

## F1 Bondi Junction Centre

1.1	Land to which this Part applies . . . . .	2
1.2	How to use this Part . . . . .	2
1.3	Relationship to other Parts . . . . .	2
1.4	Objectives of this Part . . . . .	2
2.0	Urban Form Controls . . . . .	4
2.1	Introduction . . . . .	4
2.2	Building Use . . . . .	5
2.3	Subdivision . . . . .	8
2.4	Heritage and Buildings of Historic Character . . . . .	9
2.5	Streets with Heritage and Buildings of Historic Character . . . . .	10
2.6	Active Street Frontages . . . . .	15
2.7	Street Alignment and Front Setbacks . . . . .	18
2.9	Separation . . . . .	25
2.10	Side and Rear Boundary Setbacks . . . . .	30
2.11	Building Footprint and Orientation . . . . .	34
2.12	Number of Storeys . . . . .	39
2.13	Views, Vistas and Tree Preservation . . . . .	42
3.0	Building Design Controls . . . . .	44
3.1	Design Excellence . . . . .	44
3.2	Building Elevations . . . . .	44
3.3	Public Art in the Private Domain . . . . .	47
3.4	Awnings and Colonnades . . . . .	47
3.5	Building Renovation Opportunities . . . . .	50
3.6	Open Spaces at the Street Front . . . . .	50
3.7	Designing Buildings for Flexibility . . . . .	51
3.8	Ceiling Heights . . . . .	51
3.9	External Living Areas . . . . .	52
3.10	Wind Mitigation . . . . .	53
3.11	Reflectivity . . . . .	55
3.12	Green Star Environmental Rating Scheme and BASIX . . . . .	56
3.13	Community Crime Prevention . . . . .	58
3.14	Roller Shutters . . . . .	59
3.15	Outdoor Advertising Signage and Structure . . . . .	59
4.0	Access and Movement . . . . .	62
4.1	Introduction . . . . .	62
4.2	Arcades, Through-block Links and Squares . . . . .	65
4.3	Vehicular and Service Access to Lots . . . . .	67
4.4	Pedestrian Overpasses and Underpasses . . . . .	69
4.5	On-site Parking . . . . .	71
5.0	Town Square Provisions . . . . .	71
5.1	Building Form . . . . .	71
5.2	Pedestrian Amenity . . . . .	77
5.3	Access, Parking and Servicing . . . . .	84
5.4	Controls for Special Areas . . . . .	87

## **1.0 INTRODUCTION**

### **1.1 Land to which this Part applies**

This Part applies to land as identified in the Waverley Local Environmental Plan (Bondi Junction Centre) 2010 – Application Map.

### **1.2 How to use this Part**

This Part contains Objectives and Controls for commercial and mixed use development within the Bondi Junction Centre (BJC). This Part must be read in conjunction with Waverley Local Environmental Plan (Bondi Junction Centre) 2010 (WLEP (Bondi Junction Centre) 2010) and Public Domain Technical Manual – Bondi Junction Centre.

### **1.3 Relationship to other Parts**

This Part is to be read in conjunction with all relevant Parts of WDCP 2010.

Where conflicts occur between this Part and other Parts of WDCP 2010, Part F1 takes precedence.

### **1.4 Objectives of this Part**

The intent of this Part is to encourage high quality streetscape and urban design that continues to improve the BJC. This Part requires that urban design issues are addressed so that buildings are designed to be coordinated along streets and within the BJC as a whole and not as isolated and individual elements. The basis of this Part is to recognise the street and block structure of the Town Centre. To reinforce this, the controls in this Part are underpinned by the:

- protection of streets and laneways for public use, access and connection;
- Town Centre form which reinforces the grid street pattern;
- building alignment which encloses and defines the major streets;
- building orientation which reflects and reinforces the rectilinear grid pattern of the BJC;
- building scale which complements existing heritage items whilst allowing development capacity;
- human scaled streetscape environment; and
- use and building form that avoids impacting negatively on the existing surrounding low scale residential areas.

## **2.0 URBAN FORM CONTROLS**

### **2.1 Introduction**

The built form controls define the way the three dimensional form of buildings is modelled to ensure a vibrant and attractive commercial area responsive to the subdivision pattern, existing built form and the Town Centre's streets.

The desired future urban form for BJC is block edge building forms with tower buildings above. The block edge building form defines the street space, mitigates harsh wind effects and provides consistency in terms of height and alignment along streets throughout the BJC.

It also:

- coordinates building massing along streets and across blocks;
- ameliorates the effects of unevenly scaled and massed buildings existing throughout the BJC;
- mitigates the visual effect of tall buildings on the street; and
- mitigates environmental effects of tall buildings on existing surrounding low scale residential development.

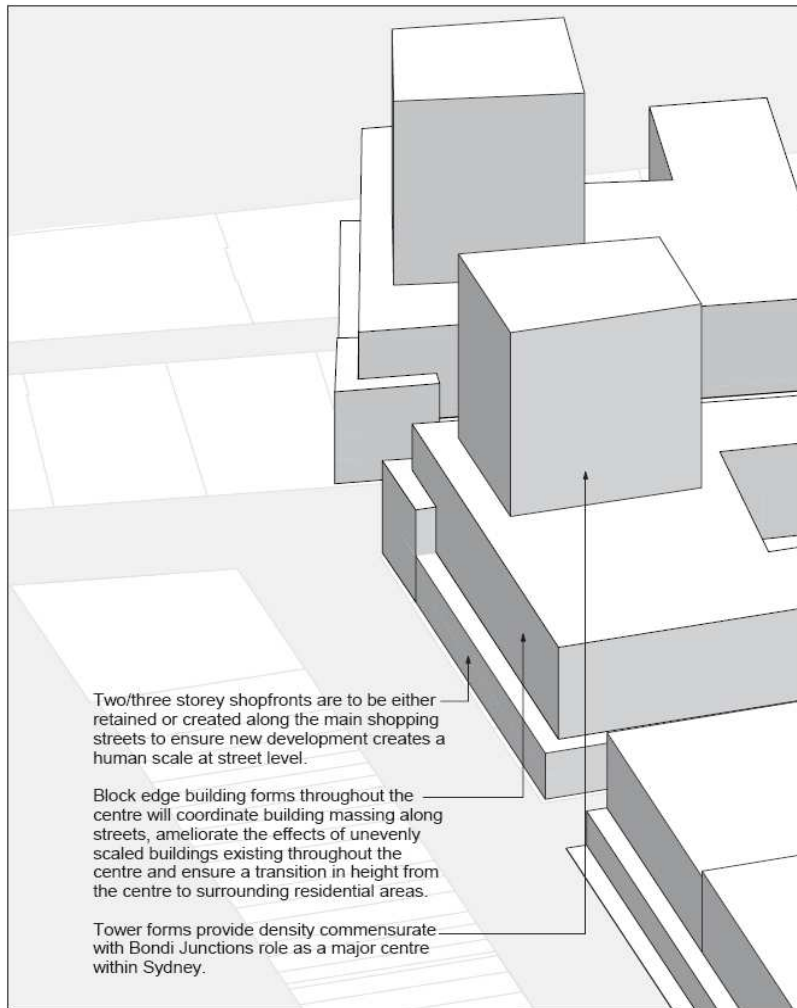
Along a number of the streets the block edge form is combined with a lower 2/3 storey shopfront facade. This is to occur along Oxford Street, Bronte Road, Denison Street, Ebley Street and Nelson Street. This ensures the streetscape setting for heritage buildings and other noteworthy buildings are retained and enhanced. Corner sites may have slightly higher building forms to accentuate the junction of streets and the rectilinear block pattern.

The 2/3 storey shopfront facade also:

- ensure new development creates a human scale at street level;
- reinforces the spatial qualities of streets;
- reduces down drafts off tall buildings;
- sets buildings back for better sun access to streets; and
- encourage small footprint tower buildings for sustainability, better cross ventilation, daylight access and diversity.

Above the block edge form is the tower building form. This form is set back from the street edge and from the front, side and rear boundaries (refer to Figure 1). Tower building forms occur in the Bondi Junction Commercial zones and are designed to provide higher density development commensurate with Bondi Junction's role as a major Centre as identified in the Sydney Metro Strategy. Encouraging small footprint tower buildings is one of the key determinants of sustainability to facilitate cross ventilation, daylight access and to create diversity within the BJC skyline.

Development adjacent to the low scale residential areas surrounding the centre has been modelled to be sensitive to the scale, massing and architecture of lower scale building forms.



**Figure 1:** Indicative and Diagrammatic Massing

The 2/3 Storey shopfronts and the 6 storey block edge form ensures that towers do not dominate the street.

## 2.2 Building Use

The diversity in shopfront activity along streets is an important aspect for creating a diverse and lively Centre. Large scale developments can result in significant lengths of blank facades along streets. Office space at street level can also contribute to a decline in street activity as the level of privacy required in offices can lead to obscured glass and blank facades. These situations are to be avoided. It is important that building use is controlled to ensure street level activity is encouraged and BJC is attractive and lively.

Above street level there has been a significant rise in residential accommodation over the years. Bondi Junction's primary role is as a Commercial Centre so it is important that residential development enhances rather than replaces commercial space particularly on the lower levels of buildings. Although there is a role for residential development in the BJC, this must not be at the expense of commercial development and employment creation.

### 2.2.1 Objectives

- Encourage high quality commercial development.
- Retain lower levels of buildings for commercial and retail uses.
- Increase the diversity and range of shopping and recreational opportunities for people who live, work and visit the Centre.
- Enhance community safety by increasing activity in the public domain on week nights and on weekends.
- Encourage a variety of mixed use development.
- Minimise conflicts between commercial and residential uses.

### 2.2.2 Controls

#### *Primary shopping streets*

- (a) Ground Level of buildings along primary shopping streets must be designed and used for retail purposes (refer to Figure 2).
- (b) First Level of buildings must be designed and used for commercial purposes but not limited to retail.
- (c) On sites with wider frontages (over 10m) at least 85% of the building frontage is to be associated with retail uses such as entries, display area, café, restaurant, shop floor.
- (d) On sites with narrow frontages (under 10m) at least 70% of the building frontage is to be associated with retail uses such as entries, display area, café, restaurant and shop floor.
- (e) Entries to residential buildings cannot take up more than 15% of the buildings frontage at street level (for wider building frontages over 10m) and 30% of the building frontage at street level (for narrow frontages under 10m).

#### *Secondary shopping streets*

- (f) Ground Level of buildings located on secondary shopping streets must be designed and used for commercial purposes but not limited to retail. Retail uses are preferred (refer to Figure 2).
- (g) Entries to residential buildings cannot take up more than 30% of the buildings frontage at street level.

#### *Laneways*

- (h) Retail and commercial frontages are encouraged along laneways where possible (refer to Figure 2).

#### *Arcades, squares and through block links (refer to Section 4.2)*

- (i) Ground Level must be designed and used for retail purposes.
- (j) First Level must be designed and used for commercial purposes but not limited to retail.
- (k) Residential entries cannot take up more than 15% of the frontage.



## 2.3 Subdivision

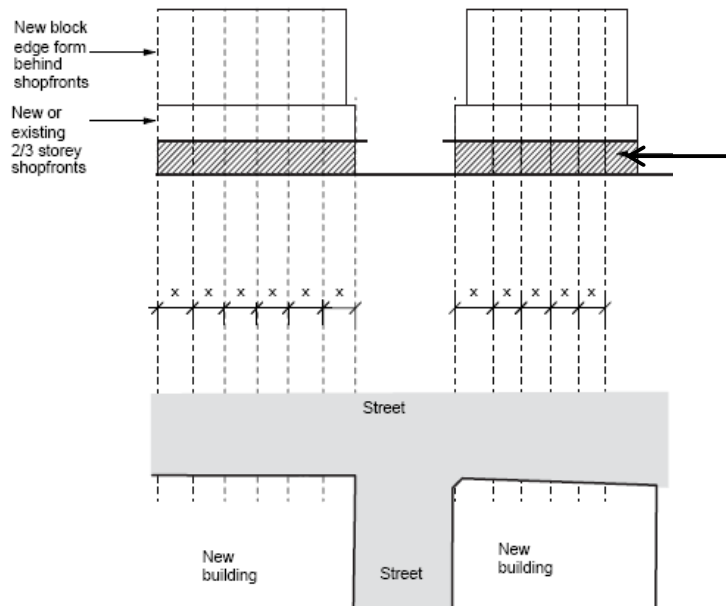
Subdivision and the associated building form that it generates determine the character of urban places. In Commercial Centres a mixture of small allotments and larger amalgamated sites help to create diversity within the centre. Subdivision help define what is private and public, maintaining streets and laneways for access, connection and movement. Retaining or reinforcing the small allotment size is important to retaining human scale along the street.

