

**MULTI DWELLING
HOUSING**
DCP 2015 CHAPTER 5

SUTHERLANDSHIRE

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a. Multi-Dwelling Housing in the R2 Low Density Residential Zone

The R2 Low Density Residential zone is applied to traditional, low density residential areas within Sutherland Shire. The zone allows for a variety of housing types as well as facilities and services to meet the needs of the community. However, all forms of development are required to be at a scale and density that is compatible with the single dwelling character of the locality.

The controls relating to multi dwelling housing within the R2 zone aim to ensure that new development fits comfortably within the established landscaped character, neighbourhood character and streetscapes of these low density localities. Infill multi dwelling housing needs to preserve and enhance the garden and bushland settings in the zone, and deliver well designed homes which offer amenity to local residents while protecting neighbours' amenity.

1. Streetscape and Building Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. In the Sutherland Shire, the relationship of the built form to the natural environment is an important consideration. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character.

Architectural quality contributes to the character and quality of both the streetscape and the built form. It can be achieved through the skilful composition and detailing of building elements, textures, materials and colours, and reflects the use, internal design and structure of a development. Ancillary elements such as driveways, garages, parking areas and fencing are also important determinants of the streetscape, reinforcing the scale and character of existing buildings and landscape elements.

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. Create entrances which provide a desirable and safe identity for the development and assist in visitor orientation.
3. Ensure development is compatible with the scale, character and landscape setting of the streetscape, its natural setting and scenic quality.
4. Achieve quality architecture in new development through the appropriate composition and articulation of building elements, textures, materials and colours.
5. Minimise the visual impact of garages, basement car parks, driveways and parking areas on the streetscape.
6. Ensure sites are of sufficient size to accommodate well designed development.
7. Provide for resident amenity.
8. 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.
9. Ensure that basements do not add to building bulk or exacerbate impacts upon neighbours.
10. Ensure the safety of pedestrians, cyclists, and vehicles using public domain and private land

1.2 Controls

1. 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.
2. A minimum site width of 20m is required for multi dwelling development. Where a variation is proposed, Council must be satisfied that:
 - a. The development provides safe and efficient vehicle and pedestrian access and allows vehicles to leave the site in a forward direction; and
 - b. The development provides adequate vehicular parking, storage space and waste storage areas; and
 - c. The development achieves a high standard of resident amenity and would have no greater impact on adjoining development that would otherwise be the case; and
 - d. The development is compatible with the streetscape and the landscape setting of the locality.

A smaller or narrower site width may not allow for the full FSR to be realised.

3. Development must be designed and sited so that it addresses the street and must have a clearly identifiable entry.
4. Individual dwelling entries must be designed to ensure safe pedestrian access and easy way finding.
5. Driveways and other communal paved areas should enhance a sense of place through the use of quality treatments. Unit pavers or textured materials are to be used for hard surfaces; bitumen is not to be used.
6. Buildings are to be a maximum of three storeys when viewed from the street. Dwellings must be stepped down a steep site.

Note:

Storey means a space within a building that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but does not include:

- a. a space that contains only a lift shaft, stairway or meter room, or
- b. a mezzanine, or
- c. an attic.

Attic means any habitable space, but not a separate dwelling, contained wholly within a roof above the ceiling line of the storey immediately below, except for minor elements such as dormer windows and the like.

7. Roof forms are to be designed to an appropriate size, mass and separation in order to be compatible with the scale and character of existing buildings and landscape elements.
8. The building form must be articulated to avoid large expanses of unbroken wall, and to visually reduce bulk.

9. Facades are to be composed with an appropriate scale, rhythm and proportion, which respond to the desired character of a locality.
10. Developments on street corners should be designed to define and address both street frontages.
11. Extensive use of highly reflective materials is not acceptable for roof or wall cladding.
12. The need for additional building services (e.g., electricity kiosk/substation and fire services facilities) must be co-ordinated and integrated with overall design of the development.
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.
14. Private open space may be provided in the front setback, provided integrated into a well-designed landscape solution which offers resident amenity and contributes to streetscape quality.

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.

15. Where provided, communal driveways should be designed to provide visual variety and landscaping to reduce the monotony and scale of the pavement.
16. All basements must be designed so that vehicles can enter and leave safely in a forward direction.
17. Basement car parking must not result in the building having a three storey appearance when viewed from the street.

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.

18. Where a basement car park extends above the natural ground level, it is to be designed to ensure that any podium or vehicular entry does not dominate the overall design of the building or the streetscape.
19. Driveway walls adjacent to the entrance of a basement car park are to have a high standard of finish or are to be consistent with the external finish of the building.
20. A 1m deep soil landscaped setback to neighbouring properties is to be provided along the driveways to basement car parks.
21. Basements must:
 - a. 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.
 - b. 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.
 - c. 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.
 - d. 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. All multi dwelling development must ensure that vehicles enter and exit in a forward direction.

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 street facades. Street setbacks can also be used to enhance the setting for the building providing for landscape 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. 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. Ensure new development is compatible within the established or desired future streetscape character.
2. Encourage articulated building forms and ensure garages do not dominate the streetscape.
3. Enhance the setting of 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, particularly access to natural light and ventilation and both visual and acoustic privacy.
5. Incorporate architectural detailing and modulation to side elevations to offset building bulk and visual intrusion.
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:

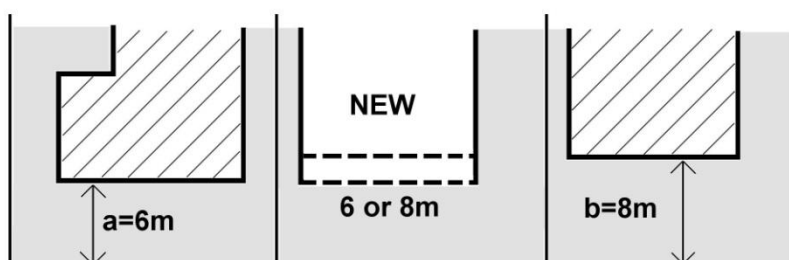
Table 1: Setbacks

Setbacks	Minimum Distance
Front	
Primary street frontage	7.5m - except where 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
Side	
Ground floor	0.9m for front 60% of site 4.0m for rear 40% of site
Second storey	1.5m for front 60% of site
Rear	
	4.0m

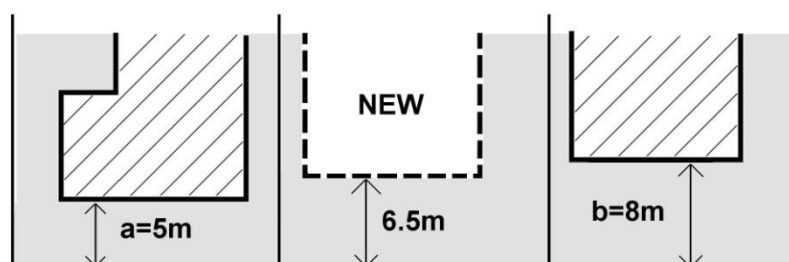
*The established street setback is the average distance of the setbacks of the nearest dwelling houses having the same primary road boundary and located within 40m of the lot on which the dwelling house is erected. Where the difference between the setbacks of the nearest dwelling houses is less than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

Figure 1: Established Street Setbacks

Where the difference between setbacks is 2m or less



Where the average between setbacks is greater than 2m



3. The side setback may be reduced to 1.5m in the rear 40% of the site if the development is single storey height in this rear 40% of the site.
4. For corner properties, the 7.5m street setback applies to the primary (narrowest) street frontage.
5. Despite any other clause, for multi dwelling housing 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.
6. Any basement that extends beyond the foot print of the building must be setback a minimum of 3 metres from side boundaries unless it can be designed to mitigate overlooking between adjoining properties and make provision for landscaping at the side boundaries
7. Basement walls and roofs and associated vehicular entries must not dominate the overall design of the building or streetscape and are to be integrated into the finished building design and landscaped treatment of the site.
8. 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.

9. Garages and garage doors are not to 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.
10. At grade car parking must not be located within the primary or secondary setback to the street. An exception will only be accepted by Council where:
 - a. It is directly associated with an adaptable/livable dwelling and no reasonable alternative is possible; and
 - b. The landscape design for the proposed development will still achieve a predominately landscaped setting that is compatible with the established streetscape.

11. Basement underground car parking may be allowed within the articulation zone of the street setback, provided the structure is considered in conjunction with the overall landscape design and does not detract from the merit of the development.
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 element 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.

