WSU Milperra Site Specific Development Control Plan (DCP)

Land to which this DCP applies

Chapter *[insert chapter number]* of this Development Control Plan (DCP) applies to the Subject Site being the properties at 2 and 2A Bullecourt Avenue Milperra, known as the Western Sydney University (WSU) campus at Milperra, for development for the purposes of permissible residential accommodation within the R1 General Residential Zone. For other development types, the other parts of this DCP will apply.

Note: The C2 Environmental Conservation zoned land in the north-east corner of the subject site is not within the scope of this DCP.

Table 1: Description of Subject Site

Address	Lot and DP	Site Area (approximately)	
2 Bullecourt Avenue, Milperra	Lot 105 DP 1268911	202m ²	
2A Bullecourt Avenue, Milperra	Lot 1 DP 101147	19,640m ²	



Figure 1: The site context, with the subject site outlined in red

1.1. How to use this DCP

This DCP provides the framework for future development on the Subject Site. It contains objectives and controls that will deliver the desired outcome for future development. Any application for future development is to demonstrate how it meets the objectives and controls as set out in this DCP. The controls contained in this DCP provide clear and measurable benchmarks for how the objectives can be practically achieved.

Council may grant consent to a proposal that does not comply with the controls in this DCP, providing the objectives and intent of the controls is achieved. Where variation from the DCP controls is proposed, it must be justified in writing and indicate how the development is meeting the objectives of the relevant control and demonstrate consistency with section 2: Development Vision.

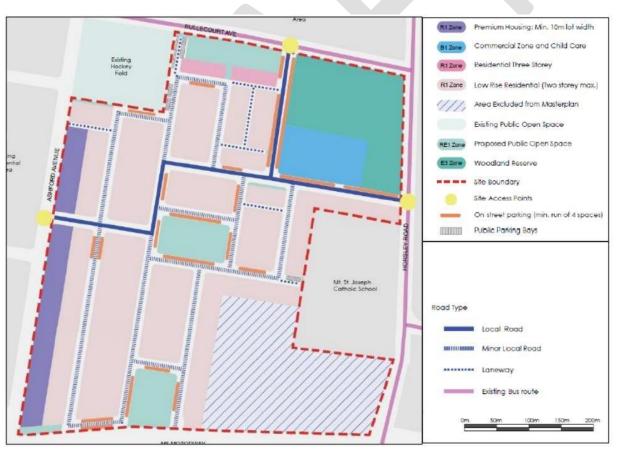


Figure 2: Concept Plan (Source: Planning Proposal)

2. Application

This DCP applies to development for the purpose of premium housing, a commercial and childcare precinct and residential two and three Storey dwellings within the subject site of this DCP.

For other development types, it is advised that the Canterbury Bankstown Local Environmental Plan will take precedence over matters contained in this Site Specific DCP (SSDCP). If there are any inconsistencies between the objectives and controls in this chapter and any other objectives and controls in this DCP, the objectives and controls in this chapter will prevail, but only to the extent of that inconsistency.

3. Development vision

The site will accommodate a residential neighbourhood for up to 430 comprising a diverse mix of housing types, located adjacent to public open space and community and social gathering destinations. New tree planting will be provided in the public domain, including streets and public parks and within private development to ensure an increased canopy cover across the site and a leafy neighbourhood character.

The proposed development will aim to retain and conserve the existing streetscape and remnant vegetation whilst providing a positive contribution to the existing and future residential context. The redevelopment of the precinct will create new destinations for public interaction by integrating the new residential neighbourhood with the existing community through the creation of new proposed open spaces and permeable streets, pedestrian paths and cycleways that increase connectivity across the precinct.

Additionally, a neighbourhood centre will cater for small scale retail and businesses whilst supporting the precinct's existing childcare services, providing a high-quality community meeting point. The remanent Cumberland Plain woodland in the north eastern corner of the site will be retained and maintained.

3.1. Key Objectives

- **O1** To provide a new neighbourhood that is compatible with the surrounding land uses and responds to site constraints
- **O2** To provide an affordable housing stock at a rate of 5% of dwelling yield or via monetary contribution.
- **O3** To permit small dwellings capped at 75m2 as part of dual occupancy and multi-dwelling housing on-site.

- **O4** To deliver a range of residential dwellings typologies in a planned residential community.
- **O5** To provide new public open space and amenities for the future population whilst preserving the remnant Cumberland Plain Woodland in the north-eastern corner of the site.
- **O6** To establish a small neighbourhood centre centred around the retention of the existing childcare facility on-site.