### 2.3.1 Objectives

- Reinforce the expression of small lot subdivision pattern in building form.
- Enrich the character and diversity within the centre.
- Encourage a human scale in building design.
- Encourage a diversity of shopfronts along streets.
- Encourage the highest and best use of land along shopping streets.

### 2.3.2 Controls

- The design of building elevations are to generally use a 6m grid. This 6m grid can be varied by +/- 2m in order to match an existing grid of an existing building or lot (refer to Figure 3).
- Retaining the small lot subdivision pattern which reflects the original shop fronts along streets in the BJC is encouraged on lots (refer to Figure 4).
- Where this cannot occur due to amalgamation, the design of building elevations is to interpret the small lot subdivision pattern along the street front on lots.



**Figure 3:** Control Diagram Interpretation of the pattern of small lot shop fronts along streets with Heritage

New Shopfronts generally 6m wide. Small lot subdivision pattern used to design proportions of new building elevations and shopfronts



**Figure 4:** Control Drawing Building Frontages to express the small lot subdivision pattern

Buildings to have shopfronts designed on a 6m wide grid. This can be varied +/-2m to match the grid of an existing building or lot.



## **2.4 Heritage and Buildings of Historic Character**

Heritage items can consist of diverse elements such as parks, beaches, headlands and trees. These, together with buildings and other man made structures contribute to Waverley's distinctive character. In the commercial area there are; heritage items and heritage conservation areas; archaeological items and area; townscape items; landscape items and area; and urban area. This Part must be read in conjunction with Part H1.

### **2.4.1 Objectives**

- Ensure buildings of historic character and remaining original shopfronts are retained or reinterpreted.
- Retain the streetscape setting of sites and buildings of historic, architectural and aesthetic significance.
- Recognise the opportunities for heritage sites and contributory buildings to inform streetscape character.
- Ensure developments in or adjacent to conservation areas retain and enhance the conservation values of that area.

### **2.4.2 Controls**

#### *Buildings of Historic Character and Heritage Items*

- (a) Buildings of historic character are identified on Figure 6.
- (b) Lots identified with buildings of historic character are to retain as a minimum the facade (for a depth of 2m) of the building or preferably the whole building.
- (c) Where a facade cannot be retained the new buildings are to interpret the scale, facade modelling including the location and percentage of glass to solid wall and the vertical and horizontal proportions of the existing building.
- (d) Where the building form, detailing or use of individual buildings of historic character have been inappropriately altered and changed, any application to upgrade or re-use the buildings must clearly demonstrate that the architectural and streetscape value of the building will be enhanced by the proposal.
- (e) Any application to demolish an identified building of historic character must clearly demonstrate that a replacement building will possess equal or higher quality contributory value regarding streetscape, character, architectural design and material quality.
- (f) New development adjacent to buildings of historic character must have facades sympathetic in vertical and horizontal proportions and alignments.
- (g) New buildings adjacent buildings of historic character or heritage items should display proportions respectful and build upon proportions similar to adjoining streetscape and forms.
- (h) New buildings adjacent buildings of historic character or heritage items should draw on the predominant pattern of the streetscape. They are to be open & glazed at street level, have emphasis toward a singular enclosed building form at upper levels and be capped by a lighter more articulated element.

### **2.4.3 Design Guidance for Heritage Items and Building of Historic Character**

The following provides generic design guidance. Site specific design information is to be obtained from Council's Heritage Planner/Advisor.

- (a) Facades:
  - Original facade elements above awning level such as windows, parapets, balconies and ornamental detailing should be retained where possible. Consistency should be achieved through; parapet height, string course both at parapet level, window proportions (sill and lintel height), awning height, fenestration and balcony elements, facade depth and modelling.
- (b) Height:
  - Match the streetscape proportions and scale of the heritage or contributory building facade.
  - The height of the building at the facade shall take into consideration existing parapets and other facade details of established surrounding development. Match the height of awnings of heritage or contributory building.
- (c) Materials:
  - Ensure there is a positive integration of contemporary prefabricated building materials. Using materials similar to, or compatible with the existing context (generally rendered or painted masonry).
- (d) Windows:
  - When restoring a facade that has been subject to substantial alterations over time, look to similar examples in the street to determine correct window proportion, style and materials.
  - Ensure the window area is proportionate to the wall mass.
  - Prefabricated aluminium windows will not be appropriate.
- (e) Awnings:
  - Existing box section awnings, cantilever, or suspended by tie rods, should be retained. New awnings should match the form of adjacent awnings and maintain the same alignment.
  - Pitched or domed awnings of plastic, glass or canvas construction are not permitted.
- (f) Colour:
  - Achieve a sympathetic juxtaposition of colour on adjacent building forms and ensure that a row of shops which are homogeneous or symmetrical in style adopt a uniform tonal distribution over the facade without limiting individual colour expression on each shop.

### **2.5 Streets with Heritage and Buildings of Historic Character**

In order to retain the character of streetscapes, development in those streets is to be sympathetic to existing heritage buildings. New buildings require special façade treatment to match the proportions and design of existing buildings. Generally this requires that new buildings in streets with heritage items require a 2/3 storey shopfront along the street.

#### **2.5.1 Objectives**

- Ensure that the scale of existing height of original 2/3 storey shopfronts is retained along streets.
- Enhance the streetscape setting adjacent to heritage sites.

- Retain and reinforce a pedestrian scale to streets.
- Encourage ongoing adaptive re-use of buildings of historic character.

## 2.5.2 Controls

- (a) New buildings on lots with frontages identified in Figure 7 and listed below are to have a 2/3 storey façade along the street and are to be built to the street alignment:

141-143 Oxford Street	15 Bronte Road
167-169 Oxford Street	20 Bronte Road
234-264 Oxford Street	22-26 Bronte Road
266 Oxford Street	23-25 Bronte Road
352 Oxford Street	31-33 Bronte Road
406 Oxford Street	

- (b) Balconies to the street façade are to be recessed behind the principle building façade.
- (c) Open spaces and external building forecourts at street level are discouraged on streets with heritage buildings.
- (d) New building on lots with frontages identified in Figure 7 should be designed in accordance with Section 2.3.




**Figure 5:** Interpretation of buildings of historic character

### Principles:

- The horizontal proportions of the façade are interpreted into new buildings.
- The proportion of openness to solid façade is to be used to guide new facades above awning height.
- The façade has a depth generally between 300mm to 500mm which is designed to give a modelled façade.
- Existing shopfronts give the vertical and horizontal proportions for new shopfronts.
- Ground level is transparent glass shopfronts, awnings, doors and signage.





**Figure 6:** Control Drawing Buildings of Historic Character

 Building with historic character to be either retained or reinterpreted



**Figure 7:** Control Drawing Building Elevation in Streets with Heritage and Buildings of Historic Character

-  Building frontages to have 2/3 storey shopfront facades
-  Street to have 2/3 storey shopfront facades

## **2.6 Active Street Frontages**

The design of building frontages along the street is one of the most critical elements in ensuring the centre is an active and vibrant commercial area. There are significant opportunities throughout the centre for improved frontages along streets. Active frontages are at Ground Level (the first level building elevations are also desirable) and include internal building spaces that have direct pedestrian access to the street and provide Town Centre activities. These activities include civic, community or entertainment. Active frontages do not include residential although foyers or entries to residential buildings can make up a small proportion of active frontages.

Active frontages have a high level of connection both physically and visually. Active frontages are one or a combination of the following: shop fronts, cafe or restaurant if accompanied by an entry from the street, pedestrian entrances to retail premises, upper level uses, pedestrian entries or forecourts to buildings, commercial and residential lobbies.

### **2.6.1 Objectives**

- Promote pedestrian activity and safety in the public domain
- Provide a high degree of surveillance over the street.
- Provide transparency and visual contact between the street and the buildings interior.
- Facilitate future adaptability and flexibility of uses.
- Ensure that all streets have active commercial frontages.
- Maximise the amount of active frontages throughout the BJC.
- Create a 'public face' for buildings to enhance the character of streets.

### **2.6.2 General Controls**

- (a) Refer to Part E. Where inconsistencies occur; Part F1 prevails.
- (b) Locate ground levels on grade with finished footpath levels. On sloping sites the levels are to be on grade at entries but may vary elsewhere by up to 500mm.
- (c) Provide clear glazing to windows and doors from floor to ceiling at ground level. The sill height may not be more than 500mm above adjacent street paving. Obscured glazing is not acceptable.
- (d) Reinforce corner frontages on primary shopping streets with shop or office front windows. Splayed corners or entries on corners are discouraged.
- (e) Openable shop fronts for restaurants or cafes and the like are encouraged.
- (f) Outdoor restaurants, cafes and the like are encouraged.
- (g) Active ground floor uses provide pedestrian access from footpath level into the building.
- (h) First level active frontages are encouraged: signage, outdoor dining, openable frontages and retail at first floor looking onto the street. Premises are required to display a street number.
- (i) The height of the street numbers will be no less than 300mm and numbers should be presented in a clear readable font and

- be located above the entry door, where possible.
- (j) The installation of roller shutters is not permitted.
- Primary Shopping Street Frontages*
- (k) Primary active frontages are to occur at ground level along all primary shopping streets (refer Figure 8).
- (l) Acceptable uses for primary shopping frontages include; Retail or the entry area to an entertainment or civic building, the entry area of residential or commercial premises.
- (m) One door (into entertainment, civic, community, commercial or retail uses) per preferred 6m (max. 10m) length of street frontage must be provided (refer to Figure 9).
- (n) Not more than 10% of the street frontage on a lot can have blank walls or service areas (excluding structure, columns and beams).
- (o) Commercial and residential lobbies if accompanied by an entry and occupying less than 10% of the buildings street frontage can front the street.
- Secondary Shopping Street Frontages*
- (p) Primary active frontages are encouraged along secondary shopping streets as indicated on Figure 8.
- (q) One door (into entertainment, civic, community, commercial or retail uses) per preferred 10m (min. 15m) of street frontage must be provided.
- (r) At least 50% of the frontage is to be associated with retail uses; access and display areas. The other 50% can be other types of commercial uses such as offices or cafes and restaurants.
- (s) Not more than 15% of the street frontage can have blank walls or service areas (excluding structure, columns and beams).
- (t) 85% of the street frontage is to have clear glass frontages including doors (excluding structure, columns and beams).
- (u) Residential lobbies if accompanied by an entry and occupying less than 15% of the lots street frontage.
- (v) No less than 80% of the building is to be aligned to the street.
- Arcades, squares and through block links (refer to Section 4.2)*
- (w) Arcades, squares and through block links must have active frontages.
- (x) Acceptable uses include; predominantly retail, entries to entertainment or civic buildings or commercial premises. Max 15% of the frontage can be the entry to a residential premise.
- (y) One door per preferred 4m (max. 8m) length of street frontage must be provided.
- (z) 95% of the frontage is to be associated with retail uses: access into the building, display area, café and restaurant areas.
- (aa) 95% of the street frontage is to have clear glass shopfronts including doors (excluding structure, columns and beams).
- (bb) Not more than 10% of the frontage can have blank walls or service areas (excluding structure, columns and beams).







## **2.7 Street Alignment and Front Setbacks**

Streets with buildings aligned to one another and to the street edge is a key characteristic of commercial centres. This is an important ordering principle and results in:

Definition of the public domain and visual order: Ensuring all buildings in a street align, provides unity of building forms to give greater emphasis to the public space of the street rather than to individual buildings.

