

Liverpool Development Control Plan 2008
Part 4
Development in
Liverpool city centre

DRAFT

Part 4 must be read in conjunction with Part 1

Liverpool Development Control Plan 2008

Part 4 Liverpool city centre

4.1.	PRELIMINARY	3
4.2.	CONTROLS FOR BUILDING FORM.....	8
4.2.1	Building form.....	8
4.2.2	Building Envelopes	11
4.2.3	Controls for the Fine Grain Precinct	11
4.2.4	Controls for the Midrise Precinct.....	13
4.2.5	Controls for sites that require the submission of a DCP or concept DA...15	
4.2.6	Building Floor Plates	22
4.2.7	Street Alignments and Street Setbacks	22
4.2.8	Side and rear boundary setbacks	24
4.2.9	Minimum Floor to Ceiling Heights	25
4.2.10	Housing Choice and Mix	26
4.2.11	Deep Soil Zones and Site Cover	26
4.2.12	Public Open Space and Communal Open Space	27
4.2.13	Landscape Design	28
4.2.14	Planting on Structures	29
4.3.	PEDESTRIAN AMENITY.....	29
4.3.1	Pedestrian Permeability	29
4.3.2	Pedestrian Overpasses and Underpasses.....	32
4.3.3	Active Street Frontages.....	33
4.3.4	Street Address	33
4.3.5	Street and Building Interface	34
4.3.6	Lane / Serviceways and Building Interface.....	34
4.3.7	Awnings	35
4.3.8	Building Design and Public Domain Interface.....	37

4.3.9	Street Intersections and Corner Buildings	38
4.3.10	Public Artworks	38
4.4.	TRAFFIC AND ACCESS	39
4.4.1	Vehicular Access and Manoeuvring Areas	39
4.4.2	On Site Parking.....	41
4.5.	ENVIRONMENTAL MANAGEMENT	42
4.5.1	Wind Mitigation	42
4.5.2	Noise.....	42
4.6.	CONTROLS FOR SPECIFIC AREAS	44
4.6.1	Heritage Items and Conservation Areas	44
4.6.2	Site Specific DCPs.....	45
Figure 4-1:	Land to which this Part applies	3
Figure 4-2	Precincts	10
Figure 4-1:	Fine Grain/Mid-Block.....	12
Figure 2-4:	Fine Grain/Corner.....	12
Figure 4-5:	Mid-Rise/Mid-Block	14
Figure 4-6:	Mid-Rise/Corner	14
Figure 4-7:	Tower on a Podium/Mid-Block.....	19
Figure 4-8:	Tower on a Podium/Corner Site	20
Figure 4-9:	Tower on a Podium/Acute Corner Site	21
Figure 4-10	Street Setbacks.....	23
Figure 4-11	Laneway and Serviceway Setbacks	24
Figure 4-12	Through Site Links	31
Figure 4-13	Awnings	36
Figure 4-14	High Pedestrian Priority Areas	41
Figure 4-15	Noise.....	43

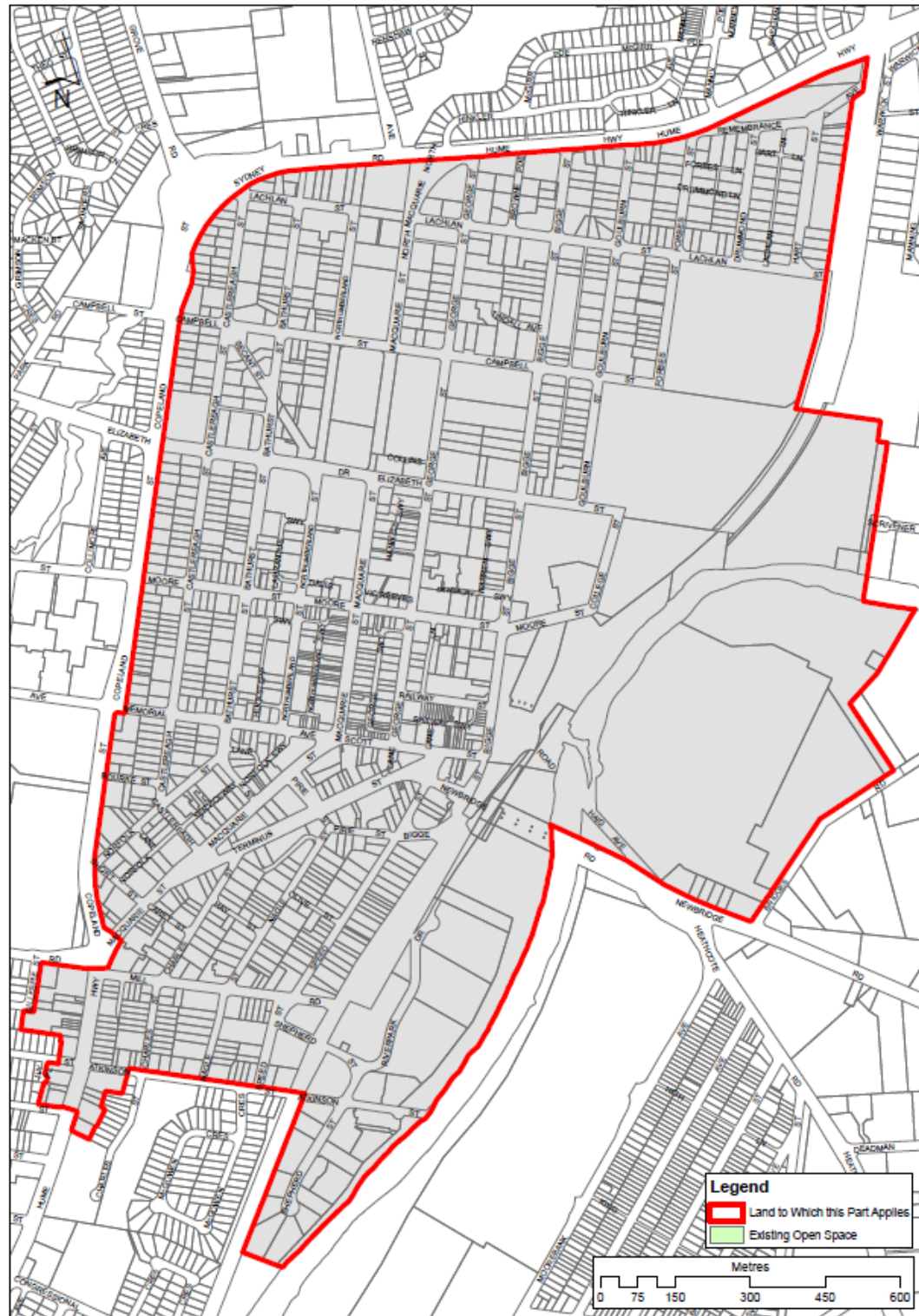
4.1. PRELIMINARY

Applies to

This Part applies to the area shown in Figure 4-1.

Part 1 also applies to the area shown in Figure 4-1.

Figure 4-1: Land to which this Part applies



Background

The Liverpool city centre was identified by the Department of Planning as a regional city through the Sydney Metropolitan Strategy – A City of Cities in 2005. This status was confirmed in A Plan for Growing Sydney released by the Department of Planning and Environment in December 2014.

In March 2018 the Sydney Regional Plan, *A metropolis of three cities* was published by the Greater Sydney Commission (GSC), establishing a renewed planning framework for the Sydney region as a whole towards 2056. The Western City District Plan — connecting communities (WCDP), was finalised by the GSC in March 2018 also. The WCDP provides detailed planning direction for the future development of Liverpool city centre, as part of the Liverpool LGA.

Liverpool city centre LEP revision

In 2015 Council launched a review of the planning controls applying to Liverpool city centre. The city centre LEP review sought to revitalise Liverpool city centre, to create a mixed-use, vibrant 18-hour city centre, a walkable city that offers living, recreation and work opportunities and a city focused along the river. To this end it was decided to significantly expand the area of B4 – Mixed Use zoned land and reduce the area of land zoned B3 – Commercial Core. This amendment to Liverpool Local Environmental Plan (LLEP) 2008 — Amendment 52, was gazetted and came into force on 5 September 2018.

In addition to rezoning land to reduce the size of the Commercial Core and expand the area of Mixed Use zoned land, Amendment 52 defined legible character precincts based on ownership, subdivision, street block patterns, and the role of the public domain. It also specified an urban form that responds to the character of each precinct, has different building typologies, and offers different economic opportunities.

Amendment 52 enables individual owners to develop sites without the requirement for amalgamation, improves connectivity to and within the city centre, de-couples car parking from development where appropriate and develops consistent urban form, where possible, for new development within the city centre. It is envisaged that increasing the number of residents in the city centre will activate the city centre, and will lead to increased demand for retail and services, resulting in more jobs.

This Part of Liverpool Development Control Plan (LDCP) 2008 seeks to provide appropriate development objectives and controls that will facilitate development in Liverpool city centre in concert with the Liverpool Local Environmental Plan (LLEP) 2008.

Characteristics of the Liverpool city centre

The character of Liverpool city centre can be divided into specific areas which have a number of character elements as described below. The character areas are illustrated in **Figure 4.2** below. However, where appropriate, reference is also made to which precinct, illustrated on the FSR map as amended by Amendment 52, also applies:

- Mixed Use (Area 7 and Area 8).
- High Density Residential.
- Education and Medical Precinct (Area 9).
- Commercial Core (Area 10)
- Standalone sites (including Area 11)
- City Centre Riverfront.
- Georges River Precinct.

Commercial Core

Land considered as part of Amendment 52, but which retains the B3 — Commercial Core zoning. Council aims to increase employment in the city centre to a total of 30,000 jobs by 2031. Commercial development is encouraged throughout the Mixed Use and Commercial Core areas of the city centre.

Liverpool city centre's commercial core is located near the public transport interchange on land bounded by Elizabeth Street to the north, Bigge Street to the east, George Street to the west and Railway Street to the south. In addition, the existing Westfield shopping centre is also part of the Commercial Core. Preservation of a Commercial Core in the city centre will support the broader base of uses likely to arise in the Mixed Use areas. Retail development will continue to be focused around the Macquarie Street Mall and Westfield shopping centre, though retail uses will also be permitted throughout the Mixed Use and Commercial precincts.

Mixed Use

Amendment 52 expanded the area of Liverpool city centre zoned B4 – Mixed Use. Land zoned B4 – Mixed Use may be developed for a range of retail/commercial and residential uses. Three new precincts have been defined for the rezoned sites in Liverpool city centre and some existing B4 sites. These precincts relate to the existing site characteristics, ownership patterns and subdivision patterns. The precincts are identified as Fine Grain, Midrise and Long Term Civic Sites. Certain lots within the Mid-Rise and Long-term Civic Sites (in addition to the Commercial Core) precincts may be developed pursuant to clause 7.5A of LLEP 2008, but only if they meet lot size and access requirements.

The Fine Grain and the Midrise sites use a perimeter block typology, defined by building envelopes (see 4.22 below). The building envelopes enable buildings constructed to these profiles to relate to each other and the street network.

Lots that may be developed pursuant to clause 7.5A are large, strategically located sites, which can be developed subject to a concept development application as defined by section 4.23 of the Environmental Planning and Assessment (EP&A) Act 1979 and the delivery of a public benefit, as defined by clause 7.5A(3)(b) of LLEP 2008 (see 4.2.5 below).

High Density Residential

Liverpool city centre is an increasingly popular residential destination. The Commercial Core and Mixed Use areas of the city centre are surrounded by R4 – High Density Residential zoned land. With the growth of the hospital, there will be increasing demand for accommodation for health workers. One of Council's aims is to improve access to residential areas and the city centre.

In addition to significant residential development in the Mixed Use areas of the city centre, residential development will be focused around the northern, western and southern periphery. It is desirable that the frontages to Macquarie Street at Pioneer Park accommodate retail/café/restaurant activities at ground floor with residential and potentially some office space on floors above. Shepherd Street (at the southern extremity of the city centre) offers the potential to accommodate residential development with good access to the Georges River. Planning controls have been reviewed to assist this outcome.

Education and Medical Precinct

The Education and Medical precinct is located on the eastern edge of the city centre. It is defined by the South-Western Sydney Area Health Service (Liverpool Hospital) and attendant medical centres and clinics, the Liverpool Private Hospital, public and private schools, and the Liverpool TAFE buildings. The precinct is centred on historic Bigge Park and the Francis Greenway-

designed old Liverpool Hospital, now part of TAFE.

LLEP 2008 identifies Liverpool Hospital as a Long-Term Civic Site so that the site may develop using a concept development application and with a full range of building typologies.

Standalone sites

Standalone sites, as illustrated in **Figure 4.2**, describes a number of sites in certain locations around the city centre, which have been rezoned by Council independently of Amendment 52. The sites have been recognised by Council with development standards which will encourage architecturally significant buildings. It is envisaged that these buildings will develop using the tower on podium building typology.

City centre riverfront

Liverpool city centre was the first of the 'Macquarie towns', chartered by Governor Lachlan Macquarie in 1810. From its foundation, the city identity was closely connected to the Georges River. Since the development of the railway line along the river as early as 1856, the city centre has become increasingly divorced from the river. The State Rail Freight Line, which runs alongside the passenger line immediately adjacent to the river, has further divided the city and obstructs connections across the Georges River, both physically and visually.

The natural edge of the Georges River and the Chipping Norton lakes system is one of Liverpool's most valuable assets. Opportunities exist to create continuous urban parkland. Council is committed to exploring improved connections from the city centre to the river and to Moorebank.

Georges River Precinct

The Georges River Precinct has been identified for potential city centre expansion due to the large sites, the limited ownership and proximity to the train station. The site has a number of constraints however, including the location of the railway line, which presents a barrier to access to the city centre, the river and the site's location within the 1% AEP (i.e. 100 year flood). There is limited existing connectivity to the city centre.

Streets, Laneways and Serviceways

The Hoddle grid, adopted as the township plan shortly after Governor Macquarie founded Liverpool, provides an excellent and legible framework for development. It has a vital role in determining the city's built form.

Streets make up the largest area of public space in Liverpool city centre. Used primarily for traffic and pedestrian movement, they also accommodate business, shopping, festivals, dining, socialising and entertainment. Within the formal grid of north-south and east-west streets there are serviceways (lanes) and arcades. Currently the serviceways do not generally provide direct connections between streets but the arcades do.

In the southern part of the city centre, the grid distorts in response to the topography, forming a secondary grid. The meeting of the regular Hoddle grid with the secondary grid along Memorial Avenue creates corner blocks with obtuse and acute angles. This provides a valuable opportunity to reinforce the character and streetscape quality of Liverpool city centre.

