

2.1 Dual occupancy (side by side)

This Section provides the Objectives and Design Criteria for development that contains two dwellings that are located side by side.

Key characteristics of development to which this Section applies are:

- The dwellings are located side by side and each dwelling has a frontage to a public road;
- There are no other dwellings above or below any of the dwellings; and
- Each dwelling has private open space generally located near or at ground level.

Permissibility

Development types that can use this Section include:

- Dual occupancy (attached) 2 dwellings on one lot of land that are attached to each other, but does not include a secondary dwelling; and
- Dual occupancy (detached) 2 detached dwellings on one lot of land, but does not include a secondary dwelling.

The development type must be permissible on the lot on which the development is proposed. The LEP that applies to the land will indicate if the development is permissible.

The relevant development type is the description of the development as proposed, including any subdivision. For example, construction of an attached dual occupancy (two dwellings side by side) and Torrens title subdivision.

Subdivision

Subdivision allows separate ownership of the two dwellings constructed under this Section.

Development carried out under this Section may receive concurrent approval for the development and for the strata or Torrens title subdivision.

Certain LEPs may not permit subdivision of a dual occupancy. If this is the case, the subdivision is not permitted.

Understanding the proposed subdivision is important as the development standards for gross floor area and landscaped area apply differently for each subdivision type.

Strata title

A dual occupancy that is strata subdivided will result in two dwellings on one lot of land.

A dual occupancy may be strata titled either because the individual dwellings do not meet the minimum lot size requirements for Torrens title subdivision, or they have basement car parking or other common property that does not enable simple Torrens title subdivision.

The dwellings to be strata subdivided can be attached or detached.

Torrens title

A dual occupancy may be Torrens title subdivided to create two dwelling houses or a semi-detached dwelling. At the completion of the development, each dwelling is located on a separate Torrens title lot with separate ownership of the lots.

Each lot that proposes to be the Torres title subdivision must comply with the minimum lot sizes specified in the LEP.

Development Application

A development application can be submitted where the development is permissible in the zone.

This Section is to be used with the following documents:

- Local Environmental Plan (LEP) for permissibility, development standards and controls
- Development Control plan for local character, built form controls, parking, waste and stormwater requirements
- Other SEPPs and regulations where relevant.

A summary of the steps required to prepare a DA is provided in Figure 2-28.

A qualified designer or a building designer that is accredited by the Building Designers Association of Australia is to certify that the design of the development is consistent with the Design Criteria in the Design Verification Statement.

Using this Section

This Section contains Objectives and Design Criteria.

Objectives: relate to the Design Principles and set out what the design should achieve.

Design Criteria: are the measurable standards that are deemed to meet the Objectives.

The development application proposal is merit assessed.

If the development application cannot meet the Design Criteria then the consent authority is to be flexible in applying these provisions and allow reasonable alternative solutions that achieve the relevant Objectives.

Section 3 provides explanatory guidance to assist with the interpretation of terms used in this Section.

Check land zoning and minimum lot size

NSW Planning Portal to view the Local

Environmental Plan

Check DCP

Refer to local character guidance, setbacks envelope, parking and stormwater controls

Satisfy the Objectives Low Rise Housing Diversity Design Guide for DAs

Use Design Criteria as a measurable standard

Low Rise Housing Diversity

Design Guide for DAs

Prepare Design Verification Statement





Figure 2-29 Dual occupancy (side by side)

2.1A Building Envelopes

Summary Development Standard

Maximum height of building

The maximum building height as specified in the LEP.

Objectives

Objective 2.1A-1

The building height is consistent with the desired scale and character of the street and locality and provides an acceptable impact on the amenity of adjoining properties.

Design Criteria

- 1. Where the LEP or DCP does not include a maximum building height, that height of buildings is:
 - 8.5m. or
 - For detached dual occupancies in a battle axe arrangement, the dwelling furthest from the street: 5.4m.
- 2. The maximum number of storeys excluding basements is:
 - 2, or
 - For detached dual occupancies in a battle axe arrangement, the dwelling furthest from the street: 1

Objective 2.1A-2

The development provides a setback from the front boundary or public space that:

- defines the street edge;
- creates a clear threshold and transition from public to private space;
- assists in achieving visual privacy to ground floor dwellings from the street;
- contributes to the streetscape character and landscape; and
- relates to the existing streetscape and setback pattern or the desired future streetscape pattern if different to the existing.

- 3. Refer to the DCP for front setback or envelope controls.
- 4. Where the DCP does not contain front setback controls the following apply:
 - Where existing dwelling houses or dual occupancies are within 40m of the development - average of the two closest dwelling houses or dual occupancies.
 - Where no existing dwelling houses or dual occupancies are within 40m of the development then the following apply:

Lot Area (m²) Setback 0 - 900 4.5m >900 - 1500 6.5m 10m

5. Where the DCP does not contain setback controls for secondary roads the following apply:

Lot Area (m²)	Setback
0 - 900	2m
>900 - 1500	3m
>1500	5m

- 6. Setback from a boundary with a parallel road: 3m, unless in the case of a dual occupancy (detached), 1 of the dwellings in the dual occupancy faces the parallel road, in which case the setback is to be the same as a primary road.
- 7. Setback from classified road: 9m.
- 8. Setback from public reserve: 3m.

Objective 2.1A-3

The development provides side boundary setbacks that reflects the character and separation of buildings within the surrounding area.

- 9. Refer to the DCP for side setback or envelope controls.
- 10. Where the DCP does not contain side setback controls the following apply:

Lot width at the building line (m)	Building height at any height	Minimum required setback from each side boundary
0 - 24	0m - 4.5m	0.9m
	> 4.5m - 8.5m	= (building height - 4.5m) ÷ 4 + 0.9m
> 24 - 36	0m - 4.5m	1.5m
	> 4.5m - 8.5m	= (building height - 4.5m) ÷ 4 + 1.5m
> 36	0m - 8.5m	2.5m
-		

See Figures 3-40 to 3-43 in section 3 of this Design Guide.

Objective 2.1A-4

The development provides a rear boundary setback that provides opportunity to retain and protect or establish significant landscaping and trees in deep soil areas.

- 11. Refer to DCP for rear setback or envelope controls.
- 12. Where the DCP does not contain rear setback controls the following apply:

Lot Area (m²)	Building height	Minimum required setback from Rear boundary
0 - 900	0m - 4.5m	3m
	> 4.5m	8m
>900 - 1500	0m - 4.5m	5m
	> 4.5m	12m
>1500	0m - 4.5m	10m
	> 4.5m	15m

13. The setback to a lane is Om.

Notes:

- 1. When applying primary road, secondary road and rear setbacks the lot area refers to the lot area prior to any subdivision.
- 2. The side setbacks only apply to the side boundaries of the lot prior to any subdivision.
- 3. Setbacks do not apply to the following: access ramps, down pipes, driveways or hard standard spaces, electricity or gas meters, fascias, fences, gutters, light fittings, pathways and paving, privacy screens fixed to the building.
- 4.If a dual occupancy on a corner lot has dwelling fronting different roads, the rear of each dwelling is to be treated as a side for the purposes of determining the setbacks required under this clause.
- 5. Refer to Section 3 for an explanation of the application of setbacks.

2.1B Gross Floor Area / Floor Space Ratio

Summary Development Standard

Gross Floor Area / Floor Space Ratio

The floor space ratio / gross floor area as specified in the LEP.

Objectives

Objective 2.1B-1

To ensure that the bulk and scale is appropriate for the context, minimises impacts on surrounding properties and allows for articulation of the built form.

Design Criteria

14. Where the LEP or DCP do not contain an FSR or Gross floor area the following maximum gross floor area applies for all development on the site:

Lot Area (m²) 0 - 2000 300m² >2000

Maximum GFA 25% of lot area + 800m²

2.1C Landscaped Area

Summary Development Standard

Landscaped Area

The minimum landscaped area as specified in the LEP.

Objectives

Objective 2.1C-1

To provide adequate opportunities for the retention of existing and provision of new vegetation that:

- contributes to biodiversity;
- enhances tree canopy; and
- minimises urban runoff.

Design Criteria

15. Where the LEP or DCP does not contain a minimum landscaped area the minimum landscaped area is:

50% of the parent lot area minus 100m².

- 16. The minimum dimension of any area included in the landscaped area calculation is 1.5m.
- 17. At least 25% of the area forward of the building line is to be landscaped area.

At least 50% of the required landscaped area must be behind the building line.

Objective 2.1C-2

Landscape design supports healthy plant and tree growth and provides sufficient space for the growth of medium sized trees.

- 18. An ongoing maintenance plan is to be provided as part of the landscape plan.
- 19. Minimum soil standards for plant sizes are provided in accordance with the Table below.

Tree Size	Height	Spread	Min Soil Area	Min soil depth
Large trees	>12m	>8m	10 x 10m	1.2m
Medium tree 1.0m	:S	8 - 12m	4 - 8m	6 x 6m
Small trees	5 - 8m	<4m	3.5 x 3.5m	0.8m
Shrubs				0.5 - 0.6m
Groundcove	r			0.3 - 0.45m
Turf				0.2m

- 20. If the DCP does not specify tree planting of a particular size or species the following is to be provided:
 - Front: 1 tree with mature height of 5m if primary road setback is greater than 3m.
 - Rear: 1 tree with mature height of 8m.

Objective 2.1C-3

Existing natural features of the site that contribute to neighbourhood character are retained, and visual and privacy impacts on existing neighbouring dwellings are reduced.

- 21. Mature trees are to be retained, particularly those along the boundary, (except those where approval is granted by Council for their removal).
- 22. Landscape features including trees and rock outcrops are to be retained where they contribute to the streetscape character or are located within the rear setback.

Objective 2.1C-4

Landscape design contributes to a local sense of place and creates a micro climate.

- 23. The landscape plan proposes a combination of tree planting, for shade, mid height shrubs, lawn and ground covers.
- 24. The landscape plan indicates that at least 50% of the overall number of trees and shrubs are species native to the region.

2.1D Local Character and Context

Objectives Objective 2.1D-1 The built form, articulation and scale relates to the local character of the area and the context. 25. Provide a description in the Design Verification Statement how the built form of the development contributes to the character of the local area, using the guidance in Section 3D Local Character and Context.

2.1E Public Domain Interface

Objectives	Design Criteria
Objective 2.1E-1 Provide activation and passive surveillance to the public streets.	26. The front door of each dwelling is to be directly visible from the public street.
	27. Windows from habitable rooms are to overlook the public domain.
Objective 2.1E-2 Front fences and walls do not dominate the public domain instead they respond to and complement the context and character of the area (including internal streets).	28. Private courtyards within the front setback are located within the articulation zones and / or behind the required front building line.
	 29. Front fences: Are visually permeable (no more than 50% of the allowable fence area will be solid masonry, timber or metal). Average height no greater than 1.2m. Have a consistent character with other front fences in the street. Are not to be constructed of solid metal panels or unfinished timber palings.
	30. High solid walls are only used to shield the dwelling from the noise of classified roads. The walls are to have a maximum height of 2.1m and be setback at least 1.5m from the property boundary. Landscape planting is to be provided between the wall and the boundary, with a mature height of at least 1.5m.
	31. Retaining walls greater than 600mm within the front setback are softened by planting for a minimum depth of 600mm on the low side of the retaining wall.
Objective 2.1E-3 The secondary frontage of a development positively contributes to the public domain by providing an active edge and semi-transparency to the boundary treatment.	 32. Where the development adjoins public parks, open space, bushland, or is a corner site, the design positively addresses this interface using any of the following design solutions: Habitable room windows facing the public domain. Street access, pedestrian paths and building entries. Paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space. Walls fronting the public spaces are to have openings not less than 25% of the surface area of the wall.

2.1F Pedestrian and Vehicle Circulation

Objective	Design Criteria
Objective 2.1F-1 Ensure there is adequate space for vehicle circulation and off-street parking.	33. Vehicle circulation complies with AS2890.1.
	34. Where on street parking is currently available in front of the development, the proposed driveways are located so that at least one car space remains.
	35. Vehicular crossing is to have a maximum width of 3.5m at the street boundary.

2.1G Orientation, Siting and Subdivision		
Summary Development Standard		
Minimum lot size for carrying out dual occupancy development	The minimum lot area and / or minimum lot width as specified in the LEP.	
Minimum lot size resulting from the subdivision of a dual occupancy	The minimum subdivision lot area and / or minimum lot width as specified in the LEP.	
Objectives	Design Criteria	
Objective 2.1G-1 To achieve planned residential density consistent with the local housing strategy	36. Where the LEP or DCP does not contain a minimum lot area, the minimum lot area is 400m ^{2.}	
	 37. Where the LEP or DCP does not contain a minimum lot width, the minimum lot width is: 12m measured at the building line where parking is provided from a secondary road, parallel road or lane, or 15m measured at the building line where parking is accessible from a primary road. 	
Objective 2.1G-2 To ensure that lots created resulting from the subdivision of land have sufficient area for the dwelling, vehicle access, landscaping, parking and amenity and are consistent with the desired future character of an area.	 38. The area of each resulting lot must be at least— (i) the minimum size specified for the subdivision of land for the purpose of a dual occupancy in the environmental planning instrument that applies to the land, or (ii) if no minimum size is specified—200m2. 	
	39. The ground floor footprint of the strata area is not less than 180m² for each dwelling.	

	 40. The following provisions apply if no minimum lot width is specified in the LEP or DCP On R3 zoned land: Garages not fronting primary road - 5m Garages fronting primary road - 7.5m On R1, R2, & RU5 zoned land: Garages not fronting primary road - 6m Garages fronting primary road - 7.5m 41. A dwelling on a proposed battle-axe lot
	 (whether strata or Torrens title) must be a part of a detached dual occupancy and have a lot with minimum dimensions as required by the DCP or LEP. If the DCP or LEP has no control, then the minimum dimensions are: 4.5m wide access to the primary road Minimum dimension of 18m x 18m.
Objective 210 7	
Objective 2.1G-3 The built form, articulation and scale	42. The dwelling frontage is to be at least 5m.
relates to the local character of the area and the context.	43. Each dwelling on a corner lot is to have a frontage to a different street.
Objective 2.1G-4 Reasonable solar access is provided to the living rooms and private open spaces of adjoining dwellings.	44. A window that is more than 3m from the boundary to a living room of an adjoining dwelling is to receive more than 3 hours of direct sunlight between 9am and 3pm on the winter solstice (June 21). If the window currently receives less than 3hrs - direct sunlight is not reduced. Note: Direct sunlight is measured
	consistent with Design Criteria 51 and is only required to one window serving the living room.
	45. Where the location of the living room windows of an adjoining dwelling cannot be verified, the proposed development is accommodated within a building envelope defined by a 35° plane springing from 3.6m above the boundary.
Objective 2.1G-5	46. Dwellings are located to step with the topography.
The development responds to the natural landform of the site, reducing the visual impact and avoiding large amounts of cut and fill and minimises the impacts of retaining walls.	47. Unless a dwelling is over a basement, the ground floor is not more than 1.3m above ground level, and no more than 1m below ground level.
Objective 2.1G-6 The development minimises impacts to vegetation on adjoining properties and allow for vegetation within the setbacks.	48. Basement car parking should not be provided within the setbacks described in the table in Section 2.1A.

Objective 2.1G-7 Independent services and utilities are available to service each lot.	49. All lots must have access to reticulated water, sewer, electricity, telecommunications and where available, gas.
Objective 2.1G-8 Provide adequate separation between buildings to allow for landscape, provide visual separation and daylight access between buildings	50. For a dual occupancy (detached) the minimum separation between two dwellings that is 3m.