Active spaces: Building to the street alignment helps to bring the public uses inside the building and on the street closer together so that the spaces are accessible and visible for pedestrians.

Territory and security: A consistent alignment helps reduce the occurrence of niches or small spaces which can be unsafe at night and ambiguous in terms of whether they are public or private. Consistent alignments create a clear threshold between public and private space, whether commercial or residential.

Create pedestrian scaled spaces: Building to the street alignment provides enclosure to the street and a sense of intimacy between buildings and the public domain. The remaining original narrow lot shop fronts align to the street edge and have human scale. They are to be retained along primary commercial streets. Lots without small lot frontages are to be proportioned to match the existing shop fronts.

### **2.7.1 Objectives**

- Enhance streets as the commercial and civic space for the centre. Provide easy and legible pedestrian access ways and entrances into buildings. Ensure a vibrant commercial centre with continuous and active street frontages. Create consistent and unified building elevations along streets.
- Improve the quality of the public domain. Ensure building facades create a human scale to the street.
- Define the space of public streets and other public spaces such as squares and parks. Maximise safety within public places.

### **2.7.2 Controls**

- (a) Buildings are to have front elevations aligned to the street boundary.
- (b) Situations where a variation to building in alignment with the street boundary may occur includes:
  - Where the building is adjacent to a heritage building that may have a curtilage, setback or important building elevation facing side boundary. In such cases site specific heritage information is consulted, or for a public building to create a forecourt.
- (c) Open spaces at the street front for private buildings are not permitted.

*Two/three storey shopfront facades*

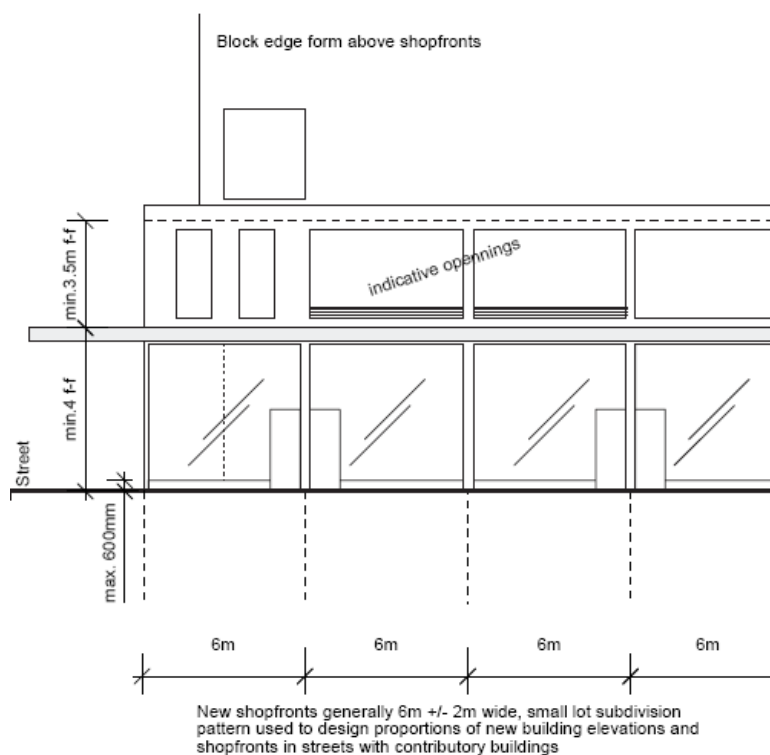
- (d) Corner sites are to be built to both street alignments.
- (e) On lots with 2/3 storey shopfront facades, corners may be 2, 3 or 4 storeys high.

**Block edge Building Forms- Level 2 to Ceiling of Level 5**

- (f) Lots in street with heritage buildings (refer to Figure 7) are to have the block edge building form above the 2/3 storey shopfronts set back from the street boundary by 2m.
- (g) Developments on all other lots are to have front building elevations built to the street alignment to a maximum of 6 storeys block edge development built to the street boundary.

**Tower building forms – Level 6 and above**

- (h) Tower building forms are to be set back a minimum of 6m from the street boundary, are to be parallel to the street boundary and oriented to the front and the rear boundary.

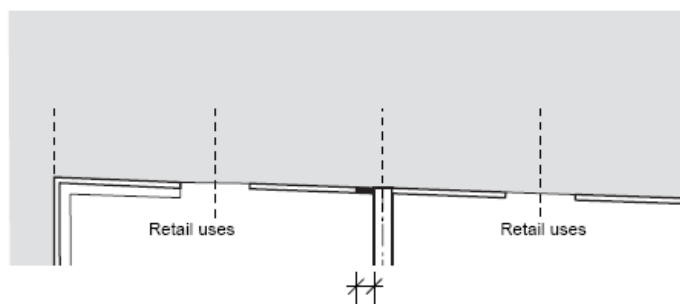


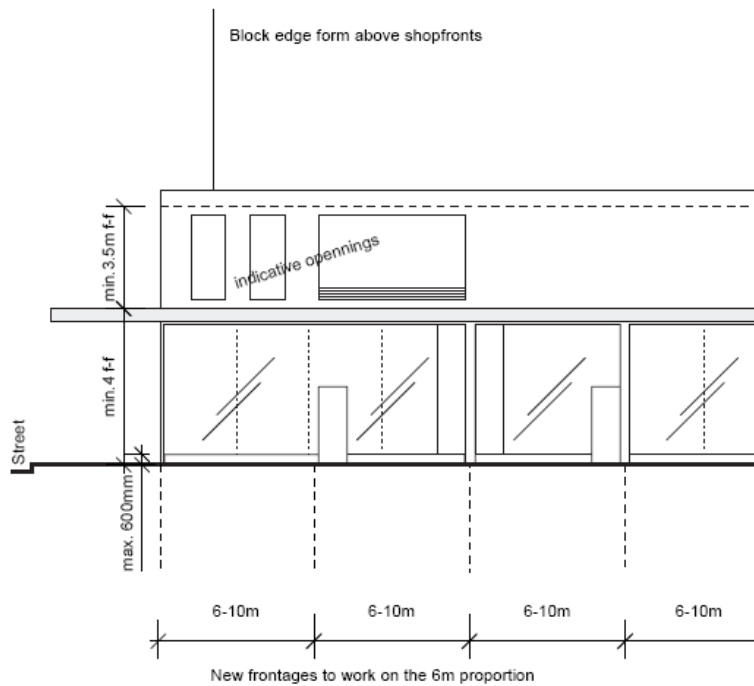
**Figure 9: Control Drawing Primary Streets**

Active uses on levels that are setback ie. level 1 and level 2 are encouraged to have active uses looking over the street. Particularly on corner sites

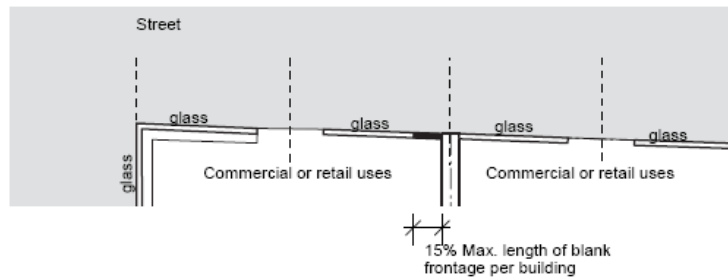
Second level retail, cafes, restaurant uses overlooking the street add another layer of activity to the street

- Retail uses
- One door per 6-10m of frontage
- Inside and street at same level
- Glazing generally 6m wide
- Awnings above ground level





Streetscape elevation - proportional diagram  
Secondary shopping street active frontage



Streetscape plan  
Secondary shopping street active frontage

**Figure 10:** Control Diagram  
Secondary Streets


Active uses on levels that are setback i.e. Level 2 and Level 5 are encouraged to have active uses looking over the street. Particularly on corner sites.

Second level retail, cafes, restaurant uses overlooking the street add another layer of activity to the street.

- Retail uses
- One door per 10 – 15m of frontage.
- Inside and street at same level
- Glazing generally 6m wide
- Awnings above ground level




**Figure 11:** Control Drawing Building to the street alignment: Level 1 – Level 2

 Ground and Level 1 building frontages must align with, be parallel to and on the street boundary.


Note: Where the shopfront is 3 rather than 2 storeys high Level 2 (being the third level of the building) must align with, be parallel to and on the street boundary.



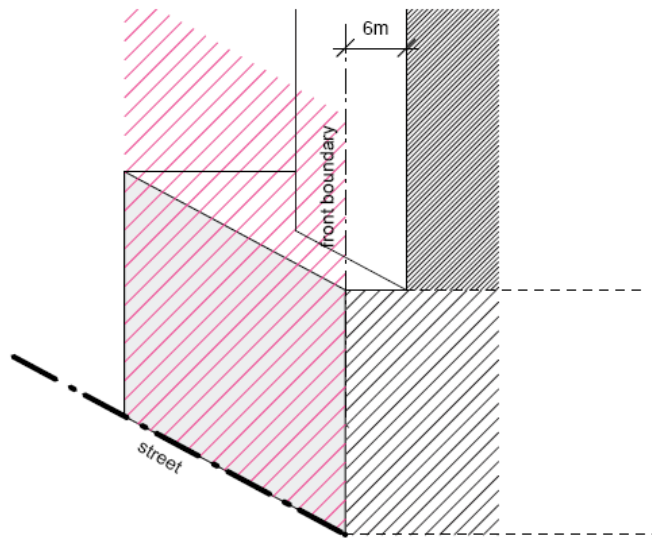
**Figure 12:** Control Drawing Building to the street alignment, Level 2 – 5

 Level 2 to Level 5 building frontages to be built parallel to the street boundary and setback from the street boundary by 2m

(Note: Level 2 preferably setback from the street boundary by 2m but can have zero setback if the shopfront is 3 storeys. To be parallel to the street boundary)

 Level 2 to Level 5 to have zero setback along the street and to be parallel to the street boundary

All building forms above Level 5 are to be generally parallel to the street boundary and setback by a minimum of 6m



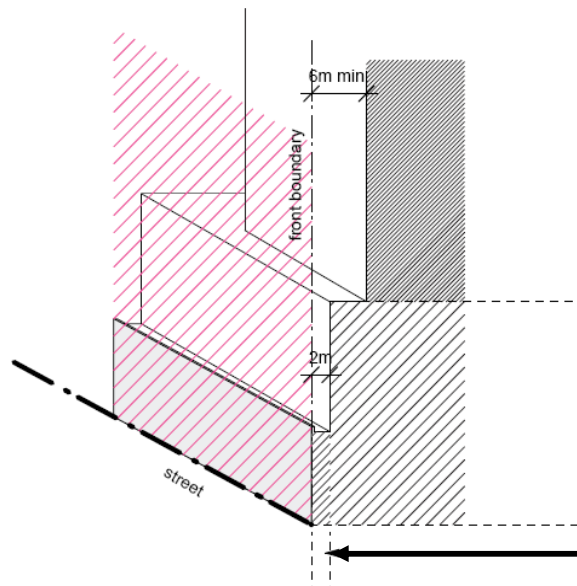
**Figure 13:** Control Diagram Setbacks from the street

Tower building form to be parallel to the street boundary

Block edge building form

Building elevation aligns with and is parallel to the street boundary

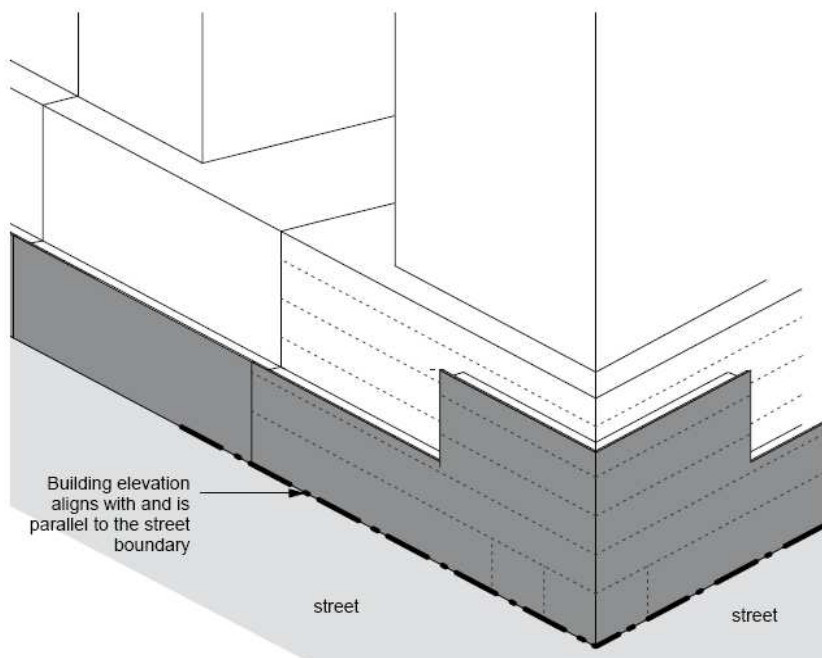
### Sectional Elevation Streets without Heritage Block Edge Building



