Department of Planning, Housing and Infrastructure

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Homebush Transport Oriented Development Precinct Design Guide

November 2024

Acknowledgement of Country

The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Homebush Precinct Design Guide

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1 Introduction

1.1 Land to which this Design Guide applies

The Design Guide applies to the land identified in Figure 1: Land Application Map. This land is also referred to as the Homebush Precinct (the Precinct).

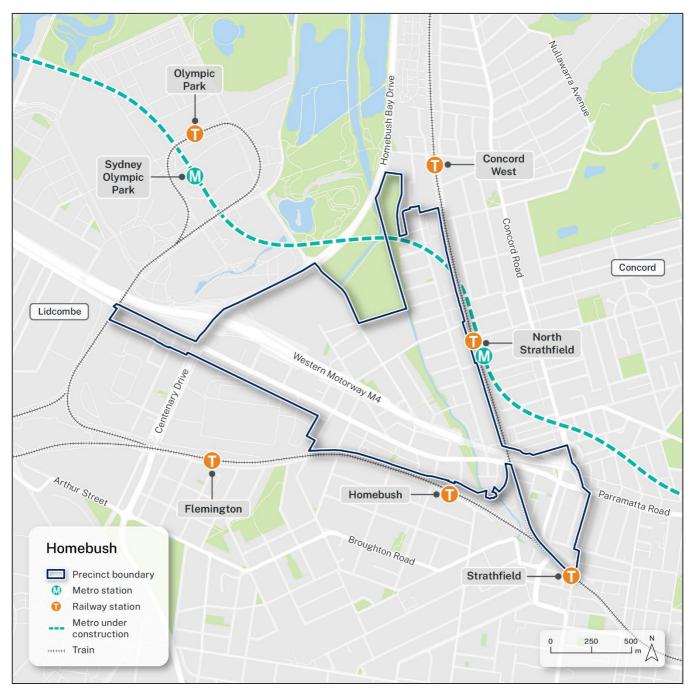


Figure 1: Land Application Map

1.2 Commencement

The Design Guide commences on the day on which the Homebush Precinct amendments to the Canada Bay Local Environmental Plan 2013 and the Strathfield Local Environmental Plan 2012 come into effect.

1.3 Purpose and Application of this Guide

The purpose of this Design Guide is to support implementation of the Canada Bay Local Environmental Plan 2013 (CBLEP) and the Strathfield Local Environmental Plan 2012 (SLEP) as it applies to the Homebush Precinct by providing more detailed provisions to guide development.

It is given effect by reference in the provisions of the CBLEP and SLEP. This Design Guide replaces the provisions of the Canada Bay Development Control Plan 2013, Strathfield Consolidated Development Control Plan 2005 and Development Control Plan 20 – Parramatta Road Corridor Area in so far as they apply to the Precinct. The sections of this Design Guide inform the preparation, assessment and determination of development applications as follows:

- Section 1 sets out the land to which the Design Guide applies, administrative matters and the relationship to other elements of the planning framework that apply to the Precinct.
- Section 2 contains the Vision, Locality Statement, Principles and Understanding Country which have informed the planning framework (including this Design Guide and relevant provisions of the CBLEP and SLEP). The vision, desired future character and principles are to be considered when assessing whether a development application will deliver the intended outcomes for the Precinct.
- Section 3 contains contextual information to assist with understanding how places within the Precinct fit within the cultural and urban context of the locality and surrounding area. Section 3 provides analysis to assist with ensuring development applications appropriately incorporate the cultural heritage of the site and align with the desired future character of each locality.
- Section 4 provides direction to support the delivery of key sites, public domain infrastructure and site amalgamations.
- Sections 5 8 contain provisions and design guidance for development applications in the Precinct across four themes (Built Form and Environment, Public Open Space, Movement and Parking). Each subsection includes:
 - \circ $\;$ Objectives that describe the intent of provisions and the anticipated outcomes; and
 - Provisions that specify numeric or performance-based considerations to guide detailed design of development within the Precinct.

• Section 9 contains a glossary and amendment notes.

1.4 Relationship to Other Plans and Planning Instruments

The Design Guide forms part of suite of planning provisions that apply to the Homebush Precinct. This includes Acts, Regulations and State environmental planning policies.

The Design Guide is subordinate to the CBLEP and SLEP and other environmental planning instruments that apply to the Precinct. Where a provision of this Design Guide conflicts with a provision in the CBLEP, SLEP or a State environmental planning policy, the CBLEP, SLEP or the relevant State environmental planning policy prevails to the extent of the inconsistency.

In the event of any inconsistency between the Design Guide and the relevant Council Development Control Plans (DCPs), the objectives and provisions of this Design Guide prevail to the extent of that inconsistency. Where no provisions are indicated this Design Guide, the relevant provisions in the DCP will apply.

1.5 How to use this Design Guide

This Design Guide provides a hierarchy of objectives, design guidance and other provisions to guide future development in the Precinct.

Any application for development is to demonstrate how it meets the objectives and guidance of this Design Guide. The Design Guide sets clear and measurable benchmarks for how the objectives can be practically achieved. If it is not possible to satisfy the provisions, applications must demonstrate what other responses or alternative solutions are proposed to achieve the objectives.

1.6 Amendments to this Guide

Any amendment to this Design Guide requires the endorsement of the Secretary of the Department of Planning, Housing and Infrastructure (the Department).

Refer to Section 9 for amendment notes to this Design Guide.

2 Vision and Principles

2.1 Vision for the Precinct

The Wangal people of the Eora Nation are respectfully recognised as the Traditional Owners and custodians of the land on which the Homebush Precinct is situated. Parramatta Road and Homebush are recognised as important places in the cultural landscape and history of Aboriginal people. Recognising Aboriginal past, present and future is a key principle underpinning the vision for the Precinct. Voices and perspectives from past, present, and future First Nations stakeholders will be embedded in the evolution of the Precinct.

The Homebush Precinct will be a connected centre for living, creativity, and employment. The Precinct forms a key part of the broader Parramatta Road Corridor, which supports the movement of people and goods. The Precinct will be an attractive and desirable high density urban area, with George Street and Parramatta Road as the main streets and local centres of urban activity. Homebush Precinct will host a well-designed built environment with appropriately scaled street buildings that transition to adjacent low-density areas.

Renewal will draw on Homebush's existing character and will acknowledge significance to Aboriginal peoples, culture and communities across Australia establishing a clear Aboriginal identity, while celebrating and respecting the past, by adaptively re-using heritage buildings in the Precinct. The Precinct will deliver a variety of public domain spaces that are attractive and inviting, safe, activated, exhibit good environmental amenity and stimulate social interaction and pedestrian movement.

The Precinct will accommodate residential population growth while providing housing diversity and provide a diverse range of building types to attract residential and business development, innovation and creative uses across four distinct character areas. The Precinct will evolve as a high amenity locality, contributing positively to its surrounding urban fabric, providing shops, office space, services, community facilities and public spaces that meet the needs of the existing and future community and that are complimentary to those already provided within the adjacent established areas.

Renewal of the Precinct will benefit from its proximity and access to new and existing transport infrastructure and services in the region, such as Concord West, Homebush, North Strathfield and Strathfield Train Stations, and the future Metro Station at North Strathfield as part of Sydney Metro West.

2.2 Locality Statement

Sitting between Sydney's two main CBDs, Homebush will be transformed into an active and varied hub, blending higher density housing and a mix of different uses, supported by a network of green links and open spaces with walking and cycling access to excellent public transport options. Homebush is also located within close proximity to Sydney Olympic Park, a major sporting and entertainment precinct.

The Precinct spans a large and diverse geographic area, encompassing a range of existing land uses, built forms, landscapes, and social and economic activities. This diversity will be celebrated by creating unique character areas, including the Active Heart, Parkland Living, High-Rise Living, and Employment Edge. Each area will have its own distinct identity, supporting a mix of residential, commercial, and community uses.

Homebush Precinct will be a focus for high density housing, with a hub of activity between Homebush, North Strathfield, Concord West and Strathfield Stations. Most of the new density is focused on the future Metro station at North Strathfield which will provide high frequency and highquality metro services to Parramatta and Sydney CBDs. Both Parramatta Road and George Street will form main streets to build on the character of the Bakehouse Quarter and the curve of Parramatta Road and will be complemented by increased density and open space in the Strathfield Triangle. Strengthening north-south connections at Hillcrest St/Bridge Rd and Underwood Street/ Subway Lane and improvements to connections into the Powells Creek linear park and improved pedestrian and bicycle connections east/west between urban areas and open spaces. Loftus Lane parallel to Parramatta Road will be formalised as a secondary east/west laneway to both support businesses on Parramatta Road while providing a secondary pedestrian corridor.

Taller residential buildings will mark the centre of activity along the Precinct's main streets and sections of open space. The network of streets emanating from Underwood Road and Powells Creek corridor will be well connected and safe. The area around Sydney Markets will maintain its employment and retail focus.

When the Homebush Precinct is complete, it will have potential to accommodate approximately 25,000 dwellings and 9,000 workers and a mix of complementary uses. It will be a highly accessible place, providing improved walking, cycling and public transport connections.

The Homebush Precinct will provide renewed public spaces, consisting of open spaces, streets and pedestrian connections. Public open spaces, including parks and plaza areas will offer places for relaxation, recreation, collaboration, work and venues for community events. These spaces will support high quality pedestrian amenity and an activated environment.

New built form will provide an appropriate transition from the low rise and fine grain scale of surrounding residential areas to the east and west of Homebush and North Strathfield and the industrial scale of the Sydney Markets, to higher density developments along Parramatta Road and George Street.

The Homebush Precinct will seek to deliver ecologically sustainable development. Precinct-scaled green infrastructure will be integrated with water sensitive urban design (WSUD), while respecting the heritage fabric of the Homebush Precinct to support a cool and green environment for residents, workers and visitors.

2.3 Understanding Country

Understanding Country not as a Western concept, but as an Aboriginal worldview. It is nature at a deeper level, where all things are interconnected, and the spiritual underlies the physical. Appreciating that the Aboriginal sense of Country is that past, present and future are not confined by time, but rather they merge into a continuum. Aboriginal thinking therefore embraces what was on Country before, what is there now and what might come back or evolve in the future. It is about a continuum of place too, where borders and boundaries are open to culture crossing Country, and where stories interconnect with surrounding Peoples.

Country commands care and respect. Respect between people, animals, plants and earth is required to keep Country healthy so Country can care for and sustain life. Aboriginal principles for sustaining Country are embedded in language, stories and Songlines which all reflect physical and spiritual understandings of the land. The diversity of traditional language groups, stories and Songlines reflects the diversity of Country's landforms and ecosystems. The significance of ceremony and lore between language groups ensures caring for Country principles and responsibilities to Country are shared across Australia. All things belong to Country, Country does not belong to anyone.

The Homebush Precinct is located on part of the traditional lands of the Wangal clan, one of the tribes of the Eora Nation, a clan which has felt the adverse effects of colonisation and displacement since the late 1700s. These impacts have caused mass identity confusion and loss of culture with there only being a scarce number of traditional knowledge holders within the local and surrounding areas. The area and its surroundings have long been known for the rich history of settler colonies and frontier war.

This Design Guide aims to provide a basis for co-designing with Country, through its objectives and provisions and embedding continuing local Aboriginal engagement in processes and outcomes.

2.4 Principles

The principles of this Design Guide are to ensure:

- a) the Homebush Precinct recognises the significance of the area to Aboriginal people, fosters connections with Country throughout the project design, development and delivery process and considers Aboriginal peoples' perspectives, stories, and history when making planning and design decisions,
- b) future development recognises and celebrates the layers of history at the Homebush Precinct including pre and post contact, as well as contemporary history,
- c) the heritage significance of the local heritage items, such as the Bakehouse Quarter,
 Homebush Theatre and listed residential developments is conserved, enhanced, and adaptive
 reuse of heritage items makes properties available for community, cultural and employment
 uses,
- d) development of a diverse, activated and attractive Precinct for living, creativity and employment opportunities that supports innovation and the jobs of the future,
- e) the movement network provides attractive tree-lined streets and interprets its past with an emphasis on pedestrian and bicycle priority, and access to public transport,
- f) high quality public spaces for use by the general community for passive recreation, active recreation and children's playgrounds, working, collaboration, culture and living,
- g) built form contributes positively to the public domain with respect to scale and pedestrian comfort appropriate to the function and use of the place,
- h) development and density responds appropriately to the Precinct's high accessibility, liveability and amenity
- i) impacts on the urban character of the surrounding locality are minimised,
- j) new and adapted buildings and public spaces achieve design excellence and maximise the amenity of occupants and its overall environmental performance,
- k) increased tree canopy cover and improved landscaping, including deep soil, to provide for greenery to improve amenity and reduce the heat island effect,
- l) incorporating endemic flora and fauna outcomes into landscaping for developments and public spaces improves biodiversity and health of Country,
- m) new streets implement WSUD treatments at the point source and provide permeable ground surfaces to support sustainable water management. Should this WSUD treatment not be

supported by Council due to maintenance costs, an alternative solution will be investigated, and

n) new development responds appropriately to alleviate the impact of stormwater and flooding risk through the design and location of streets and open space and the design of buildings.

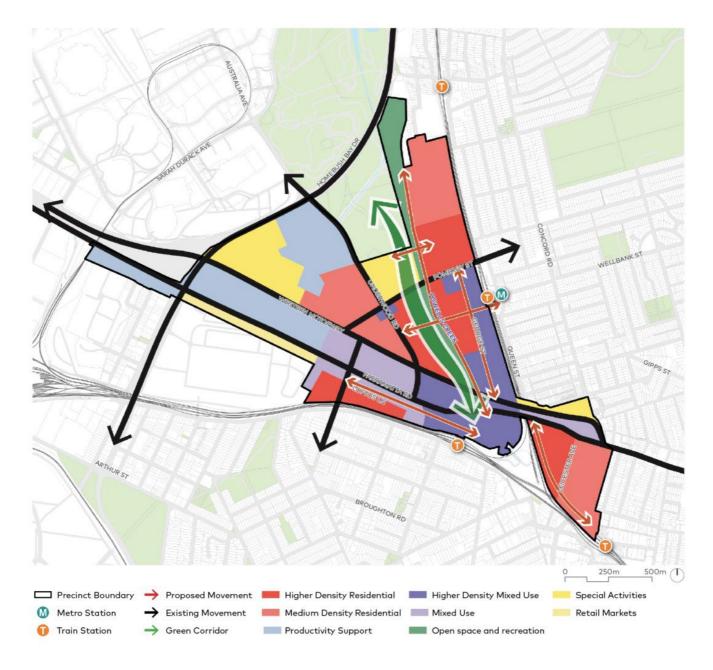


Figure 2: Structure Plan

3 Places and desired future character

The Homebush Precinct is centrally located between the Sydney and Parramatta CBD and with the delivery of Metro West will be one of the most accessible precincts in Greater Sydney. The Homebush Precinct will be a vibrant, liveable precinct supported by jobs, new open space and community infrastructure.

The Homebush Precinct spans a large area that encompasses many different land uses, built form, landscapes, and social and economic activities. This diversity is reinforced by the establishment of character areas, which broadly group together zones and activities that exhibit similar characteristics (Figure 3: Character areas (Source: Urban Design Report, COX)).

The Homebush Precinct is defined by four distinct character areas:

- Active Heart,
- Parkland Living,
- High Rise Living, and
- Employment Edge.





3.1 Active Heart

The Active Heart character area is geographically located at the heart of the Homebush Precinct and will comprise a large proportion of the mixed use, civic, cultural, retail and recreational opportunities within the Precinct.

The Active Heart will be anchored by two significant civic spaces at the North Strathfield and Homebush interchanges, with new public open spaces planned for the sites immediately adjoining the interchanges. These new spaces will serve not only as a safe, accessible and amenable accesses to the interchange, but also be programmed for a variety of uses and users to ensure they are active day and night, weekday and weekend, winter and summer. The entirety of the Active Heart is proposed to comprise of mixed use buildings, with lower levels dedicated to retail, food and beverage, recreational, cultural and commercial uses, with residential towers of varying heights located above. Active frontages, with retail at ground level and opportunities for commercial uses on upper floors, will ensure a lively streetscape that is economically and socially engaging.

The character area also encompasses the majority of heritage items within the precinct to be retained, reused and celebrated as part of the Master Plan. These include the Homebush Theatre and the Bakehouse Quarter, which will be surrounded by new open spaces that are complementary to the heritage fabric of the existing buildings. Surrounding this will be new mixed use buildings comprised of materials such as brick and steel, creating robust structures with fine grain detailing along local streets and laneways. Homebush's rich industrial and commercial history, with heritage celebrated through the use of public art that interprets this past.

Not all public spaces will be green, but they will offer a diverse set of experiences, from adventure and play to more passive recreation. New laneways will enhance permeability, providing direct access to the central civic space, while existing laneways will be activated by adjacent developments to further boost connectivity and vibrancy. Barriers such as Parramatta Road, the M4, and Powells Creek will be mitigated to form a network of walkable, connected destinations throughout the precinct.

The public domain will be defined by high-quality design, public art, and lighting that creates a welcoming atmosphere both day and night. The sub-precinct will foster a fine grain urban environment characterised by a range of urban spaces that encourage outdoor dining, social interaction, and relaxation, providing a variety of places for public use both during the day and in the evening.



Figure 4 (left): An example of how the Bakehouse Quarter may be redeveloped to celebrate heritage and connect to Powell's Creek. (Source: Urban Design Report, COX)

Figure 5 (right): Medium-high density mixed use frontage to a main road. Victoria & Vine, Victoria. (Source: Urban Design Report, COX)

3.2 Parkland Living

This character area will comprise a medium-high density residential community with a diverse range of housing choices set amongst green parkland areas.

A variety of housing typologies will be incorporated, including maisonettes fronting parklands and garden apartments, ensuring a mix of dwelling styles that cater to a wide demographic. The design will maintain a human scale through the use of modulated podiums, articulated building entrances, and an activated public realm, creating a lively and engaging streetscape.

The proposed densities and building heights encourage higher densities adjacent to the open space. The open space will be designed as a highly flexible space to allow for a range of activities and events, responding to the needs of a diverse population.

Some residential buildings will have direct access to parks and the public domain and be oriented to activate public spaces, promoting healthy living and walkability throughout the north-south axis of the precinct.

This area is anchored by a linear green and blue corridor along Powell's Creek, designed to incorporate the principles of water sensitive urban design, and provide opportunities for passive recreation.

Key green spaces like Mason Park, valued for its biodiversity, and Bressington Park, a hub for both active and passive recreation, form the northern boundary to this character area. Dedicated active transport routes will be provided to connect the broader Precinct to these open space destinations.

Opportunities to widen streets and increase primary building setbacks to allow for planting within the private domain to complement the street trees will be explored to accommodate additional greening. Additionally, eastward connections to the Metro and North Strathfield Station will be prioritised, enhancing access to public transport.



Figure 6 (left): Perimeter buildings surrounding communal open spaces (Source: Urban Design Report, COX) Figure 7 (right): Tanner Springs, Portland - reintroduction of a wetland park into the city where a now piped former creek line occurred (Source: Urban Design Report, COX)

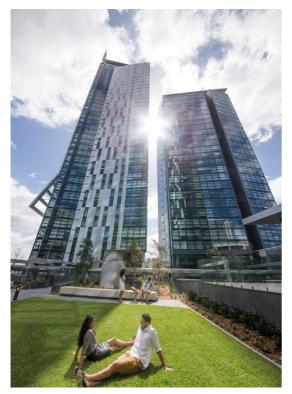
3.3 High Rise Living

The High Rise Living character area will feature mid to high-rise residential developments, creating a high-quality built environment that utilises materiality, setbacks, and thoughtful building articulation.

Redevelopment of key sites will offer opportunities to integrate private and public domains, providing community benefits through greater uplift and improved urban experiences.

Buildings with residential uses on the ground floor will activate the public domain through utilisation of garden apartments and separate street entries, with generous primary setbacks to allow for planting in the private domain to complement street tree planting. Secondary setbacks will provide for additional views to the sky and ensure the streetscapes are of a pedestrian scale.

A highly walkable community will be established, with seamless connections to both Homebush Village and Strathfield Town Centre. Upgrades to The Crescent will facilitate walkability, with increased setbacks allowing for widened footpaths and better pedestrian movement.



Urban landscape planting will blend native and exotic species throughout the public and private realms, with features like green walls and green roofs enhancing the area's environmental sustainability.