3.2. Key Principles

The relocation of the Western Sydney University Milperra Campus to the purpose-built Bankstown City Campus will provide an opportunity for the site to be transformed into a master planned residential neighbourhood, providing a variety of high-quality housing opportunities, public open space, enhanced environmental outcomes and improved connectivity.

The following key principles pertain to the vision of the site:

- **Diversity of housing types**: The proposal will provide a diversity of housing types to respond to changing family structures and increased inter-generational housing needs of the community. A mix of low-rise housing types will include terraces, semi-detached houses, and freestanding homes. Buildings will be designed to activate streets and provide natural surveillance of the public domain. All dwellings will achieve high amenity in terms of adequate private open space, landscape, and solar access mid-winter.
- **Community gathering spaces**: Proposed open spaces will importantly cater for social and communal needs of residents attached to the residential complexion established through new high-quality housing developments. The existing childcare centre will be integrated into a neighbourhood centre which will include small scale retail/businesses including a café/restaurant.
- A connected network of open spaces: There will be a network of new tree-lined pedestrianfriendly streets that connect shared facilities and open spaces to encourage residents to engage with each other and the broader Milperra community. New and upgraded parks are positioned across the site, co-located with mature trees. The existing vegetated woodland area at the corner of Bullecourt Avenue and Horsley Road will be retained and will contribute significantly to the existing street character. These landscape and public realm components will anchor the neighbourhood and contribute to a sense of community.
- Sensitive interfaces: The proposal will use landscaped, green streets and verges to sensitively integrate with the surrounding neighbourhood. The proposed housing along Ashford Avenue will be limited to a maximum of two levels and comprise freestanding housing. Attached and semi-detached housing will visually and acoustically screen the neighbourhood from adjoining industrial/employment uses and the adjoining school.

• **Tree Canopy and Sustainability**: Contemporary sustainability features will be integrated into buildings and the public domain, including a 30% tree canopy target and management of water in the landscape to mitigate against the effects of climate change and urban heat. Mature high-value trees across the site will be retained where possible.

4. Development Controls: Subdivisions

4.1. Dwelling Yield

The Subject Site has a total maximum dwelling cap of 430 dwellings. Refer to Clause *[insert clause number when confirmed]* in the Canterbury Bankstown Local Environmental Plan *[insert year]*.

- **C1** A summary of the running total of dwellings proposed and constructed must be included in the Statement of Environmental Effects submitted with each Development Application that proposes the construction of residential accommodation.
- 4.2. Minimum Residential Lot Size

The BLEP states a minimum subdivision lot size of 300m². Council may consider an application for subdivision of land to create lots less than 300m² where the subdivision application consists of a minimum of four lots and incorporates a dwelling design for each lot. This approach will allow for a comprehensive assessment of streetscape, solar access, parking and character and design integration.

Note: No lot size controls are proposed for the Zone B1 Neighbourhood Centre, Zone RE1 Public Recreation and Zone C2 Environmental Conservation Zones.

Objectives

- **O1** To provide an appropriate interface with existing residential neighbourhood and heritage area.
- **O2** To facilitate a variety of dwelling types and appropriate density across the site.
- **O3** To apply additional density on the site in a manner that does not adversely impact the amenity of future residents.

Controls

- **C1** Reduced lot size controls apply for attached dwellings, semi-detached dwellings, and detached dwellings where the following additional requirements are met:
 - (a) The lots do not front to Ashford Avenue;

- (b) The subdivision includes the creation of a minimum of four lots; and
- (c) The subdivision is supported by a dwelling design for each proposed lot to provide certainty of the dwelling outcome and amenity.
- **C2** The minimum lot size and lot frontage width for each housing lot type shall be consistent with Table 2.

Table 2:	Minimum lot size	Minimum Lot Frontage
Development Type		
Terraces (3 Storey)	150m2	5m if rear loaded 7m if front loaded
Attached Dwelling (2 Storey)	150m2	5m if rear loaded 7m if front loaded
Semi-detached dwelling	210m2	8m
Dwelling House	250m2	9m
Dwelling House	300m2	10m
(Fronting Ashford Avenue)		

- C3 Rear studio lots are not permitted to be sub-divided
- C4 Minimum lot width of 12m is required for double garages to detached dwellings.
- **C5** Each new lot must be able to be service and meet the requirements of Council's standard waste collection service

4.3. Street layout, access and parking

Objectives

- **O1** To provide a permeable Street network that connects to existing residential neighbourhoods.
- **O2** To establish a framework for pedestrians and cyclists and encourage sustainable travel behaviour.
- **O3** To ensure that street sections are of sufficient width to support medium to large street trees within the road reserve.
- O4 To ensure parking is managed across the site and does not dominate the streetscape
- **O5** To provide safe access for service vehicles.