3.1 Objectives

1. Ensure that building siting, design and construction methods respond to the natural landform of the site.
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.
4. Minimise impacts on surrounding vegetation and provide increased opportunities for tree retention, including trees on neighbouring properties.

3.2 Controls

1. Developments should avoid any unnecessary earthworks by designing and siting buildings within the natural slope of the land.
2. 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 and bush regeneration and by minimising urban runoff. The use of indigenous trees that extend remnant habitat helps develop a strong sense of place in a locality.

4.1 Objectives

1. Contribute to streetscape character, local habitat and the amenity of the public domain by using indigenous 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 developments.

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.
2. Ground floor courtyards must not extend into the 3m landscape strip along the frontage of development.
3. Development should be designed to retain existing canopy trees in good health in the vicinity of side, rear and front setbacks, including on adjoining land.
4. 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.
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.
7. Any privacy fencing must be appropriately landscaped with screen planting.
8. Appropriate paving must be provided to driveways, walkways, entries, fire egress points, garbage bin enclosures, letter boxes and clothes lines, and under pergolas.
9. Landscaping in the vicinity of a driveway entrance should not obstruct visibility for the safe ingress and egress of vehicles and pedestrians.
10. Where planter boxes edge both sides of a pedestrian path or entrance, the vertical height of the planter shall not exceed a height greater than half the width of the pathway.
11. Where planting is proposed on that part of a basement which extends beyond the building footprint, roof tops or within planter boxes, the space to be planted must be designed and constructed to contain a minimum soil depth of:
 - 450mm for grass and ground covers
 - 600mm for shrubs
 - 900mm for small trees
 - 1200mm for large trees.

Species selection must be suited to the future microclimate. Landscaping on basement roofs and planter boxes must be accessible for maintenance access.

12. Where trees are proposed on roofs or planter boxes an area of 3m x 3m per tree must be provided. Planter boxes in this case must be stepped, mounded or set down in the slab to reduce their apparent height on the surface to 450mm.
13. Where site levels allow, basement roof planting is to be integrated with surrounding deep soil landscaping and hard paved areas so the basement roof landscaping reads as an extension of the deep soil landscaping.
14. Where planter boxes edge both sides of a pedestrian path or entrance, the vertical height of the planter shall not exceed a height greater than half the width of the pathway.
15. A communal rainwater tank and pump should be located underground in common open space. Common open space areas must be provided with a water efficient irrigation system and taps at a minimum 25m intervals connected to the rainwater tank. Each private open space must be provided with a tap connected to the rainwater tank.
16. An external energy efficient lighting system is to be provided for pedestrian access and driveways located within communal open space.
17. Internal driveways within the drip zone of existing trees should have a pervious surface treatment.

18. Plant species selection should reduce the potential for invasive plant species to escape into bushland.

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.

5. Building Layout, 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. Dwelling layouts and room size should be functional and appropriate for the intended purpose and number of occupants.

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.

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 dwellings.

5.1 Objectives

1. Ensure outdoor living areas are functional and responsive to the environment and the internal layout of the building.
2. Ensure development provides opportunities for cross-ventilation and natural ventilation.
3. Integrate essential amenities and waste management facilities within developments.
4. Minimise the impacts of ancillary aspects of development on people, building occupants or neighbours, and on the streetscape and the natural environment.

5.2 Controls

1. New developments shall be sited and designed to maximise direct sunlight to north-facing living areas, communal open space and private open space areas.
2. New developments shall incorporate passive solar building design, including the optimisation of sunlight access to living areas and the minimisation of heat loss and energy consumption, to avoid the need for additional artificial heating and cooling.
3. For at least 75% of residential units in a development, living rooms and private open spaces should receive a minimum of 3 hours direct sunlight between 9am and 3pm in midwinter.
4. Lightwells must not be used as the primary source of daylight in habitable rooms.
5. Each dwelling is to provide an area of private open space that has a minimum area of 36m² with minimum dimension of 5m, of which 9m² must be paved.

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. The primary living area of a dwelling is to provide direct access to its private open space.
8. For the proposed multi dwelling development:
 - a. Orientate the area of private open space to take advantage of the northern solar access,
 - b. Ensure 10m² 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.
9. For the neighbouring dwellings:
 - a. Ensure 10m² 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 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.
10. Each dwelling is to provide a secure storage space, 50% of which is inside the dwelling. The storage requirement is as follows:
 - a. One bedroom unit - 6m³
 - b. Two bedroom unit – 8m³
 - c. Three bedroom unit – 10m³.
11. Suitable clothes drying facilities shall be provided. They shall not be visible from a public place and shall have access to sunlight.

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 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.
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 maximise the provision of visual privacy.
2. Use detailed site and building design elements to increase visual 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.
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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 Guidelines.
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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. Parking

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 the provision of sufficient parking on site to satisfy the demand for parking generated by the development.
2. Maximise safety for residents and visitors to the development.
3. Ensure development can provide vehicle manoeuvring and safe entry and exit.
4. Ensure vehicular access routes and parking areas are easily accessible and visible to motorists and pedestrians.
5. Ensure vehicle access, garages, carports and parking areas do not visually dominate either the development or the streetscape.
6. Minimise reliance on on-street parking.

7.2 Controls

1. Parking spaces shall be located behind the building line.
2. Car parking for multi dwelling housing is to be provided at the following rates:

Dwelling size	Car parking spaces per dwelling
1 bedroom	Minimum: 1 Maximum: 3 spaces per dwelling*
2 bedrooms	Minimum: 1.5 Maximum: 3 spaces per dwelling*
3 + bedrooms	Minimum: 2 Maximum: 3 spaces per dwelling*

*Where more than the minimum parking spaces are proposed per dwelling, the additional space/s will only be considered to meet Council's requirements for parking, and be excluded from the calculation of gross floor area, if it is provided within a basement and meets the objectives and controls for basements specified in Streetscape and Building Form

Maximum parking rates in a basement meet Council's requirement for parking, and as such are not included in the calculation of gross floor area.

3. One (1) visitor car park is to be provided for every 4 dwellings in a multi dwelling development.
4. Developments with 10 or more dwellings must also provide 1 designated carwash bay with minimum dimensions of 3m x 7.6m.
5. For developments in excess of 30 dwellings, car wash bays are required at a rate of one (1) per 20 dwellings.
6. The location of driveways is to be determined with regard to dwelling design and orientation, street gully pits and street trees, and is to maximise the availability of on-street parking.
7. Developments should minimise potential conflicts between pedestrians and vehicles in the design and use of driveways, roadways and footpaths, and by separating pedestrian and vehicles movements.
8. The design of the all vehicle access ways shall enable all vehicles to enter and leave the site in a forward direction. Turning areas shall be provided to enable a maximum 3-point turn to achieve this egress.
9. The minimum vehicular crossing and driveway for a combined vehicular crossing (entry/exit) is 5.5m and 4m for a separate vehicular crossing with a minimum spacing between driveways of 3m.
10. Only one single driveway access per frontage is to be provided to the development. Where a variation is proposed Council must be satisfied that:
 - a. each access driveway provides safe access; and
 - b. the availability of on street car parking is not diminished, particularly where on street car parking demand is high; and
 - c. access facilitates retention of existing street trees, rock outcrops or natural features where they occur; and
 - d. site design facilitates greater resident amenity and solar access; and
 - e. development is consistent with the spatial and landscape qualities of the streetscape - in this regard wider lots are appropriate; and
 - f. car parking and garages do not dominate the streetscape.

8. Adaptable and Livable Housing

Adaptable and livable (universally designed) dwellings are conventional dwellings that incorporate construction and design elements to meet people's changing mobility requirements over their lifetime (e.g. level pathways, wider doorways and corridors and reinforced bathroom walls to enable future installation of grab rails). The focus is on creating safe, accessible and functional housing for a diverse demography including the elderly, families with children and people with permanent or temporary disabilities.

An 'adaptable dwelling' is a dwelling with design features that are easily adapted at a later date to flex with the changing needs of the occupants, as specified in AS 4299 (Adaptable Housing). The provision of adaptable housing units within a development can assist people to continue to live in a dwelling which is suited to their mobility and level of ability. It is far more cost effective than relocation or substantial building renovations to modify a home to be more accessible at a later date. Adaptable housing is important part of the housing mix in the Shire as the number of people over the age of 55 years is above the Sydney average. It is also increasing as a proportion of the total population.

