using fluorescent and iridescent paints, shall be temporary in nature, and not cover more than 60% of the window surface area (refer to Figure 32).

(b) Painted window signage which is skeletal in form, identifying only the business name of the premises, may be permanently applied to the window surface.

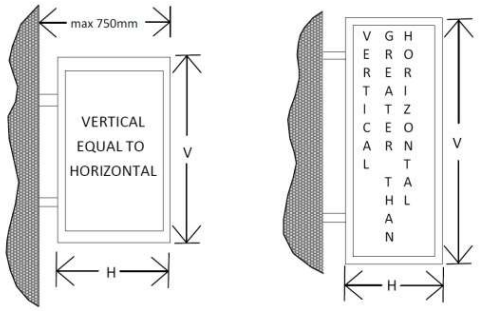
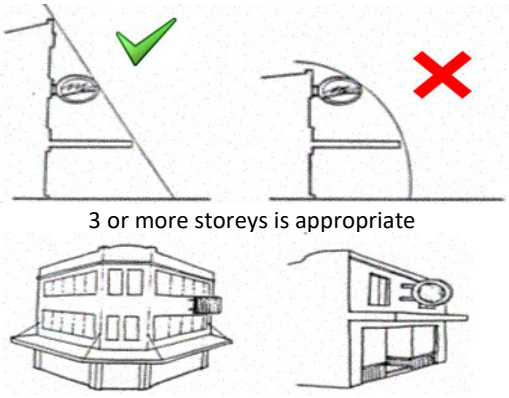


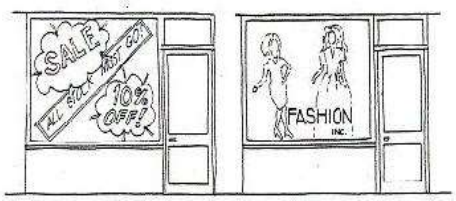
Figure 294 Dimensions for vertical projecting wall signs

Figure 530 Preferred alignment of façade panels



3 or more storeys is appropriate

Figure 631 Signage for buildings with 3 or more storeys



Temporary Signage Permanent Signage

Figure 732 -Painted shop front window signs

B16 PUBLIC DOMAIN

The public domain is Waverley's shared space for residents and visitors alike. It is important that development that addresses the public domain is attractive, safe and accessible. The public domain should be characterised by accessibility, excellence in design, high quality materials and well integrated public art.

16.1 IMPROVING THE PUBLIC DOMAIN

Objective

(a) To ensure that the public domain receives adequate solar access.
(b) To protect significant views and vistas from the public domain.
(c) To ensure that development contributes to the activity, safety, amenity and quality of the public domain.
(d) To ensure that development adjoining the public domain is of a high quality.
(e) To provide legible and accessible development.
(f) To reinforce the character of the area.
(g) To minimise the use of, and ameliorate the effect of, blank walls at ground level.

Controls

(a) Overshadowing effects of new buildings on publicly accessible open space is to be minimised between 9am – 3pm on 21 June.
(b) Development is not to impede important or significant views from the public domain to public places, parks, Sydney harbour or the eastern coastline, heritage buildings, monuments, or public artworks.
(c) Development is to identify and improve key view corridors from the public domain.
(d) Use buildings and trees to frame views.
(e) Low level views of the sky along streets and from parks are to be maintained.
(f) Buildings are to be designed to address the street and to utilise high quality finishes and public art to enhance the public domain and pedestrian interface.
(g) Blank walls are not supported within centres. Where blank walls must be provided, utilise artworks or interesting façade designs to enrich the public domain.
(h) Ground floor tenancies and building entry lobbies are to have entries at the same level as the adjacent footpath or public domain.
(i) Ground floor tenancies and residential developments are to be designed so that there are regular opportunities for direct surveillance of the adjacent street or public domain.
(j) Car parking areas at ground level must be screened by active uses to a minimum depth of 6m from the façade visible to the street or public domain.
(k) Align setbacks between buildings with lanes and pedestrian links to enable clear lines of sight.

16.2 ACTIVE STREET FRONTAGES

~~(a)~~ This Part applies to commercial and mixed use development that is subject to *Part E Site Specific Development*.

~~(b)~~ Active frontages include internal building spaces that have direct pedestrian access or visibility to the street and provide important centre activities such as commercial, civic and entertainment uses. These frontages contribute to the liveliness of a street, and are a key component of a people focused place.

~~(c)~~

~~(d)~~ Uses that can facilitate active frontages are any of the following:

- ~~(e)~~ Entrance to retail;
- ~~(f)~~ Shop front;
- ~~(g)~~ Glazed entries to commercial and residential lobbies occupying less than 50% of the street frontage, to a maximum of 12m frontage;
- ~~(h)~~ Café or restaurant if accompanied by an entry from the street;
- ~~(i)~~ Active office uses, such as reception, if visible from the street; or
- ~~(j)~~ Public building if accompanied by an entry.

Objectives

(a) To promote pedestrian activity and safety in the public domain
(b) To provide a high degree of surveillance over the street.
(c) To provide transparency and visual connection between the street and the building's interior.
(d) To facilitate future adaptability and flexibility of uses.
(e) To provide high standards of accessibility.
(f) To supplement the WLEP 2012 controls for active street frontage.
(g) To maximise the amount of active frontages throughout centres.
(h) To ensure development encourages appropriate streetscape activation and active participation by the public.
(i) To ensure that development provides a well-connected, weather protected public domain to reduce the impact of wind and rain and provide adequate shade for pedestrians.
(j) To create a 'public face' for buildings to enhance the character of streets.
(k) To promote a high level of visual connectivity and physical accessibility between the street and the active frontage premises.

Controls

16.2.1 General Controls

(a) Development is to be constructed to the front property boundary.
(b) Active ground floor uses are to be at the same general level as the footpath and be accessible directly from the street.
(c) Sites identified as Active Street Frontage in this DCP must not provide vehicle access across the Active Street Frontage.
(d) At ground level provide large, clear glazed windows with the sill at a minimum of 500mm above finished floor level.
(e) Opaque or obscured glazing is not acceptable.

(f) Reinforce corner frontages on primary shopping streets with shop or office front windows.

(g) Openable shop fronts for restaurants or cafes and the like are encouraged, to a maximum of 80% of the façade.