The core of the city centre is bounded by Bathurst Street, Campbell Street, Bigge Street, Pirie Street and Terminus Street. These streets carry the bulk of through traffic around the city centre to access the major arterials – Newbridge Road, Hoxton Park Road, the Hume Highway, Elizabeth Drive and the Cumberland Highway.

The network of serviceways complements the dominant qualities of the main streets. Hidden within the blocks, the serviceways have the potential to be extended to provide important direct pedestrian links to the streets. If this can be achieved, the serviceways have the capacity to improve permeability and provide spaces that diversify and enrich the city structurally and economically. The active street frontages along Macquarie Street and throughout the city centre are also an asset that should be maintained and expanded.

The development controls in this Part complement the amended LLEP 2008 and define the built form required to ensure that the amenity of the streets and lanes/serviceways is protected and enhanced.

Satisfactory arrangements

At the request of Transport for NSW, Council conducted a review of the transport needs that would be created by the additional residential development that would be made possible by rezoning much of the existing commercial core of the city centre to permit residential development. The review made a number of recommendations, including that a range of improvements to designated State public infrastructure would be required to support the planned residential growth.

In order to fund the required infrastructure improvements, clause 6.4A of LLEP 2008 indicates that the development of any and all residential accommodation on land within the intensive urban development area of Liverpool city centre (i.e. "Area 7", "Area 8", "Area 9", "Area 10" or "Area 11" shown on the Floor Space Ratio Map), must demonstrate via written confirmation from the Secretary of the DP&E that, according to clause 6.4A(2), "satisfactory arrangements have been made to contribute to the provision of designated State public infrastructure in relationship to the land on which the development is to be carried out."

The satisfactory arrangements provision must be satisfied prior to the determination of a DA which includes residential development. It is expected that the satisfactory arrangements will take the form of an additional levy on residential development, and may require the making of the planning agreement with the DP&E.

Development of hotel, motel, backpacker, bed-and-breakfast or serviced apartment accommodation is not considered "residential development" and will not be subject to satisfactory arrangements as described in clause 6.4A of LLEP 2008.

Site-specific Development Control Plan

Clause 6.6, Development control plan, of LLEP 2008 requires that:

- (1) Development consent must not be granted for development on land in an urban release area or intensive urban development area unless a development control plan that provides for the matters specified in subclause (2) has been prepared for the land.*

The "intensive urban development area" is defined in clause 6.4A as being "Area 7", "Area 8", "Area 9" or "Area 10" shown on the Floor Space Ratio Map.

Proposed development that does not rely on clause 7.5A of LLEP 2008 (see Section 2.1.4 below), would not require the lodgement of a site-specific DCP. Council will accept an assessment of compliance with Part 1 and Part 4 of LDCP 2008 in lieu of the submission of a site-specific DCP. For development undertaken pursuant to the floor space bonuses described in clause 7.5A of LLEP 2008, please refer to Section 4.2.5 of this Part.

4.2. CONTROLS FOR BUILDING FORM

4.2.1 Building form

Background

Building form refers to the individual elements of building design that collectively contribute to the character and appearance of the built environment. LLEP 2008 includes provisions for land use, building heights, sun access, floor space ratio (FSR) and design excellence. The development controls in this Part of the DCP are intended to reinforce the desired outcomes for the city centre. The resulting built form and character of new development should contribute to an attractive public domain in Liverpool city centre and produce a desirable setting for the intended uses.

The provisions in the Apartment Design Guidelines (ADG) associated with State Environmental Planning Policy No.65 – Design Quality are incorporated in this DCP to apply to all residential development in the Liverpool city centre including apartments, any residential component of a mixed use development, and serviced apartments that are strata titled. Where there is an inconsistency between other provisions in the ADG and this DCP, the ADG prevails to the extent of the inconsistency.

Within the existing Liverpool city centre, the diversity of uses is reflected in the different building typologies. These are:

- Perimeter Block (accommodating commercial and residential uses).
- Towers on a Podium (accommodating commercial and residential uses).
- Detached Buildings (apartment buildings, religious, commercial, education and medical uses).

LLEP 2008 identifies specific precincts on the FSR map for Liverpool city centre (Area 7, Area 8, Area 9, Area 10 and Area 11). The precincts relate to specific character areas defined in this Part as follows:

- “Area 7” is the Fine Grain Precinct;
- “Area 8” is the Midrise Precinct;
- “Area 9” is the Long-Term Civic Sites Precinct;
- “Area 10” is the Commercial Core Precinct; and
- “Area 11” is the Standalone site known as 77-83 Moore Street and 193 Macquarie Street.

The precincts are shown in **Figure 4-2**.

Objectives

1. Establish the scale, dimensions, form and separation of buildings as appropriate for the city centre and the range of uses.
2. Provide a strong definition of the public domain with buildings on a common alignment.
3. Promote building frontages with good connections to the street.

Controls

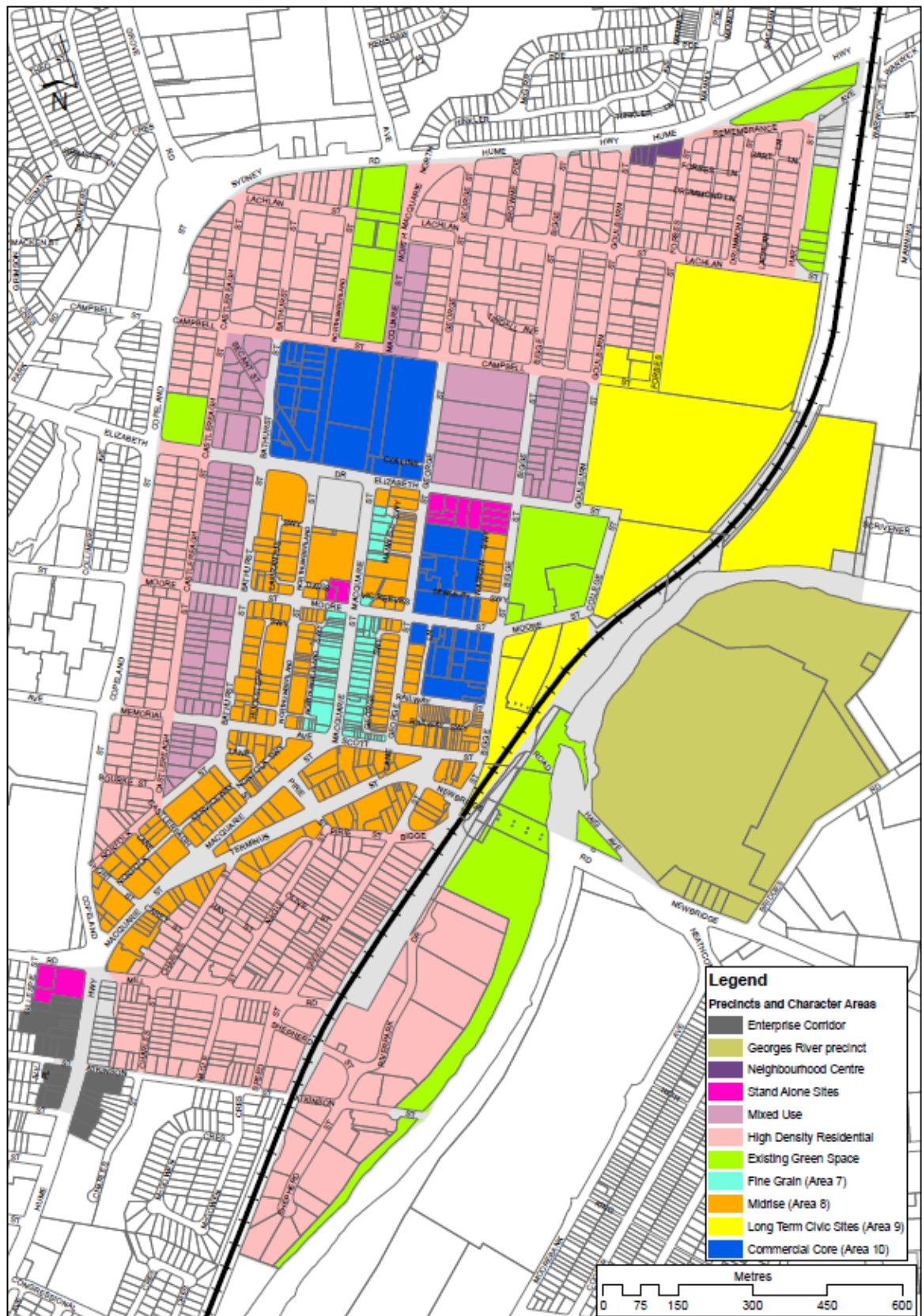
Develop new buildings in Liverpool city centre using the following building typologies for precincts as identified in **Figure 4-2**:

1. Perimeter block typology for Fine Grain precinct.
2. Perimeter block typology for Midrise precinct, with the exception of those Midrise sites

developed pursuant to clause 7.5A of LLEP 2008 (which may also be developed with a tower on podium typology).

3. Perimeter block, tower on podium or detached building typology for Long Term Civic Sites.
4. Tower on podium or detached building typology for standalone sites.
5. Perimeter block, tower on podium or detached building typology for Commercial Core sites.
6. Perimeter block, or detached building typology for Mixed Use.
7. Detached building typology for High Density Residential sites.
8. Perimeter block, or detached building typology for Enterprise Corridor sites and Neighbourhood Centre sites.

Figure 4-2 Precincts



4.2.2 Building Envelopes

Background

Building envelopes provide buildings with a strong address to the street, ensure compatibility between sites and maintain a suitable relationship to the scale of existing buildings. The lower scale buildings on the Fine Grain and Midrise sites contribute to the character of the existing city centre and make a positive contribution to its vitality, image and identity.

Midrise and Commercial Core sites of over 1,500m² in area may be developed as described in clause 7.5A of LLEP 2008 in certain circumstances. See section **4.2.5 Controls for sites requiring the submission of a DCP** for greater clarification.

4.2.3 Controls for the Fine Grain Precinct

Background

The Fine Grain Precinct is identified on **Figure 4-2**. Fine Grain Sites are small sites that have a very important role for pedestrian interface along streets. They are important because of their short frontages to streets, variety of uses, but also because the diverse ownership offers significant contrast of character, opening hours and price-point for retail offerings.

Objectives

1. Create a contiguous street wall even though sites are developed independently.
2. Address solar access/privacy and light within the building envelope so that separate studies are not required.
3. Provide active street and lane/serviceway frontages.
4. Encourage development without car parking on site.

Controls

Design new buildings in the Fine Grain Precinct as follows:

1. Construct a maximum of four storeys to the street and four storeys to the serviceway frontages, with an additional two storeys set back to street frontages in accordance with **Figures 4-3 and 4-4**.
2. Locate retail uses at the ground floor on street and lane/serviceway frontages (where possible).
3. Develop no more than one level of (at grade) car parking (where necessary), which is to be appropriately screened or sleeved.
4. Provide parking in accordance with LLEP 2008 provisions or make an alternative arrangement to the satisfaction of Council.

Figure 4-3: Fine Grain/Mid-Block

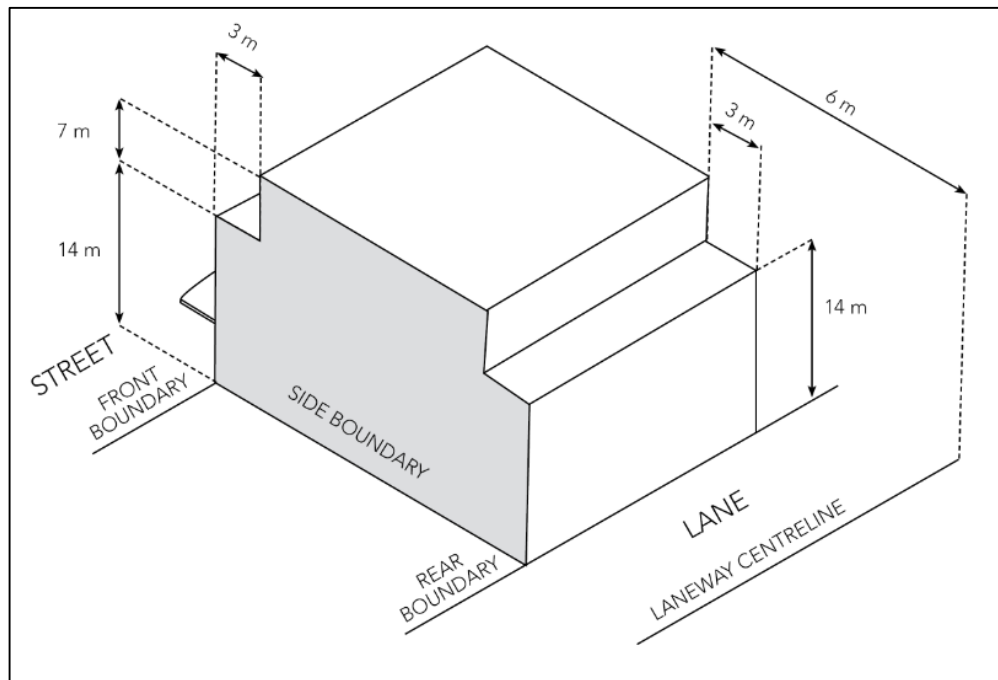
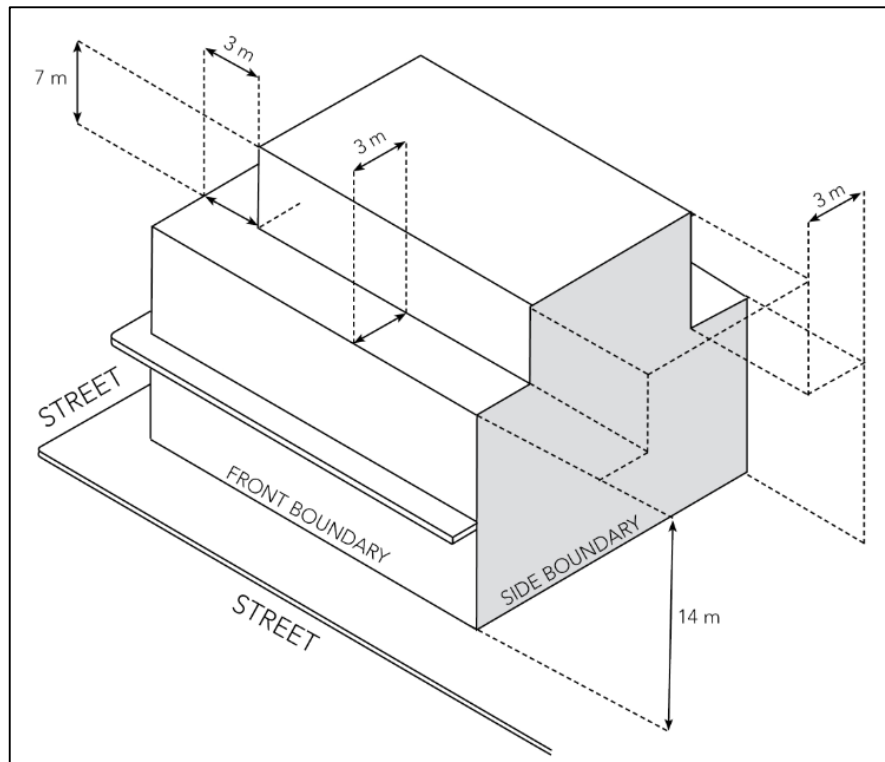


Figure 4-4: Fine Grain/Corner



4.2.4 Controls for the Midrise Precinct

Background

The Midrise Precinct is identified on **Figure 4-2**. Midrise Sites are capable of accommodating more development than Fine Grain Sites. They are important because of the relatively short-frontages to streets and their diverse range of uses. Differing ownership also provides a variety of use and form that single ownership of large city buildings does not achieve.

