DUAL OCCUPANCY

DCP 2015 CHAPTER 4

SUTHERLAND SHIRE

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a. Dual Occupancies in the E3 Environmental Management Zone

The E3 Environmental Management zone is the most environmentally sensitive residential zone in the Sutherland Shire. The E3 zone is the first tier of the environmental zones where residential development is permissible but has to be carried out in the context of areas with special ecological, scientific or aesthetic attributes, or areas which are subject to environmental hazards or processes.

The E3 zone applies to low density residential areas characterised by distinctive natural features and sensitive environmental values being scenic foreshore areas and bushland settings. The E3 zone also applies to some land which is at risk from bushfire and areas where evacuation will be required during bushfires.

The foreshores of the Sutherland Shire are characterised by the historic nature of developments which line the waterways, in particular waterfront cottages. In order to retain this historic nature, within the E3 zone, dual occupancy is listed as a permissible use. The intention of permitting dual occupancies in the zone is to retain these cottages, while allowing a new dwelling to be built on the lot - therefore creating a dual occupancy by definition. However, this permissibility is confined to foreshore areas marked as Area B on the Additional Permissible Uses Map where an existing lawfully constructed waterfront cottage is to be retained.

Given its application to land that has environmental significance, scenic values or hazard risks, a limited range of development is appropriate in the zone. In this low density zone development needs to be sensitively designed and sited so that it is compatible with the underlying qualities of the land. The controls for dual occupancy in the E3 zone aim to deliver well designed homes that respond to natural landforms, minimise the visual impact of new development and protect and enhance the natural vegetation. The controls also aim to ensure a high level of amenity for neighbouring residents.

Note:

The new LEP contains specific controls which relate to dual occupancies. A maximum height of 5.4m applies to dual occupancy development on an internal lot or where a rear dwelling forming a dual occupancy is proposed on a lot with only one road frontage. See Clause 4.3(4) & (5).

1. Streetscape and Building Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. In the E3 zone the relationship of the built form to the natural environment, particularly along the waterways is also a key consideration. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character and scenic quality. Ancillary elements of development such as driveways, parking areas and fencing are important elements of the streetscape. To make a positive contribution to the streetscape, new development needs to be compatible with the scale and character of existing buildings and landscape elements.

Architectural quality contributes to the character and quality of both the streetscape and built form when viewed from the street and waterways. High architectural quality requires appropriate composition of building elements, textures, materials and colours and reflects the use, the natural landscape setting, internal design and overall structure of a development.

1.1 Objectives

1. Ensure that all elements of development visible from the street, waterways and public domain make a positive contribution to the foreshore, streetscape and natural features of the area.

2. Ensure development is compatible with the scale, character and landscape setting of the adjoining streetscape, natural setting and scenic quality and that the environment's natural qualities dominate.

3. Retain and incorporate existing natural features, trees and bushland into the development.

4. Buildings are to be designed and sited to acknowledge the private open space of surrounding development and spatial character of rear yards. Extensive development should not dominate neighbouring rear yards.

5. Ensure that basements do not add to building bulk or exacerbate impacts upon neighbours.

6. Ensure the safety of pedestrians, cyclists, and vehicles using public domain and private land.

1.2 Controls

1. New dual occupancy dwellings shall be sited so that there is minimal disturbance to the natural landscape, with significant vegetation retained and enhanced.

2. Where a site is subject to bushfire risk, the dwellings should be located where risk factors are less severe.

3. Development must be designed and sited so that it addresses the street frontage ensuring that the path to all main entries are clearly identifiable from the street.

4. Where dwellings are provided side by side, the building entries to each dwelling should not require entry though a space allocated for parking nor be recessed behind garaging.

5. Development is limited to two storeys in height above existing ground level. Development must be stepped down a steep site.

6. Despite the above Council may permit a variation to the two storey limit for a third storey above natural ground where Council is satisfied that:

   a. The third storey does not result in the building having an adverse visual impact when viewed from the public domain, waterway or open space; and
   b. The third storey does not result in a building that is incompatible with the established scale or character of the immediate locality or adversely affect the amenity, streetscape and landscape setting.

7. Council may permit a basement where Council is satisfied that:
   a. Basements must be wholly contained within the footprint of the building above. Terraces and alfresco areas are not to be provided over basements unless they are at ground level.
   b. Basements must be setback a minimum of 7.5m from the front boundary and 50% of the front setback is to be landscaped in order to contribute to the landscape quality of the streetscape.
   c. In order to minimise the visual impact of driveways to basements, cut shall be confined to less than one metre within the first 4 metres of the setback from the street. Landscaped terracing is to be relied upon to avoid the need to provide balustrading. Where site constraints make balustrading unavoidable, it is to be open form to minimise its visual intrusion into the streetscape.
   d. Natural ground levels surrounding the development and at property boundaries must be retained or reinstated to predevelopment levels. Basements must be designed to work with the slope of the land.
   e. Basements must not compromise the safety of the on-street or off-street environment for pedestrians, cyclists or vehicles. Ramps must have a maximum grade of -5% grade for the first 3m. Front and side boundary fences must be no higher than 1.2m within 3m of the basement ramp. Where safety and/or traffic conditions necessitate, vehicles are required to enter and exit in a forward direction.
   f. For dual occupancy development, basements will only be allowed where the access is shared through a common entry point that is no greater than 4m in width.

Note:

Basement means the space of a building where the floor level of that space is predominantly below ground level (existing) and where the floor level of the storey immediately above is less than 1 metre above ground level (existing).

If basement construction protrudes more than 1m above ground level, it is no longer defined as a basement. Floor space in a basement may be counted as part of gross floor area. Refer to the definition of gross floor area in SSLEP2015.

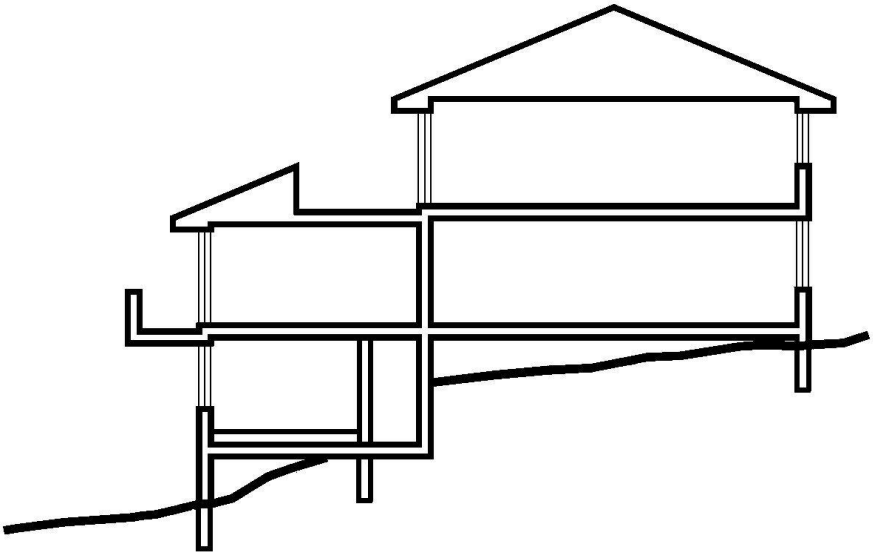


Figure 1: Building stepping down a site

8. Two or three storey development is only permitted on the front of an allotment and may extend to a maximum of 60% of the depth of the site measured from the property boundary.

9. Despite 8, where the topography, orientation or context of the site would allow for a better outcome to be achieved through accommodating two storey developments in the rear portion of the allotment, a variation may be considered if this solution will not result in a significant loss in the privacy or amenity of adjoining properties.

10. Extensive use of highly reflective materials is not acceptable for roof or wall cladding.

11. Development must be sensitively designed so that it is sympathetic to the amenities and view corridors of neighbouring public and private property and balances this with the amenity afforded to the new development.

Note:

View corridors may be maintained by implementing the following measures:
a. stepping buildings down the site,
b. using only single storey elements,
c. avoiding steep roofs, and
d. breaking up the built form.

Note:
Specific controls for fencing are provided in Chapter 34.

2. Building Setbacks

Street Setbacks
Street setbacks establish the front building line. Controls over street setbacks create the proportions of the street. Setbacks contribute to the public domain by enhancing streetscape character and the continuity of street facades. Street setbacks can also be used to enhance the setting for the building - providing for landscape areas, entries to the dual occupancy dwellings, privacy and deep soil zones suitable for planting of canopy trees.

Side and Rear Setbacks
The spatial relationship of buildings is an important determinant of urban form. Building separation affects the spatial continuity and the degree of openness in the street. Building separation is required to minimise adverse amenity impacts by providing opportunities for landscaping, access, privacy, solar access and private and shared open spaces.

2.1 Objectives

1. Establish the street proportions.

2. Encourage articulated building forms and ensure garages do not dominate the streetscape.

3. Enhance the setting for the building by providing opportunities for landscaping and infiltration of stormwater and protecting the landscape qualities and character of the locality.

4. Promote residential amenity for residents and neighbours including access to natural light and ventilation and both visual and acoustic privacy.

5. Provide adequate access for emergency services within the side setback in bush fire prone areas.

6. Alleviate the visual intrusion of building bulk on neighbouring properties.

7. Minimise view loss from adjoining or nearby properties.

2.2 Controls

1. Street, side and rear setbacks are measured perpendicular from the property boundary to the closest extent of the building, including balconies, awnings, podiums, sunscreens and the like (excluding eaves).

2. The minimum setbacks required are set out in the table below:

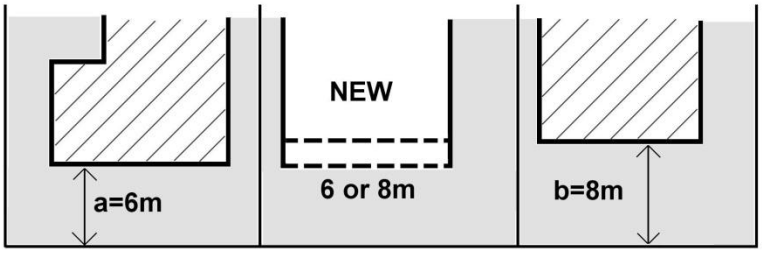
Setbacks	Minimum Distance
Front	
Primary street frontage	7.5m – except where the adjoining dwellings are setback greater than or less than 7.5m, in which case it is the established street setback *
Secondary street frontage	3.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m
Side	1.5m
Rear	6.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m

Table 1: Setbacks

Note: The 7.5m street setback applies to the primary (narrowest) street frontage.

***** The established street setback is the average distance of the setbacks of the nearest dwelling houses having the same primary road boundary and located within 40m of the lot on which the dwelling house is erected. Where the difference between the setbacks of the nearest dwelling houses is less than or equal to 2.0m, the greater or lesser setback may be applied.

Where the difference between setbacks is 2m or less



Where the average between setbacks is greater than 2m

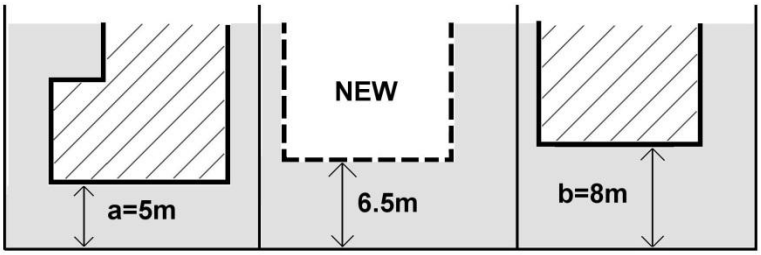


Figure 2: Established Street Setbacks

3. Where a development has a street setback of 7.5m or greater, building elements may encroach 1.5m into the front setback for a maximum of one third of the area of the facade, forming an articulation zone.

   Built form encroachments into the articulation zone can include open structure elements such as balconies and hoods, as well as elements which contribute to floor space ratio such as bay windows and room projections.

   Built form encroachments into the articulation zone must not include:
   - Garages, or
   - Lift shafts.

   Built form encroachments into the articulation zone must improve the design quality of the development with good façade articulation.

4. Garages and garage doors cannot be located in the articulation zone. These elements are to be located no closer than 7.5m to the street and integrated with the building design.

5. In the case of corner properties, the 7.5m setback applies to the narrowest street frontage.

6. The side setback may be reduced to 900mm for alterations and additions to dwellings which will form a dual occupancy that have an existing side setback of 900mm, where this does not impeded emergency access.

7. Where a second storey wall adjacent to a side boundary exceeds 15m in continuous length, the side setback shall be increased by a further 500mm or more for that part of the wall. Where the scale of the side elevation results in significant overshadowing and/or visual intrusion due to building bulk to an adjoining dwelling, an increased building setback is to be employed.

3. Landform

The natural topography and landform features of the E3 zone make up a fundamental part of the character and attractiveness of the Shire. Natural landforms provide for a variety of views and vistas, both local and distant, from public and private domains. Maintaining the natural landform should be an integral consideration for the design of new dual occupancy dwellings.

In order to contribute to the quality and identity of the area, new development must respect landform and natural settings. Development must be designed so that it minimises impacts to natural land forms and allows the natural qualities of the site to be the dominant elements of its setting.

Development on the steeper and higher topographical areas is often more prominent, particularly when viewed from the low side. Well considered design ensures dual occupancy dwellings integrate with the streetscape and views from the waterways, and retain a consistent relationship to the natural topography. This relationship provides an important visual link between buildings in a streetscape, as well as reducing the impacts of new development on neighbouring lots.

Deep excavation, cut and fill or benching may alter the pattern of subsoil water flow and soil stability, which may adversely affect neighbouring properties and the natural environment. Alternatives to slab on ground construction are encouraged where the gradient and characteristics of the site would otherwise require major excavation or filling.

3.1 Objectives

1. Ensure that development utilises natural or existing building platforms so that:
   a. existing natural vegetation within the precinct is preserved; and
   b. steeply sloping land is not modified to create building platforms, making the land unstable.

2. Ensure that the building/s siting, design and construction method responds to the natural landform of the site and is appropriate for site slope.

3. Minimise the visual impact of new development, particularly when viewed from and the public domain.

4. Minimise earth works so as to maintain the existing landform and protect the integrity and stability of geological elements in the vicinity of the site.

5. Minimise impacts on surrounding vegetation and provide increased opportunities for tree retention, including trees on neighbouring properties.

3.2 Controls

1. Development is to be located so that:
   a. Clearing of natural vegetation is avoided;
   b. A stable building footprint can be established that:
      i. does not rely on the use of cut or fill, or any other form of terracing;
      ii. avoids the location of buildings over slopes greater than 18 degrees or 33%;
      iii. uses, where practicable, a natural flat area.

2. The depth of cut and fill must not exceed 1m from existing ground level, except where the excavation is for a basement.

3. Despite the above, Council may consider a variation (cut or fill greater than 1m) only where:

   a. Alternative design solutions have been explored and presented to Council showing no feasible solution to excavation is available, and

   b. There is unlikely to be disruption, or detrimental effects on existing drainage patterns, vegetation, sedimentation and soil stability in the locality, and

   c. The design is a sensitive solution to the constraints of the site that does not exacerbate amenity impacts on neighbouring dwellings.

4. Developments should avoid any unnecessary earthworks by designing and siting buildings within the natural slope of the land. The building footprint must be designed to minimise cut and fill by allowing the building mass to step in accordance with the slope of the land.

5. Natural ground level surrounding the development and at property boundaries must be retained or reinstated prior to the completion of works.

4. Landscaping

Good design recognises that landscape and buildings operate together as an integrated system, resulting in greater aesthetic quality and amenity for the occupants and neighbours, and a more attractive public domain. High quality landscape design protects and builds on the site's natural and cultural features to contribute to a development's positive relationship to its context and site.

In the E3 zone, the tree cover, areas of bushland and natural beauty are valued by its residents. Landscape design in new development must recognise that existing trees, areas of habitat and natural systems must be protected and enhanced by the retention of important landscape elements, appropriate planting, bush regeneration and by minimising urban runoff.

4.1 Objectives

1. Retain and enhance existing mature trees and bushland vegetation within and adjacent to the proposed development.

2. Contribute to streetscape character, local habitat and the amenity of the public domain by using indigenous planting and species which complement scale of the development.

3. Provide landscaping treatments which foster attractive outlooks, privacy and private recreation areas of high aesthetic quality.

4. Improve the microclimate within development.

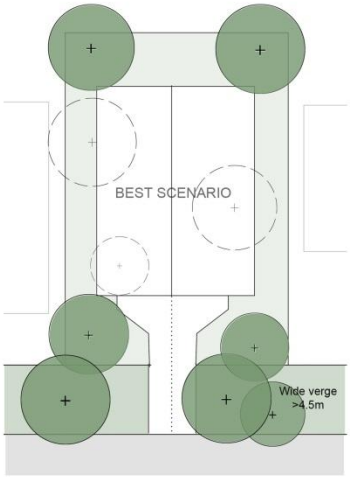
4.2 Controls

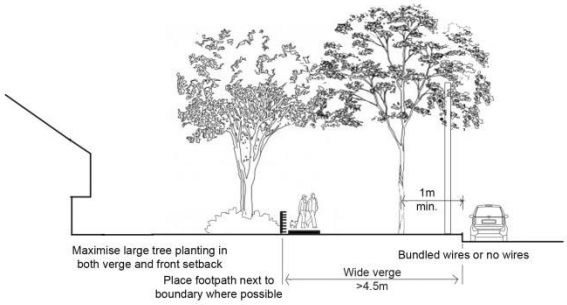
1. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, dual occupancy development must be designed to accommodate front and rear dual occupancy dwellings so that the required vehicle access can be provided, as well as the required deep soil landscaping.

2. Development should be designed to retain existing canopy trees in the vicinity of side, rear and front setbacks including on adjoining land.

3. A minimum of 4 trees are to be provided per dual occupancy development. A minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 3m of the front boundary and a minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 2m of the rear boundary or within the foreshore area (whichever is applicable). All indigenous tree species must be selected from Council's *Native Plant Selector* available on Council's website.

REPLACEMENT PLANTING IN STREET & FRONT SETBACK

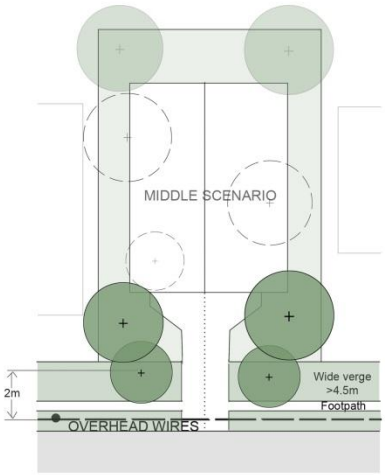


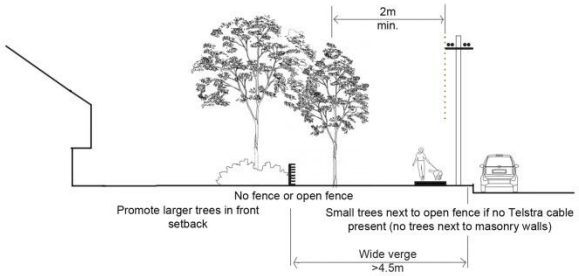


REPLACEMENT PLANTING CALCULATION:

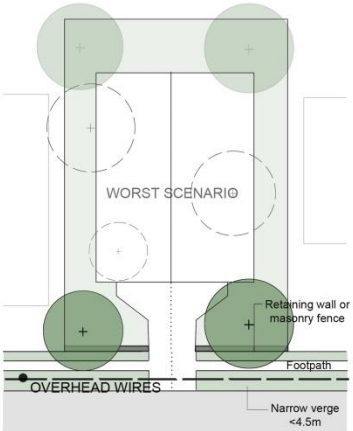
3 trees removed at a replacement rate of 4 to 1 (@$100/tree)
3x4=12 Trees
Potential to put back in 7 trees in best scenario
5 trees remaining
5x$100=$500 into fund

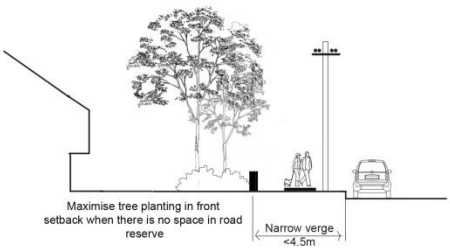
1. REPLACEMENT PLANTING-
WIDE VERGE AND NO OVERHEAD WIRES





2. REPLACEMENT PLANTING -
WIDE VERGE AND OVERHEAD WIRES





3. REPLACEMENT PLANTING-
NARROW VERGE AND OVERHEAD WIRES

4. Landscape design and plant species selection should reduce the potential for invasive plant species to escape into the surrounding bushland.

5. Where there are continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a maximum height of 4m, must be planted at a maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and or masonry fence or retaining wall. Street trees must be selected from the Council's technical specifications and Native Plan Selector available on Council's website

6. Where there are no continuous overhead power lines, a minimum number of one indigenous canopy street tree that will attain a minimum mature height of 6m, must be planted at maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and/or masonry fence or retaining wall. Street trees must be selected from Council's technical specifications and Native Plant Selector available on Council's website.

Note:

All indigenous tree species must be selected from Council's Native Plant Selector available on Council's website. The Native Plant Selector is a tool that recommends plants suitable for Sutherland Shire's ecosystems based on the specific address of the site locality. The tool is available online at http://www.sutherlandshire.nsw.gov.au/Outdoors/Environment/Plants-and-Bushland/Native-Plant-Selector.

For additional guidance on landscape design and implementation refer to the Sutherland Shire Environmental Specifications - Landscape 1-5. Applicants should also refer to the Greenweb map and controls in Chapter 39 Natural Resource Management. For development application submission requirements refer to Council's DA Guide.

5. Building Layout, Private Open Space and Solar Access

Good design provides a building layout that maximises the natural attributes of the site. Carefully considered building layout and design also creates a higher level of amenity for occupants through enhanced visual and acoustic privacy, passive heating and cooling, attractive outlooks from living spaces, and flexible and useable indoor and outdoor spaces that meet the needs of occupants.

Quality private space is critical to achieving good residential amenity. Open space of sufficient area and dimensions to enable recreational and outdoor use, landscaping and service functions is needed for all dual occupancy dwellings.

Ideally, solar access should be maximised in winter and controlled in summer. Daylight consists of both diffused light and direct light. Good levels of daylight in a dual occupancy dwelling improve amenity and reduce the need for artificial lighting. Good levels of daylight can be achieved through the careful consideration of window size, location and proportion.

5.1 Objectives

1. Ensure development provides opportunities for cross-ventilation and natural ventilation, through the arrangement of external openings.

2. Ensure outdoor living areas are functional and responsive to the environment.

3. Provide privacy and solar access to principle private open space areas of dual occupancy dwellings.

4. Ensure building design and location does the most to minimise adverse impacts of overshadowing of neighbouring buildings and private and public open spaces.

5.2 Controls

1. Orientate all new development and windows to take advantage of solar orientation to maximise natural light penetration to indoor areas and reduce the need for mechanical heating and cooling.

2. A minimum of 3 hours of direct sunlight between 9am and 3pm in midwinter should be provided to a living area within each dwelling.

3. Each dwelling is to provide an area of Private Open Space that has a minimum area of $36m^2$ with minimum dimension of 5m, of which $9m^2$ must be paved.

4. A primary living area of each dual occupancy dwelling is to provide direct access to the private open space.

5. Private open space may be located within the front setback. In such instances a combination of fencing and hedging is to provide privacy for residents while also ensuring that the site makes a positive contribution to the landscaped character of the street. High solid fencing is unacceptable. Residents seeking to rely on the front setback for private open space must accept a lower level of privacy until landscaping matures. Front fencing must be in accordance with the provisions specified in Chapter 34 Ancillary Development: Fences.

6. For the proposed dual occupancy dwellings:
   a. orientate the area of private open space to take advantage of the northern solar access;
   b. ensure $10m^2$ of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. overshadowing by vegetation should be ignored;
   d. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

7. For the neighbouring dwellings:
   a. ensure $10m^2$ of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   b. ensure windows of living areas have 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. consideration will be given to reduced solar access where the proposed development is generally compliant with all development standards and controls, and the extent of impact is the result of orientation, site constraints, and or existing built forms;
   d. overshadowing by vegetation should be ignored;
   e. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

8. A secure space per dwelling of $10m^3$ set aside exclusively for storage as part of the dwelling or garage should be provided. Storage areas must be adequately lit and secure. The required $10m^3$ of storage is in addition to bedroom wardrobes, kitchen cupboards and pantries and bathroom cupboards.

9. Each dwelling is to provide an external service area set aside for accommodating garbage bins, air conditioning units etc.

6. Visual and Acoustic Privacy

Building design must take into consideration aspects of visual privacy and noise sources and minimise their future impact on occupants. Amenity is enhanced by privacy and a better acoustic environment. This can be achieved by carefully considering the location of the building/s on the site, the internal layout, the building materials used, and screening devices. The consideration of visual privacy requires an understanding of the context of the adjacent site, site configuration, topography, the scale of the development and its layout.

Major roads and rail operations generate noise and vibration, and people living and working near major transport corridors can be adversely affected. Major roads can also impact on air quality due to their volume of traffic. Building design must take into consideration the noise, vibration and air quality effects of busy roads and rail corridors and minimise the amenity and health impacts on future occupants.

6.1 Objectives

1. Ensure a high level of amenity by protecting the acoustic and visual privacy of occupants within dual occupancy dwellings and their associated private open spaces.

2. Ensure dual occupancy dwellings are sited and designed so that visual and acoustic privacy and vibration from outside sources is controlled to acceptable levels, incorporating architectural and building elements to assist in protecting privacy.

3. Minimise direct overlooking of windows and private open space so that the amenity of neighbours and intended occupants is respected.

4. Recognise the outlook and views from principal rooms and private open space without compromising visual privacy of others.

6.2 Controls

1. Locate, orientate and design new development to ensure visual privacy between buildings and between buildings and adjacent private open space.

2. Use building design to increase privacy without compromising access to light and air.

3. Living room, dining room and kitchen windows that provide a direct outlook to an adjacent property dwelling which leads to a loss of amenity, needs to consider the following:

    a. offset the edge of one window to the edge of the other window by a sufficient distance to limit the views into the adjacent windows; or
    b. provide sill heights of at least 1.6m; or
    c. have fixed obscure glazing or glass blocks in any part of the window below 1.6m.
    d. Direct the outlook from all living rooms, dining rooms, bedrooms, kitchens and studies where possible towards the street, private open space on the development site, public open spaces, and waterways.
    e. Where overlooking of adjacent living rooms, dining rooms, bedrooms, kitchens and studies or private open space is unavoidable then screening elements such as louvres and obscured glass must be used to preserve reasonable visual privacy for neighbours.

Note:

Visual privacy may be achieved by:
a. Designing the dual occupancy dwellings to maximise the separation distances from adjacent dwellings and private open spaces,

Design elements to achieve privacy may include:
a. Offset windows in new development and windows of adjacent development,
b. Recessed balconies and/or vertical fins between adjacent balconies,
c. Solid or semi-solid balustrades to balconies,
d. Louvres or screen panels to windows and/or balconies,
e. Fencing,
f. Vegetation as a screen between spaces,
g. Planter boxes in walls or balustrades,
h. Pergolas or shading devices to limit overlooking of lower level private open space.

4. All noise generating equipment such as air conditioning units, swimming pool filters, fixed vacuum systems and driveway entry shutters must be designed to protect the acoustic privacy of residents and neighbours. All such noise generating equipment must be acoustically screened. The noise level generated by any equipment must not exceed an LAeq (15min) of 5dB(A) above background noise at the property boundary.

5. Residential development adjacent to a rail corridor or a busy road as identified on the Road and Rail Noise Buffer Map should be sited and designed to include noise and vibration attenuation measures to minimise noise and vibration impacts. Refer to State Environmental Planning Policy (Infrastructure) 2007 and the NSW Department of Planning's *Development near Rail Corridors and Busy Roads – Interim Guideline*.

Note:
Compliance with the NSW Planning and Environment's Development near Rail Corridors and Busy Roads –Interim Guidelines is mandatory for roads with an annual average daily traffic (AADT) volume greater than 40,000 and is best practice advice for roads with an AADT volume of 20,000 - 40,000 (based on the traffic volume data available on the website of the RTA).

The Guidelines apply to development:
- located up to 300m from the road kerb and with a direct line of sight to busy roads, and, or
- located within 80m of an operational rail track

The Guidelines require that noise levels in any such residential development not exceed:
- LA eq of 35dB (A) measured within any bedroom in the building at any time between 10pm-7am and
- LA eq of 40dB(A) measured within any bedrooms between 7am-10pm and anywhere else in the building (other than a garage, kitchen, bathroom or hallway) at any time.

Depending on the classification of a development using the screen tests in the Development near Rail Corridors and Busy Roads – Interim Guidelines, compliance with specified noise control treatments (Appendix C) may be required or an assessment by an acoustic consultant may be required.

7. Vehicular Access, Parking and Circulation

The location and layout of parking can have a significant impact on the design of new development. It will influence the layout and design of buildings and landscaping. All development must satisfy the demand for parking that it creates within its own site.

The provision of sufficient parking must not compromise the safety of the on-street and off-street environment for vehicles, pedestrians or cyclists.

7.1 Objectives

1. Ensure vehicle access, garages, carports and parking areas do not visually dominate either the development or the streetscape.

2. Car parking spaces are designed to ensure ease of access, egress and on-site manoeuvring.

3. Reduce reliance on street parking.

7.2 Controls

1. Car parking shall be provided in accordance with the car parking requirements set out under *Table 1 - Car Parking Numbers* in Chapter 36: Vehicular Access, Traffic, Parking and Bicycles.

   All spaces shall be behind the building line.

2. The parking space available within the garage shall be 5.5 m long and 3.0 m wide with a clear garage opening of 2.75m. The garage opening (doorway width) may be reduced to 2.4m wide where the driveway leads straight into the garage (as shown in Figure 1 in Chapter 36). Where a double garage is permitted, it shall be 5.5 metres long and 5.7m wide with a clear garage opening of at least 5m.

3. Only two single garage doors (of maximum 3m in width) or one double garage door are to face the street.

4. Parking spaces shall have a grade no greater than 1:20.

5. Dual occupancies proposed on corner lots must ensure that driveways are approached from separate streets, where appropriate.

6. Car parking layout, and vehicular access requirements and design and public and private footpaths are to be in accordance with the Australian Standards, in particular AS 2890.1-2004 and the requirements contained in Chapter 36. On Arterial and Distributor Roads (as identified on the DCP Road Hierarchy Map) vehicles may be required to enter and leave a site in a forward direction, due to traffic conditions.

7. Driveways are to be designed and sited to accommodate street gully pits and street trees, and maximise the availability of on-street parking.

8. Single driveways should not exceed a maximum width of 3.5m at the boundary.

9. Only one driveway access per frontage is to be provided to dual occupancy development. Council may accept a second driveway access where it is satisfied that:

   a. The frontage of the lot is a minimum of 15m wide, and
   b. Driveway widths should not exceed a maximum width of 3m at the boundary, and
   c. Locations of driveways must comply with AS2890.1, and
   d. Two driveways must be able to accommodate an on-street car space a minimum of 6m long (wing-tip to wing-tip). Any splay transitions at the kerb should be wholly within the subject property frontage, and have regard for neighbouring properties, and
   e. Each access driveway provides safe access, and
   f. The availability of on street car parking is not diminished, particularly where on street car parking demand is high, and
   g. Access facilitates retention of existing trees, rock outcrops or natural features where they occur, and
   h. Site design facilitates greater resident amenity and solar access, and
   i. Development is consistent with the spatial and landscape qualities of the streetscape – in this regard wider lots are appropriate, and
   j. Car parking and garages do not dominate the streetscape.

10. Where a common driveway serves a side by side dual occupancy (where adjacent parking is provided) and the required parking space is setback 7.5m or less, driveways should not exceed a maximum width of 4.5m at the boundary and 3.5m at the kerb.

11. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, this must be achieved without compromising the contribution of the site to the landscape quality of the street.

    Note:
    Where vehicles must enter and leave a site in a forward direction, dual occupancy development is best designed as front and rear dwellings so that the required vehicle access can be provided as well as the required deep soil landscaping in the front setback.

8. Waste Management Requirements

The design of waste and recyclables storage areas within the property affects ease of use, amenity, and the efficiency of handling of waste for the life of the development.

8.1 Objectives

1. Ensure appropriate storage and collection of waste.

2. Minimise the environmental impacts associated with waste management.

3. Discourage illegal dumping.

4. Encourage on-site waste management facilities that are integrated with the design of a development and enable source separation, reuse and recycling.

5. Enable collection service providers to efficiently collect waste and recyclables with minimum disruption and impact on the community.

8.2 Controls

1. Each dwelling must be provided with a waste storage area capable of accommodating the following:
   a. 120 litre garbage bin
   b. 240 litre recycling bin
   c. 240 litre green waste bin.

2. The waste storage area must not be located forward of the building line and must not detract from the streetscape.

3. Developments must be designed so that bins do not need to be wheeled more than 75 metres.

Note:

Further details on Waste Management Plans including a template for a typical plan are in the Sutherland Shire DA Guide and the Waste Management Information Guidelines.

Sutherland Shire Council provides a garbage and recycling collection to residential and commercial developments based on the pricing structure outlined in the Schedule of Fees and Charges for Goods and Services. The Council only has the infrastructure to services 120 litre and 240 litre mobile garbage bins. Services are available from private contractors who might use different collection vehicles and bin sizes to those used by the Council.

All garbage, recycling and garden waste bins are collected from the kerbside by Council collectors. It is the responsibility of residents to ensure the bins are placed at the collection point, usually between the kerbside and the road reserve, by 5am on the regular service day.

b. Dual Occupancies in the E4 Environmental Living Zone

The E4 Environmental Living zone is the second tier of the environmentally sensitive residential zones within the Sutherland Shire. The zone applies to land with special environmental or scenic values due to its proximity to waterways, bushlands, hazards or suburban areas with higher levels of environmental qualities where residential development can be accommodated.

Dual occupancies are only permitted in some parts of the E4 Environmental Living zone by way of the Additional Permitted Uses Map. Much of this zone is subject to bushfire risk and as such, dual occupancies are generally not permitted in areas subject to risk. While dual occupancies are permitted in areas of this zone, limitations apply which seek to ensure a balance between the environmental and scenic values of the land and residential development. Development should aim to deliver well designed dual occupancy homes that respond to natural landforms, minimise the visual impact of new development and protect and enhance the vegetated character of these areas. The controls also aim to ensure a sensible balance between residential development and a high level of amenity for neighbouring residents.

Note:

The new LEP contains specific controls which relate to dual occupancies. A maximum height of 5.4m applies to dual occupancy development on an internal lot or where a rear dwelling forming a dual occupancy is proposed on a lot with only one road frontage. See Clause 4.3(4) & (5).

1. Streetscape and Building Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. In the E4 zone the relationship of the built form to the natural environment, particularly along the waterways is also a key consideration. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character and scenic quality. Ancillary elements of development such as driveways, parking areas and fencing are important elements of the streetscape. To make a positive contribution to the streetscape, new development needs to be compatible with the scale and character of existing buildings and landscape elements.

Architectural quality contributes to the character and quality of both the streetscape and built form when viewed from the street and waterways. High architectural quality requires appropriate composition of building elements, textures, materials and colours and reflects the use, the natural landscape setting, internal design and overall structure of a development.

1.1 Objectives

1. Ensure that all elements of development visible from the street, waterways and public domain make a positive contribution to the foreshore, streetscape and natural features of the area.

2. Ensure development is compatible with the scale, character and landscape setting of the adjoining streetscape, natural setting and scenic quality and that the environment's natural qualities dominate.

3. Ensure dual occupancy design responds to the opportunities and constraints of the site, delivering optimal solar orientation for both dwellings.