(h) Outdoor restaurants, cafes and the like are encouraged.

(i) First level active frontages are encouraged. Some centres require first level active frontages, refer to *Part E Site Specific Development*.

(j) Commercial ground floor frontages are to provide clear glazing where ever possible to promote passive surveillance and contribute to street activity.

(k) One entrance to civic, entertainment, community, commercial or retail uses per 6m-10m of street frontage must be provided.

(l) Provide regular tenancy widths, preferably between 6m-10m, or similar to adjacent shopfronts.

(m) Development is to utilise a 500mm depth to articulate the building façade at ground level to create interest and variety in the streetscape. Ground level walls should be experienced as having depth and providing a transition between inside and outside. Modulation of the façade may include openings, setbacks, windows and doors, columns and structure.

(n) Where carpark entrances must be located within an active frontage, innovative design solutions are to be provided that create an engaging or attractive entrance.

(o) Where possible direct ramps and stairways into the depth of the tenancy instead of along a frontage, or provide access from a secondary frontage.

(p) A variety of high-quality materials is to be used for active street frontages, with detailing that is of a human scale.

(q) Active uses on levels that are setback are encouraged to look over the street, particularly on corner sites.

(r) The context analysis submitted with the application is to determine whether the active frontage is in an area of predominantly traditional or contemporary shopfronts, and whether the frontage is on a primary or secondary shopping street. The design of the frontage is to comply with the relevant controls below. Refer also to any site specific controls in *Part E Site Specific Development*.

~~(s)~~

~~(t)~~ **16.2.2 Shopfront Style**

~~(u)~~(a) Development that is of a Traditional Shopfront style is to:

~~(v)~~(i) Interpret and represent the design of adjacent Traditional Shopfronts.

~~(w)~~(ii) Retain or rebuild any existing shopfronts, using construction techniques and materials that respect the original style, period and architecture of the building.

~~(x)~~(iii) Provide between 40-80% of the ground level façade as glazing.

~~(y)~~(iv) Articulate entrances in a similar manner to surrounding Traditional Shopfronts.

~~(a)~~(b) Development that is of a Contemporary Shopfront style is to:

~~(z)~~(i) Have a high degree of articulation and diverse materiality.

~~(aa)~~(ii) Articulate entrances with inset doorways and thresholds.

~~(bb)~~(iii) Provide between 40-80% of the ground level façade as glazing.

16.2.2 Primary Shopping Street Frontages

(a) Active frontages are to occur at ground level along all primary shopping streets.
(b) Not more than 10% of the street frontage on a lot is to have blank walls or service areas (excluding structure, columns and beams).
(c) On sites with wider frontages (over 10m) at least 85% of the building frontage is to be associated with retail uses such as entries, display area, café, restaurant and shop floor.
(d) On sites with narrow frontages (under 10m) at least 70% of the building frontage is to be associated with retail uses such as entries, display area, café, restaurant and shop floor.

16.2.3 Secondary Shopping Street Frontages

(a) At least 50% of the frontage is to be active frontage.
(b) Not more than 15% of the street frontage can have blank walls or service areas (excluding structure, columns and beams).
(c) No less than 80% of the building is to be aligned to the street.
(d) Active uses on levels that are setback are encouraged to have active uses looking over the street, particularly on corner sites.

16.3 ARCADES AND THROUGH SITE LINKS

Objectives

(a) To develop a comprehensive, compact, easy to follow, safe and accessible pedestrian network.
(b) To increase permeability of large sites and within centres.
(c) To ensure that arcades are safe and accessible.
(d) To expand and enhance the public domain.
(e) To promotes pedestrian activity throughout centres.
(f) To increase active street frontages throughout centres.
(g) To provide continuity of retail throughout centres.

Controls

(a) Potential street-to-street connections involving sites in separate ownership should consider liaising to develop compatible proposals and submitting concurrent applications to create new through site links.
(b) Arcades and through site links must:
  (i) Connect to a public street on both ends;
  (ii) Be well lit and designed to minimise opportunities for loitering;
  (iii) Incorporate high quality floor finishes;
  (iv) Be in a straight alignment, bends or dog legs are not allowed;
  (v) Have visual connection from street to street;
  (vi) Provide an accessible path of travel from street to street;
  (vii) Have a minimum width of 3m clear of all obstructions;
  (viii) Be either open to the sky or with a glazed roof;
  (ix) Be open for public use for at least between the hours of 7:00am and 10:00pm daily; and
  (x) Have signage indicating public accessibility and the street to which the lane connects.

  *Refer to Figure 3 for a good example of a retail arcade with active frontages.
(c) If a through site link is to be closed between 10:00pm and 7:00am via a gate or other mechanism, the gate must be latched into the 'open' position between 7:00am and 10:00pm, to allow an accessible path of travel.
(d) Developments with public spaces such as arcades and through site links are to incorporate public art within the development (refer to *Part B11 Public Art*).
(e) Arcades or through site links within any of the centres identified in *Part E Site Specific Development* must:
  ~~(f)~~(i) Provide active frontages at the ground level, and in some cases first level, in accordance with *Section 16.2 Active Street Frontages*;
  ~~(g)~~(ii) Maximise entries and display windows to shops and/or food and drink premises to increase pedestrian interest and interaction;
  ~~(h)~~(iii) Provide elements of visual interest;
  ~~(i)~~(iv) Provide predominantly retail, entertainment, civic or commercial uses;
  ~~(j)~~(v) Provide a maximum of 15% of the frontage as the entry to a residential premise;
  ~~(k)~~(vi) Provide one door per 4m; and

~~(l)~~(vii) Provide not more than 10% of the frontage as blank walls or service areas (excluding structure, columns and beams).

~~(m)~~

Figure 3 Example of through site pedestrian link which is compliant with objectives and controls

16.4 AWNINGS AND COLONNADES

Objectives

(a) To increase the usability and amenity of public footpaths by protecting pedestrians from rain, strong winds, summer sunlight and glare.
(b) To encourage pedestrian activity along streets to support and enhance the vitality of the local area.
(c) To contribute to the character of the streetscape.
(d) To ensure that heritage significance is taken into consideration in the application for awnings.