Key sites within the Precinct will contribute significantly to public benefit by achieving iconic architecture, offering vibrant open spaces, and providing community facilities and educational opportunities. These tall buildings will shape a varied and recognizable skyline.

Additionally, well-equipped communal open spaces will cater to the recreational needs of future residents. New street connections and public spaces within the Strathfield Triangle will further improve connectivity and overall amenity, ensuring a dynamic and liveable urban environment.

Figure 8: High Rise Living with communal open space on a podium (Source: Urban Design Report, COX)

3.4 Employment Edge

The Precinct's existing employment lands will be carefully protected, recognising their vital role in the local economy. As a key hub, this area serves as a central point for the convergence and distribution of goods, particularly fresh food, to Greater Sydney. Sydney Markets, as the city's primary food distribution centre, will remain a crucial 'food bowl' for the region, ensuring that Sydney's food supply chain is efficiently managed from this location.

In addition to its role in food logistics, this sub-precinct will function as a broader logistics hub, with opportunities for a range of creative and flexible uses that support the evolving needs of industry.

Thoughtful consideration will be given to the area's transition to the adjacent parkland, ensuring that the edges are designed to blend harmoniously with the natural surroundings while maintaining the integrity of the employment and logistics functions within the area.





Figure 9 (top left): Light Industrial / Mezzanine Office (Source: Urban Design Report, COX) Figure 10 (top right): Incubator / Meditech research spaces (Source: Urban Design Report, COX) Figure 11 (below): Multi-storey light industrial uses (Source: Urban Design Report, COX)

4 Key Sites and Site Amalgamation

4.1 Land affected by infrastructure

Objectives

a) Deliver identified new community infrastructure, including roads, open space, through site links and public domain enhancements.

Provisions

- 1. This section applies development located on land identified on Figure 12: Key Sites map that seeks to benefit from the maximum floor space ratio and height of buildings provisions that apply to those sites under the CBLEP or SLEP.
- 2. Certain land occupied by public infrastructure identified in this section, including roads, open space, through-site links and shared pathways is to be dedicated to Council, allowing for its ongoing maintenance and management for the general community.
- 3. Land to be dedicated to Council is dedicated at no cost to Council. The area of the land to be dedicated will be taken into account in calculating the permitted density of development.

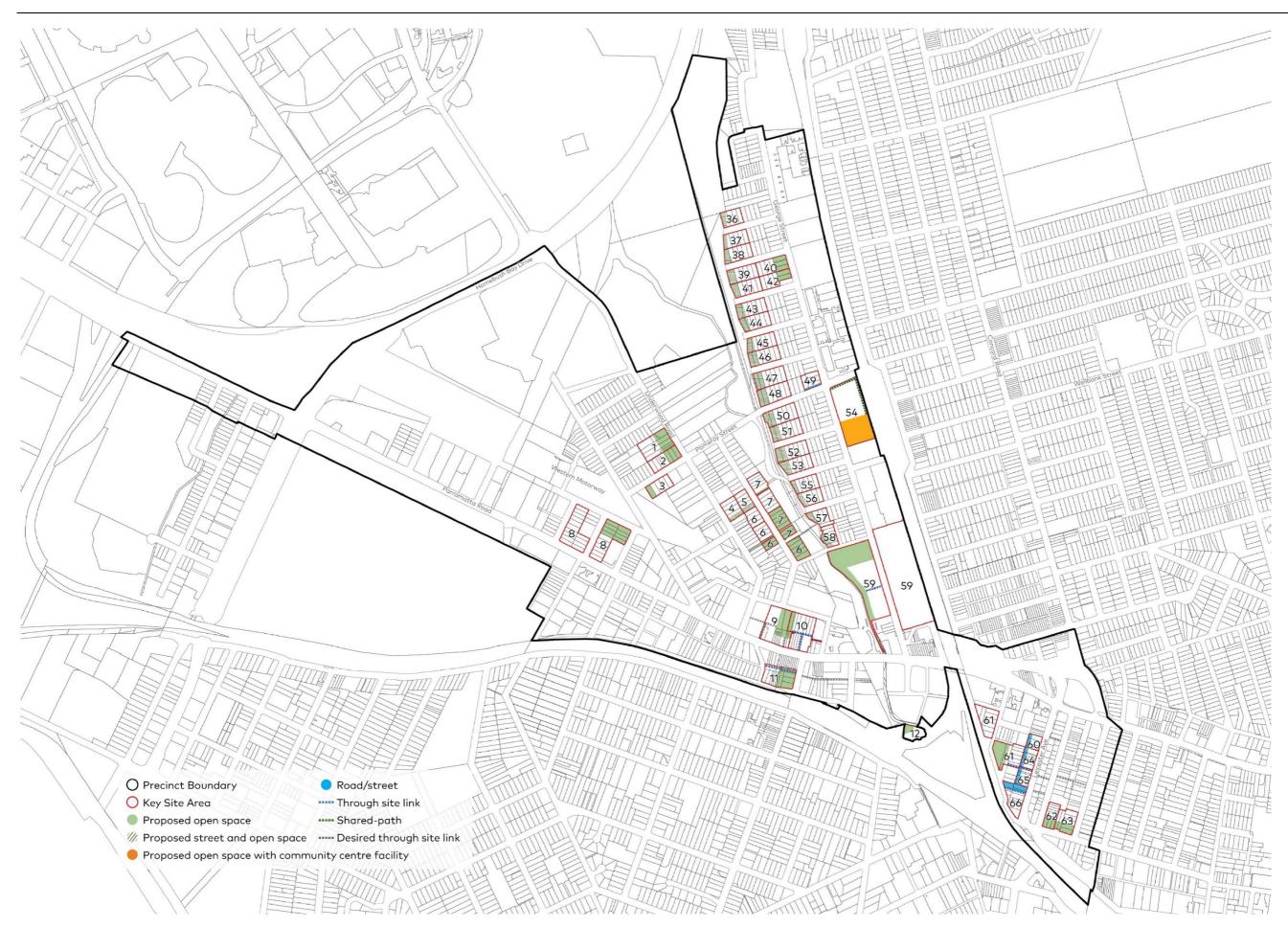


Figure 12: Key Sites map

4.2 Amalgamation

Objectives

- a) Ensure amalgamation of allotments to promote the efficient use of land and to avoid the creation of isolated sites
- b) Provide for community infrastructure to support the Precinct.

Provisions

 All development areas are to comply with the amalgamation pattern for key sites as shown on Figure 12: Key Sites map.

4.3 Infrastructure requirement and embellishment

Objectives

- a) Adequate community infrastructure is provided to meet the needs of the future population.
- b) Community infrastructure is designed in accordance with the Design Guide.

Provisions

- New development must meet or exceed the community infrastructure requirements identified in the Canada Bay LEP (refer to clause 9.9) and Strathfield LEP (refer to clause 7.10) for each key site. Table 1: Key site community infrastructure requirements provides a guide and breakdown of these infrastructure requirements.
- 2. For sites identified as comprising 'Proposed open space' and 'Proposed open space with community centre facility' in Figure 12: Key Sites map, open space is to be designed in accordance with section 6 Design Guidelines Public Open Space.
- 3. For sites identified as comprising 'Proposed street and open space', 'Road/street', 'Through site link' and 'Shared path' in Figure 12: Key Sites map, open space, streets, through site links and paths are to be designed in accordance with sections 6 Design Guidelines – Public Open Space and 7 Design Guidelines – Movement and Parking.
- 4. Design of streets and pathways must adopt the relevant Council's street design codes and public domain plan for a durable, manageable and consistent palette of materials used in the public domain. Materials must be of a high-quality finish and durability that is appropriate to the street type, pathway and/or open space function.

Key Site	Public Open Space (m²)		Pedestrian Link (m²)	Total Key Site Area (m²)	
Strathfield LGA – Sites 1-12					
1	2,475	0	0	2,475	
2	1,653	0	0	1,653	
3	613	0	0	613	
4	0	604	0	604	
5	0	497	0	497	
6	3,696	235	0	3,931	
7	3,756	0	351	4,107	
8	3,819	0	0	3,819	
9	3,007	0	671	3,677	
10	804	0	995	1,799	
11	2,489	0	638	3,127	
12	544	0	0	544	
Canada Bay LGA – Sites 36-66					
36	0	577	0	577	
37	0	500	0	500	
38	9	694	0	702	
39	110	805	0	914	
40	1,696	0	0	1,696	
41	23	758	0	781	

Table 1: Key site community infrastructure requirements

Key Site	Public Open Space (m²)	New Street/Road (m²)	Pedestrian Link (m²)	Total Key Site Area (m²)
42	1,136	0	0	1,136
43	121	811	0	931
44	27	735	0	762
45	49	749	0	798
46	225	805	0	1,030
47	265	954	0	1,219
48	417	953	0	1,370
49	0	0	290	290
50	720	554	0	1,274
51	528	557	0	1,085
52	719	513	0	1,232
53	434	513	0	947
54**	6,671	0	1,115	7,787
55	6	465	0	471
56	0	428	0	428
57	67	398	0	465
58	272	637	0	909
59	12,723	0	449	13,173
60	0	140	0	140
61	3,084	112	589	3,785

Key Site	Public Open Space (m²)	New Street/Road (m²)	Pedestrian Link (m²)	Total Key Site Area (m²)
62	962	0	0	962
63	1,481	0	0	1,481
64	0	190	330	520
65	0	169	278	447
66	0	613	0	613
Total	54,599	14,964	5,760	75,270

**** Note: In addition to the requirements set out above,** Key Site 54 is also required to deliver **a 3,000m²** community facility to a 'warm shell' **fit out** and dedicated to Council at no cost. The Canada Bay LEP 2013 provides a gross floor area exemption for the provision of a community facility at this site.

4.4 Delivery of infrastructure

Objectives

a) Ensure that private land, identified to contain public infrastructure such as new and widened street reserves, through site links and public open space, is dedicated to Council.

Provisions

Land dedication and embellishment mechanism

- 1. The method for the dedication of land to Council may be through establishment of a planning agreement under Section 7.4 of the *Environmental Planning and Assessment Act* 1979.
- 2. Any planning agreement must consider the applicable policies and/or requirements in relation to dedication of land to council, of the relevant Council area within which the site is located.
- 3. Land to be dedicated to Council must consider the provisions of section 8.13 Dedication of land to Council and should be negotiated in accordance with Council's Planning Agreements Policy.
- 4. The developer is not eligible for any financial compensation or reduction in local infrastructure contributions payable under the EP&A Act as a result of any land dedication to Council.

Activation of community infrastructure incentives

- 1. Land may only be capable of accessing the floor space ratio and height of buildings provisions if:
 - a) the development land comprises all lots shown on the Key Sites Map in Figure 12: Key Sites map,
 - b) the land has been remediated for its intended land use,
 - c) adequate services (including stormwater infrastructure) are available,
 - d) sufficient public domain has been realised to allow the appropriate level of amenity for the relevant land and adopts accessible design to address the movement needs of people with disabilities.
 - e) Council is reasonably satisfied that community infrastructure lands identified for dedication to Council can be secured, or community infrastructure lands identified to remain under private ownership will be managed and maintained by the private owner of the land and an easement placed on title to secure the relevant public access
 - f) The registered proprietor of a lot burdened by a through-site link must, to the satisfaction of Council, acting reasonably:
 - i. keep the subject land (including any services in, on or under the land) in good repair and condition;
 - ii. maintain and repair the subject land in accordance with any relevant maintenance or operational manual approved by the Council;
 - iii. keep the subject land clean and free from rubbish;
 - iv. maintain sufficient public liability insurance in accordance with the terms of the easement; and
 - Provide and maintain lighting which achieves compliance with Australian/ New
 Zealand Standard 1158 for the lighting of the easement, enabling safe use of a night time.
 - g) Council is reasonably satisfied the owner has, or will, participate in the provision of the infrastructure in accordance with the relevant LEP, DCP and this Design Guide and in an equitable way,
 - h) the community infrastructure is designed and constructed in accordance with the Urban Design Report (COX, 2024) and this Design Guide, specifically the intended future character and key design features, and
 - i) Council's street design codes have been adopted to ensure a consistent palette of materials used in the public domain.

2. When amalgamating key sites comprising heritage items, the gross floor area provided under the floor space ratio provisions in the relevant LEP for the site containing the heritage item may be transferred to the adjoining land/lots within the same development.

5 Design Guidelines – Built Form

5.1 Block Configuration, Site Planning and Amalgamation

Objectives

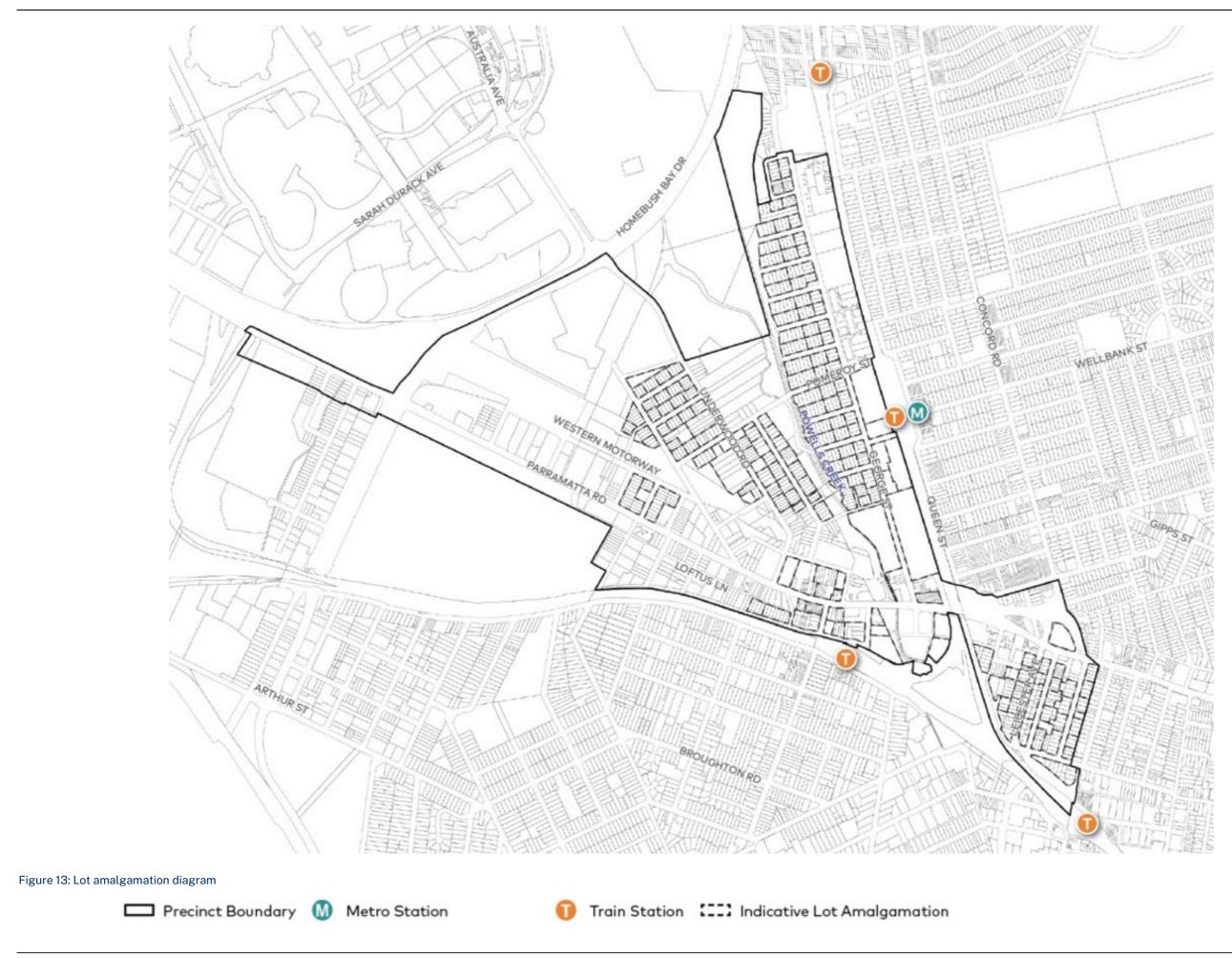
- a) Maximise permeable ground surfaces to allow rainwater to penetrate the soil.
- b) Ensure that buildings address the street, laneway, new through-site link or open space.
- c) Encourage amalgamation of allotments to promote the efficient use of land, avoid the creation of isolated lots and provide for improved design outcomes
- d) Create a high quality desirable place to live, work and play.

Provisions

- 1. Built form is to be positioned for optimal access to daylight and direct sunlight to internal and external spaces.
- 2. Siting and orientation of buildings are to activate streets and deliver safe streets and open spaces.
- 3. Emphasise building corners on key streets to signify key intersections and enhance public domain legibility.
- 4. Define street edges with low rise buildings or appropriately scaled podiums to create a pedestrian scale at street level.
- 5. Sleeve larger buildings with finer grain active frontages to the street and public domain.
- 6. Development sites are to be consistent with Figure 13: Lot amalgamation diagram.
- 7. Development sites should be of an area and width that can accommodate a building envelope consistent with the floor plate and setback controls in this Design Guide and the Apartment Design Guide under the Housing SEPP 2021.
- 8. Development is not to result in the creation of an isolated site that could not be developed in compliance with the relevant planning controls, including the relevant LEP or this Design Guide.
- 9. Where there is the potential for site isolation to occur on adjoining lots the development application must address the principles of the court case *Karavellas v Sutherland Shire* [2004] *NSWLEC 587.*

- 10. Where the lot amalgamation pattern is not met, the proponent must provide appropriate documentary evidence that demonstrates a genuine and reasonable attempt has been made to purchase an isolated site based on a fair market value. At least two (2) independent valuations (reports and valuations) must be undertaken within 3 months of the date of the development application lodgement which are to be submitted as part of that evidence and these are to account for reasonable expenses likely to be incurred by the owner of the isolated site in the sale of the property.
- 11. The documentation must include copies of correspondence between parties and any formal financial offers and responses to offers.
- 12. Where amalgamation of the isolated site is not feasible, applicants are required to demonstrate that an orderly and economic use and development of the separate sites can be achieved. In this regard, applicants will be required to submit a development application Concept Plan that provides the following:
 - a) Details an envelope for the isolated site, indicating height, setbacks, resultant site coverage (building and basement), sufficient to understand the relationship between the application and the isolated site.
 - b) The likely impacts the developments will have on each other, such as solar access, visual and acoustic privacy and the impact of development of the isolated site on the streetscape must also be addressed.
 - c) An assessment against the ADG with respect to the impact of the proposed development on the isolated site. Any proposed development of a neighbouring isolated site is to be compliant with ADG provisions
- 13. Amalgamation of sites adjacent to heritage items addresses the following:
 - a) visual and spatial separation of new development from heritage items,
 - b) opportunities for integration of heritage items into large developments, through lot amalgamation, maintaining and privileging the item's heritage significance,
 - c) potential inclusion of heritage items into amalgamated developments, with adaptive re-use of existing building fabric, or retention of context and settings by installing an increased symbolic curtilage.
- 14. For development adjacent to or in the vicinity of a heritage item, employ design devices to provide separation for curtilage and setting of heritage items, to retain the heritage item's setting. Suggested devices include:
 - a) lower height transition zones,

- b) low-scale podiums that respond to the scale of the heritage item along adjacent boundaries, and
- c) new public open space or roadways.



5.2 Building height, massing and scale

Objectives

- a) Provide flexibility to deliver a cohesive mix of different building forms, typologies and floorplates.
- b) Arrange building forms including heights and massing that reinforce the future desired character of the area.
- c) Support a transition in building heights across the Homebush Precinct.

Provisions

1. To ensure that buildings are adaptable to a variety of uses over time, the following minimum floor to floor heights apply:

Table 2: Minimum Floor to Floor Heights

Use	Minimum height
Retail/ Commercial (ground floor)	4.5m
Commercial	4.0m
Adaptable	3.7m
Residential	3.2m

- 2. Except where required to achieve a minimum freeboard above a Flood Planning Level (FPL), the ground floor level above the ground level of the adjacent public domain is to be no greater than:
 - a) 1.2 metre for residential uses;
 - b) 0.15 metre for retail, commercial and community uses.
- 3. Built form over 8 storeys must be limited to a 750m² GFA floorplate.
- 4. Buildings, or their individual elements, must be appropriately scaled to address and define the surrounding character.
- 5. Changes in scale must be explored to create interest and enhance the relationship with and safety of the public domain.

6. Any part of a basement or sub-floor area that projects greater than one metre above natural ground level comprises a storey.