Controls

- **C1** C1 Road network to be provided is consistent with the Concept Masterplan *(Refer to Figure [insert final figure number])*.
- C2 Local roads are to measure 18m in width and incorporate the following;
 - (a) 11m wide road carriageway
 - (b) 3.5m verge width on each side (including 1.5m wide footpath & 2m shared path on either side).
- C3 Minor Local roads are to measure 17.2m in width and incorporate the following;
 - (a) 10.2m wide road carriageway
 - (b) 3.5m verge width on each side (including 1.5m wide footpath on one side of road).
- C4 Laneways are to measure 8.5m in width and incorporate the following;
 - (a) 6m wide road carriageway
 - (b) 1.25m verge on each side (to allow for bin placement for council collection). The remainder is to be landscaped.

[Figure to be inserted post-exhibition to illustrate the above controls]

Figure xx: Local Road cross-section

[Figure to be inserted post-exhibition to illustrate the above controls]

Figure xx: Minor local road cross-section

[Figure to be inserted post-exhibition to illustrate the above controls]

Figure xx: Laneway cross-section

- **C5** The entrance from Bullecourt Avenue is to have a median with trees down its full length.
- **C6** The existing entry along Ashford Avenue is to provide a pedestrian crossing point as supported by an appropriately sized pedestrian island that does not compromise vehicular access, if this access point is retained.
- **C7** Provide laneways to separate waste services, minimise driveway crossings and impediments to traffic flow along Local Roads. *Note: This control does not replace the need to have off-street parking, particularly for sites contained within the B1 zone.*
- **C8** Provision of laneways are to ensure a through link is provided and not to result in dead end streets.
- **C9** All dwelling houses are to provide at least one off–streetcar parking space.
- **C10** A car parking space may comprise of a garage or open car parking space.
- **C11** Front access car parking spaces are required to be setback at least 5.5 metres from the road boundary.

- **C12** Front access car parking spaces are required to be setback at least 1 metre behind the front building line.
- **C13** Rear access car parking spaces require 1m setback from the rear lane boundary.
- **C14** On corner lots, side access car parking spaces are required to be setback at least 3 metres from the secondary street boundary.
- **C15** On double frontage lots the car parking can be located on either frontage but not on both.

[Figure to be inserted post-exhibition to illustrate the above controls]

Figure xx: On-site car parking design requirements

4.4. Public domain & tree canopy

Objectives

- **O1** To maximise tree canopy and retain as many existing valuable trees as possible.
- **O2** To maximise pedestrian connectivity across the site.

Controls

- **C1** A tree canopy target of 40% should be achieved across site through retention of existing trees and street tree planting. *Note: for the purpose of determining the requirement of 30% tree canopy cover, the vegetation identified within the 'Woodland Area' shown in Figure 2 [confirm figure number in final] is excluded.*
- **C2** Ensure large or medium tree species are selected and capable of shading the road corridor. To achieve maximum canopy cover in streets (excluding intersections), street trees should have the following minimum mature canopy diameter, taking into account driveways and street movement:
 - (a) large tree = 16m diameter
 - (b) medium tree = 8m diameter
- **C3** Public domain plantings (including parks and street trees) must include larger container sizes greater than 200 litres and comprise a mix of large locally indigenous trees that conform with the Cumberland Plain Woodland Community.
- **C4** In addition to the landscaping objectives and controls in Part B, a landscape plan by a qualified landscape architect is required for public domain works including parks and all open space and stormwater detention areas.
- **C5** Pedestrian links provided are generally consistent with the Concept Masterplan (Figure 2 [confirm figure number in final].

- **C6** Maximum block length of 180m before providing a pedestrian through site link connection. These connections should ideally line up with adjacent streets to allow for long views through the site. Through site links are to;
 - (a) Be open to the sky.
 - (b) Be accessible to pedestrians 24 hours a day and designed to be accessible for people of all abilities.
 - (c) Provide a safe environment, including appropriate lighting and clear straight sightlines.
 - (d) Be designed to ensure pedestrian safety through the limiting of vehicular access (other than temporary maintenance or emergency vehicles).
 - (e) Through site links are to be provided as an easement on title for public right of way.
- **C7** A 3:1 replacement ratio is to be implemented where any trees are removed from the envisaged public domain with a mix of large locally indigenous trees that conform with the Cumberland Plain woodland Community.
- **C8** Vehicle access to new residential lots must be design to reduce the impact of new driveways on existing street trees along the eastern boundary of Ashford Avenue
- 4.5. Open space

Objectives

- **O1** To ensure that open space provided is generally consistent with the Concept Masterplan (Figure 2 *[confirm figure number in final]*).
- **O2** To ensure that adequate open space to cater for the needs of the new residential community is provided
- **O3** To ensure that the design of publicly accessible open space is of a high quality, provides for a variety of both passive and active uses, and can evolve over time to respond to community needs.