4. Ensure that basements do not add to building bulk or exacerbate impacts upon neighbours

5. Ensure the safety of pedestrians, cyclists, and vehicles using public domain and private land.

1.2 Controls

1. New dual occupancy dwellings shall be sited so that there is minimal disturbance to the natural landscape, with significant vegetation retained and enhanced.

2. Where a site is subject to bushfire risk, the dwellings should be located where risk factors are less severe.

3. Development must be designed and sited so that it addresses the street frontage ensuring that the path to all main entries are clearly identifiable from the street in order to facilitate way finding.

4. Where dwellings are provided side by side, the building entries to each dwelling should not require entry though a space allocated for parking nor be recessed behind garaging.

5. The design of dual occupancy must seek to reduce the apparent bulk and scale of development such that it is not dominant in the streetscape. Articulation of facades and massing of elements should be employed to reduce apparent bulk and scale from the street.

6. Dual occupancy development is to have a limit of one single garage door for each dwelling fronting the same street.

7. Where a dual occupancy development is proposed on a corner allotment, each dwelling and any associated garaging, must independently address a street frontage. If both dwellings are proposed to be accessed from one street due to site constraints, car parking and driveways should not dominate the streetscape.

8. Development is limited to two storeys in height above existing ground level. Development must be stepped down a steep site.

9. Despite the above, Council may permit a variation to the 2 storey limit above natural ground as the additional floor level where Council is satisfied that*:*

    a. The third storey does not result in the building having an adverse visual impact when viewed from the public domain, waterway or open space; and

    b. The third storey does not result in a building that is incompatible with the established scale or character of the immediate locality or adversely affect the amenity, streetscape and landscape setting;

10. Council may permit a basement where Council is satisfied that:
    a. Basements must be wholly contained within the footprint of the building above. Terraces and alfresco areas are not to be provided over basements unless they are at ground level.
    b. Basements musts be setback a minimum of 7.5m from the front boundary and 50% of the front setback is to be landscaped in order to contribute to the landscape quality of the streetscape.
    c. In order to minimise the visual impact of driveways to basements, cut shall be confined to less than one metre within the first 4 metres of the setback from the street. Landscaped terracing is to be relied upon to avoid the need to provide balustrading. Where site constraints make balustrading unavoidable, it is to be open form to minimise its visual intrusion into the streetscape.
    d. Natural ground levels surrounding the development and at property boundaries must be retained or reinstated to predevelopment levels. Basements must be designed to work with the slope of the land.
    e. Basements must not compromise the safety of the on-street or off-street environment for pedestrians, cyclists or vehicles. Ramps must have a maximum grade of -5% grade for the first 3m. Front and side boundary fences must be no higher than 1.2m within 3m of the basement ramp. Where safety and/or traffic conditions necessitate, vehicles are required to enter and exit in a forward direction.

f. For dual occupancy development, basement will only be allowed where the access is shared through a common entry point that is no greater than 4m in width.

Note:
Basement means the space of a building where the floor level of that space is predominantly below ground level (existing) and where the floor level of the storey immediately above is less than 1 metre above ground level (existing)

If basement construction protrudes more than 1m above ground level, it is no longer defined as a basement. Floor space in a basement may be counted as part of gross floor area. Refer to the definition of gross floor area in SSLEP2015.

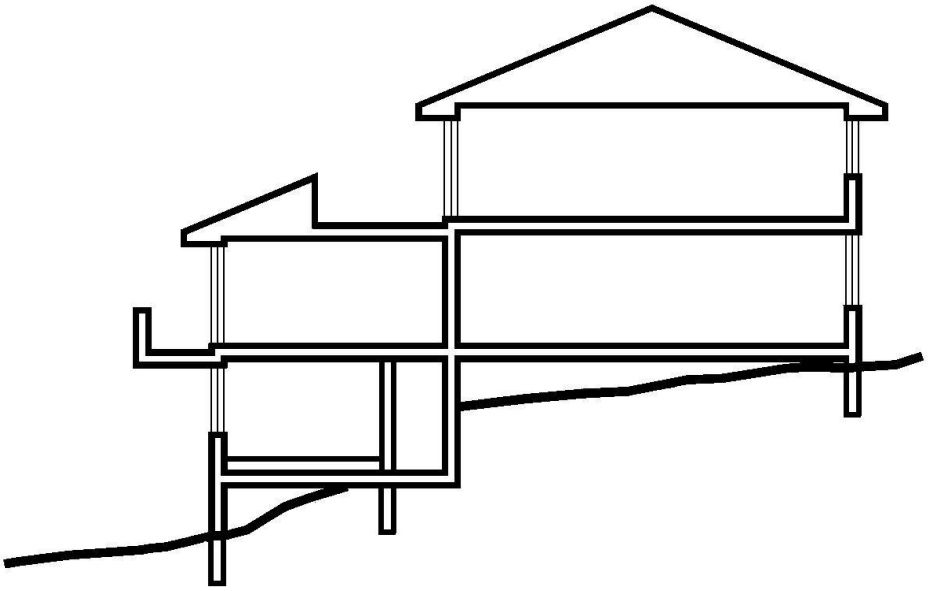


Figure 1: Buildings stepping down a site

10. Two or three storey development is only permitted on the front of an allotment and may extend to a maximum of 60% of the depth of the site measured from the property boundary.

11. Despite 11, where the topography, orientation or context of the site would allow for a better outcome to be achieved through accommodating two storey developments in the rear portion of the allotment, a variation may be considered if this solution will not result in a significant loss in the privacy or amenity of adjoining properties.

12. Extensive use of highly reflective materials is not acceptable for roof or wall cladding.

13. Development must be sensitively designed so that it is sympathetic to the amenities and view corridors of neighbouring public and private property and balances this with the amenity afforded to the new development.

Note:

View corridors may be maintained by implementing the following measures:
a. stepping buildings down the site,
b. using only single storey elements,
c. avoiding steep roofs, and
d. breaking up the built form.

Note:

Specific controls for fencing are provided in Chapter 34.

2. Building Setbacks

Street Setbacks
Street setbacks establish the front building line. Controls over street setbacks create the proportions of the street. Setbacks contribute to the public domain by enhancing streetscape character and the continuity of street facades. Street setbacks can also be used to enhance the setting for the building - providing for landscape areas, entries to the dual occupancy dwellings, privacy and deep soil zones suitable for planting of canopy trees.

Side and Rear Setbacks
The spatial relationship of buildings is an important determinant of urban form. Building separation affects the spatial continuity and the degree of openness in the street. Building separation is required to minimise adverse amenity impacts by providing opportunities for landscaping, access, privacy, solar access and private and shared open spaces.

2.1 Objectives

1. Establish the street proportions.

2. Encourage articulated building forms and ensure garages do not dominate the streetscape.

3. Enhance the setting for the building by providing opportunities for landscaping and infiltration of stormwater and protecting the landscape qualities and character of the locality.

4. Promote residential amenity for residents and neighbours including access to natural light and ventilation and both visual and acoustic privacy.

5. Provide adequate access for emergency services within the side setback in bush fire prone areas.

6. Alleviate the visual intrusion of building bulk on neighbouring properties.

7. Minimise view loss from adjoining or nearby properties.

2.2 Controls

1. Street, side and rear setbacks are measured perpendicular from the property boundary to the closest extent of the building, including balconies, awnings, podiums, sunscreens and the like (excluding eaves).

2. The minimum setbacks required are set out in the table below:

Table 1: Setbacks

Setbacks	Minimum Distance
Front	
Primary street frontage	7.5m – except where the adjoining dwellings are setback greater than or less than 7.5m, in which case it is the established street setback*
Secondary street frontage	3.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m
Side	1.5m
Rear	6.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m - **Some variations apply.

Note: The 7.5m street setback applies to the primary (narrowest) street frontage.

***** The established street setback is the average distance of the setbacks of the nearest dwelling houses having the same primary road boundary and located within 40m of the lot on which the dwelling house is erected. Where the difference between the setbacks of the nearest dwelling houses is less than or equal to 2.0m, the greater or lesser setback may be applied.

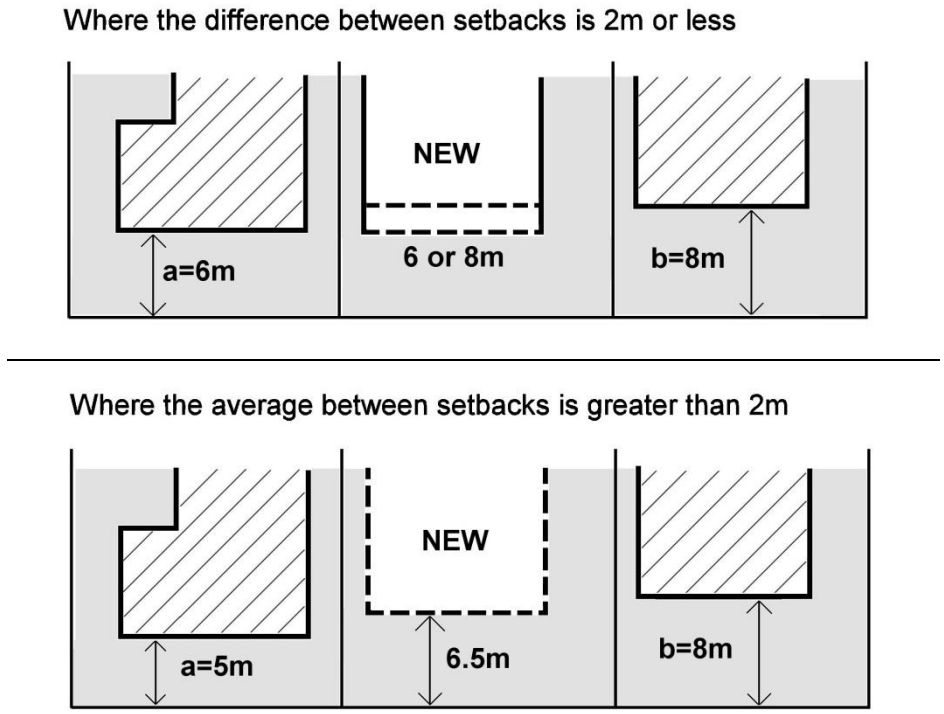


Figure 2: Established Street Setbacks

3. Where a development has a street setback of 7.5m or greater, building elements may encroach 1.5m into the front setback for a maximum of one third of the area of the façade, forming an articulation zone.

   Built form encroachments into the articulation zone can include open structure elements such as balconies and hoods, as well as elements which contribute to floor space ratio such as bay windows and room projections.
   Built form encroachments into the articulation zone must not include:
   - Garages, or
   - Lift shafts.

   Built form encroachments into the articulation zone must improve the design quality of the development with good façade articulation.

4. Garages and garage doors cannot be located in the articulation zone. These elements are to be located no closer than 7.5m to the street and integrated with the building.

5. In the case of corner properties, the 7.5m setback applies to the narrowest street frontage.

6. Despite clause 2 where a single storey dwelling forming a dual occupancy is located at the rear of the lot, the rear setback may be reduced to 4.0m.

7. Despite clause 2, in the case of a corner lot dual occupancy, garages and garage doors accessible from the secondary street must be setback a minimum of 6.0m.

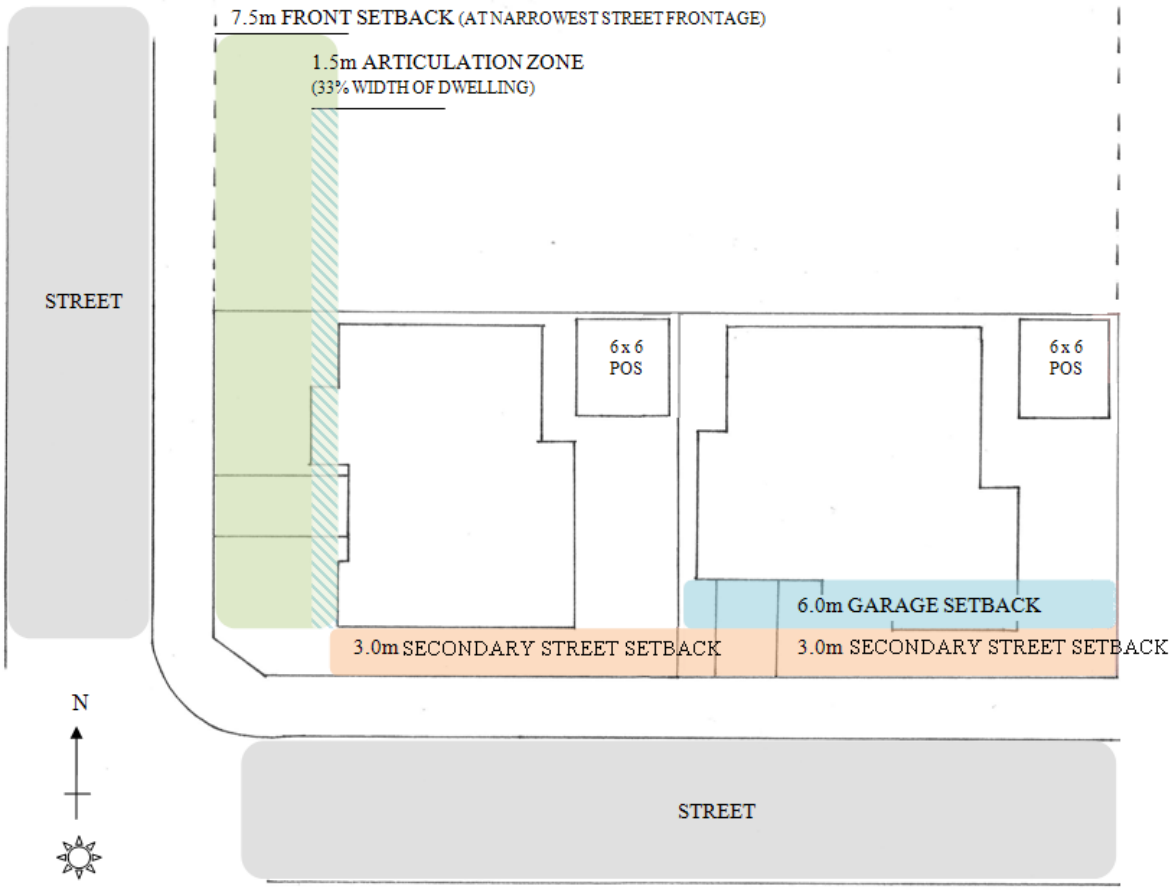


Figure 3: Street setbacks for corner lots.

8. In the case of a corner property dual occupancy, one boundary must be nominated as the rear boundary of the property and comply with the minimum required setbacks identified in Clause 2.

9. Despite any other clause, for dual occupancy development on corner allotments, a variation to the rear setback may be considered by Council, but only where it can be demonstrated that a variation would achieve a better outcome than would strict compliance with the standard setback controls because of site constraints, implications stemming from the existing allotment pattern, building design, retention of existing significant vegetation, solar access or positioning of useable open space.

10. Despite clause 2 the rear setback may be reduced to 1.5m where the rear of the original lot adjoins the side boundary of an adjacent property. This clause does not apply to corner dual occupancy developments.

11. Despite clause 2 where a dwelling forming a dual occupancy is located at the rear of the lot which has a side boundary with a predominantly northerly aspect, the required 4.0m rear setback may be relocated to this side boundary, provided the private open space for that dwelling is located along this northern side boundary. In such circumstances, the original rear boundary may be reduced to 1.5m.

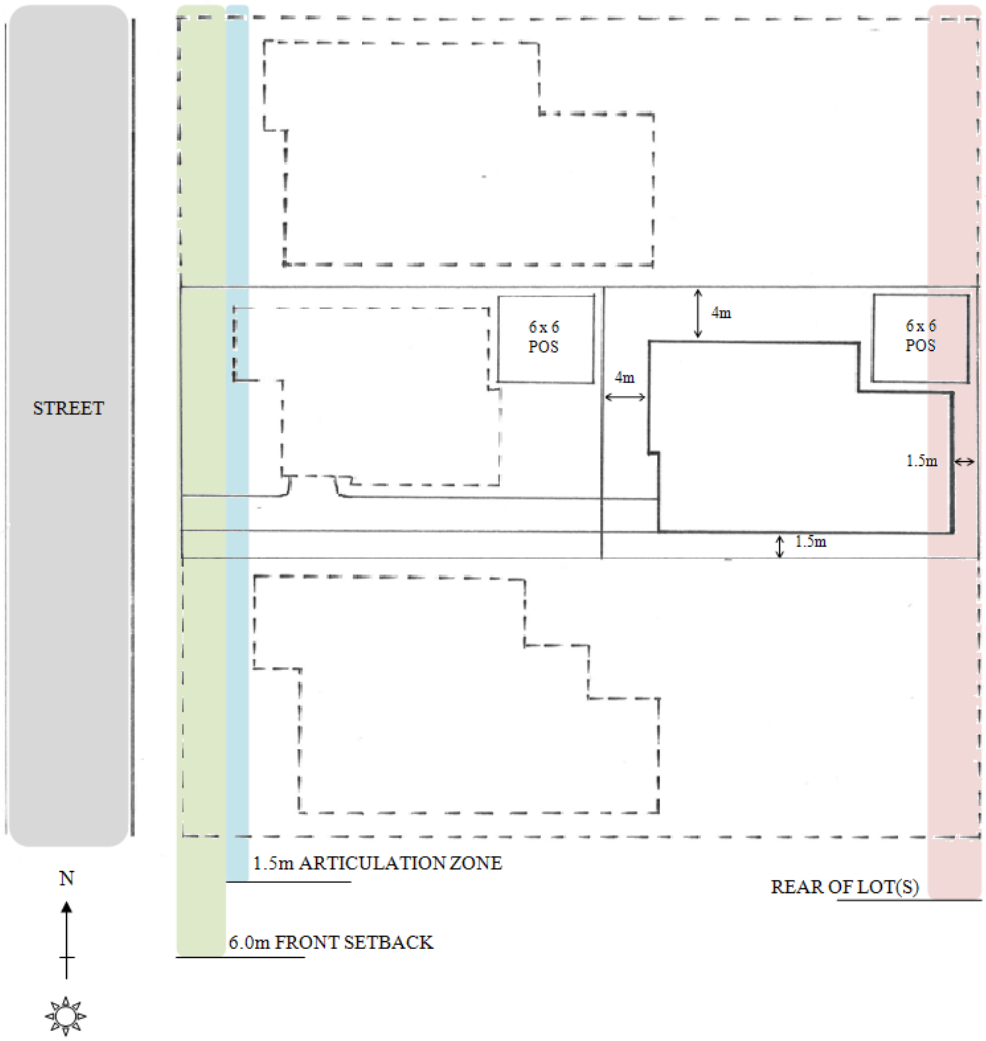


Figure 4: The required 4.0m rear setback may be relocated to the side boundary, provided the private open space for that dwelling is located along the northern side boundary, see clause 11.

12. The side setback may be reduced to 900mm for alterations and additions to an existing dwelling to create a dual occupancy, where the existing side setback is 900mm and this does not impeded emergency access.

13. Where a second storey wall adjacent to a side boundary exceeds 15m in continuous length, the side setback shall be increased by a further 500mm or more for that part of the wall. Where the scale of the side elevation results in significant overshadowing and/or visual intrusion due to building bulk to an adjoining dwelling, an increased building setback is to be employed.

3. Landform

The natural topography and landform features of the E4 zone make up a fundamental part of the character and attractiveness of the Shire. Natural landforms provide for a variety of views and vistas, both local and distant, from public and private domains. Maintaining the natural landform should be an integral consideration for the design of new dual occupancy dwellings.

In order to contribute to the quality and identity of the area, new development must respect landform and natural settings. Development must be designed so that it minimises impacts to natural land forms and allows the natural qualities of the site to be the dominant elements of its setting.

Development on the steeper and higher topographical areas is often more prominent, particularly when viewed from the low side. Well considered design ensures dual occupancy dwellings integrate with the streetscape and views from the waterways, and retain a consistent relationship to the natural topography. This relationship provides an important visual link between buildings in a streetscape, as well as reducing the impacts of new development on neighbouring lots.

Deep excavation, cut and fill or benching may alter the pattern of subsoil water flow and soil stability, which may adversely affect neighbouring properties and the natural environment. Alternatives to slab on ground construction are encouraged where the gradient and characteristics of the site would otherwise require major excavation or filling.

3.1 Objectives

1. Ensure that development utilises natural or existing building platforms so that:
   a. existing natural vegetation within the precinct is preserved; and
   b. steeply sloping land is not modified to create building platforms, making the land unstable.

2. Ensure that the building/s siting, design and construction method responds to the natural landform of the site and is appropriate for site slope.

3. Minimise the visual impact of new development, particularly when viewed from the public domain.

4. Minimise earth works so as to maintain the existing landform and protect the integrity and stability of geological elements in the vicinity of the site.

5. Minimise impacts on surrounding vegetation and provide increased opportunities for tree retention, including trees on neighbouring properties.

3.2 Controls

1. Development is to be located so that:
   a. Clearing of natural vegetation is avoided;
   b. A stable building footprint can be established that:
      i. does not rely on the use of cut or fill, or any other form of terracing;
      ii. avoids the location of buildings over slopes greater than 18 degrees or 33%;
      iii. uses, where practicable, a natural flat area.

2. The depth of cut and fill must not exceed 1m from existing ground level, except where the excavation is for a basement.

3. Despite the above, Council may consider a variation (cut or fill greater than 1m) only where:
   a. Alternative design solutions have been explored and presented to Council showing no feasible solution to excavation is available, and
   b. There is unlikely to be disruption, or detrimental effects on existing drainage patterns, vegetation, sedimentation and soil stability in the locality, and
   c. The design is a sensitive solution to the constraints of the site that does not exacerbate amenity impacts on neighbouring dwellings.

4. Developments should avoid any unnecessary earthworks by designing and siting buildings within the natural slope of the land. The building footprint must be designed to minimise cut and fill by allowing the building mass to step in accordance with the slope of the land.

5. Natural ground level surrounding the development and at property boundaries must be retained or reinstated prior to the completion of works.

4. Landscaping

Good design recognises that landscape and buildings operate together as an integrated system, resulting in greater aesthetic quality and amenity for the occupants, neighbours and the public domain. High quality landscape design protects and builds on the site's natural and cultural features to contribute to a development's positive relationship to its context and site.

Sutherland Shire's tree cover, areas of bushland and natural beauty are valued by its residents. Landscape design in new development must recognise that existing trees, areas of habitat and natural systems must be protected and enhanced by the retention of important landscape elements, appropriate planting, bush regeneration and by minimising urban runoff. Even in areas prone to bushfires, sensibly selected and sited trees can help reduce ember attack.

4.1 Objectives

1. Retain and enhance existing mature trees and bushland vegetation within and adjacent to the proposed development.

2. Contribute to streetscape character, local habitat and the amenity of the public domain by using indigenous planting and species which complement scale of the development.

3. Provide landscaping treatments which foster attractive outlooks, privacy and private recreation areas of high aesthetic quality.

4. Improve the microclimate within development.

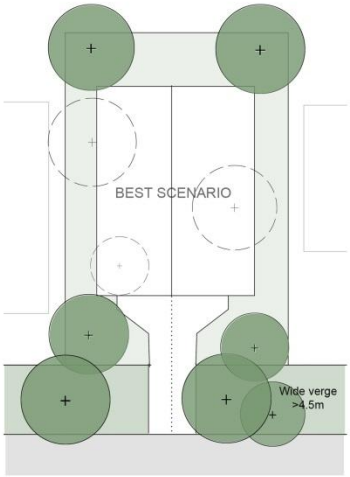
4.2 Controls

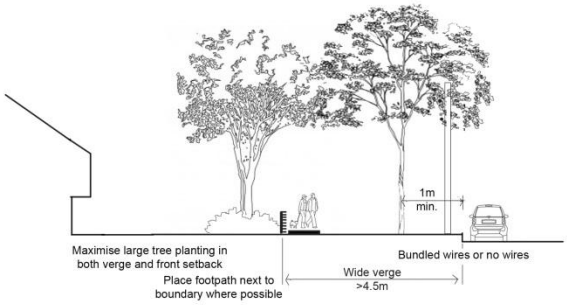
1. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, dual occupancy development must be designed to accommodate front and rear dual occupancy dwellings so that the required vehicle access can be provided, as well as the required deep soil landscaping.

2. Development should be designed to retain existing canopy trees in the vicinity of side, rear and front setbacks including on adjoining land.

3. A minimum of 4 trees are to be provided per dual occupancy development. A minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 3m of the front boundary and a minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 2m of the rear boundary or within the foreshore area (whichever is applicable). All indigenous tree species must be selected from Council's *Native Plant Selector* available on Council's website.

REPLACEMENT PLANTING IN STREET & FRONT SETBACK

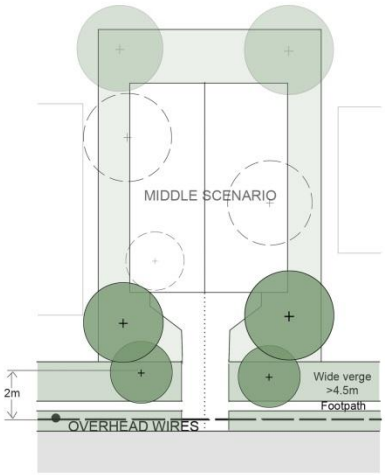


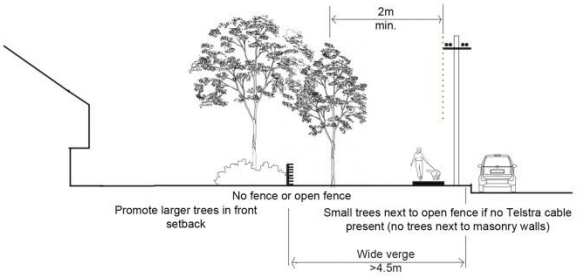


REPLACEMENT PLANTING CALCULATION:

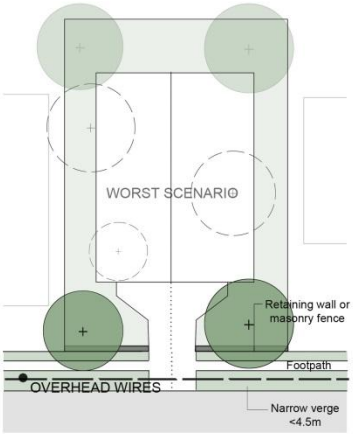
3 trees removed at a replacement rate of 4 to 1 (@$100/tree)
3x4=12 Trees
Potential to put back in 7 trees in best scenario
5 trees remaining
5x$100=$500 into fund

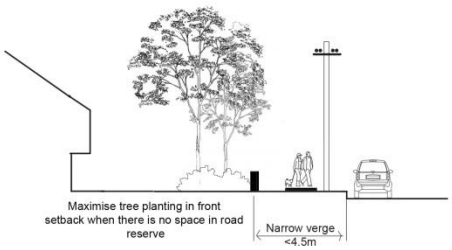
1. REPLACEMENT PLANTING-
WIDE VERGE AND NO OVERHEAD WIRES





2. REPLACEMENT PLANTING -
WIDE VERGE AND OVERHEAD WIRES





3. REPLACEMENT PLANTING-
NARROW VERGE AND OVERHEAD WIRES

4. Landscape design and plant species selection should reduce the potential for invasive plant species to escape into the surrounding bushland.

5. Where there are continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a maximum height of 4m, must be planted at a maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and or masonry fence or retaining wall. Street trees must be selected from the Council's technical specifications and Native Plan Selector available on Council's website

6. Where there are no continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a minimum mature height of 6m, must be planted at maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and/or masonry fence or retaining wall. Street trees must be selected from Council's technical specifications and Native Plant Selector available on Council's website.

Note:

All indigenous tree species must be selected from Council's Native Plant Selector available on Council's website. The Native Plant Selector is a tool that recommends plants suitable for Sutherland Shire's ecosystems based on the specific address of the site locality. The tool is available online at http://www.sutherlandshire.nsw.gov.au/Outdoors/Environment/Plants-and-Bushland/Native-Plant-Selector.

For additional guidance on landscape design and implementation refer to the Sutherland Shire Environmental Specifications - Landscape 1-5. Applicants should also refer to the Greenweb map and controls in Chapter 39 Natural Resource Management. For development application submission requirements refer to Council's DA Guide.

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5. Building Layout, Private Open Space and Solar Access

Good design provides a building layout that maximises the natural attributes of the site. Carefully considered building layout and design also creates a higher level of amenity for occupants through enhanced visual and acoustic privacy, passive heating and cooling, attractive outlooks from living spaces, and flexible and useable indoor and outdoor spaces that meet the needs of occupants.

Quality private space is critical to achieving good residential amenity. Open space of sufficient area and dimensions to enable recreational and outdoor use, landscaping and service functions is needed for all dual occupancy dwellings.

Ideally, solar access should be maximised in winter and controlled in summer. Daylight consists of both diffused light and direct light. Good levels of daylight in a dual occupancy dwelling improve amenity and reduce the need for artificial lighting. Good levels of daylight can be achieved through the careful consideration of window size, location and proportion.

5.1 Objectives

1. Ensure development provides opportunities for cross-ventilation and natural ventilation, through the arrangement of external openings.

2. Ensure outdoor living areas are functional and responsive to the environment.

3. Provide privacy and solar access to principle private open space areas of dual occupancy dwellings.

4. Ensure building design and location does the most to minimise adverse impacts of overshadowing of neighbouring buildings and private and public open spaces.

5.2 Controls

1. Orientate all new development and windows to take advantage of solar orientation to maximise natural light penetration to indoor areas and reduce the need for mechanical heating and cooling.

2. A minimum of 3 hours of direct sunlight between 9am and 3pm in midwinter should be provided to a living area within each dwelling.

3. Each dwelling is to provide an area of private open space that has a minimum area of $36m^2$ with minimum dimension of 5m, of which $9m^2$ must be paved.

4. Where a dual occupancy is comprised of a dwelling on each level, the upper dwelling is not required to provide private open space at ground level, instead supplying a 4m x 6m balcony or terrace area with a minimum area of $24m^2$ and where possible oriented north.

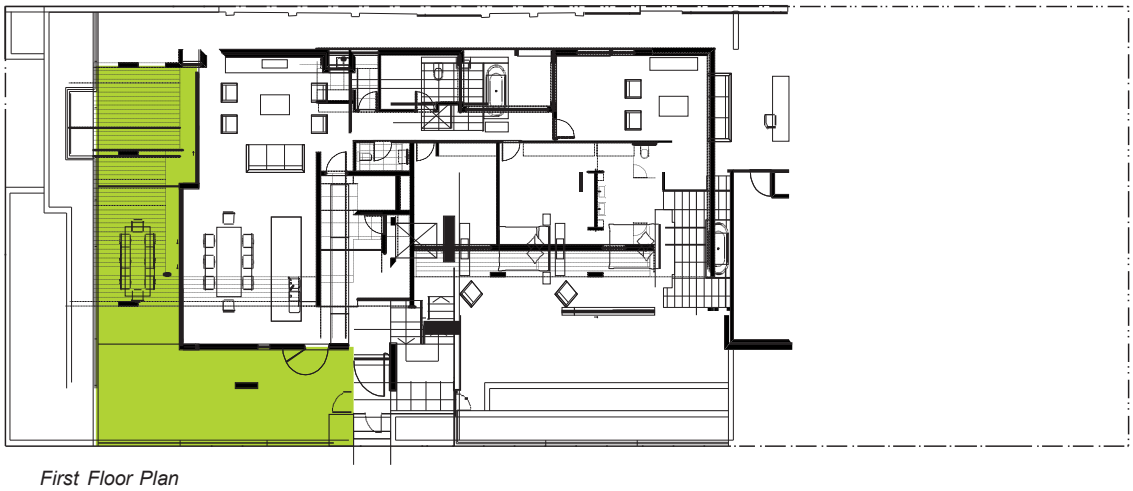

Figure 1: Private open space as balcony or terrace (Source: Draft Good Design Guide for medium density living, NSW Department of Planning, 2011)

5. A primary living area of each dual occupancy dwelling is to provide direct access to the private open space.

6. Private open space may be located within the front setback. In such instances a combination of fencing and hedging is to provide privacy for residents while also ensuring that the site makes a positive contribution to the landscaped character of the street. High solid fencing is unacceptable. Residents seeking to rely on the front setback for private open space must accept a lower level of privacy until landscaping matures. Front fencing must be in accordance with the provisions specified in Chapter 34 Ancillary Development: Fences.

7. For the proposed dual occupancy dwellings:
   a. orientate the area of private open space to take advantage of the northern solar access;
   b. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. overshadowing by vegetation should be ignored;
   d. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

8. For the neighbouring dwellings:
   a. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   b. ensure windows of living areas have 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. consideration will be given to reduced solar access where the proposed development is generally compliant with all development standards and controls, and the extent of impact is the result of orientation, site constraints, and or existing built forms;
   d. overshadowing by vegetation should be ignored;
   e. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

9. A secure space per dwelling of $10m^3$ set aside exclusively for storage as part of the dwelling or garage should be provided. Storage areas must be adequately lit and secure. The required $10m^3$ of storage is in addition to bedroom wardrobes, kitchen cupboards and pantries and bathroom cupboards.

10. Each dwelling is to provide an external service area set aside for accommodating garbage bins, air conditioning units etc.

6. Visual and Acoustic Privacy

Building design must take into consideration aspects of visual privacy and noise sources and minimise their future impact on occupants. Amenity is enhanced by privacy and a better acoustic environment. This can be achieved by carefully considering the location of the building/s on the site, the internal layout, the building materials used, and screening devices. The consideration of visual privacy requires an understanding of the context of the adjacent site, site configuration, topography, the scale of the development and its layout.

Major roads and rail operations generate noise and vibration, and people living and working near major transport corridors can be adversely affected. Major roads can also impact on air quality due to their volume of traffic. Building design must take into consideration the noise, vibration and air quality effects of busy roads and rail corridors and minimise the amenity and health impacts on future occupants.

6.1 Objectives

1. Ensure a high level of amenity by protecting the acoustic and visual privacy of occupants within dwellings and their associated private open spaces.
2. Ensure dwellings are sited and designed so that visual and acoustic privacy and vibration from outside sources is controlled to acceptable levels, incorporating architectural and building elements to assist in protecting privacy.
3. Minimise direct overlooking of windows and private open space so that the amenity of neighbours and intended occupants is respected.
4. Recognise the outlook and views from principal rooms and private open space without compromising visual privacy of others.

6.2 Controls

1. Locate, orientate and design new development to ensure visual privacy between buildings and between buildings and adjacent private open space.
2. Use building design to increase privacy without compromising access to light and air.
3. Living room, dining room and kitchen windows that provide a direct outlook to an adjacent property dwelling which leads to a loss of amenity, needs to consider the following:

    a. offset the edge of one window to the edge of the other window by a sufficient distance to limit the views into the adjacent windows; or
    b. provide sill heights of at least 1.6m; or
    c. have fixed obscure glazing or glass blocks in any part of the window below 1.6m.
    d. Direct the outlook from all living rooms, dining rooms, bedrooms, kitchens and studies where possible towards the street, private open space on the development site, public open spaces, and waterways.
    e. Where overlooking of adjacent living rooms, dining rooms, bedrooms, kitchens and studies or private open space is unavoidable then screening elements such as louvres and obscured glass must be used to preserve reasonable visual privacy for neighbours.

4. Where dual occupancy design includes a second floor dwelling with a balcony serving as the primary private open space, both the balcony and living areas should be orientated to the street or public place in order to prevent overlooking.

5. Arrange dwellings within a development to minimise noise transition between dwellings by:
   a. locating busy, noisy areas next to each other and quieter areas next to other quiet areas; for example, living rooms with living rooms, bedrooms with bedrooms;
   b. using storage or circulation zones within a dwelling to buffer noise from adjacent dwellings, mechanical services or corridors and lobby areas;
   c. minimising party (shared) walls with other dwellings.

