

5 Proposed built form controls

5.1 Introduction

Green Square will be mainly experienced from the public spaces within it, primarily the streets and parks. The form of buildings that address or relate to these spaces is an important consideration for the quality of the public domain and for perception of the area.

Building form refers to the elements of building design that contribute to the character and appearance of the built environment which include

- Ensuring a high quality public domain by dedication of certain land for public domain improvements
- Strongly defining the public domain by building alignment, street frontage heights and requiring active uses in certain locations.
- Ensuring density and height is consistent with the role of the location with respect to the Green Square Town Centre, the planned land uses of the street block, reinforcement of the public domain and the relationship with conservation areas.
- Providing a high level of residential amenity by landscape frontages, site coverage limits, building separation for privacy, solar access,
- Providing for pedestrian amenity by weather protection in active use areas, permeable street and lane system, addressing safety and security, minimising vehicle footpath crossings, and attention to signage.
- Achieving an articulation and finish of building exteriors that contribute to a high quality and sustainable urban environment.

These elements are addressed in Section 7.2 – 7.32 in the form of DCP objectives and controls (except where noted for LEP objectives and controls) under the following headings:

- Public domain
 - Land dedications
- Building form
 - FSR, height, frontage, bulk, separation setbacks, site coverage
- Certain building types
 - Terrace housing, showrooms, mixed use, warehouses
- Building quality and amenity
 - Solar access, exteriors, entries, design quality
- Pedestrian amenity
 - Lanes, through block, connections, active frontages, safety, awnings, crossings, overpasses, signage
- Additional controls for residential amenity
 - Housing mix, privacy, private open space, communal open space and fences and walls.

Green Square objectives

The following LEP objectives apply specifically to Green Square.

- Promote the redevelopment of Green Square as a Major Centre in the Global Economic corridor of the Metropolitan Strategy.
- Provide a new network of footpaths, cycleways and linear open space along the existing water channels.
- Provide transitional building heights at the interface of Conservation areas, nominated heritage buildings and areas of different building scale.
- Enable a wide range of employment uses including residential, business, light industrial, office, retail uses and a mix of uses.
- Reduce land use conflicts by separating residential and industrial uses.
- Provide a high quality public domain by requiring land dedication to enable new parks/open space, new roads/lanes/footpaths/cycleways to serve the added population.

Stage 1 Development Applications

Sites larger than 5,000sqm are recommended to proceed with a Stage 1 Development Application so that major urban design elements we addressed prior to more detailed design.

SEPP65 and the NSW Residential Flat Design Code

Where there is an inconsistency between provisions of these built form controls and the NSW Residential Flat Design Code, these built form controls prevails to the extent of that inconsistency.

PUBLIC DOMAIN

5.2 Required land dedications for public domain benefit

The strategy provides for strips of land to be dedicated to Council or the RTA at the time of development to ensure important public purposes are achieved comprising:

- New parks to serve the new population.
- New streets and lanes to serve development
- A linear open space system along the canals and drainage lines to provide a safe circulation system of footpaths and bike paths
- Pedestrian links to provide a permeable street block pattern
- Road reservation widening for bike routes and verge landscaping.
- Road changes to achieve the linear open space system comprising shareway/lanes, footpaths, bike paths and landscape enhancement of the canals.

BUILDING FORM

5.3 Floor space ratio

The current Green Square DCP1997 floor space ratio controls on **Map 16** of the DCP provides base floor space ratios and maximum floor space ratios for most of the land in the Green Square area. The maximum floor space ratio can only be achieved when public benefits such as land dedications for new streets are provided by the development of a site.

This study has tested the floor space ratios and found that with changes in height and street pattern (as described in Section 3 and Section 4), some of the floor space ratios should be changed to be consistent with employment uses (and retain employment) and to provide a better urban design outcome.

For the purposes of this study FSR the definition FSR in the LEP Template (July 2006) applies.

LEP objectives

- Provide for densities of development consistent with the role of Green Square in the City to Airport corridor and the metropolitan Strategy.
- Provide for densities of development consistent with the land use zone and role of the area in relation to the Green Square Town Centre and surrounding urban land.
- Generally ensure equity in relation to development potential for different sized sites in the same land use zone.
- Provide for nominated public domain improvements by land dedication.
- Ensure that proposals for new buildings are assessed with due regard to urban design and built form provisions of this plan and in achieving high design quality.
- Regulate the density of development and generation of vehicular traffic.

LEP controls

- a) The floor space ratios shown comprise of three categories:
- b) Maximum floor space ratio where dedication of land is required to achieve the nominated public benefit
- c) Maximum floor space ratio where no deduction of land is require.
- d) The floor space ratio of a building on any land is not to exceed the applicable floor space ratio shown for the land on Map 17 Floor Space Ratios.

Note 1: Land on a site that is nominated in **Figure 17** to be dedicated for public benefit is to be included in the calculation of floor space ratio.

Note 2: Sites that are not affected by a requirement to dedicate land for a public benefit may amalgamate with affected sites. The amalgamated site would receive the maximum floor space ratio where deduction of land is required for part of the amalgamated site..

5.4 Subdivision of industrial land

Large size lots are needed to enable a range of industrial/employment businesses to be retained and reinforced in the industrial/employment zone.

Objectives

- Provide suitably sized lots for industrial/employment use.

Controls

- a) In the industrial/employment zone further subdivision of lots is not permissible unless any lot to be created is at least 2,000sqm.

5.5 Building height

Building height means the same as defined in the NSW draft LEP Template (briefly, height measured in metres from natural ground to topmost point).

Storey means the same as defined in the NSW LEP Template (e.g. attics are excluded).

Building heights are consistent with the role of Green Square with other Major Centres in the metropolitan planning strategy and in transition between the Green Square Town Centre and existing small scale housing within and near Green Square.

LEP height objectives and controls

LEP Objectives

- Provide building heights consistent with the land use zone and role of the area in relation to the Green Square Town Centre and surrounding urban land.
- Provide a transition in built form between the Green Square Town centre and existing small scale residential areas and provide a transition at the interface of small and low scale areas with medium and taller scale areas and at the interface with nominated heritage buildings conservation areas.
- Be consistent with the general built form pattern of street block perimeter buildings with large courtyards.

LEP controls

- a) Buildings are to have a maximum building height as nominated in Figure X for the LEP (expressed in metres).

NOTE: ARCHITECTUS RECOMMENDS STOREYS HEIGHT MAP IN LEP AND NO HEIGHT MAP IN METRES (SEE 3.10.1).

- b) In addition to a) development in height zones of 30m or less with site area exceeding 2,000sqm may have up to two additional storeys for 25% of the typical floor GFA where there is at least a corresponding decrease in building height in the same development.
- c) In addition to a) corners on a main street may be reinforced by one or two additional storeys.

DCP height objectives and controls

DCP objectives

- Translate the LEP height controls to number of storeys above street level. (IF LEP HEIGHT MAP IS IN METRES)
- Moderate the scale of buildings by special design of the top floor and to provide a visually interesting roof profile.
- Reinforce significant street corners with design emphasis.

DCP controls

- a) Buildings are to have a maximum number of storeys as nominated in Map 21.
- b) The top floor of a building of 5 – 9 storeys is to be no more than 70% of the GFA of the floor immediately below it.
- c) Attics with dormer windows may be designed in roofs up to 36 degrees pitch for buildings up to 4 storeys. (Note: attics do not count as a storey – source: LEP Template).
- d) A basement area less than 1m above street level does not count as a storey.

Figure 256 Top floor

For buildings over 4 storeys the top floor it to be no more than 70% of the GFA of the floor below.

5.6 Frontage

Buildings built to the street (or water channel reservation) alignment or in a generally consistent setback alignment define the public domain and reinforce existing patterns of building frontages which gives legibility to the inner city urban environment.

There are three primary edge conditions to streets:

- Street wall where buildings are built to the street boundary to their full height (or close to their full height). Street walls provide an urban street character and strongly define the public domain. In Green Square, street walls are generally appropriate for the defining urban elements of main streets, linear open spaces including the canals and around parks. Also, street walls are appropriate where existing local streets have streetwalls.