Objectives

1. Form a contiguous street wall even though sites are developed independently.
2. Address solar access/privacy and light within the building envelope so that separate studies are not required.
3. Provide active street and lane/serviceway frontages.
4. Allow flexibility of uses within the building envelope (long life/loose fit) that can change over time.
5. Provide parking for the development on site.

Controls

Design new buildings in the Midrise Precinct as follows:

1. Construct buildings to a maximum of six storeys to the street and four storeys to the lane/serviceway frontages, with an additional two storeys set back to both frontages in accordance with **Figures 4-5** and **4-6**.
2. Develop retail uses at the ground floor at street and lane/serviceway frontages (where possible).
3. Develop at least one level above the ground floor for a commercial use, or that is capable of being adapted to a commercial use.
4. Provide parking in a basement car park. No more than one level of service (at grade) car parking is permitted and this is to be appropriately screened or sleeved.
5. Provide parking in accordance with the LLEP 2008.

Figure 4-5: Mid-Rise/Mid-Block

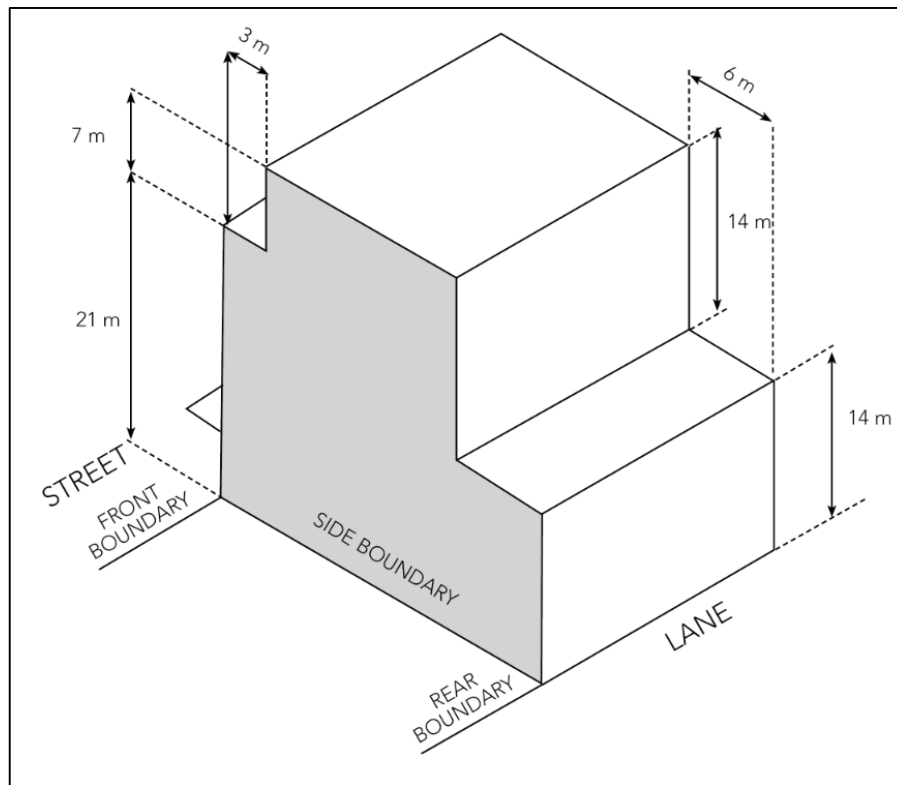
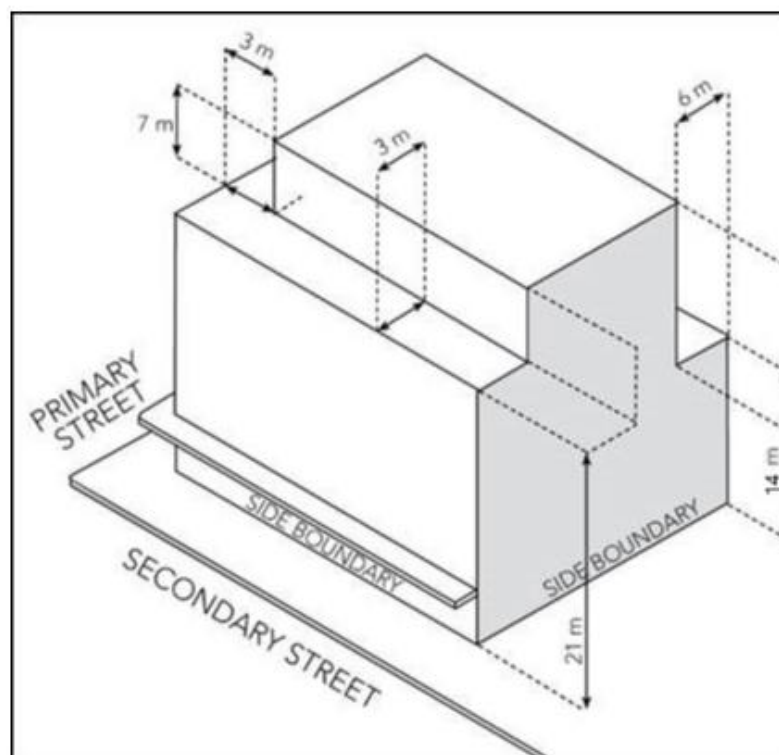


Figure 4-6 Mid-Rise/Corner



4.2.5 Controls for sites that require the submission of a site specific DCP or concept DA

Background

Clause 7.5A of LLEP 2008 provides additional provisions relating to certain land in Liverpool city centre. This section specifies the requirements for a lot to be developed according to the provisions of clause 7.5A.

The provisions of clause 7.5A are not considered development standards and therefore may not be varied according to clause 4.6 of LLEP 2008. Minimum requirements for the development of a lot pursuant to clause 7.5A are:

- That the lot is situated within “Area 8”, “Area 9” or “Area 10” on the Floor Space Ratio Map; and
- Has a lot size exceeding 1500m²; and
- Has two or more street frontages.

Pursuant to clause 7.5A(2), any building which is proposed to exceed the maximum height shown for the land on the Height of Buildings Map, and the maximum floor space ratio shown for the land on the Floor Space Ratio Map for the site (to a maximum FSR of 10: 1 in “Area 8” or “Area 10” and 7:1 in “Area 9”), must be developed so that at least 20% of the gross floor area is used for the purposes of:

- business premises;
- centre based childcare facilities;
- community facilities;
- educational establishments;
- entertainment facilities;
- food and drink premises;
- functions centres;
- information and education facility;
- medical centres;
- public administration buildings; or
- retail premises.

The Dictionary of LLEP 2008 defines the meaning and development requirements of each of the specified uses.

Development of sites pursuant to clause 7.5A of LLEP 2008 will require the submission of a DCP. According to section 4.23(2) of the EP&A Act 1979:

(2) However, if an environmental planning instrument requires the preparation of a development control plan before any particular or kind of development is carried out on any land, that obligation may be satisfied by the making and approval of a concept development application in respect of that land.

In other words, the requirement to lodge a DCP pursuant to clause 7.5A(3)(a) of LLEP 2008, may be satisfied by the lodging of a concept development application pursuant to the requirements of section 4.23 of the EP&A Act 1979 instead. It is to be noted however, that section 4.23(3) of the EP&A Act also applies to any such application meaning that:

3) Any such concept development application is to contain the information required to be

included in the development control plan by the environmental planning instrument or the regulations.

Objectives

1. That development of sites within Liverpool city centre pursuant to clause 7.5A demonstrates the appropriate mix of uses and standards of design excellence.
2. Provide appropriate parking for the development on site.
3. Provide active street and lane/serviceway uses .

Controls

1. Sites that require the submission of a DCP are to be developed pursuant to the adopted site specific DCP or a concept development application consistent with Division 4.4 of the EP&A Act 1979 and clause 7.5A of LLEP 2008.
2. Clause 7.5A(3)(b) of LLEP 2008 specifies that any proposed development which seeks to utilise the additional provisions relating to certain land in Liverpool city centre must yield a public benefit, in that the site on which the building is to be located must also include one or more of the following uses (NB: in order to provide the required public benefit, these uses must be publicly accessible):
 - recreation areas;
 - recreation facilities (indoor);
 - community facilities;
 - information and education facilities;
 - through site links; or
 - public car parks.

Each land use that is required to yield public benefit (with the exception of “through site links” and “public car parks”, defined below), is defined in the Dictionary of LLEP 2008. The size, scale, location and detailed use of any such proposed development, must be included in the required site specific DCP or concept development application, and be to the satisfaction of Council.

Through site links are only to be developed on those sites indicated in Figure 4.12 and must be developed in accordance with the requirements of section 4.3 Pedestrian Amenity.

Public car parks are only to be developed with the written permission of Council and must be vested in or under the control of Council. Provision of public car parking must be consistent with Council's Parking Strategy and locational requirements. Any such public car park must be of sufficient scale and located so as to be of a public benefit acceptable to Council.

3. The concept development application lodged pursuant to clause 7.5A of LLEP 2008, must demonstrate how the proposal addresses all matters described in 7.5A(4)(a-m), as follows:

(a) the suitability of the land for development.

The site specific DCP or concept development application must articulate planning and design principles relating to development of the land and explain how these address Part 4 of Liverpool Development Control Plan 2008 and any other relevant documents or plans. It must include an analysis of the characteristics and the local context of the land to which it applies.

It must conceptually outline and show graphically the proposed site layout and planning for the development of the land, including the conceptual vertical and horizontal distribution of potential future uses, arrangement, footprint, envelopes and mix of building types. Through analysis of a number of illustrated options for redevelopment it must determine the preferred approach,

(b) *the existing and proposed uses and use mix.*

The site specific DCP or concept development application must describe the existing uses of any building currently occupying the site, and the proposed use mix to be developed on the site (noting additional use requirements outlined in control 1 above),

(c) *any heritage issues and streetscape constraints.*

The site specific DCP or concept development application must describe how the proposal will address all heritage items in the vicinity, in accordance with the requirements of clause 5.10 of LLEP 2008 and section 4.6.1 of this Part,

(d) *the impact on any conservation area.*

The site specific DCP or concept development application must indicate how any proposed development within the Bigge Park Conservation Area addresses the requirements of clause 5.10 of LLEP 2008 and section 5.10 of this Part,

(e) *the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form.*

Liverpool city centre is a mixed-use environment. The site specific DCP or concept development application must ensure that any proposed residential tower is consistent with ADG separation and side setback distances, taking into account existing or proposed towers on the same site or neighbouring sites. Siting of all proposed towers, residential or commercial, must be consistent with clause 7.4 of LLEP 2008 Building separation in Liverpool city centre,

(f) *the bulk, massing and modulation of buildings*

The site specific DCP or concept development application must illustrate the proposed bulk, massing and modulation of buildings to be developed on the site,

(g) *street frontage heights.*

The site specific DCP or concept development application must indicate the street frontage heights of any proposed building. A tower on podium building is to be designed so that the podium is:

- a. four to six storeys in height at the primary street frontage;
- b. four storeys in height to the lanes and/or serviceways; and
- c. 6 metres from a side/rear boundary if the site is adjoining a property that is not zoned B4 – Mixed Use or contains a stand-alone building. The setback should be in accordance with the ADG,

(h) *environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity.*

The site specific DCP or concept development application must illustrate how the proposed design will satisfactorily address environmental impacts on the public domain and other sites in proximity, depending on the scale of the development. Designs must ensure the streetscape environment is of pedestrian scale and ensures human qualities of solar access, shade and amenity are provided and negative elements such as noise and wind are minimised,

(i) *the achievement of the principles of ecologically sustainable development.*

The site specific DCP or concept development application must illustrate the ways by which the development proposed maximises ecological sustainability,

(j) *encouraging sustainable transport, including increased use of public transport, walking and cycling, road access and the circulation network and car parking*

provision, including integrated options to reduce car use.

The site specific DCP or concept development application must incorporate a Transport Management and Access Plan (TMAP). The TMAP must illustrate how the proposed development will encourage sustainable transport including:

- measures to encourage increased use of public transport, walking and cycling;
- provisions for access (for pedestrians, cyclists and vehicles including heavy vehicles), circulation and car parking; and
- other measures to reduce car use (e.g. carpooling and car-share services),

(j) the impact on, and any proposed improvements to, the public domain.

The site specific DCP or concept development application must demonstrate how the proposed development will integrate with and/or make improvements to the existing public domain, including the provision of setbacks where required. The site specific DCP or concept development application must include a detailed public domain plan.

Improvements to the public domain include:

1. Contributing to the urban tree canopy through new street tree plantings consistent with the Liverpool CBD Streetscape and Paving Manual 2018.
2. Providing street furniture and pedestrian amenity items.
3. Installing high quality pedestrian paving consistent with the Liverpool CBD Streetscape and Paving Manual 2018.
4. Integrating public art in accordance with section 4.3.10 of this Part.
5. Making provision for pedestrians to access to sunlight and shade.
6. Providing a design that contributes to activation of street frontages.
7. Integration of WSUD elements to improve vegetation success within the public domain,

(k) achieving appropriate interface at ground level between buildings and the public domain.

The site specific DCP or concept development application must demonstrate how all buildings, including any proposed tower building, achieves an appropriate interface at ground level with existing and proposed buildings and the public domain, according to the requirements of Section 4.3.1 to 4.3.10 of this Part.