5.3 Transition zones and sensitive interface requirements

Objectives

- a) Ensure that where changes in building scale, mass and/or height are proposed, they occur in a manner that is sensitive to amenity issues of surroundings or nearby development.
- b) Respond to, reinforce, and sensitively relate new development to the spatial and amenity characteristics of the existing urban environment.
- c) Protect residential amenity at the interface to existing low rise development.
- d) Provide appropriate interfaces and mitigation of noise pollutants from road and rail infrastructure to ensure a high quality of life for future residents, workers and visitors.
- e) Protect future residents and building users from negative impacts generated by the rail line, Parramatta Road and the WestConnex tunnel.

Provisions

- 1. Ensure the gradual stepping up of the built form at the interface of existing low-rise development and proposed higher rise development.
- 2. Ensure new development is sensitive and complementary in scale and site location to surrounding properties of identified heritage and/or streetscape value, and contributes positively to the desired character of the street or area concerned.
- 3. Dwellings and other sensitive uses located within 100m of the WestConnex Underwood Road Ventilation Facility (refer to Strathfield LEP, clause 6.12), must not exceed or equal 20m in height unless otherwise informed by a detailed Air Quality Impact Assessment (AQIA). Additional building design measures may be required based on the results of the AQIA, including:
 - a) Mechanical ventilation;
 - b) Strategic location of air intakes;
 - c) Use of filtration unit; and
 - d) Non-openable windows or balconies.
- 4. Residential development located near a rail line. The M4, Parramatta Road. Concord Road or Leicester Avenue are to be designed with private open space and openings for natural

ventilation of habitable rooms facing away from the rail or road infrastructure to provide amenity, relief and separation from noise and air pollution.

- 5. Residential uses above non-residential and employment uses must have increased separation from traffic on Parramatta Road and the M4.
- 6. Applicants proposing development near busy roads or railway line are to refer to and comply with State Environmental Planning Policy (Transport and Infrastructure) 2021 and the NSW Government's *Development near Rail Corridors and Busy Roads Interim Guidelines* which includes design guidelines and requirements to manage the impacts from road and rail noise and vibration.
- 7. An Acoustic Assessment must be prepared with reference to the NSW Government's *Development near Rail Corridors and Busy Roads – Interim Guidelines* for all development applications proposing residential development within the Precinct.
- 8. Where sensitive uses are proposed, development is to be appropriately designed to minimise the impact of road/rail noise and vibration.

5.4 Street wall height, setbacks and frontage requirements

Objectives

- a) Ensure the appearance of buildings reinforce, complement, and enhance neighbourhood and streetscape character.
- b) Design the street wall to provide appropriate scale, material quality and detail.
- c) Create visual interest and variety in the streetscape within an overall framework of consistency in the definition of the street and its character.
- d) Provide a sense of enclosure to the street and contribute to a consistent built form scale across the precinct over time.
- e) Enhance development and its relationship with adjoining sites and the public domain, particularly in regard to access to sunlight, outlook, view sharing, ventilation and privacy.

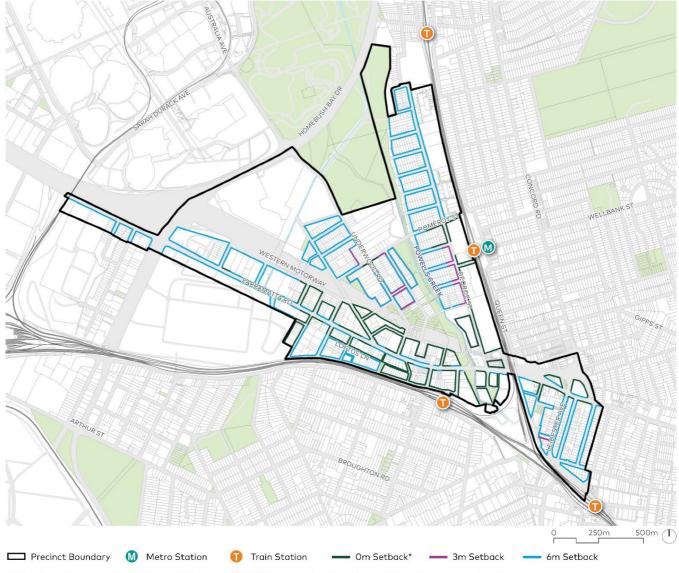
Provisions

- All development is to comply with the setbacks shown on Figure 14: Primary building setbacks and Figure 15: Secondary building setbacks (additional setback from the primary building setback line).
- 2. The 0 metre primary setback identified in Figure 14: Primary building setbacks refers to development within the mixed use zone to facilitate active ground floor, non-residential uses

directly to the edge of the public domain and/or where development already exists with a 0m setback. Should residential uses be proposed on the ground floor, a minimum 3m setback will be required (unless otherwise stated).

- 3. Maximum street wall and podium heights are to be in accordance with Figure 18: Street wall and podium heights.
- Mixed use buildings must provide a minimum 1 storey and maximum 2 storey street wall podium. For wholly residential buildings, a minimum 2 storey and maximum 4 storey podium with a secondary setback must be provided.
- 5. Through the Bakehouse Quarter, George Street is to be provided as continuous built form where a 0 metre building setback is required.
- 6. One step in the built form as the height increases is required to improve building separation. Additional steps must not to cause a 'ziggurat' appearance.
- 7. Where development is set back at least 3m from the site boundary, elements can protrude up to 0.5m into the front setback (articulation zone). Where development is set back at least 4.5m from the site boundary, elements can protrude up to 1m into the front setback (articulation zone).
- All property boundary front setbacks must be deep soil and landscaped and must not have any underground intrusions such as underground car parking, on-site detention or building utilities. Refer to section 6.3 Landscape Design and Green Infrastructure and Table 10: Tree canopy, deep soil and tree planting requirements for more detailed controls.
- 9. Setbacks are to maximise the retention of existing trees and the tree root zone (including those on adjoining properties and in the street).
- Setbacks are to include the planting of canopy trees, both small and large varieties.
 Developments are not to rely solely on street trees to assist in achieving tree canopy targets.
- 11. New development is to provide a minimum 6 metre green edge setback to Parramatta Road as identified in Figure 14: Primary building setbacks.
- 12. The 6m building setback for sites along Parramatta Road must be publicly accessible and be designed in accordance with the cross sections provided in Figure 17, and Figure 35 -Figure 37. This green edge setback must not have any underground intrusions, such as underground car parking on-site detention or building utilities.
- 13. For sites that are zoned R4 and are not required to have an active ground floor, an analysis of existing and likely future context must be submitted to determine the most appropriate ground floor uses, setbacks, landscaping, and built form at the street.

- 14. Where a site adjoining the subject site does not contain an apartment building at the time the development application is being assessed, the separation required must be that specified for habitable rooms and balconies in Section 3F of the Apartment Design Guide.
- 15. The front setback must be designed so as not to be dominated by stairs, ramps, level changes, handrails and other servicing structures. Any design elements to achieve universal access must be internalised within the building form.



*Om setback for non-residential uses on the ground floor / 3m minimum setback for residential uses on the ground floor

Figure 14: Primary building setbacks

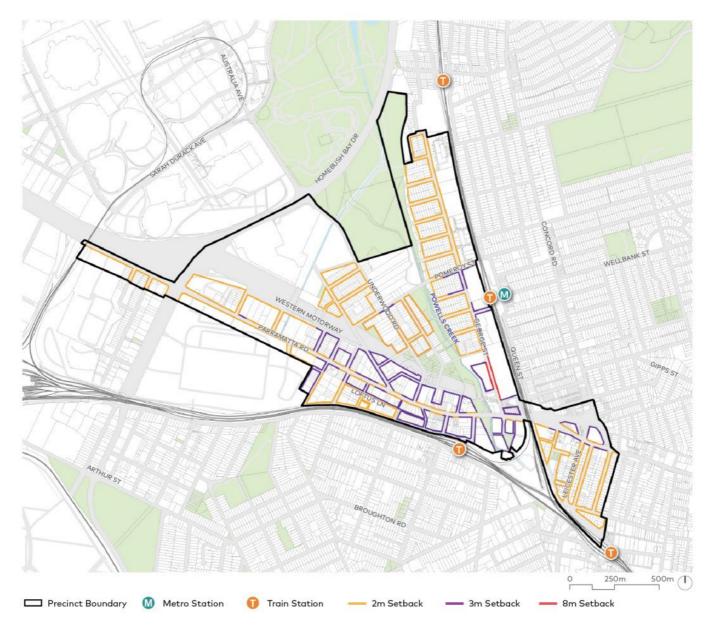


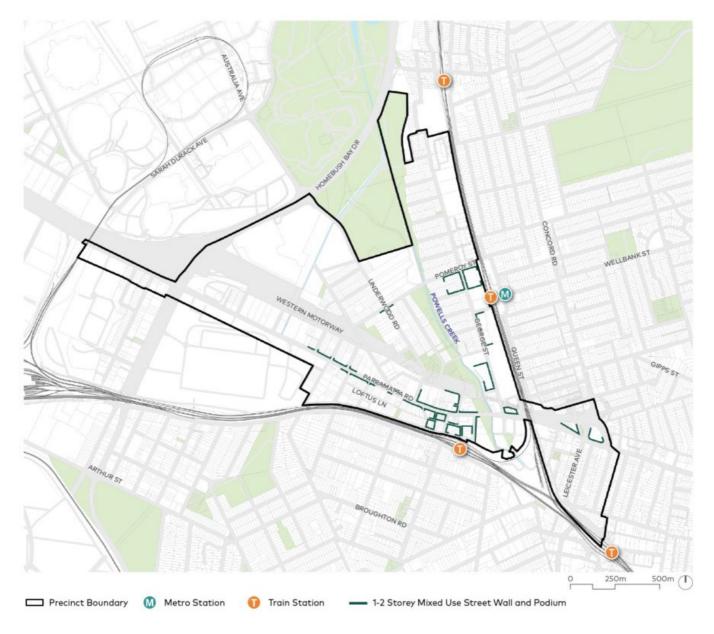
Figure 15: Secondary building setbacks (additional setback from the primary building setback line)



Figure 16: Example section for a mixed-use building



Figure 17: Example section for a high-density residential building





5.5 Building orientation

Objectives

- a) Maximise residential amenity in terms of privacy, natural ventilation and daylight access to internal spaces.
- b) Minimise the impact of new development on the outlook and privacy of adjoining properties.
- c) Ensure that buildings address the street, laneway, new through-site link or open space.
- d) Provide usable private external spaces which are integrated with internal spaces.

- 1. Ensure ground floor dwellings have a primary street address or are oriented to the public domain and have clear legible entries.
- 2. Blank walls are to be avoided fronting principal streets and the public domain.
- 3. Development must be designed so that it has a clearly definable entry and addresses the street.
- 4. Buildings on corners must address both streets and architectural elements are composed so that they 'turn the corner'.

5.6 Building Articulation and Design

Objectives

- a) Ensure development provides a high quality visual experience and creates interest when experienced from a walking pace.
- b) Add visual quality and interest to new buildings with a focus on breaking up massing of higher density forms when viewed from public places and neighbouring properties.
- c) Ensure buildings respond to environmental conditions such as noise, sun, wind and views.
- d) Improve the safety of residents and the public domain.

- 1. Buildings that are 3 storeys or more are to be designed so that they clearly articulate a base, middle and top.
- 2. Facades are articulated using techniques such as projections, recesses, eave overhangs and deep window reveals.
- 3. Louvres, shading devices and windows are able to be operated by buildings users to allow building occupants to regulate climatic conditions rather than rely solely on mechanical systems.
- 4. The maximum length of straight wall on any storey above ground floor level, without articulation such as a balcony or return, is 15m to break up massing.
- 5. New development is to place particular focus on creating a 'human scale' at the lower levels using detailed design, insets and projections that create interest and breaks down the mass and scale of the building and, where relevant, the appearance of finer grain buildings.
- 6. Building massing is to be vertically articulated.

- 7. Adjoining buildings are considered in terms of setbacks, awnings, parapets, cornice lines and facade proportions.
- 8. Roof plant, lift overruns, vents, carpark entries and other service-related elements are integrated into the built form and complement the architecture of the building.
- 9. Architectural or artistic treatments should be incorporated to add visual interest to highly visible interim blank facades.

5.7 Active Frontage Requirements

Objectives

- a) Encourage new development that promotes activity on the street and enhances public safety and security.
- b) Provide for the amenity, interest and liveliness of the street environment.
- c) Establish a fine grain urban environment to ensure a positive experience for pedestrians within the street.
- d) Provide an active ground floor frontage that is accessible and integrated with the design of the public domain.

- 1. The finished ground floor level with an Active Frontage is to match the footpath level. Where this is not possible due to topography, the ground floor level is to be a maximum of 0.4m above the footpath, unless the building is located within an area vulnerable to flooding.
- 2. Consistent paving, awnings, street furniture, signage, planting and lighting is provided along Active Frontages.
- 3. Generally, Active Frontages are to:
 - a) maximise entries or display windows to shops and/or food and drink premises or other active uses,
 - b) include a minimum of 70% of transparent glazing with a predominantly unobstructed view from the adjacent footpath, except as required to preserve the significant fabric of heritage buildings,
 - c) incorporate design features, such as continuous awnings, to ensure adequate protection for pedestrians from the elements,
 - d) provide a high standard of finish and appropriate level of architectural detail for shopfronts,

- e) minimise blank walls (with no windows or doors), fire escapes, service doors, plant and equipment hatch,
- f) ensure the placement of mechanical louvres/grilles is at a high level and discretely integrated into the façade, and
- g) reduce exposure to back of house areas.

5.8 Interactive Residential Frontages

Objectives

- a) Appropriately define and design the street edge and setback area to achieve amenity and privacy for residents as well as engagement with and passive surveillance of the street.
- b) Ensure appropriate scale and proportion of foyers and lobbies in relation to site frontage
- c) Increase passive surveillance of the street and enhance safety

- 1. In locations that are not identified as Active Frontages, development that fronts onto streets must comply with following controls:
 - a) Maximise the number of front doors and private spaces which are visible from the street. At a minimum there is to be a pedestrian entry and/or primary private open space overlooking the street every 15m.
 - b) Provide openable windows and balconies at upper levels that provide views of the street.
 - c) Entries and private open spaces are provided within the 3m and 6m landscaped setbacks including a 1.5m wide strip of landscaping (see Figure 14 and Figure 15) and other controls including those identified in sections 6.3 Landscape Design and Green Infrastructure, 6.5 Tree Canopy and Deep Soil and 6.4 Tree Species are also to be met.
 - d) Provide lighting at entryways and along the frontages to ensure visibility at night, improving both security and aesthetic appeal. Specify types of lighting fixtures that are energyefficient and suitable for enhancing the streetscape to address CPTED requirements.
 - e) All landscaping within the front setback is to maintain clear views from the footpath to the development.
 - f) Front fences are to be a maximum of 1.2m high and at least 50% is to be at least 50% transparent and enable a high level of passive surveillance.

- g) Front terraces and entry areas are to be elevated by between 0.6m and 1.0m above the level of the street to improve privacy and increase opportunities for passive surveillance.
- h) Any ramping exceeding the gradient of 1:20 is to be internalised within the building form to minimise visual clutter and maximise landscaping within the front setback.
- Development is to minimise services (i.e. substations, fire services and water services) located within the front setback, along the site frontage or on building facades in the first instance. Where utility services are directly visible from the public domain, they must be integrated with the façade design of the building. Where this is not practical, utility services must be screened using high quality materials and integrated with the landscape design.

5.9 Accessible Design

Objectives

- a) Ensure that the public domain of new development provides equitable, safe and legible access for everyone.
- b) Prioritise accessibility in the public domain to maximise connections to Country and cultural practices within a safe environment.
- c) Provide equitable access and facilities for all people to all new development and upgraded or intensified uses in existing buildings.
- d) Encourage consideration of access issues early in the development design process.

- 1. All development must comply with the following:
 - a) all Australian Standards relevant to accessibility,
 - b) the Building Code of Australia access requirements, and
 - c) Disability Discrimination Act 1992.
- 2. Complex developments, where compliance is proposed through alternative solutions, must be accompanied by an Access Report prepared by a suitably qualified access professional.
- 3. The provision of equitable access is to have minimal impact on the significant fabric and setting of heritage items and of contributory buildings within heritage conservation areas.
- 4. Where heritage impact is used as a reason for not providing equitable access in accordance with this Section, evidence is to be provided that no suitable alternatives for access are available.

- 5. Encroachment onto public domain to achieve access requirements is generally not permitted except when:
 - a) access by other means will result in a substantial loss of original fabric of a heritage-listed property impacting on the heritage significance of the place, and that the provision of equitable access is highly desirable, with no alternative access options available; or
 - b) the proposal involves a significant public building where equitable access is highly desirable and there are no alternative access options available.
- 6. Access arrangements are to be:
 - a) integral with the overall building and landscape,
 - b) as direct as possible, and
 - c) designed so that a person does not need to summon help.

5.10 Adaptable Dwellings

Objectives

a) Provide a reasonable proportion of residential units in multi-unit developments which are designed to be flexible and easily modified to cater for occupants with a disability.

Provisions

- 1. Adaptable dwellings are to be spread amongst all unit sizes to accommodate various household sizes.
- 2. Adaptable dwellings are to be provided in all new development in accordance with the following rates:

Table 3: Adaptable Dwellings Requirements

Total number of dwellings	Number of adaptable dwellings to be provided
Between 0 and 7	Nil
Between 8 and 14	1 dwelling
Between 15 and 21	2 dwellings
Between 21 and 29	3 dwellings

Total number of dwellings	Number of adaptable dwellings to be provided
30 or more	15% of total dwellings

5.11 Affordable Housing

Objectives

a) Ensure that low to moderate income households can afford to live in the Precinct by increasing the stock of appropriate affordable housing.

Provisions

- 1. Construction materials are durable and contribute to achieving environmental objectives.
- 2. In buildings that contain both affordable housing and private housing, the affordable housing must:
 - a) Be indistinguishable from private housing in layout, design and building access, and
 - b) achieve the same levels of amenity (in particular solar, noise and ventilation) as private housing.

5.12 Residential uses not covered by the Housing SEPP and Apartment Design Guide

Objectives

a) Ensure design quality, performance of and amenity created by new residential development is of a high standard and consistent across the precinct.

- 1. The maximum building depth is 18m unless it can be demonstrated that all habitable rooms receive adequate ventilation and solar access, e.g. through the use of a courtyard design.
- 2. Single aspect dwellings, if unavoidable, are only permitted if they have a northerly or easterly aspect.
- Parking is not permitted to be visible from streets and open spaces. Access to parking via a driveway, lane or basement carpark entry is permitted if one access point services a minimum of 5 dwellings. Front garages, carports and individual driveways are not permitted.

- 4. Living rooms and private open spaces of at least 70% of apartments receive a minimum of 2 hours direct sunlight between 9 am and 3 pm in mid-winter (21 June).
- 5. Building separation is to be provided as per the Apartment Design Guide, Section 3F Visual Privacy.
- 6. Private open space (POS) is designed to maximise useability, privacy, outlook and solar access.
- 7. For dwellings on the ground floor including terraces, the minimum POS must be provided in accordance with Table 4: Minimum Private Open Space Requirements Ground Floor, with minimum dimensions of 4.0m x 4.0m.
- 8. For dwellings on upper levels such as decks and balconies, the minimum POS must be provided in accordance with Table 5: Minimum Private Open Space Requirements Upper Levels, with minimum dimensions of 2.0m x 3.0m.

Table 4: Minimum Private Open Space Requirements - Ground Floor

Dwelling type	Min. POS
Studio / 1 bed	20m ²
2 bedroom	28m²
3+ bedroom	35m²

Table 5: Minimum Private Open Space Requirements – Upper Levels

Dwelling type	Min. POS
Studio / 1 bed	10m ²
2 bedroom	14m²
3+ bedroom	18 ²

5.13 Industrial developments

Objectives

a) Ensure that industrial development does not unreasonably adversely impact on residential amenity.

- b) Facilitate employment generation and maximise the potential of employment generating industries.
- c) Encourage design that is sustainable and environmentally responsible, and takes into account its social impact on environmental amenity.
- d) Encourage design that is of a type, scale, height, bulk and character that is compatible with and will enhance the streetscape characteristics of the surrounding area.

- 1. Developments predominately comprising industrial uses must be designed in accordance with:
 - a) Part H Industrial of the Canada Bay DCP, for development on sites located within the Canada Bay LGA, or
 - b) Part D Industrial Development of the Strathfield DCP, for development on sites located within Strathfield LGA.