Controls

- **C1** The following approximate open areas to be provided, consistent with Figure 2[confirm figure number in final]:
 - 4,600m2 public park on its northern boundary fronting Bullecourt Avenue
 - 5,380m2 central park in the centre of the site. This park <u>to</u> be co-located with existing mature trees as well as providing a playground.
 - 4,860m2 park of bordering the sites southern boundary to the M5 Motorway.
- **C2** Open spaces should be clearly designated and located where they can be easily observed by people.
- **C3** Open spaces should be co-located with existing high value trees where possible.

C4 Detention basing/drainage swale located on the south-western corner of the site to be vegetated with local indigenous vegetation to control and filter stormwater runoff within a coastal wetland proximity area.

4.6. Crime Prevention through Environmental Design (CPTED)

Objectives

- **O1** To create a physical environment that are safe and encourages a feeling of safety.
- **O2** To design buildings and communal areas to encourage a sense of ownership by the occupants and users.
- **O3** To ensure that new development is designed to reduce crime risk and minimise opportunities for crime.

Controls

- **C1** Dwelling entrances should be oriented towards the street, or both streets if located on a corner. Front doors must be visible from the public domain.
- C2 Habitable rooms should be located at the front of dwellings.
- **C3** Pathways from the street frontage and entrances to dwellings should be direct. All barriers beside pathways should be low in height or permeable, including landscaping and fencing etc.
- **C4** Open spaces should be clearly designated and located where they can be easily observed by people.
- **C5** Provide external lighting (in accordance with AS1158) that makes any potential 'hiding spots' visible.
- **C6** Any fences forward of the building line have a maximum height of 1.1m.
- **C7** Development adjacent to land zoned C2 Environmental Conservation should not compromise visibility, sight lines and lighting and should promote active edges and the elimination of entrapment spots where practicable.

4.7. Stormwater

Objectives

- **O1** To control stormwater runoff and minimise discharge impacts on adjoining properties and into natural drainage systems before, during and after construction.
- **O2** To prevent flood damage to the built and natural environment, inundation of dwellings and stormwater damage to properties.
- **O3** To ensure that proposed development does not adversely affect the operational capacity of the downstream stormwater system.
- **O4** To minimise energy use, water use, waste generation and urban heat effects.

O5 To ensure an integrated water cycle management approach through water-sensitive urban design principles.

Controls

- **C1** A Detailed Water Management Plan is to be provided with the first Development Application for proposing subdivision of the site and the first Development Application proposing construction of residential accommodation, that addresses the following provisions:
 - (a) An alternative water supply such as stormwater runoff and/or reticulated recycled water to be used for the primary irrigation water source with potable (town) water as a backup, or if this is not achievable, how an irrigated water supply prioritises use of alternative water sources over potable (town) water supplies.
 - (b) A smart irrigation system is adopted which relies on rain and/or soil moisture sensors and night scheduling. In extreme heat situations, the irrigation system should be capable of prioritising trees that can provide shade.
 - (c) Drip irrigation lines (above or sub-surface) are used.
- **C2** Stormwater management should include biofiltration, such as vegetated swales overlaid with soil-based filter medium, to improve discharge water quality.
- 4.8. Acoustic

Objectives

O1 To mitigate acoustic impacts to and from sensitive interfaces in a way that does not negatively impact the amenity of future residents.

Controls

- **C1** Development within the noise sensitive areas identified in Figure *[confirm figure number in final]* must include noise mitigation measures recommended by a Noise Impact Assessment submitted with the Development Application.
- **C2** The Noise Impact Assessment submitted for lots within the noise sensitive areas is to confirm whether lots beyond those nominated in Figure xx require noise mitigation measures.

Note: The acoustic assessment submitted with the planning proposal indicated the internal living areas of the residential lots along the southern part of the site would exceed noise criteria. Mitigation measures including acoustic treatments will be required to achieve the relevant internal noise level criteria. Mechanical ventilation may also be required to meet the requirements of the Building Code of Australia in order to achieve compliance with the relevant noise criteria. Future development applications will need to demonstrate compliance with the requirements of the applicable noise criteria. This will ensure that any potential impacts of road noise are addressed and mitigated at design stage.