Electricity substations and waste collection points must be appropriately integrated into the building design to minimise disruption and visual clutter in the ground plane and streetscape,

(l) the excellence and integration of landscape design.

The concept development application must demonstrate compliance with section 4.2.13 of this Part.

4. Locate non-residential uses at ground level that address all street frontages (and laneway/service way frontages, where possible).
5. Develop a maximum of two levels of above-ground car parking, provided it is sleeved by other uses on street frontages and appropriately screened or sleeved by other uses on lane/serviceway frontages. Aboveground parking must achieve minimum floor to ceiling heights that would permit adaption for another use (e.g. commercial/retail or residential).
6. Construct buildings according to the requirements illustrated in **Figure 4.7**, **Figure 4.8** or **Figure 4.9**, depending on the location of the site.

Figure 4-7: Tower on a Podium/Mid-Block

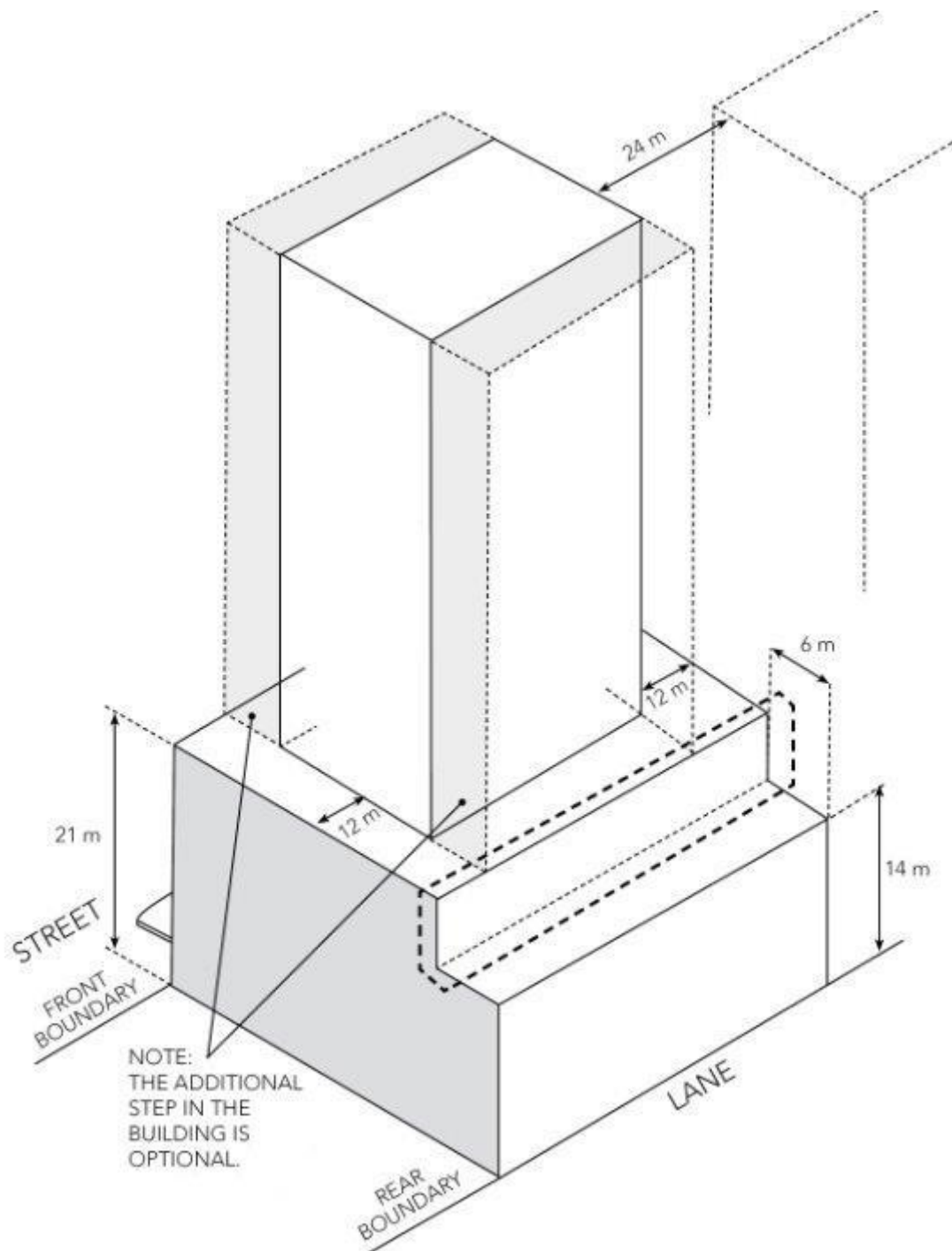


Figure 4-8: Tower on a Podium/Corner Site

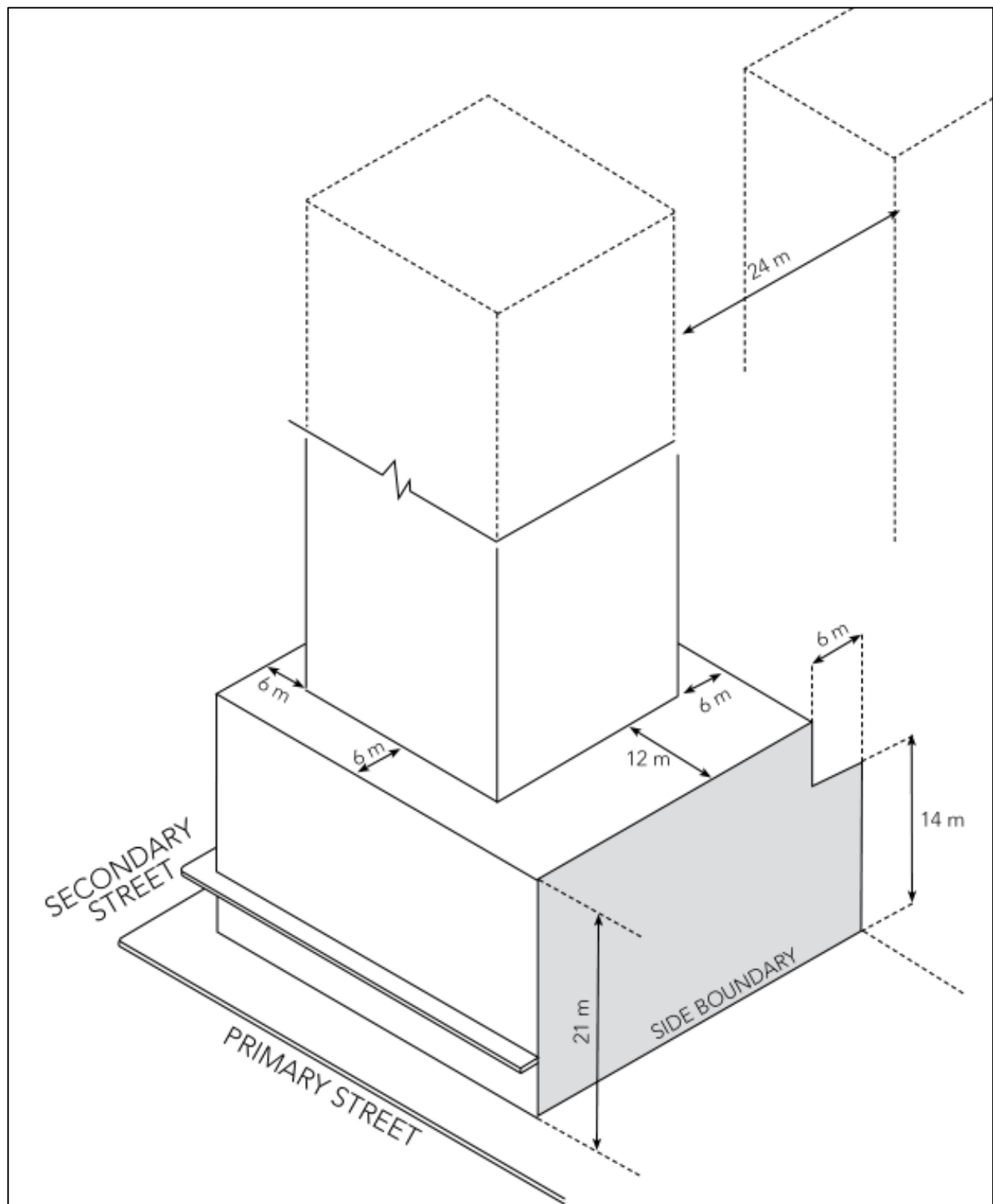
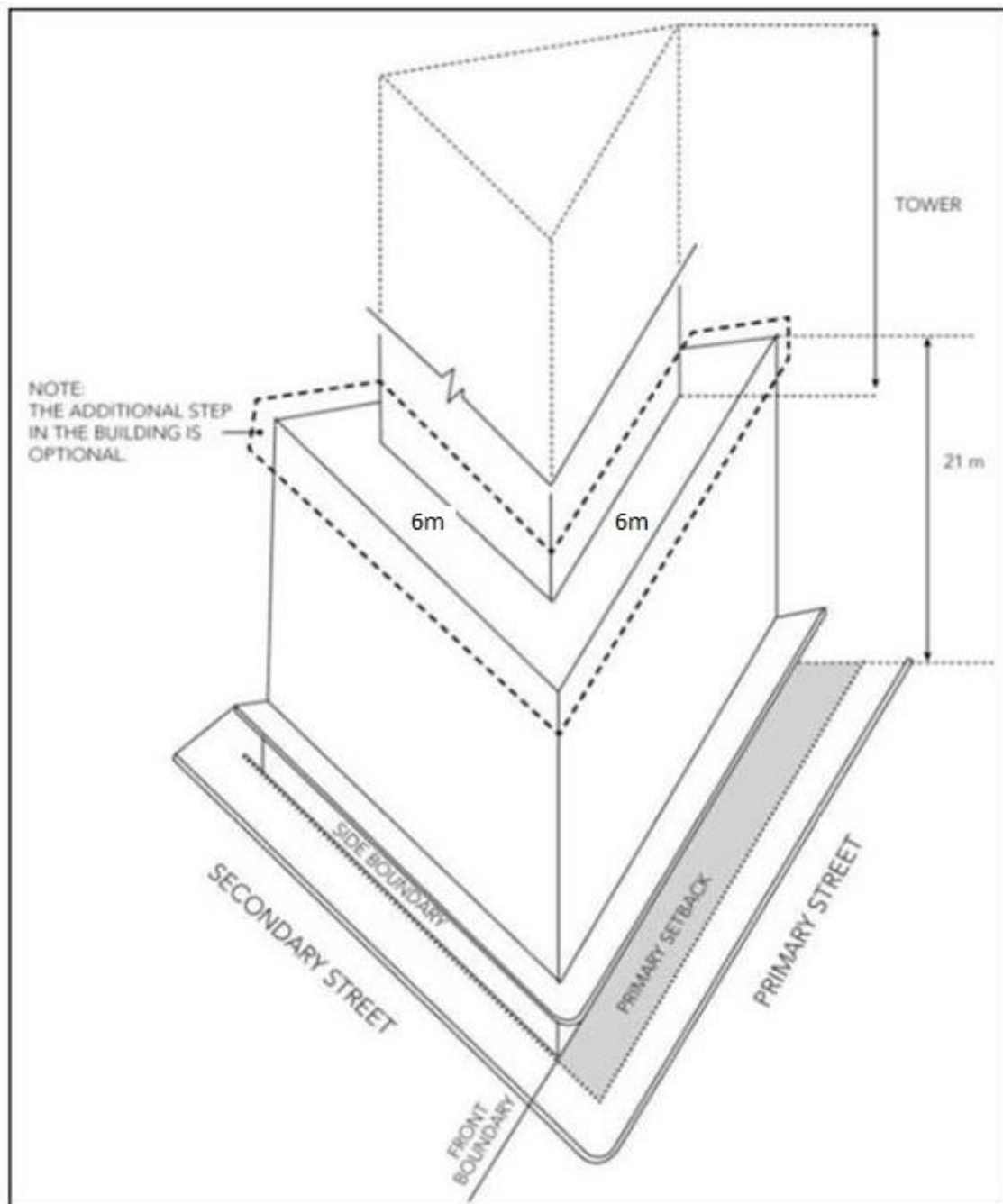


Figure 4-9: Tower on a Podium/Acute Corner Site



4.2.6 Building Floor Plates

Background

Limiting the size of tower floor plates allows for good internal amenity in terms of natural light and ventilation, while mitigating the potentially adverse impacts that tall and bulky buildings may have on the public domain including overshadowing and poor street amenity. Building depth is related to building use, meaning that commercial floor plates are typically deeper and larger than residential floor plates.

Objectives

1. Achieve living and working environments with good internal amenity and minimise the need for artificial heating, cooling and lighting.
2. Provide viable and useable commercial and/or residential floor space.
3. Contribute to useable and pleasant streets and public domain at ground level by controlling the size of upper level floor plates of buildings.
4. Reduce the apparent bulk and scale of buildings by limiting the size of the building.

Controls

1. Design the floor plate sizes and depth of buildings for Fine Grain and Midrise sites as indicated in the building envelopes.
2. Provide a maximum GFA of 700m² per level for residential towers with maximum length of elevation of 45m.
3. Comply with ADG standards for building depth and number of apartments.
 4. Provide a maximum GFA of 1,000m² per level for commercial towers with maximum length of elevation of 45m. Where sites are greater than 2,000m² a proportionally larger GFA per floor may be considered.

4.2.7 Street Alignments and Street Setbacks

Background

Buildings define the street network and public domain. For this reason, the alignment and setbacks of buildings are critical to the quality of internal and external environments. Land in the setback areas may be utilised as outdoor dining and may have basement car parking located under it if required.

Objectives

1. Create a strong and consistent definition of the public domain.
2. Define the street as a spatial entity. Reinforce the importance of the public role of the street.
3. Provide front setbacks appropriate to building function and character.
4. Establish the desired spatial proportions of the street.
5. Provide sunlight access to streets, comfortable wind conditions, a generous footpath for pedestrians, and to assist growing conditions for street trees. Allow for street landscaping.
6. Locate active uses, such as shopfronts, close to pedestrian activity areas. Allow an outlook to, and surveillance of, the street.
7. Create a transition between public and private space.

Controls

1. Buildings are to comply with the front setbacks as set out in **Figures 4-12**.
2. Upper level frontages to a lane/serviceway must be setback 6 metres from the centre line of the lane/serviceway.
3. Construct perimeter block buildings and podiums, which comply with the building envelope requirement, to the street and side boundaries (0m setback).