A 'livable' dwelling is a form of adaptability that incorporates elements 'designed in' at the construction stage, thus not requiring subsequent modification or adaptation through the lifecycle of occupants.

For the purpose of this section, a livable dwelling means a dwelling designed to Silver Standard *Livable Housing Design Guidelines*.

8.1 Objectives for Adaptable and Livable Housing

1. Provide housing that will meet the access and mobility needs of any occupant.
2. Ensure a suitable proportion of dwellings include layouts and design features to accommodate changing mobility requirements of residents.
3. Promote ageing in place by extending the usability of dwellings to meet 'whole of life' needs of the community.

8.2 Controls for Adaptable Housing

1. All new multi dwelling housing must provide dwellings designed in accordance with the Australian *Adaptable Housing Standard (AS4299)* to Class C Certification at the following rates:
 - Development containing 3-5 dwellings – none.
 - Developments of 6 or more dwellings – 20% adaptable.
2. When the calculations for the number of dwellings results in a fraction, numbers $\leq .5$ should be rounded down.
3. Variations will be considered where it can be demonstrated that site conditions would preclude achieving the controls.

4. An applicant will need to demonstrate compliance with the adaptable housing provisions. This may include a report prepared by an appropriately qualified person submitted with the development application, specifying how the proposal has addressed the requirements in this chapter, the relevant Australian Standards (e.g., *Australia Standard 1428 – Design for access and mobility*) and the National Construction Code.
5. The design of adaptable dwellings must be integrated into the development with the use of consistent materials and finishes.

8.3 Controls for Livable Housing

1. In addition to complying with the adaptable housing rates in clause 1 above, all new multi dwelling housing developments must provide 'livable dwellings (i.e., dwellings designed to Silver Standard *Livable Housing Design Guidelines*) at the following rates:
 - Developments containing 3-5 dwellings – 1 dwelling.
 - Developments of 6 or more dwellings –10% of dwellings.
2. When the calculations for the number of dwellings results in a fraction, numbers $\leq .5$ should be rounded down.
3. Dwellings provided in accordance with Clause 1 must incorporate the following *Livable Housing Design Guidelines* :
 - A car park 3.2m wide – where the parking area forms part of the dwelling access.
 - An accessible continuous path of travel from the street entrance and/or parking area to dwelling entrance
 - At least one level entrance into the dwelling
 - Internal doors and corridors width that facilitate comfortable and unimpeded movement between spaces
 - A toilet on the ground (or entry) level that provides easy access
 - Reinforced walls around the toilet, shower and bath to support the safe installation of grab rails at a later date
 - A continuous handrail on one side of any stairway where there is a rise of more than one metre.
4. Where proposed, all 'livable' dwellings must be clearly identified on the submitted DA plans.
5. Variations to (1) will only be considered where it can be demonstrated that site conditions would preclude achieving the controls.

Note:

For further details on the *Livable Housing Design Guidelines*, applicants are encouraged to visit www.livablehousingaustralia.org.au.

9. Safety and Security

In April 2001, the NSW State Government introduced *Crime Prevention Through Environmental Design (CPTED)* to Section 4.15 of the *Environmental Planning and Assessment Act, 1979*. The *Crime Prevention Through Environmental Design (CPTED)* guidelines require consent authorities to ensure development provides safety and security to users and the community. If a development presents a crime risk, the guidelines can be used to justify modification of the development to minimise crime risk, or refusal of the development on the grounds that crime risk cannot be appropriately minimised.

9.1 Objectives

1. Reduce opportunities for crime through building layout, orientation and location, and the strategic use of design, landscaping and lighting.

9.2 Controls

1. A design for multi dwelling housings must demonstrate compliance with *Crime Prevention Through Environmental Design* guidelines.

10. Waste Management Requirements

The design of waste and recycling storage areas within the property affects ease of use, amenity and handling of waste for the life of the development. Multiple households within a property increase challenges of minimising the volume of waste, allowing for ease of access and the efficiency of waste sorting and removal systems.

10.1 Objectives

1. Ensure appropriate waste storage and collection facilities.
2. Maximise source separation and recovery of recyclables.
3. Ensure waste management systems are intuitive for occupants and are readily accessible.
4. Ensure appropriate resourcing of waste management systems, including servicing.
5. Minimise risk to health and safety associated with handling and disposal of waste and recycled material, and ensure optimum hygiene is achieved.
6. Minimise adverse environmental impacts associated with waste management.
7. Discourage illegal dumping by providing on site storage and removal services.
8. Enable collection service providers to efficiently collect waste and recyclables with minimum disruption and impact on the community.
9. Ensure bin storage areas do not dominate the streetscape.

10.2 Controls

1. Provision must be made for waste management, including storage and collection, in accordance with Sutherland Shire Council's "Waste Collection Policy for Multi-Unit Dwellings and Residential Flat Buildings".

b. Multi-Dwelling Housing in the R3 Medium Density Residential Zone

The R3 Medium Density zone is primarily intended for villa and townhouse style development. The zone is generally located on the outer edges of centres where residents can gain easy access to public transport and services and amenities. Other lower density forms of residential accommodation are also permitted in the zone to provide housing choice and diversity in this zone.

The R3 Medium Density zone has a more urban character than the R2 Low Density zone. Higher density of development and building heights of 9m are permissible. Front setbacks and the streetscape play a major role in establishing the landscape setting of the zone because there is less landscaped area required on each lot.

The controls aim to achieve well designed villa and townhouse style development which provide high levels of amenity for the residents of new and neighbouring dwellings.

1. Streetscape and Building Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. In the Sutherland Shire, the relationship of the built form to the natural environment is an important consideration. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character.

Architectural quality contributes to the character and quality of both the streetscape and the built form. It can be achieved through the skilful composition and detailing of building elements, textures, materials and colours, and reflects the use, internal design and structure of a development. Ancillary elements such as driveways, garages, parking areas and fencing are also important determinants of the streetscape, reinforcing the scale and character of existing buildings and landscape elements.

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. Create entrances which provide a desirable and safe identity for the development and assist in visitor orientation.
3. Ensure development is compatible with the future scale, character and landscape setting of the streetscape, natural setting and scenic quality.
4. Achieve quality architecture in new development through the appropriate composition and articulation of building elements, textures, materials and colours.
5. Minimise the visual impact of garages, basement car parks, driveways and parking areas on the streetscape.
6. Provide for resident amenity.
7. Ensure that basements do not add to building bulk or exacerbate impacts upon neighbours
8. Ensure the safety of pedestrians, cyclists, and vehicles using public domain and private land.

1.2 Controls

1. A minimum site width of 20m is required for multi dwelling development. Where a variation is proposed, Council must be satisfied that:
 - a. The development provides safe and efficient vehicle and pedestrian access and allows vehicles to leave the site in a forward direction; and
 - b. The development provides adequate vehicular parking, storage space and waste storage areas; and
 - c. The development achieves a high standard of resident amenity and would have no greater impact on adjoining development that would otherwise be the case, and
 - d. The development is compatible with the streetscape and the landscape setting of the locality.

A smaller or narrower site width may not allow for the full FSR to be realised.

2. Development must be designed and sited so that it addresses the street and must have a clearly identifiable entry.
3. Individual dwelling entries must be designed to ensure safe pedestrian access and easy way finding.
4. Driveways and other communal paved areas should enhance a sense of place through the use of quality treatments. Unit pavers or textured materials are to be used for hard surfaces; bitumen is not to be used.
5. Development for multiple dwellings may consist of 3 storeys above existing ground level in addition to any basement.

Note:

Storey means a space within a building that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but does not include:

- d. a space that contains only a lift shaft, stairway or meter room, or
- e. a mezzanine, or
- f. an attic.

Attic means any habitable space, but not a separate dwelling, contained wholly within a roof above the ceiling line of the storey immediately below, except for minor elements such as dormer windows and the like.

-
6. Roof forms are to be designed to an appropriate size, mass and separation in order to be compatible with the scale and character of existing buildings and landscape elements.
 7. The building form must be articulated to avoid large expanses of unbroken wall, and to visually reduce bulk.
 8. Facades are to be composed with an appropriate scale, rhythm and proportion, which respond to the desired character of a locality.

9. Developments on street corners should be designed to define and address both street frontages.
10. Extensive use of highly reflective materials is not acceptable for roof or wall cladding.
11. The need for additional building services (e.g., electricity kiosk/substation and fire services facilities) must be co-ordinated and integrated with overall design of the development.
12. 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.
13. Private open space may be provided in the front setback, provided integrated into a well-designed landscape solution which offers resident amenity and contributes to streetscape quality.