2.1H Solar and Daylight Access

Objective	Design Criteria
Objective 2.1H-1 To optimise sunlight received to habitable rooms and private open spaces. Solar access enables passive solar heating in winter and provides a healthy indoor environment.	51. A living room or principal private open space in each dwelling is to receive a minimum of 3 hours direct sunlight between 9 am and 3 pm on the winter solstice (June 21).
	Note: Direct sunlight is achieved when 1m ² of direct sunlight on the glass is received for at least 15 minutes. To satisfy 3 hours direct sunlight, 12 periods of 15 minutes will need to be achieved, however the periods do not need to be consecutive.
Objective 2.1H-2 To provide good access to daylight suited to the function of the room, minimises reliance on artificial lighting, and improves amenity.	52. Daylight may not be borrowed from other rooms, except where a room has a
	frontage to a classified road.
	53. No part of a habitable room is more than 8m from a window.
	54. No part of a kitchen work surface is more than 6m from a window or skylight.
	 55. Courtyards are to: Be fully open to the sky; and Have a minimum dimension of one third of the perimeter wall height, and an area of 4m².
	56. A window is visible from 75% of the floor area of a habitable room.

2.11 Natural Ventilation

Objectives	Design Criteria
Objective 2.11-1 All habitable rooms are naturally	57. All habitable rooms are naturally ventilated.
ventilated.	58. Each dwelling is naturally cross ventilated.

2.1J Ceiling Height

Objective	Design Criteria
Objective 2.1J-1	59. Minimum ceiling heights are:
Ceiling height achieves sufficient natural ventilation and daylight access, and provides spatial quality.	 2.7m to ground floor habitable rooms. 2.7m to upper level living rooms. 2.4m to upper level habitable rooms (excluding living rooms).
	The ceiling height is measured from finished floor level to finished ceiling level.

2.1K Dwelling Size and Layout

Objective	Design Criteria
Objective 2.1K-1 The dwelling has a sufficient area to ensure the layout of rooms is functional, well organised and provides a high standard of amenity.	 60. Dwellings are to have the following minimum internal floor areas: 1 bed 65m² 2 bed 90m² 3+ bed 115m²
	61. The minimum internal areas outlined above only include one bathroom. The minimum area of each additional bathroom is 5m² added onto the minimum dwelling area.
	62. The minimum area of any additional bedroom is 12m². The area of each additional bedroom is then added to the minimum internal floor area contained in Design Criteria 60.
	63. Kitchens are not part of a circulation space, such as a hallway.
Objective 2.1K-2 Room sizes are appropriate for the intended purpose and number of occupants.	64. One bedroom has a minimum area of 10m², excluding wardrobe space.
	65. Bedrooms have a minimum length and width of 3m, excluding wardrobe space.
	 66. Combined living and dining rooms have a minimum area of: 1 and 2 bed 24m² 3+ bed 28m²
	67. Living room or lounge rooms are to have a minimum length and width of 4m, excluding fixtures.

2.1L Principal Private Open Spaces

Objectives	Design Criteria
Objective 2.1L-1 Dwellings provide appropriately sized private open space and balconies to enhance residential amenity.	68. The area of principal private open space provided for each dwelling is at least 16m² with a minimum length and width of 3m.
Objective 2.1L-2 Principal private open space and balconies are appropriately located to enhance liveability for residents.	69. The principal private open space is located behind the front building line.
	70. The principal private open space is located adjacent to the living room, dining room or kitchen to extend the living space.
	71. 25% of the private open space is to be covered to provide shade and protection from rain.

2.1M Storage

Objectives	Design Criteria
Objective 2.1M-1 Adequate, well-designed storage is provided in each dwelling.	 72. In addition to storage in kitchens and bedrooms, the following storage with a minimum dimension of 500mm is provided: 1 bed 6m³ 2 bed 8m³ 3+ bed 10m³
	73. At least 50% of the required storage is located inside the dwelling.
	74. Storage not located in dwellings is secure and clearly allocated to specific dwellings, if in a common area.

2.1N Car and Bicycle Parking

Objectives	Design Criteria
Objective 2.1N-1 Car parking is provided appropriate for the scale of the development.	75. Car parking is to be provided at the rate required for a dual occupancy within the DCP that applies to the land. If there is no rate in the DCP - 1 space per dwelling is to be provided.
	76. Car parking spaces and circulation are to comply with AS 2890.1:2004.
Objective 2.1N-2 Parking facilities are provided for bicycles.	77. Covered space is to be provided for the secure storage of at least 1 bicycle per dwelling.

Objective 2.1N-3

Visual and environmental impacts of car parking and garages do not dominate the streetscape and have an appropriate scale in relationship with the dwelling.

- 78. Basement car parking is not to protrude more than 1m above finished ground level except at the entrance to the car park.
- 79. The maximum dimensions of any basement car park entry is to be 2.7m high by 3.5m wide.
- 80. Where a driveway is adjacent to an existing tree, it is either outside the drip line or complies with the recommendations in a report prepared by a qualified arborist.
- 81. The setback of a car space from a primary, secondary or parallel road is to be at least:

Setback of Dwelling from Road	Minimum Off-Street Parking Setback From Road
<4.5m	5.5m
4.5m or more	1m behind the building line

82. The maximum width of all garage doors facing a primary, secondary or parallel road:

Lot Width	Maximum Width of Garage Door Openings
12m - 15m	3.2m
>15m - 20m	6m
>20m	9.2m
>25m	12m

Note: Lot width refers to the completed Torrens title lot or in the case of a strata subdivision being the development site.

83. The maximum width of all garage doors facing a parallel road:

Lot Width	Maximum Width of Garage Door Openings
12m - 15m	6m
>15m - 20m	9.2m
>20m	12m

2.10 Visual Privacy

Objectives

Objective 2.10-1

The separation of windows and terraces, decks and balconies within a site and to adjoining existing or future buildings provide a degree of visual privacy without the reliance on fixed screening.

Design Criteria

- 84. Orientate living room windows, primary private open space to the street front or rear.
- 85. At least one window for each habitable room is provided without the need for a privacy screen.
- 86. A privacy screen is required when:

Distance from Boundary

Finished Floor Level Above Ground Level (Existing)

<3m

1 **-** 3m

<6m

>3m

Distance from Windows in Dwelling on Same Finished Floor Level Above Ground Level

(Existing)

Lo

1 **-** 3m

<6m

>3m

<12m

Note: This does not apply to a habitable room with a floor level not more than 1m above ground level (existing), bedroom windows that have an area less than 2m² or windows that have a frontage to a road or public open space.

87. A privacy screen is required at the edge of that part of a terrace, deck, balcony or verandah that is parallel or faces towards a side or rear boundary.

Distance from Boundary

Finished Floor Level Above Ground Level

(Existing)

<3m

1 - 3m

<6m

>3m

Distance from Windows in Dwelling on Same

Finished Floor Level Above Ground Level

(Existing)

Lot

1 **-** 2m

<6m

>2m

<12m

Note: This does not apply to a terrace, deck, balcony or patio that has an area less than 3m² or has a frontage to a road or public open space.

Objective 2.10-2

Site and building design elements increase privacy without compromising access to light and air, and balance outlook and views from habitable rooms and private open space.

88. Where privacy screens are provided to windows, they must not cover part of the window required to meet the minimum daylight or solar access requirements, or restrict ventilation.

2.1P Acoustic Privacy

Objectives	Design Criteria
Objective 2.1P-1 Noise transfer is minimised through the siting of buildings and building layout.	89. Electrical, mechanical, hydraulic and air conditioning equipment is housed so that it does not create an 'offensive noise' as defined in the <i>Protection of the Environment Operations Act 1997</i> either within or at the boundaries of any property at any time of the day.

2.1Q Noise and Pollution

Objectives	Design Criteria
Objective 2.1Q-1 Ensure outside noise levels are controlled to acceptable levels in living and bedrooms of dwellings.	90. Any development within the 20 ANEF contour is to be constructed to comply with AS 2021:2015 Acoustics - Aircraft Noise Intrusion.
	 91. Dwellings that are within 100m of a classified road or 80m from a rail corridor are to have LAeq measures not exceeding: In any bedroom: 35dB(A) between 10pm-7am. Anywhere else in the building (other than a kitchen, garage, bathroom or hallway): 40dB(A) at any time. This is achieved by: Providing a full noise assessment prepared by a qualified acoustic engineer; and Complying with relevant noise control treatment for sleeping areas and other habitable rooms in Appendix C of RMS Development Near Rail Corridors and Busy Roads - Interim Guideline.

Note: Development that is on land immediately adjacent to a rail corridor and development that involves penetration of the ground to a depth of 2m within 25m of a rail corridor may be integrated development and State Environmental Planning Policy (Infrastructure) 2007 applies.

2.1R Architectural Form and Roof Design

Objectives	Design Criteria	
Objective 2.1R-1	92. Provide in the Design Verification Statement a description as to how the	
The architectural form is defined by a balanced composition of elements. It responds to internal layouts and desirable elements in the streetscape.	architectural form reduces the visual bulk and provides a cohesive design response.	
	Note: Refer to Section 3 for guidance.	
Objective 2.1R-2 The roof treatments are integrated into the building design and positively respond to the street.	93. Provide in the Design Verification	
	Statement how the roof design integrates harmoniously with the overall building form	
	94. Skylights and ventilation systems are integrated into the roof design.	

2.1S Visual Appearance and Articulation

Objectives	Design Criteria
Objective 2.1S-1 To promote well designed buildings of high architectural quality that contribute to the local character.	95. Provide in the Design Verification Statement a description as to how the aesthetics and articulation contribute to the character of the local area. Note: Refer to Section 3 for guidance.
	 96. The development may have a primary road articulation zone that extends up to 1.5m forward of the minimum required setback from the primary road and a secondary road articulation zone that extends up to 1m forward of the minimum required setback from the secondary road. The following elements can be located in the articulation zone: An entry feature or portico. A balcony, deck, pergola, terrace or verandah. A window box treatment. A bay window or similar feature. An awning or other feature over a window. A sun shading feature. An eave.

2.1T Pools and Detached Development

Objectives

Objective 2.1T-1

The location of swimming pools and spas minimise the impacts on adjoining properties.

Design Criteria

- 97. Swimming pools and spas are to have a maximum height above ground level (existing):
 - At the water line 1.2m,
 - At the top of the coping 1.4m, and
 - Where the coping is more than 300mm wide 600mm.
- 98. Swimming pools and spas are to be located in the rear yard with a minimum setback of 1m from any side or rear boundary.

The setback of a swimming pool from a secondary road must be consistent with the setback of a dwelling house from the secondary road boundary.

99. The swimming pool pump must be located in an enclosure that is sound proofed.

Objective 2.1T-2

The location of the detached development minimises the impact on adjoining properties.

- 100. Maximum height above ground level (existing) 4.5m.
- 101. A detached studio with a frontage to a rear lane or parallel road may have a height of 6m.
- 102. Maximum floor area for detached development:
- generally: 45m²
- detached studios: 36m²
- 103. Where the DCP does not contain setbacks for detached development, side setbacks are the same as for the dwelling except for the following:
- side setback: 0.9m, or
- side setback with wall height less than 3.3m: Om, and adjoining lot building is <0.9m from boundary and building wall is of masonry construction with no windows,
- side setback of detached studio with frontage to a lane: Om
- side setback of detached studio without a frontage to a lane:

Lot Width at building line	Rear setback
0 - 18m	900mm
>18m	1.5m

104. Where the DCP does not contain setbacks for detached development, rear setbacks are:

Lot Area	Rear setback
0 - 900m²	900mm
>900 - 1500m²	1.5m
>1500m²	2.5m

105. The maximum floor level of a detached deck, patio, pergola or terrace that is less than 0.9m from the side boundary is 0.6m above ground level (existing).

Note: A child-resistant barrier must be constructed or installed in accordance with the requirements of the Swimming Pools Act 1992.

Note: Privacy and building separation and other Design Criteria still apply.

2.1U Energy Efficiency

Objectives	Design Criteria
Objective 2.1U-1 The development incorporates passive environmental design.	106. An outdoor area for clothes drying that can accommodate at least 16 lineal metres of clothes line is provided for each dwelling.
	107. Any clothes drying area is screened from public and communal areas.

Note: A DA for a dwelling is required to have a BASIX Certificate that applies a minimum energy consumption target.

2.1V Water Management and Conservation

Objectives	Design Criteria
Objective 2.1V-1 Flood management systems are integrated into site design.	108. A stormwater system must:Comply with requirements in the DCP
	 that applies to the land. Be approved (if required) under s.68 of the Local Government Act 1993.
	109. Detention tanks are to be located under paved areas, driveways or in basements.

Note: A DA for a dwelling is required to have a BASIX Certificate that applies a minimum water consumption target.

2.1W Waste Management

Objectives

Objective 2.1W-1

Waste storage facilities meet the needs of the residents, are easy to use and access, and enable efficient collection of waste.

Design Criteria

- 110. Provide storage space for the type and number of bins designated in council's waste policy.
- 111. Where waste storage is provided in a communal area, access to this waste area is to be provided for all residents without crossing a private lot.
- 112. Where waste storage is provided in the basement car park, a maximum ramp gradient of 1:6 is to be provided to the waste collection point.
- 113. Where a rear lane has provision for waste collection trucks used by council, the collection point is to be from the rear lane.
- 114. Any communal waste area is to:
 - · provide water supply for cleaning,
 - have a solid floor grated to a floor waste (connected to sewer), and
 - be designed to meet the requirements of council's waste policy.
- 115. Despite any requirements in council's waste policy, onsite waste vehicle access is not required.

Note: The waste collection point is typically located on the footpath.

- 116. If a waste collection point is provided on-site and used for permanent storage of bins it is to:
 - be screened from view from the public domain,
 - have a height no greater than 1.3m if forward of the building line.
 - be less than 10m from the street boundary,
 - be located on a surface with a gradient less than 1:20,
 - not require access through a security door or gate (unless this is permitted by council's waste policy), and
 - have a path that connects the collection area to the street boundary with a gradient less than 1:8 and free of steps to all for the transfer of bins to the collection vehicle.

Objective 2.1W-2

Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.

- 117. Storage areas for rubbish and recycling bins are to be provided:
 - Within garages;
 - In a screened enclosure that is part of the overall building design; or
 - In the basement car park.
- 118. Communal waste areas are to be located at least 3m from any bedroom or living room window.



2.2 Manor house and dual occupancies (one above the other)

This Section provides the Objectives and Design Criteria for development that contains a manor house or a dual occupancy where one dwelling is located above the other.

Key characteristics of development to which this Section applies are:

- Dwellings are located above other dwellings in the development;
- Development can contain up to four dwellings; and
- Development is typically strata titled with common areas for circulation, parking and landscaped areas.

Permissibility

Development types that can use this Section include:

- Dual occupancy (one above the other)
 where two dwellings on one lot of land
 are attached to each other, but does
 not include a secondary dwelling. Dual
 occupancies must be a permissible land
 use for this type of development to be
 carried out.
- Manor houses where three or four dwellings are on one lot of land, where each dwelling is attached to another dwelling by a common wall and/or floor, but cannot be characterised as multi dwelling housing.

The development type must be permissible on the land on which the development is proposed. The LEP that applies to the land will indicate if the development is permissible.



Figure 2-30 Manor House - 3 dwellings

Strata title subdivision

When subdivided:

- A dual occupancy will contain two dwellings on one lot; and
- A manor house will contain three or four dwellings on one lot. These may be strata titled to allow for separate ownership of each dwelling.

Development that complies with this Section may receive development approval for the development and strata title subdivision.

Development Application

A development application can be submitted where the development is permissible in the zone.