4. Buildings with a boundary to the Hume Highway have a minimum setback of 8m.
5. Buildings on the southern side of streets identified in **Figure 4-10** have minimum front setbacks as follows, in order to maximise solar access:
 - a. Elizabeth Street between Bathurst Street and George Street - 6m.
 - b. Railway Street, Scott Street and Memorial Avenue - 3m.
 - c. Parts of George, Bathurst, Terminus and Bigge Streets – 2.5m.

Figure 4-10 Street Setbacks

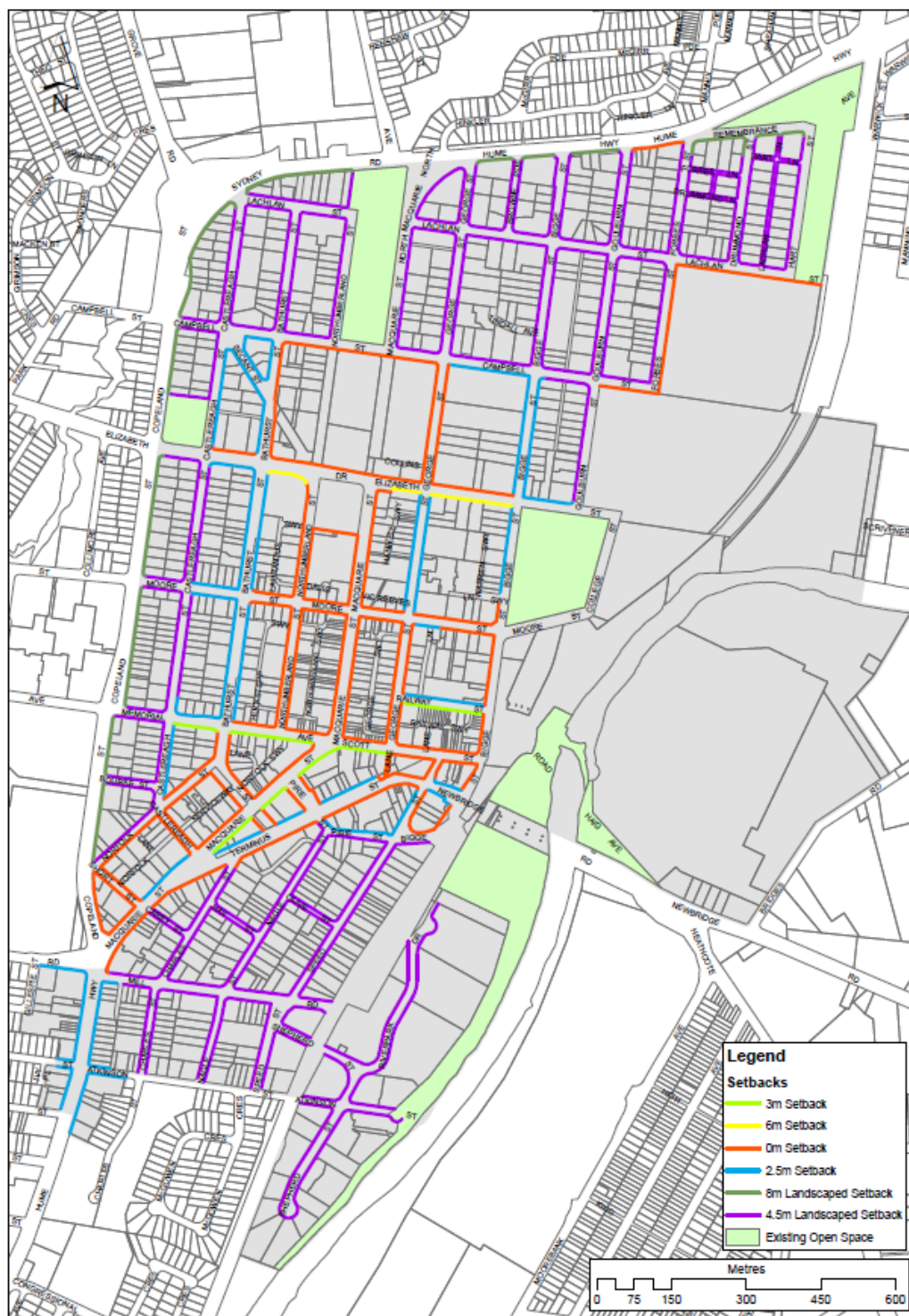
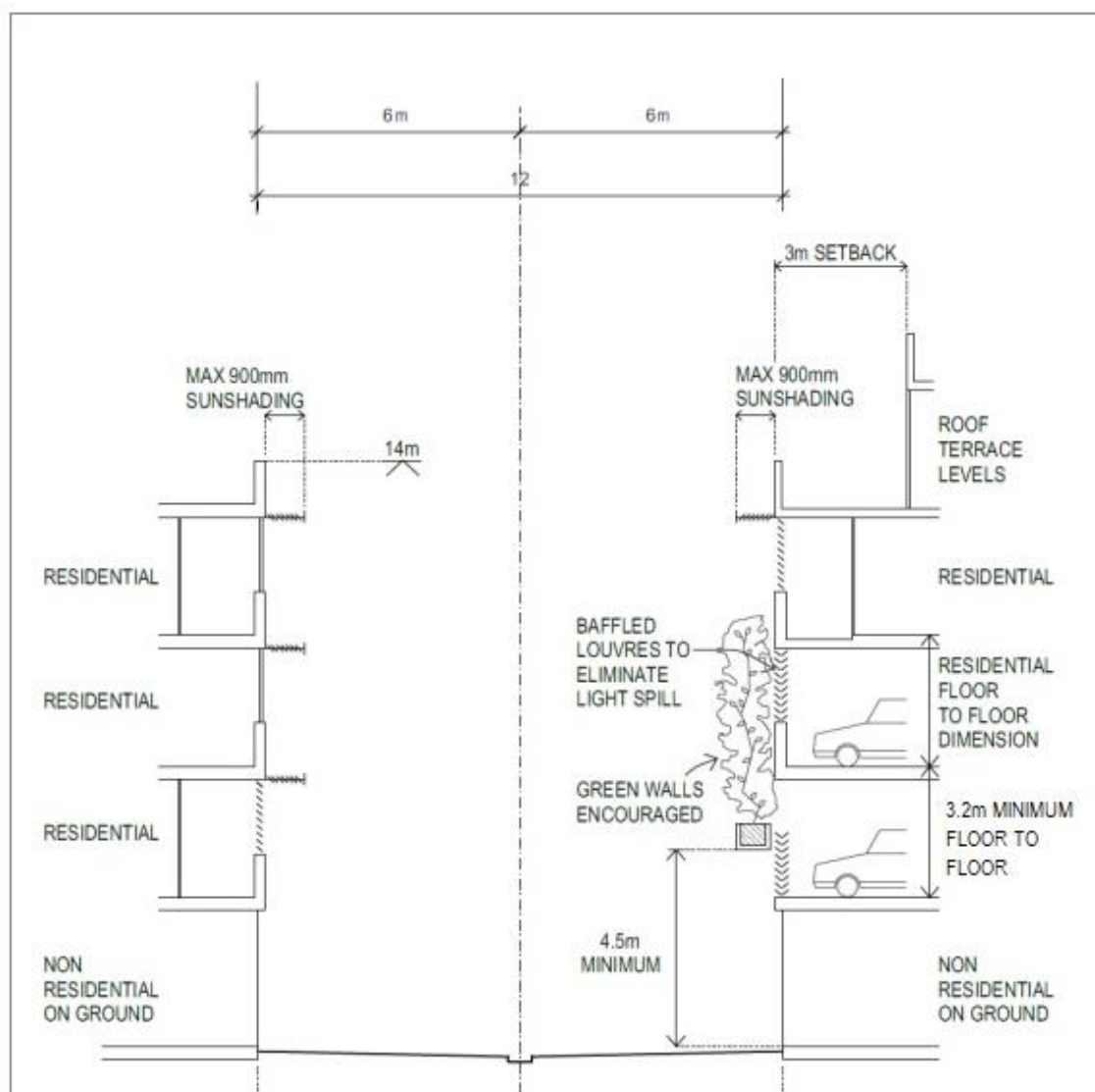


Figure 4-11 Laneway and Serviceway Setbacks



6. Pave the land in the set-back zone to match the paving in the public street so that it provides a seamless and level ground plane.
7. Ensure that no columns, blade walls or other building elements encroach the ground level of the front setback.
8. Ensure that balconies project a maximum of 1.2 metres into front building setbacks in the R4 - High Density Residential Zone.
9. Ensure that minor projections into front building lines and setbacks above ground level are designed for sun shading, entry protection or building articulation and enhance the amenity of the public domain.
10. Allow enclosures or screening of balconies only if they are moveable and aid the amenity of the apartments.

4.2.8 Side and rear boundary setbacks

Background

Side and rear setbacks, where provided, allow ventilation, solar and daylight access, assist with visual privacy, acoustic amenity, view sharing, and can reduce adverse wind effects. Building separation should relate to building height to ensure appropriate urban form, amenity and privacy for building occupants.

Objectives

Side and rear boundary setbacks must:

1. Ensure an appropriate level of amenity for building occupants in terms of daylight, outlook, view sharing, ventilation, wind mitigation, and privacy.
2. Achieve usable and pleasant streets and public domain areas in terms of wind mitigation and daylight access.

Controls

1. All residential and commercial buildings must comply with the separation distances in SEPP 65 and the ADG unless otherwise agreed with Council in an approved concept development application.
2. For existing buildings that do not comply with the setback requirements identified in control 1 above, appropriate screening must be installed should the building be refurbished or converted.
3. Buildings with a rear or side boundary to the rail corridor are to provide a minimum setback of 12m. The setback is to be appropriately landscaped.
4. Buildings on land zoned B6 – Enterprise Corridor and B1 – Neighbourhood Centre located in the Liverpool city centre, to have setbacks consistent with Table 4-1 below.
5. Construct buildings across the site facing the street and the rear boundaries rather than facing side boundaries.

Table 4-1 Side and rear boundary setbacks

Enterprise Corridor, Neighbourhood Centre and Existing Mixed Use areas	Setbacks	
	Side	Rear
Podium up to six levels :		
- If adjoining development built to boundary	0m	0m
- If adjoining stand-alone development	ADG	ADG
Stand-Alone Buildings		
- Building height up to 12m	ADG	6m
- Building height 12-25m	ADG	9m
- Building height over 25m	ADG	12m

4.2.9 Minimum Floor to Ceiling Heights

Background

The height of a ceiling contributes to amenity within an apartment and the perception of space. Well designed and appropriately defined ceilings can create spatial interest and hierarchy in apartments. Ceiling height is directly linked to achieving sufficient natural ventilation and daylight access to habitable rooms. The ground and first floor levels of mixed use apartment buildings should have increased ceiling heights to ensure their longer term adaptability for non-residential uses.

Objectives

Minimum floor to ceiling heights must:

1. Address the internal amenity of all users.
2. Assist in ensuring buildings are well-proportioned, articulated and modulated.
3. Allow for the potential for commercial uses in the first floor of any new building.

Controls

The minimum floor to ceiling heights are:

1. Ground floor: 3.6m.
2. Above ground level:
 - a) Commercial office 3.3m.
 - b) Capable of adaptation to commercial uses 3.3m.
 - c) Residential 2.7m.
 - d) Active public uses, such as retail and restaurants 3.6m.
3. Car Parks: Sufficient to cater to the needs of all vehicles that will access the car park and, if aboveground, adaptable to another use, as above.

4.2.10 Housing Choice and Mix

Background

A mix of dwelling types is essential to cater for different family groups and lifestyles, and to achieve housing affordability. Dwellings require internal flexibility as well as a variety of outdoor and recreational areas.

Objectives

Developments must:

1. Provide a mix of dwelling types, sizes and open space to cater for a range of household types and living styles.
2. Provide dwelling layout that is sufficiently flexible for residents' changing needs over time.
3. Meet the Australian Adaptable Housing Standard (AS 4299-1995) and provide a sufficient proportion of dwellings that include accessible layouts and features to accommodate the changing requirements of residents.

Controls

1. In addition to the provisions for dwelling mix in the ADG, residential apartment buildings and shop-top housing must comply with the following apartment mix and size:
 - Studio and one bedroom units must not be less than 10% of the total mix of units within each development;
 - Three or more bedroom units must not be less than 10% of the total mix of units within each development;
 - Dual-key apartments must not exceed 10% of the total number of apartments; and
 - A minimum of 10% of all dwellings (or at least one dwelling – whichever is greater) to be capable of adaptation for disabled or elderly residents.
2. Adaptable dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995).
3. Provide certification from an Accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995).
4. Ensure car parking and garages allocated to adaptable dwellings comply with the requirements of the relevant Australian Standard for disabled parking spaces.

4.2.11 Deep Soil Zones and Site Cover

Background

Deep soil zones are areas of natural ground retained within a development, uninhibited by artificial structures and with relatively natural soil profiles. Deep soil zones have important environmental benefits, including promoting healthy growth of large trees with large canopies, protecting existing mature trees, and allowing stormwater infiltration.

Limiting site cover provides separation between buildings. This space may be public (accessible and useable by the general public), communal (shared by all occupants of a development) or private (for the exclusive use of a single dwelling or tenancy).

Objectives

1. Provide an area on site that enables soft landscaping and deep soil planting, permit the retention and/or planting of trees that will grow to a large or medium size.
2. Improve amenity by allowing for good daylight access, ventilation, and assisting improved visual privacy.
3. Integrate with the open space and provide passive and active recreational opportunities.

Controls

1. The maximum permitted site coverage for development is specified in **Table 4-2**.

Table 4-2 Site coverage

Zone	Commercial & Mixed Use	Residential
Commercial Core, Fine Grain and Midrise	Up to 100%	N/A
Existing Mixed Use	75%	N/A
Enterprise Corridor and Infrastructure	75%	50%
All other zones	60%	50%

2. Include a deep soil zone as per Section 3E of the ADG in all developments with a residential component in all areas other than the Fine Grain Precinct and Midrise Precinct, or where perimeter block buildings are developed.

4.2.12 Public Open Space and Communal Open Space

Background

Public and communal open spaces are critically important for outdoor recreation opportunities for residents, connection to the natural environment, and valuable 'breathing space' between apartment buildings and within the city centre.

They also contribute to the appeal of the city, the individual development and the wellbeing of residents. High quality open space is essential in higher density urban precincts. The size, location and design of public and communal open space will vary depending on the site context and the scale of development.

Council encourages the development of the rooftop of residential flat buildings and mixed-use developments for the purposes of communal open space, including rooftop gardens, where possible. Better use of the rooftop space will increase the overall amenity and quality of new development in Liverpool city centre.