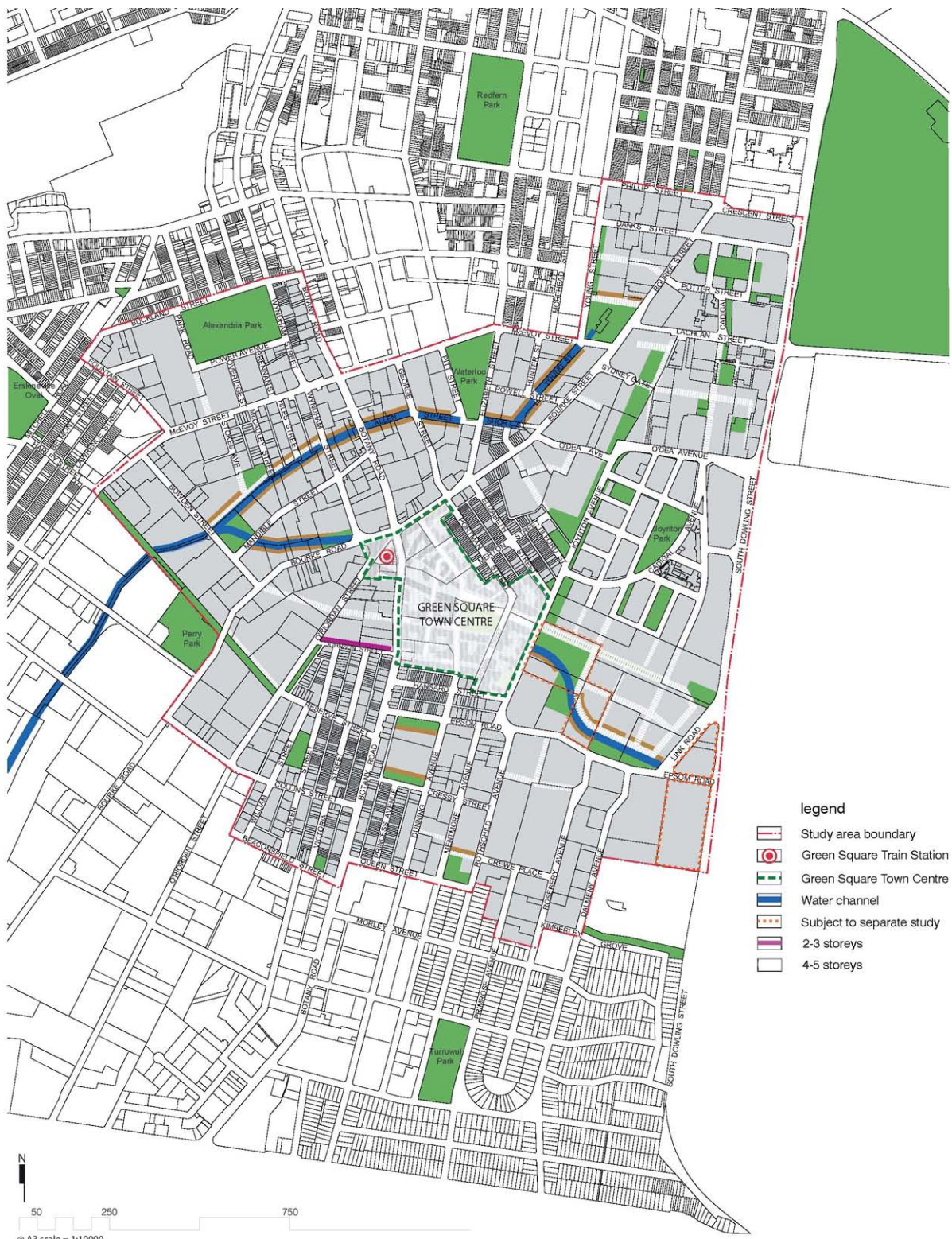
- Street step back where the lower levels of buildings are built to the street boundary and upper floors are set back. A street step back is defined by street frontage heights and setback distances above the street frontage height. Street step backs are appropriate where space is needed for large tree canopies, where medium scale development is opposite low scale development and where the bulk of taller scale buildings is to be moderated.
- Street front setback where the buildings are set back from the street to provide for frontage landscaping. Generally, the local residential streets and new streets have frontage landscaping for residential amenity.
- Provide variation in building form for visual interest.

Objectives

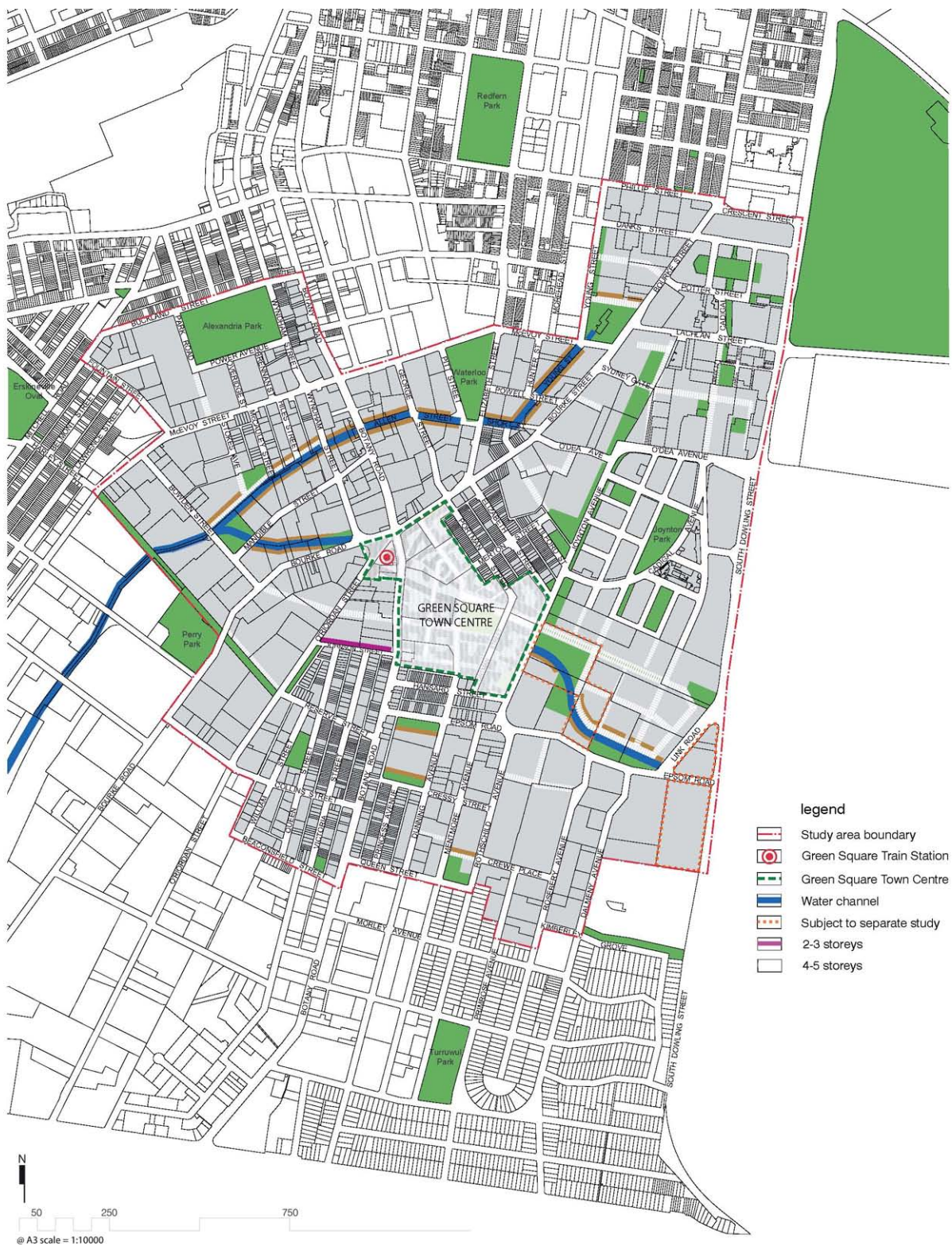
- Achieve comfortable street environments for pedestrians that vary in character according to the importance of the street.
- Reinforce existing building frontage patterns in streets that have an interesting or good character.
- Enable flexibility in building design within limits that are important for the character of the street.

Controls

- a) Buildings are to be built to the street boundary and water channel reservation (defined by 10m from the centreline of the water channel) as shown on **Map 7**.
- b) Buildings are to conform to the frontage heights shown in Map 24.
- c) The set back above the frontage height is to be:
 - at least 3m above frontage heights of 2-3 storeys
 - at least 5m for frontage heights of 4 or more storeys.
- d) Corner buildings where at least one frontage is to a main street may
 - reduce the set back above the frontage height to zero for up to 15m from the corner and
 - increase the frontage height by one storey for the 2-3 storey category and up to 2 storeys for the other categories of frontage heights.
- e) Other buildings (not stated in a) - d)) are to have a front landscaped setback at ground level (or within 1m of ground level) of 4-6m. Front setbacks apply to the face of the external wall of the building. Eaves and balconies may project up to 1m into the setback.



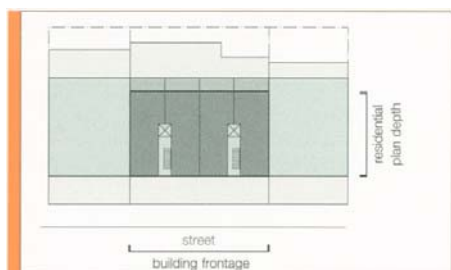
Map 23 Key buildings
Key buildings terminate street vistas and require special design consideration.





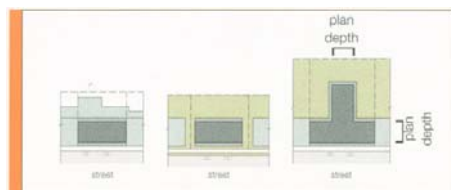
01.58. Where freestanding buildings with multiple aspects achieve satisfactory amenity, the plan depth is measured along the shortest axis.

Figure 257



01.59. Where street wall buildings have limited aspect, the plan depth is measured from the front (street) to the back (inside of block).

Figure 258



01.60. Street wall buildings can have a variety of settings and forms (party wall infill, detached infill with small side setbacks, t-shaped infill).

Figure 259

Figure 260 Building depth

This plan defines building depth in relation to a street and irregular plan shapes.