This section is to be used with the following documents:

• Local Environmental Plan (LEP) for permissibility, development standards and controls

Check land zoning and minimum lot size NSW Planning Portal to view the Local **Environmental Plan**

Check DCP

Refer to local character guidance, setbacks envelope, parking and stormwater controls

Satisfy the Objectives Low Rise Housing Diversity Design Guide for DAs

Use Design Criteria as a measurable standard Low Rise Housing Diversity Design Guide for DAs

Prepare Design Verification Statement

Figure 2-31 Workflows: Preparing a DA

- Development Control plan for local character, built form controls, parking, waste and stormwater requirements
- SEPPs and regulations where relevant.

A summary of the steps required to prepare a DA is provided in Figure 2-31.

A qualified designer or a building designer that is accredited by the Building Designers Association of Australia is to certify that the design of the development is consistent with the Design Criteria in the Design Verification Statement.

Using this Section

This Section contains Objectives and Design Criteria.

Objectives relate to the Design Principles and set out what the design should achieve

Design Criteria: are the measurable standards that are deemed to meet the Objectives.

The development application proposal is merit assessed.

If the development application cannot meet the Design Criteria then the consent authority is to be flexible in applying these provisions and allow reasonable alternative solutions that achieve the relevant Objectives.

Section 3 provides explanatory guidance to assist with the interpretation of terms used in this Section.

2.2A Building Envelopes

Summary Development Standard

Height of Building

The maximum building height as specified in the LEP.

Objectives

Objective 2.2A-1

The building height is consistent with the desired scale and character of the street and locality and provides an acceptable impact on the amenity of adjoining properties.

Design Criteria

- 1. Where the LEP or DCP does not include a maximum building height, that height of buildings is: 8.5m.
- 2. The maximum number of storeys excluding basements is: 2

Objective 2.2A-2

The development provides a setback from the front boundary or public space that:

- · defines the street edge;
- creates a clear threshold and transition from public to private space;
- assists in achieving visual privacy to ground floor dwellings from the street:
- contributes to the streetscape character and landscape; and
- relates to the existing streetscape and setback pattern or the desired future streetscape pattern if different to the existing.

- 3. Refer to the DCP for front setback or envelope controls.
- 4. Where the DCP does not contain front setback controls the following should apply:
 - Where existing dwellings are within 40m average of the two closest dwelling houses, dual occupancies or multi dwelling housing terraces.
 - Where no existing dwellings are within 40m then:

Lot Area (m²)	Setback
0 - 900	4.5m
>900 - 1500	6.5m
>1500	10m

5. Where the DCP does not contain setback controls for secondary roads or to public reserves the following apply:

Lot Area (m²)	Setback
0 - 1500	3m
>1500	5m

- 6. Setback from a parallel road for manor house or dual occupancy (one above the other): 3m.
- 7. Setback from classified road: 9m
- 8. Setback from public reserve: 3m

Objective 2.2A-3

The development provides side boundary setbacks that reflect the character and form intent of the area where is characterised by the separation of buildings.

- 9. Refer to the DCP for side boundary setbacks or envelope controls.
- 10. Where the DCP does not contain side setback controls the following should apply:
 - not more than 10m from the front building line 1.5m
 - greater than 10m from front building line building envelope defined by a 45° plane 3m above the boundary.

See Figures 3-40 to 3-43 in section 3 of this Design Guide.

Objective 2.2A-4

The development provides a rear boundary setback that provides opportunity to retain and protect or establish significant landscape trees in deep planting areas.

- 11. Refer to the DCP for rear boundary setbacks or envelope controls.
- 12. Where the DCP does not contain rear setback controls the following apply:

Lot Area (m²)	Building height	Minimum required setback from Rear boundary
0 - 1500	0m - 4.5m	6m
	> 4.5m	10m
>1500	Om - 4.5m	10m
	> 4.5m	15m

13. The setback to a lane is Om

Notes:

- 1. When applying primary road, secondary road and rear setbacks the lot area refers to the lot area prior to any subdivision.
- 2. The side setbacks only apply to the side boundaries of the lot prior to any subdivision.
- 3. Setbacks do not apply to the following: access ramps, down pipes, driveways or hard standard spaces, electricity or gas meters, fascias, fences, gutters, light fittings, pathways and paving, privacy screens fixed to the building.
- 4. Refer to Section 3 for an explanation of the application of setbacks.

2.2B Gross Floor Area / Floor Space Ratio

Summary Development Standard Gross Floor Area / Floor Space Ratio The floor space ratio / gross floor area as specified in the LEP.

Objectives	Design Criteria
Objective 2.2B-1 To ensure that the bulk and scale is appropriate for the context, minimises impacts on surrounding properties and allows for articulation of the built form.	14. Where the LEP or DCP do not contain an FSR or Gross floor area the following maximum gross floor area applies for all development on the site: 25% of lot area + 150m² to a maximum of 400m².

2.2C Landscaped Area

Summary Development Standard

Landscaped Area

The minimum landscaped area as specified in the LEP.

Objectives

Objective 2.1C-1

To provide adequate opportunities for the retention of existing and provision of new vegetation that:

- contributes to biodiversity;
- enhances tree canopy; and
- minimises urban runoff.

Design Criteria

15. Where the LEP or DCP do not contain a minimum landscaped area the minimum landscaped area is:

50% of the parent lot area minus 100m²

- The minimum dimension of any area included in the landscaped area calculation is 1.5m
- 17. At least 25% of the area of the lot forward of the building line must be landscaped. At least 50% of the required landscaped area must be behind the building line.

Objective 2.2C-2

Landscape design supports healthy plant and tree growth and provides sufficient space for the growth of medium sized trees.

- 18. An ongoing maintenance plan s to be provided as part of the landscape plan.
- 19. Minimum soil standards for plant sizes are provided in accordance with the Table below.

Tree Size	Height	Spread	Min Soil Area	Min soil depth
Large trees	>12m	>8m	10 x 10m	1.2m
Medium tree 1.0m	:S	8-12m	4 - 8m	6 x 6m
Small trees	5 - 8m	<4m	3.5 x 3.5m	0.8m
Shrubs				0.5 - 0.6m
Groundcove	r			0.3 - 0.45m
Turf				0.2m

- 20. If the DCP does not specify tree planting of a particular size or species the following is to be provided:
 - Front: 1 tree with mature height of 5m if primary road setback is greater than 3m.
 - · Rear: 1 tree with mature height of 8m.

Objective 2.2C-3

Existing natural features of the site that contribute to neighbourhood character are retained, and visual and privacy impacts on existing neighbouring dwellings are reduced.

- 21. Mature trees are to be retained, particularly those along the boundary, (except those where approval is granted by Council for their removal).
- 22. Existing landscape features including trees and rock outcrops are retained where they contribute to the streetscape character or are located within the rear setback.

Objective 2.2C-4

Landscape design contributes to a local sense of place and creates a micro climate.

- 23. The landscape plan proposes a combination of tree planting, for shade, mid height shrubs, lawn and ground covers.
- 24. The landscape plan indicates that at least 50% of the overall number of trees and shrubs are species native to the region.

2.2D Local Character and Context

Objectives	Design Criteria
Objective 2.2D-1 The built form, articulation and scale relates to the local character of the area and the context.	25. Provide a description in the Design Verification Statement how the built form of the development contributes to the character of the local area, using the guidance in Section 3D Local Character and Context.

2.2E Public Domain Interface

2.2E Public Domain Interface			
Objectives	Design Criteria		
Objective 2.2E-1 Provide high level activation and passive surveillance to the public streets.	26. Pedestrian entries are to be directly visible from the public street.		
	27. Windows from habitable rooms are to overlook the public domain.		
	28. Direct visibility is provided along paths and driveways from the public domain to the front door.		
Objective 2.2E-2 Front fences and walls do not dominate the public domain instead they respond to and complement the context and character of the area (including internal streets).	29. Private courtyards within the front setback are only to be located within the articulation zones and / or behind the required front building line.		
	 30. Front fences: Are visually permeable (no more than 50% of the allowable fence area will be solid masonry, timber or metal). Average height no greater than 1.2m. Have a consistent character with other front fences in the street. Are not to be constructed of solid metal panels or unfinished timber palings. 31. High solid walls are only used to shield a dwelling from the noise of classified roads. The walls are to have a maximum height of 2.1m and be setback at least 1.5m from the property boundary. Landscape planting is to be provided between the wall and the boundary, with a mature height of at least 1.5m. 		
	height of at least 1.5m. 32. Retaining walls greater than 600mm within the front setback are softened by planting to a minimum depth of 600mm on the low side of the retaining wall.		
Objective 2.2E-3 The secondary frontage of a development positively contributes to the public domain by providing an active edge and semi-transparency to the boundary treatment.	 33. Where development adjoins public parks, open space, bushland, or is a corner lot, the design positively addresses this interface using any of the following design solutions: Habitable room windows facing the public domain. Street access, pedestrian paths and building entries Paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space Walls fronting the public spaces are to have openings not less than 25% of the surface area of the wall. 		

2.2F Pedestrian and Vehicle Circulation

Objectives	Design Criteria
Objective 2.2F-1 Ensure there is adequate space for vehicle circulation and off-street parking.	34. Vehicle circulation complies with AS2890.1.
	35. Vehicular crossing is to have a maximum width of 3.5m at the street boundary.
	36. Where a driveway services more than 3 dwellings, the driveway must be designed to ensure all vehicles must leave the site in a forward direction.
	37. Only one driveway cross-over is located on the same street frontage.

2.2G Orientation, Siting and Subdivision

Summary Development Standard	
Minimum lot size for carrying out dual occupancy development or manor house development.	The minimum lot area and / or minimum lot width as specified in the LEP.
Objectives	Design Criteria
Objective 2.2G-1 To achieve planned residential density consistent with the local housing strategy.	 38. Where the LEP or DCP does not contain a minimum lot area and /or dimension the minimum lot area for a dual occupancy (attached) is: 600m² the minimum lot area for a manor house is: 600m² minimum lot width measured at the building line is: 15m
Objective 2.2G-2 The building is orientated to the street and provides opportunities for street surveillance and connectivity.	39. Dwellings orientate to the street or rear garden, not solely to the side boundary.
	40. The front door is visible from the public domain.
	41. Development is not located on a battle axe lot.

Objective 2.2G-3 Reasonable solar access is provided to the living rooms and private open spaces of adjoining dwellings.	42. A window that is more than 3m from the boundary to a living room of an adjoining dwelling is to receive more than 3 hours of direct sunlight between 9am and 3pm on the winter solstice (June 21). If the window currently receives less than 3hrs - direct sunlight is not reduced. Note: Direct sunlight is measured consistent with Design Criteria 47 and is only required to one window serving the living room.
	43. Where the location of the living room windows of an adjoining dwelling cannot be verified, the proposed development is accommodated within a building envelope defined by a 35° plane springing from 3.6m above the boundary.
Objective 2.2G-4 The development responds to the natural landform of the site, reducing the visual impact and avoiding large amounts of cut and fill and minimises the impacts of retaining walls.	44. The lowest level of the dwelling is not more than 1.3m above ground level, and no more than 1m below ground level.
Objective 2.2G-5 To minimise impacts to vegetation on adjoining properties and allow for vegetation within the setbacks.	45. Basement car parking is not provided within the setbacks described in the table in Section 2.2A.
Objective 2.2G-6 Independent services and utilities are available to service each lot.	46. All lots must have access to reticulated water, sewer, electricity, telecommunications and where available, gas.

2.2H Solar and Daylight Access

Objectives	Design Criteria
Objective 2.2H-1 To optimise sunlight received to habitable rooms and private open spaces. Solar access enables passive solar heating in winter and provides a healthy indoor environment.	47. At least 75% of dwellings in a development are to receive a minimum of 3 hours direct sunlight between 9am and 3pm on the winter solstice (June 21) to a living room and private open space. Note: Direct sunlight is achieved when there is 1m² of sunlight on the glass for a period of at least 15 minutes. To satisfy 3 hours direct sunlight, 12 periods of 15 minutes will need to be achieved - the periods do not need to be consecutive.

Objective 2.2H-2

To provide good access to daylight suited to the function of the room, minimise reliance on artificial lighting and improve amenity.

- 48. Daylight may not be borrowed from other rooms, except where a room has a frontage to a classified road.
- 49. No part of a habitable room is more than 8m from a window.
- 50. No part of a kitchen work surface is more than 6m from a window or skylight.
- 51. Courtyards are to be:
 - Be fully open to the sky; and
 - · Have a minimum dimension of one third of the perimeter wall height, and area of
- 52. A window is visible from 75% of the floor area of a habitable room.

2.21 Natural Ventilation

Objectives	Design Criteria
Objective 2.21-1 All habitable rooms are naturally	53. All habitable rooms are naturally ventilated.
ventilated.	54. Each dwelling is naturally cross ventilated.

2.2J Ceiling Height

Objectives	Design Criteria
Objective 2.2J-1 Ceiling height achieves sufficient natural ventilation and daylight access and provides spatial quality.	 55. Minimum ceiling heights are: 2.7m to ground floor habitable rooms 2.7m to upper level living rooms. 2.4m to upper level habitable rooms (excluding living rooms). The ceiling height is measured from finished floor level to finished ceiling level.

2.2K Dwelling Size and Layout

Objectives	Design Criteria
Objective 2.2K-1 The dwelling has a sufficient area to ensure the layout of rooms are functional, well organised and provide a high standard of amenity.	 56. Dwellings are required to have the following minimum internal floor areas: Studio 35m² 1 bed 50m² 2 bed 70m² 3+ bed 90m²
	57. The minimum internal areas outlined above only include one bathroom. The minimum area of each additional bathroom is 5m² added onto the minimum dwelling area.
	58. The minimum area of any additional bedroom is 12m². The area of each additional bedroom is then added to the minimum internal floor area contained in Design Criteria 56.
	59. Kitchens are not to be part of a circulation space such as a hallway, except in studio apartments.
Objective 2.2K-2 Room sizes are appropriately sized for the intended purpose and number of occupants.	60. One bedroom has a minimum area of 10m² excluding space for a wardrobe.
	61. Bedrooms have a minimum length and width of 3m excluding wardrobe space.
	 62. Combined living and dining rooms are to have a minimum area of: 1 and 2 bed 24m² 3+ bed 28m²
	63. Living room or lounge rooms are to have a minimum length and width of 4m, excluding fixtures.

2.2L Principal Private Open Spaces

Objectives	Design Criteria
Objective 2.2L-2 Dwellings provide appropriately sized private open space and balconies to enhance residential amenity.	 64. All dwellings are to have access to principal private open space with a minimum length and width of 3m: 1 bed or studio 8m² 2+ bed 12m²
	 Dwellings with living area at ground level 16m²
Objective 2.2L-1 Principal private open space and balconies are appropriately located to enhance liveability for residents.	65. The principal private open space is located behind the front building line.
	66. The principal private open space is located adjacent to the living room, dining room or kitchen to extend the living space.
	67. 25% of the private open space is to be covered to provide shade and protection from rain.

2.2M Storage

Objectives	Design Criteria
Objective 2.2M-1 Adequate, well designed storage is provided in each dwelling.	 68. In addition to storage in kitchens, and bedrooms, the following storage with a minimum dimension of 500mm is provided: 1 bed or studio 6m³ 2 bed 8m³ 3+ bed 10m³
	69. At least 50% of the required storage is located inside the dwelling.
	70. Storage not located in dwellings is secure and clearly allocated to specific dwellings if in a common area.