6 Design Guidelines – Public Open Space

6.1 Public Domain

Objectives

- a) Implement a "Country-centred" approach, a network of relationships through Country, human and non-human - all supporting each other throughout the Homebush Precinct.
- b) Establish a diverse range of types, uses and scales of public spaces throughout the Homebush Precinct that encourage social interaction, collaboration and use by everyone.
- c) Achieve an adaptable public domain capable of accommodating a broad range of uses and events (including community events), experiences and activities.
- d) Support walking and cycling along new and upgraded active transport routes to key destinations such as surrounding train stations and centres, Sydney Markets and Sydney Olympic Park.

- e) Deliver landscape and green infrastructure outcomes in accordance with section 6.3 Landscape Design and Green Infrastructure.
- f) Achieve well integrated interpretive heritage elements and public art to create a more visually interesting and culturally diverse public domain.
- g) Increase tree canopy cover and provide for greenery within the public domain.

- Tree planting on publicly accessible streets and laneways must be consistent with Table 6: Public Domain Tree Canopy, unless it can be clearly demonstrated that it is unreasonable to meet this requirement, and a suitable urban design outcome can be achieved which would be applicable to this specific instance only.
- 2. To calculate the tree canopy percentage:
 - a) Identify the targets applicable to the street type, giving due consideration to the zoning, the width of the road reserve, and the location of power (underground vs overhead),
 - b) Calculate existing canopy (m²) as a baseline using available tree canopy data (Note: The Department has released 2022 tree canopy data for Greater Sydney. Council canopy data or an arboricultural assessment of canopy cover, based on the size, species, and maturity of the tree is also acceptable),
 - c) Any canopy from trees identified for removal as part of the assessment should be omitted from the baseline,
 - d) Include any canopy contribution from young trees upon reaching maturity,
 - e) Calculate the canopy cover target as a percentage of the total road reserve area (m²).
 Subtract the baseline existing canopy from this total target area. The remaining area equates to the amount of additional canopy required to achieve the target, and
 - f) Convert the additional canopy required into a number of small, medium, and/or large trees. This can be done using the general assumed tree sizes at maturity in Table 9: Target mix of trees or using the assumed canopy area at maturity of specific tree species if known.
- 3. Public domain works are to incorporate underground utilities within the road reserve as agreed with the consent authority and in a manner that does not impede consistent street planting and allows provision of required soil volumes and associated drainage requirements
- 4. Retain existing site qualities and natural landscape features.
- 5. Create public domain that promotes recreation and public engagement.

- 6. Increase the quality and usability of the public domain through innovative built form, wider footpaths and new connections.
- 7. Provide permeable ground surfaces to allow rainwater to penetrate the soil.
- 8. In flood affected areas flood impact is to be considered as part of the design of public domain (refer to section 8.6 Flooding).
- 9. A detailed public domain plan is to be prepared as part of any future development application that proposes new public domain elements.
- 10. Where a detailed public domain plan is required, it is to:
 - a) incorporate place principles and a movement plan that demonstrates how the site has been designed to deliver high quality, co-ordinated public spaces that include:
 - i. deep soil areas, street trees and other vegetation,
 - ii. paving and other hard surfaces,
 - iii. lighting,
 - iv. seating,
 - v. bicycle parking spaces for share bikes and visitors,
 - vi. bins,
 - vii. signages, including wayfinding signs,
 - viii. public art,
 - ix. heritage interpretation,
 - x. Aboriginal historical considerations.
 - b) consider the NSW Movement and Place Framework where applicable, and the NSW Greener Neighbourhoods Guide.
- 11. Ensure the design of the public domain prioritises 'Country' including providing:
 - a) Accessible public open space that caters for the needs of people of all ages and abilities,
 - b) Specific cultural secure spaces to practice/share culture and showcase for local and surrounding Aboriginal communities, and
 - c) Tangible connections to pre-contact landscapes, patterns of movement (people and environmental) and biodiversity.

Table 6: Public Domain Tree Canopy

	Street type	Canopy Cover
Existing streets	Residential street with overhead power lines	40%
	Residential street with underground power lines 50%	
	Industrial street with overhead power lines 35%	
	Industrial street with underground power lines 45%	
New streets*	Residential street with underground power lines	70%
	Industrial street with underground power lines	60%

* Note: All new streets should have underground powerlines.

Street tree spacing

- Within street settings with overhead power lines, small trees are to be spaced at 7m centres.
- Within street settings without overhead power lines, medium trees are to be spaced at 10m centres.
- Allow a 2m offset between edge of driveways and centre of the tree on residential streets, and a 4m offset from driveways on industrial streets.

6.2 Public Open Space

Objectives

- a) Deliver public open space that is vibrant, inclusive, accessible and safe.
- b) Public open space is of an appropriate size for a variety of uses and suitably dimensioned and designed for the intended use in terms of quality and orientation.

- 1. Public open space is to be provided in the locations identified in Figure 19: Public Domain Plan (Tyrrell Studio, 2024), and in accordance with the standards set out in Table 7: Open Spaces opportunities and the open space landscape characteristics as detailed in Homebush Precinct Public Domain Strategy Report (Tyrrell Studio, 2024).
- 2. Landscaping and design of publicly accessible open spaces is to be of high quality, creating interest and character by including endemic and native tree species, well integrated public art and high-quality materials and furniture.

- 3. The minimum tree canopy targets set out in Table 8: Open Space Canopy Targets coverage must be achieved for all parks.
- 4. The public domain is to provide a comfortable environment, in particular for wind and solar access, suited for the intended purpose of its various parts: sitting, standing and walking.
- 5. Design of the public domain must integrate stormwater and floodwater management and green infrastructure (refer to section 8.5 Water management).
- 6. Public open space must:
 - a) Include basic services (including stormwater) and access needs before development results in long-term occupation,
 - b) Include public domain spaces that are constructed in a legible manner, allowing viable use and a positive contribution to the amenity of the area,
 - c) Be sequenced so that the construction and delivery and essential infrastructure is balanced between cost efficiency and unnecessary disruption with ordinary use and enjoyment of the land.

Eg. Stormwater systems, services installation and road construction may extend beyond the boundaries of a particular site if this represents a cost-effective approach, minimising interface and disruption costs in the future.

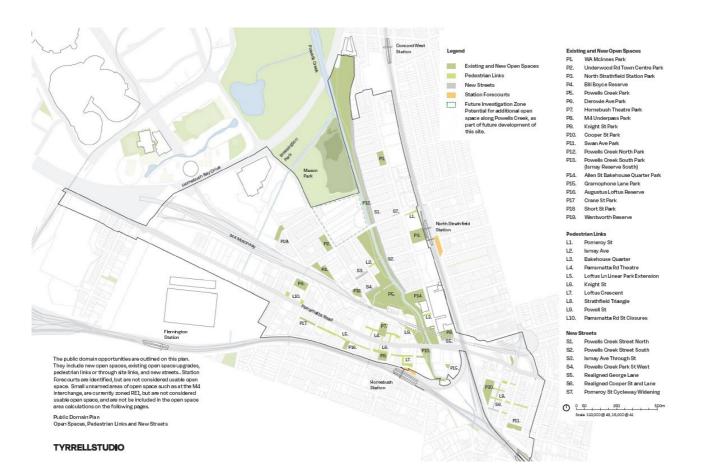


Figure 19: Public Domain Plan (Tyrrell Studio, 2024)

Table	7:	Open	Spaces	opportunities
Tuble	· ·	open	opuces	opportunities

Number	Name	Status (Existing/New)	Existing Area (m²)	Proposed Total Area (m²)
P1.	WA McInnes Park	Existing	575	3,371
P2.	Underwood Road Town Centre Park	New	-	4,184
P3.	North Strathfield Station Park	New	-	6,598
P4.	Bill Boyce Reserve	Existing	4,265	4,881
P5.	Powells Creek Central Park	Existing	53,188	87,526
P6.	Derowie Avenue Park	New	-	3,883
P7.	Homebush Theatre Park	New	-	3,842
P8.	M4 Underpass Park	New	-	3,449

Number	Name	Status (Existing/New)	Existing Area (m²)	Proposed Total Area (m²)
P9.	Homebush Station Park	New	-	2,489
P10.	Strathfield Triangle Park	New	-	6,222
P11.	Swan Avenue Park	New	-	2,442
P12.	Powells Creek North Park	Existing	65,455	68,408
P13.	Powells Creek South Park	Existing	5,520	7,067
P14.	Allen Street Bakehouse Quarter Park	New	-	5,842
P15.	Gramophone Lane Park	Existing	556	556
P16.	Augustus Loftus Reserve	Existing	1,283	1,283
P17.	Crane Street Park	Existing	1,177	1,177
P18.	Short Street Park	Existing	2,082	2,082
P19.	Wenworth Reserve	Existing	2,515	2,515

Table 8: Open Space Canopy Targets

Land Use Category	Minimum canopy target
Open spaces (< 5 ha) without sports courts and fields	Minimum 45% canopy cover
Open spaces (< 5 ha) with sports courts and fields	Minimum 45% canopy cover. Target only applies to areas outside the courts and fields. The remaining area is to exceed the 45% minimum to compensate for any reduced canopy
Regional open space	Determined on a case-by-case basis. Applicants must demonstrate no-net loss of canopy and a contribution to strategic canopy targets.

6.3 Landscape Design and Green Infrastructure

Objectives

- a) Promote high quality landscape design as an integral component of the overall design of new development, softening the appearance of buildings and mitigating the impacts of urban heat.
- b) Improve the health of Country through enhancing local micro-climate, native fauna and flora habitats and control climatic impacts on buildings and outdoor spaces.
- c) Strengthen our connection with Country and create opportunities for Aboriginal storytelling.
- d) Ensure landscape design is incorporated into the design process from the beginning as it is an integrated part of the overall design outcome.
- e) Ensure landscape design is coordinated with building, infrastructure and service locations.

- 1. Minimise the impact of driveways and parking areas on existing landscaping, landform and streetscape, in terms of siting, permeability and choice of materials.
- 2. Landscaped areas must be effectively distributed on the site to minimise the dominance of buildings, structures and paving when viewed from the street, public places and surrounding properties.
- 3. Street trees are incorporated into the overall design of the development.
- 4. Landscape design is to highlight architectural features, define entry points, assist with wayfinding through the site, and frame and filter views from and into the site.
- 5. Landscape design is to be integrated with water and stormwater management.
- 6. Incorporate diversity of plant species, forms and heights.
- 7. Integrate opportunities for planting and landscape areas over structures including details of drainage, waterproofing and soil types as appropriate.
- 8. For new development, a landscape plan is to be prepared by a suitably qualified landscape architect with the development application that shows the:
 - a) planting schedule with numbers and species of plants including botanical and common names,
 - b) number and name including botanical and common names of mature trees on site,

- c) proposed finishes, materials, setout, and details of hard landscape elements and landscape structures including type, levels and detail of paving, fencing, retaining walls and other details of external areas of the site, and
- d) response to other requirements under section 6.3 Landscape Design and Green Infrastructure.
- 9. Where outdoor/at grade parking is proposed, one medium tree per 4 car spaces is to be provided in addition to perimeter planting. This planting is to:
 - a) be in a minimum planting zone of 13m² (equivalent to one parking bay), with a minimum dimension of 2m and soil depth of 1m unencumbered deep soil. The bays are to be provided with a raised kerb barrier and native ground cover planting,
 - b) be designed as rain gardens or other suitable alternative as agreed by Council,
 - c) be planted in soil with a suitable rooting volume for the required number of trees and their future canopy size,
 - d) improve pedestrian amenity,
 - e) not obstruct the visibility of either drivers or pedestrians, with open sightlines maintained between parking areas, public streets and paths,
 - f) not conflict with lighting and services, and
 - g) break up large areas of impervious surfaces.
- 10. For development along Parramatta Road, identified with a 6m setback (refer to Figure 14: Primary building setbacks and streetscape section in accordance with Figures 30 – 33), a minimum of 1 canopy tree per 10m of length of frontage is to be planted in the 'green edge' setback area, capable of reaching a mature height of at least 10m.
- 11. For all development not along Parramatta Road (excluding active frontages) a minimum of 1 canopy tree per 12m of frontage is to be planted. New trees are to be capable of a mature height of at least 6m.

6.4 Tree Species

Objectives

- a) Contribute to improving the diversity and abundance of locally endemic, indigenous and native flora and fauna species across the Homebush Precinct.
- b) Enhance and regulate micro-climate in the public domain, communal or private open space.

- 1. Tree species shall be selected from:
 - a) City of Canada Bay tree species identified in the Canada Bay DCP for sites located in the Canada Bay LGA, or
 - b) Strathfield Council's list of trees for sites located in the Strathfield DCP.
- 2. During the detailed design phase, the species proposed in parks and properties are to be reviewed and considered in relation to the microclimatic conditions resulting from the proposed development form, particularly shade/sun.
- 3. All development is to be designed to eliminate the impact upon significant trees on site, street trees and trees on adjoining land including public open space.
- 4. Existing mature trees in good health and condition are to be retained to ensure viable retention through the appropriate siting of buildings, car parks, basements, ancillary buildings, driveways and hard stand areas.
- 5. Tree species selection is to provide a mix of trees in accordance with Table 9: Target mix of trees.

6.5 Tree Canopy and Deep Soil

Objectives

- a) Increase tree canopy cover and provide for more greenery associated with the public domain.
- b) Provide for adequate infiltration of stormwater, deep soil areas to support mature tree growth, landscaping and areas of communal outdoor recreation.

- 1. Tree coverage includes trees planted at ground level as well as any trees planted in upper levels of buildings, such as podiums and roofs. It may also include any canopy overhanging from an adjoining public domain area.
- 2. Trees and vegetation are to provide a high degree of amenity and environmental benefit. Their selection and location should:
 - a) Provide shade in summer and sun access in winter to building facades and public and private open spaces;
 - b) Reduce glare from hard surfaces;
 - c) Channel air currents into built form; and

- d) Provide windbreaks, screen noise and enhance visual privacy where desirable.
- 3. Deep soil areas must provide for sufficient soil volumes and quality to support healthy root system development and ensure canopy trees reach maturity.
- 4. Tree size and mix is to align with Table 9: Target mix of trees.
- 5. Tree canopy and deep soil must be provided in accordance with Table 10: Tree canopy, deep soil and tree planting requirements.
- 6. Deep soil areas must meet and/or exceed the requirements of the Apartment Design Guide.
- 7. Consolidate deep soil in setback areas and locate with adjoining deep soil areas in adjoining properties.
- 8. Deep soil areas are to be de-compacted before planting with no services to be installed within these zones.
- 9. Deep soil zones are to be located within key communal outdoor space areas or elsewhere where large trees will benefit the maximum number of residents or contribute to the public domain.

Table 9: 1	Farget mix	of trees

Tree category	Size (minimum mature canopy diameter)	Minimum canopy area	Indicative mix of trees
Small	6m	28m ²	15%
Medium	12m	50m ²	45%
Large	>18m	113m ²	40%

Table 10: Tree canopy, deep soil and tree planting requirements

Lot size	Minimum	Minimum	Minimum tree planting rates*
	tree	deep soil	
	сапору	(% of	
	target (%	site	
	of site	area)	
	area)*		

Attached dwellings – separate lots (or appearance of), separate driveway/parking, all dwellings face a public road. Requirements are to be delivered on each dwelling within a development.

Less than 150m ²	15%	15%	At least one small tree is to be planted in the deep soil area.
150m² - 300m²	20%	20%	For every 200m ² of site area, or part thereof at least one small tree is to be planted in the deep soil area.
Greater than 300m ²	25%	25%	For every 225m ² of site area, or part thereof at least one medium tree is to be planted in the deep soil area.

Multi dwelling housing – strata/community lots, ground floor access, shared driveway parking, not all dwellings face a public road

Less than 1,000m ²	20%	20%	For every 300m ² of site area or part thereof, at least one medium tree is to be planted in the deep soil area.
1,000m² - 3,000m²	25%	25%	For every 200m ² of site area or part thereof, at least one medium tree is to be planted in the deep soil area.
Greater than 3,000m²	30%	30%	For every 350m ² of site area or part thereof, at least two medium trees or one large tree are to be planted in the deep soil area

Apartments

All lots (aligned with design criteria under Objective 3E in the Apartment Design Guide

7%

All lots

15%

Recommended (Aligned with design guidance under Objective 3E in the Apartment Design Guide)

Lot size	Minimum tree canopy target (% of site area)*	Minimum deep soil (% of site area)	Minimum tree planting rates*		
Less than 650m ²	15%	7%	For every 350m ² of site area, or part thereof, plant at least one small tree in the deep soil area.		
650m2 - 1500m²	15%	10%	For every 350m ² of site area, or part thereof, plant at least one medium tree in the deep soil area.		
Greater than 1500m ²	20%	15%	For every 575m ² of site area, or part thereof, plant at least two medium trees or one large tree in the deep soil area.		
Commercial					
All lots	35%	25%	For every 300m ² of site area, plant at least two medium trees or one large tree in the deep soil area.		
Mixed-use					
All lots	Developments will be assessed on a case-by-case basis, considering both the Apartment Design Guidelines and proposed setbacks. The applicant must demonstrate maximised tree planting in deep soil zones, no-net loss of canopy, and a contribution to strategic canopy targets.				
Industrial (large format and light industrial)					
All lots	25%	15%	For every 400m ² of site area or part thereof, at least two medium trees or one large tree is to be planted in the deep soil area.		

* Development can meet urban tree canopy requirements by planting trees in line with the tree planting rate or by planting a combination of trees that achieve the minimum tree canopy percentage cover. The required number of trees that will meet minimum tree canopy percentage cover can be calculated by using the assumed canopy area of small, medium and large trees in Table 9: Target mix of trees.

6.6 Tree Management

Objectives

a) Retain and protect the health of existing trees.

Provisions

- 1. Ensure the protection and maintained health of existing mature trees in accordance with the relevant Australian Standards.
- 2. A qualified Arborist (AQF Level 5) is to be engaged to provide tree impact assessment, protection and management advice throughout the design and construction phase of development where a significant tree exists on the site.
- Tree management must be in accordance with requirements outlined in the Australian Standard 4970-2009 – Protection of Trees on Development Sites and:
 - a) Canada Bay DCP for sites located in the Canada Bay LGA; or
 - b) Strathfield DCP for sites located in the Strathfield LGA.
- 4. Replacement tree planting must be provided in accordance with:
 - a) Canada Bay DCP for sites located in the Canada Bay LGA; or
 - b) Strathfield DCP for sites located in the Strathfield LGA.
- 5. Any development application is to:
 - a) be guided by an arboricultural impact assessment,
 - b) comply with site-specific tree protection measures,
 - c) include commitment to monitoring the site works to ensure the health and structural stability of existing trees, and
 - d) provide tree protection certification.

6.7 Ecology and Biodiversity

Objectives

- a) Increase and protect existing habitat features throughout the Homebush Precinct.
- b) Maintain and enhance terrestrial biodiversity by protecting native fauna and flora.

- c) Provide corridors of locally indigenous vegetation that link major open spaces and water bodies to enhance environmental quality and optimise opportunities for habitat for native flora and fauna species.
- d) Enhance and connect remnant and fragmented habitat on public and private land through landscaping.