Controls

(a) Colonnades are not permitted in areas with active frontages.
(b) Awnings are to be provided above all active frontages.
(c) Continue the height, depth and form of existing awnings where they occur in the street.
(d) Awnings are to provide a consistent height above the footpath with a minimum height between the footpath level and underside of awning of 3.1m.
(e) Awnings should extend across the width of the footpath to within 0.6m of the kerb line.
(f) Awning height is to be in the range 3.2m - 4.2m, with the final height determined to ensure continuity in appearance and weather protection with adjoining awnings.
(g) Box awnings with slim fascias are to be provided.
(h) Preferred awning depth is 3m.
(i) Awnings are required to step with topography. Sloping awnings are discouraged.
(j) Building entries must be covered.
(k) The colour of awning fascias is to be consistent along the street.
(l) Where street trees are required the entire length of the awning is to be set back from the kerb by 1.2m. Cut outs for trees and light poles in awnings are not acceptable.
(m) To control sun access/protection, canvas blinds along the street edge may be permitted, subject to design merit and assessment.
(n) Signage on blinds is not permitted.
(o) Provide appropriate under awning lighting to facilitate night use and public safety.
~~(p)~~

16.5 REFLECTIVITY

Objectives

(a) To mitigate adverse glare from reflective surfaces on street level.
(b) To ensure reflectivity does not impact upon the function of the public domain.
(c) To minimise adverse solar reflection through the reduction of reflective materials and the use of shading devices.
(d) To avoid façade treatments containing large areas of glazing.
(e) To minimise potential impact on pedestrians and occupants of neighbouring buildings.

Controls

(a) Limit the use of large areas of glass in facades to a maximum of 60% of the façade surface area above ground level.
(b) Shade glass areas with shading devices appropriate to the orientation. East and west-oriented glazing benefits from vertical shading devices, whilst north benefits more from horizontal shading devices.
(c) Reflected solar glare on drivers should not exceed 500 candelas/m^2. A candela is the base unit for measuring the intensity of luminance under the International System of Units (SI).
(d) Mirrored glass and other highly reflective materials should not be used on building exteriors.
(e) All panels and elements on vertical façades are to have a maximum specular reflectivity of visible light from normal angles of incidence of 20%.
(f) Any surface inclined by more than 20 degrees to the vertical (inclined glass awnings or cladding on inclined roofs) are to have a maximum specular reflectivity of visible light from normal angles of incidence of 10%.
(g) The above mentioned limits may need to be further reduced depending on the outcome of the analysis by a reflectivity consultant of the impact on drivers' visibility. Refer to the *Waverley Development Application Guide* for information about when a reflectivity report is required.

16.6 SECURITY

Objectives

~~(a)~~(k) To improve the amenity of the public domain by discouraging roller shutters.
~~(b)~~(l) To promote engagement with shops and businesses after operating hours through window displays.
~~(c)~~(m) To prevent vandalism of shop fronts.

Controls

(a) Roller shutters on shop fronts are not permitted.
(b) Security grilles on shop fronts are discouraged.
(c) Applications involving a change of use of retail premises shall be required to retain or reinstate the window shop front.
(d) Where the nature of the proposed retail activity does not warrant a window shop front display, consideration may be given to folding or sliding glass doors.
(e) Security grilles may only be fitted internally behind the shopfront and are to be fully retractable and at least 50% transparent when closed.
~~(f)~~

16.7 MINOR ENCROACHMENTS

This section applies to the following structures that are permitted to encroach from private property onto public property:

- Awnings;
- Balconies;
- Shutters;
- Building signs;
- Decorative structures;
- Private security lighting;
- CCTV cameras; and
- Special drainage structures.

Objectives

(a) To ensure encroachments from private property onto public property are safe for pedestrians and vehicular traffic.
(b) To ensure encroachments conserve the characteristics of an area.
(c) To ensure that minor encroachments do not result in any loss of public amenity or safety and do not compromise future plans for road realignment or footpaths and stormwater drainage.
(d) To allow architectural features that enhance the appearance of the building and streetscape.
(e) To preserve and restore buildings which are a heritage item or located within a heritage conservation area

Controls

17.7.1 General

(a) Encroachments are to be of a minor nature.
(b) Encroachments must not pose a hazard, particularly to pedestrians or other users of public space.
(c) Encroachments must be consistent with the character of the surrounding area.
(d) Encroachments must:
    (i) Be a maximum of 300mm;
    (ii) Not interrupt pedestrian movement or public space or amenity;
    (iii) Not enter into public space between ground/footpath level and 1m above ground/footpath level;
    (iv) Not reduce the width of a footpath to less than 1.8 metres wide;
    (v) Not extend over a vehicular carriageway; and
    (vi) Must have a minimum setback of 600mm from the kerb face

ANNEXURES

Annexure B1-1
Examples of Building Material Reuse

Material	Reuse/recycling potential
Concrete	Reused for filling, levelling or road base
Bricks and Pavers	Can be cleaned for reuse or rendered over or crushed for use in landscaping and driveways
Roof Tiles	Can be cleaned and reused or crushed for use in landscaping and driveways
Untreated Timber	Reused as floorboards, fencing, furniture, mulched or sent to second hand timber suppliers
Treated Timber	Reused as formwork, bridging, blocking and propping, or sent to second hand timber suppliers
Doors, Windows, Fittings	Sent to second hand suppliers
Glass	Reused as glazing or aggregate for concrete production
Metals (fittings, appliances and wiring)	Removal for recycling
Synthetic Rubber (carpet underlay)	Reprocessed for use in safety devices and speed humps
Significant Trees	Relocated either onsite or offsite
Overburden	Power screened and used as topsoil
Garden Waste	Mulched, composted
Carpet	Can be sent to recyclers or reused in landscaping
Plasterboard	Removal for recycling, return to supplier

Note: More information is available at the following link:
http://www.epa.nsw.gov.au/warr/index.htm

Annexure B1-2
Waste and Recycling Generation Rates

Residential Generation Rates

Based on a survey of waste and recycling generation rates used across Sydney and Melbourne Councils in 2018, the approximate waste and recycling generation rates for residential dwellings are as follows:

Generation Rates			
Dwelling type	**Generation rate rubbish (L/dwelling/week)**	**Generation rate recycling - containers (L/dwelling/week)**	**Generation rate Recycling - paper cardboard (L/dwelling/week)**
Single Unit Dwelling (House)	120L	60	60
1 bedroom or studio	80L	40	40
2 + bedroom unit	120L	60	60

The above generation based upon rates sourced from Randwick City Council's Waste Management Plan Guidelines, City of Melbourne Council's Waste Generation Rates (2015) and the NSW EPA Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (2012)

Use the figures above to estimate total waste 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. To ensure building flexibility for future uses, Council may require a higher generation rate than the proposed use.