2.2N Car and Bicycle Parking

-		
Objectives	Design Criteria	
Objective 2.2N-1 Car parking is provided appropriate for the scale of the development.	provided at the occupancy wit the land. If the	cies car parking is to be e rate required for a dual hin the DCP that applies to re is no rate in the DCP - 1 lling is to be provided.
	provided at the House within tl the land. If the	car parking is to be e rate required for a Manor ne DCP that applies to re is no rate in the DCP - 1 lling is to be provided.
	73. Car parking sp comply with A	aces and circulation are to S 2890.1:2004.
Objective 2.2N-2 Parking facilities are provided for bicycles.		is to be provided for the of at least 1 bicycle per
Objective 2.2N-3 Visual and environmental impacts of car parking and garages do not dominate the streetscape and have an appropriate scale relationship with the dwelling.	protrude more	oarking should not than 1m above finished scept at the entrance to the
	76. The maximum basement car play 3.5m wide.	dimensions of any park entry will be 2.7m high
	existing tree, it tree canopy or	vay is adjacent to an is either outside the complies with the ons in a report prepared by prist.
		a car space from a dary or parallel road is to
	Setback of Dwelling from Road	Maximum Off-Street Parking Setback From Road
	<4.5m	5.5m
	4.5m or more	1m behind the building line
		width of all garage doors ry, secondary or parallel
	Lot Width	Maximum Width of Garage Door Openings
	15m - 20m	6m
	>20m - 25m	9.2m
	>25m	12m

2.20 Visual Privacy

Objectives

Objective 2.20-1

The separation of windows and terraces, decks and balconies within a site and to adjoining existing or future buildings provide a degree of visual privacy without the reliance on fixed screening.

Design Criteria

- 80. Orientate living room windows, primary private open space to the street front or rear.
- 81. At least one window for each habitable room is provided without the need for a privacy screen.
- 82. A privacy screen is required when:

Distance from Boundary

Finished Floor Level Above Ground Level (Existing)

<3m

(LXISTIII)

<6m

1 **-** 3m > 3m

Distance from Windows in Dwelling on Same Lot Finished Floor Level Above Ground Level

(Existing)

LUI

1 **-** 3m

<6m <12m

>3m

Note: This does not apply to bedroom windows that have an area less than 2m² or windows that have a frontage to a road or public open space.

83. A privacy screen is required at the edge of that part of a terrace, deck, balcony or verandah that is parallel or faces towards a side or rear boundary

Distance from Boundary

Finished Floor Level Above Ground Level

<3m

(Existing)
1 - 3m

<6m

>3m

Distance from Windows in Dwelling on Same

Finished Floor Level Above Ground Level

(Existing)

Lot <6m

1 - 2m

~12m

>2m

Note: This does not apply to a terrace, deck, balcony or patio that has an area less than 3m^2 or has a frontage to a road or public open space.

Objective 2.20-2

Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space.

84. Where privacy screens are provided to windows, they must not cover part of the window required to meet the minimum daylight or solar access requirements, or restrict ventilation.

2.2P Acoustic Privacy

Objectives	Design Criteria
Objective 2.2P-1 Noise transfer is minimised through the siting of buildings and building layout.	85. Electrical, mechanical, hydraulic and air conditioning equipment is housed so that it does not create an 'offensive noise' as defined in the <i>Protection of the Environment Operations Act 1997</i> either within or at the boundaries of any property at any time of the day.

2.2Q Noise and Pollution

Objectives	Design Criteria
Objective 2.2Q-1 Ensure outside noise levels are controlled to acceptable levels in living and bedrooms of dwellings.	86. Any development within the 20 ANEF contour is constructed to comply with AS 2021:2015 Acoustics – Aircraft Noise Intrusion.
beardon's or awaiiings.	 87. Dwellings that are within 100m of a classified road or 80m from a rail corridor are to have LAeq measures not exceeding: in any bedroom: 35dB(A) between 10pm-7am; and anywhere else in the building (other than a kitchen, garage, bathroom or hallway): 40dB(A) at any time. This can be achieved by: Providing a full noise assessment prepared by a qualified acoustic engineer; and Complying with relevant noise control treatment for sleeping areas and other habitable rooms in Appendix C of RMS Development Near Rail Corridors and Busy Roads - Interim Guideline.

Note: Development that is on land immediately adjacent to a rail corridor and development that involves penetration of the ground to a depth of 2m within 25m of a rail corridor may be integrated development and State Environmental Planning Policy (Infrastructure) 2007 applies.

2.2R Architectural Form and Roof Design

Objectives	Design Criteria	
Objective 2.2R-1 The architectural form is defined by a balanced composition of elements. It responds to internal layouts and desirable elements in the streetscape.	88. Provide in the Design Verification Statement a description as to how the aesthetics and articulation contribute to the character of the local area. Note: Refer to Section 3 for guidance.	
Objective 2.2R-2 The roof treatments are integrated into the building design and positively respond to the street.	89. The roof design is integrated harmoniously with the overall building form.	
	90. Skylights and ventilation systems are integrated into the roof design.	

2.2S Visual Appearance and Articulation

Objectives	Design Criteria
Objective 2.25-1 To promote well designed buildings of high architectural quality that contribute to the local character.	91. Provide in the Design Verification Statement a description as to how the aesthetics and articulation contribute to the character of the local area.
	Note: Refer to Section 3 for guidance.
	 92. The development may have a primary road articulation zone that extends up to 1.5m forward of the minimum required setback from the primary road. The following elements can be located in the articulation zone: An entry feature or portico. A balcony, deck, pergola, terrace or verandah. A window box treatment. A bay window or similar feature. An awning or other feature over a window. A sun shading feature. An eave.

2.2T Pools and Detached Development

Objectives

Objective 2.2T-1

The location of swimming pools and spas minimise the impacts on adjoining properties.

Design Criteria

- 93. Swimming pools and spas are to have a maximum height above ground level (existing):
 - At the water line 1.2m,
 - At the top of the coping 1.4m, and
 - Where the coping is more than 300mm wide 600mm.
- 94. Swimming pools and spas are to be located in the rear yard with a minimum setback of 1m from any side or rear boundary.

The setback of a swimming pool from a secondary road must be consistent with the setback of a dwelling house from the secondary road boundary.

95. The swimming pool pump must be located in an enclosure that is sound proofed.

Objective 2.2T-2

The location of the detached development minimises the impact on adjoining properties.

- 96. Maximum height above ground level (existing) 4.5m
- 97. A detached studio with a frontage to a rear lane or parallel road may have a height of 6m.
- 98. Maximum floor area for each dwelling:
 - generally:

Lot Area (m²) Maximum GFA 400 - 600 45m² >600 - 900 60m² >900 100m² • detached studios: 36m²

- 99. Where the DCP does not contain setbacks for detached development, side setbacks are the same as for the dwelling except for the following:
 - side setback: 0.9m, or
 - side setback with wall height less than 3.3m: Om, and adjoining lot building is <0.9m from boundary and building wall is of masonry construction with no windows,
 - side setback of detached studio with frontage to a lane: Om
 - side setback of detached studio without a frontage to a lane:

building line	Rear setback	
0 - 18m	900mm	
>18m	1.5m	

100. Where the DCP does not contain setbacks for detached development, rear setbacks are:

Lot Area	Rear setback
0 - 900m²	900mm
>900 - 1500m²	1.5m
>1500m²	2.5m

101. The maximum floor level of a detached deck, patio, pergola or terrace that is less than 0.9m from the side boundary is 0.6m above ground level (existing).

Note: Privacy and building separation and other Design Criteria still apply.

2.2U Energy Efficiency

Objectives	Design Criteria	
Objective 2.2U-1 The development incorporates passive environmental design.	102. Provide an outdoor area for clothes drying that can accommodate at least 8 lineal metres of clothes line for each dwelling.	
	103. Any clothes drying area should be screened from public and communal areas.	

Note: A development application for a dwelling is required to have a BASIX Certificate that applies a minimum energy consumption target.

2.2V Water Management and Conservation

Objectives	Design Criteria
Objective 2.2V-1	104. A stormwater system must:
Flood management systems are integrated into site design.	 Comply with requirements in the DCP that applies to the land.
	Be approved (if required) under s.68 of the Local Government Act 1993.
	105. Detention tanks are located under paved areas, driveways or in basements.

2.2W Waste Management

Objectives	Design Criteria
Objective 2.2W-1 Waste storage facilities meet the needs of the residents, are easy to use and access and enable efficient collection of waste.	106. Provide storage space for the type and number of bins designated in council's waste policy.
	107. Where waste storage is provided in a communal area, access to this waste area is to be provided for all residents without crossing a private lot.
	108. Where waste storage is provided in the basement car park a maximum ramp gradient of 1:6 is to be provided to the waste collection point.
	109. Where a rear lane has provision for waste collection trucks used by council, the collection point is to be from the rear lane.

- 110. Any communal waste area is to:
- provide water supply for cleaning,
- have a solid floor grated to a floor waste (connected to sewer), and
- be designed to meet the requirements of council's waste policy.
- 111. Despite any requirements in council's waste policy, on-site waste vehicle access is not required.
 - Note: The waste collection point is typically located on the footpath.
- 112. If a waste collection point is provided onsite and used for permanent storage of bins it is to:
- be screened from view from the public domain,
- have a height no greater than 1.3m if forward of the building line,
- be less than 10m from the street boundary,
- be located on a surface with a gradient less than 1:20,
- not require access through a security door or gate (unless this is permitted by council's waste policy), and
- have a path that connects the collection area to the street boundary with a gradient less than 1:8 and free of steps to all for the transfer of bins to the collection vehicle.

Objective 2.2W-2

Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.

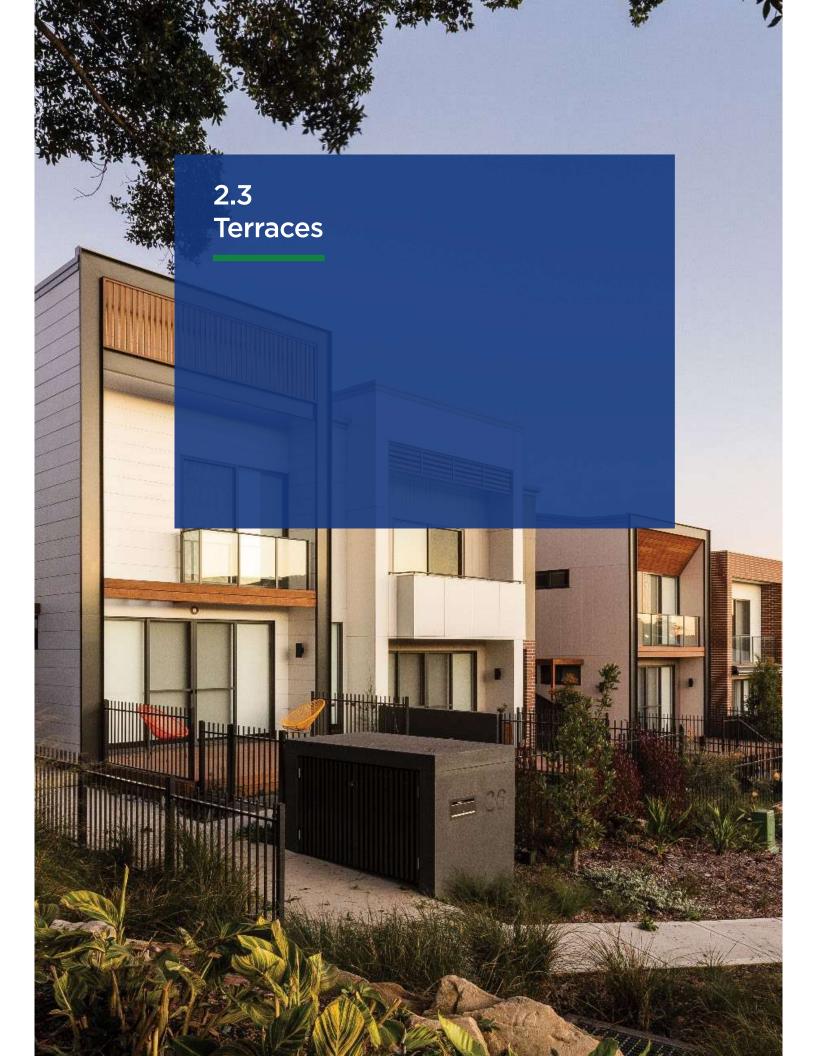
- 113. Storage areas for rubbish and recycling bins are to be provided:
- Within garages;
- In a screened enclosure that is part of the overall building design; or
- In the basement car park.
- 114. Communal waste areas are to be located at least 3m from any bedroom of living room window.

2.2X Universal Design

Objectives	Design Criteria		
Objective 2.2X-1 Universal design features are included in dwelling design to promote flexible housing for all community members.	115. At least one ground floor dwelling is to include the Silver Level Seven Core Liveable Housing Design Elements contained in the <i>Liveable Housing Design Guidelines</i> .		

2.2Y Communal Areas and Open Space

Objectives	Design Criteria
Objective 2.2Y-1 Communal areas are designed to enhance residential amenity and maximise safety and connectivity to the dwelling and promote social interaction between residents.	116. Communal open spaces are visible from habitable rooms and private open space while maintaining visual privacy.
	117. Any communal open space is directly accessible from the building entry and common circulation.
	118. For manor houses the active communal open space is at least 5% of the site area and has a maximum grade of 1:50.
	119. Active communal open space is at least 3m from the habitable room of a dwelling on the lot.
Objective 2.2Y-2	120. Common circulation above ground
Common circulation spaces achieve good amenity with access to daylight and ventilation.	is provided with natural daylight and ventilation.



2.3 Terraces

This Section provides the Objectives and Design Criteria for development that contains multi dwelling housing (terraces).

Key characteristics of development to which this Section applies are:

- The development contains three or more dwellings;
- Each dwelling has a frontage to a public road; and
- The dwellings are located side by side, with no part of a dwelling located above another dwelling.

Permissibility

Multi dwelling housing must be permissible on the lot on which the multi dwelling housing (terraces) development is proposed. The LEP that applies to the land will indicate if the development is permissible.



Figure 2-32 Multi dwelling (terraces)

Subdivision

Subdivision allows separate ownership of the three or more dwellings that can be constructed under this Section.

Development carried out under this Section may receive concurrent approval for the development and strata or Torrens title subdivision.

Strata title

Terraces that are strata subdivided will result in three or more dwellings on one lot of land.

They may be strata titled either because the individual dwellings do not meet the minimum lot size requirements for Torrens title subdivision, or they have a basement car parking or other common property that does not enable simple Torrens title subdivision.

The dwellings to be strata subdivided can be attached or detached.

Torrens title

A terrace development may be subdivided to create separate dwellings or attached dwellings. At the completion of the development each dwelling is located on a separate Torrens title lot allowing for separate ownership of the lots.

Each lot that proposes to be the Torrens title subdivision must comply with the minimum lot size requirement in the LEP.

Where rear laneways are created, this land could either be retained under a community title scheme (to ensure the effective and appropriate management of the road) or dedicated to Council as a public road if all relevant requirements are met.

Development Application

A development application can be submitted where the development is permissible in the zone.

This section is to be used with the following documents:

- Local Environmental Plan (LEP) for permissibility, development standards and controls
- Development Control plan for local character, built form controls, parking, waste and stormwater requirements
- SEPPs and regulations where relevant.

A summary of the steps required to prepare a DA is provided in Figure 2-33.

A qualified designer or a building designer that is accredited by the Building Designers Association of Australia is required to certify that the design of the development is consistent with the Design Criteria in the Design Verification Statement.

Using this Section

This Section contains Objectives and Design Criteria.

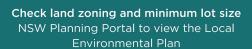
Objectives: relate to the Design Principles and set out what the design is to achieve.

Design Criteria: are the measurable standards that are deemed to meet the Objectives.

The development application proposal is merit assessed.