[Insert figure post-exhibition showing location of lots subject to the above control]

Figure xx: Noise sensitive areas requiring submission of noise mitigation measures

- 5. Development Controls: Dwellings
- 5.1. Residential Development

Objectives

- **O1** To ensure the amenity of proposed residential properties.
- **O2** To ensure the built form is of a compatible height with surrounding residential neighbourhoods.

Controls

C1 Proposed development must be consistent with Table 3 below.

Table 3: Residential Development Controls						
Туре	Height	Min. Lot	Min. Lot Frontage	Min. Private Open Space	Total	Landscaped
	in Storeys	Size	Trontage	openopue	Landscap ed Area	Area within Front Setback
Terraces (3 Storey)	3	124m ²	5m	15m ² (minimum width of 2.5m2)	15%	25% or 0% where front boundary is to a laneway
Attached dwelling (2	2	150m²	5m	15m² (minimum width of	See C5 below	25%

Storey)				2.5m2)		
Semi- detached dwelling	2	210m ²	8m	24m ² (minimum width of 3m)	25%	25%
Dwelling House	2	250m ²	9m 12m minimum if double garage	24m ² (minimum width of 3m)	25%	45%
Dwelling House (fronting Ashford Avenue)	2	300m ²	10m	24m ² (minimum width of 3m)	25%	45%

- **C2** Three storey dwellings are limited to locations shown on the Concept Plan (figure 2).
- C3 Private open space must be directly accessible from a living area.
- **C4** Private open space must be located behind the building line, except for lots that have a north to south orientation.
- C5 Landscaping for attached dwellings is to be as follows;
 - (a) For lots <200m², minimum allocation of site area for landscaping is 15% of the total site area,
 - (b) For lots >200m²-250m2, minimum 20% of total site area
 - (c) For lots >250m², minimum 25% of total site area
- **C6** At least 50% of all residential lots must contain a deep rooted shade tree capable of a height of at least 8m and a 8m canopy spread at maturity. It is Council's preference that the tree is located at the North-western orientation of the lot where practicable.

5.2. Setbacks

Objectives

O1 To provide appropriate setbacks to street frontages and common boundaries that maximise the retention of deep soil zones and provide a buffer to residential uses

- **O2** To provide setbacks to the North and west facing boundaries to ensure amenity, deep soil and safety can be achieved
- O3 To ensure all façade and building treatments are contained within the lot boundary

Controls

C1 Proposed development types must be consistent with Table 3 below;

Table 4: Setback requirements						
Development Type	Minimum Front Setback	Minimum Secondary Frontage	Minimum Side Setback	Minimum Rear Setback	Zero Lot Line	
Attached dwelling or Terrace	4.5m, or 3m when facing open	0.9m or if the secondary	Wall not attached to other	Min 4m for all storeys.	See C3 below.	
	space or drainage land	frontage is to a	dwelling: min 0.9m			
	Garage setback 5.5m	laneway, 0.5m.	Attached or abutting wall; 0m.	Garage setback 0.5m to rear lane		
detached 3m dwelling facin space	4.5m, or 3m when facing open space or drainage land	2m	Wall not attached to other dwelling: min 0.9m Attached or	Ground floor: 4m First Floor: 6m		
			abutting wall; Om.	Garage to rear laneway: 0.5m		
	Garage setback 5.5m					

Dwelling	4.5m or 3m	2m	0.9m.	Ground	Permitted
House	when facing open space or drainage land		Zero Lot: 0m (for maximum length of 14m)	floor: 4m First Floor: 6m	for a maximum length of 14 metres.
	Garage setback 5.5m			Garage to rear laneway: 0.5m	

- **C2** All eaves and gutters will be contained within the lot boundary of the associated dwelling.
- **C3** A minimum building setback of 10m must be provided along North and west facing boundaries to allow for the planting of deep-rooted shading trees
- C4 Zero lot line controls for attached Dwellings are as follows:
 - (a) Permitted for a maximum length of 21 metres on the ground floor.
 - (b) Permitted for a maximum length of 16 metres for the 2nd and 3rd storey.

5.3. Solar access and cooling

Objectives

- **O1** To ensure the amenity of proposed residential properties.
- **O2** To ensure passive cooling approaches are implemented in all new developments

Controls

C1 Proposed development must retain a minimum of 3 hours of sunlight between 8.00am and 4.00pm on 21 June for existing primary living areas and to 50% of the principal private open space.

5.4. Landscaping

Objectives

- **O1** To ensure that the sites layout is designed in a manner that ensures mature street trees are retained and increases the opportunity for future landscaping opportunities.
- **O2** To ensure suitable shadeShade and tree canopy are provided across the site to reduce the Urban Heat Island effect.