- Existing habitat features including waterbodies and native trees, shrubs and groundcover vegetation are to be retained. Where habitat features are not retained development applications must provide justification for this and to ensure that any loss of habitat for native fauna is compensated through at least a 2:1 ratio. Habitat features such as bush rock, logs and tree hollows removed during the construction should be considered for recreating habitat.
- 2. New habitat features including native trees, shrubs and groundcover vegetation, waterbodies (e.g. gilgais), rockeries and green roofs and walls are to be included in all new developments.
- 3. Any development within the Coastal Wetland proximity area and key areas adjacent to the Coastal Environment Area (as indicated in Figure 20: Biodiversity Vegetation Assessment) should adhere to the *NSW Coastal Design Guidelines* (DPE 2023).
- 4. Any development to be undertaken within the Coastal Wetland proximity area and key areas adjacent to the Coastal Environment Area (as indicated in Figure 20: Biodiversity Vegetation Assessment (EMM, 2024)) are to include the following considerations:
 - a) Allow for the adaptive management of stormwater to ensure run-off leaving the site is better than pre-development quality to lessen effects on coastal wetlands. Appropriate management of water runoff quality and quantity discharged into Powell Creek should be achieved through incorporating effective Water Urban Sensitive Design into building design. At a minimum, water quality is to be managed to ensure pollutant loads in water runoff into Powells Creek meets Australian and New Zealand guidelines for fresh and marine water quality (ANZG 2018)
 - b) Minimise light emitted from development as much as possible
 - c) Wildlife friendly lighting is to be applied
 - d) Assess shading impacts on Mason Park Wetland and seek to minimise as much as possible
 - e) Minimise use of reflective glass to minimise risk of bird collision
 - f) No loud commercial premises operating at night. Noise modelling is to be undertaken to ensure proposed rezoning does not impact wildlife utilising Mason Park Wetland
 - g) Assess and mitigate any potential impact of the development on groundwater that supports the Mason Park Wetland

- h) Potential impacts of acid sulfate soils and legacy contamination are to be assessed and appropriately managed if present
- i) Suitable safeguards and adaptive management employed during construction to avoid impacts of water runoff pollution, contamination, erosion, sedimentation, noise, dust and light.
- 5. Enhance existing and potential biodiversity corridors wherever possible through planting of endemic trees and shrubs throughout the Powells Creek Linear Park. Native vegetation to be planted should be a mix of endemic species belonging to the Estuarine Swamp Oak Twig-rush Forest community. These endemic tree species include Casuarina glauca, Melaleuca quinquenervia, Cupaniopsis anacardioides, Glochidion ferdinandi, Eucalyptus robusta, Eucalyptus botryoides, Eucalyptus tereticornis, Eucalyptus resinifera, Eucalyptus longifolia and Ficus rubiginosa. Common endemic shrubs include Melaleuca ericifolia, Goodenia ovata, Myoporum acuminatum, Acacia longifolia, Melaleuca styphelioides, and Melaleuca linariifolia. Common endemic groundcover includes Machaerina juncea, Juncus kraussii subsp. australiensis, Phragmites australis, Gahnia clarkei, Entolasia marginata, Sporobolus virginicus, Cynodon dactylon, Fimbristylis ferruginea and Hemarthria uncinata.
- 6. All Development Applications must include a detailed, site-specific assessment of biodiversity values which include additional considerations for development within the Coastal Wetland proximity area. This assessment is to be prepared by a suitably qualified ecologist. This report will:
 - a) Identify and determine the habitat extent of any entities of conservation significance, including NSW and Commonwealth listed threatened species and ecological communities
 - b) Determine the nature and extent of impacts to native flora, ecological communities and fauna onsite and in the vicinity during demolition, construction and post-construction stages of the proposed development
 - c) For areas within the Coastal Wetland proximity buffer and key sites adjacent to the Coastal Environment Area, demonstrate consistency with the provisions of the *NSW Coastal Design Guidelines* (DPE 2023)
 - d) Demonstrate consistency with the provisions of the Homebush Precinct Design Guideline
 - e) Address any relevant biodiversity assessments undertaken for the Precinct
 - f) Outline the mitigation measures that will be employed to avoid or minimise such impacts, which may include:
 - i. clearance and, where practical, relocation of any onsite endemic and native flora and fauna prior to works commencing
 - ii. protection of any significant habitat features, where practical
 - iii. restoration/creation of compensatory habitat for any important habitat features removed or disturbed by the development.
- 7. Assess the residual impact on biodiversity according to the NSW *Biodiversity Conservation Act* 2016 and *Environmental Protection and Biodiversity Conservation Act* 1999, as well as any relevant

planning instruments under the *Environmental Planning and Assessment Act 1979* (including State Environmental Planning Policy (Resilience and Hazards) 2021)

8. An overall Landscape Plan or Vegetation Management Plan (VMP) across all key areas, and Landscape/ VMP specific to the Powells Creek Linear Park (as indicated in Figure 20: Biodiversity Vegetation Assessment), are to informed by the current biodiversity assessment, as well as the *Greener Places Design Guide* (DPIE 2020) and any additional guidance from relevant Ecological Assessment reports, Review of Environmental Factors, or Arboricultural Impact Assessments.



Figure 20: Biodiversity Vegetation Assessment (EMM, 2024)

6.8 Solar access

Objectives

a) Achieve desirable public spaces with high levels of pedestrian amenity addressing solar access and micro-climate.

- 1. Siting and built form configuration optimise solar access within the development and minimises overshadowing of adjoining properties.
- 2. Development is to ensure a minimum of 2 hours of sunlight between 9am to 3pm on 21 June for publicly accessible open space within the Homebush Precinct. The minimum 2hr solar access requirement is to be provided to the proportion of area indicated in Figure 21: Solar access to open space.
- 3. Solar access diagrams showing the period of sunlight with one hour gradients between 9am to 3pm on 21 June and the proportion receiving 2 hours of sunlight are to be submitted with the development application. Diagrams are to indicate the existing condition and proposed. If required, the consent authority may request additional detail to assess the overshadowing impacts.
- 4. Areas south of Parramatta Road that are unable to achieve 50% solar access will require consideration as to their proposed programme and use, and how they can provide shaded areas in the summer to complement the areas with very high solar access.

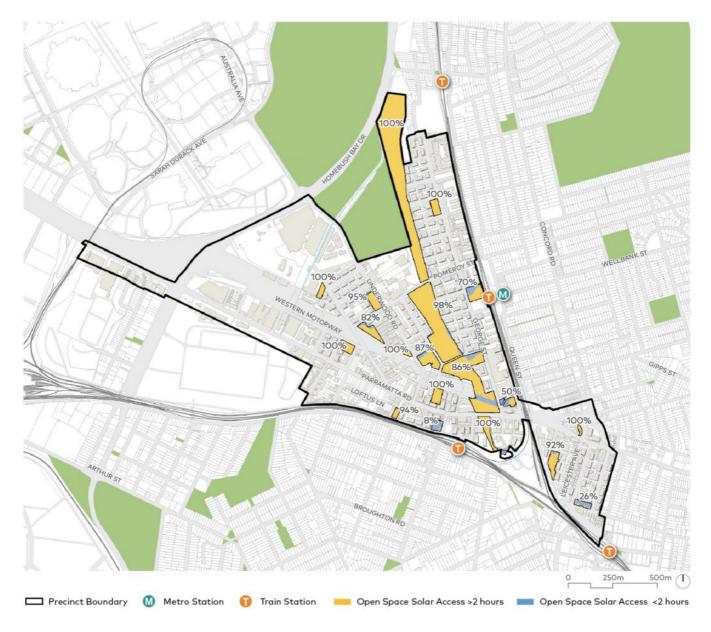


Figure 21: Solar access to open space

7 Design Guidelines – Movement and Parking

7.1 Street network and function

Objectives

- a) Provide a legible and permeable street network that prioritises a high level of amenity, comfort and safety for all road users.
- b) Integrate water sensitive urban design and utilities within the road reserve.
- c) Minimise conflict between active transport uses, such as pedestrian and bicycle paths.
- d) Provide a better and more robust access network that links residential, local schools, employment and retail uses in activity centres throughout Homebush Precinct and to surrounding train stations and open spaces such as the playing fields, Powell's Creek Reserve and Sydney Olympic Park.
- e) Encourage travel behaviour change by discouraging car usage and supporting sustainable travel choices such as public and active transport.

- 1. The street layout and movement network is to be provided in accordance with Figure 22: Access and Movement network.
- Streets are to be designed to consider the streetscape typical cross sections provided in Figure 24 –39. Refer to Figure 23: Movement and Place Plan (Arup, 2024) for sections locations. These are typical cross sections as widths are highly variable and may require reallocation of space within the road reserve in consultation with Council to confirm requirements.
- Transport projects are implemented in accordance with Potential precinct environment interventions detailed in the Homebush TOD Rezoning Precinct Transport Statement (Arup, 2024).
- All streets are to be designed and constructed generally with reference to the NSW Government's Movement and Place – Design of Roads and Streets Guide and Transport for NSW's Walking Space Guide – Towards Pedestrian Comfort and Safety 2020.

- 5. Streets are designed, surfaced and graded to reduce run-off, allow stormwater to be controlled within the Homebush Precinct site, and provide for natural infiltration of stormwater runoff through landscaping.
- 6. Long blocks are broken up with new high quality pedestrian prioritised links, particularly where new connections would facilitate access to public transport, open spaces, activity centres and community facilities.
- 7. All future vehicular links including share zones are required to be in public ownership.
- It is desirable that all future pedestrian / cycle links come under public ownership, however, an 24hr public access easement over private land may be acceptable in certain circumstances, following consultation and negotiation with Council.
- 9. Public domain works are to incorporate underground utilities within the road reserve as agreed with the consent authority and in a manner that does not impede consistent street planting and allows provision of required soil volumes and associated drainage requirements.
- 10. Vehicular access points for developments and buildings are to be consolidated to minimise conflict with pedestrians and cyclists.
- 11. Vehicular access points for developments fronting a classified road should be provided from adjacent local roads where possible.
- 12. Traffic management treatments are not to unduly impede pedestrian or cycle movements.
- 13. New streets are to incorporate water sensitive urban design techniques such as landscaped swales to improve the quality of groundwater and water entering the waterways and tree bays.

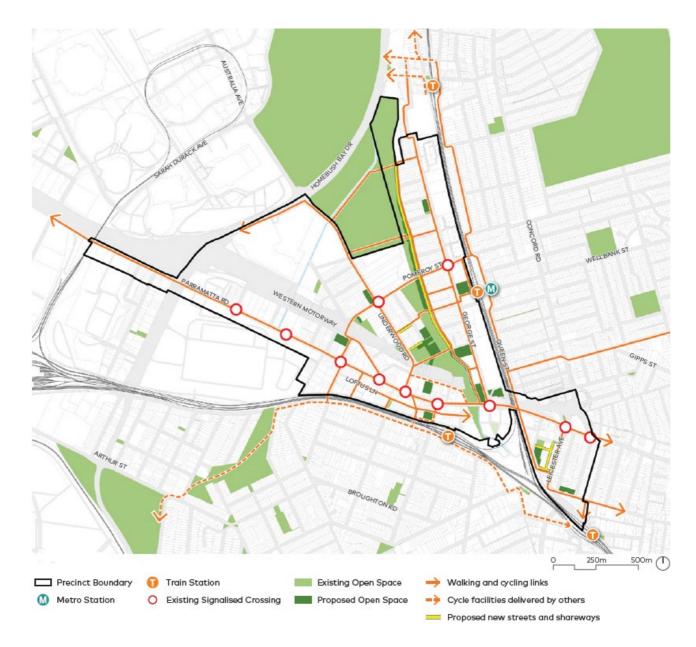


Figure 22: Access and Movement network

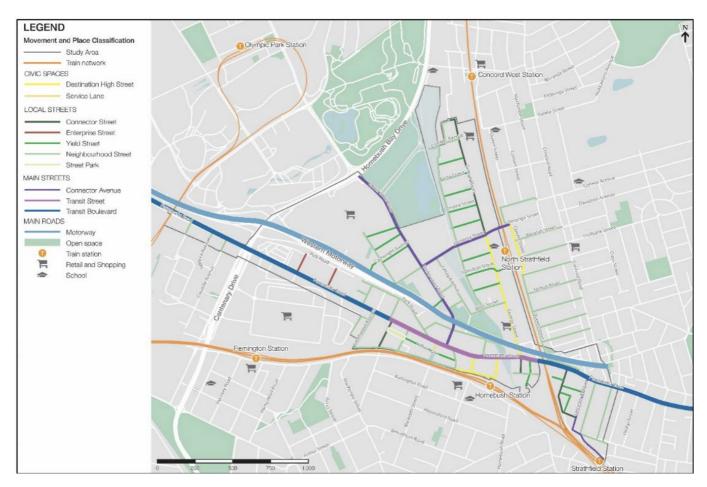


Figure 23: Movement and Place Plan (Arup, 2024)