Note:
Visual privacy may be achieved by:
a. Designing the dual occupancy dwellings to maximise the separation distances from adjacent dwellings and private open spaces,

Design elements to achieve privacy may include:
a. Offset windows in new development and windows of adjacent development
b. Recessed balconies and/or vertical fins between adjacent balconies,
c. Solid or semi-solid balustrades to balconies,
d. Louvres or screen panels to windows and/or balconies,
e. Fencing,
f. Vegetation as a screen between spaces,
g. Planter boxes in walls or balustrades,
h. Pergolas or shading devices to limit overlooking of lower level private open space.

6. All noise generating equipment such as air conditioning units, swimming pool filters, fixed vacuum systems and driveway entry shutters must be designed to protect the acoustic privacy of residents and neighbours. All such noise generating equipment must be acoustically screened. The noise level generated by any equipment must not exceed an LAeq (15min) of 5dB(A) above background noise at the property boundary.

7. Residential development adjacent to a rail corridor or a busy road as identified on the Road and Rail Noise Buffer Map should be sited and designed to include noise and vibration attenuation measures to minimise noise and vibration impacts. Refer to State Environmental Planning Policy (Infrastructure) 2007 and the NSW Department of Planning's *Development near Rail Corridors and Busy Roads – Interim Guideline*.

Note:
Compliance with the NSW Planning and Environment's Development near Rail Corridors and Busy Roads –Interim Guidelines is mandatory for roads with an annual average daily traffic (AADT) volume greater than 40,000 and is best practice advice for roads with an AADT volume of 20,000 - 40,000 (based on the traffic volume data available on the website of the RTA).

The Guidelines apply to development:
- located up to 300m from the road kerb and with a direct line of sight to busy roads, and, or
- located within 80m of an operational rail track

The Guidelines require that noise levels in any such residential development not exceed:
- LA eq of 35dB (A) measured within any bedroom in the building at any time between 10pm-7am and
- LA eq of 40dB(A) measured within any bedrooms between 7am-10pm and anywhere else in the building (other than a garage, kitchen, bathroom or hallway) at any time.

Depending on the classification of a development using the screen tests in the Development near Rail Corridors and Busy Roads – Interim Guidelines, compliance with specified noise control treatments (Appendix C) may be required or an assessment by an acoustic consultant may be required.

7. Vehicular Access, Parking and Circulation

The location and layout of parking can have a significant impact on the design of new development. It will influence the layout and design of buildings and landscaping. All development must satisfy the demand for parking that it creates within its own site.

The provision of sufficient parking must not compromise the safety of the on-street and off-street environment for vehicles, pedestrians or cyclists.

7.1 Objectives

1. Ensure vehicle access, garages, carports and parking areas do not visually dominate either the development or the streetscape.

2. Car parking spaces are designed to ensure ease of access, egress and on-site manoeuvring.

3. Reduce reliance on street parking.

7.2 Controls

1. Car parking shall be provided in accordance with the car parking requirements set out under *Table 1 - Car Parking Numbers* in Chapter 36: Vehicular Access, Traffic, Parking and Bicycles.

   All spaces shall be behind the building line.

2. The parking space available within the garage shall be 5.5 m long and 3.0 m wide with a clear garage opening of 2.75m. The garage opening (doorway width) may be reduced to 2.4m wide where the driveway leads straight into the garage (as shown in Figure 1 in chapter 36). Where a double garage is permitted, it shall be 5.5 metres long and 5.7m wide with a clear garage opening of at least 5m.

3. Only two single garage doors (of maximum 3m in width) or one double garage door are to face the street.

4. Parking spaces shall have a grade no greater than 1:20.

5. Dual occupancies proposed on corner lots must ensure that driveways are approached from separate streets, where appropriate.

6. Where a common driveway serves a side by side dual occupancy (where adjacent parking is provided) and the required parking space is setback 7.5m or less, driveways should not exceed a maximum width of 4.5m at the boundary and 3.5m at the kerb.

7. Driveways are to be designed and sited to accommodate street gully pits and street trees, and maximise the availability of on-street parking.

8. Single driveways should not exceed a maximum width of 3.5m at the boundary.

9. Only one driveway access per frontage is to be provided to dual occupancy development. Council may accept a second driveway access where it is satisfied that:

   a. The frontage of the lot is a minimum of 15m wide, and
   b. Driveway widths should not exceed a maximum width of 3m at the boundary, and
   c. Locations of driveways must comply with AS2890.1, and
   d. Two driveways must be able to accommodate an on-street car space in between, with a minimum length of 6m long (wing-tip to wing-tip) between the driveways. Any splay transitions at the kerb should be wholly within the subject property frontage, and have regard for neighbouring properties, and
   e. Each access driveway provides safe access, and
   f. The availability of on street car parking is not diminished, particularly where on street car parking demand is high, and
   g. Access facilitates retention of existing trees, rock outcrops or natural features where they occur, and
   h. Site design facilitates greater resident amenity and solar access, and
   i. Development is consistent with the spatial and landscape qualities of the streetscape – in this regard wider lots are appropriate, and
   j. Car parking and garages do not dominate the streetscape.

10. Where a common driveway serves a side by side dual occupancy (where adjacent parking is provided) and the required parking space is setback 7.5m or less, driveways should not exceed a maximum width of 4.5m at the boundary and 3.5m at the kerb.

11. Car parking layout, and vehicular access requirements and design and public and private footpaths are to be in accordance with the Australian Standards, in particular AS 2890.1-2004 and the requirements contained in chapter 36. On Arterial and Distributor roads (as identified on the DCP Road Hierarch Map) vehicles may be required to enter and leave a site in a forward direction due to traffic conditions.

12. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, this must be achieved without compromising the contribution of the site to the landscape quality of the street.

Note: Where vehicles must enter and leave a site in a forward direction, dual occupancy development is best designed as front and rear dwellings so that the required vehicle access can be provided as well as the required deep soil landscaping in the front setback.

8. Waste Management Requirements

The design of waste and recyclables storage areas within the property affects ease of use, amenity, and the efficiency of handling of waste for the life of the development.

8.1 Objectives

1. Ensure appropriate storage and collection of waste.

2. Minimise the environmental impacts associated with waste management.

3. Discourage illegal dumping.

4. Encourage on-site waste management facilities that are integrated with the design of a development and enable source separation, reuse and recycling.

5. Enable collection service providers to efficiently collect waste and recyclables with minimum disruption and impact on the community.

8.2 Controls

1. Each dwelling must be provided with a waste storage area capable of accommodating the following:
   a. 120 litre garbage bin
   b. 240 litre recycling bin
   c. 240 litre green waste bin.

2. The waste storage area must not be located forward of the building line and must not detract from the streetscape.

3. Developments must be designed so that bins do not need to be wheeled more than 75 metres.

Note:

Further details on Waste Management Plans including a template for a typical plan are in the Sutherland Shire DA Guide and the Waste Management Information Guidelines.

Sutherland Shire Council provides a garbage and recycling collection to residential and commercial developments based on the pricing structure outlined in the Schedule of Fees and Charges for Goods and Services. The Council only has the infrastructure to services 120 litre and 240 litre mobile garbage bins. Services are available from private contractors who might use different collection vehicles and bin sizes to those used by the Council.

All garbage, recycling and garden waste bins are collected from the kerbside by Council collectors. It is the responsibility of residents to ensure the bins are placed at the collection point, usually between the kerbside and the road reserve, by 5am on the regular service day.

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c. Dual Occupancies in the R2 Low Density Residential Zone

The R2 zone is the zone applied to the traditional low density residential areas of the Shire. The controls for dual occupancies in this zone aim to ensure that development is compatible with the established character and streetscape of a locality and preserves and enhances the garden and bushland setting of the zone. The controls aim to delivers well designed homes that offer amenity to the residents and protect neighbours amenity.

The zone allows for a variety of housing types, facilities and services to meet the needs of the community and residents; however all development is required to be at a scale and density that is compatible with the single dwelling character of the locality.

Note:

The new LEP contains specific controls which relate to dual occupancies. A maximum height of 5.4m applies to dual occupancy development on an internal lot or where a rear dwelling forming a dual occupancy is proposed on a lot with only one road frontage. See Clause 4.3(4) & (5).

1. Streetscape and Building Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character and scenic quality. Ancillary elements of development such as driveways, parking areas and fencing are important elements of the streetscape. To make a positive contribution to the streetscape, new development needs to be compatible with the scale and character of existing buildings and landscape elements.

Architectural quality contributes to the character and quality of both the streetscape and built form when viewed from the street and waterways. High architectural quality requires appropriate composition of building elements, textures, materials and colours and reflects the use, the natural landscape setting, internal design and overall structure of a development.

1.1 Objectives

1. Ensure that all elements of development visible from the street and public domain make a positive contribution to the streetscape and natural features of the area.

2. Ensure development is compatible with the scale, character and landscape setting of the adjoining streetscape, natural setting and scenic quality.

3. Ensure dual occupancy design responds to the opportunities and constraints of the site, delivering optimal solar orientation for both dwellings.

4. Ensure that basements do not add to building bulk or exacerbate impacts upon neighbours

5. Ensure the safety of pedestrians, cyclists, and vehicles using public domain and private land.

1.2 Controls

1. Development must be designed and sited so that it addresses the street frontage ensuring that the path to all main entries are clearly identifiable from the street order to facilitate way finding.

2. The front entrance to each dwelling is to be the dominant element in each dwelling frontage. Building entries (landings, porticos, patios etc) are to be used to accomplish this.

3. Where dwellings are provided side by side, the building entries to each dwelling should not require entry through a space allocated for parking nor be recessed behind garaging.

4. The design of dual occupancy must seek to reduce the apparent bulk and scale of development such that it is not dominant in the streetscape. Articulation of facades and massing of elements should be employed to reduce apparent bulk and scale from the street.

5. Dual occupancy development is to have a limit of one single garage door for each dwelling fronting the same street.

6. Where a dual occupancy development is proposed on a corner allotment, each dwelling and any associated garaging, must independently address a street frontage. If both dwellings are proposed to be accessed from one street due to site constraints, car parking and driveways should not dominate the streetscape.

7. Development is limited to two storeys in height above existing ground level. Development must be stepped down a steep site.

8. Despite the above, Council may permit a variation to the two storey limit for a third storey above natural ground level where Council is satisfied that:
   a. The third storey does not result in the building having an adverse visual impact when viewed from the public domain, waterway or open space; and
   b. The third storey does not result in a building that is incompatible with the established scale or character of the immediate locality or adversely affect the amenity, streetscape and landscape setting;

9. Council may permit a basement where Council is satisfied that:
   a. a. Basements must be wholly contained within the footprint of the building above. Terraces and alfresco areas are not to be provided over basements unless they are at ground level.
   b. Basements musts be setback a minimum of 7.5m from the front boundary and 50% of the front setback is to be landscaped in order to contribute to the landscape quality of the streetscape.
   c. In order to minimise the visual impact of driveways to basements, cut shall be confined to less than one metre within the first 4 metres of the setback from the street. Landscaped terracing is to be relied upon to avoid the need to provide balustrading. Where site constraints make balustrading unavoidable, it is to be open form to minimise its visual intrusion into the streetscape.
   d. Natural ground levels surrounding the development and at property boundaries must be retained or reinstated to predevelopment levels. Basements must be designed to work with the slope of the land.
   e. Basements must not compromise the safety of the on-street or off-street environment for pedestrians, cyclists or vehicles. Ramps must have a maximum grade of -5% grade for the first 3m. Front and side boundary fences must be no higher than 1.2m within 3m of the basement ramp. Where safety and/or traffic conditions necessitate, vehicles are required to enter and exit in a forward direction.
   f. For dual occupancy development, basement will only be allowed where the access is shared through a common entry point that is no greater than 4m in width.

Note:

Basement means the space of a building where the floor level of that space is predominantly below ground level (existing) and where the floor level of the storey immediately above is less than 1 metre above ground level (existing)

If basement construction protrudes more than 1m above ground level, it is no longer defined as a basement. Floor space in a basement may be counted as part of gross floor area. Refer to the definition of gross floor area in SSLEP2015.

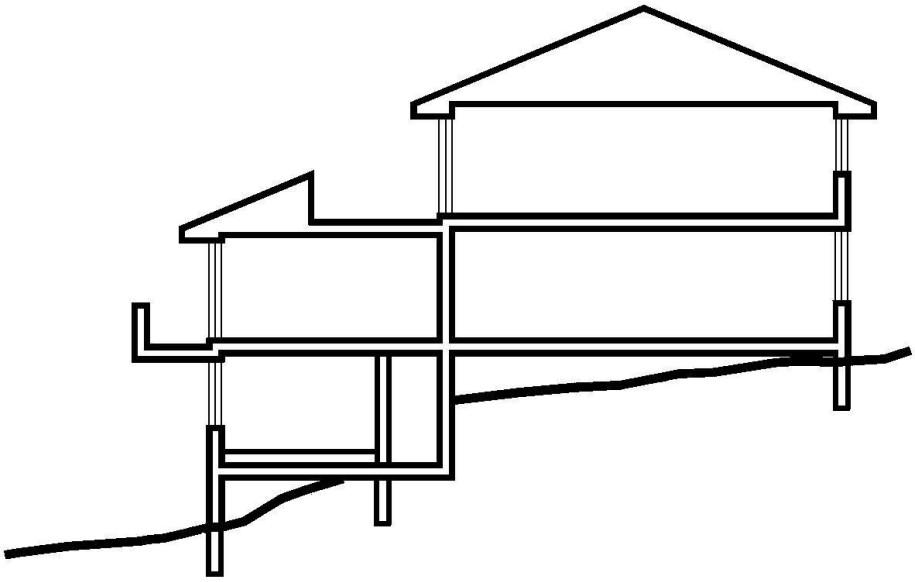


Figure 1: Building stepping down a slope

10. Two or three storey development is only permitted on the front of an allotment and may extend to a maximum of 60% of the depth of the site measured from the property boundary.

11. Despite 10, where the topography, orientation or context of the site would allow for a better outcome to be achieved through accommodating two storey developments in the rear portion of the allotment, a variation may be considered if this solution will not result in a significant loss in the privacy or amenity of adjoining properties.

12. Extensive use of highly reflective materials is not acceptable for roof or wall cladding.

13. Development must be sensitively designed so that it is sympathetic to the amenities and view corridors of neighbouring public and private property and balances this with the amenity afforded to the new development.

Note:

View corridors may be maintained by implementing the following measures:
a. stepping buildings down the site,
b. using only single storey elements,
c. avoiding steep roofs, and
d. breaking up the built form.

Note:

Specific controls for fencing are provided in Chapter 34.

2. Building Setbacks

Street Setbacks
Street setbacks establish the front building line. Controls over street setbacks create the proportions of the street. Setbacks contribute to the public domain by enhancing streetscape character and the continuity of street facades. Street setbacks can also be used to enhance the setting for the building providing for landscape areas, entries to the dual occupancy dwellings, privacy and deep soil zones suitable for planting of canopy trees.

Side and Rear Setbacks
The spatial relationship of buildings is an important determinant of urban form. Building separation affects the spatial continuity and the degree of openness in the street. Building separation is required to minimise adverse amenity impacts by providing opportunities for landscaping, access, privacy, solar access and private and shared open spaces.

2.1 Objectives

1. Establish the street proportions.

2. Encourage articulated building forms and ensure garages do not dominate the streetscape.

3. Enhance the setting for the building by providing opportunities for landscaping and infiltration of stormwater and protecting the landscape qualities and character of the locality.

4. Promote residential amenity for residents and neighbours including access to natural light and ventilation and both visual and acoustic privacy.

5. Alleviate the visual intrusion of building bulk on neighbouring properties.

6. Minimise view loss from adjoining or nearby properties.

2.2 Controls

1. Street, side and rear setbacks are measured perpendicular from the property boundary to the closest extent of the building, including balconies, awnings, podiums, sunscreens and the like (excluding eaves).

2. The minimum setbacks required are set out in the table below:

Table 1: Setbacks

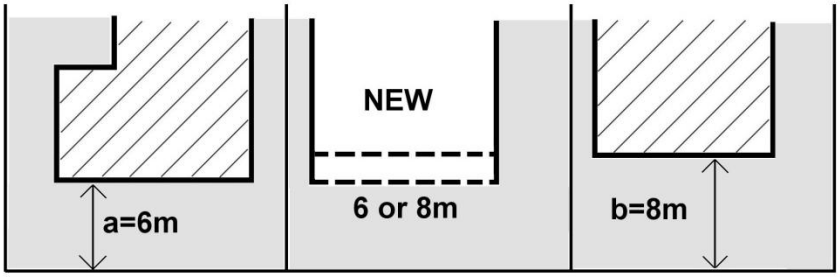
Setbacks	Minimum Distance
Front	
Primary street frontage	7.5m – except where the adjoining dwellings are setback greater than or less than 7.5m, in which case it is the established street setback*
Secondary street frontage	3.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m
Side - Ground floor	0.9m
Second storey	1.5m
Internal lot	1.5m
Rear	6.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m – some variations apply

Note: The 7.5m street setback applies to the primary (narrowest) street frontage.

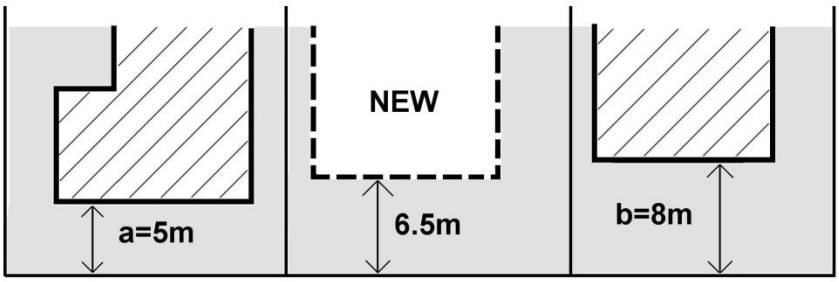
***** The established street setback is the average distance of the setbacks of the nearest dwelling houses having the same primary road boundary and located within 40m of the lot on which the dwelling house is erected. Where the difference between the setbacks of the nearest dwelling houses is less than or equal to 2.0m, the greater or lesser setback may be applied.

Figure 2: Established Street Setbacks

Where the difference between setbacks is 2m or less



Where the average between setbacks is greater than 2m



3. Where a development has a street setback of 7.5m or greater, building elements may encroach 1.5m into the front setback for a maximum of one third of the area of the façade, forming an articulation zone.

   Built form encroachments into the articulation zone can include open structure elements such as balconies and hoods, as well as elements which contribute to floor space ratio such as bay windows and room projections. Built form encroachments into the articulation zone must not include:
   - Garages, or
   - Lift shafts.

   Built form encroachments into the articulation zone must improve the design quality of the development with good façade articulation.

4. Garages and garage doors cannot be located in the articulation zone. These elements are to be located no closer than 7.5m to the street and integrated with the building design.

5. In the case of corner properties, the 7.5m setback applies to the narrowest street frontage.

6. Despite 2, in the case of a corner lot dual occupancy, garages and garage doors accessible from the secondary street must be setback a minimum of 6.0m.

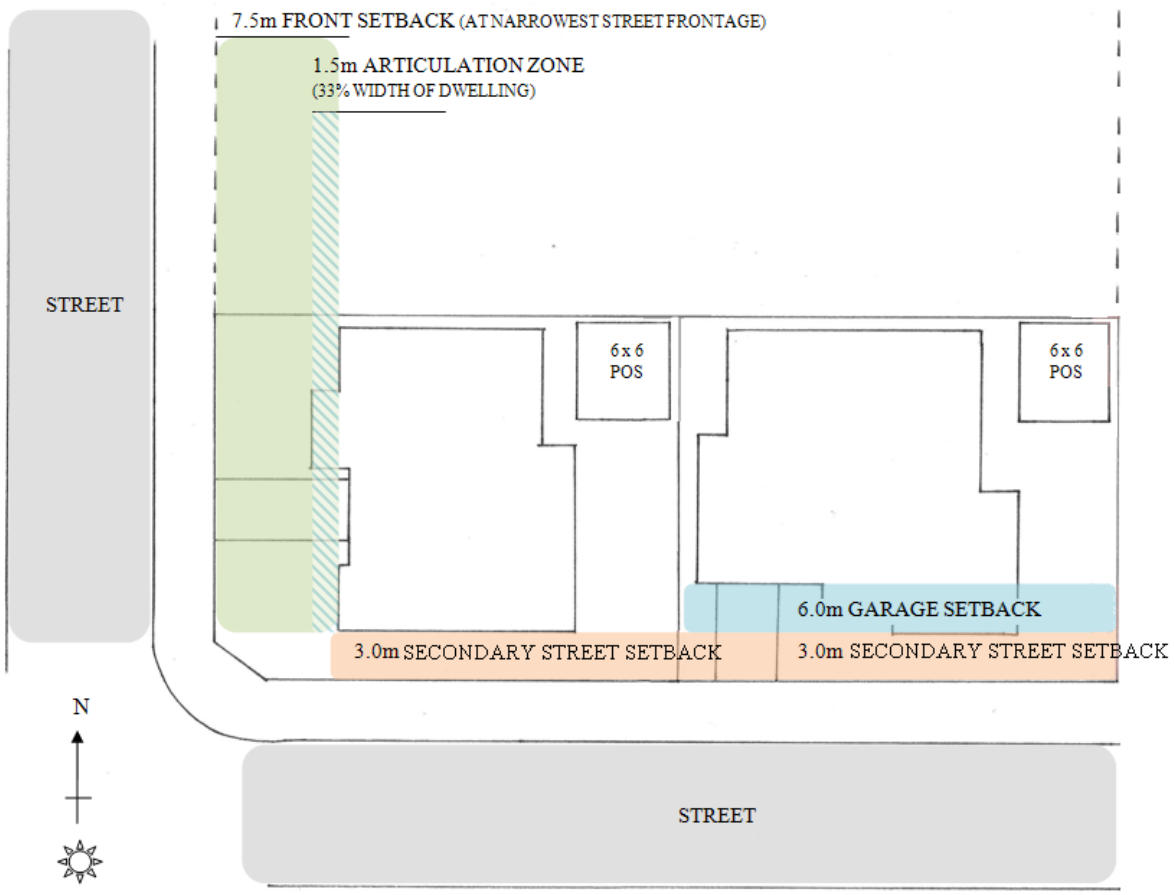


Figure 3: Street setbacks for corner lots.

7. Despite clause 2 where a single storey dwelling forming a dual occupancy is located at the rear of the lot, the rear setback may be reduced to 4.0m.

8. In the case of a corner property dual occupancy, one boundary must be nominated as the rear boundary of the property and comply with the minimum required setbacks identified in clause 2.

9. Despite any other clause, for dual occupancy development on corner allotments, a variation to the rear setback may be considered by Council, but only where it can be demonstrated that a variation would achieve a better outcome than would strict compliance with the standard setback controls because of site constraints, implications stemming from the existing allotment pattern, building design, retention of existing significant vegetation, solar access or positioning of useable open space.

10. The rear setback may be reduced to 1.5m where the rear of the original lot adjoins the side boundary of an adjacent property. This clause does not apply to corner dual occupancy developments.

11. Despite clause 2 where a dwelling forming a dual occupancy is located at the rear of the lot which has a side boundary with a predominantly northerly aspect, the required 4.0m rear setback may be relocated to this side boundary, provided the private open space for that dwelling is located along this northern side boundary. In such circumstances, the original rear boundary may be reduced to 1.5m.

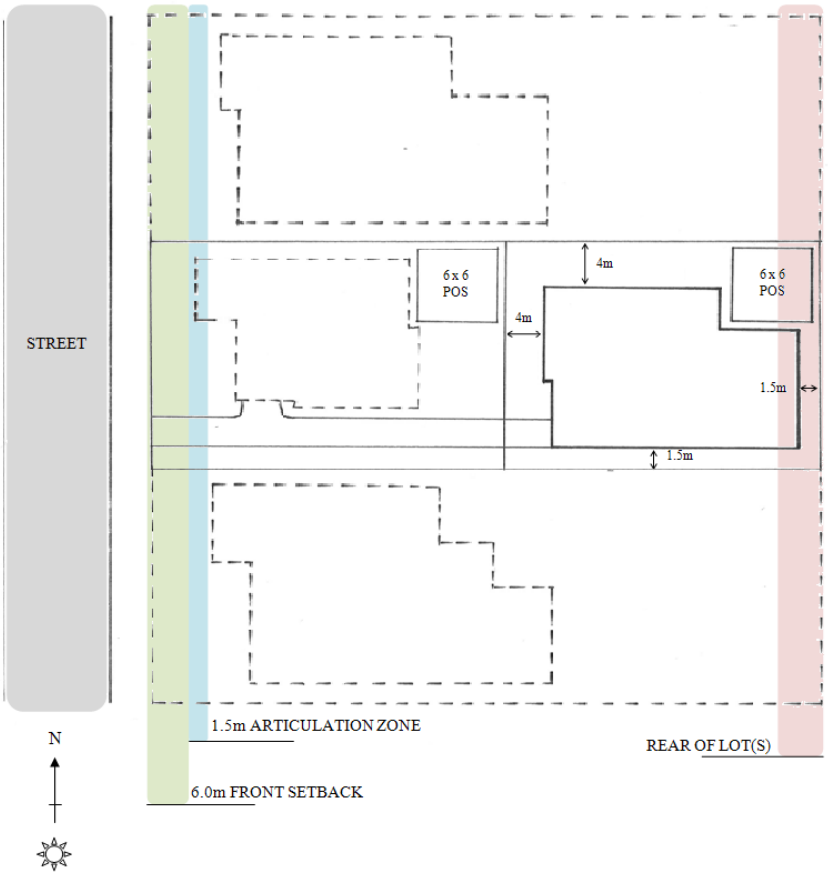


Figure 4: The required 4.0m rear setback may be relocated to the side boundary, provided the private open space for that dwelling is located along the northern side boundary, see clause 11.

12. Where a second storey wall adjacent to a side boundary exceeds 15m in continuous length, the side setback shall be increased by a further 500mm or more for that part of the wall. Where the scale of the side elevation results in significant overshadowing and/or visual intrusion due to building bulk to an adjoining dwelling, an increased building setback is to be employed.

3. Landform

The natural topography and landform features of the Shire make up a fundamental part of the character and attractiveness of the area. Natural landforms provide for a variety of views and vistas, both local and distant, from public and private domains. Maintaining the natural landform should be an integral consideration for the design of new dwellings.

In order to contribute to the quality and identity of the area, new development must respect landform and natural settings. Development must be designed so that it minimises impacts to natural land forms and allows the natural qualities of the site to be the dominant elements of its setting.

Development on the steeper and higher topographical areas is often more prominent, particularly when viewed from the low side. Well considered design ensures dual occupancy dwellings integrate with the streetscape and views from the waterways, and retain a consistent relationship to the natural topography. This relationship provides an important visual link between buildings in a streetscape, as well as reducing the impacts of new development on neighbouring lots.

Deep excavation, cut and fill or benching may alter the pattern of subsoil water flow and soil stability, which may adversely affect neighbouring properties and the natural environment. Alternatives to slab on ground construction are encouraged where the gradient and characteristics of the site would otherwise require major excavation or filling.

3.1 Objectives

1. Ensure that the building/s siting, design and construction method responds to the natural landform of the site and is appropriate for site slope.

2. Minimise the visual impact of new development, particularly when viewed from public domain.

3. Minimise earth works so as to maintain the existing landform and protect the integrity and stability of geological elements in the vicinity of the site.

4. Minimise impacts on surrounding vegetation and provide increased opportunities for tree retention, including trees on neighbouring properties.

3.2 Controls

1. The depth of cut and fill must not exceed 1m from existing ground level, except where the excavation is for a basement.

2. Despite the above, Council may consider a variation (cut or fill greater than 1m) only where:
   a. Alternative design solutions have been explored and presented to Council showing no feasible solution to excavation is available; and
   b. There is unlikely to be disruption, or detrimental effects on existing drainage patterns, vegetation, sedimentation and soil stability in the locality; and
   c. The design is a sensitive solution to the constraints of the site that does not exacerbate amenity impacts on neighbouring dwellings.

3. Developments should avoid unnecessary earthworks by designing and siting buildings within the natural slope of the land. The building footprint must be designed to minimise cut and fill by allowing the building mass to step in accordance with the slope of the land.

4. Any excavation must not extend beyond the building footprint.

5. Natural ground level surrounding the development and at property boundaries must be retained or reinstated prior to the completion of works.

4. Landscaping

Good design recognises that landscape and buildings operate together as an integrated system, resulting in greater aesthetic quality and amenity for the occupants, neighbours and the public domain. High quality landscape design protects and builds on the site's natural and cultural features to contribute to a development's positive relationship to its context and site.

Sutherland Shire's tree cover, areas of bushland and natural beauty are valued by its residents. Landscape design in new development must recognise that existing trees, areas of habitat and natural systems must be protected and enhanced by the retention of important landscape elements, appropriate planting, bush regeneration and by minimising urban runoff.

4.1 Objectives

1. Contribute to streetscape character, local habitat and the amenity of the public domain by using indigenous planting and species which compliment scale of the development.

2. Provide landscaping treatments which foster attractive outlooks, privacy and private recreation areas of high aesthetic quality.

3. Improve the microclimate within development.

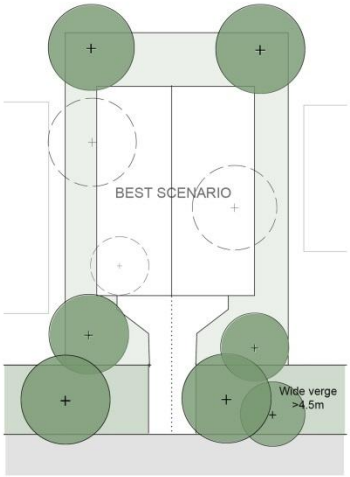
4.2 Controls

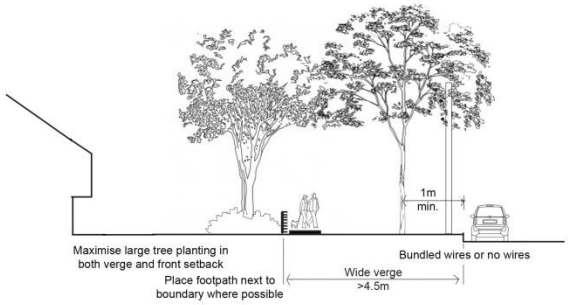
1. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, dual occupancy development must be designed to accommodate front and rear dual occupancy dwellings so that the required vehicle access can be provided, as well as the required deep soil landscaping.

2. Development should be designed to retain existing canopy trees in the vicinity of side, rear and front setbacks including on adjoining land.

3. A minimum of 4 trees are to be provided per dual occupancy development. A minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 3m of the front boundary and a minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 2m of the rear boundary or within the foreshore area (whichever is applicable). All indigenous tree species must be selected from Council's *Native Plant Selector* available on Council's website.

REPLACEMENT PLANTING IN STREET & FRONT SETBACK

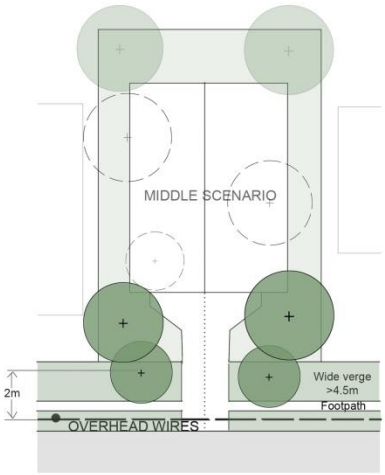


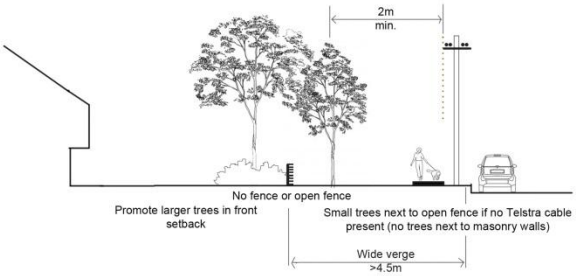


REPLACEMENT PLANTING CALCULATION:

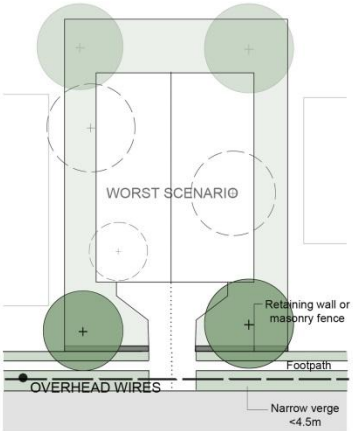
3 trees removed at a replacement rate of 4 to 1 (@$100/tree)
3x4=12 Trees
Potential to put back in 7 trees in best scenario
5 trees remaining
5x$100=$500 into fund

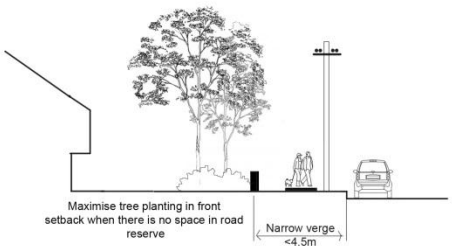
1. REPLACEMENT PLANTING-
WIDE VERGE AND NO OVERHEAD WIRES





2. REPLACEMENT PLANTING -
WIDE VERGE AND OVERHEAD WIRES





3. REPLACEMENT PLANTING-
NARROW VERGE AND OVERHEAD WIRES

4. Landscape design and plant species selection should reduce the potential for invasive plant species to escape into the surrounding bushland.

5. Where there are continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a maximum height of 4m, must be planted at a maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and or masonry fence or retaining wall. Street trees must be selected from the Council's technical specifications and Native Plan Selector available on Council's website

6. Where there are no continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a minimum mature height of 6m, must be planted at maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and/or masonry fence or retaining wall. Street trees must be selected from Council's technical specifications and Native Plant Selector available on Council's website.

Note:

All indigenous tree species must be selected from Council's Native Plant Selector available on Council's website. The Native Plant Selector is a tool that recommends plants suitable for Sutherland Shire's ecosystems based on the specific address of the site locality. The tool is available online at http://www.sutherlandshire.nsw.gov.au/Outdoors/Environment/Plants-and-Bushland/Native-Plant-Selector.

For additional guidance on landscape design and implementation refer to the Sutherland Shire Environmental Specifications - Landscape 1-5. Applicants should also refer to the Greenweb map and controls in Chapter 39 Natural Resource Management. For development application submission requirements refer to Council's DA Guide.

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5. Building Layout and Solar Access and Private Open Space

Good design provides a building layout that maximises the natural attributes of the site. Carefully considered building layout and design also creates a higher level of amenity for occupants through enhanced visual and acoustic privacy, passive heating and cooling, attractive outlooks from living spaces, and flexible and useable indoor and outdoor spaces that meet the needs of occupants.

Quality private space is critical to achieving good residential amenity. Open space of sufficient area and dimensions to enable recreational and outdoor use, landscaping and service functions is needed for all dual occupancy dwellings.

Ideally, solar access should be maximised in winter and controlled in summer. Daylight consists of both diffused light and direct light. Good levels of daylight in a dwelling improve amenity and reduce the need for artificial lighting. Good levels of daylight can be achieved through the careful consideration of window size, location and proportion.

5.1 Objectives

1. Ensure development provides opportunities for cross-ventilation and natural ventilation through the arrangement of external openings.

2. Ensure outdoor living areas are functional and responsive to the environment.

3. Provide privacy and solar access to principle private open space areas of a dual occupancy dwelling.

4. Ensure building design and location does the most to minimise adverse impacts of overshadowing of neighbouring buildings and private and public open spaces.