Type of Premises	Garbage Generation	Recycling Generation
Food Premises		
Restaurants	660L/100m^2 floor area/day	200 L/100m^2 floor area/day
Supermarkets	660 L/100m^2 floor area/day	240 L/100m^2 floor area/day
Greengrocer	240L/100m^2 floor area/day	120 L/100m^2 floor area/day
Convenience Store	300 L/100m^2 floor area/day	150 L/100m^2 floor area/day
Café	300 L/100m^2 floor area/day	200 L/100m^2 floor area/day
Take away/Café (pre-packaged	150 L/100m^2 floor area/day	150 L/100m^2 floor area/day
Butcher	80 L/100m^2 floor area/day	50 L/100m^2 floor area/day
Delicatessen	80L/100m^2 floor area/day	50 L/100m^2 floor area/day
Fish shop	80 L/100m^2 floor area/day	50 L/100m^2 floor area/day
Non Food Premises		
Education and training	5L/100m^2 floor area/day or 0.5L/student/week	5L/100m^2 floor area/day or 0.5L/student/week
Offices	10L/100m^2 floor area/day	10L/100m^2 floor area/day
Shop (less than 100m^2 floor area)	50L/100m^2 floor area/day	25L/100m^2 floor area/day
Shop (greater than 100m^2 floor area)	50L/100m^2 floor area/day	50L/100m^2 floor area/day
Showroom	40L/100m^2 floor area/day	10L/100m^2 floor area/day
Warehouse	10L/100m^2 floor area/day	10L/100m^2 floor area/day
Childcare	80L/100m^2 floor area/day	80L/100m^2 floor area/day
Gym	10L/100m^2 floor area/day	10L/100m^2 floor area/day 50L (Penrith)
Hairdresser/Beauty Salon	60L/100m^2 floor area/day	60L/100m^2 floor area/day
Accomodation		
Student housing/Backpacker	40L/occupant/week	40L/occupant/week
Boardinghouse/guesthouse	60L/occupant/week	60L/occupant/week
Hotel/Motel/Licensed club	5L/bed/day 50L/100m2 bar area/day 10L/1.5m2 dining area/day	5L/bed/day 50L/100m2 bar area/day 50/1.5m2 dining area/day
Serviced Apartments	35L/apartment/week	35L/apartment/week
Retirement Village	60L/apartment/week	60L/apartment/week
Independent living	80L/apartment/week	80L/apartment/week

The above generation based upon rates sourced from Randwick City Council's Waste Management Plan Guidelines, City of Melbourne Council's Waste Generation Rates (2015) and the NSW EPA Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (2012) and Penrith Commercial Waste Generation Rates.

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.

~~Based on a study by the Southern Waste Board in 2001 the approximate waste and recycling generations rates for a two person dwelling are as follows:~~

~~Generation rates~~	
~~**Waste stream**~~	~~**Waste stream**~~
~~Garbage~~	~~80 L/unit/week~~
~~Paper and cardboard recycling~~	~~25 L/unit/week~~
~~Other Recycling~~	~~15 L/unit/week~~

~~Use these figures to estimate the storage space required inside each residential dwelling for the storage of at least two days worth of waste and recycling.~~

~~Councils bin allocation for multi-unit residential buildings, boarding houses, backpackers and serviced apartments is as follows:~~

- ~~1 x 240 L bin for garbage per 3 units – collected weekly~~
- ~~1 x 240 L bin for paper/cardboard per 8 units – collected fortnightly/alternate weeks~~
- ~~1 x 240 L bin for other recyclables per 8 units – collected fortnightly/alternate weeks~~
- ~~1 x 80L, 140 or 240L bin for garden waste where Council considers a suitable amount of garden waste may be generated.~~
- ~~1 X 660 L bins may be considered in consultation with Council~~
- ~~Where units of 3 bedrooms or more are built, Council may require additional bins, space or collection services.~~

~~Councils bin allocation and services for single dwellings is as follows:~~

- ~~1 x 140L Bin for garbage~~
- ~~1 x 140L Bin for paper/cardboard recycling~~
- ~~1 x 140L Bin for other recyclables~~
- ~~1 x 80L, 140L or 240L MGB for garden waste where Council considers a suitable amount of garden waste may be generated~~
- ~~Garbage collected weekly~~
- ~~Recycling collected on alternate weeks, ie. each collected fortnightly.~~
- ~~Further information on Council's waste services is available in the Waste Avoidance and Resource Recovery Part.~~

Councils bin allocation and services for commercial buildings is as follows:

- 2 x 240L bin for garbage
- 2 x 240L bin for paper/cardboard recycling
- These rates may be varied on a case by case basis depending on the business type.

Premises type	Waste generation	Recyclable material generation
Backpackers hostel	40L/occupant space/week	20L/occupant space/week
Boarding house, guest house	60L/occupant space/week	20L/occupant space/week
Food premises:		
Butcher	80L/100m² floor area/day	Variable
Delicatessen	80L/100m² floor area/day	Variable
Fish shop	80L/100m² floor area/day	Variable
Greengrocer	240L/100m² floor area/day	120L/100m² floor area/day
Restaurant/Café	10L/1.5m² floor area/day	2L/1.5m² floor area/day
Supermarket	240L/100m² floor area/day	240L/100m² floor area/day
Takeaway food shop	80L/100m² floor area/day	Variable
Hairdresser, beauty salon	60L/100m² floor area/week	Variable
Hotel, licensed club, motel	5L/bed space/day 50L/100m² bar area/day 10L/1.5m² dining area/day	1L/bed space/day 50L/100m² bar area/day 50L/100m² dining area/day
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

Annexure B1-3

~~Vehicle Dimensions and Turning Circles~~Design Specification for Waste Collection Vehicles