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.

14. Where provided, communal driveways should be designed to provide visual variety and landscaping to reduce the monotony and scale of the pavement.
15. All basement car parks must be design so that vehicles can enter and leave safely in a forward direction
16. Where a basement car park extends above the natural ground level, it is to be designed to ensure that any podium or vehicular entry does not dominate the overall design of the building or the streetscape.
17. A 1m deep soil landscaped setback to neighbouring properties is to be provided along the driveways to basement car parks.
18. Driveway walls adjacent to the entrance of a basement car park are to have a high standard of finish or are to be consistent with the external finish of the building.

19. Basements must:

- a. 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.
- b. 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.
- c. 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.
- d. 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. All multi dwelling development must ensure that vehicles enter and exit in a forward direction.

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.

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 street facades. Street setbacks can also be used to enhance the setting for the building providing for landscape areas, entries 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.

Articulation of side elevations reduces the visual intrusion and bulk of buildings on adjoining properties and creates a visually interesting façade. Increasing the setback of buildings as the height and length of the elevation increases further reduces the impact of the building while making provision for areas of meaningful landscaping.

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:

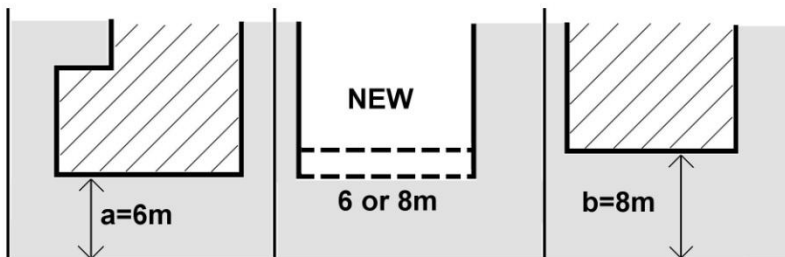
Table 1: Setbacks

Setbacks	Minimum
Street	
Primary frontage	7.5m - except where adjoining dwellings are setback greater than or less than 7.5m, in which case it is the established street setback *
Secondary frontage	3.0m
Side	
Ground floor	1.5m
Second storey	3m
Third storey	1m from storey below
Rear	
	4.0m

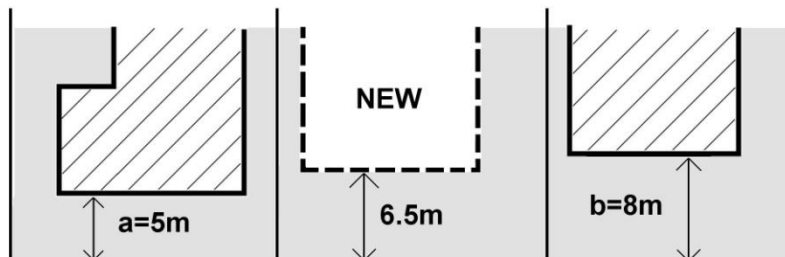
* The established street setback is the average distance of the setbacks of the nearest dwelling houses having the same primary road boundary and located within 40m of the lot on which the dwelling house is erected. Where the difference between the setbacks of the nearest dwelling houses is less than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

Figure 1: Established Street Setbacks

Where the difference between setbacks is 2m or less



Where the average between setbacks is greater than 2m



3. For corner properties, the 7.5m street setback applies to the primary (narrowest) street frontage.
4. Despite any other clause, for multi dwelling housing 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.
5. Setback requirements apply to any part of a dwelling (other than eaves) or ancillary structure such as garages, balconies, podiums, shade devices etc, whether or not they are attached to a dwelling.
6. Any basement that extends beyond the foot print of the building must be setback a minimum of 3 metres from side boundaries unless it can be designed to mitigate overlooking between adjoining properties and make provision for landscaping at the side boundaries.
7. Basement walls and roofs and associated vehicular entries must not dominate the overall design of the building or streetscape and are to be integrated into the finished building design and landscaped treatment of the site.
8. 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.
9. Garages and garage doors are not to 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.
10. At grade car parking must not be located within the primary or secondary setback to the street. An exception will only be accepted by Council where:
 - a. It is directly associated with an adaptable/livable dwelling and no reasonable alternative is possible; and
 - b. The landscape design for the proposed development will still achieve a predominately landscaped setting that is compatible with the established streetscape.
11. Basement underground car parks may be allowed within the articulation zone of the street setback, provided the structure is considered in conjunction with the overall landscape design and does not detract from the merit of the development.

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 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 siting, design and construction method responds to the natural landform of the site and is appropriate for sloping sites.
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.
4. Minimise impacts on surrounding vegetation and provide increased opportunities for tree retention, including trees on neighbouring properties.

3.2 Controls

1. Developments should avoid any unnecessary earthworks by designing and siting buildings within the natural slope of the land.
2. Earthworks must not alter ground water levels or surface stormwater flows to the extent that trees and bushland vegetation, water bodies or other property are adversely affected.
3. 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 a development.
4. Ensure any planting on podiums and in planter boxes is sustainable by providing adequate rainwater storage and water efficient irrigation.

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.
2. Ground floor courtyards must not extend into the 3m landscape strip along the frontage of development.
3. Development should be designed to retain existing canopy trees in good health in the vicinity of side, rear and front setbacks, including on adjoining land.
4. 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.

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 Plant 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.
7. Any privacy fencing must be appropriately landscaped with screen planting.
8. Appropriate paving must be provided to driveways, walkways, entries, fire egress points, garbage bin enclosures, letter boxes, clothes lines and under pergolas.
9. Landscaping in the vicinity of a driveway entrance should not obstruct visibility for the safe ingress and egress of vehicles and pedestrians.
10. Where planter boxes edge both sides of a pedestrian path or entrance, the vertical height of the planter shall not exceed a height greater than half the width of the pathway.
11. Planting is required on that part of a basement which extends beyond the building footprint. Planting in this area is to have sufficient soil depth to support the species selected and should constitute a minimum of 30% of the area of the exposed basement. This planting is intended:
 - a. to offset the potential for excessive paved areas;
 - b. to provide residents with attractive outlooks from dwellings, and
 - c. to assist in the creation of privacy between dwellings, and between dwellings and common areas.

Note:

The planting required on top of basement structures is shallow soil landscaping. This is in addition to the required deep soil landscaping for 30% of the site.

12. Where site levels allow, planting on basement roofs is to be integrated with surrounding deep soil landscaping and hard paved areas so the basement roof planting reads as an extension of the deep soil landscaping.
13. Where planting is proposed on that part of a basement which extends beyond the building footprint, roof tops or within planter boxes, the space to be planted must be designed and constructed to contain a minimum soil depth of:
 - 450mm for grass and ground covers
 - 600mm for shrubs
 - 900mm for small trees
 - 1200mm for large trees.

Species selection must be suited to the future microclimate. Landscaping on-basement roofs and planter boxes must be accessible for maintenance access.

14. Where trees are proposed on roofs or planter boxes an area of 3m x 3m per tree must be provided. Planter boxes in this case must be stepped, mounded or set down in the slab to reduce their apparent height on the surface to 450mm.
15. Where planter boxes edge both sides of a pedestrian path or entrance, the vertical height of the planter shall not exceed a height greater than half the width of the pathway.
16. A communal rainwater tank and pump should be located underground in common open space. Common open space areas must be provided with a water efficient irrigation system and taps at a minimum 25m intervals connected to the rainwater tank. Each private open space must be provided with a tap connected to the rainwater tank.
17. An external energy efficient lighting system is to be provided for pedestrian access and driveways located within communal open space.
18. Internal driveways within the drip zone of existing trees should have a pervious surface treatment.
19. For developments of 20 or more dwellings a minimum of 100m² of communal open space is required. This space must have a minimum dimension of 10m, have shelter, furniture and facilities suitable for outdoors, and if provided at ground level, include canopy trees. Communal open space should be designed to optimise privacy for occupants and adjoining residents.

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.

5. Building Layout, 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. Dwelling layouts and room size should be functional and appropriate for the intended purpose and number 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 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 outdoor living areas are functional and responsive to the environment and the internal layout of the building.
2. Ensure development provides opportunities for cross-ventilation and natural ventilation.
3. Integrate essential amenities and waste management facilities within developments.
4. Minimise the impacts of ancillary aspects of development on people, building occupants or neighbours, and on the streetscape and the natural environment.