- **O3** To establish a landscape buffer between the sites' Commercial precinct and Child Care services along Ashford Avenue and the proposed low density residential sues on the eastern section of the site.
- O4 To ensure where trees are removed from the public domain, they are replaced.
- **O5** To maintain significant landholdings along the southern boundary of the site to establish deep soil planting appropriate for that location.
- **O6** To preserve the existing C2 Environmental Conservation Woodland Species within the site.

Controls

- **C1** Landscape areas and private open space to be consistent with Table 2.
- **C2** Landscaping should consist of a mix of high canopy trees, low native under-storey planting
- **C3** A minimum of 2 trees on lots greater than 200m2 and 1 tree on lots with an area less than 200m2. Pot size at planting should be min 75L. At least one tree must be in the front setback.
- **C4** Landscaped areas must comprise of deep soil zones and be free from any part of a building including basements, water management devices and attached ancillary services.
- **C5** A minimum 3:1 tree replacement ratio applies where any trees are proposed to be removed from the public domain (not proposed residential lots), with a suitable replacement to be provided of large locally indigenous trees that conform with the Cumberland Plain woodland Community.
- **C6** Replacement trees to be provided under Control C5 above must have a minimum container size of 75L.
- **C7** For development directly adjacent to C2 Environmental Conservation Zone land, a vegetation management plan must be provided.

5.5. Parking

Objectives

- **O1** To ensure an appropriate amount of car parking is provided to cater for the needs of the future residents and visitors to the site
- **O2** To ensure parking is managed across the site and driveway crossovers do not dominate the streetscape.
- **O3** To ensure garages do not dominate front facades,

Controls

- **C1** All dwellings are to provide at least one covered off–street car parking space with a further parking space within the property e.g. within driveway.
- C2 A minimum lot width of 12m is required for double garages to detached dwellings.
- **C3** Detached garages should match the main dwelling roof form and materials.
- **C4** Carparking is to be located on the rear lane, on lots with a laneway frontages.

5.6. Heritage

Objectives

O1 To preserve the significant historical form of properties contributing it the character of the precinct, specifically along Bullercourt and Ashford Avenue

Controls

- **C1** The following requirements as part of a DA proposal are to be submitted:
 - (a) A Heritage Interpretation Plan as part of a future Development Application on the site to highlight its history (Note: this requirement is only subject to lands identified within the Heritage Interpretation Map)
 - (b) An Aboriginal Cultural Heritage Assessment (ACHA) is prepared prior to any ground disturbances in the area of the remnant Cumberland Plain Woodland.

5.7. Energy use

Objectives

O1 To ensure all new developments to provide alternative energy supply

Controls

- **C1** All individual dwellings must install (or be designed for installation) a solar PV array, inverter, and battery system with the following minimum capacity:
- (a) Homes up to 150m2: 5kW PV System
- (b) Homes between 150 250m2 : 7.5kW PV System
- (c) Homes between 250 –350 m2: 10kW PV System
- **C2** For all other developments not within the identified parameters above, individual dwellings must install (or be designed for installation) a solar PV array. Inverter and

battery system sufficiently large to provide enough renewable energy to balance its predicted energy use of the year

5.8. Waste

Note: The following controls relating to waste management are consistent with the provisions in (insert quide in consolidated DCP). Once the consolidated DCP becomes effective, the provisions below will no longer apply

Objectives:

O1. To facilitate sustainable waste management within the City of Canterbury Bankstown in accordance with the principles of Ecologically Sustainable Development and a Circular Economy.

O2. To maximise resource recovery through waste avoidance, source separation and recycling. To ensure that the disposal of waste is managed appropriately, efficiently and provides for maximum resource recovery or reuse.

O3. To ensure all waste streams being handled, stored and collected in a manner to reduce risk to health and safety of all users, including residents, commercial/retail staff, maintenance (e.g., caretakers), collection staff, and contractors (and required vehicles and equipment).

O4. To ensure that waste management systems are designed and managed to minimise impacts on residential amenity, health and the public realm. To ensure that they are convenient and accessible to occupants – residential, retail and commercial.

O5. To ensure that waste storage and collection facilities are considered early in the design process and integrated into the overall site planning and design of the development.

O6. To ensure bin storage and collection facilities are designed so that they can be integrated with and comply with the requirements for council's domestic Heavy Rigid Vehicle waste services now and into the future.

O7. To ensure all Residential Domestic Waste services are provided by Council.

5.8.1 Residential Development

Controls:

Internal waste storage

C1 Each dwelling is to have a waste storage cupboard in the kitchen capable of holding two days waste and recycling and be sufficient to enable separation of recyclable materials.