Rear Loading Bin Collection Vehicle Dimensions	
Length	10.6m
Width	2.8m
Height	4.3m
Wheelbase	5.25m
Turning circle	16.5m between kerbs

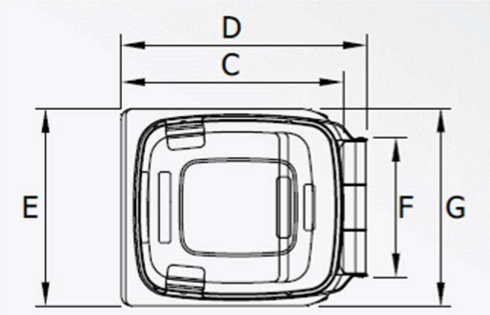
Access and Turning Provisions

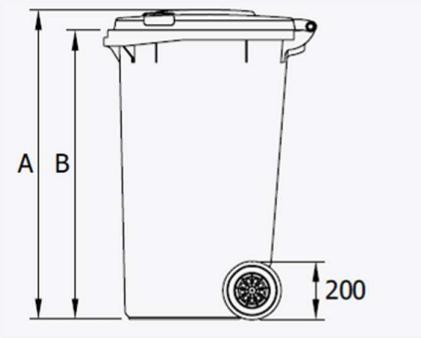
Any turning circle considerations must make allowances for driver steering error and overhangs. The steering error allowance should be at least 0.6 metres (absolute minimum) on both sides of the wheel path and 1m as desirable minimum. Best design practice for access and egress from a development calls for a separate entrance and exit to allow the collection vehicle to travel in a forward direction at all times. Where there is a requirement for the collection vehicles to turn at a cul-de-sac head within a development, the design should incorporate a bowl, 'T' or 'Y' shaped arrangement. The design aspects that must be taken into account include the following:

- The weight, height and length of Council collection trucks.
- Placement of waste and recycling bins outside each home, or in a common collection area.
- Parked cars greatly inhibit the turning of collection truck.
- Trucks should only be expected to make a three-point turn to complete a U-turn.
- Allow for collection vehicle overhang and possible interference with bins and road furniture.

Annexure B1-4
Council Supplied Bin Dimensions

Bin Type	80L	140L	240L	660L
A (HEIGHT)	840mm	925 mm	1060 mm	1235 mm
B	795mm	870 mm	990 mm	-
C	480mm	550 mm	660 mm	-
D (DEPTH)	510mm	615 mm	730 mm	1360 mm
E (WIDTH)	450mm	535 mm	585 mm	1235 mm
F	300mm	395 mm	400 mm	-
G	450mm	535 mm	585 mm	-





Source: Sulo Waste Management

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.

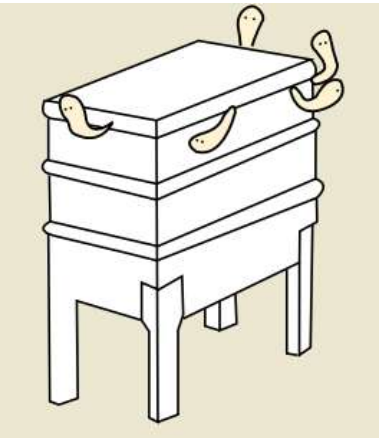
Size
The capacity of compost bins for single dwellings is discretionary and will depend on the circumstances in the individual case. In new dwelling houses, an area of 1000mm x 1000mm should be provided.

In multi-~~ unit~~ 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.

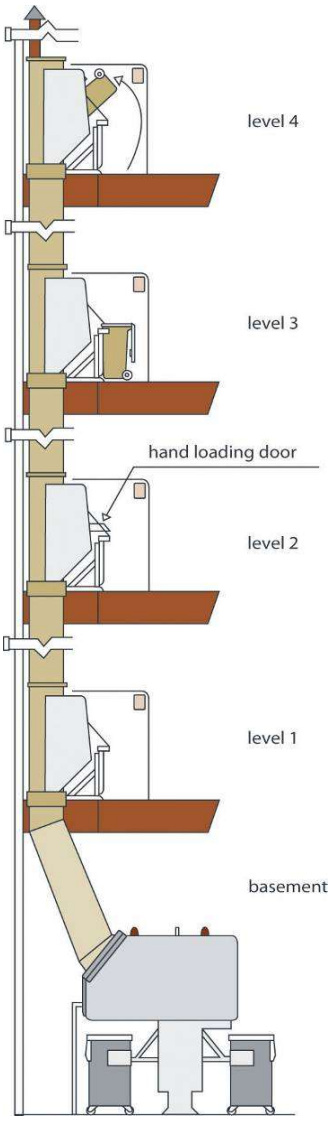
Annexure B1-6
Garbage Chutes, Compactors and Service Lifts Guidelines

Garbage chute design

- Garbage chutes must be constructed in accordance with the requirements of the *Building Code of Australia (BCA).*
- 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.

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.



Example of a garbage chute system

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 ~~transferral~~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.
- ~~Developers~~ 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.*

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.

Annexure B2-1
Planting List

All species on this list are generally recommended for use throughout Waverley, however, the selection of appropriate plant species for each site should be recommended by a suitably qualified landscape or bushland regeneration professional. Alternative species may be approved by Council.

Two asterisk (**) next to common names indicates that they are an indigenous species and common in Waverley's remnant vegetation communities and are recommended for a range of plantings. One asterisk (*) indicates the species is a local native and is also preferred. Plan the sourcing of plant material in advance of any development to ensure availability of indigenous species.