5.2 Controls

1. New developments shall be sited and designed to maximise direct sunlight to north-facing living areas, communal open space and private open space areas.
2. New developments shall incorporate passive solar building design, including the optimisation of sunlight access to living areas and the minimisation of heat loss and energy consumption, to avoid the need for additional artificial heating and cooling.
3. For at least 75% of residential units in a development, living rooms and private open spaces should receive a minimum of 3 hours direct sunlight between 9am and 3pm in midwinter.
4. Lightwells must not be used as the primary source of daylight in habitable rooms.
5. Each dwelling is to provide an area of private open space level that has a minimum area of 36m² with minimum dimension of 5m, of which 9m² must be paved.

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. The primary living area of a dwelling is to provide direct access to its private open space.
8. For the proposed multi dwelling development:
 - a. Orientate the area of private open space to take advantage of the northern solar access.
 - b. Ensure 10m² 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.
9. For the neighbouring dwellings:
 - a. Ensure 10m² 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 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.
10. Each dwelling is to provide a secure storage space, 50% of which is inside the dwelling. The storage requirement is as follows:
 - a. One bedroom unit - 6m³
 - b. Two bedroom unit – 8m³
 - c. Three bedroom unit – 10m³.
11. Suitable clothes drying facilities shall be provided. They shall not be visible from a public place and shall have access to sunlight.

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 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 Guidelines.
-

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. Parking

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 the provision of sufficient parking on site to satisfy the demand for parking generated by the development.
2. Maximise safety for residents and visitors to the development.
3. Ensure development can provide vehicle manoeuvring and safe entry and exit.
4. Ensure vehicular access routes and parking areas are easily accessible and visible to motorists and pedestrians.
5. Ensure vehicle access, garages, carports and parking areas do not visually dominate either the development or the streetscape.
6. Minimise reliance on on-street parking.

7.2 Controls

1. Parking spaces shall be located behind the building line.
2. Car parking for multi dwelling housing is to be provided at the following rates:

Dwelling size	Car parking spaces per dwelling
1 bedroom	Minimum: 1 Maximum: 3 spaces per dwelling*
2 bedrooms	Minimum: 1.5 Maximum: 3 spaces per dwelling*
3 + bedrooms	Minimum: 2 Maximum: 3 spaces per dwelling*

*Where more than the minimum parking spaces are proposed per dwelling, the additional space/s will only be considered to meet Council's requirements for parking, and be excluded from the calculation of gross floor area, if it is provided within a basement and meets the objectives and controls for basements specified in Streetscape and Building Form.

Maximum parking rates in a basement meet Council's requirement for parking, and as such are not included in the calculation of gross floor area.

3. One (1) visitor car park is to be provided for every 4 dwellings in a multi dwelling development.
4. Developments with 10 or more dwellings must also provide 1 designated carwash bay with minimum dimensions of 3m x 7.6m.
5. For developments in excess of 30 dwellings, car wash bays are required at a rate of one (1) per 20 dwellings.
6. The location of driveways is to be determined with regard to dwelling design and orientation, street gully pits and street trees, and is to maximise the availability of on-street parking.
7. Developments should minimise potential conflicts between pedestrians and vehicles in the design and use of driveways, roadways and footpaths, and by separating pedestrian and vehicles movements.
8. The design of the all vehicle access ways shall enable all vehicles to enter and leave the site in a forward direction. Turning areas shall be provided to enable a maximum 3-point turn to achieve this egress.
9. The minimum vehicular crossing and driveway for a combined vehicular crossing (entry/exit) is 5.5m and 4m for a separate vehicular crossing with a minimum spacing between driveways of 3m.
10. Only one single driveway access per frontage is to be provided to the development. Where a variation is proposed Council must be satisfied that:
 - a. each access driveway provides safe access, and
 - b. the availability of on street car parking is not diminished, particularly where on street car parking demand is high; and
 - c. access facilitates retention of existing street trees, rock outcrops or natural features where they occur; and
 - d. site design facilitates greater resident amenity and solar access, and
 - e. development is consistent with the spatial and landscape qualities of the streetscape - in this regard wider lots are appropriate; and
 - f. car parking and garages do not dominate the streetscape.

8. Adaptable and Livable Housing

Adaptable and 'livable' (universally designed) dwellings are conventional dwellings that incorporate construction and design elements to meet people's changing mobility requirements over their lifetime (e.g. level pathways, wider doorways and corridors and reinforced bathroom walls to enable future installation of grab rails). The focus is on creating safe, accessible and functional housing for a diverse demography including the elderly, families with children and people with permanent or temporary disabilities.

An 'adaptable dwelling' is a dwelling with design features that are easily adapted at a later date to flex with the changing needs of the occupants, as specified in AS 4299 (Adaptable Housing). The provision of adaptable housing units within a development can assist people to continue to live in a dwelling which is suited to their mobility and level of ability. It is far more cost effective than relocation or substantial building renovations to modify a home to be more accessible at a later date. Adaptable housing is an important part of the housing mix in the Shire as the number of people over the age of 55 years is above the Sydney average. It is also increasing as a proportion of the total population.

A 'livable' dwelling is a form of adaptability that incorporates elements 'designed in' at the construction stage, thus not requiring subsequent modification or adaptation through the lifecycle of occupants.

For the purpose of this section, a livable dwelling means a dwelling designed to Silver Standard *Livable Housing Design Guidelines*.

8.1 Objectives for Adaptable and Livable Housing

1. Provide housing that will meet the access and mobility needs of any occupant.
2. Ensure a suitable proportion of dwellings include layouts and design features to accommodate changing mobility requirements of residents.
3. Promote ageing in place by extending the usability of dwellings to meet 'whole of life' needs of the community.

8.2 Controls for Adaptable Housing

1. All new multi dwelling housing must provide dwellings designed in accordance with the Australian *Adaptable Housing Standard (AS4299)* to Class C Certification at the following rates:
 - Development containing 3-5 dwellings – none.
 - Developments of 6 or more dwellings – 20% adaptable.
2. When the calculations for the number of dwellings results in a fraction, numbers $\leq .5$ should be rounded down.
3. Variations will be considered where it can be demonstrated that site conditions would preclude achieving the controls.

4. An applicant will need to demonstrate compliance with the adaptable housing provisions. This may include a report prepared by an appropriately qualified person submitted with the development application, specifying how the proposal has addressed the requirements in this chapter, the relevant Australian Standards (e.g., *Australia Standard 1428 – Design for access and mobility*) and the National Construction Code.
5. The design of adaptable dwellings must be integrated into the development with the use of consistent materials and finishes.

8.3 Controls for Livable Housing

1. In addition to complying with the adaptable housing rates in clause 1 above, all new multi dwelling housing developments must provide 'livable dwellings (i.e., dwellings designed to Silver Standard *Livable Housing Design Guidelines*) at the following rates:
 - Developments containing 3-5 dwellings – 1 dwelling.
 - Developments of 6 or more dwellings –10% of dwellings.
2. When the calculations for the number of dwellings results in a fraction, numbers $\leq .5$ should be rounded down.
3. Dwellings provided in accordance with Clause 1 must incorporate the following *Livable Housing Design Guidelines* :
 - A car park 3.2m wide – where the parking area forms part of the dwelling access.
 - An accessible continuous path of travel from the street entrance and/or parking area to dwelling entrance
 - At least one level entrance into the dwelling
 - Internal doors and corridors width that facilitate comfortable and unimpeded movement between spaces
 - A toilet on the ground (or entry) level that provides easy access.
 - Reinforced walls around the toilet, shower and bath to support the safe installation of grab rails at a later date
 - A continuous handrail on one side of any stairway where there is a rise of more than one metre.
4. On-site car parking spaces – where parking area does not form part of the dwelling access - shall be in accordance with Australian Standard – AS 2890.1 (as amended) and Australian Standard – AS 2890.6.
5. Where proposed, all 'livable' dwellings must be clearly identified on the submitted DA plans.
6. Variations to (1) will only be considered where it can be demonstrated that site conditions would preclude achieving the controls.

Note:

For further details on the *Livable Housing Design Guidelines*, applicants are encouraged to visit www.livablehousingaustralia.org.au.