5.7 Building bulk

Controlling the size of floor plates in new buildings allows for good internal amenity in regards to natural light and ventilation and mitigates potential adverse effects that tall and bulky buildings may have on the public domain, including overshadowing and amenity of the streets.

Building depth is related to building use. Commercial use floor plate depths are typically larger than residential floors. The controls are therefore categorised into residential and commercial uses.

Objectives

- Promote the design and development of sustainable high quality buildings.
- Achieve the development of living and working environments with good internal amenity and
- Minimise the need for artificial heating, cooling and lighting.
- Provide viable and useable commercial floor space.
- Achieve usable and pleasant streets and public domain at ground level by controlling the size of upper level floorplates of buildings.

Controls

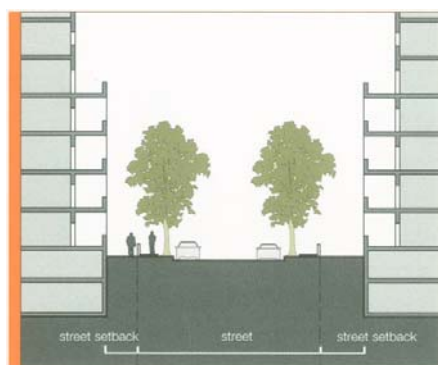
Residential development (including serviced apartments)

- a) All floors above 8 storeys are not to exceed:
 - a floor plate size of 900 m² Gross Floor Area and
 - a maximum horizontal dimension of the building parallel to the street frontage of 40m.
- b) All residential floors are not to exceed 20m in depth (between glass lines)

Commercial development (and all other uses including hotel accommodation)

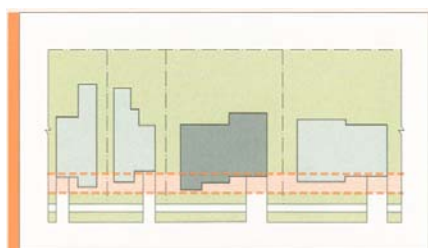
- c) At podium levels, and where development is built street edge to street edge, articulate buildings using atria, light wells and courtyards to improve internal building amenity and achieve substantial daylighting at every level, and cross ventilation and/or stack effect ventilation.

- d) All floors above 8 storeys are not to exceed:
 - 1,400 m² Gross Floor Area, and
 - usable floor space of an office floor is to be no more than 12.5m from a source of daylight. Usable floor space is space that can be occupied by an office worker at a desk.



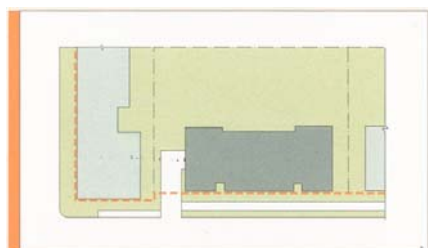
01.65. Streetscapes are defined by a combination of public elements (the street, verges, and footpaths) and private elements (street setbacks, fences and building facades).

Figure 261



01.67. Street setbacks can be defined as a range in which buildings sit.

Figure 262



01.68. Street setbacks can be defined as a built to line in areas where street edge aligned buildings are desired.

Figure 263

5.8 Building separation and side/rear setbacks

Separation of buildings allows ventilation, daylight access, view sharing, privacy and can mitigate wind effects. In residential buildings and serviced apartments where windows are provided on side and rear facades, separation with other buildings is particularly important for privacy, acoustic amenity and view sharing.

For commercial buildings, separation distances are less due to reduced requirements for privacy, noise and view access. No separation is required between industrial buildings.

Separation for mixed use buildings containing residential uses is to be in accordance with relevant distances for component uses.

Objectives

- Provide visual and acoustic privacy for residents.
- Control overshadowing of adjacent properties and private or shared open space.
- Provide consistent definition of the public domain.

Controls

- a) Separation of residential apartment buildings is to be consistent with the NSW Residential Flat Design Code as in Table 7

Table 7 Building separation minimum distances

	Between habitable rooms	Between habitable & non-habitable rooms	Between non-habitable rooms
Up to 4 storeys	12m	8m	6m
5-8 storeys	18m	13m	9m
9+ storeys	24m	18m	12m

Habitable rooms are primary living rooms and first and second bedrooms (other rooms such as kitchens, bathrooms, halls, studies, other bedrooms and other living spaces are non-habitable rooms).

Where these separation standards are proposed to be reduced, justification is needed to demonstrate that daylight access, urban form, and visual and acoustic privacy can be satisfactorily achieved.

- b) Non-residential buildings may be aligned to the side and rear boundaries to the street frontage height (up to 10 – 20 metres above street level) subject to interface with neighbouring strata title residential development.

- c) Above the frontage height or above 4 storeys where frontage heights don't apply, windows and balconies of non-residential uses are to be set back at least 3 metres from side boundaries.
- d) Side setbacks are to be consistent with Table 8.

Table 8 Minimum side setbacks

Condition	Side Setback	Rear Setback
Residential		
1 storey	1m	6m
2 storeys	1.5	6m
3 storeys	2m	6m
4 storeys	3m	6m
5 + 8 storeys	3m	9m
9+ storeys	6m	12m
Non Residential		
1 – 4 storeys	Nil	6m (1)
5 – 8 storeys	3m	9m
9+ storeys	6m	12m
(1) Nil for industrial uses		

- e) Full height gaps between street block courtyards and surrounding streets are to be provided at a width of at least 6m.
- f) Blank walls to have architectural treatment for visual interest and minimise in size.

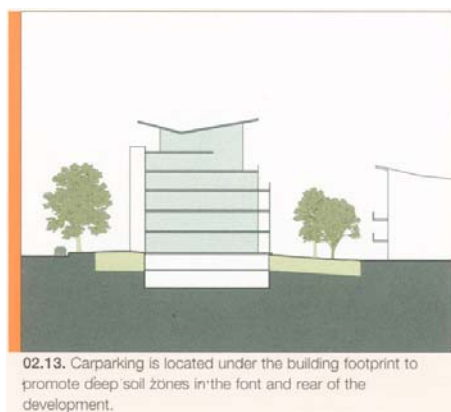


Figure 264

5.9 Site cover, landscape area and deep soil

Limiting site cover provides space 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 dwellings or tenancies). Limiting site cover improves amenity by providing daylight access, visual privacy and opportunities for recreation and social activities. Site coverage is greater for industrial use than residential or commercial use because industrial buildings tend to be broad low buildings and can have skylights.

Deep soil zones are areas of ground retained within a development that has no structure beneath. Deep soil zones have important environmental benefits, including:

- promoting healthy growth of large trees with large canopies, protecting existing mature trees, and
- allowing infiltration of rainwater to the water table and reduction of stormwater runoff.

Objectives

- Provide an area on all sites that enables soft landscaping and deep soil planting, permitting the retention and/or planting of trees that will grow to a large or medium size.
- Limit building bulk on a site and improve the amenity of developments, allowing for good daylight access, ventilation, and improved visual privacy.



02.14. A picket and pillar fence defines the street boundary in keeping with the style of the development and the neighbourhood.

Figure 265



02.15. Materials, the rhythm of solid to void and planting are combined to enhance visual amenity from the street whilst ensuring privacy and security for residents.

Figure 266

- Provide residents with passive and active recreational opportunities.

Controls

Site Cover

- a) The maximum site coverage permissible is 70% for all development except industrial development which has no specific site coverage restrictions except where there are existing groups of trees and landscape setback/buffer requirements.

Deep Soil

- b) All residential developments must include a deep soil zone. The deep soil zone is to comprise 10% of the site area preferably provided in one or two contiguous areas of at least 150sqm with a minimum dimension of 6 metres.
- c) In mixed use developments, the amount of deep soil zone maybe reduced by the percentage of the gross floor area that is non-residential. Where non-residential components result in full site coverage and there is no capacity for water infiltration, the deep soil component maybe provided on structure. In such cases, compensatory stormwater management measures is to be integrated within the development to minimise stormwater runoff.
- d) Where deep soil zones are provided, they are to accommodate existing mature trees as well as allowing for the planting of trees/shrubs that will grow to be mature trees.
- e) No structures that may restrict vegetation growth are permitted in the deep soil zone (including but not limited to car parking, footpaths greater than 1.5m wide, patios, decks and drying areas).
- f) Industrial developments are to have deep soil zones where there are existing groves of trees.

Soft landscaping

- g) Soil depth on structure to be 1.2m for trees, 600mm for shrubs and 300mm for turf/ground cover.
- h) Soft landscaping to be provided at following rates:

5.12 Mixed use buildings

Mixed-use developments provide for a variety of uses and activities adding vibrancy and life to the streets for extended hours of the day. Different uses within the same building are best located to a pattern and layout suitable to the mix of uses. For example, retail and business activity at ground level to assist street activation, commercial or residential uses for the first floor facing the street, and residential uses above..

Mixed use development in Green Square is preferred in sustainable locations, close to transport (rail station) and the Town Centre as well as in nominated locations where active street frontages are required.

Objectives

Create more active lively streets which encourage pedestrian movement, service the needs of residents and increase the area's employment base.

- Enhance public safety by increasing activity in the public domain on week nights and on weekends in nominated active street frontage locations.
- Minimise conflicts between different uses.
- Ensure that the design of mixed-use buildings addresses residential amenity.