TREES		
Genus	**Species**	**Common Name**
Acmena	*smithii*	Lilly Pilly
Backhousia	*citriodora*	Lemon Myrtle
Banksia	*integrifolia*	Coastal Banksia
Banksia	*serrata*	Old Man Banksia*
Ceratopletalum	*apetalum*	Coachwood
Cupaniopsis	*anacardioides*	Tuckeroo
Elaeocarpus	*reticulatus*	Blueberry Ash
Eucalyptus	*botryoides*	Bangalay
Eucalyptus	*gummifera*	Red Bloodwood
Eucalyptus	*obstans*	Port Jackson Mallee
Glochidion	*ferdinandi*	Cheese Tree*
Ficus	*rubiginosa*	Port Jackson Fig

SHRUBS: Medium-Large		
Genus	**Species**	**Common Name**
Acacia	*longifolia*	Sydney Golden Wattle **
Angophora	*hispida*	Dwarf Apple
Banksia	*ericifolia*	Heath-leaved Banksia **
Banksia	*oblongifolia*	Fern-leaved Banksia
Banksia	*marginata*	Silver Banksia *
Ceratopetalum	*gummiferum*	NSW Christmas Bush
Dodonaea	*triquetra*	Common Hop Bush
Grevillea	*speciosa*	Red Spider Flower
Hakea	*dactyloides*	Finger Hakea
Hakea	*gibbosa*	Needlebush
Hakea	*teretifolia*	Dagger Hakea *
Kunzea	*ambigua*	Tick Bush
Lambertia	*formosa*	Mountain Devil
Lasiopetalum	*ferrugineum*	Rusty Petals
Leptospermum	*laevigatum*	Coastal Tea Tree
Leptospermum	*polygalifolium*	Tantoon, Yellow tea-tree
Leptospermum	*squarrosum*	Pink tea-tree
Leucopogon	*ericoides &/or juniperinus*	Pink bearded-heath
Melaleuca	*armillaris*	Bracelet Honey-myrtle **
Ozothamnus	*diosmifolius*	Paper Daisy
Ricinocarpus	*pinifolius*	Wedding Bush

SHRUBS: Small-Medium		
Genus	**Species**	**Common Name**
Acacia	*myrtifolia*	Myrtle Wattle
Acacia	*suaveolens*	Sweet Wattle*
Acacia	*ulicifolia*	Prickly Moses*
Astroloma	*pinifolium*	Pine Heath*
Baeckea	*imbricata*	Baeckea**
Bauera	*rubioides*	River Dog Rose**
Bossiaea	*heterophylla*	Variable bossiaea*
Brachyloma	*daphnoides*	Daphne Heath*
Breynia	*oblongifolia*	Coffee Bush*
Callistemon	*citrinus*	Crimson Bottlebrush**
Callistemon	*linearis*	Narrow-leaved Bottlebrush*
Correa	*alba*	Coastal Correa
Crowea	*saligna*	Crowea
Darwinia	*fascicularis*	Darwinia
Dillwynia	*retorta*	Heathy Parrot Pea*
Lomatia	*silaifolia*	Crinkle Bush
Melaleuca	*nodosa*	Prickly-leaved paperbark**
Melaleuca	*thymifolia*	Thyme Honey-Myrtle
Monotoca	*elliptica*	Tree-broomed heath**
Olearia	*tomentosa*	Toothed Daisy –Bush*
Pimelea	*linifolia*	Slender Rice flower*
Platysace	*lanceolata*	Native Parsnip*
Phebalium	*squamulosum*	Silvery Phebalium
Pultenaea	*linophylla*	Halo Bush Pea*
Westringia	*fruticosa*	Coastal Rosemary**

GRASSES/SEDGES		
Genus	**Species**	**Common Name**
Baumea	*juncea*	Baumea**
Carex	*pumilla*	Carex**
Danthonia	*linkii*	Wallaby Grass
Dianella	*caerulea*	Blue Flax Lily**
Dianella	*congesta*	Coastal Flax Lily**
Dichelachne	*crinita*	Long Hair Plume Grass**
Echinopogon	*caespitosus*	Tufted Hedgehog Grass
Entolasia	*marginata*	Bordered panic*
Lachnagrostis	*billardierei*	Common Tussock Grass**
Ficinia	*nodosa*	Knobby Club Rush**
Imperata	*cyllindrica*	Blady Grass*
Lachnagrostis	*billardierei*	Common Tussock Grass**
Lomandra	*longifolia*	Spiny-headed Mat rush**
Microleana	*stipoides*	Weeping Grass*
Themeda	*australis*	Kangaroo Grass
Xanthorrhoea	*resinosa*	Grass Tree
Zoyzia	*macranthra*	Prickly Couch*

CLIMBERS/GROUNDCOVER		
Genus	**Species**	**Common Name**
Billardiera	*scandens*	Hairy Apple Berry*
Carpobrotus	*glaucescens*	Pig Face**
Centella	*asiatica*	Gotu Cola*
Dichondra	*repens*	Kidney Weed*
Gonocarpus	*teucrioides*	Germander Raspwort
Hardenbergia	*violacea*	False Sarsaparilla
Hibbertia	*scandens*	Golden Guinea Flower
Mirbelia	*rubiifolia*	Mirbelia
Pandorea	*pandorana*	Wonga Wonga Vine*
Stephania	*japonica var. discolor*	Snake Vine
Tetragonia	*tetragonioides*	Warragal Greens**
Viola	*hederaceae*	Native violet

FERNS		
Genus	**Species**	**Common Name**
Adiantum	*aethiopicum*	Maidenhair Fern*
Cyathea	*cooperi*	Australian Tree Fern*
Doodia	*aspera*	Rasp Fern
Histiopteris	*incisa*	Bats Wing Fern**
Hypolepis	*muelleri*	Harsh Ground Fern*
Pellaea	*falcata*	Sickle fern*
Pteridium	*esculentum*	Common Bracken*
Sticherus	*flabellatus*	Umbrella Fern*

Annexure B9-1

Charing Cross Conservation Area

The following map highlights the study area, as well as an extract of the Charing Cross heritage conservation area (refer to Figure 35).