Tower building form parallel to the street boundary

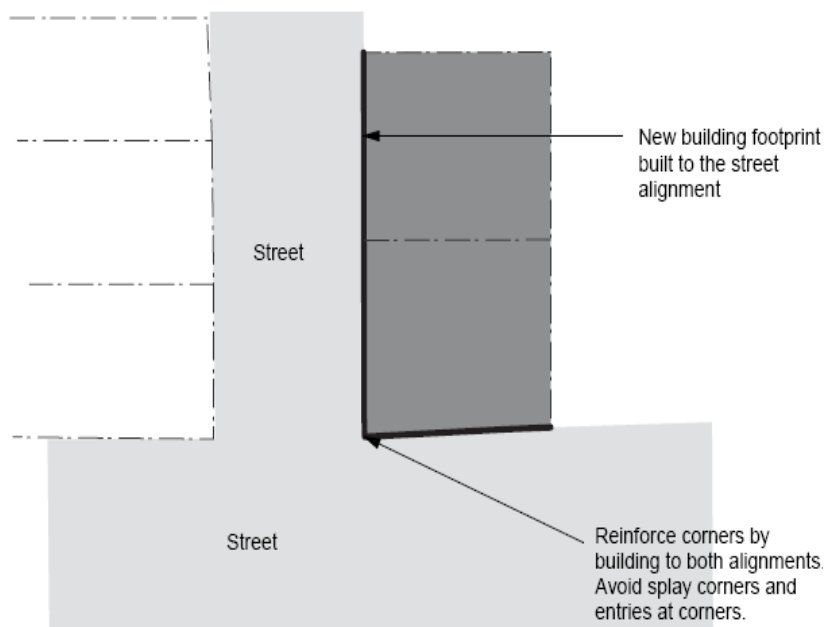
Block edge building form  
Building elevation parallel to but not aligned with the street boundary

2/3 storey element aligns with and is parallel to the street boundary



**Figure 14:** Control Diagram Corner Sites

Corner sites can have elevations that are the same height as the street elevations or they can be up to four storeys high to express the street junction.





## **2.9 Separation**

Achieving adequate separation distances between the windows of living areas of residential buildings and the windows of working areas of commercial buildings are important considerations when building in an existing and established area. Separation ensures that both existing and new residents can enjoy privacy both to internal and external spaces as well as access to sunlight and outlook.

Ensuring that main windows of living and working rooms are oriented to the front and the rear of the lot is fundamental to achieving an efficient site layout and achieving or exceeding minimum separation distances in a built up area where separation distances are at a minimum and buildings must work together to achieve amenity.

Where large buildings already exist on neighbouring sites the controls for new buildings are to use separation distances between buildings rather than side setback distances. This is to recognise that many lots are already built to capacity with medium to high rise development and are unlikely to be redeveloped in the future. Setback distances of existing buildings are in many cases either less than or in excess of what is required. Therefore to ensure privacy and amenity are achieved and that development capacity is maximised distances need to be measured from these existing buildings.

Where neighbouring lots have not yet been fully developed adequate separation can be achieved by using setback distances. Separation distances increase with building height. This is to ensure that tall buildings allow for sunlight access, increasing privacy and view sharing in residential developments. Residential uses require greater distances to achieve a higher level of sun access, outlook and ventilation into dwellings than is required for commercial uses.

### **2.9.1 Objectives**

- Provide amenity and livability for new building.
- Protect the amenity of existing buildings.
- Facilitate visual and acoustic privacy between buildings.
- Facilitate light and air to buildings.

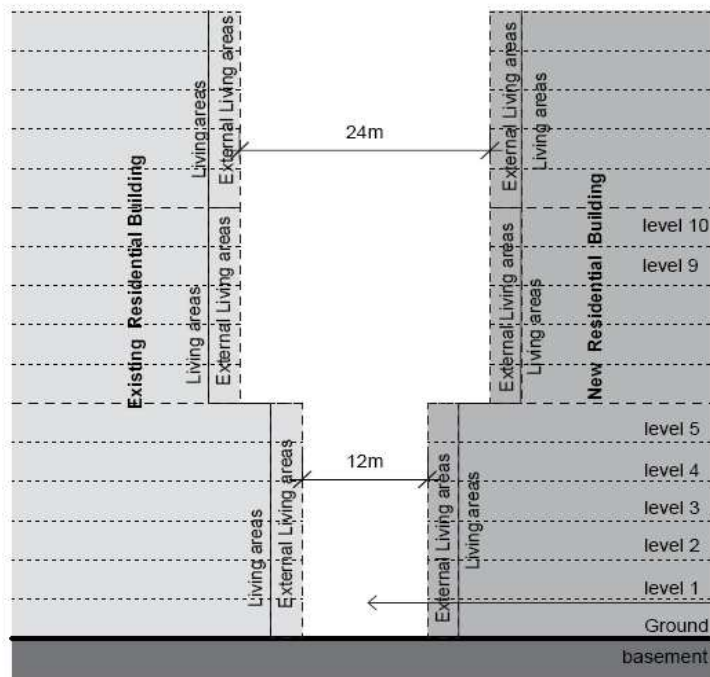
### **2.9.2 Controls**

- (a) Generally buildings are oriented (refer to Calculation Rules Separation) to the front and rear boundaries.
- (b) Refer to the BCA and comply with side boundary setbacks.

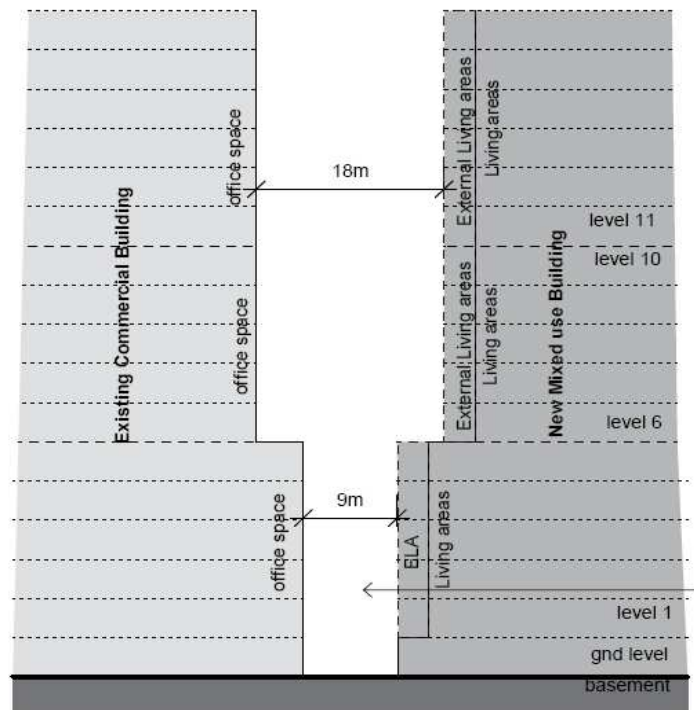
*Ground to Level 5*

- (c) Avoid orienting buildings to the side boundaries.
- (d) From Ground to Level 5 windows cannot be located or oriented to the side boundary for a distance of 8m from the front boundary to ensure that there is a continuous building frontage along the street.





**Section**  
Min. separation distances between residential living areas



**Section**  
Min. separation distances between residential living areas and  
commercial office space

**Figure 15:** Control Diagram  
Separation Distances between  
Residential and Residential Areas

Where existing buildings occur separation distance are used instead of boundary setbacks in order to ensure distances for privacy and amenity for existing buildings are retained.

Gnd - L5 – can have zero side setbacks can occur when no windows exist

**Figure 16:** Control Diagram  
Separation Distances between  
Residential and Commercial Uses

Gnd L5 – can have zero side setbacks can occur when no windows exist

*Ground to level 5*

- (e) Separation between residential and residential (refer to Figure 15):

9m min.	between non-habitable room windows (this distance can be measured diagonally) between all other windows except the primary windows of living areas/balconies
13m min.	between primary windows of living areas/external living areas and all other windows
18m min.	between primary windows of living areas/external living areas

- (f) Separation between residential and commercial (refer to Figure 16):

6m min.	between all other windows except the primary windows of living areas/balconies and non-habitable commercial (service areas)
6m min.	between all other windows except the primary windows of living areas/balconies and commercial (office space)
9m min.	between primary windows of living areas/balconies and commercial (office space)

- (g) Separation between commercial (refer to Figure 17):

9m min.	between commercial (office space)
6m min.	between non-habitable commercial (service areas)

*Tower building forms; Level 6 upwards*

- (h) Separation between residential and residential (refer to Figure 17):

12m min.	between non-habitable room windows (this distance can be measured diagonally) between all other windows except the primary windows of living areas/balconies
6m min.	small sites (24m wide or smaller)
18m min.	between primary windows of primary windows of living areas/balconies and all other windows
9m min.	small sites (24m wide or smaller)
24m min.	between primary windows of primary windows of living areas/balconies, small sites (24m wide or smaller)

- (i) Separation between residential and commercial (refer to Figure 17):

6m min.	between all other windows except the primary windows of living areas/balconies and non-habitable commercial (service areas)
9m min.	between all other windows except the primary windows of living areas/balconies and commercial (office space)
18m min.	between living areas/balconies and commercial (office space)

- (j) Separation between commercial (refer to Figure 18):

12m min.	between commercial (office space)
18m min.	between non-habitable commercial (service areas)

- (k) Where neighbouring sites have no buildings or have not redeveloped side setback controls are to be used.

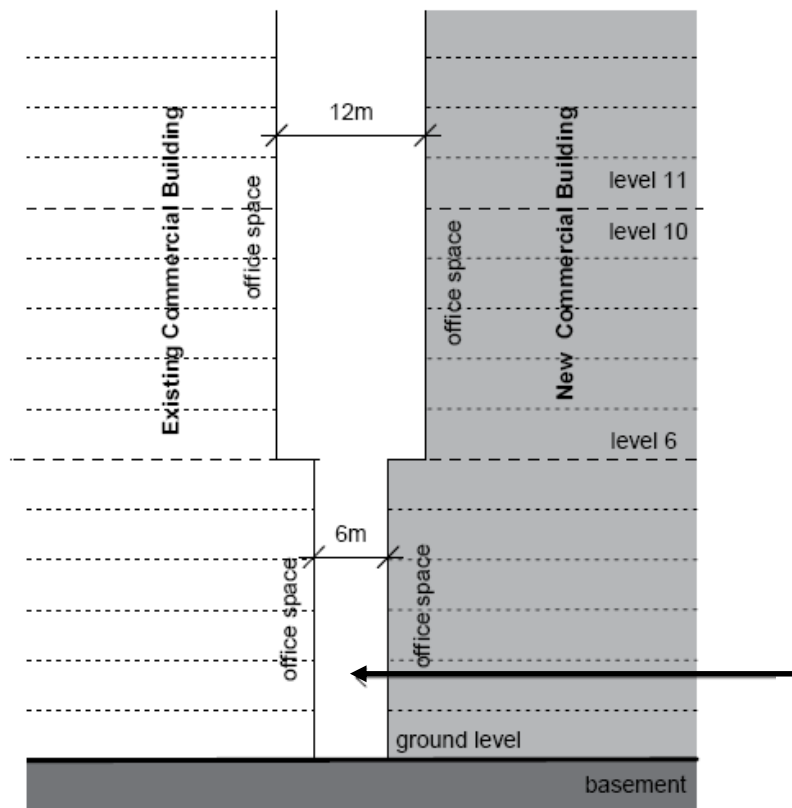
### Calculation Rules Separation

**Building orientation** refers to the direction of the external face of the building that provides the primary source of light, air and outlook to both residential uses (living room windows/doors and external living areas) and commercial uses (office or shop windows).