If the development application cannot meet the Design Criteria then the consent authority is to be flexible in applying these provisions and allow reasonable alternative solutions that achieve the relevant Objectives.

Section 3 provides explanatory guidance to assist with the interpretation of terms used in this Section



Check DCP

Refer to local character guidance, setbacks envelope, parking and stormwater controls

Satisfy the Objectives

Low Rise Housing Diversity Design Guide for DAs

Use Design Criteria as a measurable standard

Low Rise Housing Diversity

Design Guide for DAs

Prepare Design Verification Statement

Figure 2-33 Workflows: Preparing a DA

2.3A Building Envelopes

Summary Development Standard

Height of Building

The maximum building as specified in the LEP.

Objectives

Objective 2.3A-1

The building height is consistent with the desired scale and character of the street and locality and provides an acceptable impact on the amenity of adjoining properties.

Design Criteria

- Where the LEP or DCP does not include a maximum building height, that height of buildings is:
 - R1, R2, or RU5 zoned land: 9m
 - R3 zoned land: 11m
- 2. The maximum number of storeys (excluding basements) are:
 - R1, R2, or RU5 zoned land: 2
 - R3 zoned land: 3

Objective 2.3A-2

The development provides a setback from the front boundary or public space that:

- · defines the street edge;
- creates a clear threshold and transition from public to private space;
- assists in achieving visual privacy to ground floor dwellings from the street;
- contributes to the streetscape character and landscape; and
- relates to the existing streetscape and setback pattern or the desired future streetscape pattern if different to the existing.

- 3. Refer to the DCP for front setback or envelope controls.
- 4. Where the DCP does not contain front setback controls the following apply:
 - Where existing dwellings are within 40m average of the two closest dwelling houses, dual occupancies or multi dwelling housing (terraces), or
 - Where no existing dwellings are within 40m then the front setback is 3.5m.
- 5. R3 zoned land Where the DCP does not contain front setback controls the setback to primary road is 3.5m.
- 6. Where the DCP does not contain setback controls for secondary roads or to public reserves the following apply:

Lot Area (m²) Setback 0 - 900 2m >900 - 1500 3m >1500 5m

- 7. Setback from a parallel road: 3m, unless dwellings have a frontage to the parallel road, in which case the setback must be the same as if the parallel road were a primary road.
- 8. Setback from classified road: 9m
- 9. Setback from public reserve: 3m

Objective 2.3A-3

The development provides side boundary setbacks that reflect the character and form intent of the area where is characterised by the separation of buildings.

- 10. Refer to the DCP for side boundary setback or envelope controls.
- 11. Where the DCP does not contain side setback controls the side setback is 1.5m.

Objective 2.3A-4

The development provides a rear boundary setback that provides opportunity to retain and protect or establish significant landscape trees in deep planting areas.

- 12. Refer to the DCP for rear boundary setbacks or envelope controls.
- 13. Where the DCP does not contain a rear setback controls the following apply:

Lot Area (m²)	Building height	Minimum required setback from Rear boundary
600 - 900	0m - 4.5m	3m
	> 4.5m	8m
>900 - 1500	0m - 4.5m	5m
	> 4.5m	12m
>1500	0m - 4.5m	10m
	> 4.5m	15m

14. The setback to a lane is Om.

Notes:

- 1. When applying primary road, secondary road and rear setbacks the lot area refers to the lot area prior to any subdivision.
- 2. The side setbacks only apply to the side boundaries of the lot prior to any subdivision.
- 3. Setbacks do not apply to the following: access ramps, down pipes, driveways or hard standard spaces, electricity or gas meters, fascias, fences, gutters, light fittings, pathways and paving, privacy screens fixed to the building.
- 4.Refer to Section 3 for an explanation of the application of setbacks, and exceptions to the setbacks.

2.3B Gross Floor Area / Floor Space Ratio

Gross Floor Area / Floor Space Ratio	The floor space ratio / gross floor area as specified in the LEP.	
Objectives	Design Criteria	
Objective 2.3B-1 To ensure that the bulk and scale is appropriate for the context, minimises impacts on surrounding properties and allows for articulation of the built form.	 15. Where the LEP or DCP do not contain an FSR or Gross floor area the following maximum gross floor area applies to all buildings on a lot: R1, R2, or RU5 zoned land - 60% of lot area R3 zoned land - 80% of lot area. 	

2.3C Landscaped Area

Summary Development Standard

Landscaped Area

The minimum landscaped area as specified in the LEP.

Objectives

Objective 2.3C-1

To provide adequate opportunities for the retention of existing and provision of new vegetation that:

- contributes to biodiversity;
- enhances tree canopy; and
- minimises urban runoff.

Design Criteria

16. Where the LEP or DCP does not contain a minimum landscaped area, the minimum landscaped area is:

Zone R1, R2

Landscaped Area

R1, R2 Where concurrent subdivision and RU5 is proposed:

 The minimum area that must be provided for each resulting lot - 30% of lot area.

Where no subdivision is proposed:

 The minimum landscaped area that must be provided is 30% of the parent lot area of which at least 54m² is to be allocated to each dwelling.

R3

Where concurrent subdivision is proposed:

The minimum area that must be provided for each resulting lot - 20% of lot area.

Where no subdivision is proposed:

- The minimum landscaped area that must be provided is 20% of the parent lot area of which at least 36m² is to be allocated to each dwelling.
- 17. The minimum dimension of any area included in the landscaped area calculation is 1.5m.
- 18. At least 25% of the area forward of the building line is to be landscaped area.
- 19. At least 50% of the area behind the building line is to be landscaped.

Objective 2.3C-2

Landscape design supports healthy plant and tree growth and provides sufficient space for the growth of medium sized trees.

- 20. An ongoing maintenance plan is to be provided as part of the landscape plan.
- 21. Minimum soil standards for plant sizes are provided in accordance with the Table below.

Tree Size	Height	Spread	Min Soil Area	Min soil depth
Large trees	>12m	>8m	10 x 10m	1.2m
Medium tree 1.0m	:S	8-12m	4 - 8m	6 x 6m
Small trees	5 - 8m	<4m	3.5 x 3.5m	0.8m
Shrubs				0.5 - 0.6m
Groundcove	r			0.3 - 0.45m
Turf				0.2m

- 22. If the DCP does not specify tree planting of a particular size or species the following is to be provided:
 - Front: 1 tree with mature height of 5m if primary road setback is greater than 3m.
 - · Rear: 1 tree with mature height of 8m.

Objective 2.3C-3

Existing natural features of the site that contribute to neighbourhood character are retained, and visual and privacy impacts on existing neighbouring dwellings are reduced.

- 23. Mature trees are to be retained, particularly those along the boundary, (except those where approval is granted by Council for their removal).
- 24. Landscape features including trees and rock outcrops are retained where they contribute to the streetscape character or are located within the rear setback.

Objective 2.3C-4

Landscape design contributes to a local sense of place and creates a micro climate,

- 25. The landscape plan proposes a combination of tree planting, for shade, mid height shrubs, lawn and ground covers.
- 26. On grade parking should be provided with tree planting for canopy cover at a rate of 1 tree per 4 car spaces.
- 27. The landscape plan indicates that at least 50% of the overall number of trees and shrubs are species native to the region.

2.3D Local Character and Context

Objectives Objective 2.3D-1 The built form, articulation and scale relates to the local character of the area and the context. Design Criteria 28. Provide a description in the Design Verification Statement how the built form of the development contributes to the character of the local area, using the guidance in Section 3D Local Character and Context.

2.3E Public Domain Interface

Objectives	Design Criteria
Objective 2.3E-1 Provide activation and passive surveillance to the public streets.	29. The front door of each dwelling is to be directly visible from the street.
	30. Each dwelling has a habitable room that faces the street or public space.
Objective 2.3E-2 Front fences and walls do not dominate the public domain instead they respond to and complement the context and character of the area (including internal streets).	31. Private courtyards within the front setback are only located within the articulation zones and / or behind the required front building line.
	 32. Front fences: Are visually permeable (no more than 50% of the allowable fence area will be solid masonry, timber or metal). Average height no greater than 1.2m. Have a consistent character with other front fences in the street. Are not to be constructed of solid metal panels or unfinished timber palings.
	33. High solid walls are only used to shield a dwelling from the noise of classified roads. The walls are to have a maximum height of 2.1m and be setback at least 1.5m from the property boundary. Landscape planting is to be provided between the wall and the boundary, with a mature height of at least 1.5m.
	34. Retaining walls greater than 600mm within the front setback are to be softened by planting for a minimum depth of 600mm on the low side of the retaining wall.
Objective 2.3E-3 The secondary frontage of a development positively contributes to the public domain by providing an active edge and semi-transparency to the boundary treatment.	 35. Where development adjoins public parks, open space or bushland, or is a corner site, the design positively addresses this interface using any of the following design solutions: Habitable room windows facing the public domain. Street access, pedestrian paths and building entries. Paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space. Walls fronting the public spaces are to have openings not less than 25% of the surface area of the wall.

2.3F Pedestrian and Vehicle Circulation

Objective

Objective 2.3F-1

Internal vehicle and pedestrian circulation should function like a street, minimise the dominance of the driveway, and minimise impact on habitable spaces.

Design Criteria

- 36. Vehicle circulation and parking complies with AS2890.1.
- 37. All new internal streets and lanes are to be overlooked by windows from habitable rooms and or private open space.
- 38. Where new streets or lanes are created:
 - Lanes: shared or pedestrian surfaces with a width of common area including landscape - minimum 6m
 - Streets: width of common area including landscape minimum 12m.
- 39. Where less than 20 car spaces are provided reduce carriageway width to 3.5m, with passing areas as required by AS 2890.1.
- 40. Internal vehicle circulation must be:
 - at least 1m setback from a fences:
 - at least 1m setback from another dwelling;
 - at least 2.5m setback from a window in a habitable room if the window exceeds 1m²: and
 - the setbacks should contain plants to soften edges.
- 41. Terminate driveways and streets with trees, open space or the window of a dwelling not a garage or car space.
- 42. Streets to be designed to accommodate appropriate service vehicles likely to access the site.
- 43. Where on street parking is currently available in front of the development, the proposed driveways are located so that at least one car space remains.
- 44. Car parking not associated with a dwelling must be:
 - setback from a fence is to be at least 1m
 - setback from another dwelling is to be at least 1m
 - setback from a habitable room window is to be at least 3m if the window exceeds 1m².
 - The setbacks should contain plants.
- 45. New streets and lanes
 - maximum length of a dead end laneway
 40m.
 - minimum width between structures -7m.

Objective 2.3F-2

Provide safe, connected environment for pedestrians.

- 46. Provide safe shared spaces for vehicles, cyclists and pedestrians by including measures that reduce vehicle speeds such as changes in pavement texture at entries or key nodes, reduce demarcation between pedestrian and vehicle spaces.
- 47. Pedestrian paths that are separated from an internal road or lane by a kerb or landscaped area are to be provided where there are more than 20 dwellings.
- 48. Where pedestrian circulation is separated from vehicle circulation the paths are still to function like streets with pavement at least 1.5m wide, clearly identifiable dwelling entrances and clear lines of sight to create a legible and safe network.
- 49. Roads and pedestrian spaces are to have lighting designed in accordance with A1158.3.1 that avoids light spill in to private spaces.

2.3G Orientation, Siting and Subdivision

Summary Development Standard Minimum lot size for carrying out multi dwelling housing (terraces) development Subdivision Lot Size (Torrens title subdivision) The minimum lot area and / or minimum lot width as specified in the LEP.

Objectives	Design Criteria
Objective 2.3G-1 To achieve planned residential density consistent with the local housing strategy	 50. The minimum lot size for carrying out multi dwelling housing (terraces) is: the minimum area for multi dwelling housing specified in the LEP or DCP that applies to the land, or, if the LEP or DCP does not specify a minimum lot dimension - 600m² and width measured at the building line of 18m.

Objective 2.3G-2 51. If the LEP or DCP does not contain a minimum lot width the following To ensure that lots created resulting for provisions apply: the subdivision of land have sufficient area for the dwelling, vehicle access, On R3 zoned land: landscaping, parking and amenity and • Garages not fronting primary road - 5m are consistent with the desired future • Garages fronting primary road - 7.5m character of the area. On R1, R2, & RU5 zoned land: • Garages not fronting primary road - 6m • Garages fronting primary road - 7.5m. 52. If the LEP or DCP does not contain a minimum lot area for subdivision of a multi dwelling (terraces), then the following provisions apply: R1, R2, & RU5 zoned land - 200m² • R3 zoned land - 150m². Objective 2.3G-3 53. Each dwelling has a frontage to a primary, secondary or parallel road. The road must The dwelling is orientated to the be a public road as defined by the Roads street and provides opportunities for Act 1993. street surveillance and connectivity. The frontage of each terrace is to be at least 5m. 54. A window that is more than 3m from the Objective 2.3G-4 boundary to a living room of an adjoining Reasonable solar access is provided to the dwelling is to receive more than 3 hours living rooms and private open spaces of of direct sunlight between 9am and 3pm adjoining dwellings. on the winter solstice (June 21). If the window currently receives less than 3hrs direct sunlight is not reduced. Note: Direct sunlight is measured consistent with Design Criteria 47 and is only required to one window serving the living room. 55. Where the location of the living room windows of an adjoining dwelling cannot be verified the proposed development is accommodated within a building envelope defined by a 35° plane at 3.6m above the boundary. 56. Unless a dwelling is over a basement, the Objective 2.3G-5 ground floor is not more than 1.3m above The development responds to the natural ground level, and no more than 1m below landform of the site, reducing the visual ground level. impact and avoiding large amounts of cut and fill and minimises the impacts of 57. Dwellings are located to step with the retaining walls. topography.

58. All lots must have access to

gas.

reticulated water and sewer, electricity,

telecommunications, and where available

Objective 2.3G-6

Independent services and utilities are

available to service each lot.

Objective 2.3G-7

Provide adequate space between buildings to allow for landscape, provide visual separation, reduce visual bulk and daylight access between buildings. 59. The minimum separation between two or more buildings containing dwelling on the same lot is 3m.

Note: Greater separation may be required for privacy.

60. Provide a break of 3m between buildings more than 45m long.

2.3H Solar and Daylight Access

Objective	Design Criteria	
Objective 2.3H-1 To optimise sunlight received to habitable rooms and private open spaces. Solar access enables passive solar heating in winter and provides a healthy indoor environment.	61. The living room or private open space in each dwelling is to receive a minimum of 2 hours direct sunlight between 9 am and 3pm on the winter solstice (June 21).	
	Note: Direct sunlight is achieved when 1m ² of direct sunlight on the glass is achieved for at least 15 minutes. To satisfy 2 hours direct sunlight, 8 periods of 15 minutes will need to be achieved - however the periods do not need to be consecutive.	
Objective 2.3H-2 To provide good access to daylight suited to the function of the room, minimise reliance on artificial lighting and improve amenity.	62. Daylight may not be borrowed from other rooms, except where a room has a frontage to a classified road.	
	63. No part of a habitable room is more than 8m from a window.	
	64. No part of a kitchen work surface is more than 6m from a window or skylight.	
	 65. Courtyards are to: Be fully open to the sky; and Have a minimum dimension of one third of the perimeter wall height, an area of 4m². 	
	66. A window is visible from 75% of the floor area of a habitable room.	

2.31 Natural Ventilation

Objectives	Design Criteria
Objective 2.31-1 All habitable rooms are naturally	67. All habitable rooms are naturally ventilated.
ventilated.	68. Each dwelling is naturally cross ventilated.