Destination High Street Station Precinct



Figure 24: Destination High Street Station Precinct Section

Destination High Street Mixed-Use Precinct



Figure 25: Destination High Street Mixed Use Precinct Section

Connector Street with Parking

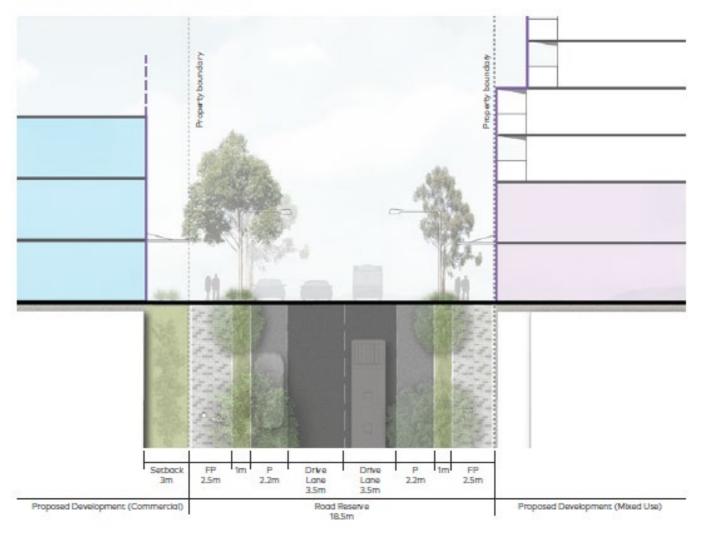


Figure 26: Connector Street with Parking Section



Connector Street with Bi-Directional Cycleway

Figure 27: Connector Street with Bi-Directional Cycleway Section

Enterprise Street

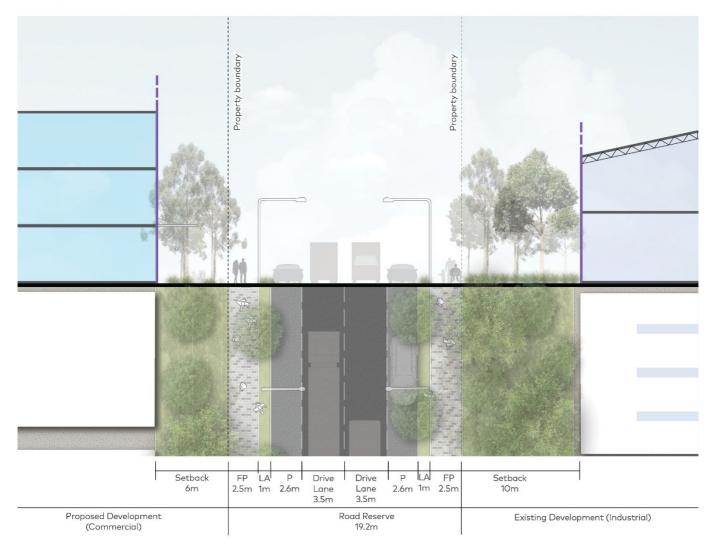


Figure 28: Enterprise Street Section

Yield Street



Figure 29: Yield Street Section

Neighbourhood Street with Parking

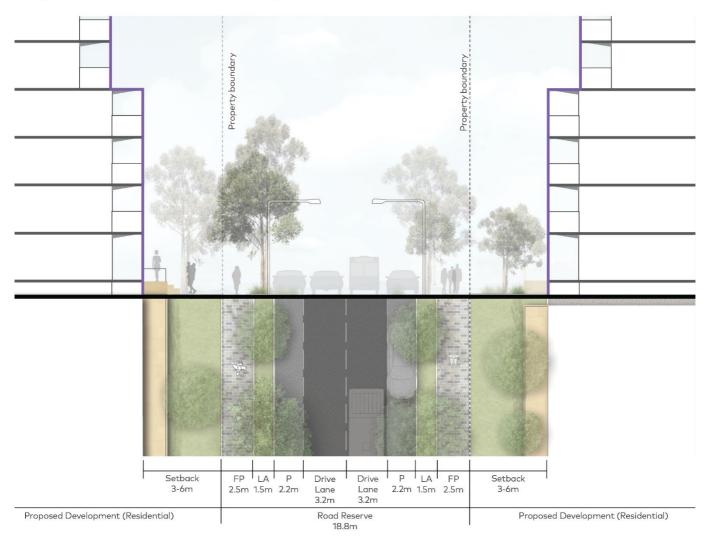


Figure 30: Neighbourhood Street with Parking Section

Neighbourhood Street with Bi-Directional Cycleway



Figure 31: Neighbourhood Street with Bi-Directional Cycleway Section

Street Park

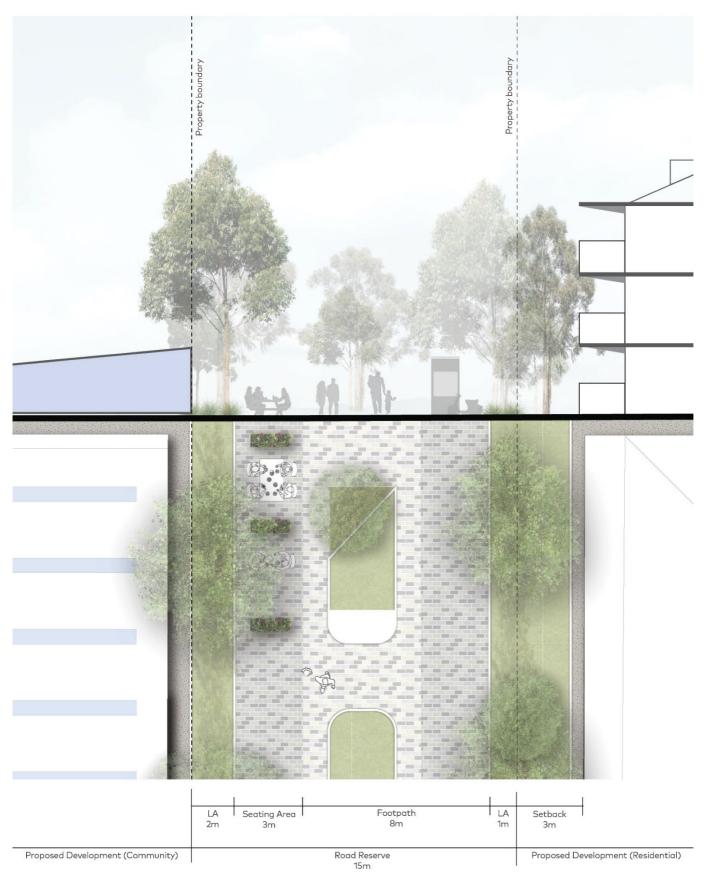


Figure 32: Street Park Section

Connector Avenue with Parking

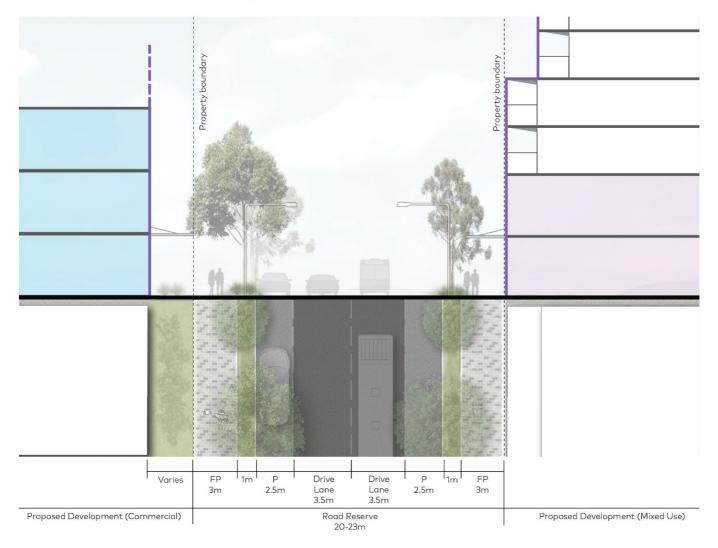


Figure 33: Connector Avenue with Parking



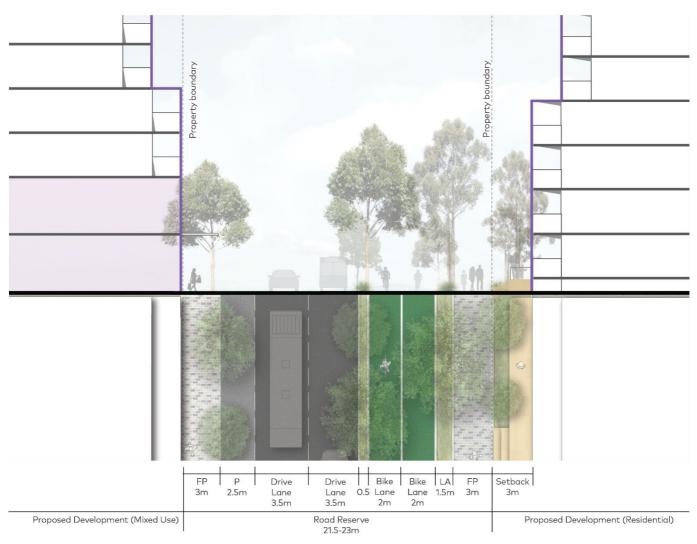


Figure 34: Connector Avenue with Bi-Directional Cycleway Section

Transit Boulevard - up to six traffic lanes



Figure 35: Transit Boulevard – up to six traffic lanes



Transit Boulevard - up to two traffic lanes with bus lanes

Figure 36: Transit Boulevard – up to two traffic lanes with bus lanes

Transit Street - up to six traffic lanes



Figure 37: Transit Street – up to six traffic lanes

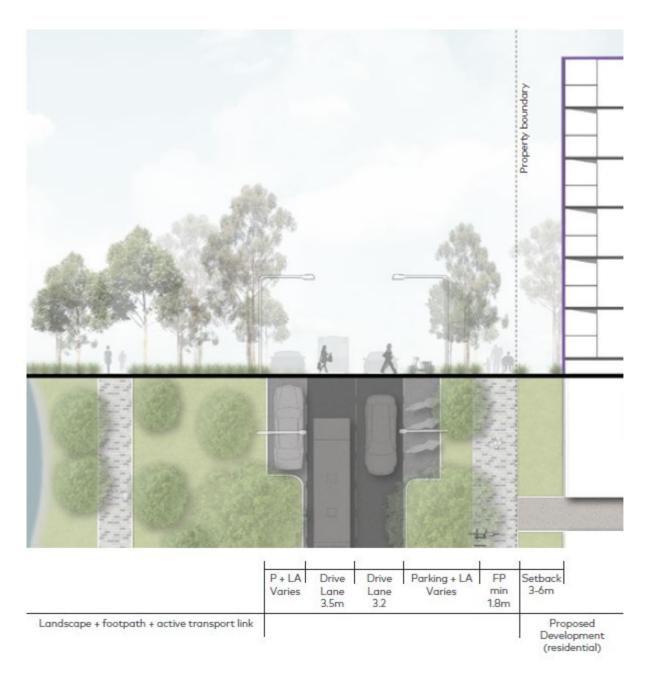


Figure 38: New street along Powells Creek

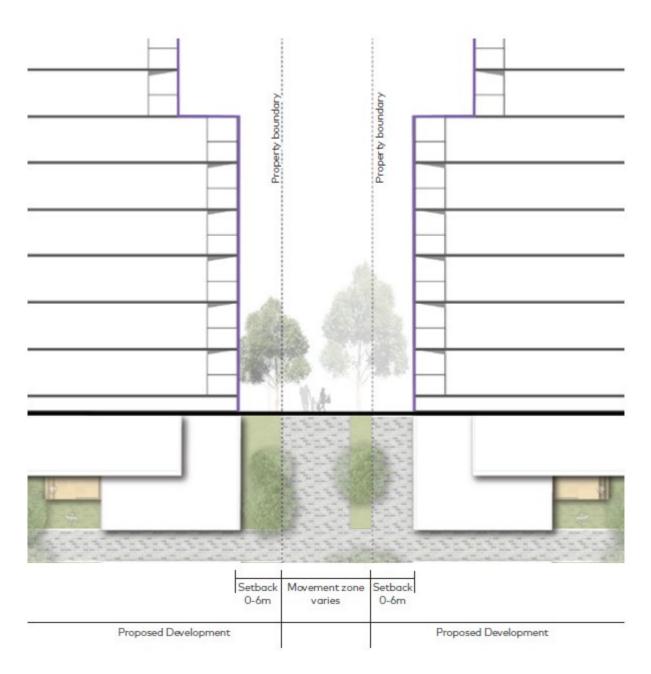


Figure 39: Through site link

7.2 Vehicle and Pedestrian Access

Objectives

- a) Minimise the visual impact of car parking areas and vehicle access points.
- b) Minimise conflicts between pedestrians and vehicles on footpaths, particularly along pedestrian desire lines such as George Street.

Provisions

- 1. Mixed-use development that includes two or more dwellings is to provide separate lift access and a separate entrance exclusively for use of residents.
- 2. Pedestrian entry to development should be clearly identifiable and provided at or near the primary street frontage.
- 3. Vehicular access points must minimise visual intrusion and disruption of the streetscape, emphasise the pedestrian experience and maximise pedestrian safety.
- 4. The width and height of vehicular entries is kept to a minimum. Roller doors or gates are integrated with the architectural design of the development.
- 5. Vehicular entry/ exit points are to be recessed at least 1m behind the building line.

7.3 Pedestrian and Cycling Network

Objectives

- a) Encourage walking, cycling and public transport use in preference to using motor vehicles.
- b) To provide a convenient, efficient, and safe network for pedestrians and cyclists.

- Improve street network permeability across the Precinct, particularly for pedestrians and cyclists, by providing active transport routes in accordance with Figure 22: Access and Movement network and the walking and cycling network interventions detailed in the Homebush TOD Rezoning Precinct Transport Statement (Arup, 2024).
- 2. Prioritise safe and direct links to rail stations, open spaces, activity centres and community facilities.
- 3. The pedestrian network is to:
 - a) be aligned with key pedestrian desire lines;
 - b) seamlessly integrate with existing street networks and consider future networks in the adjacent precincts;
 - c) have generous widths to accommodate the current and future anticipated peak hour pedestrian flows;
 - d) be designed to incorporate opportunities for respite and pause away from primary pedestrian flows; and

- e) be supported by active frontages; and be designed to support access for people of all abilities.
- 4. Future pedestrian/cycle links are to be naturally lit and ventilated, appropriately lit after hours, publicly accessible 24/7, and have clear sightlines from end to end.
- 5. Separate cycling facilities from vehicular traffic, where possible.

7.4 Through-site links

Objectives

- a) Improve pedestrian access and connectivity between residential uses, open space networks, community facilities, public transport and activity centres.
- b) Encourage pedestrian through-site links that are designed to promote safety and amenity.

- 1. Through-site links are to be provided in the locations identified in Figure 38: Through-site links.
- 2. Through-site links are to be designed to:
 - a) have a minimum width of 6m, unless an alternative width is justified through the design excellence process;
 - b) be direct and publicly accessible, including for people with a disability;
 - c) allow visibility along the length of the link to a publicly accessible space or public domain;
 - d) be open to the sky, as much as is practicable subject to wind conditions;
 - e) apply the following requirements where a through site link is proposed to be screened overhead:
 - i. the screen is to be located above the uppermost habitable floor of the podium
 - ii. the screen is to be of a transparent material to maximise access to natural daylight;
 - f) be easily identified by users and have a public character;
 - g) include signage advising of the publicly accessible status of the link and the places to which it connects;
 - be clearly distinguished from vehicle accessways through materials or barriers if appropriate;
 - align with breaks between buildings so that views are extended and there is less sense of enclosure;

- j) provide active edges and opportunities for natural surveillance and other CPTED principles including lighting in accordance with section 8.7 Safety;
- k) include materials and finishes (paving materials, tree planting, furniture etc.) integrated with adjoining streets and public spaces and be graffiti and vandalism resistant;
- ensure no structures (for example, electricity substations, carpark exhaust vents, swimming pools etc) are constructed in the through-site link;
- m) include landscaping to assist in guiding people along the link while enabling long sightlines;
- n) be accessible 24 hours a day.

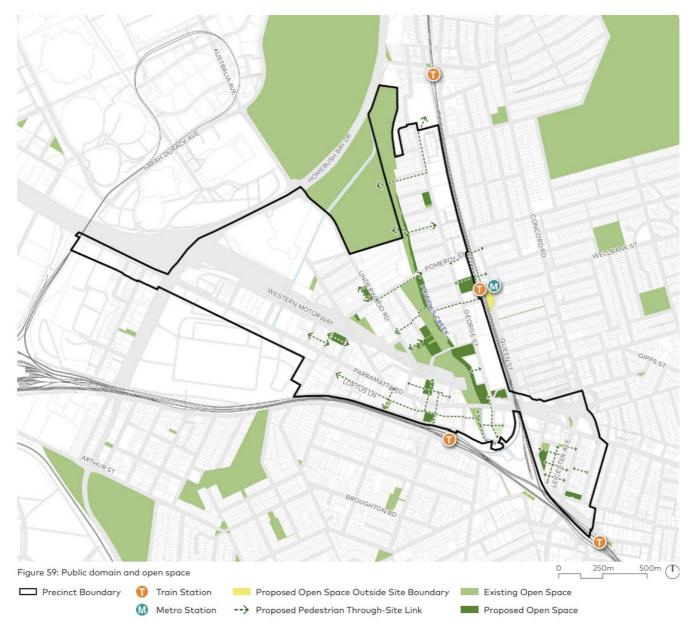


Figure 40: Through-site links

7.5 Parking and End of Trip Facilities

Objectives

- a) Identify the maximum number of car parking spaces that may be provided.
- b) Provide vehicular, pedestrian and cyclists safety.
- c) Encourage the integrated design of access and parking facilities that minimise visual and environmental impacts.

- Car parking areas are identified in Figure 39: Car Parking Areas. Provide car parking in accordance with Table 11: Car Parking Rates based on Parking Areas for the developments located in the specified areas.
- 2. At grade parking, if unavoidable, is screened from public view by active uses and not permissible within any of the setback zones.
- 3. Where possible, parking spaces are allocated to buildings (rather than dwellings) to enable the most efficient using of parking within a building.
- 4. Consideration will be given for parking listed on a separate title (unbundled) from the development.
- 5. Provision of car share parking shall be provided at rate of 1 space per 20 dwellings without parking and 1 space per 100 dwellings with parking.
- 6. Car share parking spaces are to be provided in addition to the maximum number of car parking spaces permitted in the development.
- 7. Car share spaces are located in publicly accessible areas, either on-street, in public parking stations or, if provided within a building it must be accessible to all car share members 24 hours a day, seven days a week.
- 8. All car share parking spaces are to be:
 - a) Located together,
 - b) Clearly designated by signs as being for car share scheme use only, and
 - c) Located near and with access from a public road and integrated with the streetscape through appropriate landscaping where the space is outdoors.
- 9. Written evidence must be provided with the development application demonstrating that offers of a car space to car-share providers have been made together with the outcome of the offers

or a letter of commitment to the service. Clearly marked plans identifying the location of all car share parking spaces must be submitted with the development application.

- 10. Bicycle facilities, such as parking, secure storage and end-of-trip facilities are easily accessible from the public domain and conveniently located near entrances and/or lifts of new development.
- 11. Provide bicycle parking and innovative, high quality and well designed end of trip facilities that promote multi-modal trips and the efficient use of existing public and private parking facilities.
- 12. Provide bicycle parking in accordance with rates specified in Table 12: Bicycle Parking Requirements.
- 13. Wherever possible, bicycle parking and end of trip facilities are be provided at grade. Where bicycle parking is provided within the basement or above ground levels, it is to be located on the first level of basement or first level above ground and in proximity to entry or exit points.
- 14. Provide end of trip facilities for non-residential developments in accordance with Table 13: End of Trip Facility Requirements.
- 15. Refer to section 8.8.5 Electric vehicle charging infrastructure for further controls on electric vehicle parking and charging.
- 16. On-street parking is to be integrated to the streetscape and parallel to the kerb.

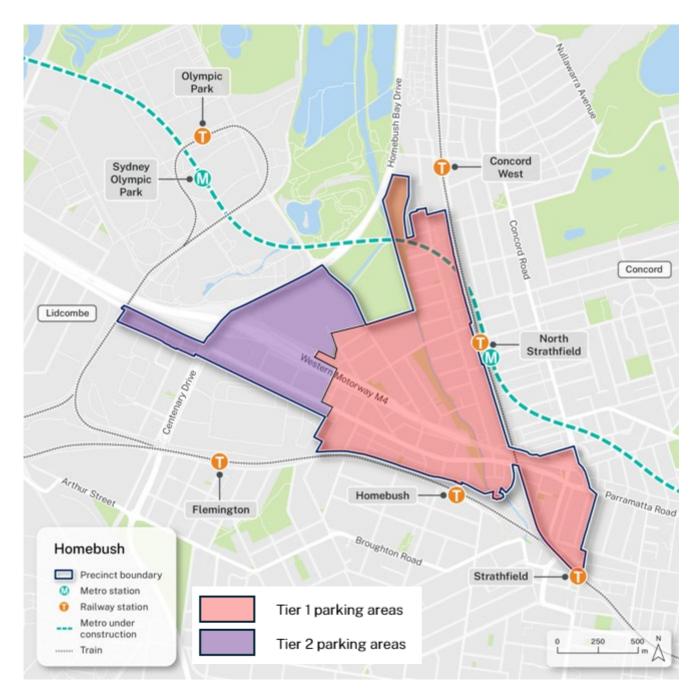


Figure 41: Car Parking Areas

Table 11: Car Parking Rates based on Parking Areas

Area	Car parking type	Maximum Provision
Tier 1 Parking Area	Residential – Studio	0.3 spaces per dwelling
	Residential – 1 bedroom	0.5 spaces per dwelling
	Residential – 2 bedrooms	0.9 spaces per dwelling
	Residential – 3 bedrooms	1.2 spaces per dwelling
	Residential – Visitor	0.1 spaces per dwelling
	Commercial	1 space per 100m² GFA
	Retail	1.4 spaces per 100m ² GFA
	Industrial	0.8 spaces per 100m ² GFA
Tier 2 Parking Area	Residential – detached and dual occupancies	1 space per dwelling
	Residential – Studio	0.6 spaces per dwelling
	Residential – 1 bedroom	0.9 spaces per dwelling
	Residential – 2 bedrooms	1.2 spaces per dwelling
	Residential – 3 bedrooms	1.5 spaces per dwelling
	Residential – Visitor	1 spaces per 5 dwellings
	Commercial	1.4 spaces per 100m ² GFA
	Retail	2 spaces per 100m ² GFA
	Industrial	1 space per 100m ² GFA

Table 12: Bicycle Parking Requirements

Category	Minimum Provision
Residential – Resident	1 per dwelling
Residential – Visitor	1 per 10 dwellings
Commercial – Employee	1 per 150m ² GFA
Commercial – Visitor	1 per 400m² GFA
Retail – Employee	1 per 250m² GFA
Retail – Visitor	2 spaces + 1 per 100m ² GFA
Industrial	1 per 10 staff

Table 13: End of Trip Facility Requirements

End of trip facility	Provision
Personal lockers	1 per bicycle space
Showers and change cubicles	1 (for up to 10 bicycle spaces)
	2 (for up to 20 bicycle spaces)
	2 (for each 20 additional bicycle spaces)

7.6 Loading and Servicing

Objectives

- a) Ensure adequate off-street loading, delivery and servicing facilities are provided to service the needs of a building
- b) Minimise the impacts of loading, delivery, and servicing operations on the surrounding road network and reduce reliance on kerbside parking
- c) Consolidate and integrate freight and servicing operations to ensure efficient space management, reduce vehicle trips and improve local amenity

- 1. Service vehicle parking spaces are not to be shared with parking provided for any other purpose or used for any other purpose such as storage of goods and equipment.
- 2. For mixed use developments, the total number of service vehicle spaces is to be calculated on a pro rata basis of spaces required for the relative proportions of different uses within the building.
- 3. Service vehicle parking spaces, including spaces for bicycle couriers are to be:
 - a) located near vehicle entry points and near lifts,
 - b) clearly designated and signposted for service vehicles only,
 - c) screened from the street where possible, and
 - d) located completely within the boundary of the site, clear of parked vehicles, and clear of through traffic.
- 4. The Transport for NSW (TfNSW) *Last Mile Toolkit* must be considered in the preparation of Traffic Impact Assessment and Loading Dock Management Plans where required.
- 5. Parking rates must be informed by TfNSW's *Urban Freight Forecasting Model* or by other available data that appropriately reflects the demand profiles of individual land uses.
- 6. Increasing utilisation rate of car parking should be considered for mixed use development to reflect variability in demand and reduce over-provision of parking for freight and servicing vehicles.
- 7. Where possible, opportunities for shared loading dock facilities with adjacent developments should be investigated for sites identified for amalgamation in Figure 13: Indicative lot amalgamation pattern between Pomeroy Street and Parramatta Road.

8 Design Guidelines – Environment

8.1 Heritage and conservation

Objectives

- a) Protect and enhance items of environmental and heritage significance.
- b) Incorporate heritage buildings into development sites.
- c) Encourage the adaptive reuse of heritage items to maintain their importance into the future.
- d) Retain and reinforce the attributes that contribute to the heritage significance of items and their settings.
- e) Preserve and enhance views that contribute to the heritage values of the Homebush Precinct and the broader area.

- 1. Retain and conserve all identified heritage items, archaeological items, and Aboriginal places.
- 2. Balance the retention of heritage values (historical uses, physical fabric, visual setting, etc) with future development.
- 3. Development involving heritage items or that are within heritage conservation areas must be:
 - a) managed in accordance with applicable statutory requirements,
 - b) planned and delivered in accordance with the principles of the Burra Charter,
 - c) designed to avoid significant impacts to heritage values, and
 - d) accompanied by heritage management documentation and assessment of potential heritage impacts.
- 4. New development is to be designed to recognise, respond to and complement heritage items, or heritage items in the vicinity, in respect of:
 - a) street alignments and setback,
 - b) building footprint and siting,
 - c) building, structure, or landscape form and proportions,
 - d) building envelope, and

- e) materials, colours and finishes.
- 5. New development is to be designed with materials and finishes that are complementary to existing heritage items.
- 6. For developments involving the adaptive reuse of heritage items:
 - a) Uses should be compatible with the nature and significance of the building components and should enable the building to remain a vital and important component of the Precinct.
 - b) The adaptation of all building components is acceptable, with compatible new uses selected that utilise the original character or permit a creative and responsible re-use of the fundamental architectural, functional and spatial characteristics.
 - c) Alterations to the primary external facades to suit new uses may be permitted to meet approved access or similar requirements, provided these are subservient to the primary architectural features and composition of the existing facades and the structure and the quality of the architectural design, materials and detailing of the alterations respects the quality and architectural design of the existing façade.
 - d) Adaptation of the buildings' interiors should ensure that the original fabric or significant architectural and spatial features are retained and interpreted as far as possible.
- 7. Developments that involve amalgamation of lots comprising a heritage item must address sections 4 Key Sites and Site Amalgamation and/or 5.1 Block Configuration, Site Planning and Amalgamation.
- 8. Provisions relating to location specific heritage items are detailed in Table 14: Heritage area controls and should be considered as part of a detailed heritage impact assessment required at the development application stage.
- 9. Ensure that views from within the Homebush Precinct to and from heritage items are maintained.
- 10. The visual impacts of any proposed future development application must be tested and assessed in the following ways:
 - a) the height and form of any proposed development is compared against each approved envelope to ensure that all parts of the built form will sit within the permissible maximum extent of the envelope,
 - b) the approved and proposed envelopes is shown in views from surrounding public spaces, and
 - c) the visual effects of any proposed development and potential impacts on the visual prominence, visual character and setting of heritage facades is tested using the

preparation of fully rendered photomontages which comply with the Land and Environment Court of New South Wales photomontages policy. Fully rendered images will include materiality, colours, lighting and ground plan furniture and signage. Proposed planting is dependent on its screening effects.

Table 14: Heritage area controls

Heritage area	Controls
Swan Avenue, Manson Road, and Leicester Avenue	 Design future development on the eastern side of Swan Avenue to minimise negative impacts to the adjacent HCA on Mosely Street. East-west through-lot connections between Swan Avenue, Mason Road and Leicester Avenue are located beside heritage items, to provide separation from new infill development. New open space is located adjacent to heritage items, to provide separation from new infill development and contribute to retention of curtilage and setting. Integrate isolated heritage items into the new amalgamating lots provided visual and spatial separation is ensured and the prominence of the items is emphasised. Increased setbacks to new infill development structures are be used to maintain the prominence of isolated heritage items as community spaces within an amalgamated lot. New infill development must include adequate space for additional canopy trees to complement street trees and maintain amenity of Swan Avenue, Manson Road, and Leicester Avenue.
Knight Street and Parramatta Road	 Provide a mix of uses that supports residential, retail, cultural and commercial activities. Prioritise non-residential uses around the commercial heritage buildings at the intersection of Knight Street and Parramatta Road, to ensure the historical uses of the heritage items are retained.
Underwood Road	• Development from amalgamated lots to the north side of Our Lady of the Assumption Church is to minimise negative impacts to the 1950s garden, carport and fence.