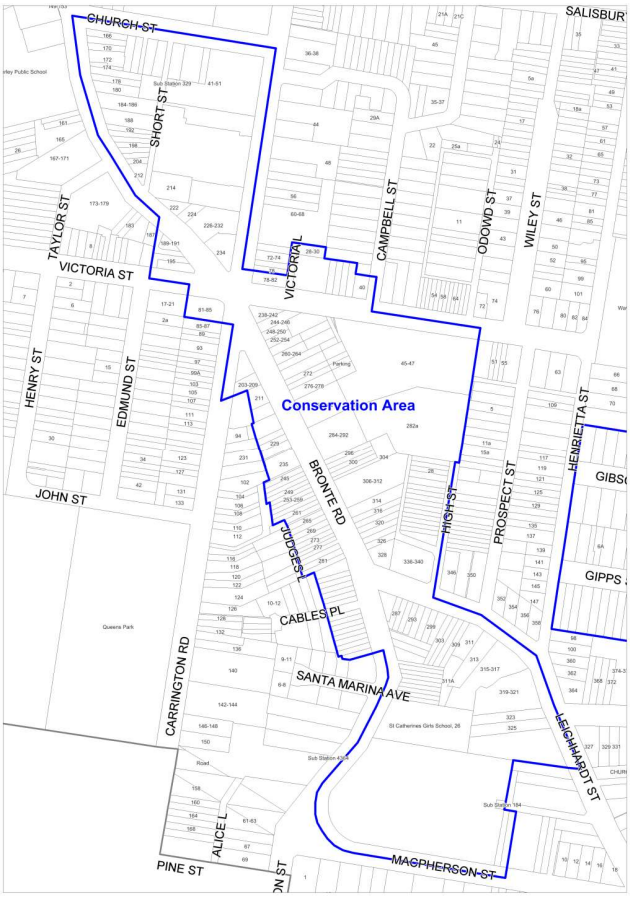


Figure 35 Charing Cross heritage conservation area

This annexureThe following provides recommendations for future conservation opportunities as well as appropriate colour schemes for the identified properties or property groups. Furthermore, the Charing Cross Streetscape Study provides a physical description of every building or building group within the study area and general recommendations for the overall improvement of the streetscape. All of the buildings included in the study are located in the Charing Cross heritage conservation area.

Conservation of Original Fabric

A large amount of original fabric still exists in the street facades of the conservation area, particularly in the upper wall areas above the awnings. However, much of it has been compromised by later additions or is covered by unsympathetic paint schemes. It is

recommended that each period of building be respected for its individual contribution to the development of the area and that future treatment will be consistent with the original character of the building.

Original shopfronts are becoming increasingly rare and remaining examples should be conserved. Partial or missing examples of original fabric can be restored or reconstructed to aid interpretation and appreciation of the streetscape, however, this must be done with care and be based on evidence, thorough research and inspection of the physical evidence on site by an experienced conservation architect.

Colour Schemes

Cleaning and repainting the facades of the buildings in the study area would be an improvement to the presentation of the street. Many individual buildings have unsympathetic colour schemes that are inconsistent with the style of the building and with the grouping in which they were built. It is desirable that the colour scheme of each building or group of buildings be informed by the period in which it was built and by physical investigation of the early paint layers on the exterior fabric. A conservation architect or heritage practitioner could carry out paint scrapes to determine the early colours. These colours could then be interpreted in a colour scheme that suits the current owners or tenants. Correct tonal relationships (the use of light and dark colours on various elements) are more important than exact replication of hues.

The accompanying inventory sheets for each building or group of buildings contain recommended colour schemes which are based on the period, style, and current treatment of the buildings. For example, in some cases where original face brickwork has been painted over, the colour scheme provides a recommendation to paint the brickwork brown to simulate face brick. These recommended colour schemes are speculative, relying on knowledge of original colour schemes of other buildings of similar periods, and are not based on physical intervention. It is preferable to undertake paint scrapes to determine the original colour scheme of each building, however, if this is not possible, the recommended colour schemes would result in a more historically relevant appearance of the streetscape.

Colour terms used in the inventory sheets relate to the Australian Standard 2700 - Colour Standards for General Purposes as follows:

Colour name	AS2700 colour name	AS2700 code
Biscuit	Raffia	X31
Bridge grey	Light grey	N35
Bronze green	Deep bronze green	G63
Brown (to simulate brickwork)	N/A – approve by sample	
Buff	Oatmeal	Y54
Copper beech	Dark brown	X65
Cream	Sandstone	Y53
Crimson	Maroon	R65
Deep Brunswick green	Bottle green	G11
Eau-de-Nil	Palm green	G44
Forest green	Holly	G12
French grey	Storm grey	N42
Grey green	Banksia	G53
Indian red	Deep indian red	R64

Colour name	AS2700 colour name	AS2700 code
Manilla	Manilla	Y45
Mid-brown	Brown	X54
Mountain blue	Blue jay	T24
Off-white	Off-white	Y35
Olive	Mist green	G54
Pale grey (to simulate render)	N/A – approve by sample	
Pink brown	Cinnamon	X45
Sea green	Lichen	G55
Vellum	Surf green	G43
Venetian red	Venetian red	R62
White	N/A	N/A

Recommended Finishes

All render and plaster should have a semi-gloss finish. All timber and metalwork should have a gloss finish.

Queens Park Heritage Conservation Area

Subdivision

Streets in the area are arranged in a grid pattern with most blocks containing internal rear service lanes. The subdivision pattern features three categories of lot size, reflecting the type of dwellings in the area. Small sized lots (typically 100m^2 to 250m^2) dominate the north-eastern portion of the study area. These lots typically contain Victorian terraces and other attached dwelling styles (refer to Figure 22).

Figure 22 Example of Victoria terraces in the area

Figure 23 Example of semi-detached dwellings in the area

Figure 24 Example of the detached bungalow dwelling style in the area

In the central and southern part of the area, lots tend to be larger (typically 200m^2 to 400m^2) reflecting the semi detached and detached villa dwelling typology (refer to Figure 23).

The largest lots (500m^2 to 800m^2) are present on the western and southern edges of the area, fronting onto Queens Park Road and York Road. These lots contain bungalow style dwellings with a

large front set back, and a small number of residential flat buildings (refer to Figure 24).

Views and Vistas

North-south street axes provide important view corridors to Queens Park. Formal tree plantings in these streets frame views to the open parkland in the distance. Properties in the upper eastern portion of the area enjoy distant views of parklands and the city to the west.

Open Space

Queens Park and Centennial Park are expansive areas of open space bordering the character area to the south and west respectively. These parklands are significant landmarks and provide a contrast to the compact residential character of the area.

Landscaping

Vegetation is an important element to the character of this area. Formal plantings of mature fig trees are the most distinguishing characteristic of the inner residential streets and provide a uniting theme throughout the study area. The sense of enclosure created by the avenues of mature trees is in contrast to the openness of the parkland bordering the area to the south and west (refer to Figure 25).