5.2 Controls

1. Orientate all new development and windows to take advantage of solar orientation to maximise natural light penetration to indoor areas and reduce the need for mechanical heating and cooling.

2. A minimum of 3 hours of direct sunlight between 9am and 3pm in midwinter should be provided to a living area within each dwelling.

3. Each dwelling is to provide an area of private open space that has a minimum area of $36m^2$ with minimum dimension of 5m, of which $9m^2$ must be paved.

4. Where a dual occupancy is comprised of a dwelling on each level, the upper dwelling is not required to provide private open space at ground level, instead supplying a 4m x 6m balcony or terrace area with a minimum area of $24m^2$ and where possible oriented north.

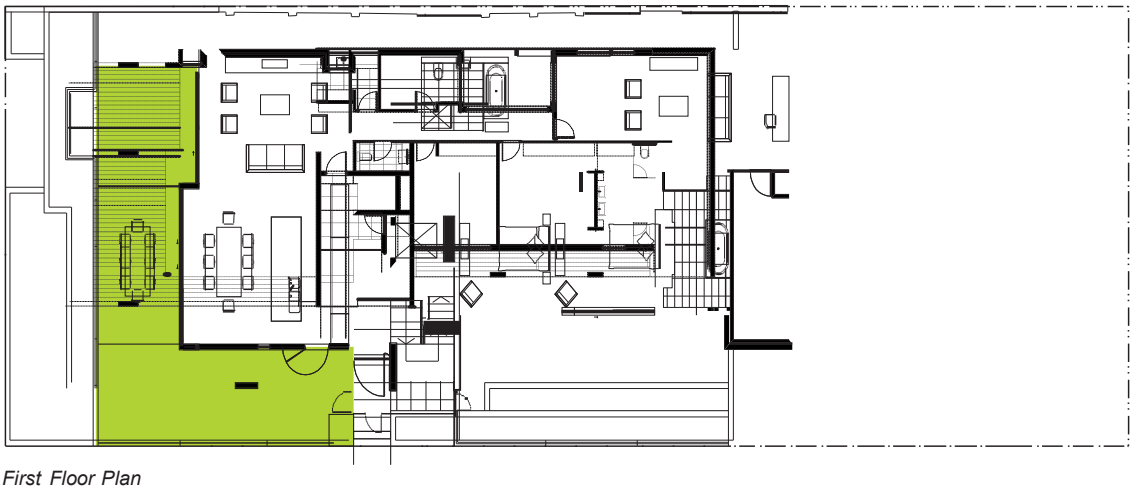

Figure 1: Private open space as balcony or terrace
(Source: Draft Good Design Guide for medium density living, NSW Department of Planning, 2011)

5. A primary living area of each dual occupancy dwelling is to provide direct access to the private open space.

6. Private open space may be located within the front setback. In such instances a combination of fencing and hedging is to provide privacy for residents while also ensuring that the site makes a positive contribution to the landscaped character of the street. High solid fencing is unacceptable. Residents seeking to rely on the front setback for private open space must accept a lower level of privacy until landscaping matures. Front fencing must be in accordance with the provisions specified in Chapter 34 Ancillary Development: Fences.

7. For the proposed dual occupancy dwellings:
   a. orientate the area of private open space to take advantage of the northern solar access;
   b. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. overshadowing by vegetation should be ignored;
   d. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

8. For the neighbouring dwellings:
   a. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   b. ensure windows of living areas have 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. consideration will be given to reduced solar access where the proposed dwelling is generally compliant with all development standards and controls, and the extent of impact is the result orientation, site constraints, and or existing built forms;
   d. overshadowing by vegetation should be ignored;
   e. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

9. A secure space per dwelling of $10m^3$ set aside exclusively for storage as part of the dwelling or garage should be provided. Storage areas must be adequately lit and secure. The required $10m^3$ of storage is in addition to bedroom wardrobes, kitchen cupboards and pantries and bathroom cupboards.

10. Each dwelling is to provide an external service area set aside for accommodating garbage bins, air conditioning units etc.

6. Visual and Acoustic Privacy

Building design must take into consideration visual and acoustic privacy. Amenity is enhanced by privacy and a better acoustic environment. This can be achieved by carefully considering the location of the building on the site, the internal layout, the building materials used, and screening devices. The consideration of visual and acoustic privacy requires an understanding of the context of the adjacent site, site configuration and the layout of the dwelling and ancillary elements.

Major roads and rail operations generate noise and vibration, and people living and working near major transport corridors can be adversely affected. Major roads can also impact on air quality due to their volume of traffic. Building design must take into consideration the noise, vibration and air quality effects of busy roads and rail corridors and minimise the amenity and health impacts on future occupants.

6.1 Objectives

1. Ensure a high level of amenity by protecting the acoustic and visual privacy of occupants within dual occupancy dwellings and their associated private open spaces.
2. Ensure dual occupancy dwellings are sited and designed so that visual and acoustic privacy and vibration from outside sources is controlled to acceptable levels, incorporating architectural and building elements to assist in protecting privacy.
3. Minimise direct overlooking of windows and private open space so that the amenity of neighbours and intended occupants is respected.
4. Recognise the outlook and views from principal rooms and private open space without compromising visual privacy of others.

6.2 Controls

1. Locate, orientate and design new development to ensure visual privacy between buildings and between buildings and adjacent private open space.
2. Use building design to increase privacy without compromising access to light and air.
3. Living room, dining room and kitchen windows that provide a direct outlook to an adjacent property dwelling which leads to a loss of amenity, needs to consider the following:

    a. offset the edge of one window to the edge of the other window by a sufficient distance to limit the views into the adjacent windows; or
    b. provide sill heights of at least 1.6m; or
    c. have fixed obscure glazing or glass blocks in any part of the window below 1.6m.
    d. Direct the outlook from all living rooms, dining rooms, bedrooms, kitchens and studies where possible towards the street, private open space on the development site, public open spaces, and waterways.
    e. Where overlooking of adjacent living rooms, dining rooms, bedrooms, kitchens and studies or private open space is unavoidable then screening elements such as louvres and obscured glass must be used to preserve reasonable visual privacy for neighbours.

4. Where dual occupancy design includes a second floor dwelling with a balcony serving as the primary private open space, both the balcony and living areas should be orientated to the street or public place in order to prevent overlooking.

5. Arrange dwellings within a development to minimise noise transition between dwellings by:
   a. locating busy, noisy areas next to each other and quieter areas next to other quiet areas; for example, living rooms with living rooms, bedrooms with bedrooms;
   b. using storage or circulation zones within a dwelling to buffer noise from adjacent dwellings, mechanical services or corridors and lobby areas;
   c. minimising party (shared) walls with other dwellings.

Note:
Visual privacy may be achieved by:
a. Designing the dual occupancy dwelling to maximise the separation distances from adjacent dwellings and private open spaces,

Design elements to achieve privacy may include:
a. Offset windows in new development and windows of adjacent development
b. Recessed balconies and/or vertical fins between adjacent balconies,
c. Solid or semi-solid balustrades to balconies,
d. Louvres or screen panels to windows and/or balconies,
e. Fencing,
f. Vegetation as a screen between spaces,
g. Planter boxes in walls or balustrades,
h. Pergolas or shading devices to limit overlooking of lower level private open space.

6. All noise generating equipment such as air conditioning units, swimming pool filters, fixed vacuum systems and driveway entry shutters must be designed to protect the acoustic privacy of residents and neighbours. All such noise generating equipment must be acoustically screened. The noise level generated by any equipment must not exceed an LAeq (15min) of 5dB(A) above background noise at the property boundary.

7. Residential development adjacent to a rail corridor or a busy road as identified on the Road and Rail Noise Buffer Map should be sited and designed to include noise and vibration attenuation measures to minimise noise and vibration impacts. Refer to State Environmental Planning Policy (Infrastructure) 2007 and the NSW Department of Planning's *Development near Rail Corridors and Busy Roads – Interim Guideline*.

Note:
Compliance with the NSW Planning and Environment's Development near Rail Corridors and Busy Roads –Interim Guidelines is mandatory for roads with an annual average daily traffic (AADT) volume greater than 40,000 and is best practice advice for roads with an AADT volume of 20,000 - 40,000 (based on the traffic volume data available on the website of the RTA).
The Guidelines apply to development:
- located up to 300m from the road kerb and with a direct line of sight to busy roads, and, or
- located within 80m of an operational rail track

The Guidelines require that noise levels in any such residential development not exceed:
- LA eq of 35dB (A) measured within any bedroom in the building at any time between 10pm-7am and
- LA eq of 40dB(A) measured within any bedrooms between 7am-10pm and anywhere else in the building (other than a garage, kitchen, bathroom or hallway) at any time.

Depending on the classification of a development using the screen tests in the Development near Rail Corridors and Busy Roads – Interim Guidelines, compliance with specified noise control treatments (Appendix C) may be required or an assessment by an acoustic consultant may be required.

7. Vehicular Access, Parking and Circulation

The location and layout of parking can have a significant impact on the design of new development. It will influence the layout and design of buildings and landscaping. All development must satisfy the demand for parking that it creates within its own site.

The provision of sufficient parking must not compromise the safety of the on-street and off-street environment for vehicles, pedestrians or cyclists.

7.1 Objectives

1. Ensure vehicle access, garages, carports and parking areas do not visually dominate either the development or the streetscape.

2. Car parking spaces are designed to ensure ease of access, egress and on-site manoeuvring.

3. Reduce reliance on street parking.

7.2 Controls

1. Car parking shall be provided in accordance with the car parking requirements set out under *Table 1 - Car Parking Numbers* in Chapter 36: Vehicular Access, Traffic, Parking and Bicycles.

   All spaces shall be behind the building line.

2. The parking space available within the garage shall be 5.5 m long and 3.0 m wide with a clear garage opening of 2.75m. The garage opening (doorway width) may be reduced to 2.4m wide where the driveway leads straight into the garage (as shown in Figure 1 in chapter 36. Where a double garage is permitted, it shall be 5.5 metres long and 5.7m wide with a clear garage opening of at least 5m.

3. Only two single garage doors (of maximum 3m in width) or one double door are to face the street.

4. Parking spaces shall have a grade no greater than 1:20.

5. Dual occupancies proposed on corner lots must ensure that driveways are approached from separate streets, where appropriate.

6. Car parking layout, and vehicular access requirements and design and public and private footpaths are to be in accordance with the Australian Standards, in particular AS 2890.1-2004 and the requirements contained in chapter 36. On Arterial and Distributor Roads (as identified on the DCP Road Hierarchy Map) vehicles may be required to enter and leave a site in a forward direction, due to traffic conditions.

7. Driveways are to be designed and sited to accommodate street gully pits and street trees, and maximise the availability of on-street parking.

8. Single driveways should not exceed a maximum width of 3.5m at the boundary.

9. Only one driveway access per frontage is to be provided to dual occupancy development. Council may accept a second driveway access where it is satisfied that:

    a. The frontage of the lot is a minimum of 15m wide, and
    b. Driveway widths should not exceed a maximum width of 3m at the boundary, and
    c. Locations of driveways must comply with AS2890.1, and
    d. Two driveways must be able to accommodate an on-street car space a minimum of 6m long (wing-tip to wing-tip). Any splay transitions at the kerb should be wholly within the subject property frontage, and have regard for neighbouring properties, and
    e. Each access driveway provides safe access, and
    f. The availability of on street car parking is not diminished, particularly where on street car parking demand is high, and
    g. Access facilitates retention of existing trees, rock outcrops or natural features where they occur, and
    h. Site design facilitates greater resident amenity and solar access, and
    i. Development is consistent with the spatial and landscape qualities of the streetscape – in this regard wider lots are appropriate, and
    j. Car parking and garages do not dominate the streetscape

10. Where a common driveway serves a side by side dual occupancy (where adjacent parking is provided) and the required parking space is setback 7.5m or less, driveways should not exceed a maximum width of 4.5m at the boundary and 3.5m at the kerb.

11. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, this must be achieved without compromising the contribution of the site to the landscape quality of the street.

Note:
Where vehicles must enter and leave a site in a forward direction, dual occupancy development is best designed as front and rear dwellings so that the required vehicle access can be provided as well as the required deep soil landscaping in the front setback.

8. Waste Management Requirements

The design of waste and recyclables storage areas within the property affects ease of use, amenity, and the efficiency of handling of waste for the life of the development.

8.1 Objectives

1. Ensure appropriate storage and collection of waste.

2. Minimise the environmental impacts associated with waste management.

3. Discourage illegal dumping.

4. Encourage on-site waste management facilities that are integrated with the design of a development and enable source separation, reuse and recycling.

5. Enable collection service providers to efficiently collect waste and recyclables with minimum disruption and impact on the community.

8.2 Controls

1. Each dwelling must be provided with a waste storage area capable of accommodating the following:
   a. 120 litre garbage bin
   b. 240 litre recycling bin
   c. 240 litre green waste bin.

2. The waste storage area must not be located forward of the building line and must not detract from the streetscape.

3. Developments must be designed so that bins do not need to be wheeled more than 75 metres.

Note:

Further details on Waste Management Plans including a template for a typical plan are in the Sutherland Shire DA Guide and the Waste Management Information Guidelines.

Sutherland Shire Council provides a garbage and recycling collection to residential and commercial developments based on the pricing structure outlined in the Schedule of Fees and Charges for Goods and Services. The Council only has the infrastructure to services 120 litre and 240 litre mobile garbage bins. Services are available from private contractors who might use different collection vehicles and bin sizes to those used by the Council.

All garbage, recycling and garden waste bins are collected from the kerbside by Council collectors. It is the responsibility of residents to ensure the bins are placed at the collection point, usually between the kerbside and the road reserve, by 5am on the regular service day.

d. Dual Occupancies in the R3 Medium Density Residential Zone

R3 Medium Density is the zone primarily intended for villa and townhouse style development and generally located on the outer edges of centres. Dual Occupancies are not the predominant form of development in the zone. The zone is characterised by a more urban character resulting from the higher density of development and greater permissible height of 9m, which allows three storey development. Front setbacks and the streetscape play a major role in establishing the landscape setting of the zone.

The controls aim to achieve well designed dual occupancy dwellings which moderate the impacts of higher residential densities to provide high levels of amenity for the residents of new and neighbouring dwellings.

Note:

The new LEP contains specific controls which relate to dual occupancies. A maximum height of 5.4m applies to dual occupancy development on an internal lot or where a rear dwelling forming a dual occupancy is proposed on a lot with only one road frontage. See Clause 4.3(2B) & (2C).

1. Streetscape and Building Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character and scenic quality. Ancillary elements of development such as driveways, parking areas and fencing are important elements of the streetscape. To make a positive contribution to the streetscape, new development needs to be compatible with the scale and character of existing buildings and landscape elements.

Architectural quality contributes to the character and quality of both the streetscape and built form when viewed from the street and waterways. High architectural quality requires appropriate composition of building elements, textures, materials and colours and reflects the use, the natural landscape setting, internal design and overall structure of a development.

1.1 Objectives

1. Ensure that all elements of development visible from the street, waterways and public domain make a positive contribution to the foreshore, streetscape and natural features of the area.

2. Ensure development is compatible with the future scale, character and landscape setting of the adjoining streetscape, natural setting and scenic quality.

3. Ensure dual occupancy design responds to the opportunities and constraints of the site, delivering optimal solar orientation for both dwellings.

4. Ensure that basements do not add to building bulk or exacerbate impacts upon neighbours

5. Ensure the safety of pedestrians, cyclists, and vehicles using public domain and private land.

1.2 Controls

1. Development must be designed and sited so that it addresses the street frontage ensuring that the path to all main entries are clearly identifiable from the street in order to facilitate way finding.

2. Where dwellings are provided side by side, the building entries to each dwelling should not require entry through a space allocated for parking nor be recessed behind garaging.

3. Development is to be stepped down a steep site.

4. The design of dual occupancy must seek to reduce the apparent bulk and scale of development such that it is not dominant in the streetscape. Articulation of facades and massing of elements should be employed to reduce apparent bulk and scale from the street.

5. Basements must:
   a. Basement must be wholly contained within the footprint of the building above. Terraces and alfresco areas are not to be provided over basemen
   b. Be setback a minimum of 7.5m from the front boundary and 50% of the front setback is to be landscaped in order to contribute to the landscape quality of the streetscape.
   c. In order to minimise the visual impact of driveways to basements, cut shall be confined to less than one metre within the first 4 metres of the setback from the street. Landscaped terracing is to be relied upon to avoid the need to provide balustrading. Where site constraints make balustrading unavoidable, it is to be open form to minimise its visual intrusion into the streetscape.
   d. Natural ground levels surrounding the development and at property boundaries must be retained or reinstated to predevelopment levels. Basements must be designed to work with the slope of the land.
   e. Basements must not compromise the safety of the on-street or off-street environment for pedestrians, cyclists or vehicles. Ramps must have a maximum grade of -5% grade for the first 3m. Front and side boundary fences must be no higher than 1.2m within 3m of the basement ramp. Where safety and/or traffic conditions necessitate, vehicles are required to enter and exit in a forward direction.
   f. For dual occupancy development, basements will be only be allowed where the access is shared through a common entry point that is not greater than 4m in width.

6. Dual occupancy development is to have a limit of one single garage door for each dwelling fronting the same street.

7. Where a dual occupancy development is proposed on a corner allotment, each dwelling and any associated garaging, must independently address a street frontage. If both dwellings are proposed to be accessed from one street due to site constraints, Car parking and driveways should not dominate the streetscape.

8. Extensive use of highly reflective materials is not acceptable for roof or wall cladding.

9. Development must be sensitively designed so that it is sympathetic to the amenities and view corridors of neighbouring public and private property and balances this with the amenity afforded to the new development.

Note:
Basement means the space of a building where the floor level of that space is predominantly below ground level (existing) and where the floor level of the storey immediately above is less than 1 metre above ground level (existing).

If basement construction protrudes more than 1m above ground level, it is no longer defined as a basement. Floor space in a basement may be counted as part of gross floor area. Refer to the definition of gross floor area in SSLEP2015.

Note:
View corridors may be maintained by implementing the following measures:
a. stepping buildings down the site,
b. using only single storey elements,
c. avoiding steep roofs, and
d. breaking up the built form.

Note:
Specific controls for fencing are provided in Chapter 34.

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2. Building Setbacks

Street Setbacks
Street setbacks establish the front building line. Controls over street setbacks create the proportions of the street. Setbacks contribute to the public domain by enhancing streetscape character and the continuity of street facades. Street setbacks can also be used to enhance the setting for the building providing for landscape areas, entries to dual occupancy dwellings and deep soil zones suitable for planting of canopy trees.

Side and Rear Setbacks
The spatial relationship of buildings is an important determinant of urban form. Building separation affects the spatial continuity and the degree of openness in the street. Building separation is required to minimise adverse amenity impacts by providing opportunities for landscaping, access, privacy, solar access and private and shared open spaces.

2.1 Objectives

1. Establish the street proportions.

2. Encourage articulated building forms and ensure garages do not dominate the streetscape.

3. Enhance the setting for the building by providing opportunities for landscaping and infiltration of stormwater and protecting the landscape qualities and character of the locality.

4. Promote residential amenity for residents and neighbours including access to natural light and ventilation and both visual and acoustic privacy.

5. Alleviate the visual intrusion of building bulk on neighbouring properties.

6. Minimise view loss from adjoining or nearby properties.

2.2 Controls

1. Street, side and rear setbacks are measured perpendicular from the property boundary to the closest extent of the building, including balconies, awnings, podiums, sunscreens and the like (excluding eaves).

2. The minimum setbacks required are set out in the table below:

Table 1: Setbacks

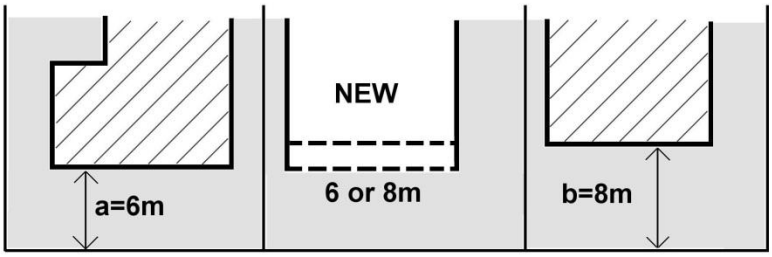
Setbacks	Minimum Distance
Front	
Primary street frontage	7.5m – except where the adjoining dwellings are setback greater than or less than 7.5m, in which case it is the established street setback*
Secondary street frontage	3.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m
Side - Ground floor	0.9m
Second storey	1.5m
Internal lot	1.5m
Rear	6.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m – some variations apply

Note: The 7.5m street setback applies to the primary (narrowest) street frontage.

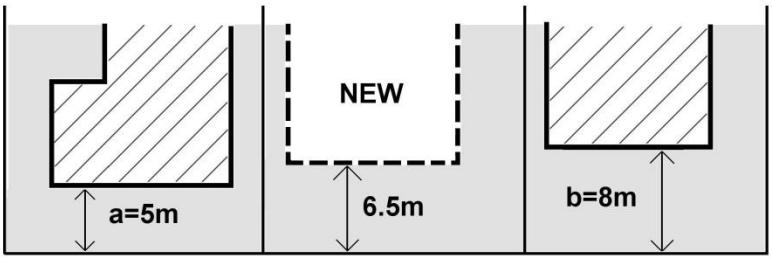
***** The established street setback is the average distance of the setbacks of the nearest ~~2~~ dwelling houses having the same primary road boundary and located within 40m of the lot on which the dwelling house is erected. Where the difference between the setbacks of the nearest dwelling houses is less than or equal to 2.0m, the greater or lesser setback may be applied.

Figure 1: Established Street Setbacks

Where the difference between setbacks is 2m or less



Where the average between setbacks is greater than 2m



3. Where a development has a street setback of 7.5m or greater, building elements may encroach 1.5m into the front setback for a maximum of one third of the area of the façade, forming an articulation zone. Built form encroachments into the articulation zone can include open structure elements such as balconies and hoods, as well as elements which contribute to floor space ratio such as bay windows and room projections.

   Built form encroachments into the articulation zone must not include:
   - Garages, or
   - Lift shafts.

   Built form encroachments into the articulation zone must improve the design quality of the development with good façade articulation.

4. Garages and garage doors cannot be located in the articulation zone. These elements are to be located no closer than 7.5m to the street and integrated with the building design.

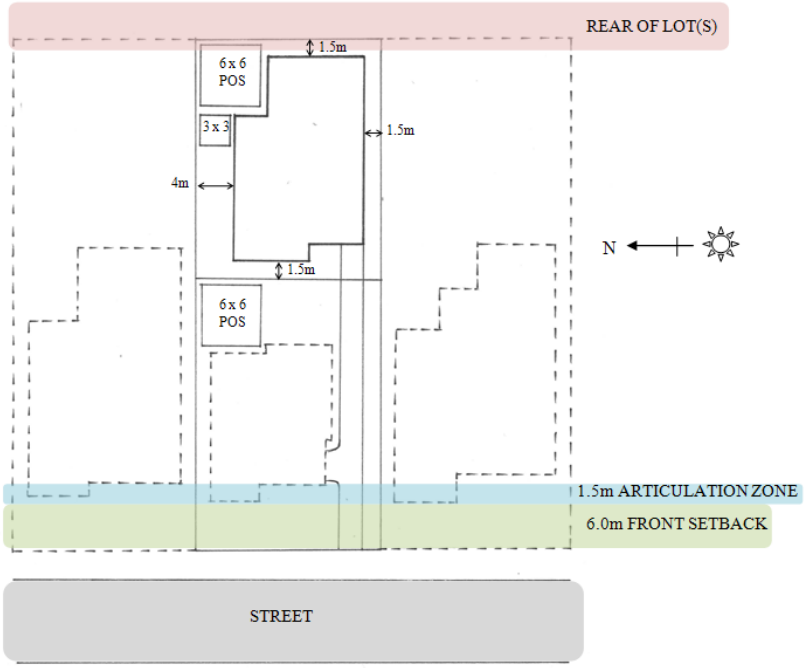


Figure 2: Street setbacks

5. In the case of corner properties, the 7.5m setback applies to the narrowest street frontage.

6. Despite 2, in the case of a corner lot dual occupancy, garages and garage doors accessible from the secondary street must be setback a minimum of 6.0m.

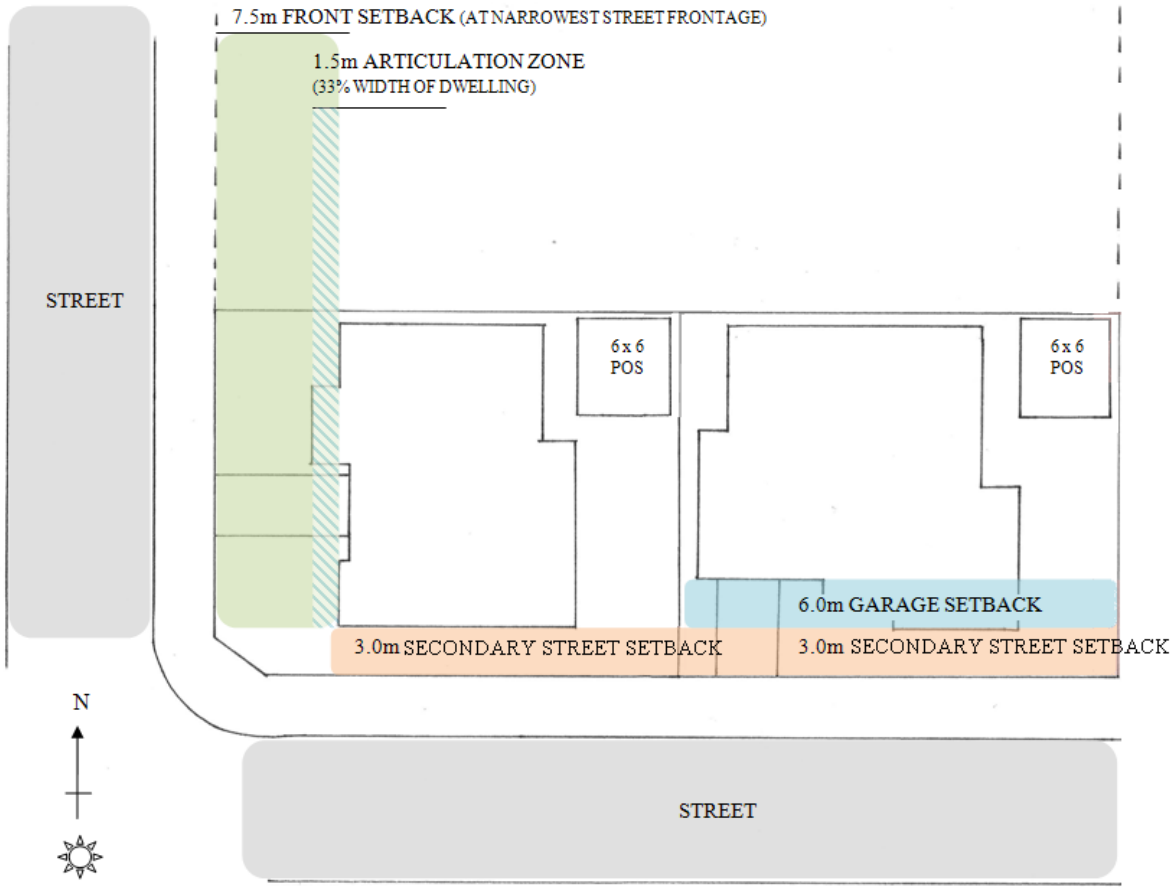


Figure 3: Street setbacks for corner lots

7. Despite clause 2 where a single storey dwelling forming a dual occupancy is located at the rear of the lot, the rear setback may be reduced to 4.0m.

8. In the case of a corner property dual occupancy, one boundary must be nominated as the rear boundary of the property and comply with the minimum required setbacks identified in clause 2.

9. Despite any other clause, for dual occupancy development on corner allotments, a variation to the rear setback may be considered by Council, but only where it can be demonstrated that a variation would achieve a better outcome than would strict compliance with the standard setback controls because of site constraints, implications stemming from the existing allotment pattern, building design, retention of existing significant vegetation, solar access or positioning of useable open space.

10. The rear setback may be reduced to 1.5m where the rear of the original lot adjoins the side boundary of an adjacent property. This clause does not apply to corner dual occupancy developments.

11. Despite clause 2 where a dwelling forming a dual occupancy is located at the rear of the lot which has a side boundary with a predominantly northerly aspect, the required 4.0m rear setback may be relocated to this side boundary, provided the private open space for that dwelling is located along this northern side boundary. In such circumstances, the original rear boundary may be reduced to 1.5m.

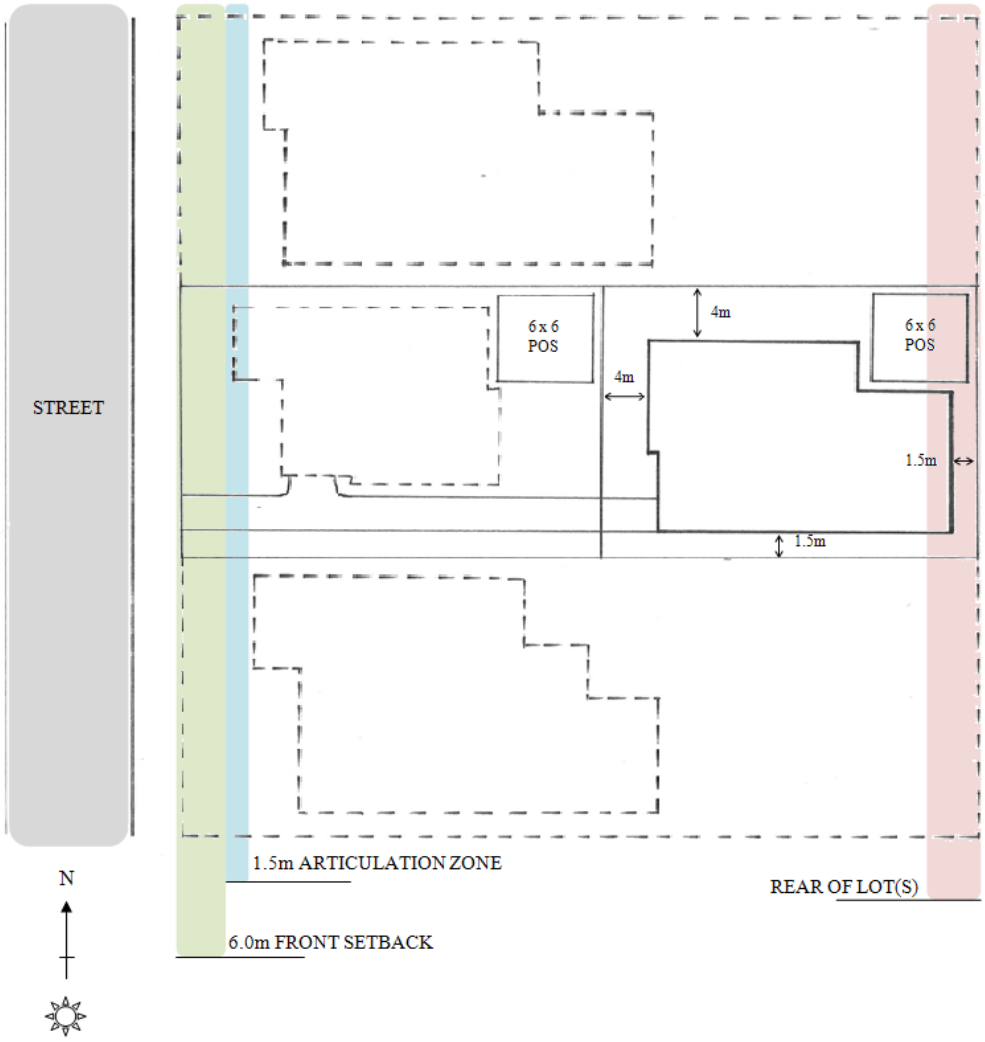


Figure 4: The required 4.0m rear setback may be relocated to the side boundary, provided the private open space for that dwelling is located along the northern side boundary, see clause 11

12. Where a second storey wall adjacent to a side boundary exceeds 15m in continuous length, the side setback shall be increased by a further 500mm or more for that part of the wall. Where the scale of the side elevation results in significant overshadowing and/or visual intrusion due to building bulk to an adjoining dwelling, an increased building setback is to be employed.

3. Landform

In order to contribute to the quality and identity of the area, new development must respect landform and natural settings. Development must be designed so that it minimises impacts to natural land forms and allows the natural qualities of the site to be the dominant elements of its setting.

Development on the steeper and higher topographical areas is often more prominent, particularly when viewed from the low side. Well considered design ensures dual occupancy dwellings integrate with the streetscape and views from the waterways, and retain a consistent relationship to the natural topography. This relationship provides an important visual link between buildings in a streetscape, as well as reducing the impacts of new development on neighbouring lots.

Deep excavation, cut and fill or benching may alter the pattern of subsoil water flow and soil stability, which may adversely affect neighbouring properties and the natural environment. Alternatives to slab on ground construction are encouraged where the gradient and characteristics of the site would otherwise require major excavation or filling.

3.1 Objectives

1. Ensure that the building siting, design and construction method responds to the natural landform of the site and is appropriate for site slope.

2. Minimise the visual impact of new development, particularly when viewed from the public domain.

3. Minimise earth works so as to maintain the existing landform and protect the integrity and stability of geological elements in the vicinity of the site.

4. Minimise impacts on surrounding vegetation and provide increased opportunities for tree retention, including trees on neighbouring properties.

3.2 Controls

1. The depth of cut and fill must not exceed 1m from existing ground level, except where the excavation is for a basement. Council will consider cut or fill greater than 1m only where:
   a. Alternative design solutions have been explored and presented to Council showing no feasible solution to excavation is available; and
   b. There is unlikely to be disruption, or detrimental effects on existing drainage patterns, vegetation, sedimentation and soil stability in the locality; and
   c. The design is a sensitive solution to the constraints of the site that does not exacerbate amenity impacts on neighbouring dwellings.

2. Dual occupancies should be designed to complement the natural slope of the land.

3. Excavation for basements should not extend beyond the building footprint.

4. Natural ground level surrounding the development and at property boundaries must be retained or reinstated prior to the completion of works.

4. Landscaping

Good design recognises that landscape and buildings operate together as an integrated system, resulting in greater aesthetic quality and amenity for the occupants, neighbours and the public domain. High quality landscape design protects and builds on the site's natural and cultural features to contribute to a development's positive relationship to its context and site.

Sutherland Shire's tree cover, areas of bushland and natural beauty are valued by its residents. Landscape design in new development must recognise that existing trees, areas of habitat and natural systems must be protected and enhanced by the retention of important landscape elements, appropriate planting, bush regeneration and by minimising urban runoff.

4.1 Objectives

1. Contribute to streetscape character, local habitat and the amenity of the public domain by using indigenous planting and species which compliment scale of the development.

2. Provide landscaping treatments which foster attractive outlooks, privacy and private recreation areas of high aesthetic quality.

3. Improve the microclimate within development.

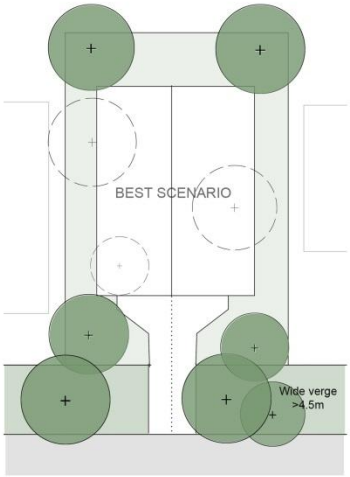
4.2 Controls

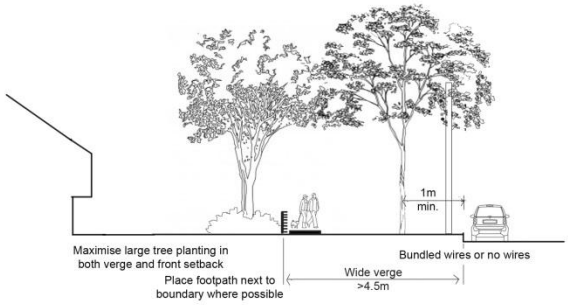
1. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, dual occupancy development must be designed to accommodate front and rear dual occupancy dwellings so that the required vehicle access can be provided, as well as the required deep soil landscaping.