Heritage area	Controls
Welfare Street and Flemington Road	 Modulate heights and FSR in development lots to the east, south and west of the Welfare Street HCA, to limit spatial and visual impacts to the modest scale of Welfare Street dwellings. Development within or adjacent to the HCA is to be compatible with the built form and urban pattern of the HCA, and be designed to respond sympathetically to: Topography and landscape setting, Views to and from the HCA, Prevailing subdivision pattern and street alignment, Building siting, layout and setbacks, Form, scale, materials, detailing, colours and garden setting of HCA buildings or contributory items.
Bakehouse Quarter	 Design new development around the retention of industrial built form, maintaining its visibility in the public domain, including roof forms, elevations, and building footprint. Development is required to be set back from boundary lot street frontages, reinforcing the predominance of heritage facades in height, setbacks and street alignment. Visual impacts to heritage significance must be avoided or mitigated and impacts demonstrated through robust visual assessment. New parapets along the western side of George Street are to be lower at the street edge, to form a cohesive street edge with existing built form, and ameliorate potential heritage impacts from maximum heights proposed within the site. Locate new open space/through site links, to interpret historical locations of open space on Arnott's complex. New development does not compete with heritage fabric but is designed to complement and enhance heritage values. Future development is to be of high design and construction quality, and sympathetic to its key heritage qualities and context of the Bakehouse Quarter, in form, bulk, scale and material selection. Materials and colours of new development shall be responsive to existing heritage buildings and structures, and shall be designed to avoid visual dominance. Integrate and interpret the Bakehouse Quarter's industrial history into public domain design.

8.2 Noise and vibration

Objectives

- a) Ensure buildings respond to environmental conditions such as noise and vibrations.
- b) Provide appropriate interfaces and mitigation of noise pollutants from road and rail infrastructure to ensure a high quality of life for future residents, workers and visitors.

- 1. Noise and vibration assessments must be prepared by a competent person as defined in the *Approved Methods for the Measurement and Analysis of Environmental Noise in NSW* (EPA 2022) when submitting a development application for a new residential or mixed-use development.
- 2. Noise assessments must consider both individual and cumulative noise impacts resulting from developments.
- 3. The attenuation of noise at its source is preferred. Where this option is adopted, the applicant will need to demonstrate that the measures to be undertaken:
 - a) Have the consent of relevant parties associated with that noise source, and
 - b) Last for the life of the development proposal.
- 4. The design of buildings must:
 - a) Group similar uses to reduce noise acoustic conflicts.
 - b) Respond to the noise and vibration context of the development (accounting for position with respect to major roads, rail, entertainment and industrial activities).
 - c) Incorporate soundscape design principles to provide masking of unwanted urban noise. This may include water, features, indigenous music, bird noise or other natural sounds.
 - d) Incorporate acoustically absorptive features such as gardens and green walls to provide noise mitigation to exterior spaces.
 - e) Consider vibration constraints on future developments from existing rail lines and the future Sydney Metro West alignment through the Precinct.
 - f) Comply with standards and guidelines related to building design and internal noise levels:
 - i. Development Near Rail Corridors and Busy Roads Interim Guideline (DoP, 2008),
 - ii. Apartment Design Guide, Tools for improving the design of residential apartment development (NSW Department of Planning and Environment, 2015), and

iii. AS/NZS 2107:2016 Acoustics - Recommended design sound levels and reverberation times for building interiors.

8.3 Visual and acoustic privacy

Objectives

- a) Ensure buildings respond to environmental conditions such as noise, sun and views.
- b) Encourage new development that promotes activity on the street and enhances public safety and security.
- c) Minimise the impact of new development on the outlook and privacy of adjoining properties.

- 1. Visual privacy is to be protected by providing adequate distance between opposite windows of neighbouring buildings where direct view is not restricted by screening or planting.
- 2. Main living areas are to be oriented to the street or rear garden to avoid overlooking.
- 3. To achieve privacy to private internal and external spaces, consider:
 - a) Building separation distance
 - b) Appropriate internal room layout
 - c) Location and design of windows and balconies
 - d) Design of appropriate screening devices and landscaping.
- 4. The use of tinted glazing as the sole means of achieving privacy is not permitted.
- To achieve privacy to ground floor level apartments, without compromising surveillance of any adjoining public domain, generally elevate the ground level by a minimum of 0.5m and maximum 1.5m above the adjoining footpath level and provide suitable front walls or fences to front gardens.
- 6. To reduce the transmission of noise internally, sound insulation requirements between separating floors, ceilings and walls of adjoining dwellings must exceed the Building Code of Australia minimums.
- 7. The siting and design of buildings minimises the transmission of noise externally, through careful consideration of the layout of internal rooms and external living spaces, design of openings, screens, blade walls, and the like, and choice of materials.

8.4 Wind Management

Objectives

a) Ensure the impact on the wind environment from future development does not result in uncomfortable or unsafe wind conditions in the public domain or on surrounding sites.

Provisions

- 1. All new development is to be designed to mitigate adverse wind effects.
- 2. Development applications foFr buildings over 45m are to be accompanied by a wind effects report/plan

8.5 Water management

Objectives

- a) Ensure an integrated approach to water management using water sensitive urban design principles.
- b) Encourage sustainable water use practices.
- c) Assist in the management of stormwater to minimise flooding and reduce the effects of stormwater pollution on receiving waterways.

Provisions

8.5.1 Drainage and stormwater management

- 1. All new development is to provide a Water Management Strategy that:
 - a) includes provision of water systems to enable utilisation of the recycled water network for permitted non- potable uses which may include flushing, irrigation, fire fighting and certain industrial purposes,
 - b) identifies how rainwater and / or stormwater will be harvested and reused on site to maximise sustainable water reuse, including 100 percent of irrigation for public open spaces and landscaping in the public domain from non-potable sources, and
- 2. A Water Management Plan for new proposed development is to be submitted with the development application that:

- a) outlines the water-related servicing infrastructure required by the development (informed by the anticipated annual and ultimate increase in servicing demand) and evaluate opportunities to reduce water demand (such as recycling water provision),
- b) details the proposed drainage design (stormwater and wastewater), including any on-site treatment, reuse and detention facilities, water quality management measures and nominated discharge points, and
- c) demonstrates compliance with the local council and other drainage or water authority requirements and avoids adverse downstream impacts.
- 3. Drainage systems are to be designed in accordance with the Flood Impact and Risk Assessment and Stormwater Management Strategy (WMA, 2024) and:
 - a) Appendix 2 Engineering Specifications (ES3 Stormwater Management) of the Canada Bay DCP, for development sites located in the Canada Bay LGA, or
 - b) The Strathfield Council Stormwater Management Code, for development sites located in the Strathfield LGA.

5.3.2 Stormwater quality

- 1. The post development run-off from impermeable surfaces (such as roofs, driveways and paved areas) is to be managed by stormwater source measures that:
 - a) contain frequent low-magnitude flows,
 - b) maintain the natural balance between run-off and infiltration,
 - c) remove some pollutants prior to discharge into receiving waters,
 - d) prevent nuisance flows from affecting adjacent properties, and
 - e) enable appropriate use of rainwater and stormwater.
- 2. Post-development stormwater volumes are to be provided in accordance with the Flood Impact and Risk Assessment and Stormwater Management Strategy (WMA, 2024). Stormwater detention devices are to be designed to ensure that the overflow and flowpath have sufficient capacity during all design rainfall events, discharge to the public stormwater system without affecting adjoining properties, and are free of obstructions, such as fences.
- 3. Development is to include measures that reduce the effects of stormwater pollution on receiving waterways.
- 4. Development is to consider and include Water Sensitive Urban Design (WSUD) measures to improve stormwater quality flowing into waterways, and potentially include:

- a) gross pollutant traps
- b) passive irrigation
- c) bioretention systems
- d) rainwater harvesting.
- 5. Where filtration and bio-retention devices are proposed, they are to be designed to capture and provide temporary storage for stormwater.
- 6. Car parking areas and access aisles are to be designed, surfaced and graded to reduce run-off, allow stormwater to be controlled within the site, and provide for natural infiltration of stormwater runoff through landscaping.
- Development of a site greater than 1,000m² must undertake a stormwater quality assessment to demonstrate that the development will achieve the post-development pollutant load standards as indicated by the Flood Impact and Risk Assessment and Stormwater Management Strategy (WMA, 2024).
- 8. Development on a site with an area less than 1,000m² is to be designed so that the flow of pollutants from the site due to stormwater is reduced.
- 9. The stormwater quality assessment is to be prepared by a suitably qualified engineer with experience in WSUD and include:
 - a) modelling of pollutant load standards with an industry standard water quality model,
 - b) the design of WSUD measures used to achieve the post-development pollutant load standards, and
 - c) maintenance schedules of any proposed WSUD measure that requires maintenance or full replacement including the likely recycling or disposal location of any wastes that may be generated.

8.6 Flooding

Objectives

- a) To minimise the risk to life and property arising from flooding
- b) Ensure the applicants and the community are aware of the potential flood hazard over the whole range of AEP and of the consequent risk and liability associated with the development and use of flood liable land.
- b) Manage flood liable land in manner that is economically and environmentally sustainable and socially responsible.

- c) Establish whether a proposed development or activity is appropriate to be carried out on flood liable land having regard to the economic, property, environmental and human impacts of flooding.
- d) Protect community by ensuring that developments with high sensitivity to flood risk (eg. critical public utilities) are sited and designed to provide reliable access, continued operability during emergencies, quick recovery and to generally minimise risk from flooding.
- e) Prevent intensification of inappropriate development on flood liable land.
- f) Ensure that proposed development does not expose existing development to increased risks associated with flooding.
- g) Ensure building design and location address flood hazard.

Provisions

Flood planning controls are set by councils in their LEP, DCP and associated controls, and all future development is required to comply with the controls set out in these documents. The controls set out in this Design Guide are intended to complement each Councils' controls.

8.6.1 Design principles

- 1. Development does not result in any increased risk to human life.
- 2. The additional economic and social costs which may arise from damage to property from flooding is not to be greater than that which can reasonably be managed by the property owner, property occupants and general community.
- 3. Development is only permitted where effective warning time is available for the evacuation of an area potentially affected by floods to an area free of risk from flooding or other appropriate strategies are implemented.
- 4. Development is only permitted where reliable egress is available for the evacuation of an area potentially affected by floods to an area free of risk from flooding.
- 5. Evacuation is to be consistent with any relevant flood evacuation strategy or flood risk management plan where in existence.
- 6. Development does not adversely increase the potential flood affectation on other development or properties, either individually or in combination with similar developments(s) that are likely to occur within the same catchment.
- 7. Developments must make allowances for motor vehicles to be relocated to an area with substantially less risk from flooding within an effective warning time.

- 8. Developments must provide a response plan detailing procedures that would be in place for an emergency (such as warning systems, signage or evacuation drills).
- 9. Flood mitigation measures associated with new developments must not result in significant impacts upon the amenity of an area by way of unacceptable overshadowing of adjoining properties, privacy impacts (eg. by unsympathetic house raising), alienation of otherwise usable open space or by being incompatible with the streetscape or character of the locality (including heritage).
- 10. Raised structures must be designed to cater for the forces of floodwaters. An Engineer's Certificate will be required for the structural design.
- 11. Filling of any land within the Probable Maximum Flood (PMF) must not adversely impact upon flood behaviour, or result in diversion or interference with floodwater storage or the natural function of waterways. This must be demonstrated by appropriate modelling.
- 12. The siting of buildings and structures avoids areas that are highly constrained, such as floodways or high hazard areas as identified as FPCC1.
- 13. Development design provides for overland flow through the consolidated sites.
- 14. Building and parking entrances considers the proximate flood behaviour and is in a preferable risk location.
- 15. Ensure access and evacuation is achievable, the following road locations have been identified as being potentially constrained for evacuation:
 - a) Cooper Street,
 - b) Parramatta Road (near Cooper Street, at Powells Creek crossing, at Underwood Road, at Bedford Road, at Telopea Avenue)
 - c) Allen Street,
 - d) Ismay Avenue, and
 - e) George Street.

8.6.2 Floor level

- 1. Habitable floor levels should be in accordance with the Flood Planning Level defined by Council.
- 2. A restriction is to be placed on the title of the land, pursuant to S.88B of the Conveyancing Act, where the lowest habitable floor area is elevated more than 1.5m above finished ground level, confirming that the subfloor space is not to be enclosed.

8.6.3 Building components and method

1. All structures to have flood compatible building components below the 1% AEP flood level plus freeboard (as defined by Council).

8.6.4 Structural soundness

- An engineer's report is required to certify that the structure can withstand the forces of floodwater, debris and buoyancy up to and including a 1% AEP flood level plus freeboard (as defined by Council)
- 2. An engineer's report is required to certify that the structure can withstand the forces of floodwater, debris and buoyancy up to and including a PMF level.

8.6.5 Flood affectation

- Carry out a Flood Impact and Risk Assessment (FIRA) in accordance with NSW Flood Risk Management Guideline LU01. This will document in a site-specific report the flood depths and levels at the site in a range of flood events, up to the PMF, and assess compliance of the development with Council controls and those set out below. Flood behaviour may be determined from Council studies or the Flood Impact and Risk Assessment and Stormwater Management Strategy (WMA, 2024) where mapping is not available. Modelling can be updated to include features at and around the site not captured in the catchment-wide studies.
- 2. An engineer's report is required to demonstrate how, and certify that, the development will not increase flood affectation elsewhere, having regard to:
 - a) loss of flood storage,
 - b) changes in flood levels, flows and velocities caused by alterations to flood flows, and
 - c) the cumulate impact of multiple potential developments in the vicinity.
- 3. The impact of the development on flooding elsewhere to be considered having regard to the three factors listed in 1 above.

8.6.6 Car parking and driveway access

- 1. The minimum surface level of open parking spaces or carports shall be as high as practical, but no lower than 0.1m below the 1% AEP flood level. In the case of garages, the minimum surface level shall be as high as practical, but no lower than the 1% AEP flood level.
- 2. Garages capable of accommodating more than 3 motor vehicles on land zoned for urban purposes, or enclosed car parking, must be protected from inundation by floods equal to or

greater than the 1% AEP flood. Ramp levels to be no lower than 0.5m above the 1% AEP flood level.

- 3. The level of the driveway providing access between the road and parking spaces shall be no lower than 0.2m below the 1% AEP flood level.
- 4. Enclosed car parking and car parking areas accommodating more than 3 vehicles, with a floor below the 1% AEP flood level, shall have adequate warning systems, signage, exits and evacuation routes.
- Restraints or vehicle barriers to be provided to prevent floating vehicles leaving a site during a 1% AEP flood.
- 6. Enclosed underground car parks shall have all potential water entry points protected from the PMF. The intent of this requirement is to mitigate the creation of life threatening circumstances and very high economic loss such as may occur with the complete inundation of an underground car park. Council may consider relaxation of this requirement if it can be shown by modelling that the catchment characteristics are such that the maximum depth of inundation is less than 300mm.

8.6.7 Evacuation

- Determine the evacuation procedures and emergency access to be used in the event of a flood. If shelter-in-place is to be used, demonstrate the site can be safely occupied during all flood events which may involve access to level 1 and above if the ground floor is below the PMF.
- 2. Reliable access for pedestrians and vehicles is required from the site to an area of refuge above the PMF level, either on site (eg. second storey) or off site.
- 3. The applicant is to demonstrate the development is consistent with any relevant flood evacuation strategy or similar plan.
- 4. Adequate flood warning is available to allow safe and orderly evacuation or application of other appropriate strategies without increased reliance upon SES or other authorised emergency services personnel.

8.6.8 Management and design

- 1. A Site Emergency Response Flood Plan is required where the site is affected by the 1% AEP flood level (except for single dwelling-houses).
- 2. The applicant is to demonstrate that area is available to store goods above the 1% AEP flood level as defined by Council.
- 3. No storage of materials below the 1% AEP flood level.

8.7 Safety

Objectives

- a) Ensure new development supports the wider neighbourhood and community safety and maximises opportunities for passive surveillance.
- b) Incorporate a high degree of accessibility into the design of new buildings and the public domain that considers the various mobility levels of future users, i.e. disabled and elderly.
- c) Promote culturally safe areas which include warm, soft features with aspects of the local traditional community.

Provisions

- Development is to consider and comply with Crime Prevention Through Environmental Design (CPTED)'s Safer by Design Guidelines.
- 2. New development addresses and defines the public domain through entrances, lobbies, windows and balconies that overlook public spaces, maximising opportunities for passive surveillance.
- 3. All building entries are clearly visible from the public domain.
- 4. Access is to be provided according to:
 - a) Active Frontages: at ground level in accordance with section 5.7 Active Frontage Requirements, unless it can be clearly demonstrated that it is unreasonable to meet this requirement and a suitable urban design outcome can be achieved which would be applicable in this specific instance only.
 - b) Interactive frontages for residential development in the R3 Medium Density zone, R4 High Density zone and MU1 Mixed Use zone: at ground level and set in a landscaped front setback in accordance with section 5.8 Interactive Residential Frontages.
- 5. The location and width of vehicle entries is to minimise impacts on the pedestrian network.
- 6. The security aspects of all development shall be considered in the context of the proposed development itself. The siting and layout of buildings ensures that:
 - a) shared pedestrian entries can be locked and serve a limited number of dwellings; and
 - b) buildings adjacent to public streets or spaces are designed to allow casual surveillance and have at least one habitable room window facing that area.

8.8 Environmental sustainability and resilience

Objectives

- a) Deliver world leading urban transformation of the precinct by exceeding current sustainability requirements.
- b) Mitigate the impacts of climate change on key infrastructure and assets.
- c) Encourage high performing building design (namely the built form, layout and services) of office premises, large-scale retail premises, hotel or motel accommodation, serviced apartments, residential flat buildings and mixed-use development that minimises the consumption of energy and water.

Provisions

8.8.1 Water conservation

- 1. Water saving devices such as dual flush toilets, tap aerators, low water use dishwashers and washing machines must be provided to all new developments.
- 2. Spring return taps must be used for all public amenities.
- 3. Appliances and plumbing hardware must have a "AAA" Australian Standards Conservation Rating.
- 4. Implement fit for purpose substitution by matching water quality with its intended use. Roof water is to be retained on site for use externally, such as garden watering, cleaning and irrigation. The collection and storage of rainwater for toilet flushing is to be considered.
- 5. The installation of incinerators is not permitted.
- 6. Water conserving landscape practices, such as use of mulch, irrigation zoning, limited turf areas and flow regulators on hoses is to be incorporated into design and management arrangements.
- 7. Minimum water requirements, include:
 - Drip irrigation to all planters/ on slab landscaping, except turf areas,
 - Water efficient taps,
 - Recycling of water from the fire pump testing system.

8.8.2 Sustainability and resilience

1. New developments demonstrate consistency with the smart parking strategies and design principles outlined in section 7 Design Guidelines – Movement and Parking.

- 2. All new streets must implement water sensitive urban design treatments at the point source across all catchment areas.
- 3. Public spaces and buildings are designed to reduce localised heat created by the urban heat island affect by:
 - a) maximising canopy cover on streets and across all pedestrian spaces such as footpaths, pedestrian links and public open space areas, in accordance with section 6.5 Tree Canopy and Deep Soil,
 - b) retaining existing street trees, by minimising driveway crossovers and locating driveways between existing trees,
 - c) maximising the use of vegetation on buildings, including above ground parking facilities vegetation, green roofs, green walls and materials with a high solar reflectance index provided on at least 50% of the surfaces of all buildings with western and northern building facades, and
 - all developments complying with landscape and tree planting requirements found in sections 6.3 Landscape Design and Green Infrastructure, 6.4 Tree Species, 6.5 Tree Canopy and Deep Soil, and 6.7 Ecology and Biodiversity.
- 4. Flow rates from the site are not more than pre-development site discharge.

8.8.3 Sustainable Buildings

- 1. New buildings are to incorporate passive solar design techniques to optimise heat storage in winter and heat transfer in summer by:
 - a) maximising thermal mass in floor and walls in northern rooms of dwelling/building,
 - b) polishing concrete floors and/or using tiles or timber floors rather than carpets,
 - c) limiting the number of single aspect apartments with a southerly aspect (SW-SE) to a maximum of 10% of the total units proposed, and
 - d) minimising the overshadowing of any solar collectors.
- 2. Developments are to provide or plan for future installation of solar collectors and photovoltaic panels, for example by:
 - a) designing the roof so that solar collectors and photovoltaic panels can be mounted parallel to the roof plane, and
 - b) locating trees where they will not shade existing or planned solar and photovoltaic installations.