2.3J Ceiling Height

Objective	Design Criteria
Objective 2.3J-1	69. Minimum ceiling heights are:
Ceiling height achieves sufficient natural ventilation and daylight access and provides spatial quality.	 2.7m to ground floor habitable rooms. 2.7m to upper level living rooms. 2.4m to upper level habitable rooms (excluding living rooms).
	The ceiling height is measured from finished floor level to finished ceiling level.

2.3K Dwelling Size and Layout

Objective	Design Criteria
Objective 2.3K-1 The dwelling has a sufficient area to ensure the layout of rooms are functional, well-organised and provide a high standard of amenity.	 70. Dwellings to have the following minimum internal floor areas: 1 bed 65m² 2 bed 90m² 3+ bed 115m²
	71. The minimum internal areas outlined above only contain one bathroom. The minimum area of each additional bathroom is 5m² added onto the minimum dwelling area.
	72. The minimum area of any additional bedroom is 12m². The area of each additional bedroom is then added to the minimum internal floor area contained in Design Criteria 69.
	73. Kitchens are not part of a circulation space such as a hallway.
Objective 2.3K-2	74. One bedroom has a minimum area of 10m², excluding space for a wardrobe.
Room sizes are appropriate for the intended purpose and number of occupants.	75. Bedrooms have a minimum length and width of 3m in any direction, excluding wardrobe space.
	 76. Combined living and dining rooms are to have a minimum area of: 1 and 2 bed 24m² 3+ bed 28m²
	77. Living room or lounge rooms are to have a minimum length and width of 4m, excluding fixtures.

2.3L Principal Private Open Spaces

Objectives	Design Criteria
Objective 2.3L-2	78. The area of principal private open space
Dwellings provide appropriately sized private open space and balconies to enhance residential amenity.	provided for each dwelling is at least 45m ² with a minimum dimension of 4m.
Objective 2.3L-1	79. The principal private open space is located behind the front building line.
Principal private open space and	located benind the front building line,
balconies are appropriately located to enhance liveability for residents.	80. The principal private open space is located adjacent to the living room, dining room or kitchen to extend the living space.
	81. 25% of the private open space is to be covered to provide shade and protection from rain.

2.3M Storage

Objectives	Design Criteria
Objective 2.3M-1 Adequate, well-designed storage is provided in each dwelling.	 82. In addition to storage in kitchens and bedrooms, the following storage with a minimum dimension of 500mm is provided: 1 bed 6m³ 2 bed 8m³ 3+ bed 10m³
	83. At least 50% of the required storage is located inside the dwelling.
	84. Storage not located in dwellings is secure and clearly allocated to specific dwellings if in a common area.

2.3N Car and Bicycle Parking

2.514 Car and Dicycle Farking		
Objectives	Design Criteria	
Objective 2.3N-1 Car parking is provided appropriate for the scale of the development.	required for mu the DCP that a	to be provided at the rate ulti dwelling housing within oplies to the land. If there a DCP - 1 space is to be welling.
	dwelling housir titled where a k	is provided in multing (terraces) that are strata pasement car park serves wellings. Provide 1 space
	87. Car parking spa comply with AS	aces and circulation are to 5 2890.1:2004.
Objective 2.3N-2 Parking facilities are provided for bicycles.		is to be provided for the of at least 1 bicycle per
Objective 2.3N-3 Visual and environmental impacts of car parking and garages do not dominate the streetscape and have an appropriate scale relationship with the dwelling.		parking should not than 1m above finished cept at the entrance to the
	90. The maximum basement car phigh by 3.5m w	park entry is to be 2.7m
	existing tree, it tree canopy or	vay is adjacent to an is either outside the complies with the ons in a report prepared by prist.
		a car space from a dary or parallel road is to
	Setback of Dwelling from Road	Maximum Off-Street Parking Setback From Road
	<4.5m	5.5m
	4.5m or more	1m behind the building line
		width of all garage doors y or secondary road:
	Lot Width	Maximum Width of Garage Door Openings
	18m - 20m	6m
	>20m - 25m	9.2m
	>25m	12m
	Torrens title lot or i	ers to the completed in the case of a strata the development site.

2.30 Visual Privacy

Objectives

Objective 2.30-1

The separation of windows and terraces, decks and balconies within a site and to adjoining existing or future buildings provide a degree of visual privacy without the reliance on fixed screening.

Design Criteria

- 94. Orientate living room windows, primary private open space to the street front or rear.
- 95. At least one window for each habitable room is provided without the need for a privacy screen.

96. A privacy screen is required when:

Distance from Boundary

Finished Floor Level Above Ground Level (Existing)

<3m

Existing

<6m

1 **-** 3m > 3m

Distance from Windows in Dwelling on Same Finished Floor Level Above Ground Level

(Existing)

<6m

1 **-** 3m

<12m

>3m

Note: This does not apply to bedroom windows that have an area less than 2m² or windows that have a frontage to a road or public open space.

97. A privacy screen is required at the edge of that part of a terrace, deck, balcony or verandah that is parallel or faces towards a side or rear boundary

Distance from Boundary

Finished Floor Level Above Ground Level

(Existing)

<6m

<3m

1 **-** 3m

Distance from Windows in Dwelling on Same

Finished Floor Level Above Ground Level

(Existing)

Lot <6m

1 - 2m

>2m

Note: This does not apply to a terrace, deck, balcony or patio that has an area less than 3m^2 or has a frontage to a road or public open space.

Objective 2.30-2

Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space.

98. Where privacy screens are provided to windows, they must not cover part of the window required to meet the minimum daylight or solar access requirements, or restrict ventilation.

2.3P Acoustic Privacy

esign Criteria
9. Electrical, mechanical, hydraulic and air conditioning equipment is housed so that it does not create an 'offensive noise' as defined in the <i>Protection of the Environment Operations Act 1997</i> either within or at the boundaries of any

2.3Q Noise and Pollution

Objectives	Design Criteria
Objective 2.3Q-1 Ensure outside noise levels are controlled to acceptable levels in living and bedrooms of dwellings.	100. Any development within the 20 ANEF contour is to be constructed to comply with AS 2021:2015 Acoustics - Aircraft Noise Intrusion.
	 101. Dwellings that are within 100m of a classified road or 80m from a rail corridor are to have LAeq measures are not exceeding: In any bedroom: 35dB(A) between 10pm-7am. Anywhere else in the building (other than a kitchen, garage, bathroom or hallway): 40dB(A) at any time.
	 This is achieved by: Providing a full noise assessment report prepared by a qualified acoustic engineer; and Complying with relevant noise control treatment for sleeping areas and other habitable rooms in Appendix C of RMS Development Near Rail Corridors and Busy Roads - Interim Guideline.

Note: Development that is on land immediately adjacent a rail corridor and development that involves penetration of ground to a depth of 2m within 25m of a rail corridor may be integrated development. Refer to the *State Environmental Planning Policy (Infrastructure)* 2007.

2.3R Architectural Form and Roof Design

Objectives	Design Criteria
Objective 2.3R-1 The architectural form is defined by a balanced composition of elements. It responds to internal layouts and desirable elements in the streetscape.	102. Provide in the Design Verification Statement a description as to how the architectural form reduces the visual bulk and responds and provides a cohesive design response.
	Note: Refer to Section 3 for guidance.
Objective 2.3R-2 The roof treatments are integrated into the building design and positively respond to the street.	103. The roof design is integrated harmoniously with the overall building form.
	104. Skylights and ventilation systems are integrated into the roof design.

2.3S Visual Appearance and Articulation

To promote well designed buildings of high architectural quality that contribute to the local character. 105. Provide in the Design Verification Statement a description as to how the aesthetics and articulation contribute to the character of the local area. Note: Refer to Section 3 for guidance. 106. The development may have a primary road articulation zone that extends up to 1.5m forward of the minimum required setback from the primary road. The following elements can be located in the articulation zone: • An entry feature or portico. • A balcony, deck, pergola, terrace or verandah. • A window box treatment. • A bay window or similar feature. • An awning or other feature over a window. • A sun shading feature.	Objectives	Design Criteria
 106. The development may have a primary road articulation zone that extends up to 1.5m forward of the minimum required setback from the primary road. The following elements can be located in the articulation zone: An entry feature or portico. A balcony, deck, pergola, terrace or verandah. A window box treatment. A bay window or similar feature. An awning or other feature over a window. A sun shading feature. 	To promote well designed buildings of high architectural quality that contribute	Statement a description as to how the aesthetics and articulation contribute to
road articulation zone that extends up to 1.5m forward of the minimum required setback from the primary road. The following elements can be located in the articulation zone: • An entry feature or portico. • A balcony, deck, pergola, terrace or verandah. • A window box treatment. • A bay window or similar feature. • An awning or other feature over a window. • A sun shading feature.		Note: Refer to Section 3 for guidance.
		 106. The development may have a primary road articulation zone that extends up to 1.5m forward of the minimum required setback from the primary road. The following elements can be located in the articulation zone: An entry feature or portico. A balcony, deck, pergola, terrace or verandah. A window box treatment. A bay window or similar feature. An awning or other feature over a window.
 An eave, 		A sun shading feature.An eave.

2.3T Pools and Detached Development

Objectives

Objective 2.3T-1

The location of swimming pools and spas minimise the impacts on adjoining properties.

Design Criteria

- 107. Swimming pools and spas are to have a maximum height above ground level (existing):
 - At the water line 1.2m,
 - · At the top of the coping 1.4m, and
 - Where the coping is more than 300mm wide 600mm.
- 108. Swimming pools and spas are to be located in the rear yard with a minimum setback of 1m from any side or rear boundary.
- The setback of a swimming pool from a secondary road must be consistent with the setback of a dwelling house from the secondary road boundary.
- 109. The swimming pool pump must be located in an enclosure that is sound proofed.

Objective 2.3T-2

The location of the detached development minimises the impact on adjoining properties.

- 110. Maximum height above ground level (existing) 4.5m
- 111. A detached studio with a frontage to a rear lane or parallel road may have a height of 6m.
- 112. Maximum floor area for each dwelling:
 - generally: 45m²
 - detached studios: 36m²
- 113. Where the DCP does not contain setbacks for detached development, side setbacks are the same as for the dwelling except for the following:
 - side setback: 0.9m, or
 - side setback with wall height less than 3.3m: Om, and adjoining lot building is <0.9m from boundary and building wall is of masonry construction with no windows,
 - side setback of detached studio with frontage to a lane: Om
 - side setback of detached studio without a frontage to a lane:

Lot Width at building line	Rear setback	
O - 18m	900mm	
>18m	1.5m	

114. Where the DCP does not contain setbacks for detached development, rear setbacks are:

Lot Area	Rear setback
0 - 900m²	900mm
>900 - 1500m²	1.5m
>1500m²	2.5m

115. The maximum floor level of a detached deck, patio, pergola or terrace that is less than 0.9m from the side boundary is 0.6m above ground level (existing).

Notes:

- 1. A child-resistant barrier must be constructed or installed in accordance with the requirements of the Swimming Pools Act 1992
- 2. Privacy and building separation and other Design Criteria still apply.

2.3U Energy Efficiency

Objectives	Design Criteria	
Objective 2.3U-1	116. Provide an outdoor area for clothes drying that can accommodate at least 16 lineal metres of clothes line for each dwelling.	
Development incorporates passive environmental design.		
on normal deorgin	117. Any clothes drying area is screened from public and communal areas.	

Note: A DA for a dwelling is required to have a BASIX Certificate that applies a minimum energy consumption target.

2.3V Water Management and Conservation

Objectives	Design Criteria
Objective 2.3V-1 Flood management systems are integrated into site design.	 118. A stormwater system must: Comply with requirements in the DCP that applies to the land. Be approved (if required) under s.68 of the Local Government Act 1993.
	119. Detention tanks are to be located under paved areas, driveways or in basements.

Note: A DA for a dwelling is required to have a BASIX Certificate that applies a minimum water consumption target.

2.3W Waste Management

Objectives

Objective 2.3W-1

Waste storage facilities meet the needs of the residents, are easy to use and access, and enable efficient collection of waste.

Design Criteria

- 120. Provide storage space for the type and number of bins designated in council's waste policy (or DCP).
- 121. Where waste storage is provided in a communal area, access to this waste area is to be provided for all residents without crossing a private lot.
- 122. Where waste storage is provided in the basement car park, a maximum ramp gradient of 1:6 is to be provided to the waste collection point.
- 123. Where a rear lane has provision for waste collection trucks used by council, the collection point is to be from the rear lane.
- 124. Any communal waste area is to:
 - · provide water supply for cleaning,
 - have a solid floor grated to a floor waste (connected to sewer), and
 - be designed to meet the requirements of council's waste policy.
- 125. Despite any requirements in council's waste policy, on-site waste vehicle access is not required where:
 - there are less than 20 dwellings, or
 - the development is Torrens title subdivided
- 126. A communal on site waste collection point is to be provided where:
 - there are 20 or more dwellings, and
 - the development is strata title subdivided.
- 127. Where vehicle access is not provided to the site, any communal on-site collection point is to:
 - be less than 10m from the street boundary,
 - be located on a surface with a gradient less than 1:20
 - not require access through a security door or gate (unless this is permitted by council waste policy).
 - have path that connects the collection area to the street boundary with a gradient less than 1:8 and free of steps for the transfer of bins to the collection vehicle
- 128. If the waste collection point is used for permanent storage of bins, it is to be screened from view from the public domain and any structure to have height no greater than 1.3m, if forward of the building line.

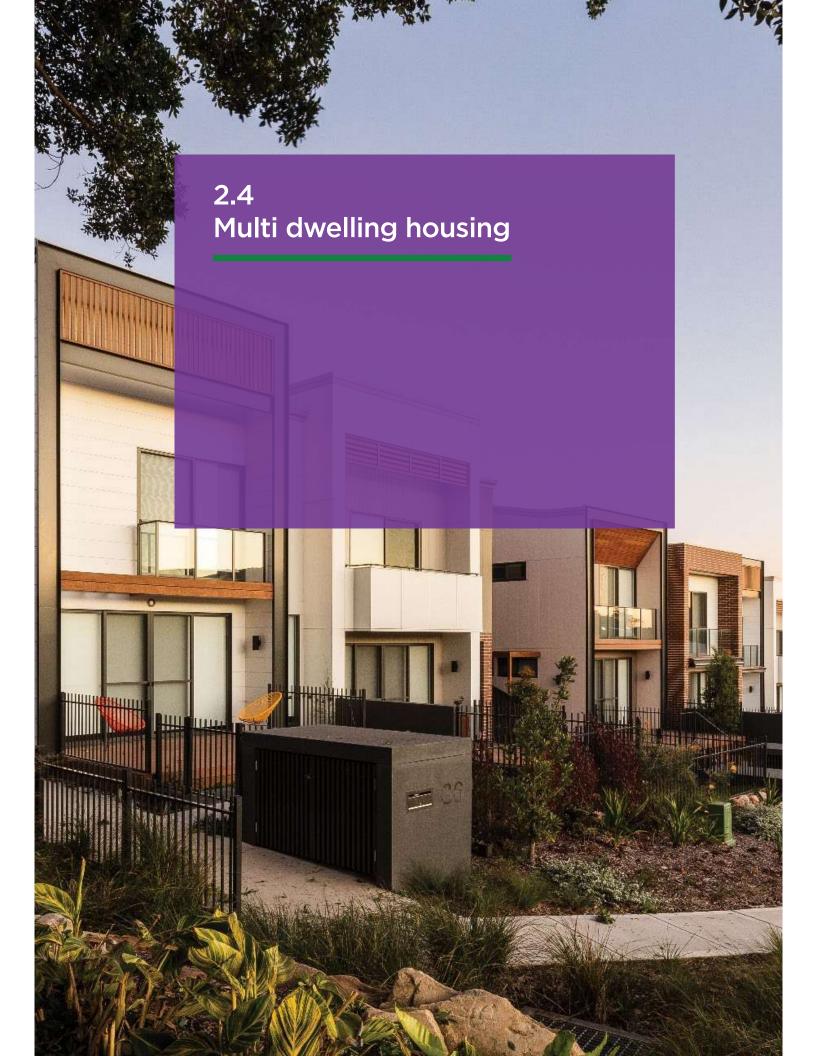
Objective 2.3W-2

Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.