2. Development should be designed to retain existing canopy trees in the vicinity of side, rear and front setbacks including on adjoining land.

3. A minimum of 4 trees are to be provided per dual occupancy development. A minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 3m of the front boundary (measured from the front building line) and a minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 2m of the rear boundary. All indigenous tree species must be selected from Council's *Native Plant Selector* available on Council's website.

REPLACEMENT PLANTING IN STREET & FRONT SETBACK

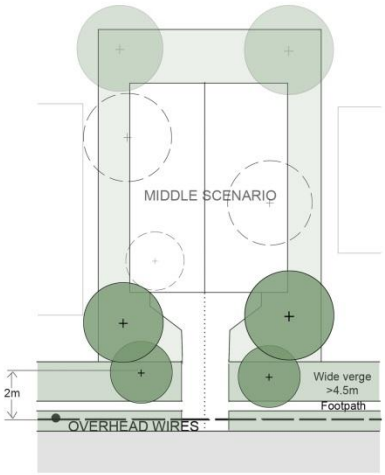


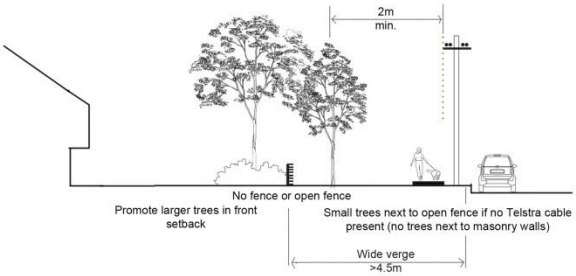


REPLACEMENT PLANTING CALCULATION:

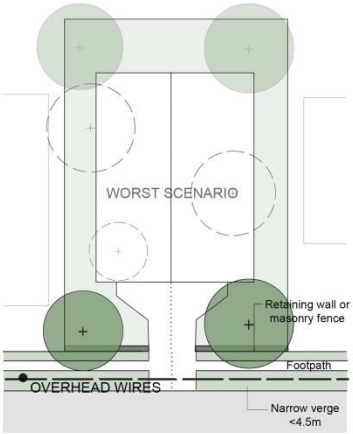
3 trees removed at a replacement rate of 4 to 1 (@$100/tree)
3x4=12 Trees
Potential to put back in 7 trees in best scenario
5 trees remaining
5x$100=$500 into fund

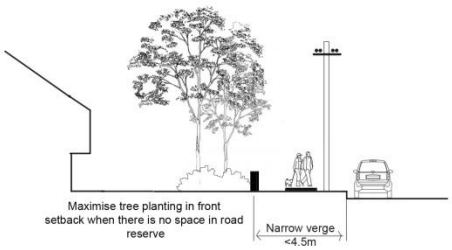
1. REPLACEMENT PLANTING-
WIDE VERGE AND NO OVERHEAD WIRES





2. REPLACEMENT PLANTING -
WIDE VERGE AND OVERHEAD WIRES





3. REPLACEMENT PLANTING-
NARROW VERGE AND OVERHEAD WIRES

4. Landscape design and plant species selection should reduce the potential for invasive plant species to escape into the surrounding bushland.

5. Where there are continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a maximum height of 4m, must be planted at a maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and or masonry fence or retaining wall. Street trees must be selected from the Council's technical specifications and Native Plan Selector available on Council's website

6. Where there are no continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a minimum mature height of 6m, must be planted at maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and/or masonry fence or retaining wall. Street trees must be selected from Council's technical specifications and Native Plant Selector available on Council's website.

Note:

All indigenous tree species must be selected from Council's Native Plant Selector available on Council's website. The Native Plant Selector is a tool that recommends plants suitable for Sutherland Shire's ecosystems based on the specific address of the site locality. The tool is available online at http://www.sutherlandshire.nsw.gov.au/Outdoors/Environment/Plants-and-Bushland/Native-Plant-Selector.

For additional guidance on landscape design and implementation refer to the Sutherland Shire Environmental Specifications - Landscape 1-5. Applicants should also refer to the Greenweb map and controls in Chapter 39 Natural Resource Management. For development application submission requirements refer to Council's DA Guide.

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5. Building Layout and Solar Access and Private Open Space

Good design provides a building layout that maximises the natural attributes of the site. Carefully considered building layout and design also creates a higher level of amenity for occupants through enhanced visual and acoustic privacy, passive heating and cooling, attractive outlooks from living spaces, and flexible and useable indoor and outdoor spaces that meet the needs of occupants.

Quality private space is critical to achieving good residential amenity. Open space of sufficient area and dimensions to enable recreational and outdoor use, landscaping and service functions is needed for all dual occupancy dwellings.

Ideally, solar access should be maximised in winter and controlled in summer. Daylight consists of both diffused light and direct light. Good levels of daylight in a dual occupancy dwelling improve amenity and reduce the need for artificial lighting. High levels of daylight can be achieved through the careful consideration of window size, location and proportion.

5.1 Objectives

1. Ensure development provides opportunities for cross-ventilation and natural ventilation through the arrangement of external openings.

2. Ensure outdoor living areas are functional and responsive to the environment.

3. Provide privacy and solar access to principle private open space areas of a dual occupancy dwelling.

4. Ensure building design and location does the most to minimise adverse impacts of overshadowing of neighbouring buildings and private and public open spaces.

5.2 Controls

1. Orientate all new development and windows to take advantage of solar orientation to maximise natural light penetration to indoor areas and reduce the need for mechanical heating and cooling.

2. A minimum of 3 hours of direct sunlight between 9am and 3pm in midwinter should be provided to a living area within each dwelling.

3. Each dwelling is to provide an area of Private Open Space that has a minimum area of $36m^2$ with minimum dimension of 5m, of which $9m^2$ must be paved.

4. Where a dual occupancy is comprised of a dwelling on each level, the second floor dwelling is not required to provide private open space at ground level, instead supplying a 4m x 6m balcony or terrace area with a minimum area of 24m^2 and where possible oriented north.

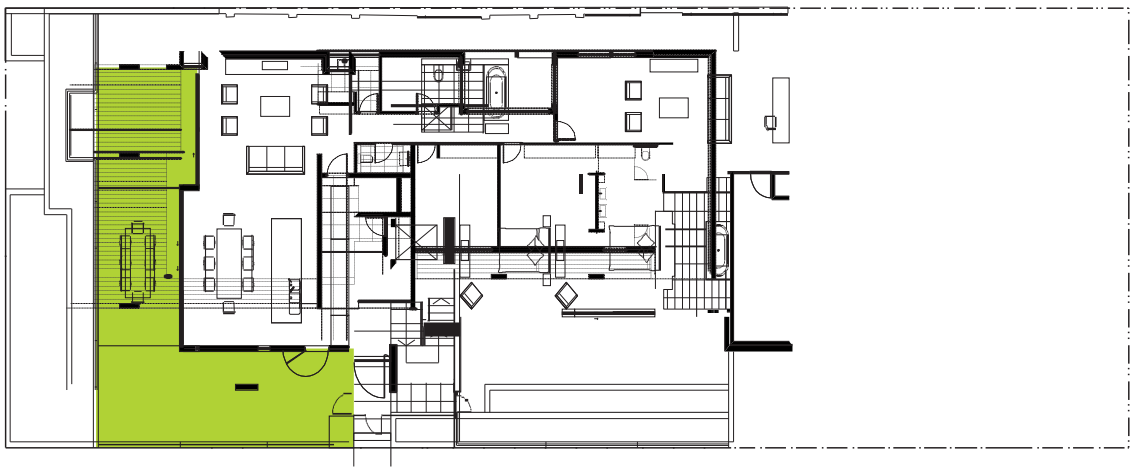

Figure 5: Private open space as balcony or terrace
(Source: Draft Good Design Guide for medium density living, NSW Department of Planning, 2011)

5. A primary living area of each dual occupancy dwelling is to provide direct access to the private open space.

6. Private open space may be located within the front setback. In such instances a combination of fencing and hedging is to provide privacy for residents while also ensuring that the site makes a positive contribution to the landscaped character of the street. High solid fencing is unacceptable. Residents seeking to rely on the front setback for private open space must accept a lower level of privacy until landscaping matures. Front fencing must be in accordance with the provisions specified in Chapter 34 Ancillary Development: Fences.

7. For the proposed dual occupancy dwellings:
   a. orientate the area of private open space to take advantage of the northern solar access;
   b. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. overshadowing by vegetation should be ignored;
   d. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

8. For the neighbouring dwellings:
   a. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June;.
   b. ensure windows of living areas have 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. consideration will be given to reduced solar access where the proposed dual occupancy dwelling is generally compliant with all development standards and controls, and the extent of impact is the result orientation, site constraints, and or existing built forms;
   d. overshadowing by vegetation should be ignored;
   e. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

9. A secure space per dwelling of 10m3 set aside exclusively for storage as part of the dwelling or garage should be provided. Storage areas must be adequately lit and secure. The required 10m^3 of storage is in addition to bedroom wardrobes, kitchen cupboards and pantries and bathroom cupboards.

10. Each dwelling is to provide an external service area set aside for accommodating garbage bins, air conditioning units etc.

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6. Visual and Acoustic Privacy

Building design must take into consideration visual and acoustic privacy. Amenity is enhanced by privacy and a better acoustic environment. This can be achieved by carefully considering the location of the building on the site, the internal layout, the building materials used, and screening devices. The consideration of visual and acoustic privacy requires an understanding of the context of the adjacent site, site configuration and the layout of the dwelling and ancillary elements.

Major roads and rail operations generate noise and vibration, and people living and working near major transport corridors can be adversely affected. Major roads can also impact on air quality due to their volume of traffic. Building design must take into consideration the noise, vibration and air quality effects of busy roads and rail corridors and minimise the amenity and health impacts on future occupants.

6.1 Objectives

1. Ensure a high level of amenity by protecting the acoustic and visual privacy of occupants within dual occupancy dwellings and their associated private open spaces.
2. Ensure dual occupancy dwellings are sited and designed so that visual and acoustic privacy and vibration from outside sources is controlled to acceptable levels, incorporating architectural and building elements to assist in protecting privacy.
3. Minimise direct overlooking of windows and private open space so that the amenity of neighbours and intended occupants is respected.
4. Recognise the outlook and views from principal rooms and private open space without compromising visual privacy of others.

6.2 Controls

1. Locate, orientate and design new development to ensure visual privacy between buildings and between buildings and adjacent private open space.
2. Use building design to increase privacy without compromising access to light and air.
3. Living room, dining room and kitchen windows that provide a direct outlook to an adjacent property dwelling which leads to a loss of amenity, needs to consider the following:

    a. offset the edge of one window to the edge of the other window by a sufficient distance to limit the views into the adjacent windows; or
    b. provide sill heights of at least 1.6m; or
    c. have fixed obscure glazing or glass blocks in any part of the window below 1.6m.
    d. Direct the outlook from all living rooms, dining rooms, bedrooms, kitchens and studies where possible towards the street, private open space on the development site, public open spaces, and waterways.
    e. Where overlooking of adjacent living rooms, dining rooms, bedrooms, kitchens and studies or private open space is unavoidable then screening elements such as louvres and obscured glass must be used to preserve reasonable visual privacy for neighbours.

4. Where dual occupancy design includes a second floor dwelling with a balcony serving as the primary private open space, both the balcony and living areas should be orientated to the street or public place in order to prevent overlooking.

5. Arrange dwellings within a development to minimise noise transition between dwellings by:
   a. locating busy, noisy areas next to each other and quieter areas next to other quiet areas; for example, living rooms with living rooms, bedrooms with bedrooms;
   b. using storage or circulation zones within a dwelling to buffer noise from adjacent dwellings, mechanical services or corridors and lobby areas;
   c. minimising party (shared) walls with other dwellings

Note:
Visual privacy may be achieved by:
a. Designing the dual occupancy dwelling to maximise the separation distances from adjacent dwellings and private open spaces,

Design elements to achieve privacy may include:
a. Offset windows in new development and windows of adjacent development
b. Recessed balconies and/or vertical fins between adjacent balconies,
c. Solid or semi-solid balustrades to balconies,
d. Louvres or screen panels to windows and/or balconies,
e. Fencing,
f. Vegetation as a screen between spaces,
g. Planter boxes in walls or balustrades,
h. Pergolas or shading devices to limit overlooking of lower level private open space.

6. All noise generating equipment such as air conditioning units, swimming pool filters, fixed vacuum systems and driveway entry shutters must be designed to protect the acoustic privacy of residents and neighbours. All such noise generating equipment must be acoustically screened. The noise level generated by any equipment must not exceed an LAeq (15min) of 5dB(A) above background noise at the property boundary.

7. Residential development adjacent to a rail corridor or a busy road as identified on the Road and Rail Noise Buffer Map should be sited and designed to include noise and vibration attenuation measures to minimise noise and vibration impacts. Refer to State Environmental Planning Policy (Infrastructure) 2007 and the NSW Department of Planning's *Development near Rail Corridors and Busy Roads – Interim Guideline*.

Note:
Compliance with the NSW Planning and Environment's Development near Rail Corridors and Busy Roads –Interim Guidelines is mandatory for roads with an annual average daily traffic (AADT) volume greater than 40,000 and is best practice advice for roads with an AADT volume of 20,000 - 40,000 (based on the traffic volume data available on the website of the RTA). The Guidelines apply to development:
- located up to 300m from the road kerb and with a direct line of sight to busy roads, and, or
- located within 80m of an operational rail track.

Note:
The Guidelines require that noise levels in any such residential development not exceed:
- LA eq of 35dB (A) measured within any bedroom in the building at any time between 10pm-7am and
- LA eq of 40dB(A) measured within any bedrooms between 7am-10pm and anywhere else in the building (other than a garage, kitchen, bathroom or hallway) at any time.

Depending on the classification of a development using the screen tests in the Development near Rail Corridors and Busy Roads – Interim Guidelines, compliance with specified noise control treatments (Appendix C) may be required or an assessment by an acoustic consultant may be required.

7. Vehicular Access, Parking and Circulation

The location and layout of parking can have a significant impact on the design of new development. It will influence the layout and design of buildings and landscaping. All development must satisfy the demand for parking that it creates within its own site.

The provision of sufficient parking must not compromise the safety of the on-street and off-street environment for vehicles, pedestrians or cyclists.

7.1 Objectives

1. Ensure vehicle access, garages, carports and parking areas do not visually dominate either the development or the streetscape.

2. Car parking spaces are designed to ensure ease of access, egress and on-site manoeuvring.

3. Reduce reliance on street parking.

7.2 Controls

1. Car parking shall be provided in accordance with the car parking requirements set out under *Table 1 - Car Parking Numbers* in Chapter 36: Vehicular Access, Traffic, Parking and Bicycles.

   All spaces shall be behind the building line.

2. The parking space available within the garage shall be 5.5 m long and 3.0 m wide with a clear garage opening of 2.75m. The garage opening (doorway width) may be reduced to 2.4m wide where the driveway leads straight into the garage (as shown in Figure 1 in chapter 36). Where a double garage is permitted, it shall be 5.5 metres long and 5.7m wide with a clear garage opening of at least 5m.

3. Only two single garage doors (of maximum 3m in width) or one double garage door are to face the street.

4. Parking spaces shall have a grade no greater than 1:20.

5. Dual occupancies proposed on corner lots must ensure that driveways are approached from separate streets where appropriate.

6. Car parking layout, and vehicular access requirements and design and public and private footpaths are to be in accordance with the Australian Standards, in particular AS 2890.1-2004 and the requirements contained in Chapter 36.

7. Driveways are to be designed and sited to accommodate street gully pits and street trees, and maximise the availability of on-street parking.

8. Where a basement car parking area is provided the minimum width of the internal driveway shall be 5.5m.

9. Only one driveway access per frontage is to be provided to dual occupancy development. Council may accept a second driveway access where it is satisfied that:

    a. The frontage of the lot is a minimum of 15m wide, and
    b. Driveway widths should not exceed a maximum width of 3m at the boundary, and
    c. Locations of driveways must comply with AS2890.1, and
    d. Two driveways must be able to accommodate an on-street car space a minimum of 6m long (wing-tip to wing-tip). Any splay transitions at the kerb should be wholly within the subject property frontage, and have regard for neighbouring properties, and
    e. Each access driveway provides safe access, and
        f. The availability of on street car parking is not diminished, particularly where on street car parking demand is high, and
        g. Access facilitates retention of existing trees, rock outcrops or natural features where they occur, and
        h. Site design facilitates greater resident amenity and solar access, and
        i. Development is consistent with the spatial and landscape qualities of the streetscape – in this regard wider lots are appropriate, and
        j. Car parking and garages do not dominate the streetscape.

10. Single driveways should not exceed a maximum width of 3.5m at the boundary.

11. Where a common driveway serves a side by side dual occupancy (where adjacent parking is provided) and the required parking space is setback 7.5m or less, driveways should not exceed a maximum width of 4.5m at the boundary and 3.5m at the kerb.

12. Car parking layout, and vehicular access requirements and design and public and private footpaths are to be in accordance with the Australian Standards, in particular AS 2890.1-2004 and the requirements contained in Chapter 36. On Arterial and Distributor roads (as identified on the DCP Road Hierarch Map) vehicles may be required to enter and leave a site in a forward direction due to traffic conditions.

13. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, this must be achieved without compromising the contribution of the site to the landscape quality of the street.

Note:
Where vehicles must enter and leave a site in a forward direction, dual occupancy development is best designed as front and rear dwellings so that the required vehicle access can be provided as well as the required deep soil landscaping in the front setback.

8. Waste Management Requirements

The design of waste and recyclables storage areas within the property affects ease of use, amenity, and the efficiency of handling of waste for the life of the development.

8.1 Objectives

1. Ensure appropriate storage and collection of waste.

2. Minimise the environmental impacts associated with waste management.

3. Discourage illegal dumping.

4. Encourage on-site waste management facilities that are integrated with the design of a development and enable source separation, reuse and recycling.

5. Enable collection service providers to efficiently collect waste and recyclables with minimum disruption and impact on the community.

8.2 Controls

1. Each dwelling must be provided with a waste storage area capable of accommodating the following:
   a. 120 litre garbage bin
   b. 240 litre recycling bin
   c. 240 litre green waste bin.

2. The waste storage area must not be located forward of the building line and must not detract from the streetscape.

3. Developments must be designed so that bins do not need to be wheeled more than 75 metres.

Note:

Further details on Waste Management Plans including a template for a typical plan are in the Sutherland Shire DA Guide and the Waste Management Information Guidelines.

Sutherland Shire Council provides a garbage and recycling collection to residential and commercial developments based on the pricing structure outlined in the Schedule of Fees and Charges for Goods and Services. The Council only has the infrastructure to services 120 litre and 240 litre mobile garbage bins. Services are available from private contractors who might use different collection vehicles and bin sizes to those used by the Council.

All garbage, recycling and garden waste bins are collected from the kerbside by Council collectors. It is the responsibility of residents to ensure the bins are placed at the collection point, usually between the kerbside and the road reserve, by 5am on the regular service day.

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e. Dual Occupancies in the R4 High Density Residential Zone

The R4 zone is Council's high density residential zone and captures lands that surround centres where residents can readily access important public transport facilities and interchanges. The zone is primarily intended for high density residential uses such as residential flat buildings (RFBs), however, dual occupancies and dwelling houses are permissible. The existing character of the R4 areas includes lower density uses such as dwelling houses and dual occupancies set alongside RFBs as well as multi- dwelling housing (villas and townhouses). The controls for dual occupancies in this zone aim to deliver higher densities within a landscape setting established by front setbacks and the streetscape. Consequently, a more intensive use of the zone is appropriate and controls aim to ensure that the construction of dual occupancy dwellings are compatible with the bulk and scale of larger structures, whilst ensuring high levels of privacy and amenity for residents of new dual occupancy dwellings and neighbouring dwellings.

1. Streetscape and Building Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character and scenic quality. Ancillary elements of development such as driveways, parking areas and fencing are important elements of the streetscape. To make a positive contribution to the streetscape, new development needs to be compatible with the scale and character of existing buildings and landscape elements.

Architectural quality contributes to the character and quality of both the streetscape and built form when viewed from the street and waterways. High architectural quality requires appropriate composition of building elements, textures, materials and colours and reflects the use, the natural landscape, internal design and overall structure of a development.

1.1. Objectives

1. Ensure that all elements of development visible from the street and public domain make a positive contribution to the streetscape and natural features of the area.

2. Ensure development is compatible with the scale, character and landscape setting of the adjoining streetscape, natural setting and scenic quality.

3. Ensure dual occupancy design responds to the opportunities and constraints of the site, delivering optimal solar orientation for both dwellings.

4. Retain and incorporate existing natural features, trees and bushland into the development

5. Ensure that basements do not add to the bulk or exacerbate impacts upon neighbours

6. Ensure the safety of pedestrians, cyclist and vehicles using the public domain and private land.

1.2 Controls

1. Development must be designed and sited so that it addresses the street frontage ensuring that the path to all main entries are clearly identifiable from the street in order to facilitate way finding.

2. Where dwellings are provided side by side, the building entries to each dwelling should not require entry through a space allocated for parking nor be recessed behind garaging.

3. The design of dual occupancies must seek to reduce the apparent bulk and scale of development such that it is not dominant in the streetscape. Articulation of facades and massing of elements should be employed to reduce apparent bulk and scale from the street.

4. Development is limited to two storeys in height above existing ground level. Development must be stepped down a steep site.

5. Basements must:
   a. Basement must be wholly contained within the footprint of the building above. Terraces and alfresco areas are not to be provided over basemen
   b. Be setback a minimum of 7.5m from the front boundary and 50% of the front setback is to be landscaped in order to contribute to the landscape quality of the streetscape.
   c. In order to minimise the visual impact of driveways to basements, cut shall be confined to less than one metre within the first 4 metres of the setback from the street. Landscaped terracing is to be relied upon to avoid the need to provide balustrading. Where site constraints make balustrading unavoidable, it is to be open form to minimise its visual intrusion into the streetscape.
   d. Natural ground levels surrounding the development and at property boundaries must be retained or reinstated to predevelopment levels. Basements must be designed to work with the slope of the land.
   e. Basements must not compromise the safety of the on-street or off-street environment for pedestrians, cyclists or vehicles. Ramps must have a maximum grade of -5% grade for the first 3m. Front and side boundary fences must be no higher than 1.2m within 3m of the basement ramp. Where safety and/or traffic conditions necessitate, vehicles are required to enter and exit in a forward direction.
   f. For dual occupancy development, basements will be only be allowed where the access is shared through a common entry point that is not greater than 4m in width.

6. Council may permit a variation to the two storey limit (whether that be a basement or third storey above natural ground as the additional floor level) where Council is satisfied that:

   a. The third storey does not result in the building having an adverse visual impact when viewed from the public domain, waterway or open space; and
   b. The third storey does not result in a building that is incompatible with the established scale or character of the immediate locality or adversely affect the amenity, streetscape and landscape setting; and
   c. The alternative to a third storey would result in the loss of bushland, existing tress or other natural features, where such exists on the site.

7. Dual occupancy development is to have a limit of one single garage door for each dwelling fronting the same street.

8. Where a dual occupancy development is proposed on a corner allotment, each dwelling and any associated garaging, must independently address a street frontage. If both dwellings are proposed to be accessed from one street due to site constraints, car parking and driveways should not dominate the streetscape.

9. Extensive use of highly reflective materials is not acceptable for roof or wall cladding.

10. Development must be sensitively designed so that it is sympathetic to the amenities and view corridors of neighbouring public and private property and balances this with the amenity afforded to the new development.

Note:

Basement means the space of a building where the floor level of that space is predominantly below ground level (existing) and where the floor level of the storey immediately above is less than 1 metre above ground level (existing)

If basement construction protrudes more than 1m above ground level, it is no longer defined as a basement. Floor space in a basement may be counted as part of gross floor area. Refer to the definition of gross floor area in SSLEP2015

Note:

View corridors may be maintained by implementing the following measures:
a. stepping buildings down the site,
b. using only single storey elements,
c. avoiding steep roofs, and
d. breaking up the built form.

Note:

Specific controls for fencing are provided in Chapter 34.

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2. Building Setbacks

Street Setbacks
Street setbacks establish the front building line. Controls over street setbacks create the proportions of the street. Setbacks contribute to the public domain by enhancing streetscape character and the continuity of street facades. Street setbacks can also be used to enhance the setting for the building providing for landscape areas, entries to the ground floor of buildings and deep soil zones suitable for planting of canopy trees.

Side and Rear Setbacks
The spatial relationship of buildings is an important determinant of urban form. Building separation affects the spatial continuity and the degree of openness in the street. Building separation is required to minimise adverse amenity impacts by providing opportunities for landscaping, access, privacy, solar access and private and shared open spaces.

2.1 Objectives

1. Establish the street proportions.

2. Encourage articulated building forms and ensure garages do not dominate the streetscape.

3. Enhance the setting for the building by providing opportunities for landscaping and infiltration of stormwater and protecting the landscape qualities and character of the locality.

4. Promote residential amenity for residents and neighbours including access to natural light and ventilation and both visual and acoustic privacy.

5. Alleviate the visual intrusion of building bulk on neighbouring properties.

6. Minimise view loss from adjoining or nearby properties.

2.2 Controls

1. Street, side and rear setbacks are measured perpendicular from the property boundary to the closest extent of the building, including balconies, awnings, podiums, sunscreens and the like (excluding eaves).

2. The minimum setbacks required are set out in the table below:

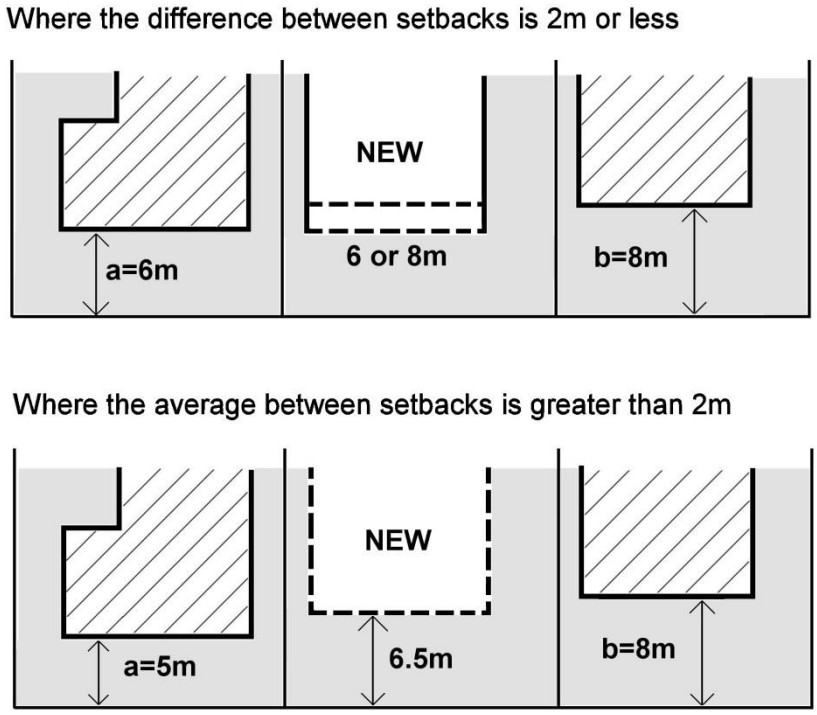
Table 1: Setbacks

Setbacks	Minimum Distance
Front	
Primary street frontage	7.5m – except where the adjoining dwellings are setback greater than or less than 7.5m, in which case it is the established street setback*
Secondary street frontage	3.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m
Side - Ground floor	0.9m
Second storey	1.5m
Internal lot	1.5m
Rear	6.0m
Internal lot(where both dual occupancy dwellings are located on an internal lot)	4.0m– some variations apply

Note: The 7.5m street setback applies to the primary (narrowest) street frontage.

***** The established street setback is the average distance of the setbacks of the nearest ~~2~~ dwelling houses having the same primary road boundary and located within 40m of the lot on which the dwelling house is erected. Where the difference between the setbacks of the nearest dwelling houses is less than or equal to 2.0m, the greater or lesser setback may be applied.

Figure 1: Established Street Setbacks



3. Where a development has a street setback of 7.5m or greater, building elements may encroach 1.5m into the front setback for a maximum of one third of the area of the façade, forming an articulation zone. Built form encroachments into the articulation zone can include open structure elements such as balconies and hoods, as well as elements which contribute to floor space ratio such as bay windows and room projections.

   Built form encroachments into the articulation zone must not include:
   - Garages, or
   - Lift shafts.

   Built form encroachments into the articulation zone must improve the design quality of the development with good façade articulation.

4. Garages and garage doors cannot be located in the articulation zone. These elements are to be located no closer than 7.5m to the street and integrated with the building design.

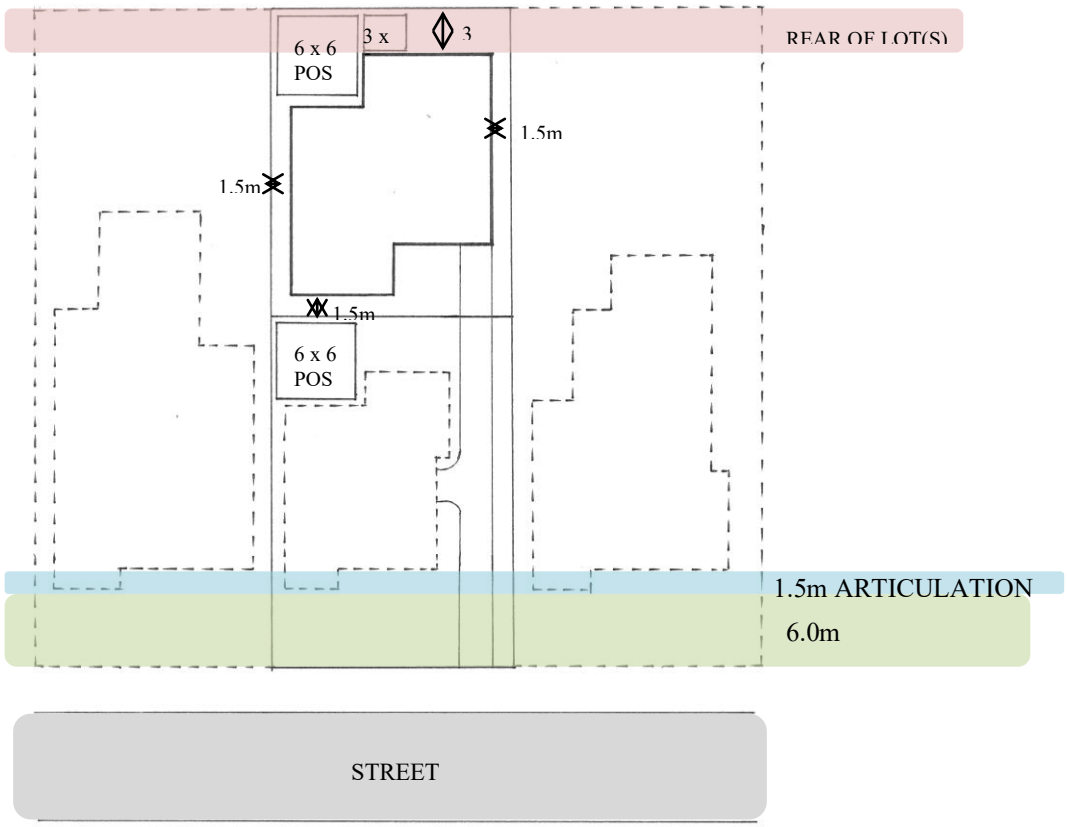


Figure 2: Setback requirements

5. In the case of corner properties, the 7.5m setback applies to the narrowest street frontage.

6. Despite clause 2 where a single storey dwelling forming a dual occupancy is located at the rear of the lot, the rear setback may be reduced to 4.0m.

7. Despite 2, in the case of a corner dual occupancy, garages and garage doors accessible from the secondary street must be set back a minimum of 6m.

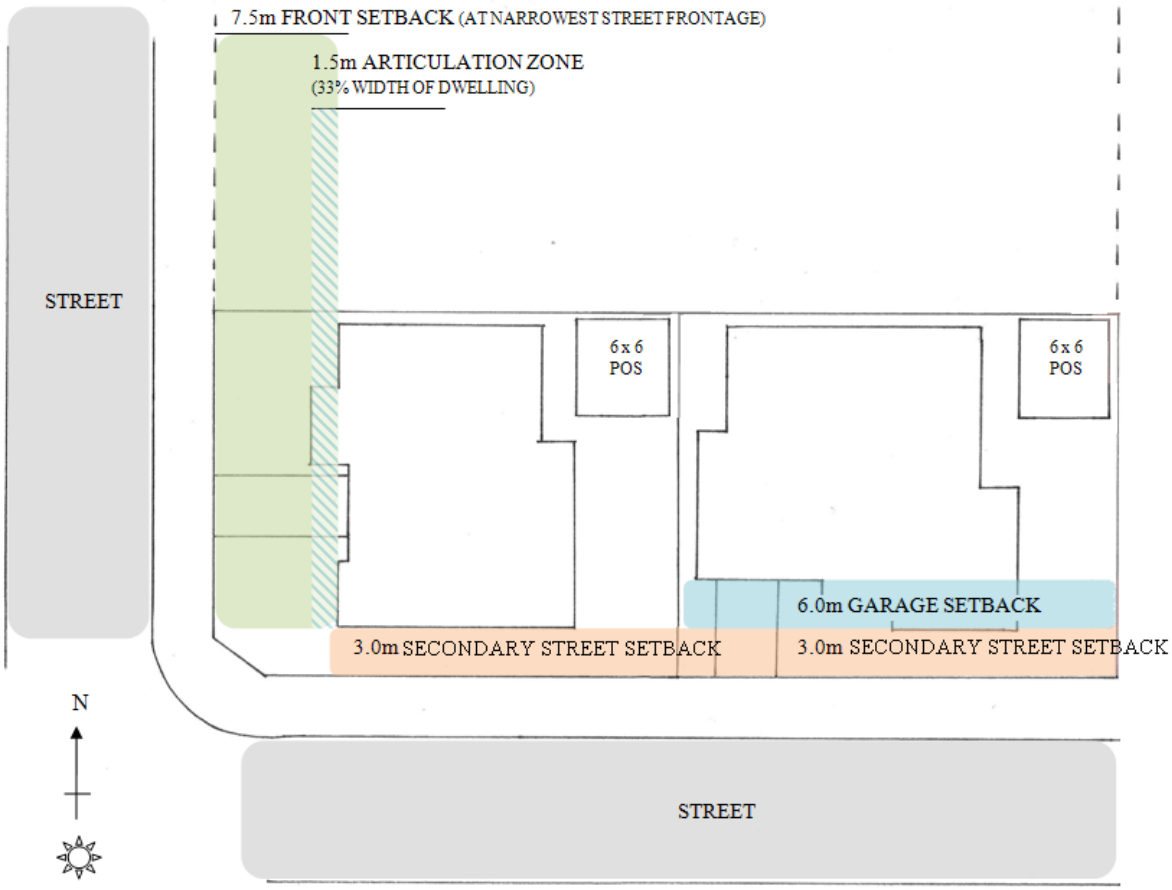


Figure 3: Street setbacks for corner lots

8. In the case of a corner property dual occupancy, one boundary must be nominated as the rear boundary of the property and comply with the minimum required setbacks identified in clause 2.