- 3. Any development involving installation of a new hot water system is to improve its efficiency by insulating the hot water system or systems with a Greenhouse Score of 3.5 or greater and which suits the needs of the development and/or individual dwellings.
- 4. Developments are to be designed to reduce reliance on artificial lighting by:
 - a) providing a mix of lighting fixtures, including dimmable lighting, to provide for a range of activities in different rooms,
 - b) designing to allow for different possibilities for lighting the room, for example, low background lighting supplemented by task or effect lighting for use as required,
 - c) using separate switches for special purpose lighting,
 - d) using high efficiency lighting, such as compact fluorescent, for common areas, and
 - e) using motion detectors for common areas, lighting doorways and entrances, outdoor security lighting and car parks.
- 5. New residential developments are to maximise the efficiency of household appliances by:
 - a) selecting an energy source with minimum greenhouse emissions,
 - b) installing high efficiency refrigerators/freezers, clothes washers and dishwashers, and
 - c) providing areas for clothes to be dried through natural ventilation.

8.8.4 Electric vehicle charging infrastructure

- 1. Car parking areas serving more than 3 dwellings must:
 - a) Provide an EV Ready Connection to all car parking spaces.
 - b) Provide EV Distribution Board(s) of sufficient size to allow connection of all EV Ready Connections and Shared EV connections.
 - c) Locate EV Distribution board(s) so that no future EV Ready Connection will require a cable of more than 50 metres from the parking bay to connect.
 - d) Identify on the plans submitted with the Development Application for the future installation location of the cable trays from the EV Distribution Board to the car spaces that are provided a Future EV connection, with confirmation of adequacy from an electrical engineer. Spatial allowances are to be made for cables trays and EV Distribution Board(s) when designing in other services.
- 2. All car share spaces and spaces allocated to visitors must have a Shared EV connection.

3. All non-residential building car parking must provide 1 Shared EV connection for every 10 commercial car spaces distributed throughout the carpark to provide equitable access across floors and floor plates.

8.8.5 Bird friendly design

- 1. Treatment of all external windows and other glazed surfaces of buildings is required to any new glazed surface (whether part of a new building or a building undergoing alterations and additions), when the glazed surface is:
 - a) Less than 6 metres from another glazed surface such as corners and skybridges.
 - b) Less than 6 metres from an internal planted area such as a green wall or planted atrium.
 - c) Projecting vertically more than 1 metre above the building roof line.
 - d) Projecting horizontally more than 1 metre beyond the building enclosed façade.
 - e) Where buildings are located within 100 metres of the Powells Creek, treatment to 95% of glazing is required.
- 2. Treatment to the glazing must be either:
 - a) Bird strike UV patterning such as Ornilux.
 - b) Fritted, etched, channelled or translucent glass such as Silk-screen with a minimum untreated dimension of 100mm x 100mm.
 - c) External treatments such as angled, layers or recessed glazing, shading elements such as louvers, overhangs and awnings or mesh with a minimum open dimension of 100mm x 100mm.

8.9 Utilities servicing

Objectives

- a) Ensure heating and cooling infrastructure within residential developments is consolidated in a centralised location to accommodate future environmental technologies.
- b) Smart technologies are embedded to enhance experiences in the public domain and creates liveable public open spaces.

Provisions

- 1. The need for additional building services must be resolved at the design stage (eg. electricity kiosk/substation and fire services facilities) and must be coordinated and integrated with the overall design of the development without compromising building or landscape design.
- 2. All building services and hydraulic systems, including fire booster pumps must be integrated into the building. Services located within landscape areas is not permitted.
- 3. For building maintenance and to future proof residential buildings to enable infrastructure upgrades, heating and cooling infrastructure is to be consolidated into a centralised basement location and near the service/vehicle access points where possible.
- 4. Multi-function poles are to meet the following design requirements:
 - a) placement is a minimum of 600mm from the face of kerb or carriageway alignment,
 - b) placement avoids impacts on existing and future mature street tree canopies,
 - c) is co-located with other street furniture, and
 - d) pit and pipe to each light pole is provided to enable the future upgrading to 'intelligent' lights and the installation of 'smart meter' to the relevant local government and product specification(s).
- 5. Where new connections to the water and recycled network are proposed, include smart water meters and fittings to minimise water consumption.
- 6. Use smart technologies to monitor and self-regulate building environment and operations (e.g. lighting, heat, ventilation, and air conditioning).
- 7. Install smart energy solutions to increase self-sustainability and reduce reliance on the main energy grid.
- 8. Demonstrate alignment to relevant NSW policy, including but not limited to the NSW Internet of Things (IoT) policy, NSW Cyber Security Policy and NSW Smart Infrastructure Policy.

8.10 Contamination

Objectives

- a) Minimise the risk to human and environmental health on land contaminated by past uses.
- b) The redevelopment of land does not increase the risk to public health or the environment.
- c) Avoid inappropriate restrictions on land that could otherwise be remediated.
- d) Consider the likelihood of land contamination as early as possible in the planning process.

- e) Link decisions about the development of land with the information available about contamination.
- f) Facilitate appropriate site remediation to ensure the land is suitable for the intended use.

Note – These obligations are outlined in Chapter 4 Remediation of land in the State Environmental Planning Policy (Resilience and Hazards) 2021 at the time of adoption of this plan.

Provisions

- 1. All development must take precautionary steps to prevent the release of substances that cause contamination of soil, surface water, air or groundwater.
- 2. Development applications must consider the risk ranking assigned to the land as shown in Figure 40 Qualitative contamination risk rating Homebush Precinct (Source: Contamination Assessment, October 2024, AECOM) and undertake the level of contamination assessment prescribed for that risk rating in Table 15: Contamination assessment requirements (Source: Contamination Assessment, June 2024, AECOM).
- 2. Proposals for the development of contaminated land or potentially contaminated land will need to determine:
 - a) The extent to which land is contaminated (including both soil and groundwater contamination);
 - b) Whether the land is suitable in its contaminated state (or will be suitable after remediation) for the purpose for which the development is proposed to be carried out,
 - c) Whether the land requires remediation to make the land suitable for the intended use prior to that development being carried out, and
 - d) If the land has been previously investigated or remediated, development cannot be carried out until Council has considered the nature, distribution and levels of residues remaining on the land and Council has determined that the land is suitable for the intended use.
- 3. For areas adjacent to medium and high risk mapped areas it is to be considered whether there is a potential for contamination to have migrated via groundwater onto the subject area and whether a groundwater investigation is to be undertaken to assess if there is a potential contamination risk to the proposed redevelopment.
- 4. All investigations must be undertaken by a qualified contaminated land consultant and in accordance with National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (ASC NEPM, 2013) and relevant EPA endorsed guidelines.

- 5. The following works as are to be considered Category 1 remediation works in addition to the Category 1 remediation works under the State Environmental Planning Policy (Resilience and Hazards) 2021:
 - a) Remediation work within 40m of an open drainage channel, creek or water body.
 - b) Remediation work involving treatment of groundwater.
 - c) Remediation work involving on-site treatment of contaminated soil e.g., soil stabilisation, land-farming, soil washing or thermal desorption.
 - d) Remediation work involving on-site capping or containment of contaminated soils.
 - e) Remediation work on a site where off site migration of contaminants has occurred.
 - Remediation work involving the removal of Petroleum and other Underground Storage Tanks.

Contamination risk rating	Assessment requirements		
Very low risk	No further contamination assessment for redevelopment.		
Low risk	Previous investigation and remediation validation reports are to be reviewed to confirm whether contamination remains on site that could pose a risk to the future redevelopment. If these reports cannot be obtained a PSI and/or DSI are to be provided to confirm the suitability of the site for development.		
Medium risk	PSIs and DSIs must be undertaken prior to redevelopment to assess the suitability of the site for the proposed land use and determine whether a remediation action plan (RAP) is required to be prepared and implemented to make the site suitable for the proposed development.		
High risk	PSIs and DSIs must be undertaken prior to redevelopment to assess the suitability of the site for the proposed land use and determine whether a remediation action plan (RAP) is required to be prepared and implemented to make the site suitable for the proposed development.		

Table 15: Contamination assessment requirements (Source: Contamination Assessment, June 2024, AECOM)

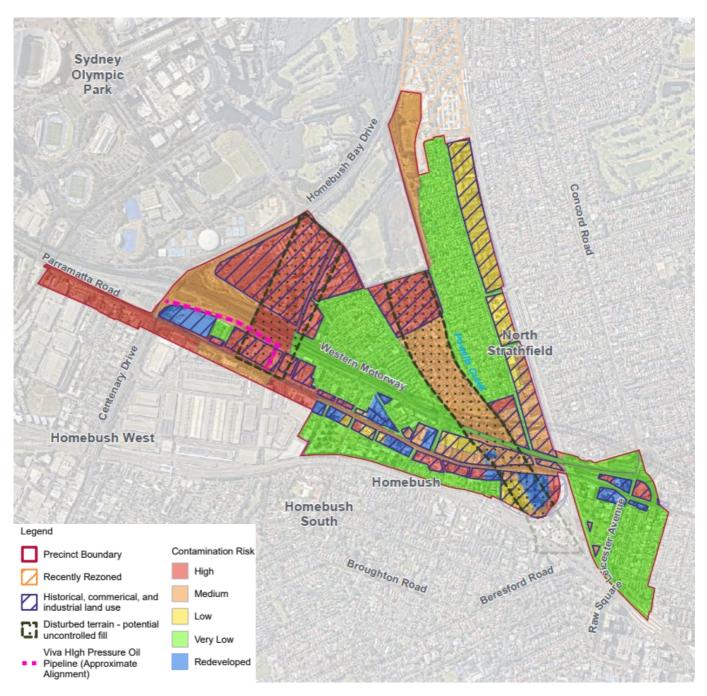


Figure 42: Qualitative contamination risk rating Homebush Precinct (Source: Contamination Assessment, October 2024, AECOM)

8.11 Waste

Objectives

a) Assist in achieving Federal and State Government waste minimisation targets in accordance with regional waste plans.

- b) Minimise overall environmental impacts of waste and foster the principles of ecologically sustainable development.
- c) Facilitate source separation and provide design standards that complement waste collection and management services offered by Council and private service providers.

Provisions

- 1. Developments must meet the requirements in:
 - a) Part B4 Waste Management of the Canada Bay DCP, for development located in the Canada Bay LGA, or
 - b) Part H Waste Minimisation and Management Plan of the Strathfield DCP, for developments located in the Strathfield LGA.

8.12 Public art

Objectives

- a) Enhance the sense of place through the provision of public art.
- b) Provide well integrated public art to create a more visually interesting and culturally diverse public domain.

Provisions

- 1. Developments must meet the requirements in:
 - a) Part F6 Public Art of the Canada Bay DCP, for development located in the Canada Bay LGA, or
 - b) Strathfield Council Public Art Policy, for developments located in the Strathfield LGA.

8.13 Dedication of land to Council

Objectives

- a) Ensure roads are of a sufficient width to provide access to new high density development.
- b) Ensure that pedestrians and cyclists can safely use roads and laneways.
- c) Provide high quality and publicly accessible open space.
- d) Ensure the design of open space provides for a variety of both passive and active uses appropriate to the location and can respond to community needs.

e) Ensure that open space is strategically located to assist with water sensitive urban design and stormwater management.

Provisions

1. Any contaminated land must be remediated for its intended land use prior to dedication to Council.

8.13.1 Dedication of land for road widening

- A 4.9m strip of land for properties on the southern side of Loftus Lane, taken from the property boundary will be the subject to the dedication of land (for road/lane widening) without cost to Council. The area of the land to be dedicated will be considered in calculating the permitted density of development.
- 2. Where it is identified that a road or laneway is required to be widened to accommodate redevelopment of the surrounding area, the subject land will be dedicated without cost to Council. The area of the land to be dedicated will be considered in calculating the permitted density of development.
- 3. No permanent structure may be built above or below this area of land.
- 4. All building setbacks are to be measured from the relocated boundary and the laneway dedication is to be clearly identified on the plans lodged with the development application.

8.13.2 Dedication of land for open space

- 1. Publicly accessible open space areas are to be delivered in accordance with the site areas specified in Table 7: Open Spaces opportunities unless the proposal will increase an area of adjoining open space or provide a lineal connection to nearby open space.
- 2. Where land is identified as an accessible open space area, the subject land will be dedicated without cost to Council. The area of the land to be dedicated will be considered in calculating the permitted density of development.
- Regular shapes, square or rectangular, are preferred to allow flexibility for useable open space. The minimum width for access corridors (linear parks) is 10m. Long narrow parks are generally unacceptable unless the prime function is for linking larger park areas.
- 4. It is clearly demonstrated that the park is public open space. A park is to have at least 50% frontage to a street and at least three sides of the park are to be street/lane frontages.
- 5. Corner street frontages are preferred to ensure identification as a public place and to contribute to security and surveillance of the site.

- 6. A substantial length of road frontage is required for local parks to ensure access, good community surveillance and legibility of the public domain.
- 7. Safe and convenient access is to be provided within and surrounding the park.
- 8. The location and design of open space is to comply with section 6.2 Public Open Space and provide for multi-mode access.
- 9. The maximum slope of public parks is to be 1:4.
- 10. Public parks are to be fit for purpose (generally flat and usable) and not constrained by contaminated land restrictions or property easements.
- 11. The need for future development within public parks is minimised to ensure maintenance costs are reasonable and to ensure the long term flexibility for the use of the public open space.

8.13.3 Dedication of land for public domain

- 1. Public domain identified in Figure 23: Movement and Place Plan (Arup, 2024) and associated street sections may require private land to be used for widened footpaths, thereby enabling land within the road reserve to be improved for bicycle lanes, car parking and street tree planting.
- 2. Where land is identified as public domain, the subject land will be dedicated without cost to Council. The area of the land to be dedicated will be taken into account in calculating the permitted density of development. Alternatively, depending on the nature or use of this private land, the land may remain in private ownership with a public access easement (subject to Council agreement).
- 3. Land that is dedicated to Council under this section should be free from underground services, utilities and basement car parking.

9 Glossary and amendment notes

9.1 Glossary

The following table defines selected key terms used in this Design Guide.

Table 16: Glossary of Terms

Term	Meaning
Advertising and signage	has the same meaning as advertisement and signage in the 'Standard Instrument–Principal Local Environmental Plan'
Active frontage	means where all premises on the ground floor of a building facing publicly accessible areas are used for the purposes of business premises or retail premises, excluding areas required for entrances and lobbies (including as part of mixed use development), access for fire services or vehicle access

Term	Meaning
Country	includes land, waters, and sky. It can be tangible or intangible aspects, knowledge and cultural practices, belonging and identity, wellbeing and relationships. People are part of Country' (Government Architect NSW & Dr Danièle Hromek, 2020)
	Understanding Country not as a Western concept, but as an Aboriginal worldview. It is nature at a deeper level, where all things are interconnected, and the spiritual underlies the physical. Appreciating that the Aboriginal sense of Country is that past, present and future are not confined by time, but rather they merge into a continuum. Aboriginal thinking therefore embraces what was on Country before, what is there now and what might come back or evolve in the future. It is about a continuum of place too, where borders and boundaries are open to culture crossing Country, and where stories interconnect with surrounding Peoples.
	Country commands care and respect. Respect between people, animals, plants and earth is required to keep Country healthy so Country can care for and sustain life. Aboriginal principles for sustaining Country are embedded in language, stories and Songlines which all reflect physical and spiritual understandings of the land. The diversity of traditional language groups, stories and Songlines reflects the diversity of Country's landforms and ecosystems. The significance of ceremony and lore between language groups ensures caring for Country principles and responsibilities to Country are shared across Australia. All things belong to Country, Country does not belong to anyone.
Country-centred	Country, as expressed in Aboriginal language, wisdom and ideas, shows a different way of thinking about how we, as humans, are part of our built and natural environment, and how we shape and are shaped by that environment. This way of thinking and behaving recognises humans, land, water, flora, fauna and sky as interconnected. When applied in design and planning processes consider natural systems that include people, animals, resources and plants equally - similar to an Aboriginal world view. (Government Architect, 2023)

Term	Meaning
Deep soil	is a landscaped area connected horizontally to the soil system, the local ground water system beyond and is unimpeded by any building or structure above or below ground with the exception of minor structures*. Deep soil zones with a minimum dimension of 3m allows sufficient space for the planting and healthy growth of new trees that provide canopy cover and assist with urban cooling and infiltration of rainwater to the water table. Deep soil also allows for the retention of existing trees. * Minor structures are defined as
	 a) path, access ramp or area of paving with a maximum width up to 1.2m b) essential services infrastructure (such as stormwater pipes) with a maximum diameter up to 300mm
	 c) landscape structures (such as lightweight fences, light poles or seating) requiring a footing with a maximum size of up to 300mm x 300mm in cross section.
	The 3m dimension in deep soil refers to 3m in every horizontal direction (length and width). This means deep soil is a minimum 9m ² (3m x 3m).
Design excellence	is a term that exists in statutory planning to refer to the design quality of a building or project and to a variety of requirements intended to lift design quality. The description of Design Excellence is broadly consistent across planning legislation where it is often summarised as 'the highest standard of architectural, urban and landscape design.'
EV Distribution Board	is a distribution board dedicated to EV charging that is capable of supplying not less than 50% of EV connections at full power at any one time during off- peak periods, to ensure impacts of maximum demand are minimised, and that increases to electrical feed sizes are not required. To deliver this, the distribution board will be complete with an EV Load Management System and an active suitably sized connection to the main switchboard. The distribution board must provide adequate space for the future installation (post construction) of compact meters in or adjacent to the distribution board, to enable the body corporate to measure individual EV usage in the future.

Term	Meaning			
EV Load Management System	 is to be capable of: Reading real time current and energy from the electric vehicle chargers under management, Determining, based on known installation parameters and real time data, the appropriate behaviour of each EV charger to minimise building peak power demand whilst ensuring electric vehicles connected are full recharged, and Scale to include additional chargers as they are added to the site over time. 			
EV Ready Connection	is the provision of a dedicated spare 32A circuit provided in an EV Distribution Board to enable easy future installation of cabling from an EV charger to the EV Distribution Board and a circuit breaker to feed the circuit.			
Flood Planning Constraint Category 1 (FPCC1)	 captures land that is highly constrained and may, in some cased, be unsuitable for intensification development. This may be due to the: Impacts development of these areas would have on flood behaviour and the flood risk and flood emergency response of the existing community, and Degree of flood constraints that new development would need to address to manage the flood risks to the development and its users. 			
Green Infrastructure	is the network of green spaces, natural systems and seminatural systems that support sustainable communities. It includes waterways, bushland, tree canopy and green ground cover, parks and open spaces that are strategically planned, designed and managed to support a good quality of life in an urban environment.			
Gross Building Area (GBA)	means the total enclosed and unenclosed area of the building at all building floor levels measured between the normal outside face of any enclosing walls, balustrades and supports that could be achieved within the defined planning envelope inclusive of any cantilever zone to meet the required qualitative and performative standards. The unit of measurement for building areas is the square metre.			
Gross Floor Area (GFA)	gross floor area as defined in CBLEP and the SLEP			
Open to the sky	means a space that directly opens to the sky without any structures above.			

Term	Meaning		
Private EV Connection	is the provision of a minimum 15A circuit and power point to enable easy future EV connection in the garage connected to the main switch board.		
Public spaces	 are all places publicly owned or for public use, accessible and enjoyable by all free and without a profit motive. These include: public open spaces – active and passive (such as parks, gardens, playgrounds, public beaches, riverbanks and waterfronts, outdoor playing fields and courts and publicly accessible bushland), public facilities – public libraries, museums, galleries, civic/community centres, showgrounds and indoor public sports facilities, and streets, avenues and boulevards, squares and plazas, pavements, passages and lanes and bicycle paths. 		
Residential accommodation	has the same meaning as in the 'Standard Instrument – Principal Local Environmental Plan'		
Residential flat buildings	has the same meaning as in the 'Standard Instrument – Principal Local Environmental Plan'		
Shared EV Connection	is the provision of a minimum Level 2 40A fast charger and Power Supply to a car parking space connected to an EV Distribution Board.		

9.2 Amendment notes

Homebush Precinct Design Guide					
Date	Page	Section	Amendment		