Controls

- a) Building depth and form is to be determined in relation to each use's requirements for servicing and amenity. The compatibility of various uses can be addressed utilising:
 - flexible building layouts, which promote variable tenancies or uses on the ground and first floors of a building in the mixed use zone and in active street frontage locations.
 - minimum floor to ceiling heights of 2.7m for commercial office and residential uses and for active frontages 3.6m for ground floor and 3.3m for first floor. 2.4m for non-habitable space and second floor of double storey apartments or 2.4m for double height floor space.
 - Innovative design where larger footprint commercial spaces (cinemas, supermarkets, department stores) are integrated with residential uses.
 - Large floor plate retailers are to be sleeved with active uses fronting the street.
- b) Design legible circulation systems, which ensure the safety of users by:
 - isolating commercial service requirements, such as loading docks, from residential access, servicing needs and primary outlook.
 - locating clearly demarcated residential entries directly from the public street.
 - clearly distinguishing commercial and residential entries and vertical access points.

- providing security entries to all entrances into private areas (including car parks and internal courtyards) and provide keyless egress from communal areas and common spaces.
 - providing line of sight between a building entry and the lift lobby.
 - providing safe pedestrian routes through the site, where required.
- c) Ensure the building positively contributes to the public domain and streetscape by avoiding the use of blank walls at ground level.
 - d) Address noise conflict between uses by awnings as a noise buffer, locating quiet uses in quieter locations in the building adjoining one another, mechanical equipment to conform to noise standards.
 - e) Address odours from commercial premises (e.g. take-away shop exhausts) to be screened from view.

Building quality and amenity

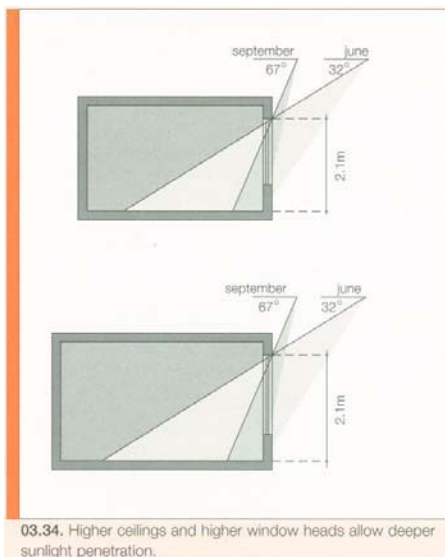


Figure 267

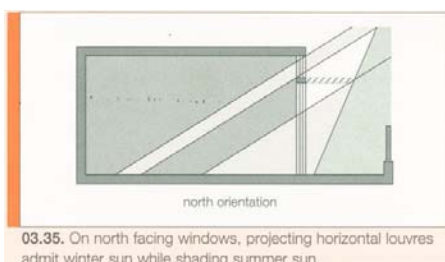


Figure 268

5.14 Solar access, daylight and overshadowing

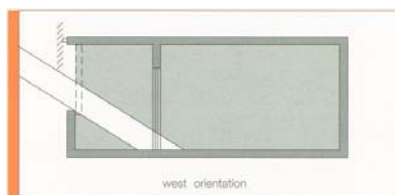
As Green Square continues to develop to an increased intensity, it is important that adequate access to sunlight is maintained for public spaces, dwellings and private open space. BASIX provides for energy use. The objectives and controls below relate to amenity.

Objectives

- Ensure that solar access is provided for internal and external areas of dwellings during mid winter;
- Ensure the living and working environments are not reliant as far as practical, upon artificial heating, cooling and lighting;
- Reduce the need for artificial heating and cooling;
- Ensure the design of windows and glazed areas considers the internal environmental impact of heat gain, heat loss, privacy and views; and
- Ensure reasonable solar access to the public domain, particularly in mid-winter.

Controls

- a) Developments are to optimise the number of dwellings oriented to the north balanced with streetscape considerations, buildings facing streets and views.
- b) The principle living rooms and principle private open space areas of at least 70% of dwellings in a multi unit development are to receive at least two hours direct sunlight on June 22 for part of their area.
- c) No more than 10% of apartments in a development may face south subject to views and streetscape considerations.



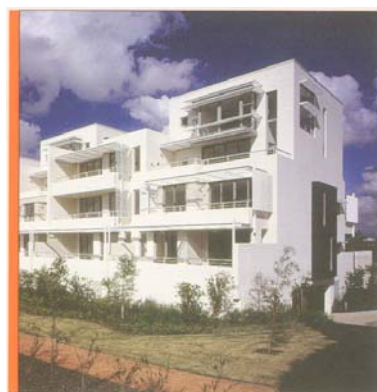
03.36. On west facing windows, vertical louvre panels or sliding screens protect from glare and low afternoon sun.

Figure 269



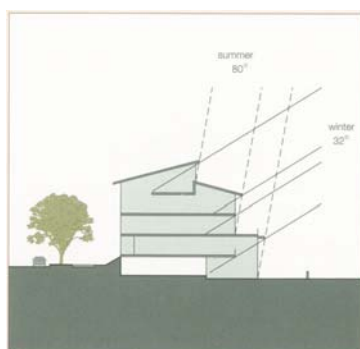
03.37. A combination of louvres provides shading for different times of the day.

Figure 270



03.38. Sun shading is an integral component of the building form and facade design.

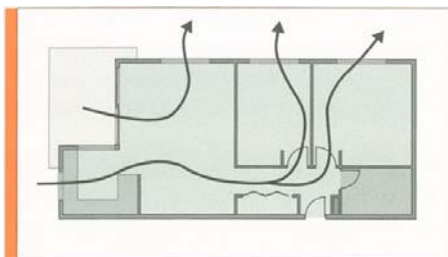
Figure 271



03.39. Double height apartments on the ground floor and on the top floors facilitate better daylight access.

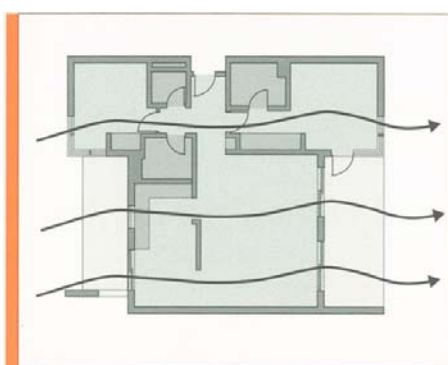
Figure 272

- d) Parks are to be provided with direct solar access for at least 50% of their area between the hours of 10am and 3pm in mid winter (June 21).
- e) Street block courtyards and common open space of a development are to receive at least two hours direct sunlight on the 22 for 25% of their total area.
- f) Appropriate sun protection devices are to be provided on the northern and western facades of all types of buildings so as to facilitate protection from mid-summer sunlight. For example, fixed overhang shades to north façades and moveable vertical shades to western façades. Extensive glazing that is unprotected from mid-summer sunlight is to be avoided. Reliance upon high performance tinting or glazing as a mid-summer sun control device is not appropriate.
- g) Single aspect apartments are to be limited in depth to 10m. (Note: the RFDC recommends 8m. 10m allows for larger living spaces). Apartments in podia may be deeper where ceiling heights are increased.
- h) The width of an apartment is to be least 4m.
- i) The rear wall of kitchens is to be no more than 10m from a window. (Note: the RFDC recommends 8m. 10m allows for larger living spaces).
- j) Light wells are inappropriate for buildings above 8 storeys and for living rooms and main bedroom primary windows. Light well dimensions are to be at least as follows:
 - 6 x 6m for up to 4 storeys
 - 9 x 9m for up to 6 storeys
 - 12 x 12m for up to 8 storeys



03.42. Natural ventilation in this corner apartment is drawn through windows having different orientation. This layout works well in upper floor apartments.

Figure 273



03.43. This optimal layout allows air flow directly from one side of the apartment to the other.

Figure 274



03.50. Use of varying facade alignments and sunscreens articulate the taller mass of this building.

Figure 275

5.15 Natural Ventilation

Natural ventilation is the circulation of fresh air through an apartment and common areas of an apartment building to create a comfortable indoor environment.

Objectives

- Ensure apartments and above ground common indoor areas are designed to provide all habitable rooms with direct access to fresh air.
- Reduce energy consumption by minimising air conditioning.

Controls

- At least 60% of apartments in a development are to be cross ventilated by one or a combination of the following:
 - Windows on two external wall of an apartment such as corner apartments, through apartments and cross-over apartments.
 - Single aspect apartments above 4 storeys are to have a wider façade than their depth or are to be double storey with a void space.
- At least 10% of apartments in a development are to have kitchens with access to natural ventilation.
- Enclosed common areas above ground and common corridors are to have natural ventilation by at least one window.

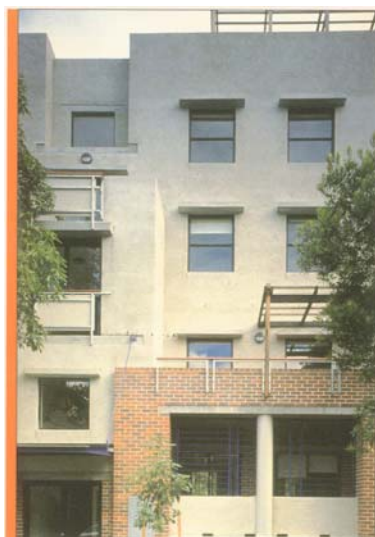
5.16 Building exteriors

Green Square's urban environment and public domain are 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.