C2 Each dwelling is to have suitable space within the kitchen for a caddy to collect organic waste.

C3 Each dwelling is to have suitable space storage space for other recyclable items, such as light globes and batteries.

5.8.2 Dwelling houses, secondary dwellings, semi-detached dwellings and dual occupancy and Multi Dwelling Housing (with six or less dwellings)

Bin storage area

C1 Each dwelling is to be provided with a bin storage area. The location and design of the bin storage area must comply with:

- (i) Sufficient size to accommodate the allocated three bins per dwelling;
- (ii) Located behind the building line of the dwelling or where it is screened or cannot be viewed from public areas;
- (iii) Located away from habitable windows and doors of adjoining dwellings to reduce noise and odour;
- (iv) Allow residents to conveniently carry their waste to the correct bin from their dwelling;
- (v) The bin carting route from the bin storage area to the kerbside collection point has a maximum distance of 30m (in the case of battle-axe properties);
- (vi) Allow bins to be moved safely to the nominated collection point; and
- (vii) Ensure the bin-carting route from the bin storage area to the collection point does not pass through any internal rooms of the dwelling, including garages.

Kerbside collection point

C1 All allocated bins for each dwelling are to be presented to the kerbside for collection. Kerbside collection points are to be located so they:

- (i) Present all allocated bins in single file with a 30cm gap between bins;
- (ii) Allow a minimum of 2m (l) x 1m (w) per dwelling for bins to be presented to the kerb;

- (iii) Ensure all allocated bins are placed within the site's allocated frontage, not in the driveway and not in front of neighbouring lots;
- (iv) Have a separation distance of 2m from driveways, tree branches, bus stops, street furniture and road infrastructure such as round-a-bouts and speed humps; and
- (v) Have a height clearance of 4.2m from overhanging tree branches, powerlines and other obstructions.

Management of organic waste

C1 Space for composting and worm farming is to be available for each dwelling within a lot, located within the backyard, private courtyard or open space. Composting facilities are to be sited on an unpaved area, with a minimum size of $1m^2$.

6. Development Controls: B1 Neighbourhood Centre

Objectives:

- **O1** Enable the development of a small local scale commercial hub and/or expansion of the existing childcare centre.
- **O2** Considered interfaces with the C2 woodland and the residential neighbourhood.
- **O3** Carparking is managed to minimise its impact.

Controls:

- **C1** Development in the B1 zone is generally consistent with Figure 3 below.
- **C2** Development is designed in such a way that is provides a frontage to the C2 woodland area and both adjacent streets.
- **C3** The frontage to the Local Road from Bullecourt Ave has a setback of 8m to allow for street tree planting, a shareway path, and outdoor space for footpath dining.
- C4 Development is no more than 3 stories high.
- **C5** Carpark entry located to south east corner of the site. No additional at grade carparking will be permitted.

6.1 Waste

Objectives

O1. To facilitate sustainable waste management within the City of Canterbury Bankstown in accordance with the principles of Ecologically Sustainable Development and a Circular Economy.

O2. To maximise resource recovery through waste avoidance, source separation and recycling. To ensure that the disposal of waste is managed appropriately, efficiently and provides for maximum resource recovery or reuse.

O3. To ensure all waste streams being handled, stored and collected in a manner to reduce risk to health and safety of all users, including residents, commercial/retail staff, maintenance (e.g., caretakers), collection staff, and contractors (and required vehicles and equipment).

O4. To ensure that waste management systems are designed and managed to minimise impacts on residential amenity, health and the public realm. To ensure that they are convenient and accessible to occupants – residential, retail and commercial.

O5. To ensure that waste storage and collection facilities are considered early in the design process and integrated into the overall site planning and design of the development.

O6. To ensure bin storage and collection facilities are designed so that they can be integrated with and comply with the requirements for council's domestic Heavy Rigid Vehicle waste services now and into the future.

O7. All Residential Domestic Waste services must be provided by Council.

6.1.1 Mixed Use Development

Controls

C1 The following controls apply to both residential and commercial components of mixed-use developments:

- (i) Waste management facilities are to be designed so that access to is limited to the coinciding development type i.e., residential occupants must not have access to commercial waste management facilities and vice versa; and
- Waste management facilities for commercial tenants must also be designed and managed so that they minimise the noise and odour impact on residential dwellings within the development;

- (iii) The waste management facilities for the residential component of the development are to comply with sections 3;
- (iv) The waste management facilities for the commercial component of the development are to comply with sections 5.

6.1.2 Commercial/Retail Development

Controls:

C1 It is essential that new commercial and industrial developments select and provide a waste management system that is responsive to the development's need. All developments need to consider tenant, public amenity and safety at all stages of the waste management process, including storage, transport and collection.