9. Despite any other clause, for dual occupancy development on corner allotments, a variation to the rear setback may be considered by Council, but only where it can be demonstrated that a variation would achieve a better outcome than would strict compliance with the standard setback controls because of site constraints, implications stemming from the existing allotment pattern, building design, retention of existing significant vegetation, solar access or positioning of useable open space.

10. The rear setback may be reduced to 1.5m where the rear of the original lot adjoins the side boundary of an adjacent property. This clause does not apply to corner dual occupancy developments.

11. Despite clause 2 where a dwelling forming a dual occupancy is located at the rear of the lot which has a side boundary with a predominantly northerly aspect, the required 4.0m rear setback may be relocated to this side boundary, provided the private open space for that dwelling is located along this northern side boundary. In such circumstances, the original rear boundary may be reduced to 1.5m.

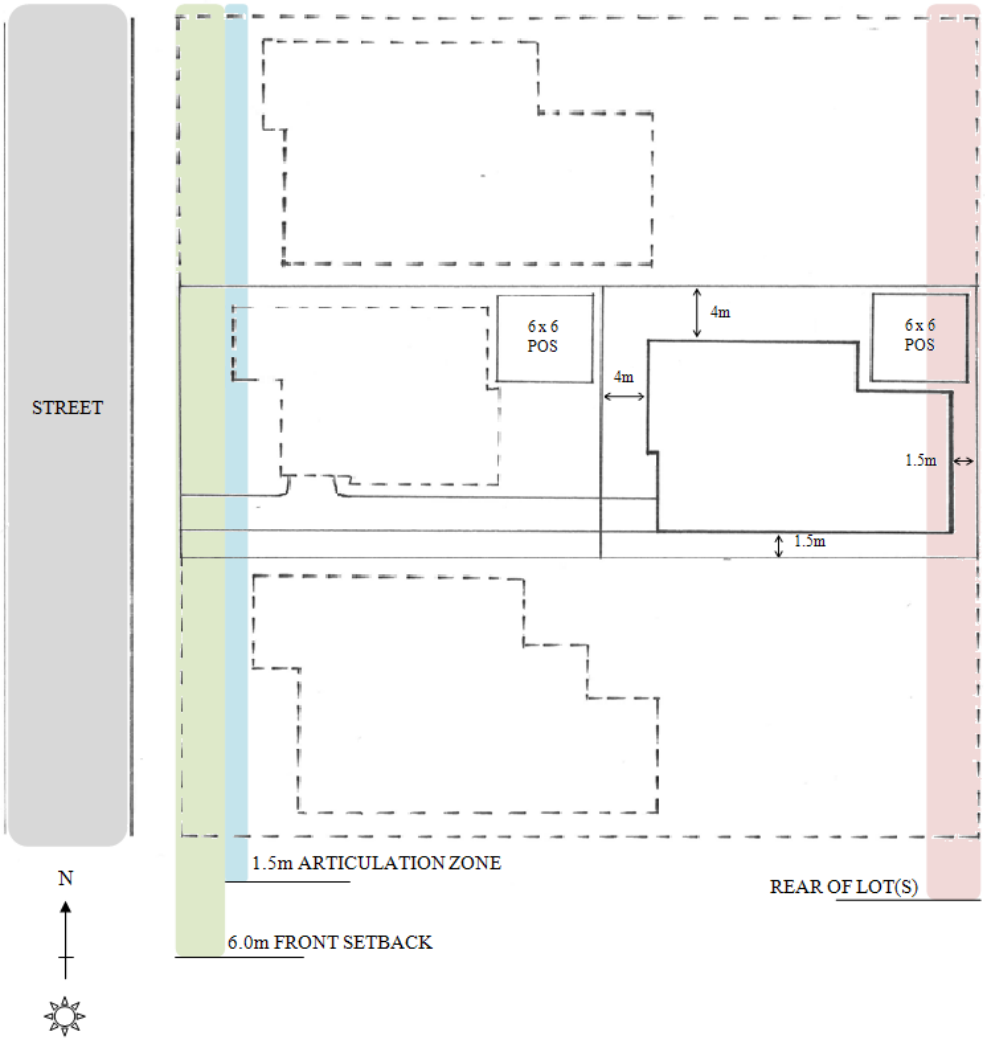


Figure 4: The required 4.0m rear setback may be relocated to the side boundary, provided the private open space for that dwelling is located along the northern side boundary, see clause 11.

12. Where a second storey wall adjacent to a side boundary exceeds 15m in continuous length, the side setback shall be increased by a further 500mm or more for that part of the wall. Where the scale of the side elevation results in significant overshadowing and/or visual intrusion due to building bulk to an adjoining dwelling, an increased building setback is to be employed.

3. Landform

Development on the steeper and higher topographical areas is often more prominent, particularly when viewed from the low side. Well considered design ensures dual occupancy dwellings integrate with the streetscape and retain a consistent relationship to the natural topography. This relationship provides an important visual link between buildings in a streetscape, as well as reducing the impacts of new development on neighbouring lots.

Deep excavation, cut and fill or benching may alter the pattern of subsoil water flow and soil stability, which may adversely affect neighbouring properties and the natural environment. Alternatives to slab on ground construction are encouraged where the gradient and characteristics of the site would otherwise require major excavation or filling.

3.1 Objectives

1. Ensure that the building siting, design and construction method responds to the natural landform of the site and is appropriate for site slope.

2. Minimise the visual impact of new development, particularly when viewed from the public domain.

3. Minimise earth works so as to maintain the existing landform and protect the integrity and stability of geological elements in the vicinity of the site.

4. Minimise impacts on surrounding vegetation and provide increased opportunities for tree retention, including trees on neighbouring properties.

3.2 Controls

1. The depth of cut and fill must not exceed 1m from existing ground level, except where the excavation is for a basement. Council will consider cut or fill greater than 1m only where:
   a. Alternative design solutions have been explored and presented to Council showing no feasible solution to excavation is available, and
   b. There is unlikely to be disruption, or detrimental effects on existing drainage patterns, vegetation, sedimentation and soil stability in the locality, and
   c. The design is a sensitive solution to the constraints of the site that does not exacerbate amenity impacts on neighbouring dwellings.

2. Dual occupancies should be designed to complement the natural slope of the land.

3. Excavation for basements should not extend beyond the building footprint.

4. Natural ground level surrounding the development and at property boundaries must be retained or reinstated prior to the completion of works.

4. Landscaping

Good design recognises that landscape and buildings operate together as an integrated system, resulting in greater aesthetic quality and amenity for the occupants, neighbours and the public domain. High quality landscape design protects and builds on the site's natural and cultural features to contribute to a development's positive relationship to its context and site.

Sutherland Shire's tree cover, areas of bushland and natural beauty are valued by its residents. Landscape design in new development must recognise that existing trees, areas of habitat and natural systems must be protected and enhanced by the retention of important landscape elements, appropriate planting, bush regeneration and by minimising urban runoff.

4.1 Objectives

1. Contribute to streetscape character, local habitat and the amenity of the public domain by using indigenous planting and species which complement scale of the development.

2. Provide landscaping treatments which foster attractive outlooks, privacy and private recreation areas of high aesthetic quality.

3. Improve the microclimate within development.

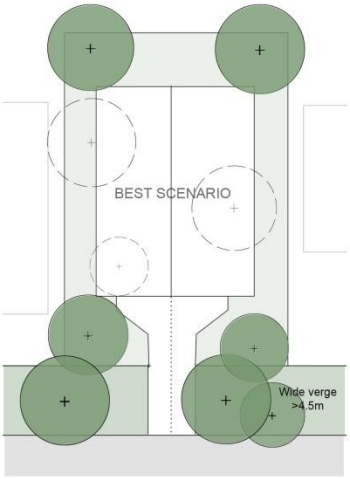
4.2 Controls

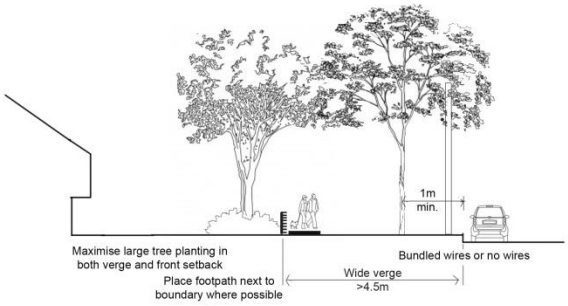
1. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, dual occupancy development must be designed to accommodate front and rear dual occupancy dwellings so that the required vehicle access can be provided, as well as the required deep soil landscaping.

2. Development should be designed to retain existing canopy trees in the vicinity of side, rear and front setbacks including on adjoining land.

3. A minimum of 4 trees are to be provided per dual occupancy development. A minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 3m of the front setback (measured from the front building line) and a minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 2m of the rear boundary. All indigenous tree species must be selected from Council's *Native Plant Selector* available on Council's website.

REPLACEMENT PLANTING IN STREET & FRONT SETBACK

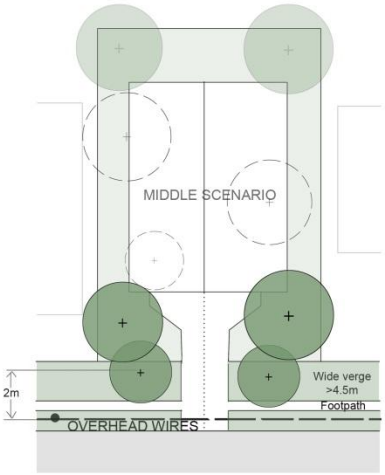


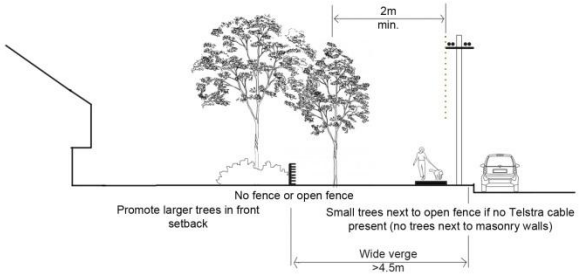


REPLACEMENT PLANTING CALCULATION:

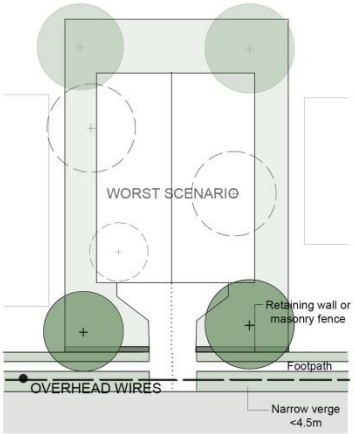
3 trees removed at a replacement rate of 4 to 1 (@$100/tree)
3x4=12 Trees
Potential to put back in 7 trees in best scenario
5 trees remaining
5x$100=$500 into fund

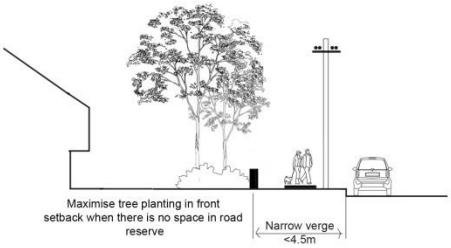
1. REPLACEMENT PLANTING-
WIDE VERGE AND NO OVERHEAD WIRES





2. REPLACEMENT PLANTING -
WIDE VERGE AND OVERHEAD WIRES





3. REPLACEMENT PLANTING-
NARROW VERGE AND OVERHEAD WIRES

4. Landscape design and plant species selection should reduce the potential for invasive plant species to escape into surrounding bushland.

5. Where there are continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a maximum height of 4m, must be planted at a maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and or masonry fence or retaining wall. Street trees must be selected from the Council's technical specifications and Native Plan Selector available on Council's website

6. Where there are no continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a minimum mature height of 6m, must be planted at maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and/or masonry fence or retaining wall. Street trees must be selected from Council's technical specifications and Native Plant Selector available on Council's website.

Note:

All indigenous tree species must be selected from Council's Native Plant Selector available on Council's website. The Native Plant Selector is a tool that recommends plants suitable for Sutherland Shire's ecosystems based on the specific address of the site locality. The tool is available online at Council's website.

For additional guidance on landscape design and implementation refer to the Sutherland Shire Environmental Specifications - Landscape 1-5. Applicants should also refer to the Greenweb map and controls in Chapter 39 Natural Resource Management. For development application submission requirements refer to Council's DA Guide.

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5. Building Layout and Solar Access and Private Open Space

Good design provides a building layout that maximises the natural attributes of the site. Carefully considered building layout and design also creates a higher level of amenity for occupants through enhanced visual and acoustic privacy, passive heating and cooling, attractive outlooks from living spaces, and flexible and useable indoor and outdoor spaces that meet the needs of occupants.

Quality private space is critical to achieving good residential amenity. Open space provided of sufficient area and dimensions to enable recreational and outdoor use, landscaping and service functions is needed for all dual occupancy dwellings.

Ideally, solar access should be maximised in winter and controlled in summer. Daylight consists of both diffused light and direct light. Good levels of daylight in a dwelling improve amenity and reduce the need for artificial lighting. Good levels of daylight can be achieved through the careful consideration of window size, location and proportion.

5.1 Objectives

1. Ensure development provides opportunities for cross-ventilation and natural ventilation through the arrangement of external openings.

2. Ensure outdoor living areas are functional and responsive to the environment.

3. Provide privacy and solar access to principle private open space areas of a dual occupancy dwelling.

4. Ensure building design and location does the most to minimise adverse impacts of overshadowing of neighbouring buildings and private and public open spaces.

5.2 Controls

1. Orientate all new development and windows to take advantage of solar orientation to maximise natural light penetration to indoor areas and reduce the need for mechanical heating and cooling.

2. A minimum of 3 hours of direct sunlight between 9am and 3pm in midwinter should be provided to a living area within each dwelling.

3. Each dwelling is to provide an area of Private Open Space that has a minimum area of $36m^2$ with minimum dimension of 5m, of which $9m^2$ must be paved.

4. Where a dual occupancy is comprised of a dwelling on each level, the second floor dwelling is not required to provide private open space at ground level, instead supplying a 4m x 6m balcony or terrace area with a minimum area of $24m^2$ and where possible oriented north.

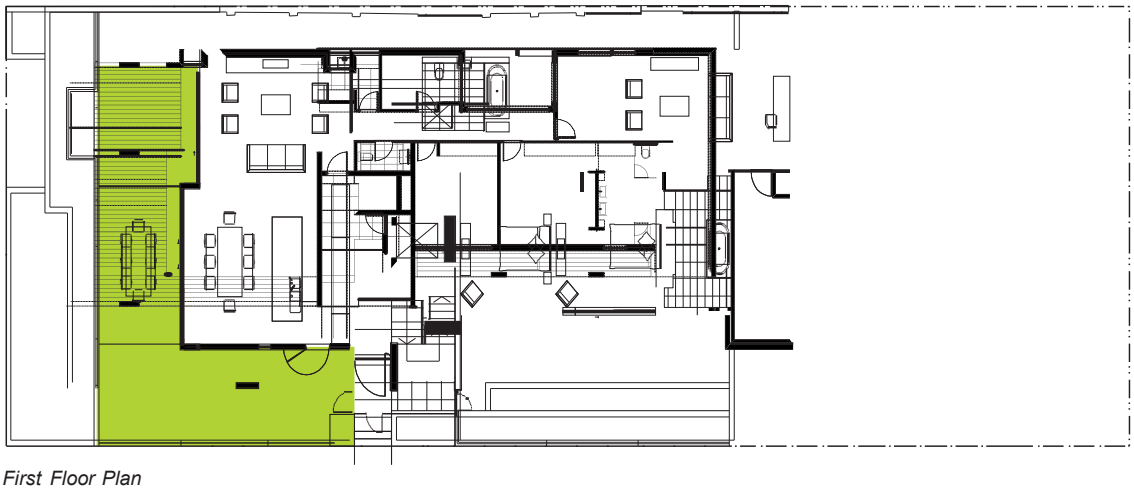

Figure 5: Private open space as balcony or terrace
(Source: Draft Good Design Guide for medium density living, NSW Department of Planning, 2011)

5. A primary living area of each dual occupancy dwelling is to provide direct access to the private open space.

6. Private open space may be located within the front setback. In such instances a combination of fencing and hedging is to provide privacy for residents while also ensuring that the site makes a positive contribution to the landscaped character of the street. High solid fencing is unacceptable. Residents seeking to rely on the front setback for private open space must accept a lower level of privacy until landscaping matures. Front fencing must be in accordance with the provisions specified in Chapter 34 Ancillary Development: Fences.

7. For the proposed dual occupancy dwellings:
   a. orientate the area of private open space to take advantage of the northern solar access;
   b. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. overshadowing by vegetation should be ignored;
   d. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

8. For the neighbouring dwellings:
   a. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   b. ensure windows of living areas have 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. consideration will be given to reduced solar access where the proposed dwelling is generally compliant with all development standards and controls, and the extent of impact is the result orientation, site constraints, and or existing built forms.
   d. overshadowing by vegetation should be ignored;
   e. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

9. A secure space per dwelling of $10m^3$ set aside exclusively for storage as part of the dwelling or garage should be provided. Storage areas must be adequately lit and secure. The required $10m^3$ of storage is in addition to bedroom wardrobes, kitchen cupboards and pantries and bathroom cupboards.

10. Each dwelling is to provide an external service area set aside for accommodating garbage bins, air conditioning units etc.

6. Visual and Acoustic Privacy

Building design must take into consideration visual and acoustic privacy. Amenity is enhanced by privacy and a better acoustic environment. This can be achieved by carefully considering the location of the building on the site, the internal layout, the building materials used, and screening devices. The consideration of visual and acoustic privacy requires an understanding of the context of the adjacent site, site configuration and the layout of the dwelling and ancillary elements.

Major roads and rail operations generate noise and vibration, and people living and working near major transport corridors can be adversely affected. Major roads can also impact on air quality due to their volume of traffic. Building design must take into consideration the noise, vibration and air quality effects of busy roads and rail corridors and minimise the amenity and health impacts on future occupants.

6.1 Objectives

1. Ensure a high level of amenity by protecting the acoustic and visual privacy of occupants within dual occupancy dwellings and their associated private open spaces.

2. Ensure dual occupancy dwellings are sited and designed so that visual and acoustic privacy and vibration from outside sources is controlled to acceptable levels, incorporating architectural and building elements to assist in protecting privacy.

3. Minimise direct overlooking of windows and private open space so that the amenity of neighbours and intended occupants is respected.

4. Recognise the outlook and views from principal rooms and private open space without compromising visual privacy of others.

6.2 Controls

1. Locate, orientate and design new development to ensure visual privacy between buildings and between buildings and adjacent private open space.

2. Use building design to increase privacy without compromising access to light and air.

3. Living room, dining room and kitchen windows that provide a direct outlook to an adjacent property dwelling which leads to a loss of amenity, needs to consider the following:

    a. offset the edge of one window to the edge of the other window by a sufficient distance to limit the views into the adjacent windows; or
    b. provide sill heights of at least 1.6m; or
    c. have fixed obscure glazing or glass blocks in any part of the window below 1.6m.
    d. Direct the outlook from all living rooms, dining rooms, bedrooms, kitchens and studies where possible towards the street, private open space on the development site, public open spaces, and waterways.
    e. Where overlooking of adjacent living rooms, dining rooms, bedrooms, kitchens and studies or private open space is unavoidable then screening elements such as louvres and obscured glass must be used to preserve reasonable visual privacy for neighbours.

Note:
Visual privacy may be achieved by:
a. Designing the dwelling to maximise the separation distances from adjacent dwellings and private open spaces,
Design elements to achieve privacy may include:
a. Offset windows in new development and windows of adjacent development
b. Recessed balconies and/or vertical fins between adjacent balconies,
c. Solid or semi-solid balustrades to balconies,
d. Louvres or screen panels to windows and/or balconies,
e. Fencing,
f. Vegetation as a screen between spaces,
g. Planter boxes in walls or balustrades,
h. Pergolas or shading devices to limit overlooking of lower level private open space.

4. Where dual occupancy design includes a second floor dwelling with a balcony serving as the primary private open space, both the balcony and living areas should be orientated to the street or public place in order to prevent overlooking.

5. Arrange dwellings within a development to minimise noise transition between dwellings by:
   a. locating busy, noisy areas next to each other and quieter areas next to other quiet areas; for example, living rooms with living rooms, bedrooms with bedrooms;
   b. using storage or circulation zones within a dwelling to buffer noise from adjacent dwellings, mechanical services or corridors and lobby areas;
   c. minimising party (shared) walls with other dwellings.

6. All noise generating equipment such as air conditioning units, swimming pool filters, fixed vacuum systems and driveway entry shutters must be designed to protect the acoustic privacy of residents and neighbours. All such noise generating equipment must be acoustically screened. The noise level generated by any equipment must not exceed an LAeq (15min) of 5dB(A) above background noise at the property boundary.

7. Residential development adjacent to a rail corridor or a busy road as identified on the Road and Rail Noise Buffer Map should be sited and designed to include noise and vibration attenuation measures to minimise noise and vibration impacts. Refer to State Environmental Planning Policy (Infrastructure) 2007 and the NSW Department of Planning's *Development near Rail Corridors and Busy Roads – Interim Guideline.*

Note:
Compliance with the NSW Planning and Environment's Development near Rail Corridors and Busy Roads –Interim Guidelines is mandatory for roads with an annual average daily traffic (AADT) volume greater than 40,000 and is best practice advice for roads with an AADT volume of 20,000 - 40,000 (based on the traffic volume data available on the website of the RTA).
The Guidelines apply to development:
- located up to 300m from the road kerb and with a direct line of sight to busy roads, and, or
- located within 80m of an operational rail track
The Guidelines require that noise levels in any such residential development not exceed:
- LA eq of 35dB (A) measured within any bedroom in the building at any time between 10pm-7am and
- LA eq of 40dB(A) measured within any bedrooms between 7am-10pm and anywhere else in the building (other than a garage, kitchen, bathroom or hallway) at any time.
Depending on the classification of a development using the screen tests in the Development near Rail Corridors and Busy Roads – Interim Guidelines, compliance with specified noise control treatments (Appendix C) may be required or an assessment by an acoustic consultant may be required.

7. Vehicular Access, Parking and Circulation

The location and layout of parking can have a significant impact on the design of new development. It will influence the layout and design of buildings and landscaping. All development must satisfy the demand for parking that it creates within its own site.

The provision of sufficient parking must not compromise the safety of the on-street and off-street environment for vehicles, pedestrians or cyclists.

7.1 Objectives

1. Ensure vehicle access, garages, carports and parking areas do not visually dominate either the development or the streetscape.

2. Car parking spaces are designed to ensure ease of access, egress and on-site manoeuvring.

3. Reduce reliance on street parking.

7.2 Controls

1. Car parking shall be provided in accordance with the car parking requirements set out under *Table 1 - Car Parking Numbers* in Chapter 36: Vehicular Access, Traffic, Parking and Bicycles.

   All spaces shall be behind the building line.

2. The parking space available within the garage shall be 5.5 m long and 3.0 m wide with a clear garage opening of 2.75m. The garage opening (doorway width) may be reduced to 2.4m wide where the driveway leads straight into the garage (as shown in Figure 1 in chapter 36). Where a double garage is permitted, it shall be 5.5 metres long and 5.7m wide with a clear garage opening of at least 5m.

3. Only two single garage doors (of maximum 3m in width) or one double garage door are to face the street.

4. Parking spaces shall have a grade no greater than 1:20.

5. Dual occupancies proposed on corner lots must ensure that driveways are approached from separate streets where appropriate.

1. Car parking layout, vehicular access requirements, and design of public and private footpaths are to be in accordance with the Australian Standards, in particular AS 2890.1-2004 and the requirements contained in chapter 36. On Arterial and Distributor Roads (as identified on the DCP Road Hierarchy, Map) vehicles may be required to enter and leave a site in a forward direction, due to traffic conditions.

6. Driveways are to be designed and sited to accommodate street gully pits and street trees, and maximise the availability of on-street parking.

7. Single driveways should not exceed a maximum width of 3.5m at the boundary.

8. Where a basement car parking area is provided, the minimum width of the internal driveway shall be 5.5m.

9. Only one driveway access per frontage is to be provided to dual occupancy development. Council may accept a second driveway access where it is satisfied that:

    a. The frontage of the lot is a minimum of 15.24m wide, and
    b. Driveway widths should not exceed a maximum width of 3m at the boundary, and
    c. Locations of driveways must comply with AS2890.1, and
    d. Two driveways must be able to accommodate an on-street car space in between, with a minimum length of 6m long (wing-tip to wing-tip) between the driveways. Any splay transitions at the kerb should be wholly within the subject property frontage, and have regard for neighbouring properties, and
    e. Each access driveway provides safe access, and
    f. The availability of on street car parking is not diminished, particularly where on street car parking demand is high, and
    g. Access facilitates retention of existing trees, rock outcrops or natural features where they occur, and
    h. Site design facilitates greater resident amenity and solar access, and
    i. Development is consistent with the spatial and landscape qualities of the streetscape – in this regard wider lots are appropriate, and
    j. Car parking and garages do not dominate the streetscape".

10. Where a common driveway serves a side by side dual occupancy (where adjacent parking is provided) and the required parking space is setback 7.5m or less, driveways should not exceed a maximum width of 4.5m at the boundary and 3.5m at the kerb.

11. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, this must be achieved without compromising the contribution of the site to the landscape quality of the street.

Note: Where vehicles must enter and leave a site in a forward direction, dual occupancy development is best designed as front and rear dwellings so that the required vehicle access can be provided as well as the required deep soil landscaping in the front setback.

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8. Waste Management Requirements

The design of waste and recyclables storage areas within the property affects ease of use, amenity, and the efficiency of handling of waste for the life of the development.

8.1 Objectives

1. Ensure appropriate storage and collection of waste.

2. Minimise the environmental impacts associated with waste management.

3. Discourage illegal dumping.

4. Encourage on-site waste management facilities that are integrated with the design of a development and enable source separation, reuse and recycling.

5. Enable collection service providers to efficiently collect waste and recyclables with minimum disruption and impact on the community.

8.2 Controls

1. Each dwelling must be provided with a waste storage area capable of accommodating the following:
   a. 120 litre garbage bin
   b. 240 litre recycling bin
   c. 240 litre green waste bin.

2. The waste storage area must not be located forward of the building line and must not detract from the streetscape.

3. Developments must be designed so that bins do not need to be wheeled more than 75 metres.

Note:

Further details on Waste Management Plans including a template for a typical plan are in the Sutherland Shire DA Guide and the Waste Management Information Guidelines.

Sutherland Shire Council provides a garbage and recycling collection to residential and commercial developments based on the pricing structure outlined in the Schedule of Fees and Charges for Goods and Services. The Council only has the infrastructure to services 120 litre and 240 litre mobile garbage bins. Services are available from private contractors who might use different collection vehicles and bin sizes to those used by the Council.

All garbage, recycling and garden waste bins are collected from the kerbside by Council collectors. It is the responsibility of residents to ensure the bins are placed at the collection point, usually between the kerbside and the road reserve, by 5am on the regular service day.

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f. Dual Occupancies in the B1 Neighbourhood Centre Zone

The B1 zone is an open business zone that covers small-scale ~~neighbourhood~~ centres that serve the needs of the surrounding area. The zone may include a number of uses including commercial and retail, shop-top housing, dwelling houses and dual occupancies. within this zone may form the transition between a small row or cluster of shopfronts and the adjacent residential zone. The controls for the zone aim to ensure high levels of amenity for residents of the new dwellings and neighbouring dwellings in the residential zone.

1. Streetscape and Building Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character and scenic quality. Ancillary elements of development such as driveways, parking areas and fencing are important elements of the streetscape. To make a positive contribution to the streetscape, new development needs to be compatible with the scale and character of existing buildings and landscape elements.

Architectural quality contributes to the character and quality of both the streetscape and built form when viewed from the street and waterways. High architectural quality requires appropriate composition of building elements, textures, materials and colours and reflects the use, the natural landscape setting, internal design and overall structure of a development.

1.1. Objectives

1. Ensure that all elements of development visible from the street and public domain make a positive contribution to the streetscape and natural features of the area.

2. Ensure development is compatible with the scale, character and landscape setting of the adjoining streetscape, natural setting and scenic quality.

3. Ensure dual occupancy design responds to the opportunities and constraints of the site, delivering optimal solar orientation for both dwellings.

4. Ensure that basements do not add to building bulk or exacerbate impacts upon neighbours

5. Ensure the safety of pedestrians, cyclists, and vehicles using public domain and private land.

1.2 Controls

1. Where a site is subject to bushfire risk, the dwelling should be located where risk factors are less severe.

2. Development must be designed and sited so that it addresses the street frontage ensuring that the path to the main entry is clearly identifiable from the street in order to facilitate way finding.

3. Where dwellings are provided side by side, the building entries to each dwelling should not require entry through a space allocated for parking nor be recessed behind garaging.

4. The design of dual occupancy must seek to reduce the apparent bulk and scale of development such that it is not dominant in the streetscape. Articulation of facades and massing of elements should be employed to reduce apparent bulk and scale from the street.

5. Dual occupancy development is to have a limit of one single garage door for each dwelling fronting the same street.

6. Where a dual occupancy development is proposed on a corner allotment, each dwelling and any associated garaging, must independently address a street frontage. If both dwellings are proposed to be accessed from one street due to site constraints, car parking and driveways should not dominate the streetscape.

7. Two or three storey development above natural ground level is only permitted on the front of an allotment and may extend to a maximum of 60% of the depth of the site measured from the property boundary.

8. Despite the above, where the topography, orientation or context of the site would allow for a better outcome to be achieved through accommodating two storey developments in the rear portion of the allotment, a variation may be considered if this solution will not result in a significant loss in the privacy or amenity of adjoining properties.

9. Extensive use of highly reflective materials is not acceptable for roof or wall cladding.

10. Development must be sensitively designed so that it is sympathetic to the amenities and view corridors of neighbouring public and private property and balances this with the amenity afforded to the new development.

11. Basements must meet the following criteria:
    a. Basements must be wholly contained within the footprint of the building above. Terraces and alfresco areas are not to be provided over basements unless they are at ground level.
    b. Basements musts be setback a minimum of 7.5m from the front boundary and 50% of the front setback is to be landscaped in order to contribute to the landscape quality of the streetscape.
    c. In order to minimise the visual impact of driveways to basements, cut shall be confined to less than one metre within the first 4 metres of the setback from the street. Landscaped terracing is to be relied upon to avoid the need to provide balustrading. Where site constraints make balustrading unavoidable, it is to be open form to minimise its visual intrusion into the streetscape.
    d. Natural ground levels surrounding the development and at property boundaries must be retained or reinstated to predevelopment levels. Basements must be designed to work with the slope of the land.
    e. Basements must not compromise the safety of the on-street or off-street environment for pedestrians, cyclists or vehicles. Ramps must have a maximum grade of -5% grade for the first 3m. Front and side boundary fences must be no higher than 1.2m within 3m of the basement ramp. Where safety and/or traffic conditions necessitate, vehicles are required to enter and exit in a forward direction.
    f. For dual occupancy, basements will only be allowed where the access is shared through a common entry point that is no greater than 4m in width.

Note:

Basement means the space of a building where the floor level of that space is predominantly below ground level (existing) and where the floor level of the storey immediately above is less than 1 metre above ground level (existing)

If basement construction protrudes more than 1m above ground level, it is no longer defined as a basement. Floor space in a basement may be counted as part of gross floor area. Refer to the definition of gross floor area in SSLEP2015.

Note:

View corridors may be maintained by implementing the following measures:
a. stepping buildings down the site,
b. using only single storey elements,
c. avoiding steep roofs, and
d. breaking up the built form.

Note:

Specific controls for fencing are provided in Chapter 34.

2. Building Setbacks

Street Setbacks
Street setbacks establish a consistent front building line and create the proportions of the street. Setbacks contribute to the public domain by enhancing streetscape character and the continuity of building facades. Street setbacks can also be used to enhance the setting for the building by providing for landscaped areas, entries to the dual occupancy dwellings, privacy and deep soil zones suitable for planting of canopy trees.

Side and Rear Setbacks
The spatial relationship of buildings is an important determinant of urban form. Building separation affects the spatial continuity and the degree of openness in the street and between properties. Building separation is required to minimise adverse amenity impacts by providing opportunities for landscaping, access, privacy, solar access and private and shared open spaces.

2.1 Objectives

1. Establish the street proportions.

2. Encourage articulated building forms and ensure garages do not dominate the streetscape.

3. Enhance the setting for the building by providing opportunities for landscaping and infiltration of stormwater.

4. Promote residential amenity for residents and neighbours including access to natural light and ventilation and both visual and acoustic privacy.

5. Provide adequate access for emergency services within the side setbacks in bush fire prone areas.

6. Alleviate the visual intrusion of building bulk on neighbouring properties.

7. Minimise view loss from adjoining or nearby properties.

2.2 Controls

1. Street, side and rear setbacks are measured perpendicular from the property boundary to the closest extent of the building, including balconies, awnings, podiums, sunscreens and the like (excluding eaves).

2. The minimum setbacks required are set out in the table below:

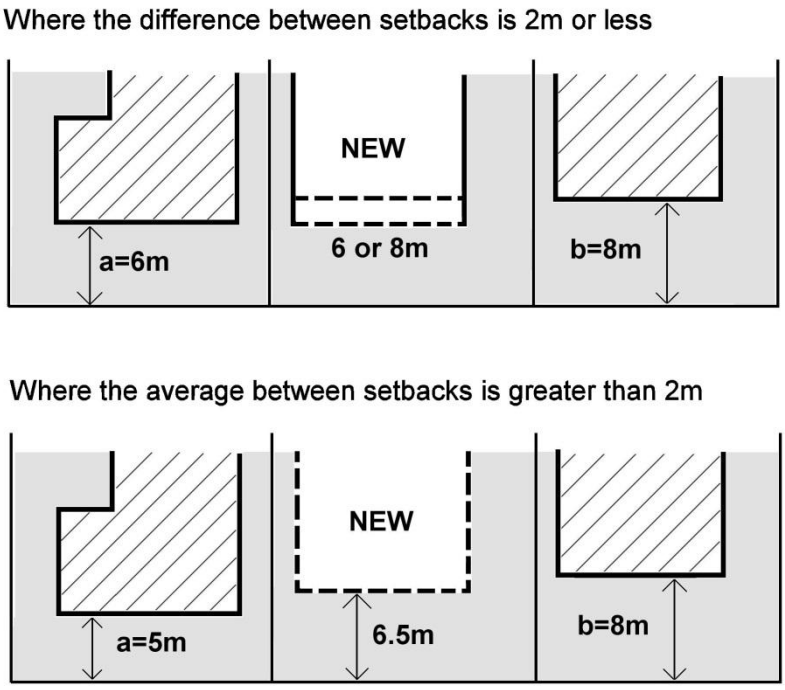
Table 1: Setbacks

Setbacks	Minimum Distance
Front	
Primary street frontage	7.5m – except where the adjoining dwellings are setback greater than or less than 7.5m, in which case it is the established street setback*
Secondary street frontage	3.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m
Side - Ground floor	0.9m
Second storey	1.5m
Internal lot	1.5m
Rear	6.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m – some variations apply

Note: The 7.5m street setback applies to the primary (narrowest) street frontage.

***** The established street setback is the average distance of the setbacks of the nearest dwelling houses having the same primary road boundary and located within 40m of the lot on which the dwelling house is erected. Where the difference between the setbacks of the nearest dwelling houses is less than or equal to 2.0m, the greater or lesser setback may be applied.

Figure 1: Established Street Setbacks



3. Where a development has a street setback of 7.5m or greater, building elements may encroach 1.5m into the front setback for a maximum of one third of the area of the façade, forming an articulation zone.

   Built form encroachments into the articulation zone can include open structure elements such as balconies and hoods, as well as elements which contribute to floor space ratio such as bay windows and room projections.