Objectives

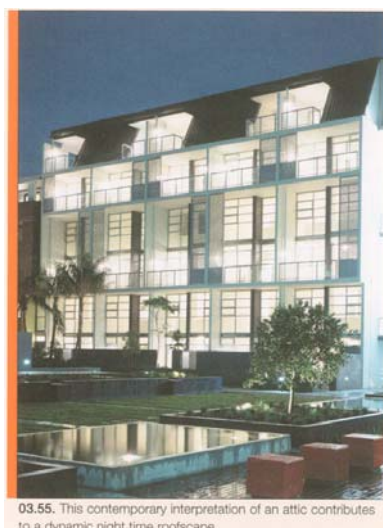
To ensure that new buildings in Green Square:

- Contribute positively to the streetscape and public domain by means of high quality architecture, materials and finishes.
- Provide richness of detail and architectural interest especially at visually prominent parts of buildings such as lower levels and roof tops, and at termination of street vistas.
- Present appropriate design responses in character with nearby development that complement the streetscape,
- Clearly define the adjoining streets, street corners and public spaces and avoid ambiguous external spaces with poor pedestrian amenity and security,
- Reinforce a pedestrian scale by the articulation and detailing of the lower levels of the building,
- Contribute to a visually interesting skyline.



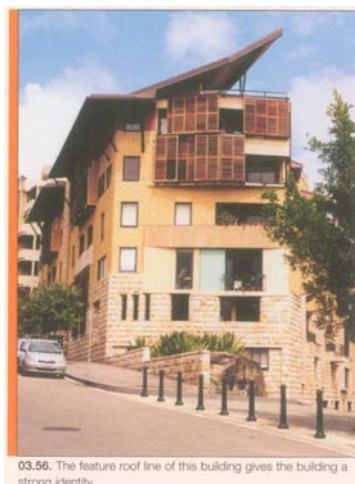
03.51. This building facade is ordered using rectilinear elements, clearly defined volumes and a change of materials.

Figure 276



03.55. This contemporary interpretation of an attic contributes to a dynamic night time roofscape.

Figure 277



03.56. The feature roof line of this building gives the building a strong identity.

Figure 278

- Integrate public art into the building that can be appreciated by people in the street.

Controls

- Adjoining buildings (particularly heritage buildings) are to be considered in the design of new buildings in terms of:
 - appropriate alignment and street frontage heights,
 - setbacks above street frontage heights,
 - appropriate materials and finishes selection,
 - facade proportions including horizontal or vertical emphasis, and
 - the provision of enclosed corners at street intersections.
- Ensure buildings that terminate vistas along street are designed to address the vista in a high quality manner.
- Balconies and terraces should be provided, particularly where buildings overlook parks and on low rise parts of buildings. Gardens on the top of setback areas of buildings are encouraged.
- Articulate façades in plan and section so that they address the street and add visual interest.
- External walls should be constructed of high quality and durable materials and finishes with ‘selfcleaning’ attributes, such as face brickwork, rendered brickwork, stone, concrete and glass. Finishes with high maintenance costs and unacceptable amenity impacts, such as reflective glass (greater than 20% reflectivity) are to be avoided.
- To assist articulation and visual interest avoid large expanses of a single material.
- Limit opaque or blank walls for ground floor uses to 30% of the street frontage.
- Provide clear glazing at ground level. Maximise glazing for retail uses and generally break glazing into sections to reflect tenancy break up and to avoid large expanses of glass (except where large showrooms are proposed).
- Highly reflective finishes and curtain wall glazing are not permitted above ground floor level.
- A colour board and finishes schedule is required with lodgement of a Development Application.
- Minor projections from building walls (beyond those permitted by the Building Code of Australia) may extend into the public space providing there is a public benefit, such as;
 - expressed cornice lines that assist in enhancing the streetscape, and
 - projections such as entry canopies and bay windows that add visual interest and amenity, and
 provided that the projections do not detract from significant views and vistas.
- A public art commitment is required for each development
- Rooftop terraces to have opaque balustrades preferably in the form of parapets and are to be screened from view of neighbours.
- Colonnades are not to be provided.



A4.13. New buildings and heritage buildings can be complementary in height and bulk without the need to replicate historical details.

Figure 279

- o) Ensure rainwater downpipes and balcony drainage are integrated into the design of the buildings. Balcony rainwater spouts are not permitted.
- p) Carparking to be below ground where possible and where above ground to be separated from the street by frontage development.

5.17 Building entries

The design of building entries varies according to building type, building use and streetscape. Building entries provide identity for a development and reinforce its address.

Objectives

- Contribute to a pattern of entries along a street and respond positively to the streetscape and building façade design.
- Promote development that is well connected to the street and contributes to the accessibility of the public domain.
- Create entries that provide desirable identity for a development.

Controls

- Respond to the predominant pattern of entries along a street.
- Locate building entries along the main street frontage of a site and to reinforce areas with active frontages.
- Where the site slopes down away from the street edge, prohibit the location of building entries below the footpath level.
- In residential areas, provide individual entries for ground floor units in residential apartments where the existing pattern of entries along the street reflects a fine grain pattern (i.e. adjacent areas with terraces). In mixed-use areas, provide individual entries for ground floor residential units where active frontages are not desired and where the existing pattern of entries along the street or in the neighbourhood reflects a fine grain pattern (i.e. adjacent areas with terraces).
- In mixed-use areas along streets with active frontages, clearly articulate building entries to upper levels.

5.18 Design quality

High quality building design is to provide a positive contribution to the overall quality of the public domain and the built environment in Green Square. Buildings are to present a high standard of architectural design, materials and detailing appropriate to the building type and the location.

Design review panels and design competitions are methods of procuring quality in urban development. They provide an open, transparent and democratic process which, if well managed, produces value for money and optimises design and development potential for a site.

Objective

- Improve the design quality of major development in Green Square through a formal design review process and a competitive design process.

Controls

- a) All developments of more than 9 storeys are to undertake a design competition. All buildings over 3 storeys or exceeding 2,000sqm GFA or at the discretion of Council are to be subject to review by a consent authority appointed design panel.
- b) The design competition is to be undertaken in accordance with the competition guidelines set in Schedule of this DCP or whether the subject development application exhibits design excellence, as advised by a Council appointed design panel and assessed by Council.

5.19 Pedestrian amenity

Lanes and through block connections

Lanes and through block connections provide links between the long sides of street blocks for pedestrian, bicycle and vehicular access. Mid-block links provide an important function in the form of lanes, shared zones, arcades and footpaths.

Objectives

- Improve pedestrian amenity and safety.
- Encourage removal of vehicular entries from primary street frontages.
- Retain and develop lanes as useful and interesting pedestrian connections as well as for service access.

Controls

- a) Designated sites are to provide new lanes as indicated on **Map 25**.
- b) Existing public lanes are to be retained.
- c) Lanes are to be 12m wide and pedestrian links are to be 6m wide and open to the sky. Both are to be clear and direct, provide public access at all times and have signage indicating public accessibility and the street to which the lane connects.
- d) Where lanes are primarily used for building access and servicing, 'safer by design' principles must be demonstrated

5.20 Active frontages

Active street frontage uses promote an interesting and safe pedestrian environment. Busy pedestrian areas and non-residential uses such as shops, studios, offices, cafes, recreation and promenade opportunities promote the most active frontages.

Active frontages assist in reinforcing neighbourhood focal points and giving legibility and visual interest to the urban environment.

Two levels of active frontage are appropriate for different locations in Green Square in response to the character of neighbourhood focal points. For example, it is desirable to have a special approach to the design of development on the north side of Johnson St because it is at the interface of a conservation area and the Town Centre – low order active frontage uses such as a corner shop to serve the local area and professional consulting rooms would be appropriate at the ground level. By contrast, activities on parts of Bourke St should be reinforced by high order active uses such as shops and showrooms.