- 129. Storage areas for rubbish and recycling bins are to be provided:
 - Within garages;
 - In a screened enclosure that is part of the overall building design; or
 - In the basement car park.
- 130. Communal waste areas are to be located at least 3m from any bedroom or living room window.

2.3X Universal Design

Objectives	Design Criteria
Objective 2.3X-1 Universal design features are included in dwelling design to promote flexible housing for all community members.	131. 30% of all dwellings will include the Silver Level Seven Core Liveable Housing Design Elements contained in the Liveable Housing Design Guidelines.



2.4 Multi Dwelling Housing

This Section provides the Objectives and Design Criteria for development that contains three or more dwellings on one lot of land but are not residential flat buildings.

Key characteristics of multi dwelling housing:

 Each dwelling typically has its entry and private open space located at ground level; and

Can either be attached or detached.

Strata title

Multi dwelling housing is a form of diverse low rise housing development that is strata titled. This form of development is differentiated from other low rise housing in that there is common area that consists of communal open space, private streets and internal circulation networks

These are commonly referred to as townhouses or villas.

They are strata titled either because the individual dwellings do not meet minimum lot size requirements, they may have basement car parking, or the configuration of the lot does not enable simple Torrens titling.

Car parking can be located to the front, off a rear lane, an internal street or within an underground car park.

This form of development cannot be carried out as complying development.

A development application is required for consent.



Figure 2-34 Multi dwelling housing

Development Application

A development application can be submitted where the development is permissible in the zone.

This Section is to be used with the following documents:

- Local Environmental Plan (LEP) for permissibility, development standards and controls
- Development Control plan for local character, built form controls, parking, waste and stormwater requirements
- SEPPs and regulations where relevant.

A summary of the steps required to prepare a DA is provided in Figure 2-35.

A qualified designer or a building designer that is accredited by the Building Designers Association of Australia is to certify that the design of the development is consistent with the Design Criteria in the Design Verification Statement.

Using this Section

This Section contains Objectives and Design Criteria.

Objectives: relate to the Design Principles and set out what the design is trying to achieve.

Design criteria: the measurable standards that are deemed to meet the Objective.

The development application proposal is merit assessed.

If the development application cannot meet the Design Criteria then the consent authority is to be flexible in applying these provisions and allow reasonable alternative solutions that achieve the relevant Objectives.

Section 3 provides explanatory guidance to assist with the interpretation of terms used in this Section.



Satisfy the Objectives Low Rise Housing Diversity Design Guide for DAs

Use Design Criteria as a measurable standard

Low Rise Housing Diversity

Design Guide for DAs

Prepare Design Verification Statement

Figure 2-35 Workflows: Preparing a DA

2.4A Building Envelopes

Summary Development Standard

Height of Building

The maximum building as specified in the LEP.

Objectives

Objective 2.4A-1

The building height is consistent with the desired scale and character of the street and locality and provides an acceptable impact on the amenity of adjoining properties.

Design criteria

- 1. Where the LEP or DCP does not include a maximum building height, that height of buildings is:
 - R1, R2, or RU5 zoned land: 9m
 - R3 zoned land: 11m
- 2. The maximum number of storeys (excluding basements) are:
 - R1, R2, or RU5 zoned land: 2
 - R3 zoned land: 3
- 3. On R1, R2, or RU5 zoned land the maximum height of building on the rear 40% of the site is: 5.4m.

Objective 2.4A-2

The development provides a setback from the front boundary or public space that:

- · defines the street edge;
- · creates a clear threshold and transition from public to private space;
- assists in achieving visual privacy to ground floor dwellings from the street:
- contributes to the streetscape character and landscape; and
- relates to the existing streetscape and setback pattern or the desired future streetscape pattern if different to the existing.

- 4. Refer to the DCP for front setback or envelope controls.
- 5. R2 zoned land Where the DCP does not contain front setback controls the following apply:
 - Where existing dwellings are within 40m - average of the two closest dwelling houses, dual occupancies or multi dwelling housing (terraces), or
 - Where no existing dwellings are within 40m the front setback is 3.5m.
- 6. R3 zoned land Where the DCP does not contain front setback controls the setback to primary road is 3.5m.
- 7. Where the DCP does not contain setback controls for secondary roads the following apply:

Lot Area (m²) Setback 0 - 900 2m >900 - 1500 3m >1500 5_m

- 8. Setback from classified road: 9m.
- 9. Setback from public reserve: 3m.

Objective 2.4A-3

The development provides side boundary setbacks that reflect the character and form intent of the area where is characterised by the separation of buildings.

10. Where the DCP does not contain side setback controls the side setback is 1.5m

Development that is 10m behind the front building line and greater than 4.5m above ground level (existing) s = h - 3m

's' is the minimum setback in metres 'h' is the hieght of the part of the building in meters.

Objective 2.4A-4

The development provides a rear boundary setback that provides opportunity to retain and protect or establish significant landscape trees in deep planting areas.

- 11. Refer to the DCP for rear setbacks or envelope controls.
- 12. Where the DCP does not contain rear setback controls the rear setback is 6m.
- 13. The setback to a lane is Om.

Notes:

- 1. When applying primary road, secondary road and rear setbacks the lot area refers to the lot area prior to any subdivision.
- 2. The side setbacks only apply to the side boundaries of the lot prior to any subdivision.
- 3. Setbacks do not apply to the following: access ramps, down pipes, driveways or hard standard spaces, electricity or gas meters, fascias, fences, gutters, light fittings, pathways and paving, privacy screens fixed to the building.
- 4.For multi dwelling housing, parallel roads should be treated as primary roads and dwellings provide a frontage to them.
- 5. Refer to Section 3 for an explanation of the application of setbacks, and exemptions to the setbacks.

2.3B Gross Floor Area / Floor Space Ratio

Gross Floor Area / Floor Space Ratio	The floor space ratio / gross floor area as specified in the LEP.
Objectives	Design Criteria
Objective 2.4B-1 To ensure that the bulk and scale is appropriate for the context, minimises impacts on surrounding properties and allows for articulation of the built form.	 14. Where the LEP or DCP do not contain an FSR or Gross floor area the following maximum gross floor area applies to all buildings on a lot: R1, R2, or RU5 zoned land - 50% of lot area R3 zoned land - 80% of lot area Note: For the purpose of this Design Criteria

2.4C Landscaped Area

Summary Development Standard

Landscaped Area

The minimum landscaped area as specified in the LEP.

Objectives

Objective 2.4C-1

To provide adequate opportunities for the retention of existing and provision of new vegetation that:

- contributes to biodiversity;
- enhances tree canopy; and
- minimises urban runoff.

Design criteria

- 15. Where the LEP or DCP does not contain a minimum landscaped area the minimum landscaped area is:
 - R1, R2, or RU5 zoned land 30%
 - R3 zoned land 20%.
- 16. The minimum dimension of any area included in the landscaped area calculation is 1.5m.
- 17. At least 50% of the area forward of the building line is to be landscaped area.

Objective 2.4C-2

Landscape design supports healthy plant and tree growth and provides sufficient space for the growth of medium sized trees.

- 18. An ongoing maintenance plan is to be provided as part of the landscape plan.
- 19. Minimum soil standards for plant sizes are provided in accordance with the Table below.

Tree Size	Height	Spread	Min Soil Area	Min soil depth
Large trees	>12m	>8m	10 × 10m	1.2m
Medium tree 1.0m	S	8-12m	4 - 8m	6 x 6m
Small trees	5 - 8m	<4m	3.5 x 3.5m	0.8m
Shrubs				0.5-0.6m
Groundcove				0.3-0.45m
Turf				0.2m

- 20. If the DCP does not specify tree planting of a particular size or species the following is to be provided:
 - Front: 1 tree with mature height of 5m if primary road setback is greater than 3m.
 - · Rear: 1 tree with mature height of 8m.

Objective 2.4C-3

Retain existing natural features of the site that contribute to neighbourhood character, and reduce visual and privacy impacts on existing neighbouring dwellings.

- 21. Mature trees are to be retained, particularly those along the boundary, (except those where approval is granted by Council for their removal).
- 22. Landscape features including trees and rock outcrops are retained where they contribute to the streetscape character or are located within the rear setback.

Objective 2.4C-4

Landscape design contributes to a local sense of place and creates a micro climate.

- 23. The landscape plan is to provide for a combination of tree planting - for shade, mid height shrubs, lawn and ground covers.
- 24. The landscape plan indicates that at least 50% of the overall number of trees and shrubs are species native to the region.

2.4D Local Character and Context

Objectives	Design criteria	
Objective 2.4D-1 The built form, articulation and scale relates to the local character of the area and the context.	25. Provide in the Design Verification Statement a description how the built form of the development contributes to the character of the local area using the	
	guidance in Section 3D Local Character and Context.	

2.4E Public Domain Interface

	ce
Objectives	Design criteria
Objective 2.4E-1 Provide activation and passive surveillance to the public streets.	26. The front door of each dwelling is directly visible from the street.
	27. Each dwelling has a habitable room that faces the street or public space.
Objective 2.4E-2 Front fences and walls do not dominate the public domain instead they respond to and compliment the context and character of the area (including internal streets).	28. Private courtyards within the front setback are only located within the articulation zones and / or behind the required front building line.
	 29. Front fences: Are visually permeable (no more than 50% of the allowable fence area will be solid masonry, timber or metal). Average height no greater than 1.2m. Have a consistent character with other front fences in the street. Are not to be constructed of solid metal panels or unfinished timber palings. 30. High solid walls are only used to shield a dwelling from the noise of classified roads. The walls are to have a maximum height of 2.1m and be setback at least 1.5m from the property boundary. Landscape planting is to be provided between the wall and the boundary, with a mature height of at least 1.5m.
	31. Retaining walls greater than 600mm within the front setback are to be softened by planting for a minimum depth of 600mm on the low side of the retaining wall.
Objective 2.4E-3 The secondary frontage of a development positively contributes to the public domain by providing an active edge and semi-transparency to the boundary treatment	 32. Where development adjoins public parks, open space or bushland, or is a corner site, the design positively addresses this interface using any of the following design solutions: Habitable room windows facing the public domain. Street access, pedestrian paths and building entries. Paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space. Walls fronting the public spaces are to have openings not less than 25% of the surface area of the wall.

2.4F Pedestrian and Vehicle Circulation

Objective

Objective 2.4F-1

Internal vehicle and pedestrian circulation should function like a street, minimise the dominance of the driveway, and minimise impact on habitable spaces.

Design criteria

- 33. Vehicle circulation and parking complies with AS2890.1.
- 34. Dwellings are to be connected by new internal streets and lanes which are overlooked by windows from habitable rooms and or private open space.
- 35. Where new streets or lanes are created:
 - Lanes: shared or pedestrian surfaces with a width of common area including landscape - minimum 6m.
 - · Streets: width of common area including landscape - minimum 12m.
- 36. Where less than 20 car spaces are provided reduce carriageway width to 3.5m, with passing areas as required by AS 2890.1.
- 37. Internal vehicle circulation must be:
 - at least 1m setback from a fences:
 - · at least 1m setback from another dwelling;
 - at least 2.5m setback from a window in a habitable room if the window exceeds 1m²; and
 - the setbacks should contain plants to soften edges.
- 38. Terminate driveways and streets with trees, open space or the window of a dwelling - not a garage or car space.
- 39. Streets to be designed to accommodate appropriate service vehicles likely to access the site.
- 40. Where on street parking is currently available in front of the development, the proposed driveways are located so that at least one car space remains.
- 41. Car parking not associated with a dwelling must be:
 - setback from a fence is to be at least 1m
 - setback from another dwelling is to be at least 1m
 - setback from a habitable room window is to be at least 3m if the window exceeds 1m².
 - The setbacks should contain plants.
- 42. New streets and lanes
 - maximum length of a dead end laneway - 40m.
 - · minimum width between structures -

Objective 2.4F-2 Provide safe, connected environment for pedestrians.	43. Provide safe shared spaces for vehicles, cyclists and pedestrians by including measures that reduce vehicle speeds such as changes in pavement texture at entries or key nodes, reduce demarcation between pedestrian and vehicle spaces.
	44. Pedestrian paths that are separated from an internal road or lane by a kerb or landscaped area are to be provided where there are more than 20 dwellings.
	45. Where pedestrian circulation is separated from vehicle circulation the paths are still to function like streets with pavement at least 1.5m wide, clearly identifiable dwelling entrances and clear lines of sight to create a legible and safe network.
	46. Roads and pedestrian spaces are to have lighting designed in accordance with A1158.3.1 that avoids light spill in to private spaces.
Objective 2.4F-3 Visual and environmental impacts of car parking are minimised	47. Basement car parking not to protrude more than 1m above finished ground level except at the entrance to the car park.
	48. Basement car park entrances to have a maximum width of 3.5m where there are less than 10 dwellings being serviced by the car park.
	49. The maximum height of the car park entry is to be 2.7m.

Note: Approval for a driveway crossing will be required under the Roads Act 1993, from Council. If the development has a frontage to a classified road, driveway frontages may be restricted and concurrence will be required from Roads and Maritime Services (RMS)

50. Where driveways are adjacent a tree, it is either outside the drip line or complies with the recommendations in a report prepared by a qualified arborist.

2.4G Orientation, Siting and Subdivision

Summary Development Standard

Minimum lot size for carrying out multi dwelling housing (terraces) development

The minimum lot area and / or minimum lot width as specified in the LEP.

Note: If the dwellings are proposed to be subdivided into individual Torrens title lots refer to Section 2.3

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Objective 2.4G-1

To ensure that the development site area will have sufficient area for the dwelling. vehicle access, landscaping, parking and amenity and are consistent with the desired future character of the area.

Design criteria

- 51. The minimum lot size for carrying out multi dwelling housing is:
 - the minimum dimensions for multi dwelling housing specified in a environmental planning instrument or DCP that applies to the land, or
 - if an environmental planning instrument or DCP does not specify a minimum lot dimension - 600m² and width measured at the building line of 20m.

Objective 2.4G-2

The development responds to the streetscape and respect the privacy of adjoining single dwelling houses.

- 52. Each dwelling is to have a frontage to an existing public street or new pedestrian or vehicle street or lane.
- 53. The frontage measured at the building line is to be at least 5m.
- 54. Dwellings should be orientated away from side boundaries and towards the front and rear of the lot or towards new internal streets.

Objective 2.4G-3

Reasonable solar access is provided to the living rooms and private open spaces of adjoining dwellings.

55. A window that is more than 3m from the boundary to a living room of an adjoining dwelling is to receive more than 3 hours of direct sunlight between 9am and 3pm on the winter solstice (June 21). If the window currently receives less than 3hrs direct sunlight is not reduced.

Note: Direct sunlight is measured consistent with Design Criteria 63 and is only required to one window serving the living room.

56. Where the location of the living room of an adjoining dwelling cannot be verified the proposed development is accommodated within a building envelope defined by a 35° plane springing from 3.6m above the boundary.

Objective 2.4G-4

The development responds to the natural landform of the site, reducing the visual impact and avoiding large amounts of cut and fill and minimise the impacts of retaining walls.

- 57. Unless a dwelling is over a basement, the ground floor is not more than 1.3m above ground level, and no more than 1m below ground level.
- 58. Dwellings are located to step with the topography.