   Built form encroachments into the articulation zone must not include:
   - Garages, or
   - Lift shafts.

   Built form encroachments into the articulation zone must improve the design quality of the development with good façade articulation.

4. Garages and garage doors cannot be located in the articulation zone. These elements are to be located no closer than 7.5m to the front boundary and integrated with the building design.

5. In the case of corner properties, the 7.5m setback applies to the narrowest street frontage.

6. Despite clause 2 where a single storey dwelling forming a dual occupancy is located at the rear of the lot, the rear setback may be reduced to 4.0m.

7. Despite 2, in the case of a dual occupancy development proposed on a corner

allotment, garages and garage doors accessible from the secondary street must be set back a minimum of 6m.

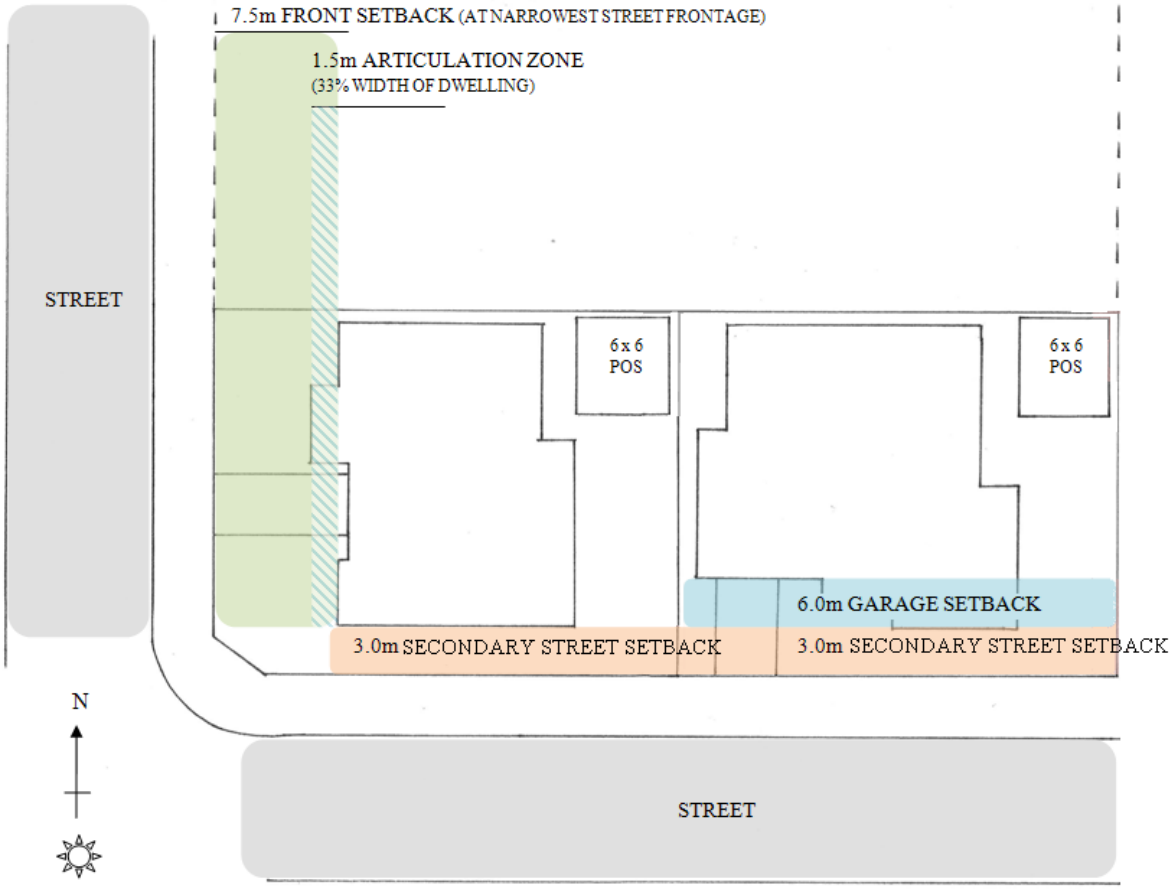


Figure 2: Street setbacks for corner lots

8. In the case of a corner property dual occupancy, one boundary must be nominated as the rear boundary of the property and comply with the minimum required setbacks identified in Clause 2.

9. Despite any other clause, for dual occupancy development on corner allotments, a variation to the rear setback may be considered by Council, but only where it can be demonstrated that a variation would achieve a better outcome than would strict compliance with the standard setback controls because of site constraints, implications stemming from the existing allotment pattern, building design, retention of existing significant vegetation, solar access or positioning of useable open space.

10. The rear setback may be reduced to 1.5m where the rear of the original lot adjoins the side boundary of an adjacent property. This clause does not apply to corner dual occupancy developments.

11. In the case of a dwelling forming a dual occupancy on an internal lot, where a side boundary faces north, the rear setback maybe reduced to 1.5m subject to the northern side boundary being setback a minimum 4m.

12. Despite clause 2 where a dwelling forming a dual occupancy is located at the rear of the lot which has a side boundary with a predominantly northerly aspect, the required 4.0m rear setback may be relocated to this side boundary, provided the private open space for that dwelling is located along this northern side boundary.. In such circumstances, the original rear boundary may be reduced to 1.5m.

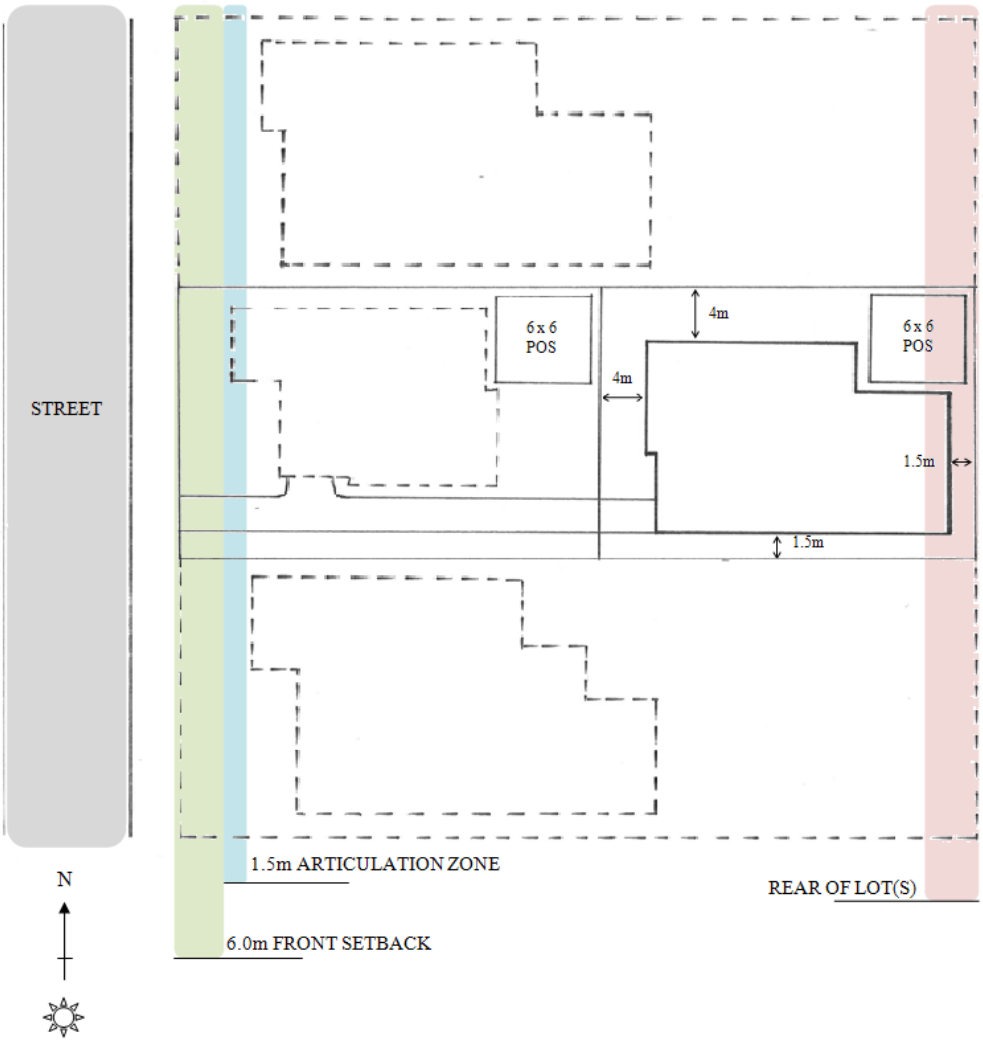


Figure 3: The required 4.0m rear setback may be relocated to the side boundary, provided the private open space for that dwelling is located along the northern side boundary, see clause 11

13. Where a second storey wall adjacent to a side boundary exceeds 15m in continuous length, the side setback shall be increased by a further 500mm or more for that part of the wall. Where the scale of the side elevation results in significant overshadowing and/or visual intrusion due to building bulk to an adjoining dwelling, an increased building setback is to be employed.

3. Landform

In order to contribute to the quality and identity of the area, new development must respect landform and natural settings. Development must be designed so that it minimises impacts to natural land forms and allows the natural qualities of the site to be the dominant elements of its setting.

Development on the steeper and more elevated areas is often more prominent, particularly when viewed from the lower areas. Well considered design ensures dwellings integrate with the streetscape and views from the waterways, and retain a consistent relationship to the natural topography. This relationship provides an important visual link between buildings in a streetscape, as well as reducing the impacts of new development on neighbouring lots.

Deep excavation, cut and fill or benching may alter the pattern of subsoil water flow and soil stability, which may adversely affect neighbouring properties and the natural environment. Alternatives to slab on ground construction are encouraged where the gradient and characteristics of the site would otherwise require major excavation or filling.

3.1 Objectives

1. Ensure that the building/s siting, design and construction method responds to the natural landform of the site and is appropriate for the site topography.

2. Minimise the visual impact of new development, particularly when viewed from the public domain.

3. Minimise earthworks so as to maintain the existing landform and protect the integrity and stability of geological elements in the vicinity of the site.

4. Minimise impacts on surrounding vegetation and provide increased opportunities for tree retention, including trees on neighbouring properties.

3.2 Controls

2. The depth of cut and fill must not exceed 1m from existing ground level, except where the excavation is for a basement. Council will consider cut or fill greater than 1m only where:
   a. Alternative design solutions have been explored and presented to Council showing no feasible solution to excavation is available, and
   b. There is unlikely to be disruption, or detrimental effects on existing drainage patterns, vegetation, sedimentation and soil stability in the locality, and
   c. The design is a sensitive solution to the constraints of the site that does not exacerbate amenity impacts on neighbouring dwellings.

3. Developments should avoid unnecessary earthworks by designing and siting buildings within the natural slope of the land.

4. Excavation for basements should not extend beyond the building footprint.

5. Basements car parks are only acceptable in the B1 Neighbourhood Centre where sites have a frontage of 20m or more and:
   a. the slope of the land is 12.5% or greater; or
   b. the basement is achieved by way of a gentle gradient so that the driveway is not greater than 1m below natural ground level within the setback to the street.

6. All basements must be design so that vehicles can enter and leave safely in a forward direction and a strip of landscaping is provided to the adjoining property boundary of at least 2 metres wide.

7. Natural ground level surrounding the development and at property boundaries must be retained or reinstated prior to the completion of works.

4. Landscaping

Good design recognises that landscape and buildings operate together as an integrated system, resulting in greater aesthetic quality and amenity for the occupants and neighbours and a more attractive public domain. High quality landscape design protects and builds on the site's natural and cultural features to contribute to a development's positive relationship to its context and site.

Sutherland Shire's tree cover, areas of bushland and natural beauty are valued by its residents. Landscape design in new development must recognise that existing trees, areas of habitat and natural systems must be protected and enhanced by the retention of important landscape elements, appropriate planting, bush regeneration and by minimising urban runoff. Even in areas prone to bushfires, sensibly selected and sited trees can help reduce ember attack.

4.1 Objectives

1. Contribute to streetscape character, local habitat and the amenity of the public domain by using indigenous planting and species which complement scale of the development.

2. Provide landscaping treatments which foster attractive outlooks, privacy and private recreation areas of high aesthetic quality.

3. Improve the microclimate within development.

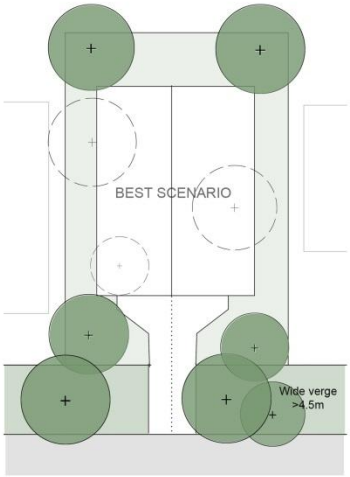
4.2 Controls

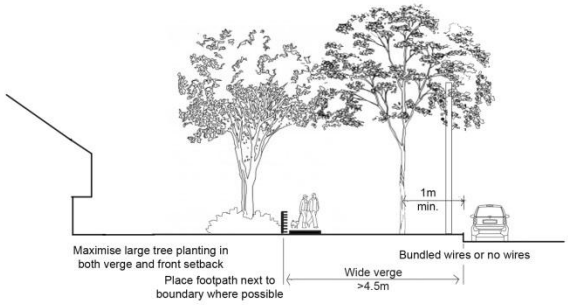
1. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, dual occupancy development must be designed to accommodate front and rear dual occupancy dwellings so that the required vehicle access can be provided, as well as the required deep soil landscaping.

2. Development should be designed to retain existing canopy trees in the vicinity of side, rear and front setbacks including on adjoining land.

3. A minimum of 4 trees are to be provided per dual occupancy development. A minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 3m of the front boundary (measured from the front building line) and a minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 2m of the rear boundary. All indigenous tree species must be selected from Council's *Native Plant Selector* available on Council's website.

REPLACEMENT PLANTING IN STREET & FRONT SETBACK

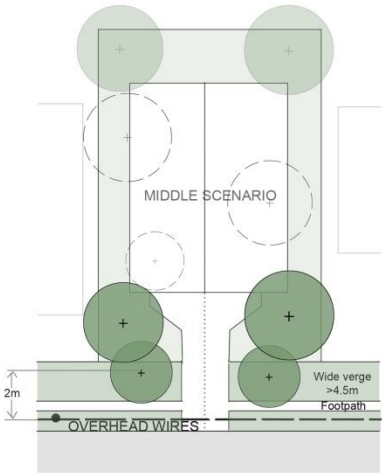


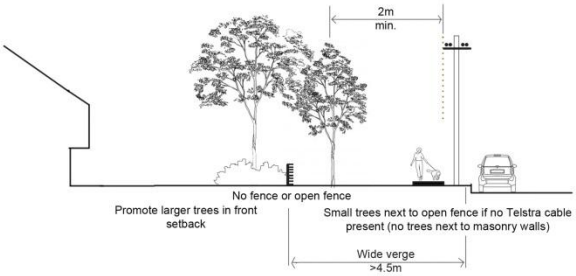


REPLACEMENT PLANTING CALCULATION:

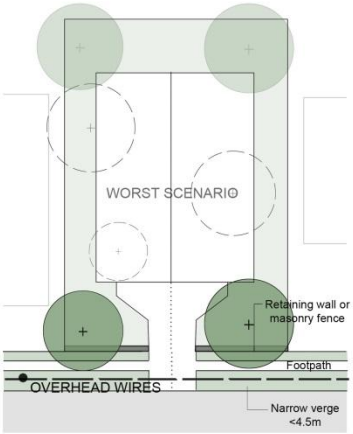
3 trees removed at a replacement rate of 4 to 1 (@$100/tree)
3x4=12 Trees
Potential to put back in 7 trees in best scenario
5 trees remaining
5x$100=$500 into fund

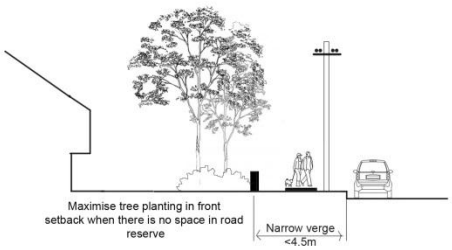
1. REPLACEMENT PLANTING-
WIDE VERGE AND NO OVERHEAD WIRES





2. REPLACEMENT PLANTING -
WIDE VERGE AND OVERHEAD WIRES





3. REPLACEMENT PLANTING-
NARROW VERGE AND OVERHEAD WIRES

4. Landscape design and plant species selection should reduce the potential for invasive plant species to escape into bushland.

5. Where there are continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a maximum height of 4m, must be planted at a maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and or masonry fence or retaining wall. Street trees must be selected from the Council's technical specifications and Native Plan Selector available on Council's website

6. Where there are no continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a minimum mature height of 6m, must be planted at maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and/or masonry fence or retaining wall. Street trees must be selected from Council's technical specifications and Native Plant Selector available on Council's website.

Note:

All indigenous tree species must be selected from Council's Native Plant Selector available on Council's website. The Native Plant Selector is a tool that recommends plants suitable for Sutherland Shire's ecosystems based on the specific address of the site locality. The tool is available online at http://www.sutherlandshire.nsw.gov.au/Outdoors/Environment/Plants-and-Bushland/Native-Plant-Selector.

For additional guidance on landscape design and implementation refer to the Sutherland Shire Environmental Specifications - Landscape 1-5. Applicants should also refer to the Greenweb map and controls in Chapter 39 Natural Resource Management. For development application submission requirement refer to Council's DA Guide.

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5. Building Layout and Solar Access and Private Open Space

Good design provides a building layout that maximises the natural attributes of the site. Carefully considered building layout and design also creates a higher level of amenity for occupants through enhanced visual and acoustic privacy, passive heating and cooling, attractive outlooks from living spaces, and flexible and useable indoor and outdoor spaces that meet the needs of occupants.

Quality private space is critical to achieving good residential amenity. Open space of sufficient area and dimensions to enable recreational and outdoor use, landscaping and service functions is needed for all dual occupancy dwellings.

Ideally, solar access should be maximised in winter and controlled in summer. Daylight consists of both diffused light and direct light. Good levels of daylight in a dual occupancy dwelling improve amenity and reduce the need for artificial lighting. High levels of daylight can be achieved through the careful consideration of window size, location and proportion.

5.1 Objectives

1. Ensure development provides opportunities for cross-ventilation and natural ventilation through the arrangement of external openings.

2. Ensure outdoor living areas are functional and responsive to the environment.

3. Provide privacy and solar access to principle private open space areas of a dual occupancy dwelling.

4. Ensure building design and location does the most to minimise adverse impacts of overshadowing of neighbouring buildings and private and public open spaces.

5.2 Controls

1. Orientate all new development and windows to take advantage of solar orientation to maximise natural light penetration to indoor areas and reduce the need for mechanical heating and cooling.

2. A minimum of 3 hours of direct sunlight between 9am and 3pm in midwinter should be provided to a living area within each dwelling.

3. Each dwelling is to provide an area of Private Open Space that has a minimum area of $36m^2$ (with minimum dimension of 5m, of which $9m^2$ must be paved.

4. Where a dual occupancy is comprised of a dwelling on each level, the second floor dwelling is not required to provide private open space at ground level, instead supplying a 4m x 6m balcony or terrace area with a minimum area of $24m^2$ and where possible oriented north.

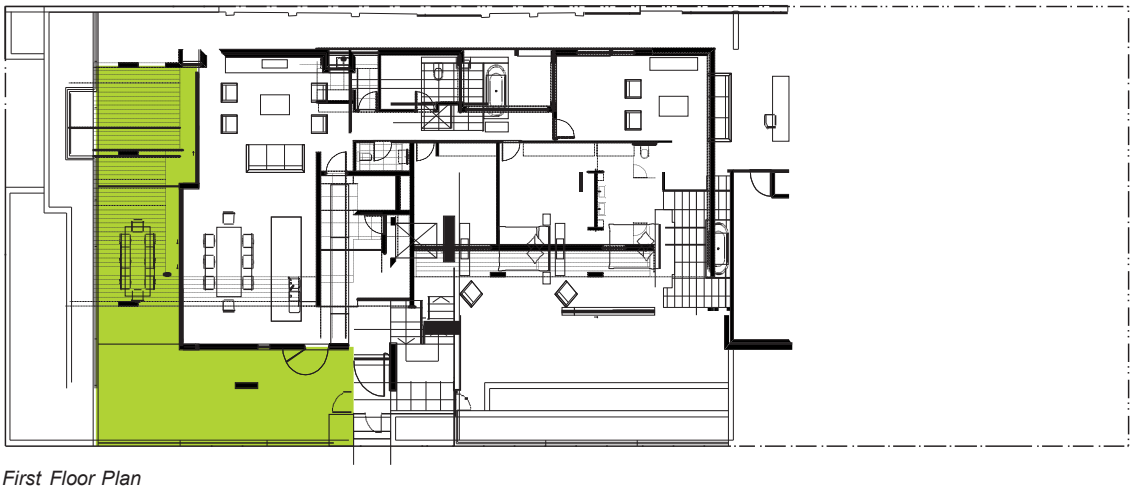


Diagram 4: Private open space as balcony or terrace
(Source: Draft Good Design Guide for medium density living, NSW Department of Planning, 2011)

5. A primary living area of each dual occupancy dwelling is to provide direct access to the private open space.

6. Private open space may be located within the front setback. In such instances a combination of fencing and hedging is to provide privacy for residents while also ensuring that the site makes a positive contribution to the landscaped character of the street. High solid fencing is unacceptable. Residents seeking to rely on the front setback for private open space must accept a lower level of privacy until landscaping matures. Front fencing must be in accordance with the provisions specified in Chapter 34 Ancillary Development: Fences.

7. For the proposed dual occupancy dwelling:
   a. orientate the area of private open space to take advantage of the northern solar access;
   b. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. overshadowing by vegetation should be ignored;
   d. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

8. For the neighbouring dwellings:
   a. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   b. ensure windows of living areas have 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. consideration will be given to reduced solar access where the proposed dwelling is generally compliant with all development standards and controls, and the extent of impact is the result orientation, site constraints, and or existing built forms;
   d. overshadowing by vegetation should be ignored;
   e. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

9. A secure space per dwelling of $10m^3$ set aside exclusively for storage as part of the dwelling or garage should be provided. Storage areas must be adequately lit and secure. The required $10m^3$ of storage is in addition to bedroom wardrobes, kitchen cupboards and pantries and bathroom cupboards.

10. Each dwelling is to provide an external service area set aside for accommodating garbage bins, air conditioning units etc.

6. Visual and Acoustic Privacy

Building design must take into consideration visual and acoustic privacy. Amenity is enhanced by privacy and a better acoustic environment. This can be achieved by carefully considering the location of the building/s on the site, the internal layout, the building materials used, and screening devices. The consideration of privacy requires an understanding of the context of the adjacent site, site configuration and the layout of the dwelling and ancillary elements.

Major roads and rail operations generate noise and vibration, and people living and working near major transport corridors can be adversely affected. Major roads can also impact on air quality due to their volume of traffic. Building design must take into consideration the noise, vibration and air quality effects of busy roads and rail corridors and minimise the amenity and health impacts on future occupants.

6.1 Objectives

1. Ensure a high level of amenity by protecting the acoustic and visual privacy of occupants within dwellings and their associated private open spaces.

2. Ensure dwellings are sited and designed so that visual and acoustic privacy and vibration from outside sources is controlled to acceptable levels, incorporating architectural and building elements to assist in protecting privacy.

3. Minimise direct overlooking of windows and private open space so that the amenity of neighbours and intended occupants is respected.

4. Recognise the outlook and views from principal rooms and private open space without compromising visual privacy of others.

6.2 Controls

1. Locate, orientate and design new development to ensure visual privacy between buildings and between buildings and adjacent private open space.

2. Use building design to increase privacy without compromising access to light and air.

3. Living room, dining room and kitchen windows that provide a direct outlook to an adjacent property dwelling which leads to a loss of amenity, needs to consider the following:

    a. offset the edge of one window to the edge of the other window by a sufficient distance to limit the views into the adjacent windows; or
    b. provide sill heights of at least 1.6m; or
    c. have fixed obscure glazing or glass blocks in any part of the window below 1.6m.
    d. Direct the outlook from all living rooms, dining rooms, bedrooms, kitchens and studies where possible towards the street, private open space on the development site, public open spaces, and waterways.
    e. Where overlooking of adjacent living rooms, dining rooms, bedrooms, kitchens and studies or private open space is unavoidable then screening elements such as louvres and obscured glass must be used to preserve reasonable visual privacy for neighbours.

Note:

Visual privacy may be achieved by:

a. Designing the dwelling to maximise the separation distances from adjacent dwellings and private open spaces,

Design elements to achieve privacy may include:

a. Offset windows in new development and windows of adjacent development
b. Recessed balconies and/or vertical fins between adjacent balconies,
c. Solid or semi-solid balustrades to balconies,
d. Louvres or screen panels to windows and/or balconies,
e. Fencing,
f. Vegetation as a screen between spaces,
g. Planter boxes in walls or balustrades,
h. Pergolas or shading devices to limit overlooking of lower level private open space.

4. All noise generating equipment such as air conditioning units, swimming pool filters, fixed vacuum systems and driveway entry shutters must be designed to protect the acoustic privacy of residents and neighbours. All such noise generating equipment must be acoustically screened. The noise level generated by any equipment must not exceed an LAeq (15min) of 5dB(A) above background noise at the property boundary.

5. Residential development adjacent to a rail corridor or a busy road as identified on the Road and Rail Noise Buffer Map should be sited and designed to include noise and vibration attenuation measures to minimise noise and vibration impacts. Refer to State Environmental Planning Policy (Infrastructure) 2007 and the NSW Department of Planning's *Development near Rail Corridors and Busy Roads – Interim Guideline*.

Note:
Compliance with the NSW Planning and Environment's Development near Rail Corridors and Busy Roads –Interim Guidelines is mandatory for roads with an annual average daily traffic (AADT) volume greater than 40,000 and is best practice advice for roads with an AADT volume of 20,000 - 40,000 (based on the traffic volume data available on the website of the RTA).

The Guidelines apply to development:
- located up to 300m from the road kerb and with a direct line of sight to busy roads, and, or
- located within 80m of an operational rail track

The Guidelines require that noise levels in any such residential development not exceed:
- LA eq of 35dB (A) measured within any bedroom in the building at any time between 10pm-7am and
- LA eq of 40dB(A) measured within any bedrooms between 7am-10pm and anywhere else in the building (other than a garage, kitchen, bathroom or hallway) at any time.

Depending on the classification of a development using the screen tests in the Development near Rail Corridors and Busy Roads – Interim Guidelines, compliance with specified noise control treatments (Appendix C) may be required or an assessment by an acoustic consultant may be required.

7. Vehicular Access, Parking and Circulation

The location and layout of parking can have a significant impact on the design of new development. It will influence the layout and design of buildings and landscaping. All development must satisfy the demand for parking that it creates within its own site.

The provision of sufficient parking must not compromise the safety of the on-street and off-street environment for vehicles, pedestrians or cyclists.

7.1 Objectives

1. Ensure vehicle access, garages, carports and parking areas do not visually dominate either the development or the streetscape.

2. Car parking spaces are designed to ensure ease of access, egress and on-site manoeuvring.

3. Reduce reliance on street parking.

7.2 Controls

1. Car parking shall be provided in accordance with the car parking requirements set out under *Table 1 - Car Parking Numbers* in Chapter 36: Vehicular Access, Traffic, Parking and Bicycles.

   All spaces shall be behind the building line.

2. The parking space available within the garage shall be 5.5 m long and 3.0 m wide with a clear garage opening of 2.75m. The garage opening (doorway width) may be reduced to 2.4m wide where the driveway leads straight into the garage (as shown in Figure 1 in chapter 36). Where a double garage is permitted, it shall be 5.5 metres long and 5.7m wide with a clear garage opening of at least 5m.

3. Only two single garage doors (of maximum 3m in width) or one double garage door are to face the street.

4. Parking spaces shall have a grade no greater than 1:20.

5. Dual occupancies proposed on corner lots must ensure that driveways are approached from separate streets where appropriate.

8. Car parking layout, vehicular access requirements, and design of public and private footpaths are to be in accordance with the Australian Standards, in particular AS 2890.1-2004 and the requirements contained in chapter 36. On Arterial and Distributor Roads (as identified on the DCP Road Hierarchy, Map) vehicles may be required to enter and leave a site in a forward direction, due to traffic conditions.

6. Driveways are to be designed and sited to accommodate street gully pits and street trees, and maximise the availability of on-street parking.

7. Single driveways should not exceed a maximum width of 3.5m at the boundary.

8. Where a basement car parking area is provided the minimum width of the internal driveway shall be 5.5m.

9. Only one driveway access per frontage is to be provided to dual occupancy development. Council may accept a second driveway access where it is satisfied that:

    a. The frontage of the lot is a minimum of 15.24m wide, and
    b. Driveway widths should not exceed a maximum width of 3m at the boundary, and
    c. Locations of driveways must comply with AS2890.1, and
    d. Two driveways must be able to accommodate an on-street car space in between, with a minimum length of 6m long (wing-tip to wing-tip) between the driveways. Any splay transitions at the kerb should be wholly within the subject property frontage, and have regard for neighbouring properties, and
    e. Each access driveway provides safe access, and
    f. The availability of on street car parking is not diminished, particularly where on street car parking demand is high, and
    g. Access facilitates retention of existing trees, rock outcrops or natural features where they occur, and
    h. Site design facilitates greater resident amenity and solar access, and
    i. Development is consistent with the spatial and landscape qualities of the streetscape – in this regard wider lots are appropriate, and
    j. Car parking and garages do not dominate the streetscape.

10. Where a common driveway serves a side by side dual occupancy (where adjacent parking is provided) and the required parking space is setback 7.5m or less, driveways should not exceed a maximum width of 4.5m at the boundary and 3.5m at the kerb.

11. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, this must be achieved without compromising the contribution of the site to the landscape quality of the street.

    Note: Where vehicles must enter and leave a site in a forward direction, dual occupancy development is best designed as front and rear dwellings so that the required vehicle access can be provided as well as the required deep soil landscaping in the front setback.

8. Waste Management Requirements

The design of waste and recyclables storage areas within the property affects ease of use, amenity, and the efficiency of handling of waste for the life of the development.

8.1 Objectives

1. Ensure appropriate storage and collection of waste.

2. Minimise the environmental impacts associated with waste management.

3. Discourage illegal dumping.

4. Encourage on-site waste management facilities that are integrated with the design of a development and enable source separation, reuse and recycling.

5. Enable collection service providers to efficiently collect waste and recyclables with minimum disruption and impact on the community.

8.2 Controls

1. Each dwelling must be provided with a waste storage area capable of accommodating the following:
   a. 120 litre garbage bin
   b. 240 litre recycling bin
   c. 240 litre green waste bin.

2. The waste storage area must not be located forward of the building line and must not detract from the streetscape.

3. Developments must be designed so that bins do not need to be wheeled more than 75 metres.

Note:

Further details on Waste Management Plans including a template for a typical plan are in the Sutherland Shire DA Guide and the Waste Management Information Guidelines.

Sutherland Shire Council provides a garbage and recycling collection to residential and commercial developments based on the pricing structure outlined in the Schedule of Fees and Charges for Goods and Services. The Council only has the infrastructure to services 120 litre and 240 litre mobile garbage bins. Services are available from private contractors who might use different collection vehicles and bin sizes to those used by the Council.

All garbage, recycling and garden waste bins are collected from the kerbside by Council collectors. It is the responsibility of residents to ensure the bins are placed at the collection point, usually between the kerbside and the road reserve, by 5am on the regular service day.

g. Dual Occupancies in the SP3 Tourist Zone

The SP3 Tourist zone is intended to provide for a variety of tourist-orientated development and related uses. The SP3 Tourist zone is primarily intended for higher density uses such as residential flat buildings as well as food and drink premises. Within this zone dwelling houses and dual occupancies are permissible. Consequently, a more intensive use of the zone is appropriate and controls aim to ensure that the construction of dual occupancy dwellings are compatible with the bulk, scale and character of larger structures, whilst ensuring high levels of privacy and amenity for residents of new dwellings and existing neighbouring dwellings.

1. Streetscape and Building Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character and scenic quality. Ancillary elements of development such as driveways, parking areas and fencing are important elements of the streetscape. To make a positive contribution to the streetscape, new development needs to be compatible with the scale and character of existing buildings and landscape elements.

Architectural quality contributes to the character and quality of both the streetscape and built form when viewed from the street and waterways. High architectural quality requires appropriate composition of building elements, textures, materials and colours and reflects the use, the natural landscape setting, internal design and overall structure of a development.

1.1 Objectives

1. Ensure that all elements of development visible from the street, waterways and public domain make a positive contribution to the foreshore, streetscape and natural features of the area.

2. Ensure development is compatible with the scale, character and landscape setting of the adjoining streetscape, natural setting and scenic quality.

3. Ensure dual occupancy design responds to the opportunities and constraints of the site, delivering optimal solar orientation for both dwellings.

4. Ensure that basements do not add to building bulk or exacerbate impacts upon neighbours.

5. Ensure the safety of pedestrians, cyclists, and vehicles using public domain and private land.

1. 2 Controls

1. Development must be designed and sited so that it addresses the street frontage ensuring that the path to all main entries are clearly identifiable from the street in order to facilitate way finding.

2. Where dwellings are provided side by side, the building entries to each dwelling should not require entry through a space allocated for parking nor be recessed behind garaging.

3. The design of dual occupancies must seek to reduce the apparent bulk and scale of development such that it is not dominant in the streetscape. Articulation of facades and massing of elements should be employed to reduce apparent bulk and scale from the street.

4. Dual occupancy development is to have a limit of one single garage door for each dwelling fronting the same street.

5. Where a dual occupancy development is proposed on a corner allotment, each dwelling and any associated garaging, must independently address a street frontage. If both dwellings are proposed to be accessed from one street due to site constraints, car parking and driveways should not dominate the streetscape.

6. Extensive use of highly reflective materials is not acceptable for roof or wall cladding.

7. Two or three storey development is only permitted on the front of an allotment and may extend to a maximum of 60% of the depth of the site measured from the property boundary.

8. Despite 7, where the topography, orientation or context of the site would allow for a better outcome to be achieved through accommodating two storey developments in the rear portion of the allotment, a variation may be considered if this solution will not result in a significant loss in the privacy or amenity of adjoining properties.

9. Development must be sensitively designed so that it is sympathetic to the amenities and view corridors of neighbouring public and private property and balances this with the amenity afforded to the new development.

10. Basements must meet the following criteria:

a)Basements must be wholly contained within the footprint of the building above. Terraces and alfresco areas are not to be provided over basements unless they are at ground level.
b)Basements musts be setback a minimum of 7.5m from the front boundary and 50% of the front setback is to be landscaped in order to contribute to the landscape quality of the streetscape.
c)In order to minimise the visual impact of driveways to basements, cut shall be confined to less than one metre within the first 4 metres of the setback from the street. Landscaped terracing is to be relied upon to avoid the need to provide balustrading. Where site constraints make balustrading unavoidable, it is to be open form to minimise its visual intrusion into the streetscape.
d)Natural ground levels surrounding the development and at property boundaries must be retained or reinstated to predevelopment levels. Basements must be designed to work with the slope of the land.
e)Basements must not compromise the safety of the on-street or off-street environment for pedestrians, cyclists or vehicles. Ramps must have a maximum grade of -5% grade for the first 3m. Front and side boundary fences must be no higher than 1.2m within 3m of the basement ramp. Where safety and/or traffic conditions necessitate, vehicles are required to enter and exit in a forward direction.
f)For dual occupancy, basements will only be allowed where the access is shared through a common entry point that is no greater than 4m in width.