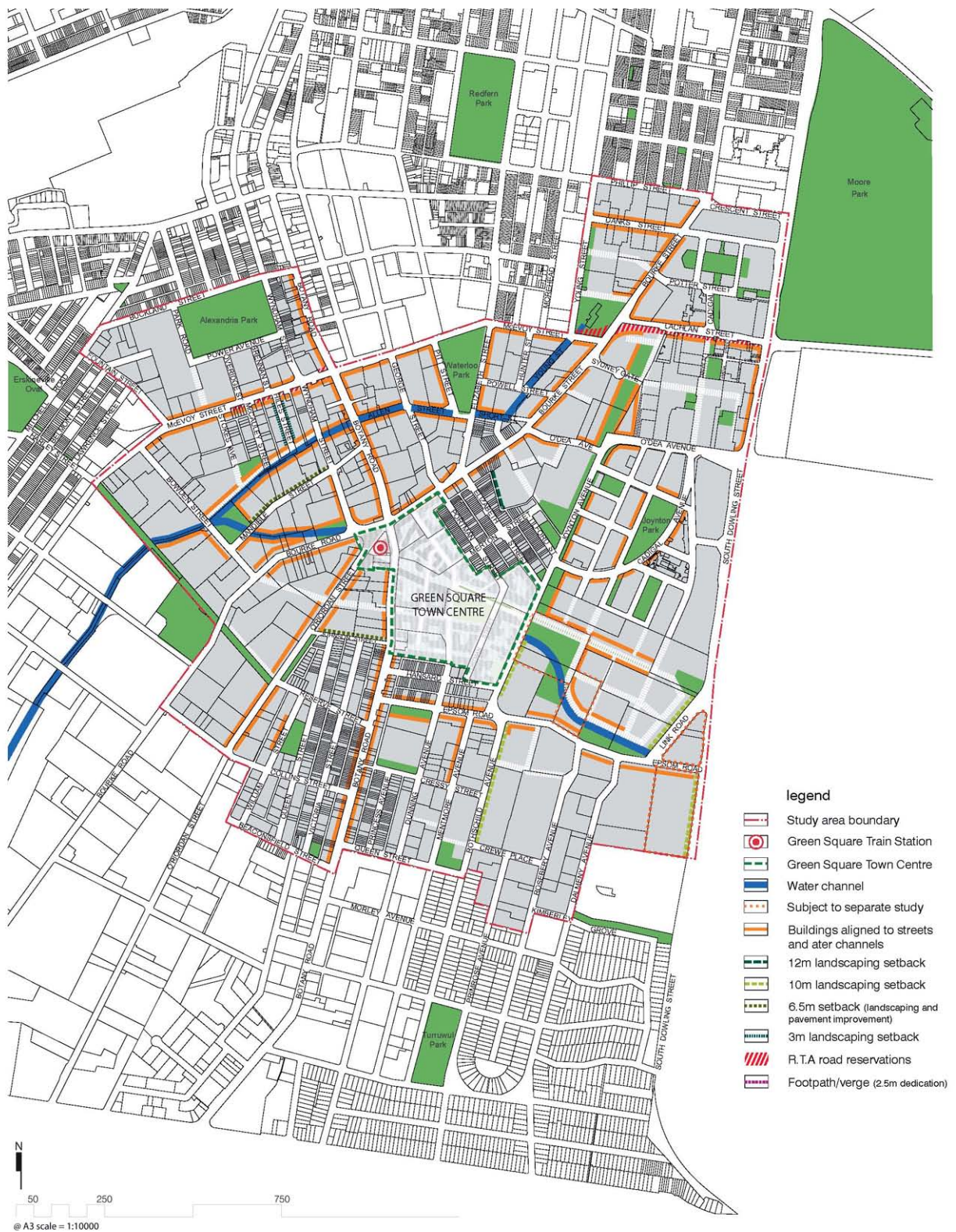
Objectives

- Provide for active frontages to reinforce existing activities and neighbourhood focal points.
- Promote pedestrian activity and safety in the public domain.
- Define areas of low and high order active frontages street to respond to the character of the location.

Controls

- a) **Map 9** shows the required locations for active frontages.
- b) **High order active frontage** uses are defined as one or a combination of the following for at least 65% of the frontage at street level:
 - Entrance to retail;
 - Shop front;
 - Glazed entries to commercial and residential lobbies occupying less than 12 metres frontage;
 - Café or restaurant if accompanied by an entry from the street;
 - Active office uses, such as reception, if visible from the street.
 - Public building if accompanied by an entry.
 - Maximum 30% of the frontage setback from the street.
- c) **Low order active frontage** uses are defined as one or a combination of the following for at least 50% of the frontage at street level:
 - Entrance to small offices/home businesses;
 - Corner shop;
 - Glazed entries to commercial and residential lobbies occupying less than 50% of the street frontage, to a maximum of 12m frontage;
 - Café or restaurant if accompanied by an entry from the street;
 - Active office uses, such as reception, if visible from the street.
 - Public building if accompanied by an entry.
- d) All active frontage buildings are to have public art visible from the street and to provide visual interest at ground level in the architecture of the building with no blank walls longer than 2m facing the street.

-
- e) Active ground floor uses are to be at the same general level as the footpath and accessible except where flood criteria require a change in level (the change in level is to be addressed within the development).
 - f) Restaurants, cafes and the like are to consider providing openable shop fronts.
 - g) Provide clear glazing to all street frontage windows at ground floor level. The sill height may not be more than 1.2m, above the adjacent street paving.
 - h) Provide multiple entrances for large developments including an entrance on each street frontage shop entries are to be no more than 10m apart.
 - i) Ground level faced to provide vertical articulation to bays where near traditional shopping strips and conservation areas.
 - j) Finished floor level of ground level to be less than 500mm above footpath level.



Map 25 Street edge strategy

5.21 Safety and security

A safe and secure environment encourages activity, vitality and viability, enabling a greater level of security. Planning and design can identify and address safety and security issues through the use of environmental and technical measures.

Objectives

- Encourage a safe and secure pedestrian environment
- Reinforce territoriality, legibility and clarity of the public environment as distinct from private environment.
- Control access to communal and private space through the provisions of physical or implied barriers which can be used to attract, channel or restrict the movement of people.
- Encourage community “ownership” of public space and communal spaces (internal and external).

Controls

- a) Ensure that the building design allows for casual surveillance of accessways, entries and driveways.
- b) Avoid creating blind corners in pathways, stairwells, hallways and car parks.
- c) Provide entrances which are in prominent positions and which are easily identifiable, with visible numbering.
- d) Where private open space is located within the frontage any front fencing is to be of a design and/or height, which allows for passive surveillance of the street.
- e) Provide adequate lighting of all pedestrian access ways, parking areas and building entries. Such lighting should be on a timer or movement detector to reduce energy consumption and glare nuisance.
- f) Avoid the creation of obscure or dark alcoves, which might conceal intruders. Provide clear lines of sight and well-lit routes throughout the development.
- g) Where a pedestrian pathway is provided from the street, allow for casual surveillance of the pathway. Ensure that pathways do not provide concealment opportunities.
- h) For large scale retail and commercial development, or as otherwise required by Council, provide a ‘safety by design’ assessment in accordance with the CPTED principles from a qualified consultant.

5.22 Awnings

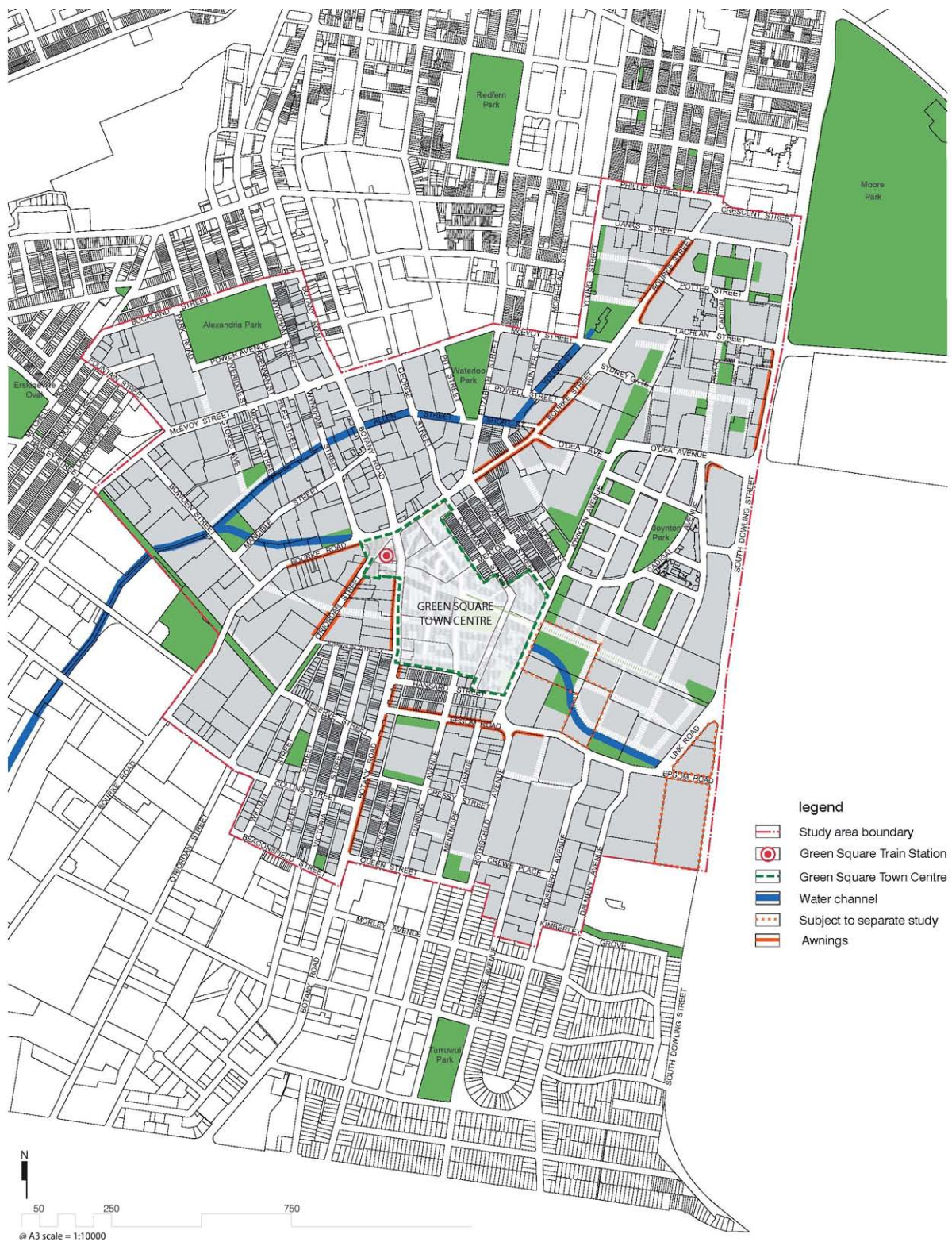
Awnings increase the useability and amenity of public footpaths by protecting pedestrians from sun and rain. Awnings, like building entries, provide a public presence and interface with the public domain and contribute to the identity of a development. Awnings should be provided in locations where street frontage activities (such as retail and commercial uses) are required by this DCP in buildings aligned with to the street boundary.