The measurement is to be taken from the windows/doors of the living room that give the rooms its primary source of outlook, light and air. Living areas include living rooms and external living areas such as balconies and terraces. For an external living area the measurement is taken from the outermost point of the balustrade.

**Primary windows:** For living rooms that have more than one orientation, the orientation that provides the primary source of light, air and outlook is only required to be used and is described in the controls as primary windows.

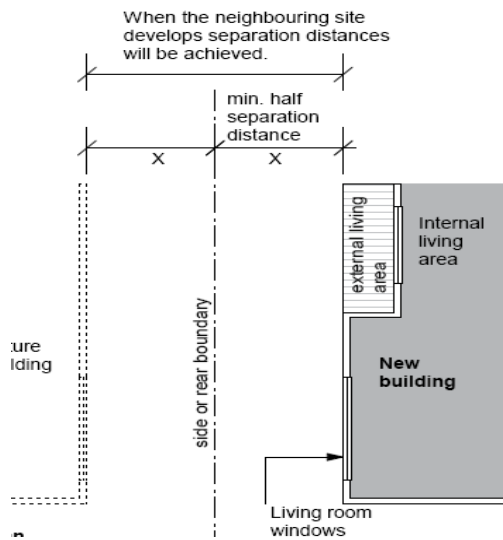
**All other windows:** includes bedroom windows and windows to non-habitable rooms. Living rooms that have a second orientation can also provide outlook, light and air to the room but in the case that greater privacy is required these windows/doors can be of opaque material, fixed, shaded or smaller in size.



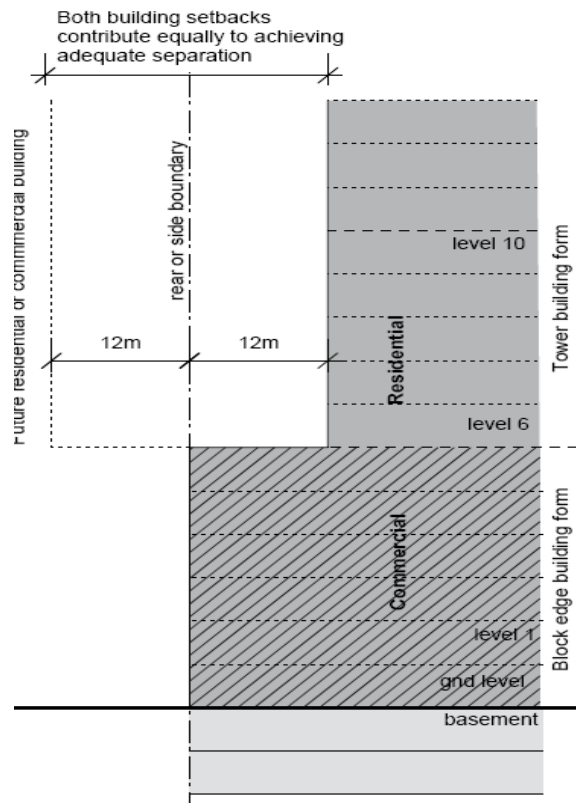
**Section**  
**Min. separation distances between commercial office space**

**Figure 17:** Control Diagram Separation Distances between Commercial Uses

Gnd – L5 can have zero side setbacks can occur where no windows exist



**Plan**  
Side and rear boundary setbacks for residential uses without neighbouring buildings



**Section**  
Side and rear boundary setbacks without neighbouring buildings

**Figure 18:** Control Diagram Side and Rear Boundary Setbacks without overlooking by neighbouring buildings

In situations where there are no neighbouring buildings with windows facing the side boundaries, setback distances are to be measured off the boundaries. The distance is to be half that of the separation distances. It must be assumed that residential will be the future use of the undeveloped site.

From Ground to Level 5 only commercial uses can have zero setback as shown in this diagram. If these levels were to be residential then the setback distances apply.

## 2.10 Side and Rear Boundary Setbacks

Side setback controls are to be used when a site does not have neighbouring buildings with windows facing the side boundaries. Developments will need to consider the position of existing windows and use separation distances to ensure that the orientation of neighbouring buildings are taken into account.

Side setbacks provide separation between buildings for fire safety, privacy, light and air and reduce adverse wind effects. Generally the Ground to Level 5; the block edge form, will have zero side boundary setbacks to allow larger commercial floor plates and to ensure the street has a continuous frontage. Side setbacks for the tower component of buildings is necessary for sunlight access, increasing privacy and outlook.

Residential uses require greater side boundary setbacks than commercial uses to achieve a higher level of sun access, outlook and ventilation. Windows facing the side boundaries are to be avoided on the lower levels of buildings to ensure that there is a continuous frontage along the street.

### 2.10.1 Objectives

- Define the street space.
- Facilitate visual and acoustic privacy between buildings.
- Facilitate light and outlook.

### 2.10.2 Controls

#### Side Boundary Setbacks

- In new developments where internal and external living areas face the side boundaries setback distances must be met. Where a new development is located next to an existing building that has internal and external living areas facing the side boundaries separation distances must be achieved by the new development (refer to Section 2.8).
- Refer to the BCA and comply with side boundary setbacks relating to class of building, type of construction, fire separation and openings and acoustic privacy requirements.
- Avoid orienting living areas to the side boundaries where possible.

#### *Block edge building forms - Ground Level to ceiling of Level 5*

- The block edge building form is to be orientated generally to the front and the rear boundaries however where windows face the side boundaries the following setback distances apply.

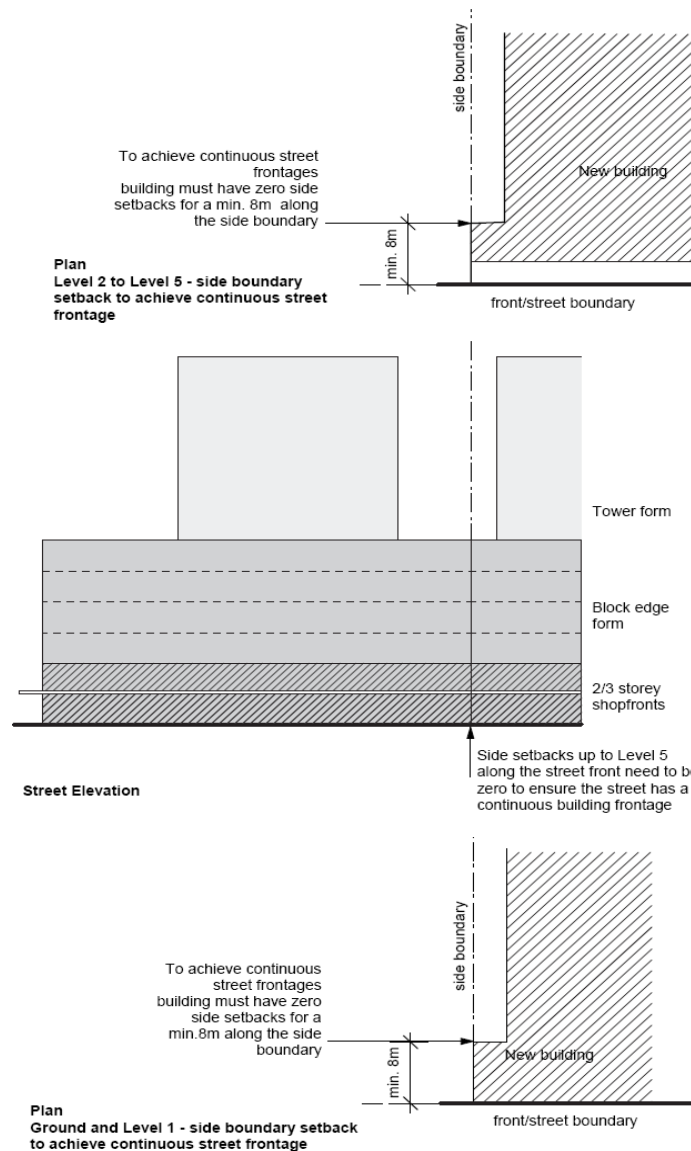
9m min.	Primary windows of primary windows of living areas/ balconies
4.5m min.	All other windows
3m min.	All other windows on small sites (24m wide or smaller)

- Sites that do not have windows of neighbouring buildings looking onto the site can have zero side boundary setbacks for

- a distance from the front boundary of min. 8m to achieve a continuous frontage along the street.
- (f) Sites adjacent to buildings that have windows looking onto the side boundaries are to ensure that separation distances are met (refer to Section 2.8).

*Tower building forms – Level 6 to Level 10 and above*

- (g) Sites adjacent to buildings that have windows looking onto the side boundaries are to ensure that separation distances are met (refer to Section 2.8).
- (h) In all other instances the side setback is to ensure separation distances can be achieved in expectation that the neighbouring site will be developed in the future. This is to be achieved by providing setback distances half that of separation distances.



**Figure 19:** Control Diagram Side Boundary Setbacks close to the street front

In order to achieve continuous building frontages along the street zero side setbacks are required.

### Rear Boundary setbacks

- (i) Refer to the BCA and comply with rear boundary setbacks relating to class of building, type of construction, fire separation and openings.

#### *Block edge building forms- Ground Level to ceiling of Level 5*

- (j) On lots with rear laneways the rear boundary setback can be zero if separation distances are met. The laneway can be included in the separation distance (refer to Figure 21).
- (k) Sites that have the windows of neighbouring buildings looking onto the site are to ensure that the separation distances are met.
- (l) Sites that do not have existing building windows looking onto the site are to achieve setback distances half that of separation distances required. This can include a rear laneway.

#### *Tower building forms – Level 6 upwards*

- (m) Sites that have existing building windows looking onto the site are to ensure that the separation distances are met.
- (n) Sites that do not have existing building windows looking onto the site are to achieve setback distances half that of separation distances required, this can include a rear laneway.

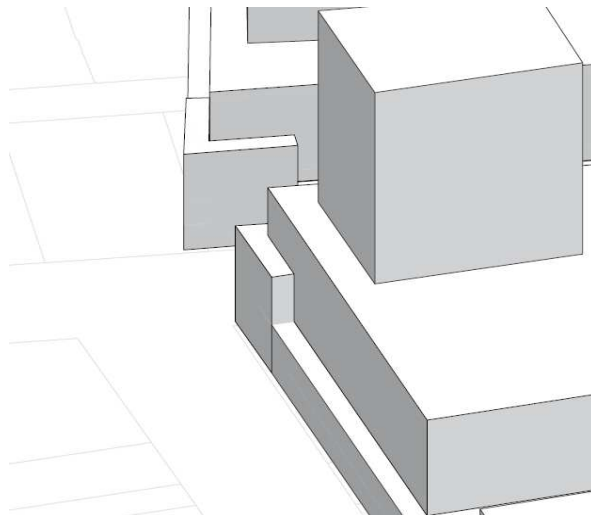
### Calculation rules

*Side setbacks are measured from the lot's side boundary to the outside edge of the building elevation. Setbacks are measured at 90 degrees to the lot boundary and are measured to the outer most edge of the building elevation including balconies, terraces and porches.*