9. Safety and Security

In April 2001, the NSW State Government introduced *Crime Prevention Through Environmental Design (CPTED)* to Section 4.15 of the *Environmental Planning and Assessment Act, 1979*. The *Crime Prevention Through Environmental Design (CPTED)* guidelines require consent authorities to ensure development provides safety and security to users and the community. If a development presents a crime risk, the guidelines can be used to justify modification of the development to minimise crime risk, or refusal of the development on the grounds that crime risk cannot be appropriately minimised.

9.1 Objectives

1. Reduce opportunities for crime through building layout, orientation and location, and the strategic use of design, landscaping and lighting.

9.2 Controls

1. A design for multi dwelling housings must demonstrate compliance *with Crime Prevention Through Environmental Design* guidelines.

10. Waste Management Requirements

The design of waste and recycling storage areas within the property affects ease of use, amenity and handling of waste for the life of the development. Multiple households within a property increase challenges of minimising the volume of waste, allowing for ease of access and the efficiency of waste sorting and removal systems.

10.1 Objectives

1. Ensure appropriate waste storage and collection facilities.
2. Maximise source separation and recovery of recyclables.
3. Ensure waste management systems are intuitive for occupants and are readily accessible, integrated with the design of a development.
4. Minimise risk to health and safety associated with handling and disposal of waste and recycled material, and ensure optimum hygiene.
5. Minimise adverse environmental impacts associated with waste management.
6. Discourage illegal dumping by providing on site storage and removal services for hard waste. Hard waste consists of discarded items of bulky household waste which are awaiting removal.
7. Enable the servicing of the waste management system on site, and the efficient collection of waste and recyclables by collection service providers, with minimum disruption and impact on the community.
8. Ensure bin storage areas/rooms do not dominate the streetscape.

10.2 Controls

1. Provision must be made for waste management, including storage and collection, in accordance with Sutherland Shire Council's "Waste Collection Policy for Multi-Unit Dwellings and Residential Flat Buildings".

11. Special Site: 27- 41 Novara Crescent, Como

In response to concerns raised in relation to the road safety implications at 27-41 Novara Crescent, Como as R3 Medium Density, an amalgamation of sites is required to make it possible to limit the number of driveway crossings, and to locate these crossings in areas with acceptable sight distances.

While these sites have dual frontage to Railway Road, access from the road is impractical. Due to significant change in grade between the Railway Road and the rear of the properties, and in the case of the corner property at number 27 Novara Crescent, the limited sight distance on Railway Road. Further, Railway Road currently provides for some commuter parking which would be significantly diminished should access driveways be installed.

11.1 Objectives

1. Provide an amalgamation pattern and a driveway crossing location which ensures that future medium density development on these lots minimises vehicle access points and provides safe vehicle ingress and egress to Novara Crescent, Como.
2. Ensure that vehicular access to the lots occurs only via Novara Crescent, Como.

11.2 Controls

1. The following lot amalgamation and driveway crossing locations shall apply to development of numbers 27 – 41 Novara Crescent, Como for multi dwelling housing:
 - a. Numbers 27, 29, 31 and 33 Novara Crescent. The driveway crossing shall be located on the southern boundary of no. 33 Novara Crescent.
 - b. Numbers 35, 37 and 39 Novara Crescent. The driveway crossing shall be located on the northern boundary of no. 35 Novara Crescent (or combined with that of the development site to the north).
 - c. Numbers 39-41 Novara Crescent. The driveway crossing shall be located in the low point on these properties, on the common boundary of these lots.
2. Vehicular access to the subject lots shall only occur from Novara Crescent, Como. There shall be no vehicle access from Railway Road.

c. Multi-Dwelling Housing in the R4 High Density Residential Zone

The R4 High Density Residential is generally intended for land where primarily high density housing, such as 'residential flat buildings', is to be provided. Other lower density residential accommodation forms, such as 'multi-dwelling housing,' are also permissible.

The controls aim to achieve well designed villa and townhouse style development which provide high levels of amenity for the residents of new and neighbouring dwellings.

1. Streetscape and Building Form

Streetscape is the urban environment created by the relationship of built elements to the public domain. In the Sutherland Shire, the relationship of the built form to the natural environment is an important consideration. The quality and scale of architecture, landscape elements, natural elements and works in the public domain determine the streetscape character.

Architectural quality contributes to the character and quality of both the streetscape and the built form. It can be achieved through the skilful composition and detailing of building elements, textures, materials and colours, and reflects the use, internal design and structure of a development. Ancillary elements such as driveways, garages, parking areas and fencing are also important determinants of the streetscape, reinforcing the scale and character of existing buildings and landscape elements.

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. Create entrances which provide a desirable and safe identity for the development and assist in visitor orientation.
3. Ensure development is compatible with the scale, character and landscape setting of the streetscape, natural setting and scenic quality.
4. Achieve quality architecture in new development through the appropriate composition and articulation of building elements, textures, materials and colours.
5. Minimise the visual impact of garages, basement car parks, driveways and parking areas on the streetscape.
6. Ensure sites are of sufficient size to accommodate well designed development.
7. Provide for resident amenity.

1.2 Controls

1. A minimum site width of 20m is required for multi dwelling development. Where a variation is proposed, Council must be satisfied that:
 - a. The development provides safe and efficient vehicle and pedestrian access and allows vehicles to leave the site in a forward direction; and
 - b. The development provides adequate vehicular parking, storage space and waste storage areas; and
 - c. The development achieves a high standard of resident amenity and would have no greater impact on adjoining development that would otherwise be the case; and
 - d. The development is compatible with the streetscape and the landscape setting of the locality.

A smaller or narrower site width may not allow for the full FSR to be realised.

2. Development must be designed and sited so that it addresses the street and must have a clearly identifiable entry.
 3. Individual dwelling entries must be designed to ensure safe pedestrian access and easy way finding.
 4. Driveways and other communal paved areas should enhance a sense of place through the use of quality treatments. Unit pavers or textured materials are to be used for hard surfaces; bitumen is not to be used.
 5. Development must be limited to three storeys in height including any basement. Dwellings may be stepped down a steep slope.
-

Note:

Storey means a space within a building that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but does not include:

- g. a space that contains only a lift shaft, stairway or meter room, or
- h. a mezzanine, or
- i. an attic.

Attic means any habitable space, but not a separate dwelling, contained wholly within a roof above the ceiling line of the storey immediately below, except for minor elements such as dormer windows and the like.

6. Roof forms are to be designed to an appropriate size, mass and separation in order to be compatible with the scale and character of existing buildings and landscape elements.
7. The building form must be articulated to avoid large expanses of unbroken wall, and to visually reduce bulk.
8. Facades are to be composed with an appropriate scale, rhythm and proportion, which respond to the desired character of a locality.
9. Developments on street corners should be designed to define and address both street frontages.
10. Extensive use of highly reflective materials is not acceptable for roof or wall cladding.
11. The need for additional building services (e.g., electricity kiosk/substation and fire services facilities) must be co-ordinated and integrated with overall design of the development.
12. 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.

13. Private open space may be provided in the front setback, provided integrated into a well-designed landscape solution which offers resident amenity and contributes to streetscape quality.
-

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.

14. Where provided, communal driveways should be designed to provide visual variety and landscaping to reduce the monotony and scale of the pavement.
15. All basement car parks must be design so that vehicles can enter and leave safely in a forward direction.
-

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.

16. Where a basement car park extends above the natural ground level, it is to be designed to ensure that any podium or vehicular entry does not dominate the overall design of the building or the streetscape.
17. Driveway walls adjacent to the entrance of a basement car park are to have a high standard of finish or are to be consistent with the external finish of the building.
18. A 1m deep soil landscaped setback to neighbouring properties is to be provided along the driveways to basement car parks.

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 street facades. Street setbacks can also be used to enhance the setting for the building providing for landscape areas, entries 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.

Articulation of side elevations reduces the visual intrusion and bulk of buildings on adjoining properties and creates a visually interesting façade. Increasing the setback of buildings as the height and length of the elevation increases further reduces the impact of the building while making provision for areas of meaningful landscaping.