Objectives

Open space must:

1. Provide amenity in the form of:
 - a) landscape character and design;
 - b) opportunities for group and individual recreation and activities, including on the roof space of new residential flat buildings and mixed-use developments;
 - c) opportunities for social interaction;

- d) environmental and water cycle management; and
- e) opportunities to enhance microclimate.
- 2. Allow for a range of activities.
- 3. Provide an attractive outlook for residents.
- 4. Respond to and enhance site characteristics and context.
- 5. Optimise safety.

Controls

Existing Public Open Space

- 1. Ensure that at least 70% of Bigge Park, Apex Park, Pioneer Park and any other public open space in the city centre has a minimum of 3 hours of sunlight between 10am and 3pm on 21 June (Winter Solstice).

New Public Open Space

- 2. Dedicate open space to Council, where required, as part of an approved concept development application if the space meets the requirements of Council in terms of:
 - a) location;
 - b) aspect;
 - c) accessibility;
 - d) safety; and
 - e) solar access. The open space must be located and designed so that at least 50% of the open space provided has a minimum of 3 hours of sunlight between 10am and 3pm on 21 June (Winter Solstice).
- 3. Developments with a residential component in all zones must comply with the sections 3D Communal Public Open Space and 4F Common Circulation and Spaces, of the ADG. Consistent with the requirements of the ADG, communal open space is to be collocated with areas of deep soil, where possible.
- 4. The roof space of residential flat buildings (RFBs) and mixed-use development (including shop-top housing) is to be developed for the purposes of communal open space that incorporate shade structures and amenity facilities (barbecue and rooftop garden) that complement the development.

4.2.13 Landscape Design

Background

Landscape design includes the planning, design, construction and maintenance of all utility, open space and garden areas. The landscape qualities of the city centre are an important influence on its image, comfort, public and private amenity. Landscaping within the public domain will be implemented within the framework established by the Liverpool CBD Streetscape and Paving Manual 2018. In the private domain, it is important that a strong and consistent approach to landscaping is achieved in order to contribute to both a high level of amenity and a cohesive image for the city centre.

Objectives

- 1. Enhance quality of life for residents and occupants within a development in terms of privacy, outlook, views and recreational opportunities.
- 2. Ensure potable water for irrigation is minimised. Incorporate passive irrigation where possible.
- 3. Ensure landscaping is integrated into the design of development.
- 4. Improve stormwater quality and control run-off.
- 5. Improve the microclimate and solar performance within the development.
- 6. Improve urban air quality and contribute to biodiversity.

Controls

1. Submit a landscape plan prepared by a registered landscape architect that demonstrates consistency with the above objectives and section 4V, water management and conservation, of the ADG.

4.2.14 Planting on Structures

Background

The following controls apply in the Commercial, Mixed Use and Enterprise Corridor zones (as identified in **Figure 4-2**) for planting on roof tops or over car park structures, particularly for communal open space required as a component of mixed use residential development, and in non-residential developments where the landscaping proposed is not on natural ground.

Objectives

1. Contribute to the quality and amenity of open space on roof tops and internal courtyards.
2. Encourage the establishment and healthy growth of trees in urban areas.
3. Minimise the use of potable water for irrigating planting on structures.

Controls

1. Comply with the Section 4P, planting on structures in the ADG in all developments with a residential component and/or communal open space.

4.3. PEDESTRIAN AMENITY

Pedestrian amenity incorporates all those elements of individual developments that directly affect the quality and character of the public domain. These provisions are intended to achieve a high standard of public domain design and pedestrian comfort in city centre public spaces. The pedestrian environment is to be characterised by excellence of design, high quality materials and a standard of finish appropriate to a regional city centre. The city's lanes, arcades and through-site links are to form an integrated pedestrian network providing a choice of routes at ground level for pedestrians.

The controls in this section aim to increase the vitality, safety, security and amenity of the public domain by:

1. Developing future through-site links at ground level;
2. Ensuring active street frontages;
3. Ensuring a positive relationship between the building and the public domain;
4. Ensuring provision of awnings along the retail frontages; and
5. Mitigating adverse impacts on the street arising from driveway crossings.

4.3.1 Pedestrian Permeability

Background

The existing serviceways and through-site links are an integral component of the pedestrian movement system, providing direct access between the street frontage, serviceways and rear parking areas. The north-south oriented street grid in the city centre provides excellent connectivity in this direction, but the city's street pattern would benefit from additional through-site links in an east-west direction. This will assist in reducing the overall street block size.

In some blocks, additional north-south connections will also improve accessibility and choice. Additionally, laneways provide for site servicing in a manner that protects the quality of main street

frontages in the city centre.

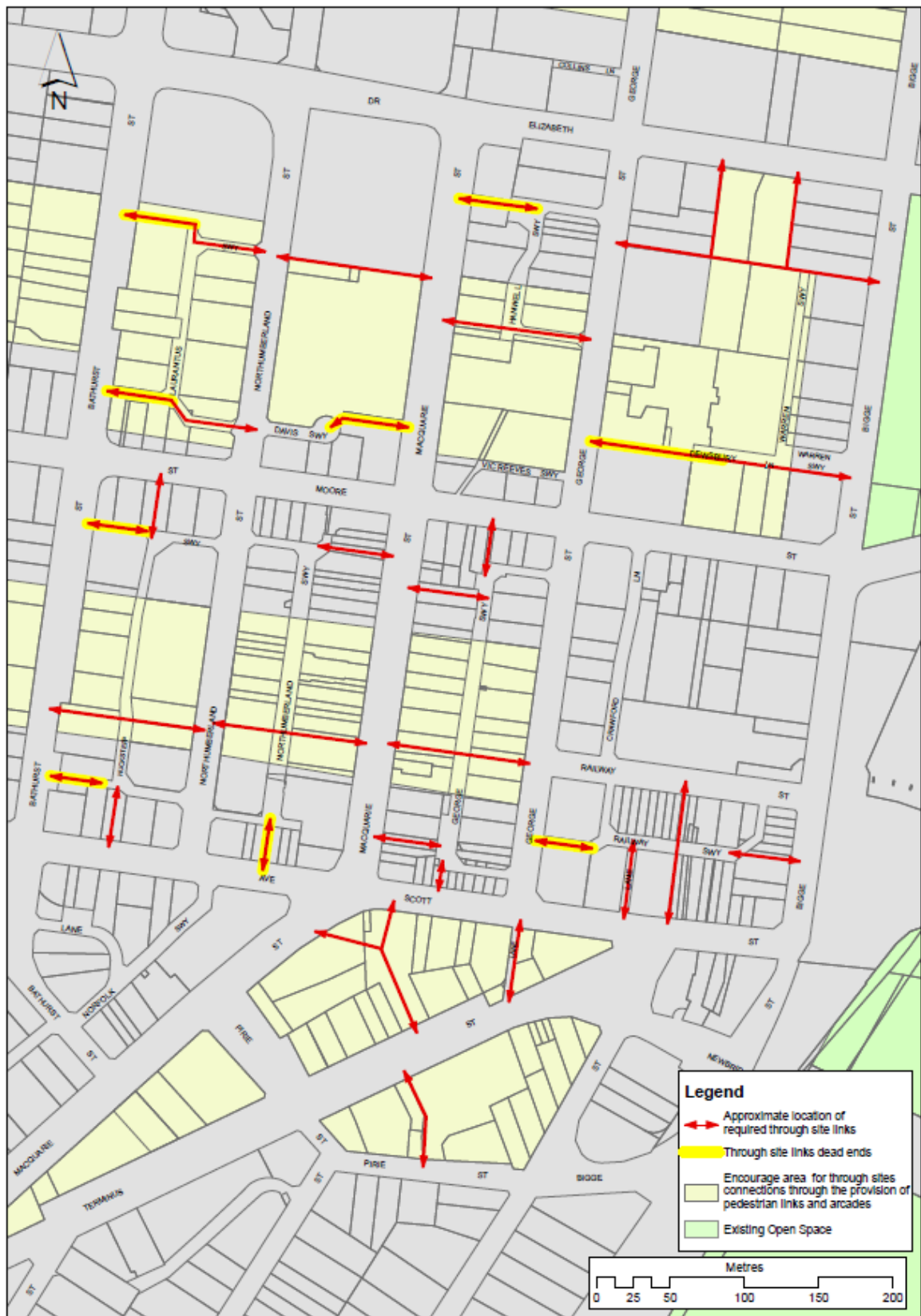
Objectives

1. Improve access and choice in the city centre by providing through-site links as redevelopment occurs.
2. Reduce the size of large street blocks to provide greater movement choice.
3. Create clear and direct throughways for pedestrians.
4. Increase the range of economic opportunities.
5. Retain and enhance existing through site links as redevelopment occurs.
6. Enable active street frontages on through site links.
7. Discourage vehicular access from the primary street frontages. Vehicular access shall be provided from secondary streets or laneways.

General Controls

1. Design through-site links to have direct sight lines.
2. Locate through-site links as shown in **Figure 4-12**.
3. Locate through-site links within “through site link encouragement areas” (as identified in **Figure 4-12**) opposite other through site links.
4. Extend existing dead end lanes (as identified in in **Figure 4-12**) through to the next street as redevelopment occurs.
5. Connect new through site links with existing and proposed through site links, serviceways, shared zones, arcades and pedestrian ways.
6. The siting of new through site links may be varied where new links cannot be directly aligned with existing links.
7. Retain existing, publicly and privately owned, through-site links.
8. Locate active uses on through site links where possible.
9. Nominate sites for through-site links, shared zones etc. that may be acquired by Council or may be dedicated to Council at no cost as part of a concept development application.
10. Vehicular access shall be provided from secondary streets or laneways only. Vehicular access will not be allowed from the primary street.

Figure 4-12 Through Site Links



Specific Controls for Different Link Typologies

1. Shareway | Pedestrians and Cars (Public) Through Site Links must:
 - a) Be a minimum width of 6m and clear of all obstructions.
 - b) Be open to the sky and to be publicly accessible at all times.
 - c) Display signage at street entries indicating public accessibility and the street to which the through site link connects.
2. Pedestrian Paths | (Public) Through Site Links must:
 - a) Be a minimum width of 3m clear of all obstructions.
 - b) Be open to the sky and to be publicly accessible at all times.
 - c) Have signage at street entries indicating public accessibility and the street to which the through site link connects.
3. Pedestrian Arcades and Through Site Links must:
 - a) Be a minimum width of 5m and clear of all obstructions (including columns, stairs, and escalators).
 - b) Provide public access at all business trading times.
 - c) Be at least 2 storeys high.
 - d) Have access to natural light for at least 50% of their length, where appropriate.
 - e) Incorporate clear glazed entry doors comprising at least 50% of the entrance where air conditioned, and to be accessible at least 18 hours per day, 7 days per week.
 - f) Display signage at street entries indicating public accessibility and the street to which the through site link connects

4.3.2 Pedestrian Overpasses and Underpasses

Background

Streets provide the best amenity and safety when activated by pedestrians. Pedestrians should be encouraged to use the street to enhance and contribute to street life, and to maximise safety and security of the public domain.

Pedestrian overpasses linking commercial or retail buildings over the public street are discouraged as they can have a negative impact on the streetscape quality and on views and vistas along streets. New pedestrian overpasses or underpasses will only be considered where they directly connect to major transport nodes (such as Liverpool railway station), and/or can substantially improve pedestrian safety and access over major arterial roads (such the Hume Highway).

Objectives

1. Promote pedestrian activation of streets and public places by limiting pedestrian overpasses and underpasses.
2. Encourage pedestrian circulation at street level.
3. Protect views and vistas along streets.

Controls

1. Design underpasses or overpasses in accordance with *Crime Prevention Through Environmental Design* principles and compliant with the applicable Australian Standard for Disabled Access.
2. Design overpasses to be fully glazed or open, and not greater than 3m wide or more than one level high.
3. Consider underpasses for direct connection under adjacent streets to the railway station where they:

- a) would substantially improve pedestrian safety and accessibility;
- b) incorporate active uses, particularly at entry and exit points; and
- c) have a minimum width of 4.5m clear of all fixed obstructions and a minimum ceiling height of 6m.

4.3.3 Active Street Frontages

Background

Active street frontages promote an interesting and safe pedestrian environment.

Active frontage uses are defined as one or a combination of the following at street level:

- entrance to retail;
- glazed entries to commercial and residential lobbies;
- café or restaurant, if accompanied by an entry from the street;
- active office uses, such as reception, if visible from the street; and/or
- public building if accompanied by an entry.

Objectives

1. Promote pedestrian activity and safety in the public domain.
2. Maximise active street frontages in Liverpool city centre.
3. Development in Liverpool city Centre is consistent with the Liverpool City Activation Strategy 2019-24.

Controls

1. Locate active street frontages on the ground level of all commercial or mixed use buildings, including adjacent through-site links.
2. Locate active street frontages in the Mixed Use, Commercial Core, Enterprise Corridor and Neighbourhood zones (as identified in **Figure 4-2**), on ground level. This does not preclude servicing activities particularly in the serviceways.
3. Locate active street frontages at first floor level in addition to ground for sites addressing major roads as depicted in **Figure 4-16**.
4. Locate street fronts at the same level as the footpath and with direct access from the street.
5. Use only open grill or transparent security (at least 50% visually transparent) shutters to retail frontages.

4.3.4 Street Address

Background

Street address is defined as that part of a building that has a frontage to the street, contains entries, lobbies, balconies and habitable rooms overlooking the street. Buildings can contribute positively to the street by providing a clear address to, direct access from and outlook over, the street.

Objectives

1. The street address for buildings must provide:
 - a) An attractive interface between the public and private domains.
 - b) Legible entries to the building from the street.
 - c) Opportunities for surveillance of the street and public domain.

Controls

1. Provide a clear street address and direct pedestrian access off the primary street frontage in mixed use and residential developments.
2. Provide multiple entrances to large developments on all street frontages.

3. Provide direct 'front door' and/or garden access to the street in ground floor residential units.

4.3.5 Street and Building Interface

Background

Buildings are to provide privacy if dwellings are located on the ground floor. Where fences are used, they need to be designed to enable a positive relationship between the building and the street. Front fences include all fences to the primary and secondary street frontages, and side boundary fences forward of the building alignment.

Objectives

1. Clearly define the interface between the public and private domain.
2. Provide privacy for dwellings on the ground floor of buildings.
3. Ensure front fences allow for passive surveillance of the street.
4. Encourage the preservation and/or construction of fences, walls and landscaped areas that contribute to the character of the locality.