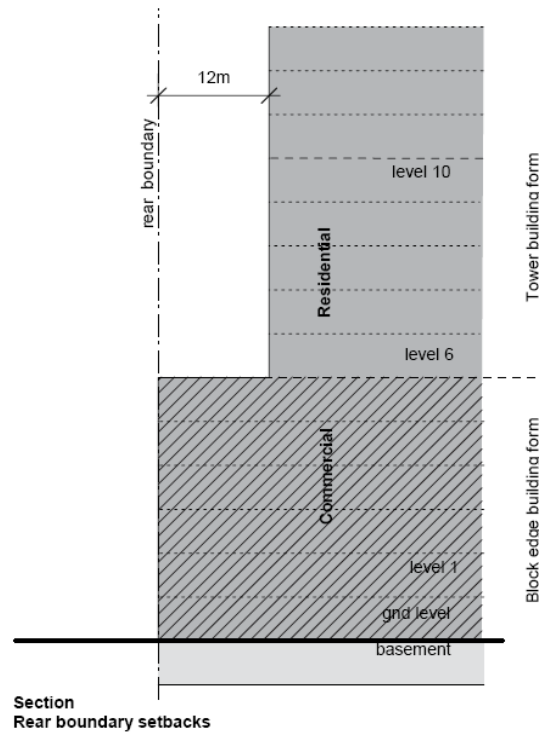
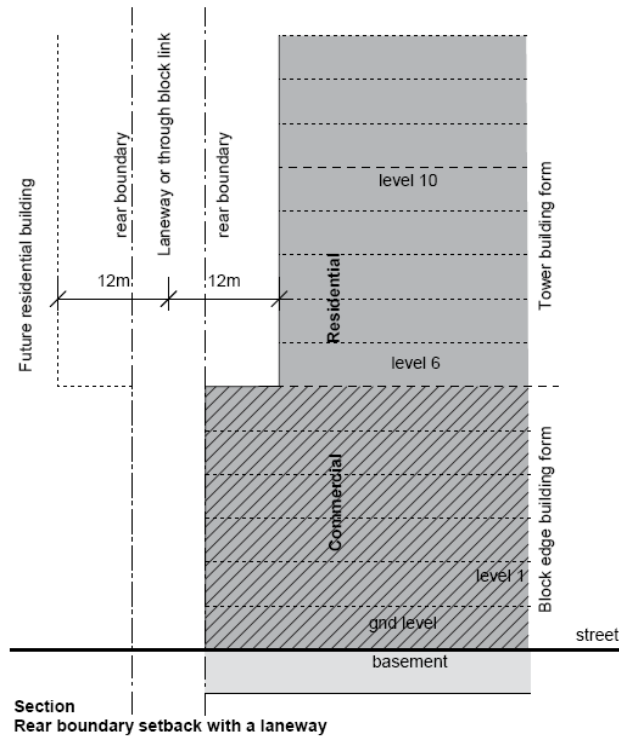
*Rear boundaries may be either on a laneway or where two lots back onto one another.*

*Lots that extend from street to street do not have rear boundaries but rather have two street frontages.*

*Side and rear setbacks are measured to the outermost part of the buildings elevation i.e. edge of balconies rather than the glass line.*



**Figure 20:** Side setbacks contribute to continuous frontages along the street from ground to Level 5, above the side setback distances can be increased as required.



**Figure 21:** Control Diagram Rear Setbacks

From Ground to Level 5 only commercial uses can have zero rear boundary setbacks as shown in this diagram. If these levels were to be residential then the setback and separation distances apply.



## **2.11 Building Footprint and Orientation**

A building footprint is a two dimensional area designed to provide useable floor areas and to set the extent of a building in relation to the site boundaries. It defines the width and depth of the overall buildable area within which a future building is to be located. The building footprint dimensions can contribute to the environmental sustainability of the buildings by reducing artificial lighting and ventilation needed.

Building footprint provides the appropriate location and alignment of future development in relation to the street layout, block and lot size in a particular location. Building footprint is used to control building amenity in terms of light, ventilation, privacy, outlook and security required for the intended uses as well as setting the relationship between the building and the street.

In large mixed use buildings there may be two or more building footprint types stacked vertically. In the case of Bondi Junction, these controls define a ground floor building footprint, a block edge building footprint and a tower building footprint. The ground floor building footprint is to be designed for retail uses. The block edge building form is expected to accommodate commercial uses but can also be residential. The tower component may contain either commercial or residential uses either of which will require narrower footprints and greater setbacks from the side, rear and front boundaries. Commercial footprints can be larger than residential footprints and therefore provides greater densities on sites.

### **2.11.1 Objectives**

- Reinforce the street edge.
- Provide amenity in terms of sun access and natural ventilation.
- Promote sustainable design less reliant on artificial heating, cooling and lighting by encouraging thin cross section buildings.
- Provide ground and first level floor plates to cater for commercial uses and to encourage commercial from Ground level to Level 5.
- Provide for flexible commercial or residential uses in the tower components of buildings.
- Ensure that shopfronts line commercial shopping streets.

### **2.11.2 Controls**

- (a) Setback and separation distances must be met.
- (b) To achieve narrow cross section buildings consider using atria, light wells and courtyards open to the sky to achieve additional daylight and or stack and cross ventilation.
- (c) The use of skylights to provide the primary source of daylight and ventilation to habitable rooms is not permitted.
- (d) Where possible provide commercial and residential spaces with at least two external walls.
- (e) Where possible ensure that common areas such as corridors and entrances have natural light and cross ventilation i.e. openable windows.

- (f) Where possible, achieve natural cross ventilation to dwellings by having window openings in walls facing two different directions, and opposite directions where possible.
- (g) Maximise daylight to all areas such as lobbies, corridors, kitchens and bathrooms by limiting the depth of buildings.
- (h) Avoid or minimise the reliance on mechanical ventilation or air conditioning to these areas.

*Block edge building form (refer to Figure 23)*

**Commercial**

- (i) For commercial floor plates max. 100% site coverage is allowed from Ground to Level 5 as long as setback and separation controls are met.
- (j) For commercial buildings that only have daylight access to two and opposite sides of the building the maximum building footprint depth is a maximum of 20m.

**Residential**

- (k) For the residential component of a block edge form (above Level 1) the maximum internal plan depth of a building should be no greater than 18m (measured from glass line to glass line). Buildings may have greater depth than 18m only if they still achieve satisfactory daylight and natural ventilation and have habitable room depth no greater than 8m from a source of sunlight.

*Tower building forms (refer to Figure 23)*

**Commercial**

- (l) Tower building forms are to be designed so that no commercial habitable space is preferably more than 15m from a source of daylight.

**Residential**

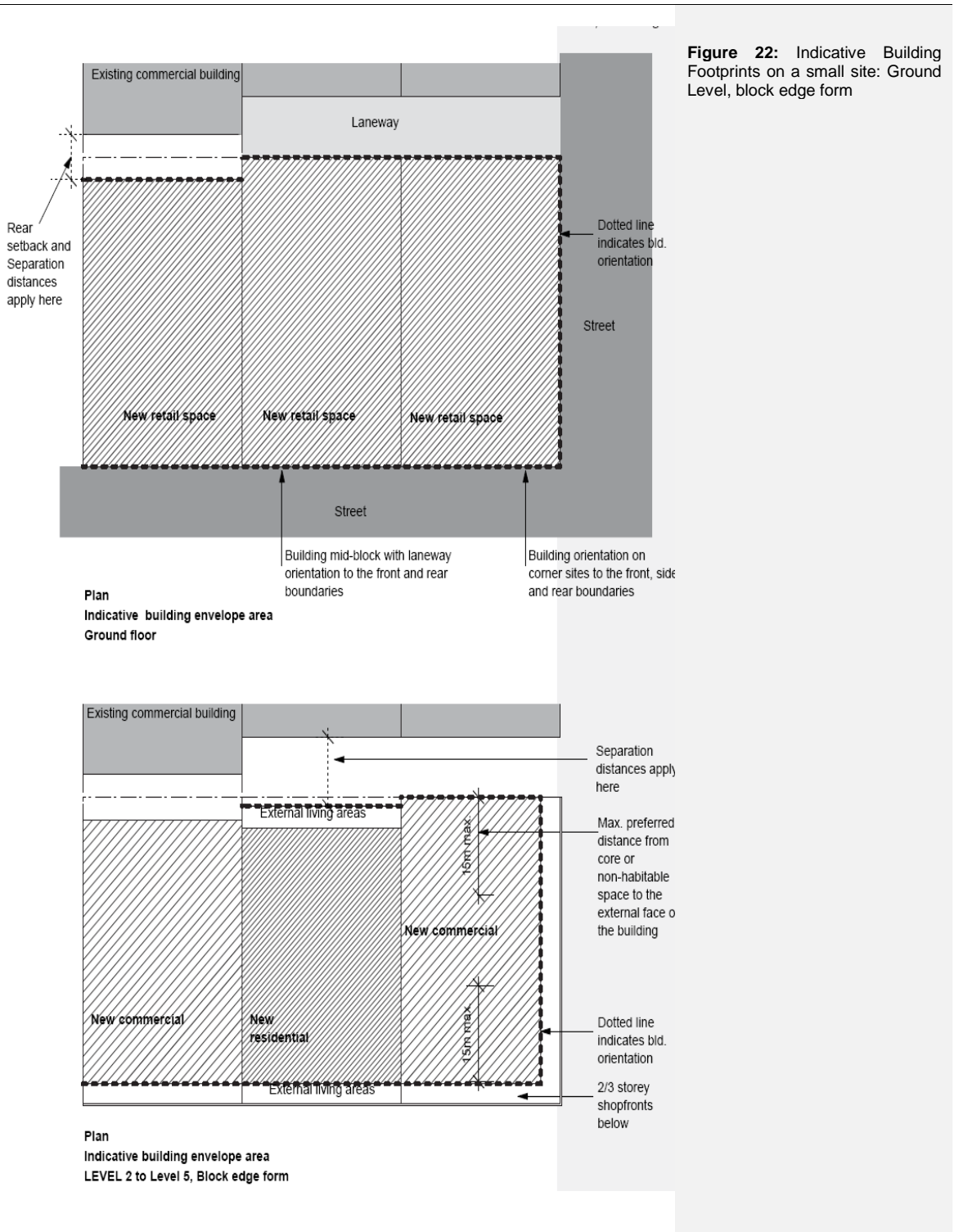
- (m) Residential tower buildings are to have dwelling depth no greater than 15m from a source of sunlight (not including service areas and non-habitable rooms).

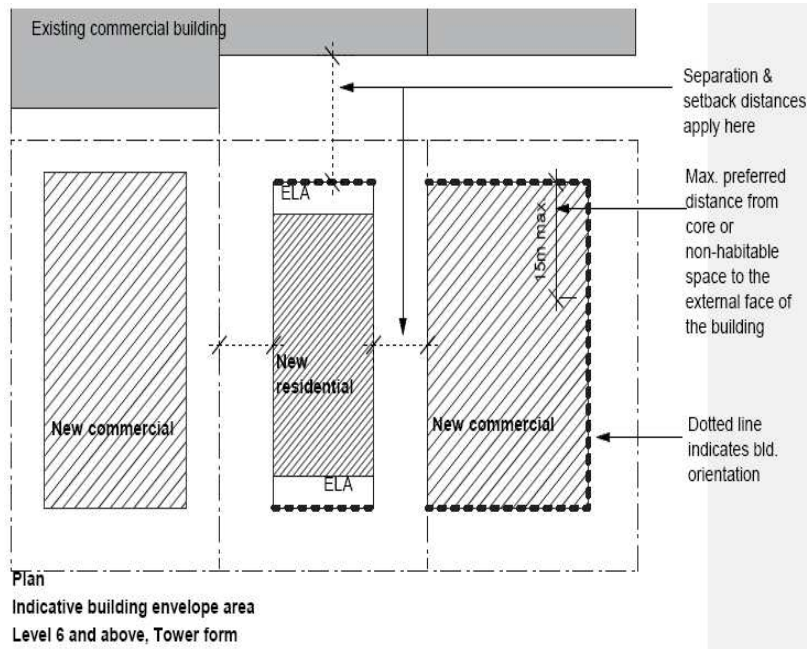
**Calculation rules**

*Building footprint depth refers to the dimension measured from the buildings front or street elevation to the back elevation (rear of the site). Building depth includes the internal plan depth of the dwelling; it does not include external living areas. Building footprint width is measured from side building elevation to side elevation. Building width is set by the width of the site minus the required side setback.*