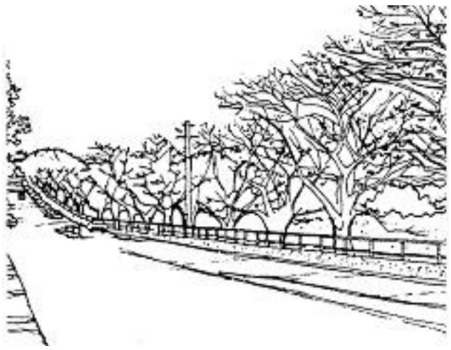


Figure 25 Open views, established street trees and rock outcrops are a unique character of Queens Park

Residential Character – Streetscapes

Three distinct types of streetscape character are found within the area. Streets which carry larger volumes of local through traffic (e.g. Birrell Street, Queens Park Road, York Road), inner residential streets (e.g. Manning Street, Alt Street, Ashton Street) and rear access lanes.

The streets with higher volumes of through traffic have a wider carriageway, relatively narrow verges and smaller scale and less dense street plantings. These features contribute to a wider, more open streetscape (refer to Figure 26).

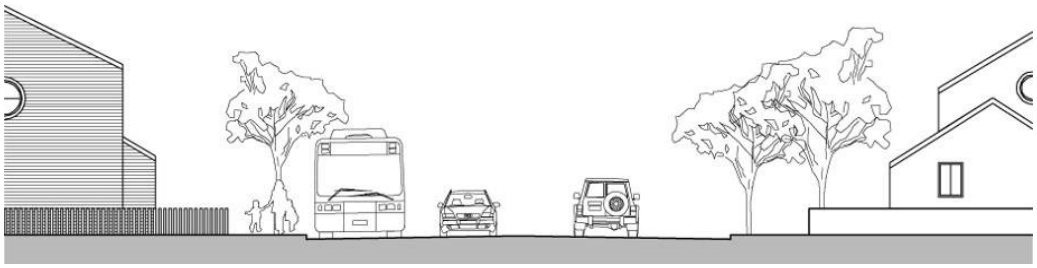


Figure 26 Typical section of a street with high volumes of through traffic

Inner residential streets are characterized by mature trees forming a canopy. These streets are foliage shaded, with a cooler microclimate, and wider verges (refer to Figure 27).

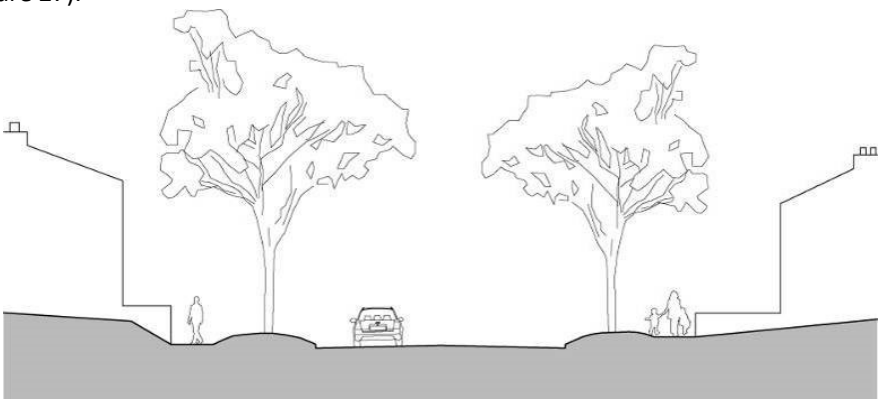


Figure 27 Typical section of an inner residential street

The narrow, corridor like rear access lanes are dominated by garage doors, high fences, walls, landscape screening, and a variety of building setbacks (refer to Figure 28).

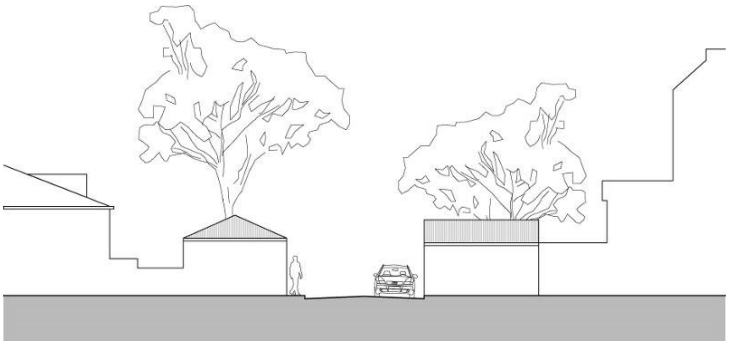


Figure 28 Typical section of a rear access lane.

A variety of front fence styles and setback conditions typify the range of dwelling styles represented in the area. Shallow front setbacks with cast iron front fences are part of the original character of Victorian terraces. While most remain intact, some have been replaced with higher, rendered brick fences. Detached and semi-detached dwellings typically have deeper front setbacks, with low brick or timber picket front fences being the most common styles (refer to Figure 29)

Low, stepped brick fences are used on steeper sites and where no rear lane access is provided, garage doors and sloped landscaping face the street (refer to Figure 30).

Architectural Style

QPCA is one of the oldest precincts in the Municipality, containing many manmade and natural heritage items, including remnants of walls, stables, buildings, caves and trees. Any development must be sensitive to these items.

A variety of architectural styles reflect the various eras of development in the study area. These include the Victorian Terrace, sandstone Post Regency cottage, Victorian Gothic, Edwardian and Federation semidetached dwellings and larger Federation, Californian and Modern bungalows. Most dwellings are clustered in groups of similar style. Repetition of building elements such as shingled gables, chimneys, doors and windows, terraces, entrances, fences, etc. establishes a coherent streetscape character based on detail and rhythm.

Recent development has increased the vocabulary of the character of the area. New dwellings and alterations and additions range from minor dormer windows to contemporary architecture.

Figure 29 Example of low and transparent fences which correspond to the established existing character elements.

Figure 30 Stepped fences on steeper sites

Controls

Any property within the QPCA must have regard for the following Desired Future Character Objectives and Performance Criteria. This Part is to be read in conjunction with *Part ~~C1 – Dwelling House, Dual Occupancy, Secondary Dwelling, Semi-detached Dwelling and Terrace Development~~C2 Low Density Residential Development*. Where there is any inconsistency, this Part will prevail.