C2 To ensure new commercial and industrial developments can access a waste service in an efficient and effective manner, the following must be considered in the site planning stage of the development:

The development accommodates on-site waste collection and allows a HRV to enter/exit in a forward direction, manoeuvre within the site and access the nominated collection point in a safe and efficient manner.

The development ensures amenity and safety of all users (tenants, caretakers, cleaners and waste collection staff) at all stages of the waste management process.

Adequate waste storage area(s) are provided within the development to store all required waste bins, bulky waste and recyclable items (e.g., Pallets)

C3 The following controls will apply to commercial, industrial and any other non-residential development.

Waste management facilities

C1 All commercial and industrial development must provide bin storage and separation facilities.

C2 Waste generation rates for each tenancy are to be calculated in accordance with the commercial waste generation rates provided in NSW EPA: "Better Practice guide for resource recovery in residential developments 2019"- Appendix F, Table F3.

C3 Development must provide an appropriate and efficient waste storage system that considers:

the volume of waste generated on-site

the number of bins required for the development and their size

waste and recycling collection frequencies.

C4 Waste collection frequency is to be a minimum of once per week. Higher collection frequency may be required for development with larger waste generation rates and to ensure bin storage areas are kept clean, hygienic and free from odours.

C5 Collection frequency for commercial tenancies producing more than 50 litres of meat, seafood or poultry waste must have daily waste collection or be designed to be provided with a dedicated refrigerated room for waste storage between collections.

Interim waste storage areas

C1 For any building comprising three or more storeys and not containing dwellings (i.e., commercial only), a suitable system for the interim storage and transportation of waste and recyclables from each storey to the waste storage/collection area is to be integrated within the building's design.

Internal waste storage

C1 Each business is to have a waste storage cupboard in the kitchen capable of holding two days waste and to enable recyclable waste to be stored in a separate container (not in plastic bags).

Bin Storage Areas

C1 When designing developments, it is recommended consideration of the intended and future uses should be undertaken to reduce any costly retrofitting that may be required at the operational stage of the development.

C2 Where the development involves multiple tenancies, individual bins for each tenancy is to be provided.

C3 Bin storage areas are to be designed so they can be constructed to the following requirements:

The size of the bin storage area must be sufficient to cater for all likely waste generation and the required bins for all waste streams. Waste generation is to be determined in accordance with the NSW EPA: "Better Practice guide for resource recovery in residential developments 2019"- Appendix F.

Location

Equal and convenient access for all tenants is to be provided, with each tenant to have their own allocated area for bin storage;

Sited behind the development building line and incorporated within the development footprint;

In areas that will not reduce the amenity for tenants and existing users adjoining the development.

Located within 10m of the nominated collection point, to minimise bin-carting routes.

Design

As a minimum, the design should allow for the separate collection of general waste, recycling, paper and cardboard, food waste and pallets;

Bin storage areas can be a stand-alone structure for smaller commercial and industrial developments. Where a stand-alone structure is to be provided it is to be designed and integrated into the overall look of the development in regard to materials and finishes.

For larger developments (particularly with a high number of individual tenancies) a bin storage area should be provided within the development footprint.

Layout

The layout of the bin area must prevent obstructions that impact on bin movement, maintenance and cleaning as well as any servicing requirements;

Construction

Floors must be constructed of concrete at least 75mm thick and graded and drained to a Sydney Water approved drainage fitting;

Floors must be finished so that it is non-slip and has a smooth and even surface;

Walls must be constructed of solid impervious material;

Ceilings must be finished with a smooth faced, non-absorbent material capable of being cleaned;

Walls, ceilings and floors must be finished in a light colour;

If a room or is integrated within the building, a minimum 2.1m unobstructed room height is required in accordance with the Building Code of Australia;

The area must be provided with an adequate supply of hot and cold water mixed through a centralised mixing valve with hose cock;

Doors must at least 2m wide and be close fitting and self-closing and able to be opened from within the area

The area must be constructed to prevent the entry of vermin and birds;

The area must have adequate light and ventilation; and

Lighting must be controlled using switches located both inside and outside the area.

Carting Route

C1 The bin-carting route from the bin storage area to collection point is to be:

direct and less than 10m;

solid and a minimum 2 metres wide;

non-slip, free from obstacles and steps;

Does not pass through any internal walkways, doors or rooms;

not within a driveway or carpark, this is considered a conflict point for residents, vehicles and collection staff; and

a maximum grade of 1:30 (3%);

Without crossing a private lot; and

Compliant with Work, Health and Safety legislation.