Controls

1. Design the area between the building and the public footpath so that it:
 - a) provides visibility to and from the street (if non-residential use);
 - b) provides privacy if residential uses are on the ground floor;
 - c) introduces paving and/or landscaping between the street and the building; and/or
 - d) screens any above ground car parking.
2. Use front fences that:
 - a) do not present a solid edge to the public domain greater than 1.2 m above the footpath / public domain level; and
 - b) are not constructed of sheet metal or opaque glass.

4.3.6 Lane / Serviceways and Building Interface

Background

Council envisages lane ways and serviceways in Liverpool city centre developing to offer some of the higher order functions of streets. While preserving functions necessary to the servicing of businesses, lane ways and serviceways may develop to include independent/niche retail businesses and/or residential accommodation in addition to providing back of house services. Active street frontages on service ways can assist in promoting interesting and safe environments in which vehicles and pedestrians have access and a range of uses may flourish.

Objectives

1. Clearly define the interface between the public and private domain.
2. Provide for passive surveillance of the street from the building to the serviceway.
3. Minimise the impact of above ground car parking.
4. Provide suitable non-residential uses with direct pedestrian access to the lane/serviceway.
5. Ensure the effective operation of loading facilities.

Controls

1. Set back all levels above ground of buildings 6m from the centre line of the lane/serviceway so that residential uses can be accommodated on opposite sides of the serviceway, as described in **Figure 4-11**.
2. Provide active uses and/or entries at ground level where possible.
3. Screen or sleeve above ground car parking with green walls or other screening devices.
4. Electricity substations (where required) shall be situated within the building or its basement.
5. Vehicular entry points must be of high quality design. The impact of vehicular entry points

- on pedestrians must be minimised.
6. Garbage collection points, fire services and other service requirements are to be integrated into the design of the building.

4.3.7 Awnings

Background

Awnings increase the useability and amenity of public footpaths by protecting pedestrians from sun and rain. Awnings provide a public presence and interface within the public domain to contribute to the identity of a development.

Objectives

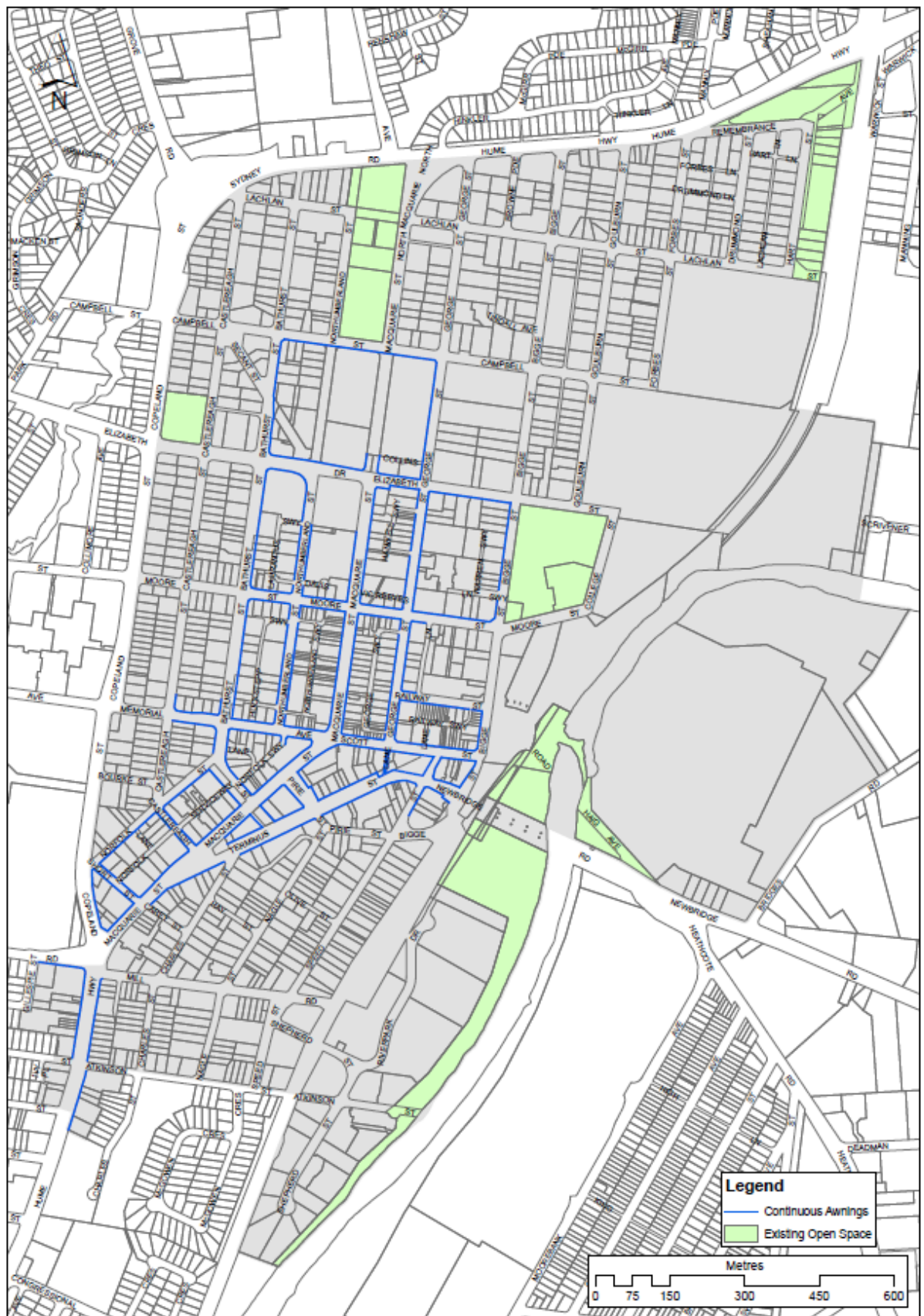
Awnings on buildings must:

1. Provide shelter for public streets where most pedestrian activity occurs.
2. Address the streetscape by providing a consistent street frontage.

Controls

1. Provide street frontage awnings for all new developments on streets identified in **Figure 4-13**.
2. Awnings must be:
 - a) horizontal in form;
 - b) minimum 2.4m deep (dependent on footpath width);
 - c) minimum soffit height of 3.2m and maximum of 4m;
 - d) stepped to accommodate sloping streets;
 - e) integral with the building design;
 - f) slim vertical faciae or eaves (generally not to exceed 300mm height); and
 - g) setback 1.2m from kerb to allow for clearance of street furniture, trees, and other public amenity elements.
3. Match awning design to building facades, so that they maintain continuity and are complementary to those of adjoining buildings.
4. Include appropriate sun shading device for the outer edge of awnings along east-west streets if required. These blinds must not carry advertising or signage.
5. Provide lighting recessed into the soffit of the awning to facilitate night use and to improve public safety.
6. Maintain a minimum clearance of 2.8m from the level of the pavement to the underside of awning signage.
7. Provide all residential buildings in areas not identified for continuous awnings in **Figure 4-13** with awnings or other weather protection at their main entrance area.

Figure 4-13 Awnings



4.3.8 Building Design and Public Domain Interface

Background

Liverpool's public domain is defined by the buildings, streets and public places. The quality of the public domain is dependent on a consistent approach to the design of new development including the articulation and finish of building exteriors.

Dark coloured finishes (e.g. black, charcoal) can tend to increase heat absorption and add to the urban heat island effect, whereby the urban environment is hotter than surrounding land. Council encourages the use of lighter coloured finishes to help reduce the urban heat island effect in Liverpool city centre.

Objectives

The design of new/modified buildings in Liverpool city centre must:

1. Contribute positively to the streetscape and public domain by means of high quality architecture and robust selection of materials and finishes.
2. Provide richness of detail and architectural interest especially at visually prominent parts of buildings such as lower levels and roof tops.
3. Clearly define the adjoining streets, street corners and public spaces and avoid ambiguous external spaces with poor pedestrian amenity and security.
4. Seek to reduce the urban heat island effect by selecting lighter coloured external finishes.

Controls

1. Design new buildings that adjoin existing buildings, particularly heritage buildings and those of architectural merit so that they consider:
 - a) the street 'wall' alignment and building envelope;
 - b) the 'depth' within the façade;
 - c) facade proportions; and
 - d) the response to the corners at street intersections.
2. Provide balconies and terraces appropriately orientated where buildings face public spaces.
3. Articulate façades to address the street, proportion the building, provide 'depth' in the street wall when viewed obliquely along the street and add visual interest.
4. Use high quality robust finishes and avoid finishes with high maintenance costs, and those susceptible to degradation due to a corrosive environment. Large expanses of rented concrete finish is discouraged.
5. Select lighter-coloured materials for external finishes including roofs and avoid the use of darker-coloured materials (e.g. black, charcoal) to reduce the urban heat island effect.
6. Maximise glazing in the facades for retail uses.
7. For residential components of buildings, do not use highly reflective finishes and curtain wall glazing above ground floor level.
8. Construct only minor projections up to 600mm from building walls into the public space. These must not add to the GFA and must provide a benefit, such as:
 - a) expressed cornice lines that assist in enhancing the definition of the street; or
 - b) projections such as entry canopies that add visual interest and amenity.
9. Do not locate communication towers such as mobile phone towers, but excluding satellite dishes, on residential buildings or mixed use buildings with a residential component.
10. Incorporate roof top structures, such as air conditioning and lift motor rooms, into the architectural design of the building.
11. Screen air conditioning units on balconies.
12. No clothes drying facilities to be allowed on balconies.

4.3.9 Street Intersections and Corner Buildings

Background

As buildings located on corner sites address two street frontages instead of one, they are more visibly prominent than mid-block buildings. Corner buildings therefore play a particularly important role in the city centre. Corners can strengthen the form of city blocks, streets and intersections, identify important junctions, assist in revealing topographic features and define pedestrian routes.

Objectives

Corner buildings must:

1. Contribute to the legibility of the city.
2. Ensure they address all street frontages.
3. Support the role of corner sites in creating a clear skyline and minimising apparent density.
4. Respond to any heritage buildings on opposing corner sites.

Controls

1. Address all street frontages in the design of corner buildings.
2. Design the corner buildings to respond to the character of the intersection by recognising the different hierarchies of the street typologies.

Note: Intersections of different street types all require varied design responses.

4.3.10 Public Artworks

Background

Public Art enhances the visual quality and cultural influence of both the public domain. It contributes to people feeling positive about their surroundings. Public Art may be ephemeral, temporary or permanent in nature. It may be located in or part of a public space or facility and may be commissioned by either the public or private sector.

Public art also includes the conceptual contribution of an artist to the design of public spaces and facilities. Public Art is crucial to the development of public places which are innovative, vibrant and meaningful and allow curiosity, playfulness and or a sense of connection to form. Public art may take any of the following forms:

- a) Functional Connection; seating, lighting, bollards
- b) Decorative: Incorporated into structures eg paving, awnings
- c) Iconic: Stand-alone sculptural works
- d) Integrated: fully incorporated within the design eg flooring, windows
- e) Interpretative: describe, inform or educate, on issues, events, situations eg signage, plaques, text based work

Objectives

Public Art in Liverpool city centre must:

1. Contribute to the city's physical attractiveness and the quality of life that it offers visitors and residents.
2. Interpret and express Liverpool's historical and cultural themes, particularly as identified in *Our Home, Liverpool 2027. Community Strategic Plan*
3. Improve the quality of public artworks in Liverpool.
4. Encourage the development of public art as consistent with Council's Public Art Policy.

Controls

1. Design public art to respond to the particular site of the development as well as the city as

- a whole.
- 2. Provide well designed and visually interesting public art created by artists or organisations that are competent in the selected field and committed to best practice.
- 3. Construct Public Art of materials that are durable, resistant to vandalism, safe for the public and constructed to ensure minimal maintenance.
- 4. Develop clear and concise agreements with artists/organisations in relation to expectations and deaccession (the process used to permanently remove an object, artwork or assemblage).

4.4. TRAFFIC AND ACCESS

Background

This section contains objectives specifically related to pedestrian access, vehicular access, on-site parking and site facilities in the city centre. An upgrade of the intersection of the Hume Highway and Hoxton Park Road is also under consideration.

4.4.1 Vehicular Access and Manoeuvring Areas

Background

The location, type and design of vehicular access points to a development can have significant impacts on the streetscape, the site layout and the building façade design.

Objectives

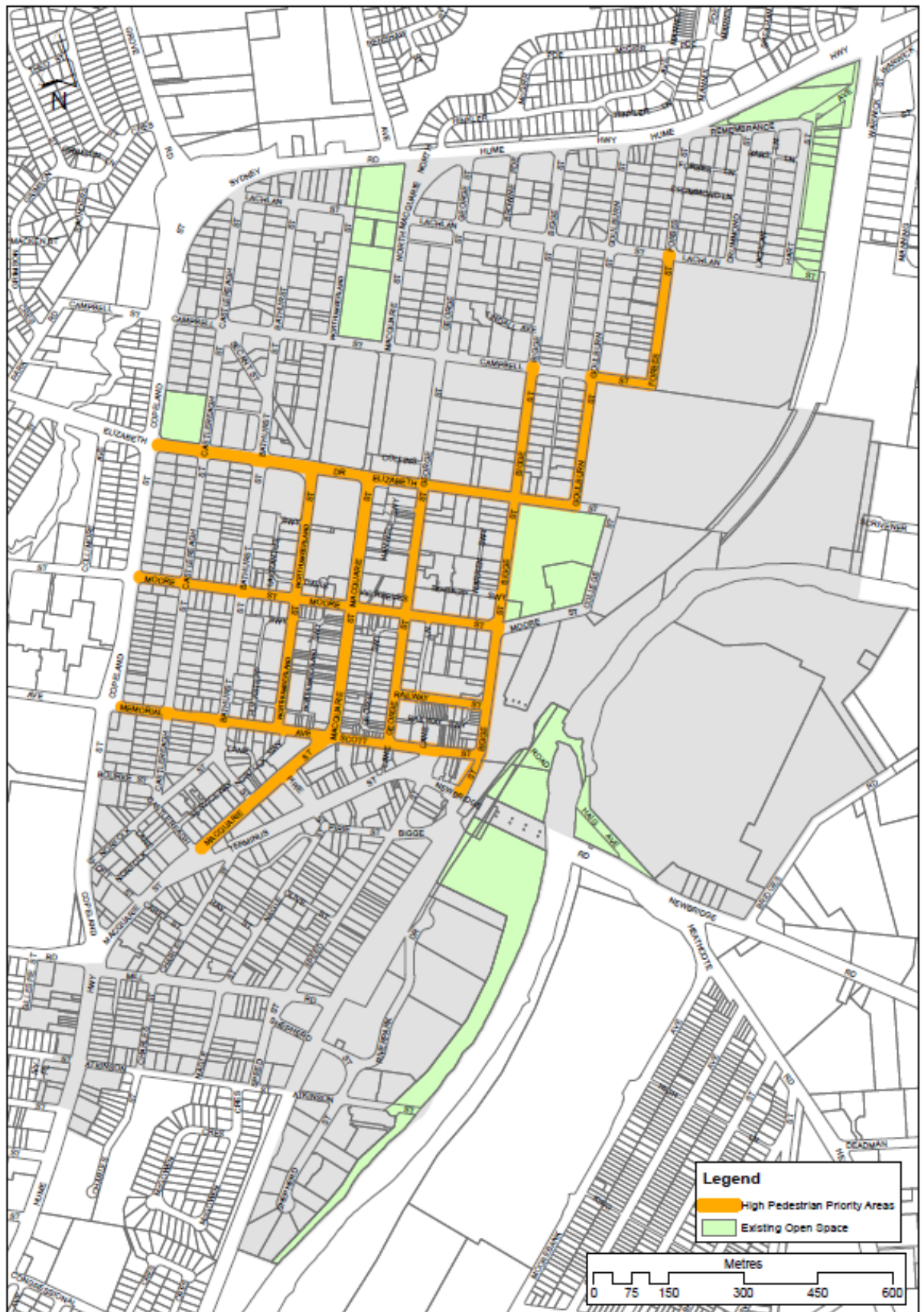
The design and location of vehicular access to developments must:

- 1. Avoid or minimise conflicts between pedestrians and vehicles on footpaths, particularly along pedestrian priority areas identified in **Figure 4-14**.
- 2. Not intrude visually into the streetscape continuity.