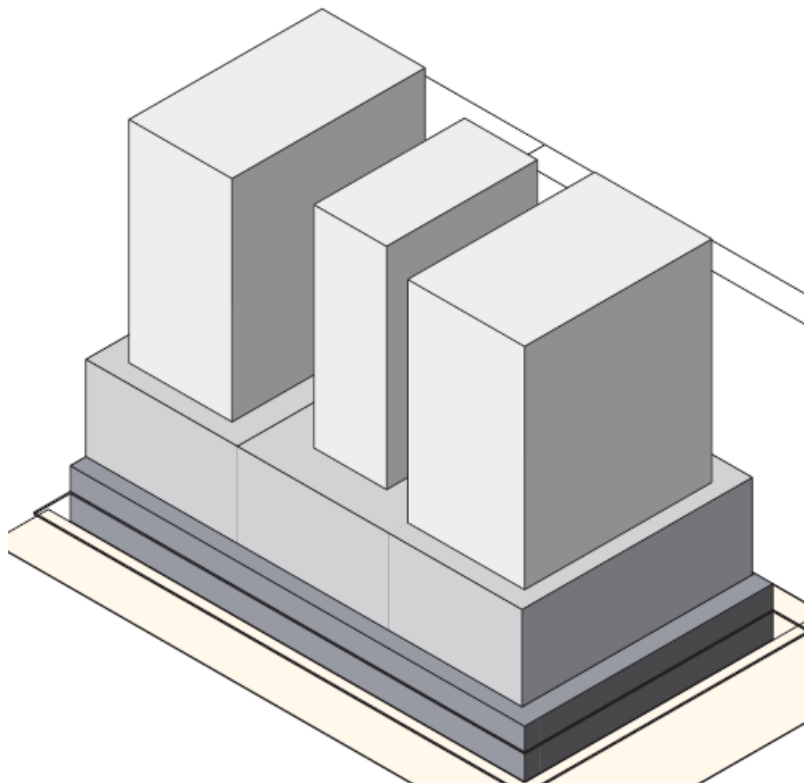
*Where buildings are not oriented to the street and the rear boundary then the footprint depth will be the dimension of the shorter axis. Mixed-use buildings may have a deeper ground level footprint to accommodate commercial uses with a narrower residential footprint above.*

*Some sites may have irregular site conditions such as topography or site shape. Such sites may require particular footprint design solutions that address such irregularities. For example buildings on narrow sites may require slender footprints to protect the amenity of neighbouring sites and to achieve the required setbacks. Sites on steep topography may require detached building footprints to account for the differences in grade.*





**Figure 23:** Indicative Building footprint on a small site: Tower Building Form



**Figure 24:** Indicative block 3D modelling of the three footprint components

## **2.11b Building Orientation**

Building orientation is a term used to describe the primary aspect of the buildings elevation containing the windows of the living areas of a dwelling and external living areas. The buildings orientation is defined in relation to the site boundaries.

Building orientation is essential in ensuring privacy and outlook for new buildings and to protect the amenity of neighbouring buildings particularly those with residential uses. Orientation is a key aspect in ensuring that new development adds to the streetscape in a positive way.

The established orientation of dwellings is to the front and the rear of lots. It is important that new development respect and replicate this pattern so as to fit within the established context. Locating the primary windows of living areas facing the street boundary and/or the rear boundary allows the side boundaries to have mainly windows to ancillary rooms. This allows the building to be located closer to the side boundaries where separation distances for ancillary rooms are not as stringent. By minimising the side setbacks this gives a great length to the front and rear elevations where distances between buildings are greater i.e. across streets and laneways, and therefore privacy and outlook are more easily achieved.

### **2.11b.1 Objectives**

- Easily achieving setback distances for privacy and outlook.
- Provide a frontage and clear entry facing the street.
- Avoid overlooking neighbouring dwellings.
- Prevent development from relaying on neighbouring lots for privacy, sunlight access or outlook.

### **2.11b.2 Controls**

- (a) Block edge building forms are to be oriented to and address the street(s).
- (b) It is desirable but not imperative to generally orient tower forms to the front and the rear of lots (refer also to Building Elevations).
- (c) Blank walls are not to front public streets.
- (d) Where possible orient bathroom, laundry and other ancillary room windows to the side boundaries.

#### **Calculation rules**

*Building orientation refers to the direction that the primary windows of living rooms and external living areas face.*

*Orientation to the front means that the primary windows of living rooms and external living areas face the street and are generally parallel to the front boundary.*

*Orientation to the rear means that the primary windows of living rooms and external living areas are generally parallel to the rear boundary.*

## 2.12 Number of Storeys

The number of storeys is a key control in this Part. It sets out the maximum number of levels allowed on each site whether the building is residential or commercial. Setting the number of storeys is important as it ensures that floor to ceiling heights are not minimised to fit the maximum number of levels into the overall building height as prescribed in the WLEP (Bondi Junction Centre) 2010. Adequate ceiling heights are important for light penetration, internal air movement and cross ventilation as well as to allow for innovative environmental approaches to heating, cooling and ventilation.

The number of storeys (levels) correlate with the desired future urban form for the centre as set out in the Introduction to the Urban Form Controls. They are also designed with regard for the existing built context, in particular to protect the amenity of surrounding low scale residential development including the Mill Hill area and the residential areas around Allens Parade. This includes:

- 2 to 3 storey - low scale on edges of Town Centre (Oxford Street West).
- 6 storeys - providing a block edge form throughout the centre to reinforce streets and provide a consistent base to tower forms (occurs throughout the BJC).
- 8 storeys - providing a transitional scale to ensure surrounding residential areas retain sunlight (eastern, western and southern edges of the Town Centre).
- High rise tower development (to the Centre and northern part of the Town Centre).

### 2.12.1 Objectives









- Ensure buildings create a human scale to the street.
- Encourage development and redevelopment potential.
- Reduce the incidence of high winds at street level.
- Provide a transitional scale between commercial and residential.
- Strengthen the Town Centre form with consistent heights along streets.

### 2.12.2 Controls

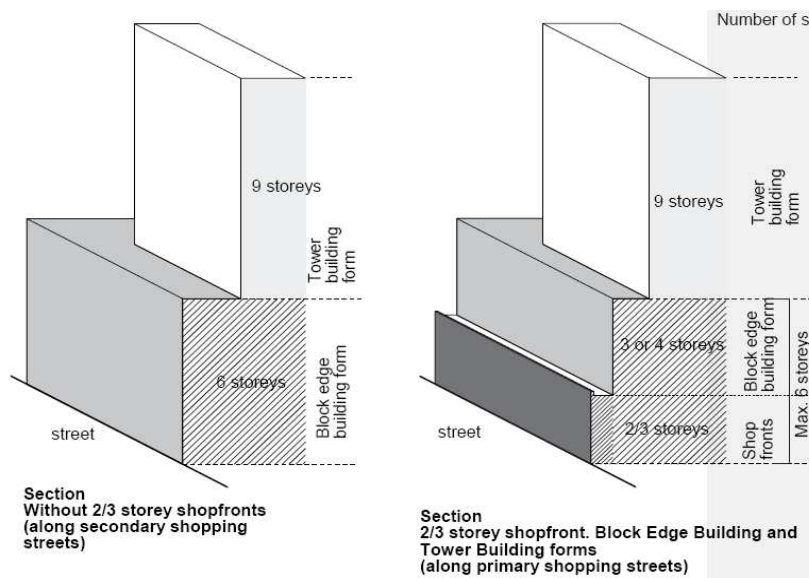
- (a) Refer to the WLEP (Bondi Junction Centre) 2010 for numeric heights. Proposals on some sites may result in less than the maximum numeric heights due to topography or other site conditions however proposals cannot have any more storeys than specified on Figure 25.
- (b) The maximum number of storeys is to be in accordance with Figure 26.
- (c) All public parks, including Clemenston Park are not to be overshadowed using the following standard: Less than 40% of the park should be in shadow between 11:00am and 3:00pm, at the winter solstice; less than 70% of the park should be in shadow between the times of 7:00am and 9:00am; and 4:00pm and 6:00pm, at the equinox.



**Figure 25:** Control Drawing Number of Storeys

-  2 storeys max.
-  3 storeys max.
-  4 storeys max.
-  8 storey max. - 6 storey block edge form with an additional 2 storeys over.
-  10 storeys - 6st block edge form with 4 storeys over.
-  16 storeys - 6st. block edge form with 10 storey tower over.
-  2 or 3 storey shopfronts along street.
-  Lots required to maintain solar amenity to neighbouring residential lots. 2 storeys to the rear of lots.





**Figure 26:** Control Diagram Number of Storeys

*Block edge building form*

- (d) Streets with heritage and buildings of historic character are to have 2 / 3 storeys (refer to Section 2.5).
- (e) Block edge building forms are to be 6 storeys (inclusive of the two or three storey shopfront).
- (f) The block edge form is to be setback from the street boundary as detailed in Section 2.7.

*Tower building forms*

- (g) Tower buildings can up to either 8 or 16 storeys (inclusive of the 6 storey block edge form) and located within the areas as identified on Figure 25.
- (h) Tower forms are to be set back from the street boundary as detailed in Section 2.7.

*Lots adjacent to surrounding residential lots*

- (i) Lots as identified on Figure 26 are to ensure they do not overshadow neighbouring or adjacent residential lots so as to preserve solar access to private open space in accordance with the solar access requirements as set out in Part G2.
- (j) Lots to the southern side of Ebley Street and Bronte Road are to drop to 2 storeys at the rear to achieve the sun light standards as set out in Part G2.



## **2.13 Views, Vistas and Tree Preservation**

Views from public spaces are an important aspect of the character of a place. Bondi Junction is located on a ridge which provides Bondi Junction with vistas of the Woollahra ridge slopes and Harbour Foreshore glimpses to the north down Newland Street and Bronte Road. To the south down these streets there are vistas of the suburbs of Queens Park, Randwick and Clovelly.

The most important views occur within Bondi Junction along its streets. These views are short to mid-range urban or town centre views and are contained by buildings and extend from one end of the street to the other. These views down streets give the overall visual quality of the centre and help to define and differentiate different places within the centre. As such they are intrinsic to the quality of the urban environment and are to be retained and enhanced in the future.

Each street has a different visual quality which is defined by building character and form when viewed from the street as well as the alignment and topography of the street. Streets with such views that require enhancement include: Oxford Street, Spring Street, Bronte Road and Newland Street. Other streets such as Ebley Street, Hollywood Avenue, Denison Street and Grosvenor Road also have important views and require enhancement. There are significant trees and vegetation within the BJC that require protection.

### **2.13.1 Objectives**

- Retain significant vistas.
- Recognise the importance of Town Centre or street views.
- Enhance views and vistas throughout the centre.
- Retain significant trees and vegetation.

### **2.13.2 Controls**

- (a) Retain vistas down Newland Street, Bronte Road and Grosvenor Street both to the south and the north in accordance with Figure 27.
- (b) No building or structure is to build into or on a street view corridor as defined in Figure 27.
- (c) Development proposals that open up significant vistas from the public domain will be encouraged, particularly north-south vistas.
- (d) Preservation is required for trees and vegetation that:
  - are more than 4m in height and a canopy spread greater than 4m;
  - have a trunk width more than 300mm (measured 1m above ground level); and
  - listed below:
    - 26 Llandaff Street, Bondi Junction: *Magnolia grandiflora*
    - 241 Oxford Street, Bondi Junction: *Magnolia grandiflora*
    - 6 Paul Street, Bondi Junction: *Phoenix canariensis*
- (e) Tree removal permits are available from Council's Planning Counter or by visiting Council's website.



### **3.0 BUILDING DESIGN CONTROLS**

#### **3.1 Design Excellence**

In considering whether development to which this clause applies exhibits design excellence, Council must have regard to WLEP (Bondi Junction Centre) 2010.

Consent must not be granted to a new development or significant alterations and additions to an existing development in the B3 Commercial Core or B4 Mixed Use zone unless a Design Review Panel or equivalent panel has reported in relation to the proposed development:

- (i) In determining a development application to which sub-clause (5) applies, Council must take into account the report of the Design Review Panel; and
- (ii) In this clause, Design Review Panel means a panel comprising of experienced urban design, architecture or planning professionals.