Note:

Basement means the space of a building where the floor level of that space is predominantly below ground level (existing) and where the floor level of the storey immediately above is less than 1 metre above ground level (existing)

If basement construction protrudes more than 1m above ground level, it is no longer defined as a basement. Floor space in a basement may be counted as part of gross floor area. Refer to the definition of gross floor area in SSLEP2015.

Note:

View corridors may be maintained by implementing the following measures:
a. stepping buildings down the site,
b. using only single storey elements,
c. avoiding steep roofs, and
d. breaking up the built form.

Note:

Specific controls for fencing are provided in Chapter 34.

2. Building Setbacks

Street Setbacks
Street setbacks establish a consistent front building line and create the proportions of the street. Setbacks contribute to the public domain by enhancing streetscape character and the continuity of building facades. Street setbacks can also be used to enhance the setting for the building by providing for landscaped areas, entries to the dwellings and deep soil zones suitable for planting of canopy trees.

Side and Rear Setbacks
The spatial relationship of buildings is an important determinant of urban form. Building separation affects the spatial continuity and the degree of openness in the street and between properties. Building separation is required to minimise adverse amenity impacts by providing opportunities for landscaping, access, privacy, solar access and private and shared open spaces.

2.1 Objectives

1. Establish the street proportions.

2. Encourage articulated building forms and ensure garages do not dominate the streetscape.

3. Enhance the setting for the building by providing opportunities for landscaping and infiltration of stormwater.

4. Promote residential amenity for residents and neighbours including access to natural light and ventilation and both visual and acoustic privacy.

5. Alleviate the visual intrusion of building bulk on neighbouring properties.

6. Minimise view loss from adjoining or nearby properties.

2.2 Controls

1. Street, side and rear setbacks are measured perpendicular from the property boundary to the closest extent of the building, including balconies, awnings, podiums, sunscreens and the like (excluding eaves).

2. The minimum setbacks required are set out in the table below:

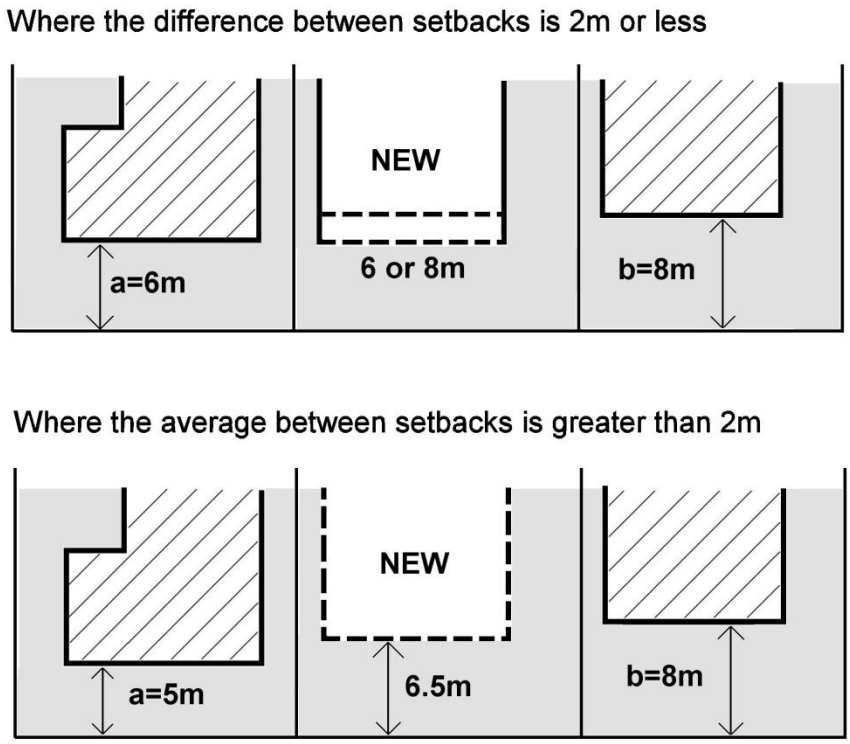
Table 1: Setbacks

Setbacks	Minimum Distance
Front	
Primary street frontage	7.5m – except where the adjoining dwellings are setback greater than or less than 7.5m, in which case it is the established street setback*
Secondary street frontage	3.0m
Internal lot (where both dual occupancy dwellings are located on an internal lot)	4.0m
Side - Ground floor	0.9m
Second storey	1.5m
Rear	6.0m

Note: The 7.5m street setback applies to the primary (narrowest) street frontage.

***** The established street setback is the average distance of the setbacks of the nearest dwelling houses having the same primary road boundary and located within 40m of the lot on which the dwelling house is erected. Where the difference between the setbacks of the nearest dwelling houses is less than or equal to 2.0m, the greater or lesser setback may be applied.

Figure 1: Established Street Setbacks



3. Where a development has a street setback of 7.5m or greater, building elements may encroach 1.5m into the front setback for a maximum of one third of the area of the façade, forming an articulation zone.

   Built form encroachments into the articulation zone can include open structure elements such as balconies and hoods, as well as elements which contribute to floor space ratio such as bay windows and room projections.

   Built form encroachments into the articulation zone must not include:
   - Garages, or
   - Lift shafts.

   Built form encroachments into the articulation zone must improve the design quality of the development with good façade articulation.

4. Garages and garage doors cannot be located in the articulation zone. These elements are to be located no closer than 7.5m to the front boundary and integrated with the building design.

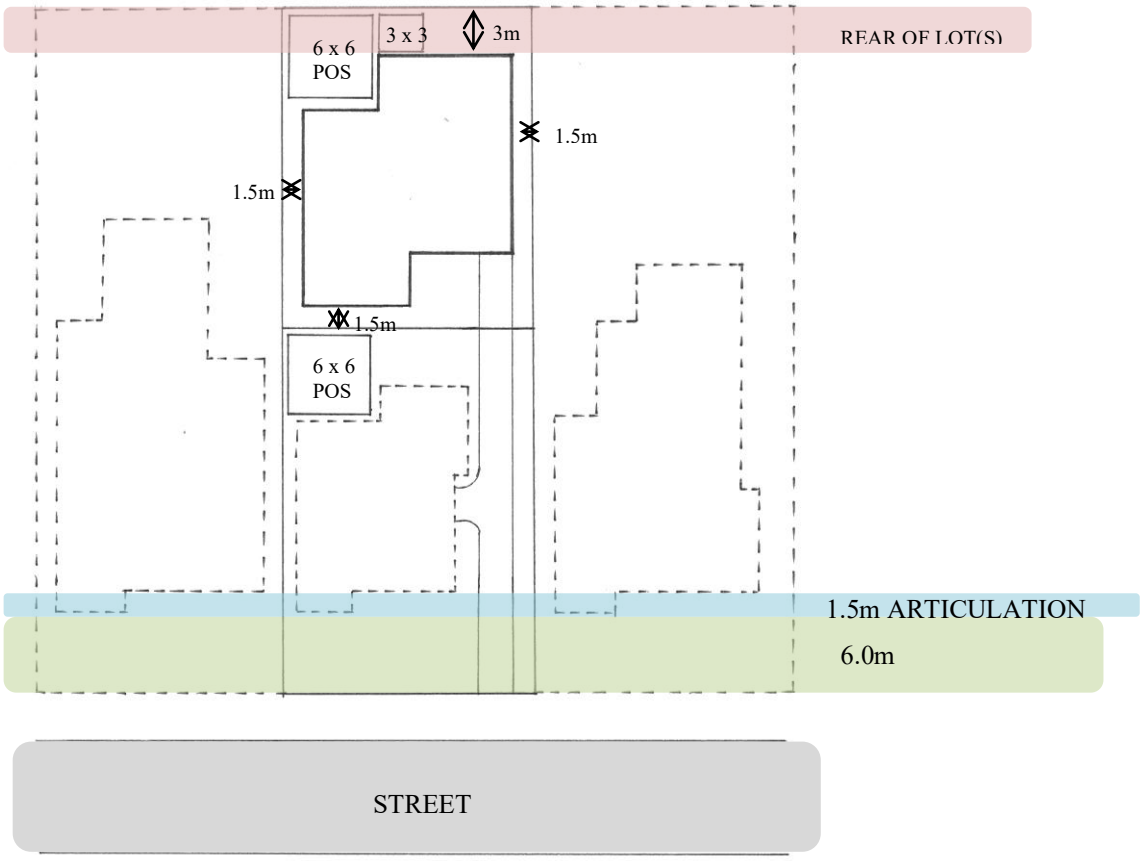


Figure 2: Setback requirements

5. In the case of corner properties, the 7.5m setback applies to the narrowest street frontage.

6. Despite 2, in the case of a corner dual occupancy, garages and garage doors accessible from the secondary street must be set back a minimum of 6m.

7. In the case of a corner property dual occupancy, one boundary must be nominated as the rear boundary of the property and comply with the minimum required setbacks identified in clause 2.

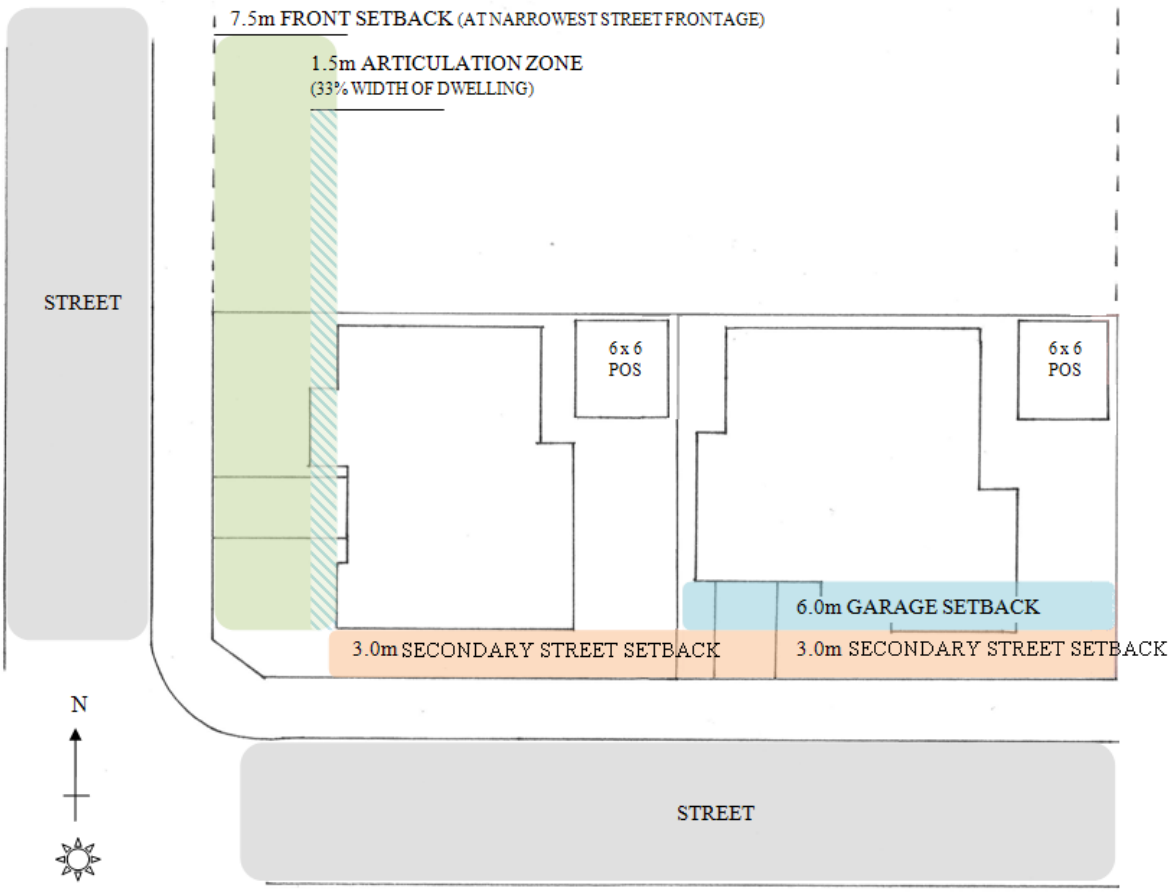


Figure 3: Street setbacks for corner lots

8. Despite any other clause, for dual occupancy development on corner allotments, a variation to the rear setback may be considered by Council, but only where it can be demonstrated that a variation would achieve a better outcome than would strict compliance with the standard setback controls because of site constraints, implications stemming from the existing allotment pattern, building design, retention of existing significant vegetation, solar access or positioning of useable open space.

9. Where a second storey wall adjacent to a side boundary exceeds 15m in continuous length, the side setback shall be increased by a further 500mm or more for that part of the wall. Where the scale of the side elevation results in significant overshadowing and/or visual intrusion due to building bulk to an adjoining dwelling, an increased building setback is to be employed.

3. Landform

Well considered design ensures dual occupancy dwellings integrate with the streetscape and views from the waterways, and retain a consistent relationship to the natural topography. This relationship provides an important visual link between buildings in a streetscape, as well as reducing the impacts of new development on neighbouring lots.

Deep excavation, cut and fill or benching may alter the pattern of subsoil water flow and soil stability, which may adversely affect neighbouring properties and the natural environment. Alternatives to slab on ground construction are encouraged where the gradient and characteristics of the site would otherwise require major excavation or filling.

3.1 Objectives

1. Ensure that the building siting, design and construction method responds to the natural landform of the site and is appropriate for the site topography.

2. Minimise the visual impact of new development, particularly when viewed from the public domain.

3. Minimise earthworks so as to maintain the existing landform and protect the integrity and stability of geological elements in the vicinity of the site.

4. Minimise impacts on surrounding vegetation and provide increased opportunities for tree retention, including trees on neighbouring properties.

3.2 Controls

1. The depth of cut and fill must not exceed 1m from existing ground level, except where the excavation is for a basement. Council will consider cut or fill greater than 1m only where:
   a. Alternative design solutions have been explored and presented to Council showing no feasible solution to excavation is available, and
   b. There is unlikely to be disruption, or detrimental effects on existing drainage patterns, vegetation, sedimentation and soil stability in the locality, and
   c. The design is a sensitive solution to the constraints of the site that does not exacerbate amenity impacts on neighbouring dwellings.

2. Dual occupancies should be designed to complement the natural slope of the land.

3. Excavation for basements should not extend beyond the building footprint.

4. Natural ground level surrounding the development and at property boundaries must be retained or reinstated prior to the completion of works.

4. Landscaping

Good design recognises that landscape and buildings operate together as an integrated system, resulting in greater aesthetic quality and amenity for the occupants and neighbours and a more attractive public domain. High quality landscape design protects and builds on the site's natural and cultural features to contribute to a development's positive relationship to its context and site.

Sutherland Shire's tree cover, areas of bushland and natural beauty are valued by its residents. Landscape design in new development must recognise that existing trees, areas of habitat and natural systems must be protected and enhanced by the retention of important landscape elements, appropriate planting, bush regeneration and by minimising urban runoff.

4.1 Objectives

1. Contribute to streetscape character, local habitat and the amenity of the public domain by using indigenous planting and species which complement scale of the development.

2. Provide landscaping treatments which foster attractive outlooks, privacy and private recreation areas of high aesthetic quality.

3. Improve the microclimate within development.

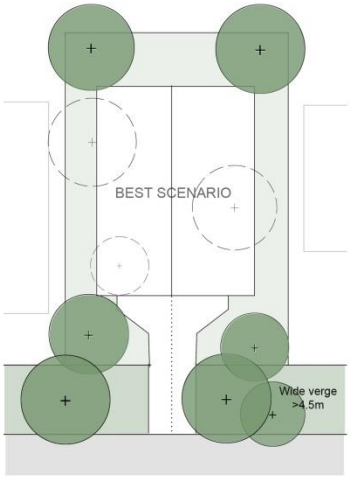
4.2 Controls

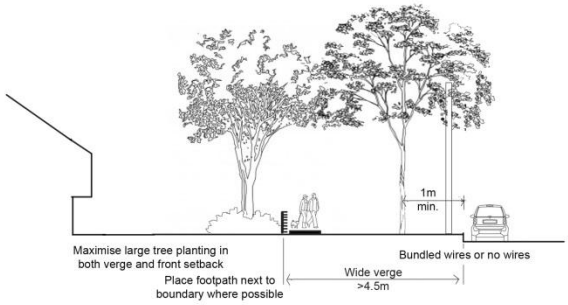
1. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, dual occupancy development must be designed to accommodate front and rear dual occupancy dwellings so that the required vehicle access can be provided, as well as the required deep soil landscaping.

2. Development should be designed to retain existing canopy trees in the vicinity of side, rear and front setbacks including on adjoining land.

3. A minimum of 4 trees are to be provided per dual occupancy development. A minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 3m of the front boundary (measured from the front building line) and a minimum of 2 indigenous canopy trees that will attain a minimum mature height of 5m must be planted within 2m of the rear boundary. All indigenous tree species must be selected from Council's *Native Plant Selector* available on Council's website.

REPLACEMENT PLANTING IN STREET & FRONT SETBACK

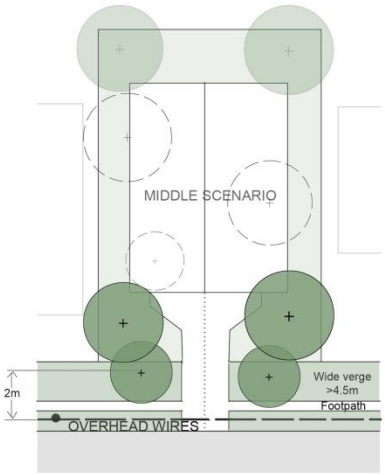


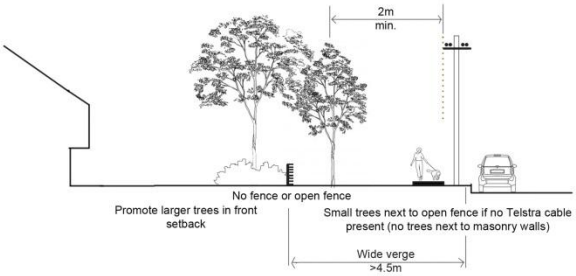


REPLACEMENT PLANTING CALCULATION:

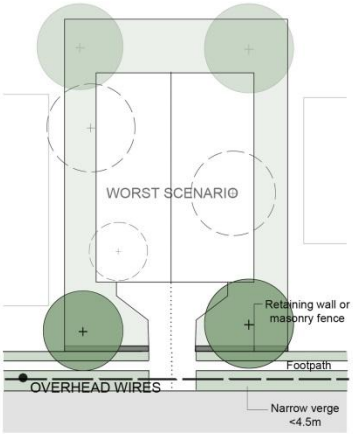
3 trees removed at a replacement rate of 4 to 1 (@$100/tree)
3x4=12 Trees
Potential to put back in 7 trees in best scenario
5 trees remaining
5x$100=$500 into fund

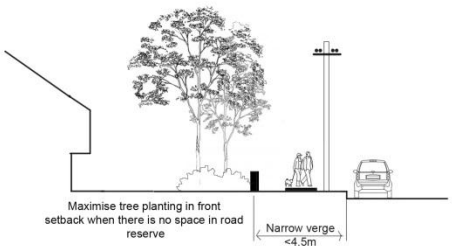
1. REPLACEMENT PLANTING-
WIDE VERGE AND NO OVERHEAD WIRES





2. REPLACEMENT PLANTING -
WIDE VERGE AND OVERHEAD WIRES





3. REPLACEMENT PLANTING-
NARROW VERGE AND OVERHEAD WIRES

4. Landscape design and plant species selection should reduce the potential for invasive plant species to escape into bushland.

5. Where there are continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a maximum height of 4m, must be planted at a maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and or masonry fence or retaining wall. Street trees must be selected from the Council's technical specifications and Native Plan Selector available on Council's website

6. Where there are no continuous overhead power lines, a minimum of 1 indigenous canopy street tree that will attain a minimum mature height of 6m, must be planted at maximum spacing of 7.5m, at a minimum distance of 1 metre from the kerb and/or footpath, and/or masonry fence or retaining wall. Street trees must be selected from Council's technical specifications and Native Plant Selector available on Council's website.

Note:

All indigenous tree species must be selected from Council's Native Plant Selector available on Council's website. The Native Plant Selector is a tool that recommends plants suitable for Sutherland Shire's ecosystems based on the specific address of the site locality. The tool is available online at http://www.sutherlandshire.nsw.gov.au/Outdoors/Environment/Plants-and-Bushland/Native-Plant-Selector.

For additional guidance on landscape design and implementation refer to the Sutherland Shire Environmental Specifications - Landscape 1-5. Applicants should also refer to the Greenweb map and controls in Chapter 39 Natural Resource Management. For development application submission requirements refer to Council's DA Guide.

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5. Building Layout and Solar Access and Private Open Space

Good design provides a building layout that maximises the natural attributes of the site. Carefully considered building layout and design also creates a higher level of amenity for occupants through enhanced visual and acoustic privacy, passive heating and cooling, attractive outlooks from living spaces, and flexible and useable indoor and outdoor spaces that meet the needs of occupants.

Quality private space is critical to achieving good residential amenity. Open space of sufficient area and dimensions to enable recreational and outdoor use, landscaping and service functions is needed for all dual occupancy dwellings.

Ideally, solar access should be maximised in winter and controlled in summer. Daylight consists of both diffused light and direct light. Good levels of daylight in a dwelling improve amenity and reduce the need for artificial lighting. High levels of daylight can be achieved through the careful consideration of window size, location and proportion.

5.1 Objectives

1. Ensure development provides opportunities for cross-ventilation and natural ventilation through the arrangement of external openings.

2. Ensure outdoor living areas are functional and responsive to the environment.

3. Provide privacy and solar access to principle private open space areas of a dual occupancy dwelling.

4. Ensure building design and location does the most to minimise adverse impacts of overshadowing of neighbouring buildings and private and public open spaces.

5.2 Controls

1. Orientate all new development and windows to take advantage of solar orientation to maximise natural light penetration to indoor areas and reduce the need for mechanical heating and cooling.

2. A minimum of 3 hours of direct sunlight between 9am and 3pm in midwinter should be provided to a living area within each dwelling.

3. Each dwelling is to provide an area of Private Open Space that has a minimum area of $36m^2$ with minimum dimension of 5m, of which $9m^2$ must be paved.

4. Where a dual occupancy is comprised of a dwelling on each level, the second floor dwelling is not required to provide private open space at ground level, instead supplying a 4m x 6m balcony or terrace area with a minimum area of $24m^2$ and where possible oriented north.

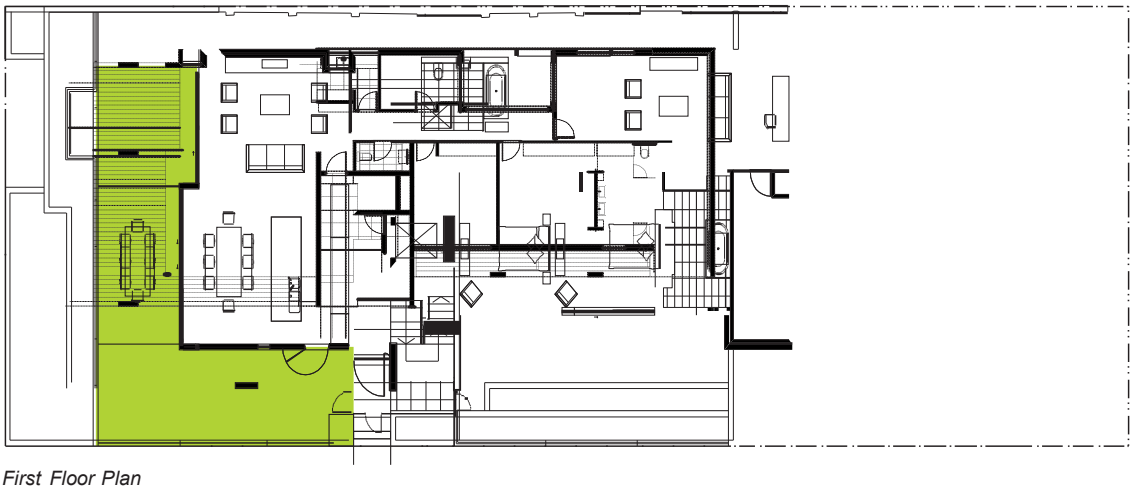

Figure 4: Private open space as balcony or terrace
(Source: Draft Good Design Guide for medium density living, NSW Department of Planning, 2011)

5. The primary living area of a dual occupancy dwelling is to provide direct access to its private open space.

6. Private open space may be located within the front setback. In such instances a combination of fencing and hedging is to provide privacy for residents while also ensuring that the site makes a positive contribution to the landscaped character of the street. High solid fencing is unacceptable. Residents seeking to rely on the front setback for private open space must accept a lower level of privacy until landscaping matures. Front fencing must be in accordance with the provisions specified in Chapter 34 Ancillary Development: Fences.

7. For the proposed dual occupancy dwelling:
   a. orientate the area of private open space to take advantage of the northern solar access;
   b. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. overshadowing by vegetation should be ignored;
   d. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

8. For the neighbouring dwellings:
   a. ensure 10m^2 of private open space has 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   b. ensure windows of living areas have 3 hours of solar access between 9:00am and 3:00pm at the winter solstice (21 June);
   c. consideration will be given to reduced solar access where the proposed dwelling is generally compliant with all development standards and controls, and the extent of impact is the result orientation, site constraints, and or existing built forms.
   d. overshadowing by vegetation should be ignored;
   e. overshadowing by fences, roof overhangs and changes in level should be taken into consideration.

9. A secure space per dwelling of $10m^3$ set aside exclusively for storage as part of the dwelling or garage should be provided. Storage areas must be adequately lit and secure. The required $10m^3$ of storage is in addition to bedroom wardrobes, kitchen cupboards and pantries and bathroom cupboards.

10. Each dwelling is to provide an external service area set aside for accommodating garbage bins, air conditioning units etc.

6. Visual and Acoustic Privacy

Building design must take into consideration visual and acoustic privacy. Amenity is enhanced by privacy and a better acoustic environment. This can be achieved by carefully considering the location of the building on the site, the internal layout, the building materials used, and screening devices. The consideration of privacy requires an understanding of the context of the adjacent site, site configuration and the layout of the dwelling and ancillary elements.

Major roads generate noise and vibration, and people living and working near major transport corridors can be adversely affected. Major roads can also impact on air quality due to their volume of traffic. Building design must take into consideration the noise, vibration and air quality effects of busy roads and rail corridors and minimise the amenity and health impacts on future occupants.

6.1 Objectives

1. Ensure a high level of amenity by protecting the acoustic and visual privacy of occupants within dwellings and their associated private open spaces.

2. Ensure dual occupancies are sited and designed so that visual and acoustic privacy and vibration from outside sources is controlled to acceptable levels, incorporating architectural and building elements to assist in protecting privacy.

3. Minimise direct overlooking of windows and private open space so that the amenity of neighbours and intended occupants is respected.

4. Recognise the outlook and views from principal rooms and private open space without compromising visual privacy of others.

6.2 Controls

1. Locate, orientate and design new development to ensure visual privacy between buildings and between buildings and adjacent private open space.

2. Use building design to increase privacy without compromising access to light and air.

3. Living room, dining room and kitchen windows that provide a direct outlook to an adjacent property dwelling which leads to a loss of amenity, needs to consider the following:

    a. offset the edge of one window to the edge of the other window by a sufficient distance to limit the views into the adjacent windows; or
    b. provide sill heights of at least 1.6m; or
    c. have fixed obscure glazing or glass blocks in any part of the window below 1.6m.
    d. Direct the outlook from all living rooms, dining rooms, bedrooms, kitchens and studies where possible towards the street, private open space on the development site, public open spaces, and waterways.
    e. Where overlooking of adjacent living rooms, dining rooms, bedrooms, kitchens and studies or private open space is unavoidable then screening elements such as louvres and obscured glass must be used to preserve reasonable visual privacy for neighbours.

Note:

Visual privacy may be achieved by:

a. Designing the dwelling to maximise the separation distances from adjacent dwellings and private open spaces,

Design elements to achieve privacy may include:

a. Offset windows in new development and windows of adjacent development
b. Recessed balconies and/or vertical fins between adjacent balconies,
c. Solid or semi-solid balustrades to balconies,
d. Louvres or screen panels to windows and/or balconies,
e. Fencing,
f. Vegetation as a screen between spaces,
g. Planter boxes in walls or balustrades,
h. Pergolas or shading devices to limit overlooking of lower level private open space.

4. Where dual occupancy design includes a second floor dwelling with a balcony serving as the primary private open space, both the balcony and living areas should be orientated to the street or public place in order to prevent overlooking.

5. Arrange dwellings within a development to minimise noise transition between dwellings by:
   a. locating busy, noisy areas next to each other and quieter areas next to other quiet areas; for example, living rooms with living rooms, bedrooms with bedrooms;
   b. using storage or circulation zones within a dwelling to buffer noise from adjacent dwellings, mechanical services or corridors and lobby areas;
   c. minimising party (shared) walls with other dwellings.

6. All noise generating equipment such as air conditioning units, swimming pool filters, fixed vacuum systems and driveway entry shutters must be designed to protect the acoustic privacy of residents and neighbours. All such noise generating equipment must be acoustically screened. The noise level generated by any equipment must not exceed an LAeq (15min) of 5dB(A) above background noise at the property boundary.

7. Residential development adjacent to a rail corridor or a busy road as identified on the Road and Rail Noise Buffer Map should be sited and designed to include noise and vibration attenuation measures to minimise noise and vibration impacts. Refer to State Environmental Planning Policy (Infrastructure) 2007 and the NSW Department of Planning's *Development near Rail Corridors and Busy Roads – Interim Guideline*.

Note:

Compliance with the NSW Planning and Environment's Development near Rail Corridors and Busy Roads –Interim Guidelines is mandatory for roads with an annual average daily traffic (AADT) volume greater than 40,000 and is best practice advice for roads with an AADT volume of 20,000 - 40,000 (based on the traffic volume data available on the website of the RTA).

The Guidelines apply to development:

- located up to 300m from the road kerb and with a direct line of sight to busy roads, and, or
- located within 80m of an operational rail track

The Guidelines require that noise levels in any such residential development not exceed:

- LA eq of 35dB (A) measured within any bedroom in the building at any time between 10pm-7am and
- LA eq of 40dB(A) measured within any bedrooms between 7am-10pm and anywhere else in the building (other than a garage, kitchen, bathroom or hallway) at any time.

Depending on the classification of a development using the screen tests in the Development near Rail Corridors and Busy Roads – Interim Guidelines, compliance with specified noise control treatments (Appendix C) may be required or an assessment by an acoustic consultant may be required.

7. Vehicular Access, Parking and Circulation

The location and layout of parking can have a significant impact on the design of new development. It will influence the layout and design of buildings and landscaping. All development must satisfy the demand for parking that it creates within its own site.

The provision of sufficient parking must not compromise the safety of the on-street and off-street environment for vehicles, pedestrians or cyclists.

7.1 Objectives

1. Ensure vehicle access, garages, carports and parking areas do not visually dominate either the development or the streetscape.

2. Car parking spaces are designed to ensure ease of access, egress and on-site manoeuvring.

3. Reduce reliance on street parking.

7.2 Controls

1. Car parking shall be provided in accordance with the car parking requirements set out under *Table 1 - Car Parking Numbers* in Chapter 36: Vehicular Access, Traffic, Parking and Bicycles.

   All spaces shall be behind the building line.

2. The parking space available within the garage shall be 5.5 m long and 3.0 m wide with a clear garage opening of 2.75m. The garage opening (doorway width) may be reduced to 2.4m wide where the driveway leads straight into the garage (as shown in Figure 1 in chapter 36). Where a double garage is permitted, it shall be 5.5 metres long and 5.7m wide with a clear garage opening of at least 5m.

3. Only two single garage doors (of maximum 3m in width) or one double garage door are to face the street.

4. Parking spaces shall have a grade no greater than 1:20.

5. Dual occupancies proposed on corner lots must ensure that driveways are approached from separate streets where appropriate. If both dwellings are proposed to be accessed from one street due to site constraints, car parking and driveways should not dominate the streetscape.

9. Car parking layout, vehicular access requirements, and design of public and private footpaths are to be in accordance with the Australian Standards, in particular AS 2890.1-2004 and the requirements contained in chapter 36. On Arterial and Distributor Roads (as identified on the DCP Road Hierarchy, Map) vehicles may be required to enter and leave a site in a forward direction, due to traffic conditions.

10. Driveways are to be designed and sited to accommodate street gully pits and street trees, and maximise the availability of on-street parking.

11. Where a basement car parking area is provided the minimum width of the internal driveway shall be 5.5m.

12. Only one driveway access per frontage is to be provided to dual occupancy development. Council may accept a second driveway access where it is satisfied that:

    a. The frontage of the lot is a minimum of 15.24m wide, and
    b. Driveway widths should not exceed a maximum width of 3m at the boundary, and
    c. Locations of driveways must comply with AS2890.1, and
    d. Two driveways must be able to accommodate an on-street car space in between, with a minimum length of 6m long (wing-tip to wing-tip) between the driveways. Any splay transitions at the kerb should be wholly within the subject property frontage, and have regard for neighbouring properties, and
    e. Each access driveway provides safe access, and
    f. The availability of on street car parking is not diminished, particularly where on street car parking demand is high, and
    g. Access facilitates retention of existing trees, rock outcrops or natural features where they occur, and
    h. Site design facilitates greater resident amenity and solar access, and
    i. Development is consistent with the spatial and landscape qualities of the streetscape – in this regard wider lots are appropriate, and
    j. Car parking and garages do not dominate the streetscape

13. Single driveways should not exceed a maximum width of 3.5m at the boundary.

14. Where a common driveway serves a side by side dual occupancy (where adjacent parking is provided) and the required parking space is setback 7.5m or less, driveways should not exceed a maximum width of 4.5m at the boundary and 3.5m at the kerb.

15. Hard surface areas within the street frontage shall be limited to a maximum of 50% of the area of the front setback, with the remaining 50% occupied by deep soil landscaping. Where vehicles must enter and leave a site in a forward direction, this must be achieved without compromising the contribution of the site to the landscape quality of the street.

    Note: Where vehicles must enter and leave a site in a forward direction, dual occupancy development is best designed as front and rear dwellings so that the required vehicle access can be provided as well as the required deep soil landscaping in the front setback.

8. Waste Management Requirements

The design of waste and recyclables storage areas within the property affects ease of use, amenity, and the efficiency of handling of waste for the life of the development.

8.1 Objectives

1. Ensure appropriate storage and collection of waste.

2. Minimise the environmental impacts associated with waste management.

3. Discourage illegal dumping.

4. Encourage on-site waste management facilities that are integrated with the design of a development and enable source separation, reuse and recycling.

5. Enable collection service providers to efficiently collect waste and recyclables with minimum disruption and impact on the community.

8.2 Controls

1. Each dwelling must be provided with a waste storage area capable of accommodating the following:
   a. 120 litre garbage bin
   b. 240 litre recycling bin
   c. 240 litre green waste bin.

2. The waste storage area must not be located forward of the building line and must not detract from the streetscape.

3. Developments must be designed so that bins do not need to be wheeled more than 75 metres.

Note:

Further details on Waste Management Plans including a template for a typical plan are in the Sutherland Shire DA Guide and the Waste Management Information Guidelines.

Sutherland Shire Council provides a garbage and recycling collection to residential and commercial developments based on the pricing structure outlined in the Schedule of Fees and Charges for Goods and Services. The Council only has the infrastructure to services 120 litre and 240 litre mobile garbage bins. Services are available from private contractors who might use different collection vehicles and bin sizes to those used by the Council.

All garbage, recycling and garden waste bins are collected from the kerbside by Council collectors. It is the responsibility of residents to ensure the bins are placed at the collection point, usually between the kerbside and the road reserve, by 5am on the regular service day.