Objectives

- To provide shelter for public streets where most pedestrian activity occurs.
- To address the streetscape by providing a consistent street frontage to buildings with commercial uses fronting the street.

Controls

- a) Continuous street frontage awnings are to be provided in the locations shown on Map 26.
- b) Awnings are to be consistent with Council's awning policy
- c) Provide under awning lighting to facilitate night use and to improve public safety.



Map 26 Awnings strategy

5.23 Vehicle footpath crossings and vehicle entries

Vehicle crossings over footpaths particularly within high pedestrian traffic areas are disruptive to pedestrian movement and can threaten safety. The design of vehicle access to buildings also influences the quality of the public domain.

Objectives

- Manage potential conflicts between pedestrians and vehicles and improve compatibility between vehicle and pedestrian movement.
- Avoid disruptions to streetscape continuity.

Controls

- a) Vehicular entries are to be from lower order streets/lanes where possible.
- b) Service access is to be combined with parking access and limited to one location per development site.
- c) Vehicle access points are to be shared by adjacent developments, wherever possible.
- d) Vehicle entries to have the following widths.

Element	Entry Width
Up to 20 car spaces	3.3m
Up to 50 car spaces	4.5m
More than 50 car spaces	6m
Infil development in traditional streetscape for more than 50 car spaces	2 x 3.3m
Industrial	6m

- e) Where practicable, vehicle access is to be a single width crossing of no more than 3.0 metres. In residential and mixed use areas, a double width crossing of no more than 6.0 metres may be acceptable, subject to current and anticipated future pedestrian movements.
- f) Vehicle access ramps parallel to the street frontage are not permitted.
- g) Vehicle entries are to have high quality finishes as seen from the street. Mechanical equipment, ducts etc are to be screened from view (when the entry door is open).
- h) Vehicle entry door are to be setback at least 1m from the front of the building and be integrated into the façade design.

5.24 Pedestrian overpasses and underpass

Streets represent important components of the public domain and present the best potential amenity for pedestrians. They offer sky exposure, sunlight and air, a sense of orientation and direct access to the main frontages of buildings. A successful city street provides a comfortable interface between pedestrians and exposure for business. Generally, pedestrians should be encouraged to use the street level to enhance and contribute to street life, to promote activity and interest, and to maximise safety and security of the public domain. The local climate does not

warrant pedestrian isolation from the street, and conflicts between pedestrians and vehicles should be resolved at the street level.

Pedestrian overpasses and underpass are discouraged as they have a negative impact on the streetscape quality and on views and vistas along streets.

Objectives

- To promote activation of streets and public places.
- To promote 'safer by design' and crime prevention principles.
- To encourage circulation at street level.
- To protect views and vistas along streets.

Controls

- a) New overpasses and underpasses over streets are discouraged.

5.25 Signage and advertising

Objectives

- To confine advertising and signage to appropriate, consistent and visually acceptable locations;
- To establish controls that encourages consistency and utility in the treatment of signage, so that it does not detract from the streetscape;
- To allow freedom of expression for commerce within well defined limits;
- To ensure that heritage structures are not despoiled by unsympathetic signage; and
- To avoid the visual pollution, which results from, unregulated advertising and signage

Controls

- a) All applications for new buildings or the substantial refurbishment of an existing building shall detail the design provisions made to accommodate future signage;
- b) Signs will only be permitted above the awning of a building where they are incorporated into the design of the building; and
- c) Signs are not to cover windows or detract from the architectural qualities of a building.
- d) Building identity signs are to be limited to a logo or name of a business associated with the building or a building name and limited one sign per elevation and limited in size.

Additional Residential development controls

5.26 Housing choice and mix

A choice of apartment types and mix of sizes in Green Square and within developments caters for a variety of socio-economic groups.

(This section does not apply to single dwellings).

Objectives

- Ensure that residential development provides a mix of dwelling types and sizes to cater for a range of household types.
- Ensure that dwelling layout is sufficiently flexible for residents' changing needs over time.
- Ensure a sufficient proportion of dwellings include accessible layouts and features to accommodate changing requirements of residents.
- Ensure the provision of housing that will, in its adaptable features, meet the access and mobility needs of any occupant.

Controls

Controls (a) and (b) are applicable to development with more than 6 dwellings.

- a) To achieve a mix of living styles, sizes and layouts within each residential development, comply with the following mix and size:
 - Provide a mix of studio, one bedroom, two bedroom and three bedroom apartments;
 - Studio apartments and one bedroom apartments are not to be greater than 25% and not less than 10% of the total mix of apartments within each development; and
 - Two bedroom apartments are not to be more than 75% of the total mix of apartments within each development.
- b) Up to a 40% mix of studio and 1 bedroom apartments is permitted within residential development owned by the Department of Housing.
- c) For residential apartment buildings and multi-unit housing, 10% of all dwellings (or at least one dwelling where less than 10 dwellings in a development) are to be designed to be capable of adaptation for disabled or elderly residents. Dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995), which includes “pre-adaptation” design details to ensure visitability is achieved.
- d) Where practicable, adaptable dwellings are to be located on the ground floor, for ease of access. Dwellings located above the ground level of a building may only be provided as adaptable dwellings where lift access is available within the building. The lift access is to provide access from the basement to allow access for people with disabilities.

-
- e) The development application is to be accompanied by 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).
 - f) Car parking and garages allocated to adaptable dwellings are to comply with the requirements of the relevant Australian Standard for disable parking space

5.27 Apartment flexibility

Flexible apartment design ensures that buildings can accommodate a wide range of occupants and their changing life style needs.

Objectives

- Encourage dwelling design to meet the broadest range of occupant needs and changes of use.

Controls

- a) Furniture layouts of typical apartments to be provided to show flexibility in furniture layout and functional efficiency.
- b) Minimum internal plan dimensions for a living room is 4m and for a bedroom is 3m clear of robes to enable flexibility in furniture layout.
- c) Lightweight internal walls that can be easily removed to be nominated.
- d) Street entries to be provided to at least 50% of ground floor apartments.
- e) Separate entries to be provided for ground floor and upper level apartments where both levels adjoin a common corridor.

5.28 Visual privacy

Provision of sufficient visual privacy is to be addressed when siting the building and determining room layout, location of windows, private open space and landscaped areas.

Objectives

- To minimise the direct overlooking of internal and external living areas.
- To ensure adequate visual privacy for dwellings.

Controls

In addition to building separation controls provided development must:

- a) Ensure adequate screening between balconies.
- b) Consider design for privacy by using recessed balconies and/or vertical fins between balconies (including semi-balustrades, louvres or screen panels and planter boxes).
- c) Ensure balconies and windows to habitable rooms and main bedrooms address either the street or rear open space (this will result in only windows to non-habitable rooms or secondary bedrooms addressing side boundaries, thereby reducing the potential for adverse privacy impacts).
- d) Incorporate windows that are designed offset or angled obliquely from one building to another to minimise overlooking.

5.29 Acoustic privacy

Objectives

- To mitigate the impact of external noise sources on internal residential amenity.
- To ensure an appropriate standard for the level of noise transmission between dwellings commensurate with the quiet enjoyment of habitable rooms.
- To mitigate conflicts between residential and commercial/retail/entertainment uses
- To allow employment generating activities to prosper commensurate with residential and tourist accommodation uses.

Controls

- a) Incorporate noise attenuation measures such as thick or double-glazed windows in development where the amenity of occupants should be protected such as facing main streets and South Dowling Street. A noise assessment report is to accompany development application for development facing main streets and South Dowling Street.

- b) Design internal layouts of apartments and location of courtyards, balconies and openings to minimise opportunities for noise transmission between dwelling units.
- c) Noise generating areas, including, but not limited to driveways, plant rooms and equipment, air conditioning units and recreation area to be designed/located so as to minimise noise impacts to residents, users and neighbours.

5.30 Energy and water

In addition to BASIX, apartments should contribute to energy and water use effectively.

Objectives

- Ensure passive energy and water efficiency measures are incorporated in developments.

Controls

- a) Provide fixed shades to north facing windows and moveable shades to west facing windows.
- b) Provide gas outlets in living rooms for space heating and in kitchens for cooking.

5.31 Private open space

Private open space include areas of paving or planting located either at ground level or above ground level in the form of roof gardens over built structures, terraces and balconies.

Objectives

- To ensure every dwellings have access to a private usable private open space directly off main internal spaces.
- To contribute to articulation and modulation of the building façade through the use of balconies and terraces.