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:

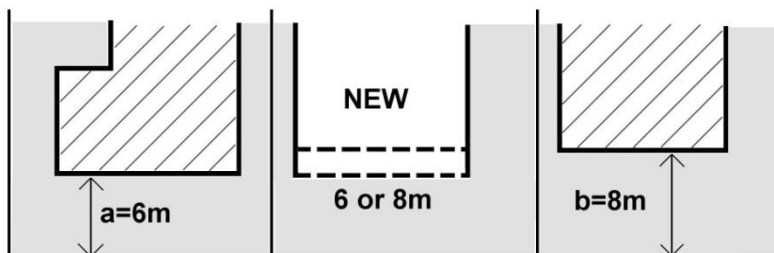
Table 1: Setbacks:

Setbacks	Minimum Distance
Street	
Primary street frontage	7.5m - except where adjoining dwellings are setback greater than or less than 7.5m, in which case it is the established street setback *
Secondary	3.0m
Side	
Ground floor	1.5m
Second storey	3m
Third storey	1m from storey below
Rear	
	4.0m

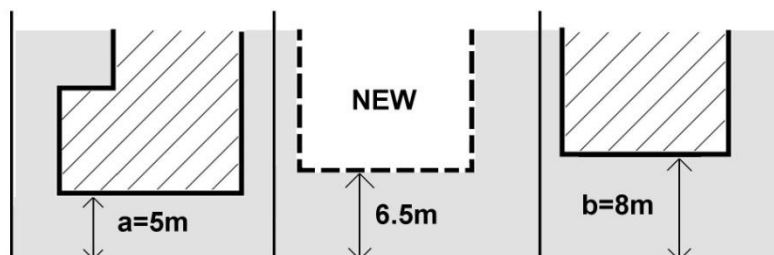
* The established street setback is the average distance of the setbacks of the nearest dwelling houses having the same primary road boundary and located within 40m of the lot on which the dwelling house is erected. Where the difference between the setbacks of the nearest dwelling houses is less than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

Figure 1: Established Street Setbacks

Where the difference between setbacks is 2m or less



Where the average between setbacks is greater than 2m



3. For corner properties, the 7.5m street setback applies to the primary (narrowest) street frontage.
4. Despite any other clause, for multi dwelling housing 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.
5. Setback requirements apply to any part of a dwelling (other than eaves) or ancillary structure such as garages, balconies, podiums, shade devices etc, whether or not they are attached to a dwelling.
6. Any basement that extends beyond the foot print of the building must be setback a minimum of 3 metres from side boundaries, unless it can be designed to mitigate overlooking between adjoining properties and make provision for landscaping at the side boundaries
7. Basement walls and roofs and associated vehicular entries must not dominate the overall design of the building or streetscape and are to be integrated into the finished building design and landscaped treatment of the site.
8. 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 facade articulation.

9. Garages and garage doors are not to 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.
10. At grade car parking must not be located within the primary or secondary setback to the street. An exception will only be accepted by Council where:
 - a. It is directly associated with an adaptable/livable dwelling and no reasonable alternative is possible; and
 - b. The landscape design for the proposed development will still achieve a predominately landscaped setting that is compatible with the established streetscape.
11. Basement underground car parks may be allowed within the articulation zone of the street setback, provided the structure is considered in conjunction with the overall landscape design and does not detract from the merit of the development.

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 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 siting, design and construction method responds to the natural landform of the site and is appropriate for sloping sites.
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.
4. Minimise impacts on surrounding vegetation and provide increased opportunities for tree retention, including trees on neighbouring properties.

3.2 Controls

1. Developments should avoid any unnecessary earthworks by designing and siting buildings within the natural slope of the land.
2. Earthworks must not alter ground water levels or surface stormwater flows to the extent that trees and bushland vegetation, water bodies or other property are adversely affected.
3. 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 a development.
4. Ensure any planting on podiums and in planter boxes is sustainable by providing adequate rainwater storage and water efficient irrigation.

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.
2. Ground floor courtyards must not extend into the 3m landscape strip along the frontage of development.
3. Development should be designed to retain existing canopy trees in good health in the vicinity of side, rear and front setbacks, including on adjoining land.
4. The landscape design must include indigenous canopy trees that will achieve a minimum of 8 metres height at maturity within suitable setback areas, a minimum distance of 3m from adjoining structures.
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.
7. Any privacy fencing must be appropriately landscaped with screen planting.
8. Appropriate paving must be provided to driveways, walkways, entries, fire egress points, garbage bin enclosures, letter boxes and clothes lines and under pergolas.
9. Landscaping in the vicinity of a driveway entrance should not obstruct visibility for the safe ingress and egress of vehicles and pedestrians.
10. Where planter boxes edge both sides of a pedestrian path or entrance, the vertical height of the planter shall not exceed a height greater than half the width of the pathway.
11. Planting is required on that part of a basement which extends beyond the building footprint. Planting in this area is to have sufficient soil depth to support the species selected and should constitute a minimum of 30% of the area of the exposed basement. This planting is intended:
 - a. to offset the potential for excessive paved areas;
 - b. to provide residents with attractive outlooks from dwellings, and
 - c. to assist in the creation of privacy between dwellings, and between dwellings and common areas.

Note:

The planting required on top of basement structures is shallow soil landscaping. This is in addition to the required deep soil landscaping for 30% of the site.

12. Where site levels allow, planting on basement roofs is to be integrated with surrounding deep soil landscaping and hard paved areas so the basement roof planting reads as an extension of the deep soil landscaping.
13. Where planting is proposed on that part of a basement which extends beyond the building footprint, roof tops or within planter boxes, the space to be planted must be designed and constructed to contain a minimum soil depth of:
 - 450mm for grass and ground covers
 - 600mm for shrubs
 - 900mm for small trees
 - 1200mm for large trees.

Species selection must be suited to the future microclimate. Landscaping on-basement roofs and planter boxes must be accessible for maintenance access.
14. Where trees are proposed on roofs or planter boxes an area of 3m x 3m per tree must be provided. Planter boxes in this case must be stepped, mounded or set down in the slab to reduce their apparent height on the surface to 450mm.

15. Where planter boxes edge both sides of a pedestrian path or entrance, the vertical height of the planter shall not exceed a height greater than half the width of the pathway.
16. A communal rainwater tank and pump should be located underground in common open space. Common open space areas must be provided with a water efficient irrigation system and taps at a minimum 25m intervals connected to the rainwater tank. Each private open space must be provided with a tap connected to the rainwater tank.
17. An external energy efficient lighting system is to be provided for pedestrian access and driveways located within communal open space.
18. Internal driveways within the drip zone of existing trees should have a pervious surface treatment.
19. For developments of 20 or more dwellings, a minimum of 100m² of communal open space is required. This space must have a minimum dimension of 10m, have shelter, furniture and facilities suitable for outdoors, and if provided at ground level, include canopy trees. Communal open space on roof tops should be designed to optimise privacy for occupants and adjoining residents.

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.

5. Building Layout, 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. Dwelling layouts and room size should be functional and appropriate for the intended purpose and number 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 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 outdoor living areas are functional and responsive to the environment and the internal layout of the building.
2. Ensure development provides opportunities for cross-ventilation and natural ventilation.
3. Integrate essential amenities and waste management facilities within developments.
4. Minimise the impacts of ancillary aspects of development on people, building occupants or neighbours, and on the streetscape and the natural environment.

5.2 Controls

1. New developments shall be sited and designed to maximise direct sunlight to north-facing living areas, communal open space and private open space areas.
2. New developments shall incorporate passive solar building design, including the optimisation of sunlight access to living areas and the minimisation of heat loss and energy consumption, to avoid the need for additional artificial heating and cooling.
3. For at least 75% of residential units in a development, living rooms and private open spaces should receive a minimum of 3 hours direct sunlight between 9am and 3pm in midwinter.
4. Lightwells must not be used as the primary source of daylight in habitable rooms.
5. Each dwelling is to provide an area of private open space that has a minimum area of 36m² with minimum dimension of 5m, of which 9m² must be paved.

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. The primary living area of a dwelling is to provide direct access to its private open space.
8. For the proposed multi dwelling development:
 - a. Orientate the area of private open space to take advantage of the northern solar access;
 - b. Ensure 10m² 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.
9. For the neighbouring dwellings:
 - a. Ensure 10m² 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 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.
10. Each dwelling is to provide a secure storage space, 50% of which is inside the dwelling. The storage requirement is as follows:
 - a. One bedroom unit - 6m³
 - b. Two bedroom unit – 8m³
 - c. Three bedroom unit – 10m³.
11. Suitable clothes drying facilities shall be provided. They shall not be visible from a public place and shall have access to sunlight.