Objective 2.3G-5 Independent services and utilities are available to service each lot.	59. All lots must have access to reticulated water and sewer, electricity, telecommunications, and where available gas.	
Objective 2.4G-6	60. Basement car parking should not be provided within the setbacks described in	
To minimise impacts to vegetation on adjoining properties and allow for vegetation within the setbacks.	2.4A.	
Objective 2.4G-7	61. The minimum separation between two or	
Provide adequate space between buildings to allow for landscape, provide visual separation, reduce visual bulk and daylight access between buildings.	more buildings containing dwelling on the same lot is 3m.	
	Note: Greater separation may be required for privacy.	
	62. Provide a break of 3m between buildings more than 45m long.	

2.4H Solar and Daylight Access

Objective	Design criteria
Objective 2.4H-1 To optimise sunlight received to habitable rooms and private open spaces. Solar access enables passive solar heating in winter and provides a healthy indoor environment	63. The living room or private open space in each dwelling is to receive a minimum of 2 hours direct sunlight between 9 am and 3pm on the winter solstice (June 21). Note: Direct sunlight is achieved when 1m² of direct sunlight on the glass is achieved for at least 15 minutes. To satisfy 2 hours direct sunlight, 8 periods of 15 minutes will need to be achieved - however the periods do not need to be consecutive.
To provide good access to daylight suited to the function of the room and to minimise reliance on artificial lighting and improve amenity	64. Daylight may not be borrowed from other rooms, except where a room has a frontage to a classified road.
	65. No part of a habitable room is to be more than 8m from a window.
	66. No part of a kitchen work surface is to be more than 6m from a window or skylight.
	 67. Courtyards are to be: Be fully open to the sky; and Have a minimum dimension of one third of the perimeter wall height, an area of 4m².
	68. A window is visible from 75% of the floor area of a habitable room.

2.41 Natural Ventilation

Objectives	Design criteria
Objective 2.4J-1 All habitable rooms are naturally	69. Natural ventilation is available to each habitable room.
ventilated.	70. Each dwelling is to be naturally cross ventilated.

2.4J Ceiling Height

Objective	Design criteria
Objective 2.4J-1	71. Minimum ceiling heights are:
Ceiling height achieves sufficient natural ventilation and daylight access and provides spatial quality.	 2.7m to ground floor habitable rooms. 2.7m to upper level living rooms. 2.4m to upper level habitable rooms (excluding living rooms).
	The ceiling height is measured from finished floor level to finished ceiling level.

2.4K Dwelling Size and Layout

Objective	Design criteria
Objective 2.4K-1 The dwelling has a sufficient area to ensure the layout of rooms are functional, well organised and provide a high standard of amenity.	 72. Dwellings are required to have the following minimum internal floor areas: 1 bed 65m² 2 bed 90m² 3+ bed 115m²
	73. The minimum internal areas outlined above only contain one bathroom. The minimum area of each additional bathroom is 5m ² added onto the minimum dwelling area.
	74. The minimum area of any additional bedroom is 12m². The area of each additional bedroom is then added to the minimum internal floor area contained in Design Criteria 72.
	75. Kitchens should not be part of a circulation space such as a hallway.
Objective 2.4K-2 Room sizes are appropriately sized for the intended purpose and number of occupants.	76. One bedroom has a minimum area of 10m² excluding space for a wardrobe.
	77. Bedrooms have a minimum dimension of 3m in any direction (excluding wardrobe space).
	 78. Combined living and dining rooms are to have a minimum area of: 1 and 2 bed 24m² 3+ bed 28m²
Low Rise Housing Diversity Design Guide for Development Apr	79. Living room or lounge rooms are to have a minimum width of 4m (excluding fixtures).

2.4L Principal Private Open Spaces

Objectives	Design criteria
Objective 2.4L-1 Dwellings provide appropriately sized private open space and balconies to enhance residential amenity.	80. The area of principal private open space provided for each dwelling is at least 45m² with a minimum dimension of 5m.
	81. Provide a consolidated paved area of 12m² with minimum dimension of 3m.
Objective 2.4L-2 Principal private open space and balconies are appropriately located to enhance liveability for residents.	82. The principal private open space is located behind the front building line.
	83. The principal private open space is to be located adjacent to the living room, dining room or kitchen to extend the living space.
	84. 8m² of the private open space should be covered to provide shade and protection from rain.

2.4M Storage

Objectives	Design criteria
Objective 2.4M-1 Adequate, well designed storage is provided in each dwelling.	 85. In addition to storage in kitchens, and bedrooms, the following storage with a minimum dimension of 500mm is provided: 1 bed 6m³ 2 bed 8m³ 3+ bed 10m³
	86. At least 50% of the required storage is to be located inside the dwelling.
	87. Storage not located in dwellings is secure and clearly allocated to specific dwellings if in a common area.

2.4N Car and Bicycle Parking

Objectives	Design criteria	
Objective 2.4N-1 Car parking is provided appropriate for the scale of the development	required for mu the DCP that a	to be provided at the rate ulti dwelling housing within pplies to the land. If there a DCP - 1 space is to be welling.
	the developme	is to be provided where nt contains more than 5 ide 1 space per 5 dwellings.
	90. Car parking spa comply with As	aces and circulation are to S 2890.1:2004.
Objective 2.4N-2 Parking facilities are provided for bicycles.		is to be provided for the of at least 1 bicycle per
Objective 2.4N-3 Visual and environmental impacts of car parking and garages do not dominate the streetscape and have an appropriate scale relationship with the dwelling	more than 1m a	parking is not to protrude above finished ground level ntrance to the car park.
	93. The maximum basement car phigh by 3.5m w	park entry is to be 2.7m
	tree, it is either complies with t	vay is adjacent an existing outside the drip line or the recommendations in a d by a qualified arborist.
		a car space from a dary or parallel road is to
	Setback of dwelling from road >4.5m <4.2m	Maximum width of garage door openings 1m behind the building line 5.5m
		width of all garage doors y or secondary road:
	Lot Width	Maximum Width of Garage Door Openings
	12m - 15m	3.2m
	>15m - 20m	6m
	>20m - 25m	9.2m
	>25m	12m

2.40 Visual Privacy

Objectives

Objective 2.40-1

The separation of windows and terraces, decks and balconies within a site and to adjoining existing or future buildings provide a degree of visual privacy without the reliance on fixed screening

Design criteria

- 97. Orientate living room windows, primary private open space to the street or rear.
- 98. At least one windows for each habitable room is provided without the need for a privacy screen.

>3m

99. A privacy screen is required when:

Distance from Finished Floor Level Boundary Above Ground Level (Existing) <3m 1 - 3m <6m

Distance from Windows in Dwelling on Same

(Existing)

1 **-** 3m <6m >3m <12m

Note: This does not apply to bedroom windows that have an area less than 2m² or windows that have a frontage to a road or public open space.

100. A privacy screen is required at the edge of that part of a terrace, deck, balcony or verandah that is parallel or faces towards a side or rear boundary

Distance from **Boundary**

Finished Floor Level Above Ground Level (Existing)

Finished Floor Level

Above Ground Level

<3m

1 - 3m

<6m

>3m

Distance from Windows in Dwelling on Same Lot

Finished Floor Level **Above Ground Level** (Existing)

1 - 2m <6m

<12m

>2m

Note: This does not apply to a terrace, deck, balcony or patio that has an area less than 3m² or has a frontage to a road or public open space.

Objective 2.40-2

Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space

101. Where privacy screens are provided to windows, they must not cover part of the window required to meet the minimum daylight or solar access requirements, or restrict ventilation.

2.4P Acoustic Privacy

Objectives	Design criteria
Objective 2.4P-1 Noise transfer is minimised through the siting of buildings and building layout	102. Electrical, mechanical, hydraulic and air conditioning equipment is housed so that it does not create an 'offensive noise' as defined in the Protection of the Environment Operations Act 1997 either within or at the boundaries of any property at any time of the day.

2.4Q Noise and Pollution

Objectives	Design criteria
Objective 2.4Q-1 Ensure outside noise levels are controlled to acceptable levels in living and bedrooms of dwellings	103. Any development within the 20 ANEF contour is to be constructed to comply with AS 2021:2015 Acoustics - Aircraft Noise Intrusion.
	 104. Dwellings that are within 100m of a classified road or 80m from a rail corridor are to have LAeq measures are not exceeding: In any bedroom: 35dB(A) between 10pm-7am. Anywhere else in the building (other than a kitchen, garage, bathroom or hallway): 40dB(A) at any time. This can be achieved by: A full noise assessment prepared by a qualified acoustic engineer Complying with relevant noise control treatment for sleeping areas and other habitable rooms in Appendix C of <i>Draft Guide to Infrastructure Development Near Rail Corridors Busy Roads</i>.

Note: Development that is on land immediately adjacent a rail corridor and development that involves penetration of ground to a depth of 2m within 25m of a rail corridor may be integrated development. Refer to the *State Environmental Planning Policy (Infrastructure)* 2007.

2.3R Architectural Form and Roof Design

Objectives	Design Criteria
Objective 2.4R-1	105. Provide in the Design Verification
The architectural form is defined by a balanced composition of elements. It responds to internal layouts and desirable elements in the streetscape.	Statement a description as to how the architectural form reduces the visual bulk and responds and provides a cohesive design response.
	Note: Refer to Section 3 for guidance.

Objective 2.4R-2

The roof treatments are integrated into the building design and positively respond to the street.

- 106. The roof design is integrated harmoniously with the overall building form.
- 107. Skylights and ventilation systems are integrated into the roof design.

2.45 Visual Appearance and Articulation

Objectives	Design criteria
Objective 2.4S-1 To promote well designed buildings of high architectural quality that contribute to the local character	108. Provide in the Design Verification Statement a description as to how the aesthetics and articulation contribute to the character of the local area. Note: Refer to Section 3 for guidance.
	 109. The development may have a primary road articulation zone that extends up to 1.5m forward of the minimum required setback from the primary road. The following elements can be located in the articulation zone: An entry feature or portico. A balcony, deck, pergola, terrace or verandah. A window box treatment. A bay window or similar feature. An awning or other feature over a window. A sun shading feature.

2.4T Pools and Detached Development

Objectives	Design criteria
Objective 2.1T-1 The location of the swimming pools and spas minimise the impacts of adjoining properties	 110. Swimming pools and spas are to have a maximum height above ground level (existing): At the water line - 1.2m, At the top of the coping - 1.4m, and Where the coping is more than 300mm wide - 600mm.
	111. Swimming pools and spas are to be located in the rear yard with a minimum setback of 1m from any side or rear boundary.
	112. The swimming pool pump must be located in an enclosure that is sound proofed.

• An eave.

Objective 2.1T-2

The location of the detached development minimise the impacts of adjoining properties

- 113. Maximum height above ground level (existing) 4.5m
- 114. A detached studio with a frontage to a rear lane or parallel road may have a height of 6m.
- 115. Maximum floor area for each dwelling:
 - generally: 45m²
 - detached studios: 36m²
- 116. Where the DCP does not contain setbacks for detached development, side setbacks are the same as for the dwelling except for the following:
 - side setback: 0.9m, or
 - side setback with wall height less than 3.3m: Om, and adjoining lot building is <0.9m from boundary and building wall is of masonry construction with no windows,
 - side setback of detached studio with frontage to a lane: Om
 - side setback of detached studio without a frontage to a lane:

Lot Width at building line	Rear setback
0 - 18m	900mm
>18m	1.5m

117. Where the DCP does not contain setbacks for detached development, rear setbacks are:

Lot Area	Rear setback
0 - 900m²	900mm
>900 - 1500m²	1.5m
>1500m ²	2.5m

118. The maximum floor level of a detached deck, patio, pergola or terrace that is less than 0.9m from the side boundary is 0.6m above ground level (existing).

Notes:

- 1. A child-resistant barrier must be constructed or installed in accordance with the requirements of the Swimming Pools Act 1992
- 2. Privacy and building separation and other Design Criteria still apply.

2.4U Energy Efficiency

Objectives	Design criteria
Objective 2.4U.1 Development incorporates passive environmental design	119. Provide an outdoor area for clothes drying that can accommodate at least 16 lineal metres of clothes line for each dwelling.
	120. Any clothes drying area should be screened from public and communal areas.

Note: A DA for a dwelling is required to have a BASIX Certificate that applies a minimum energy consumption target.

2.4V Water Management and Conservation

Objectives	Design criteria
Objective 2.4V-1	121. A stormwater system is to:
Urban stormwater is treated on site before being discharged to receiving waters	 The system must: Comply with requirements in the DCP that applies to the land. Be approved (if required) under s.68 of the Local Government Act 1993).
Objective 2.1V-2 Flood management systems are integrated into site design	122. Detention tanks are to be located under paved areas, driveways or in basements.

Note: A DA for a dwelling is required to have a BASIX Certificate that applies a minimum water consumption target.

2.4W Waste Management

Objectives

Objective 2.4W-1

Waste storage facilities meet the needs of the residents, are easy to use and access and enable efficient collection of waste

Design criteria

- 123. Provide storage space for the type and number of bins designated in council's waste policy (or DCP).
- 124. Where waste storage is provided in a communal area, access to this waste area is to be provided for all residents without crossing a private lot.
- 125. Where waste storage is provided in the basement car park, a maximum ramp gradient of 1:6 is to be provided to the waste collection point.
- 126. Where a rear lane has provision for waste collection trucks used by council, the collection point is to be from the rear lane.
- 127. Despite any requirements in council's waste policy, on-site waste vehicle access is not required where:
 - there are less than 20 dwellings, or
 - the development is Torrens title subdivided
- 128. Where vehicle access is not provided to the site, any communal on-site collection point is to:
 - be less than 10m from the street boundary,
 - be located on a surface with a gradient less than 1:20
 - not require access through a security door or gate (unless this is permitted by council waste policy).
 - have path that connects the collection area to the street boundary with a gradient less than 1:8 and free of steps for the transfer of bins to the collection vehicle
- 129. If the waste collection point is used for permanent storage of bins, it is to be screened from view from the public domain and any structure to have height no greater than 1.3m, if forward of the building line.

Objective 2.4W-2

Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents

- 130. Storage areas for rubbish and recycling bins are to be provided:
 - Within garages;
 - In screened enclosure that is part of the overall building design; or
 - In the basement car park.
- Communal waste areas are to be located at least 3m from any bedroom of living room window.

2.4X Universal Design

Objectives	Design criteria
Objective 2.4X-1 Universal design features are included in dwelling design to promote flexible housing for all community members	132. All dwellings are to include the Liveable Housing Design Guideline's Silver level universal design features.

2.4Y Communal Areas and **Open Space**

Objectives	Design criteria
Objective 2.4Y-1 Adequate area for communal open space is provided that enhances residential amenity.	133. Where more than 10 dwellings are proposed a communal space with minimum area of 5% of the site area with a minimum dimension of 8m is to be provided for active communal open space.
	134. The active communal open space is at least 3m from a habitable room of a dwelling on the lot.
	135. The active communal open space is to receive at least 2hrs of direct sunlight between 9am and 3pm at the winter solstice (June 21) to 50% of the required area.
Objective 2.4Y-2 Communal areas are designed to enhance residential amenity and maximise safety and connectivity to the dwelling and promote social interaction between residents.	136. Communal areas and open space are visible from habitable rooms and private open space while maintaining visual privacy.
	137. Where communal open space is provided, it has a direct connection to the internal street along the longest edge.
	138. Public through site links should have direct line of site between public streets.
Objective 2.4Y-3 Common circulation spaces achieve good amenity with access to daylight and ventilation	139. Daylight and natural ventilation is provided to all common circulation above ground.
	140. Provide lighting to common spaces .