Controls

In addition to the landscape, deep soil and site cover provisions at Sections X of this DCP, the following controls apply:

Private open space generally

- a) Provide dwellings with private open space in the form of a balcony, courtyard, terrace and/or roof garden, at least one of which is of the following minimum dimensions:
 - For all ground floor dwellings, provide a minimum 25sqm and minimum width of 4m. This area is to include a vegetated landscaping bed adjacent the street boundary. Where a level courtyard is not possible, a deck or split level courtyard is to have a depth of at least three metres.
 - For dwellings without direct access to private open space at ground level, provide a primary private open space such as a balcony, terrace or roof garden of minimum depth of 2.0m. Up to

10% of dwellings in a development may have 'juliet' balconies or a floor to ceiling window to living rooms with a balustrade to the window.

- b) Design primary private open spaces so that they act as direct extensions of the living areas of the dwellings that they serve.
- c) Clearly define private open spaces through the use of planting, fencing or landscaped features.
- d) Screen private open space where appropriate to ensure privacy.
- e) Courtyards are not to extend forward of the front building setback by greater than 1m.

Balconies

- a) Primary balconies are to generally address the street or rear open space. Avoid facing side boundaries.
- b) In addition to primary balconies, use smaller secondary balconies to supplement private open space and allow for service uses, such as clothes drying (location for long racks screen from public view)
- c) Design balcony balustrades such that the degree of transparency/opaqueness reflects the degree of required privacy.
- d) No building elevation is to have balconies for the whole width of any floor.
- e) Balconies may project into setbacks, in accordance with the requirements in **Section X**.
- f) Furniture layouts of representative apartments in a development are to accompany all development applications to ensure the usability of balconies.
- g) Mechanical equipment, and the like on balconies are preferred to be avoided and at least screened from public view.

5.32 Communal open space

Communal open spaces are those spaces within a site that are accessible to and benefit all residents and users. The size, location and design treatment of open space will vary depending on the context of the site and the scale of development. The primary function is to provide amenity in the form of;

- landscape design,
- daylight and ventilation access to apartments,
- visual privacy,
- opportunities for recreation and social activities, and
- water cycle management.

Objectives

- To ensure development that contains more than two units/dwellings has access to an area of communal open space.
- To provide communal areas that enable soft landscaping and deep soil planting where achievable.

Controls

In addition to the landscape, deep soil and site cover provisions of this DCP the following apply:

(These controls do not apply to single dwellings).

- a) Provide 15% of site area as a minimum for communal open space. (Note: The RFDC suggests 25%. Private open space at ground level is also to be encouraged. Therefore the communal space requirement is relevant).
- b) Locate communal open space so that it exists as a focal point for the development and a buffer between buildings.
- c) Optimise ground level communal open space.
- d) Ensure passive surveillance of the communal open space area by positioning active uses or habitable rooms with windows adjacent to main communal open space areas.
- e) Provide places and equipment for children.
- f) Consider the use of roof terraces as secondary communal open space.
- g) Provide a detailed landscape plan for all communal open space.
- h) Ensure communal open space areas are useable and accessible to all including those persons with a disability.

5.33 Fences and walls

Demarcation of the interface between the public and private domain assists with clarity of ownership and enhances security, safety and identity.

Objectives

- To ensure boundary fences and walls are constructed of high quality materials and provide partial visual privacy without compromising amenity in terms of streetscape, views, sunlight and air movement.
- To encourage the preservation and/or construction of fences and walls that contribute to the character of the locality.
- Allow for the physical separation and ownership of the private domain.
- Ensure that the design allows for casual surveillance of the lot.
- Ensure that clear lines of sight are maintained for motorists and pedestrians to and from the lot.

Controls

- a) All fences are to be constructed to allow the natural flow of stormwater drainage or runoff.
- b) Fences are not to significantly obstruct the free flow of floodwaters and are to be constructed so as to remain safe during floods and not obstruct moving debris.
- c) Fences within a floodway or high-risk flood precinct are not permitted except for open style fences of a design approved by Council.

-
- d) Fences are to be constructed of timber, metal (not sheet metal), lightweight materials or masonry.
 - e) Fences on the front and secondary building lines are to be predominantly constructed in transparent fence materials, allowing visual connection and passive surveillance of the street.
 - f) Front and side fences within the front setback area are to be a maximum height of 1.5m.
 - g) Within the front setback area front fences greater than 1.2m in height must be setback by a distance equal to their height to allow for landscaping to soften their visual impact subject to consistency in conservation areas.
 - h) Side fences between the front building line and the rear property boundary and rear fences are to be a maximum of 1.8m in height with an angled or transitional height between the front fence and the building front line.
 - i) The height and design of any proposed fence on top of a retaining wall are to be included in the consideration of the height of the retaining wall.
 - j) When trees which are the subject of a tree preservation order are located in the location of a proposed fence, then the fence is to be designed around the tree or an application made to Council for the removal of the tree.

6 Recommendations

The following recommendations arise from this study.

1. Adoption of the study for public exhibition. The appendices are for internal use by Council.
2. Green Square objectives to be included in the LGA-city wide LEP.
3. The following additional work needs to be done.
 - Further review of areas outside the site test areas
 - Identify critical lot amalgamations
 - Criteria for application of Stage 1 DA's
 - Built form controls would benefit from comprehensive illustrations (this study has provided sufficient illustrations within the study budget – however more illustrations would be beneficial).
 - Built form controls for single dwellings and small scale infill development.
 - Checklist of development standards for ease of use.
4. Council to investigate methods for resolving market reluctance to develop commercial space due to parking rate controls (e.g. public parking stations for first 30 years of development).
5. A landscape strategy is needed for the water channels for safety and to avoid the need for fencing.
6. A retail strategy is needed to investigate the need for supermarkets and appropriate locations. A planning incentive and requirement needs to be put in place to ensure implementation.
7. Sydney Airport Corporation Limited height constraints should be negotiated with SACL and mapped in the DCP with clear criteria for referral to SACL. The objective is to reduce the need for referrals.
8. A plan of the rail tunnel is needed and land marked where development needs to seek RAC advice.
9. A range of non-built form related matters needs to be in the new DCP (these matters may be as part of the LGA – wide DCP) for Green Square.
 - Dwelling mix
 - Design competition guidelines
 - Noise standards
 - Access and mobility
 - Parking rates (should be variable with distance from the rail station).
 - Public art and private developments
 - Energy and ESD issues
 - Waste management. Council's waste management policy is not strong enough. (General garbage and recycled garbage chutes to apartment floors above 4 storeys to basement compactors and on-site truck collection).
 - Community vegetable gardens (as raised in current DCP)
 - Lodging a DA checklist
 - Furniture truck loading to be kerbside
 - Rail tunnel map
 - Carpark entry widths

10. Preparation of a Public Domain Plan / Manual (i.e. update of the Public Domain Strategy only for the design of the streets and parks including footpaths, water channel design, bike ways and street tree planting).
11. Single column text format for DCP for web document for ease of scrolling.
12. A Green Square Strategy document should be prepared based on Section 3 of this report. The DCP should only have the development objectives and controls with brief explanations.
13. A special study is needed for waste management in addition to Council's current policy for general garbage and recycling chutes to serve apartment floors to basement compactor and on-site collection.
14. Driveway width to be studied in relation threshold numbers of apartments. (For example 3.5m up to 12 apartments, 4.5m for up to 50 apartments and 6m for 50+ apartments) and similar for commercial space thresholds. Furniture truck servicing needs study (Architectus recommends curbside).
15. Include DCP 1997 Appendix 1 Energy Efficiency guidelines construction materials section as a Appendix to the new DCP (it is very helpful to designers).
16. Comprehensively review the Green Square Town Centre LEP and DCP.
17. Consideration of closing Botany Road between Bourke Road and the extension of Bowden Street so that the extension of Bowden Street re-routes traffic from the Botany Road closure. The Botany Road closure would benefit the Town Centre by removing a traffic artery cutting through the heart of the Town Centre.
18. A Design Review Panel should be established to review all development over 3 storeys. This is essential to increase the quality of design in Green Square.
19. Prepare simple design competition guidelines for developments over 9 storeys where a developer provides evidence of a design competition held between at least 3 architects and restricted to a site analysis, 3D illustrations, ground plan, typical plan, street elevation and sections all at 1:200 scale and a 2 page design statement.
20. An affordable housing policy should be considered where 5% additional FSR may be awarded in exchange for 3% of GFA being provided as affordable housing and given to a community housing provider.
21. Review the need for a bus tunnel link between the east-west Boulevard and south bound connection to south bound connection to South Dowling Street (Note: a south bound connection from Epsom Road should be studied because it may have less impact on existing housing and be more cost efficient.).
22. The indicative development plans for each Site Test area should be the basis for an inductive built form plan in a new DCP for the Area for use by Council in assessing development applications.

23. Reconsider the plan for the eastern part of Victoria Park/Joynton Park to provide a better urban design outcome for the interface with South Dowling Street (currently a line of 10 storey buildings parallel to South Dowling Street propose each with 4 levels of above ground parking).
24. Progress land use zoning changes recommended by this study.
25. Adaptable, accessible, visitable, and manageable housing need to be defined by Council for the LGA and standards adopted for developments to achieve.