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 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.
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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 Guidelines*.
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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. Parking

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 the provision of sufficient parking on site to satisfy the demand for parking generated by the development.
2. Maximise safety for residents and visitors to the development.
3. Ensure development can provide vehicle manoeuvring and safe entry and exit.
4. Ensure vehicular access routes and parking areas are easily accessible and visible to motorists and pedestrians.
5. Ensure vehicle access, garages, carports and parking areas do not visually dominate either the development or the streetscape.
6. Minimise reliance on on-street parking.

7.2 Controls

1. Parking spaces shall be located behind the building line.
2. Car parking for multi dwelling housing is to be provided at the following rates:

Dwelling size	Car parking spaces per dwelling
1 bedroom	Minimum: 1 Maximum: 3 spaces per dwelling*
2 bedrooms	Minimum: 1.5 Maximum: 3 spaces per dwelling*
3 + bedrooms	Minimum: 2 Maximum: 3 spaces per dwelling*

*Where more than the minimum parking spaces are proposed per dwelling, the additional space/s will only be considered to meet Council's requirements for parking, and be excluded from the calculation of gross floor area, if it is provided within a basement and meets the objectives and controls for basements specified in Streetscape and Building Form.

Maximum parking rates in a basement meet Council's requirement for parking, and as such are not included in the calculation of gross floor area.

3. One (1) visitor car park is to be provided for every 4 dwellings in a multi dwelling development.
4. Developments with 10 or more dwellings must also provide 1 designated carwash bay with minimum dimensions of 3m x 7.6m.
5. For developments in excess of 30 dwellings, car wash bays are required at a rate of one (1) per 20 dwellings.
6. The location of driveways is to be determined with regard to dwelling design and orientation, street gully pits and street trees, and is to maximise the availability of on-street parking.
7. Developments should minimise potential conflicts between pedestrians and vehicles in the design and use of driveways, roadways and footpaths, and by separating pedestrian and vehicles movements.
8. The design of the all vehicle access ways shall enable all vehicles to enter and leave the site in a forward direction. Turning areas shall be provided to enable a maximum 3-point turn to achieve this egress.
9. The minimum vehicular crossing and driveway for a combined vehicular crossing (entry/exit) is 5.5m and 4m for a separate vehicular crossing with a minimum spacing between driveways of 3m.
10. Only one single driveway access per frontage is to be provided to the development. Where a variation is proposed Council must be satisfied that:
 - a. each access driveway provides safe access; and
 - b. the availability of on street car parking is not diminished, particularly where on street car parking demand is high; and
 - c. access facilitates retention of existing street trees, rock outcrops or natural features where they occur; and
 - d. site design facilitates greater resident amenity and solar access; and
 - e. development is consistent with the spatial and landscape qualities of the streetscape - in this regard wider lots are appropriate; and
 - f. car parking and garages do not dominate the streetscape.

8. Adaptable and Livable Housing

Adaptable and 'livable' (universally designed) dwellings are conventional dwellings that incorporate construction and design elements to meet people's changing mobility requirements over their lifetime (e.g. level pathways, wider doorways and corridors and reinforced bathroom walls to enable future installation of grab rails). The focus is on creating safe, accessible and functional housing for a diverse demography including the elderly, families with children and people with permanent or temporary disabilities.

An 'adaptable dwelling' is a dwelling with design features that are easily adapted at a later date to flex with the changing needs of the occupants, as specified in AS 4299 (Adaptable Housing). The provision of adaptable housing units within a development can assist people to continue to live in a dwelling which is suited to their mobility and level of ability. It is far more cost effective than relocation or substantial building renovations to modify a home to be more accessible at a later date. Adaptable housing is important part of the housing mix in the Shire as the number of people over the age of 55 years is above the Sydney average. It is also increasing as a proportion of the total population.

A 'livable' dwelling is a form of adaptability that incorporates elements 'designed in' at the construction stage, thus not requiring subsequent modification or adaptation through the lifecycle of occupants.

For the purpose of this section, a livable dwelling means a dwelling designed to Silver Standard *Livable Housing Design Guidelines*.

8.1 Objectives for Adaptable and Livable Housing

1. Provide housing that will meet the access and mobility needs of any occupant.
2. Ensure a suitable proportion of dwellings include layouts and design features to accommodate changing mobility requirements of residents.
3. Promote ageing in place by extending the usability of dwellings to meet 'whole of life' needs of the community.

8.2 Controls for Adaptable Housing

1. All new multi dwelling housing must provide dwellings designed in accordance with the Australian *Adaptable Housing Standard (AS4299)* to Class C Certification at the following rates:
 - Development containing 3-5 dwellings – none.
 - Developments of 6 or more dwellings – 20% adaptable.
2. When the calculations for the number of dwellings results in a fraction, numbers $\leq .5$ should be rounded down.
3. Variations will be considered where it can be demonstrated that site conditions would preclude achieving the controls.

4. An applicant will need to demonstrate compliance with the adaptable housing provisions. This may include a report prepared by an appropriately qualified person submitted with the development application, specifying how the proposal has addressed the requirements in this chapter, the relevant Australian Standards (e.g., *Australia Standard 1428 – Design for access and mobility*) and the National Construction Code.
5. The design of adaptable dwellings must be integrated into the development with the use of consistent materials and finishes.

8.3 Controls for Livable Housing

1. In addition to complying with the adaptable housing rates in clause 1 above, all new multi dwelling housing developments must provide 'livable dwellings (i.e., dwellings designed to Silver Standard *Livable Housing Design Guidelines*) at the following rates:
 - Developments containing 3-5 dwellings – 1 dwelling.
 - Developments of 6 or more dwellings –10% of dwellings.
2. When the calculations for the number of dwellings results in a fraction, numbers $\leq .5$ should be rounded down.
3. Dwellings provided in accordance with Clause 1 must incorporate the following *Livable Housing Design Guidelines* :
 - A car park 3.2m wide – where the parking area forms part of the dwelling access.
 - An accessible continuous path of travel from the street entrance and/or parking area to dwelling entrance
 - At least one level entrance into the dwelling
 - Internal doors and corridors width that facilitate comfortable and unimpeded movement between spaces
 - A toilet on the ground (or entry) level that provides easy access.
 - Reinforced walls around the toilet, shower and bath to support the safe installation of grab rails at a later date
 - A continuous handrail on one side of any stairway where there is a rise of more than one metre.
4. Where proposed, all 'livable' dwellings must be clearly identified on the submitted DA plans.
5. Variations to (1) will only be considered where it can be demonstrated that site conditions would preclude achieving the controls.

Note:

For further details on the *Livable Housing Design Guidelines*, applicants are encouraged to visit www.livablehousingaustralia.org.au.

9. Safety and Security

In April 2001, the NSW State Government introduced *Crime Prevention Through Environmental Design (CPTED)* to Section 4.15 of the *Environmental Planning and Assessment Act, 1979*. The *Crime Prevention Through Environmental Design (CPTED)* guidelines require consent authorities to ensure development provides safety and security to users and the community. If a development presents a crime risk, the guidelines can be used to justify modification of the development to minimise crime risk, or refusal of the development on the grounds that crime risk cannot be appropriately minimised.

9.1 Objectives

1. Reduce opportunities for crime through building layout, orientation and location, and the strategic use of design, landscaping and lighting.

9.2 Controls

1. A design for multi dwelling housings must demonstrate compliance with *Crime Prevention Through Environmental Design Guidelines*.

10. Waste Management Requirements

The design of waste and recycling storage areas within the property affects ease of use, amenity and handling of waste for the life of the development. Multiple households within a property increase challenges of minimising the volume of waste, allowing for ease of access and the efficiency of waste sorting and removal systems.

10.1 Objectives

1. Ensure appropriate waste storage and collection facilities.
2. Maximise source separation and recovery of recyclables.
3. Ensure waste management systems are intuitive for occupants and are readily accessible, integrated with the design of a development.
4. Minimise risk to health and safety associated with handling and disposal of waste and recycled material, and ensure optimum hygiene.
5. Minimise adverse environmental impacts associated with waste management.
6. Discourage illegal dumping by providing on site storage and removal services for hard waste. Hard waste consists of discarded items of bulky household waste which are awaiting removal.
7. Enable the servicing of the waste management system on site, and the efficient collection of waste and recyclables by collection service providers, with minimum disruption and impact on the community.
8. Ensure bin storage areas/rooms do not dominate the streetscape.

10.2 Controls

1. Provision must be made for waste management, including storage and collection, in accordance with Sutherland Shire Council's "Waste Collection Policy for Multi-Unit Dwellings and Residential Flat Buildings".