Controls

- 1. Vehicular access shall be restricted to the secondary street (other than along a High Pedestrian Priority Area) where possible.
- 2. Design of vehicle entry points must be of high quality and relate to the architecture of the building, including being constructed of high quality materials and finishes.
- 3. All weather access:
 - a) Locate and design porte cochere (for hotels only) to address urban design, streetscape, heritage and pedestrian amenity considerations.
 - b) Design porte cochere to be internal to the building, where practical, with one combined vehicle entry and exit point, or one entry and one exit point on two different frontages of the development.
 - c) In exceptional circumstances for buildings with one street frontage only, an indented porte cochere with separate entry and exit points across the footpath may be permitted, as long as it is constructed entirely at the footpath level and provides an active frontage at its perimeter.

Figure 4-14 High Pedestrian Priority Areas



4.4.2 On Site Parking

Background

On-site parking includes underground (basement), surface (at grade) and above ground parking, including parking stations. Parking requirements for buildings on land zoned B3 — Commercial Core B4 — Mixed Use within Liverpool city centre are detailed in clause 7.3 of LLEP 2008. For other development (including buildings on land zoned R4 — High Density Residential, B1 — Neighbourhood Centre or B6 — Enterprise Corridor) are detailed below. Bicycle parking requirements are detailed in section 21.3 of Part 1 LDGP 2008, On-Site Car Parking Provision and Service Facilities by Land Use.

Objectives

On site car parking must:

1. Provide a sufficient supply of on-site parking on the outskirts of the city centre to cater for a mix of development types.
2. Encourage economic growth within the city centre.
3. Enable the conversion of above ground parking to other uses in the future.
4. Encourage a modal shift in transport and recognise the complementary use and benefit of public transportation and non-motorised modes of transport such as bicycles and walking.

Controls

1. All required car parking is to be provided on site in an underground (basement) carpark except to the extent provided below:
 - a) On Fine Grain and Midrise sites, a maximum of one level of surface (at grade) parking may be provided where it is fully integrated into the building design; and
 - b) On sites requiring the lodgement of a concept DA, a maximum of one level of surface (at grade) and one additional level of above ground parking may be provided where it is fully integrated into the building design.
2. Provide car parking for buildings developed on land in the R4 - High Density Residential zone as follows:
 - a) 1 space per two studio apartments.
 - b) 1 space per one bedroom or two bedroom apartments.
 - c) 1.5 spaces per three or more bedroom apartments.
3. Provide car parking for buildings developed on land in other zones (B1 — Neighbourhood Centre and B6 — Enterprise Corridor) as follows:
 - a) 1 space per 100 m² of floor area
4. Service and visitor parking is to be provided for all development within the city centre. For sites zoned B3 — Commercial Core or B4 — Mixed Use, service and visitor parking is to be provided as part of the parking required according to clause 7.3 of LLEP 2008, Car parking in Liverpool city centre. For all other sites, service and visitor parking requirements are additional to that specified in controls 2 and 3 above.

Service and visitor parking is to be provided In accordance with the following formula:

Residential (including residential components of mixed-use or other developments)

- 1 space per 10 apartments or part thereof, for visitors; and
- 1 space per 40 apartments for service vehicles (including removalist vans and car washing bays) up to a maximum of 4 spaces per building

All other development

5. Sufficient service and delivery vehicle parking adequate to provide for the needs of the development.

Provision is to be made for motorcycle parking at the rate of 1 motorcycle space per 20 car spaces.

6. No less than 2% of the total parking demand generated by development shall be accessible parking spaces, designed and appropriately signposted for use by persons with a disability.

4.5. ENVIRONMENTAL MANAGEMENT

4.5.1 Wind Mitigation

Background

Windy conditions can cause discomfort and be dangerous to pedestrians. Downdrafts from buildings can inhibit the growth of street trees. Conversely, moderate breezes that penetrate streets can enhance pedestrian amenity and disperse vehicle emissions and air conditioning plant exhausts.

Objectives

Wind mitigation measures must:

1. Ensure that new developments satisfy nominated wind standards and maintain comfortable conditions for pedestrians.
2. Ensure that the moderate breezes are able to penetrate the streets of Liverpool city centre.

Controls

1. Design all new buildings to meet the following maximum wind criteria :
 - a) 10m/second in retail streets;
 - b) 13m/second along major pedestrian streets, parks and public places; and
 - c) 16m/second in all other streets.
2. Submit a Wind Effects Report with the DA for all buildings greater than 35m in height.
3. Submit results of a Wind Tunnel Testing report for buildings over 48m in height.

4.5.2 Noise

Background

Noise sources from major road and railway corridors and mixed-use and commercial development have been identified within and adjacent to the city centre. It is important for the amenity and comfort of future occupants of buildings in proximity to these areas that appropriate measures are put in place.

Objectives

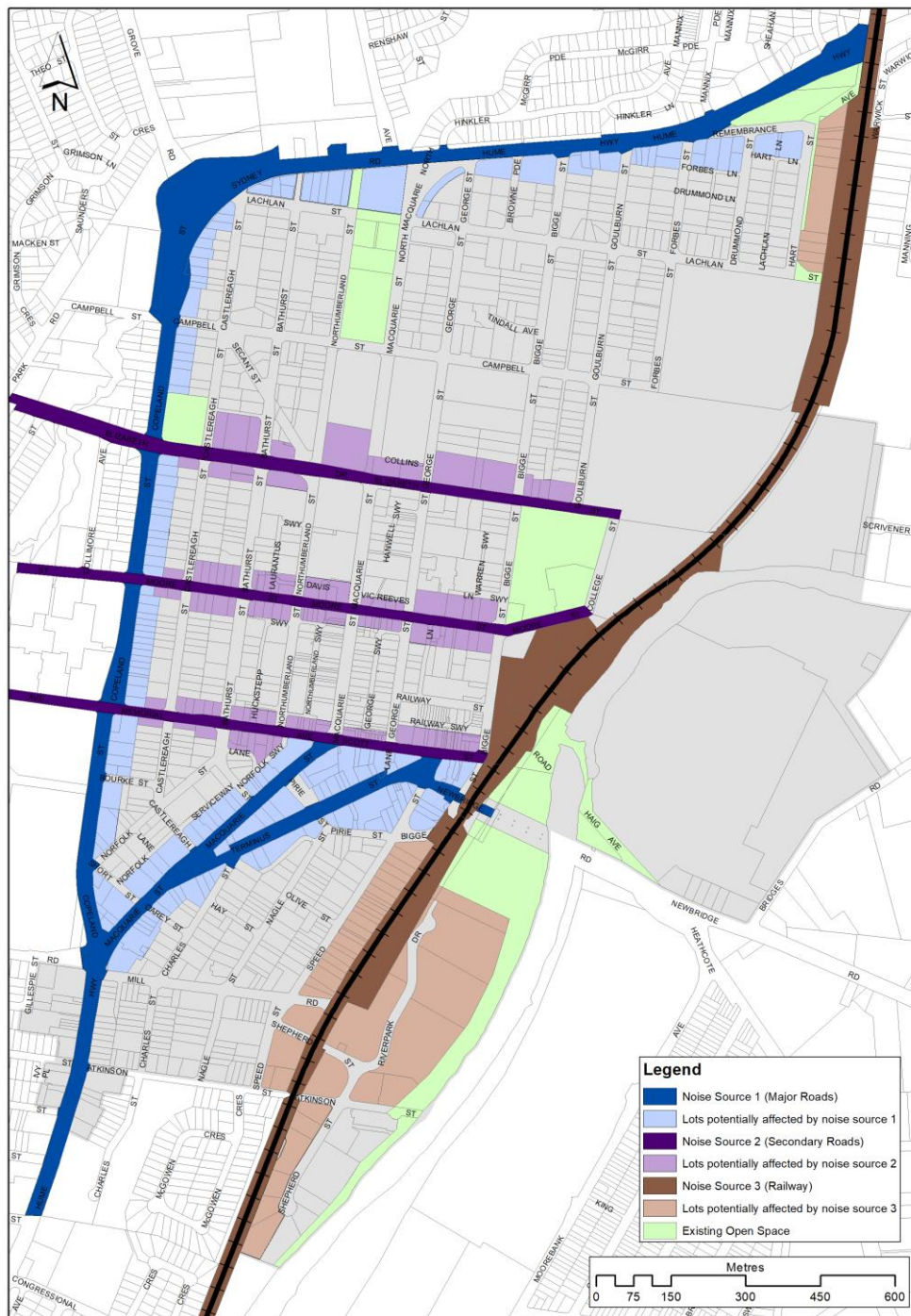
1. Noise mitigation measures must achieve appropriate amenity in noise affected locations.

Controls

1. Design development on sites adjacent to road and rail noise sources identified in **Figure 4-15**, in a manner that shields any residential development from the noise source through the location and orientation of built form on the site, supported by an appropriate acoustic report as required by the State Environmental Planning Policy (Infrastructure) 2007.
2. Provide an 8m setback from the primary street frontage to any residential component of development located along Terminus Street and the Hume Highway.

3. All residential apartments and / or serviced apartments within a mixed use development should be designed and constructed with double-glazed windows and / or laminated windows, solid walls, sealing of air gaps around doors and windows as well as appropriate insulating building elements for doors, walls, roofs and ceilings etc; to provide satisfactory acoustic privacy and amenity levels for occupants within the residential and / or serviced apartment(s).

Figure 4-15 Noise



4.6. CONTROLS FOR SPECIFIC AREAS

Background

The following controls are in addition to the general controls elsewhere in this DCP. The purpose of this section is to provide additional, site specific controls for areas of sensitivity within the city centre. These included heritage areas and sites requiring the lodgement of a site-specific DCP.

4.6.1 Heritage Items and Conservation Areas

Background

Heritage items and heritage conservation areas identified on the heritage map and in Schedule 5 of the LLEP 2008. Works affecting listed heritage items or areas, or development on listed heritage sites, are subject to the provisions of the LLEP 2008. As part of the assessment process, the consent authority must have regard to:

- Heritage provisions outlined in Clause 5.10 of the LLEP 2008;
- Heritage objectives, controls and conservation criteria as listed below;
- The relevant Statement of Significance for each item;
- Any conservation management plan, heritage impact statement or study required by the consent authority in response to proposed development of these areas;
- For development that may impact a heritage item, information addressing relevant issues must be included in a Statement of Heritage Impact submitted with the DA; and
- Development within the curtilage of a listed item, or a heritage conservation area, or which will impact upon the setting of a heritage item or heritage conservation area is also subject to the following provisions. Where there is a discrepancy with general controls elsewhere in this DCP, the following objectives and controls are to apply.

Objectives

1. Facilitate the conservation and protection of heritage items and heritage conservation areas and their settings.
2. Reinforce the special attributes and qualities of the heritage significance by ensuring that development has regard to the fabric and prevailing character of the item or conservation area, including scale, proportions, materials and finishes.
3. Design infill development to complement the heritage values and address the desired future character.
4. Conserve, maintain and enhance existing views and vistas to buildings and places of heritage significance.
5. Ensure new buildings and landscaping in heritage precincts recognise community values and provide a sense of continuity. Refer to the joint NSW Heritage Office and RAlA publication "Designing in Context: Guidelines for Infill Development in the Historic Environment" (2005) for further guidance.

Controls

1. Submit a Conservation Management Plan prior to the submission of any development application for the following sites:
 - a) St Luke's Church;
 - b) Liverpool Railway Station; and
 - c) Liverpool College of TAFE (Francis Greenway Building).
2. Ensure that all development in the Bigge Park Conservation Area addresses any potential impact on the heritage significance of the area as a whole.
3. Retain and enhance the significance of heritage items and their setting in any new development within Liverpool city centre.

4. Undertake an assessment for sites in the vicinity of heritage items or heritage conservation areas, of the impact of the proposal on the setting of nearby heritage items or heritage conservation areas.
5. Establish the relevant criteria for each proposal depending on the nature of development, the proximity of the development to surrounding heritage items and conservation areas in addition to any other factors considered in the design of the subject building.
6. Infill building must not precisely imitate its neighbour but use recognisable tools such as spatial organisation, massing, scale, alignment, detailing, materials, roof forms and coursing lines to complement adjacent heritage items.
7. New buildings must not obstruct important views and vistas of a heritage item.

4.6.2 Site specific DCPs

Background

As noted in Section 4.2.5 above, certain sites in Liverpool city centre (having a minimum lot size of 1500 m² with two or more Street frontages and situated in “Area 8”, “Area 9” or “Area 10”) may be developed pursuant to Clause 7.5A of LLEP 2008. While Council’s preferred option is that development of these sites proceeds pursuant to a concept developed application, the option is to lodge a site specific DCP which meets all the requirements of clause 7.5A(4) of LLEP 2008. Any such site-specific DCPs are to be considered as amendments to Part 4 LDCP 2008 and included in this section.