#### **3.2 Building Elevations**

Building elevation design refers to the three dimensional modelling and detailing of the external wall surfaces of a building. Well designed building elevations establish the building's identity in the street and contribute to the centre as a whole. It is important that the elevations are designed to respond to the internal layout of the building and address environmental conditions and the relationship between internal and external spaces as well as to create memorable and beautiful streets.

On the lower levels of the building elevations are to be shopfronts with a high degree of visual connection between inside and outside. On higher levels of the building elevations are designed to respond to environmental conditions including sunlight access/shading, wind mitigation, noise, breezes, privacy and views which all influence the design of building elevations through the appropriate use of sun shading devices, noise barriers, privacy screens, balconies, terraces and like. On commercial levels between Ground and Level Five, stairs linking these levels can be visible and accessible from the street and provide an alternative means of accessing levels above ground whilst still providing an address or entry to the street.

Public art in a private development can help to give the building a better identity and read the history and significance of the place more readily. Public art can help to visually improve the public domain and communal spaces such as entry areas and other circulation spaces.

##### **3.2.1 Objectives**

- Encourage design excellence in elevation design.
- Promote high architectural quality in buildings.
- Create buildings which respond to environmental conditions.
- Reduce reliance on mechanical heating and cooling.
- Improve visual quality of communal spaces and public places.

### 3.2.2 Controls

- (a) All elevations must be architecturally designed and contribute to the street in which they are located.
- (b) Design building elevations which incorporate the principles of passive design and the properties of thermal mass, glazing and insulation, to reduce the need to artificially heat or cool. Provide openable windows to living and working environments.
- (c) Facades are not to be totally flat but rather to have relief modelling (refer to Figure 28).

#### *Ground Level Building Elevations*

- (d) The ground level building elevation may not vary more than 300mm deep from the alignment to the front boundary. Where this variation occurs it is to be used to express the access into the premises and the relief modelling of the facade.

#### *Level 1*

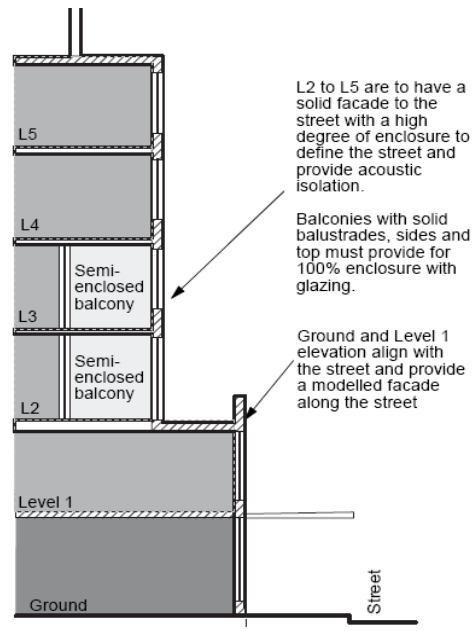
- (e) Elevations are to be composed of a solid wall with punched openings. The solid wall is to have relief modelling (refer to Figure 28). The horizontal proportions of the facade must relate to the ground level shopfronts. Facades can have an openness ratio of up to 35% of one bay of a facade, the remaining 65% must be solid.

#### *Level 2 to Level 5*

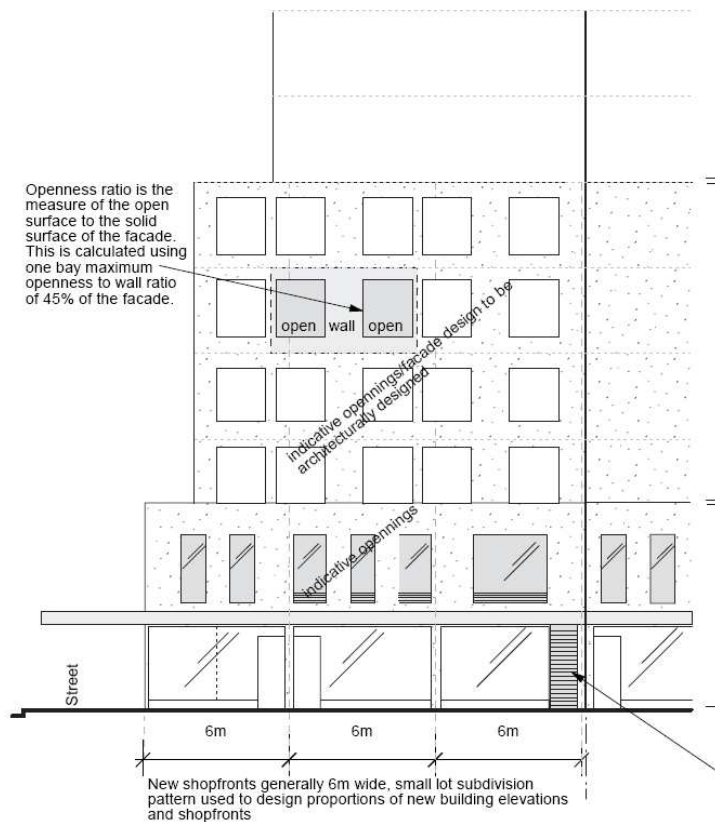
- (f) Elevations are to be composed of a solid wall with punched openings (refer to Figure 29). The horizontal proportions of the facade must relate to the ground level shopfronts.
- (g) Elevations from Level 1 to Level 5 are to be built parallel to the street boundary. Building facades can have an openness of up to 45% of one bay of a facade, the remaining 55% must be solid (refer to Figure 29). Elevations cannot have open balconies. As a minimum the balustrade, side and top of the balcony opening must be part of the solid facade.

#### *Above Level 5*

- (h) The maximum unarticulated wall length is 25m<sup>2</sup>.
- (i) Use solar protection elements appropriate to north facing facades such as awnings, deep reveals, roof overhangs.
- (j) Use solar protection elements appropriate to east or west facing facades such as external louvers, shutters, screens. These may be used in conjunction with awnings, deep reveals, roof overhangs.



**Figure 28:** Control Diagram Façade Section



**Figure 29:** Control Diagram Elevation

The tower component of buildings can be highly individual in character.

The block edge form has a maximum openness to wall ratios of 45% of the façade.

Elevations are to relate to the shopfront grid.

Elevations are to create a solid façade to the street and have semi-enclosed balconies facing to the street.

Elevations cannot have open balconies.

Gnd / L1 are to have a solid façade with punched windows.

Second Level retail, cafes restaurant uses are encouraged.

Shopfronts line the streets are to be designed on a regular grid

This part of the building is to have a flat façade with both levels vertically in line.

Stairs visible from the street can provide direct physical and visual access to second level uses.

### **3.3 Public Art in the Private Domain**

Public art in the private domain is a mechanism to demonstrate key themes and values of the community as integrated into the design of a development. These themes are identified pursuant an analysis of the site, its context and delivered within a development application.

Council encourages applicants to participate in the program where an application is submitted within the B3 Commercial Core Zone and B4 Mixed Use Zone for major alterations and additions or a new development (refer to Public Art in the Private Domain Guidelines).

#### **3.3.1 Objectives**

- (a) Encourage high quality artworks and the integration of art into development;
- (b) Increase visual and other sensory experiences within development for the communities sense of place;
- (c) Increase identifiable textures, character and designs as appropriate to the area within private domain spaces through the introduction of public art and architectural design within development; and
- (d) Increase public art in the area for greater community cohesion and understanding of the history, culture and place.

#### **3.3.2 Controls**

- (a) Provide high quality artworks and the integration of art into development in publicly accessible locations, particularly main entrances, street frontages and lobby areas.
- (b) Ensure art is sensitive, reflective and demonstrative of the community to provide creative expression and character in development.
- (c) Ensure public art is integrated into the architectural integrity of a development.

### **3.4 Awnings and Colonnades**

Awnings increase the usability and amenity of public footpaths by protecting pedestrians from sun and rain. They encourage pedestrian activity along streets and, in conjunction with active edges such as retail frontages, support and enhance the vitality of the local area. Awnings provide an interface within the public domain contributing to the identity of a development. Awnings are encouraged in order to define the edge of the footpath and reduce the apparent visual bulk of the building. Awnings may not be appropriate for heritage sites. Colonnades are not appropriate in BJC as they do not fit with the existing character of the centre.

#### **3.4.1 Objectives**

- Provide shelter for public streets thus minimising the adverse effects of rain, strong winds, summer sunlight and reflectivity.

### 3.4.2 Controls

- (a) Ensure that awnings provide protection from sun and rain in street (refer to Figure 30).
- (b) Colonnades are not permitted.
- (c) Providing awnings on buildings as indicated in the Control Drawing; Awnings.
- (d) Awnings should have consistent heights above the footpath with a minimum height between the footpath level and underside of awning of 3.1m. Extend across the width of the footpath to within 0.6m of the kerb line. Awning height is to be in the range 3.2 - 4.2m (clear soffit height), the face is to be horizontal.
- (e) Complement the height, depth and form of existing awning where they occur in the street.
- (f) Stepped rather than sloping awnings are discouraged.
- (g) Locate awnings over building entries.
- (h) Provide under-awning lighting.
- (i) The colour of awning fascias is to be consistent along the street.





### **3.5 Building Renovation Opportunities**

The renovation of buildings in BJC is strongly encouraged. There are many buildings that could benefit from the redesign of the first, second and even third levels. This occurs particularly where buildings present a blank wall to the street or laneway, have carparking against the street or laneway or other uses that do not provide an active frontage to the street. This occurs particularly on the larger strata developments on Spring Street, Grafton Street, Hollywood Avenue, Newland Street and all laneways. There is the opportunity to renovate the facades of buildings to both improve the environmental performance of the building and to improve the appearance of the building. The ground level of the building provides significant opportunities for new shops, offices and other commercial uses that can provide active frontages.

#### **3.5.1 Objectives**

- Achieve active frontages along all streets.
- Provide more retail space at street level.

#### **3.5.2 Controls**

- (a) Renovation of the ground level of buildings are to have retail or commercial frontages in accordance with Section 2.2 to 2.7.
- (b) Building renovations are to implement the controls in all Sections of this Part.

### **3.6 Open Spaces at the Street Front**

The built form within the centre is to be built to, align with and reinforce the street edge. This is to ensure that BJC streets are lined with shop windows, doors to create vibrant and busy street frontages. Buildings that are setback from the street alignment can reduce the appearance and activity on the street therefore generally open spaces at the street front are not allowed.

However a new open space as a forecourt to a public building such as a library, a performance space or a community hall may be considered if carefully designed to ensure the space is pedestrian friendly, adds to the quality of the public domain and is strategically located to enhance pedestrian connections within the centre. Generally open spaces that do not receive good solar access will be more useable if enclosed but with a high level of visual connection i.e. by using glass.

#### **3.6.1 Objectives**

- Retain a consistent alignment along streets.
- Retain and increase activity on the street front.

#### **3.6.2 Controls**

- (a) New open spaces on the street front for private buildings are not suitable for Bondi Junction.
- (b) New open spaces on the street front for public buildings may be

considered if they meet the following controls:

- (i) New open spaces require active frontages along all the built sides of the space.
- (ii) Logical and functional pedestrian connections through and beyond the space are to be provided.
- (iii) Clear sight lines into and throughout the space.
- (iv) The space must be accessible and useable to the public.
- (v) Public open spaces must not be located on block and street corners, and must be a min. of 10m from a corner.

### **3.7 Designing Buildings for Flexibility**

Flexible buildings are designed for durability and are capable of serving a variety of uses. Buildings, particularly on the lower levels can be designed to be equally capable of accommodating residential or commercial uses. This allows the Centre to retain its capacity to expand its commercial floor space easily as demand increases in the future.

#### **3.7.1 Objectives**

- Improve the quality of the built environment and apply sustainable practices.
- Encourage the design of low energy consumption, durable, flexible, adaptable buildings.
- Promote the design robust buildings to allow flexibility over time, for conversion between residential and commercial uses.

#### **3.7.2 Controls**

- (a) Design the block edge component of buildings (Levels 3 to 5) to permit adaptation for other future uses, with minimal structural and service alteration by:
- (b) Concentrate service elements such as fire stairs, air conditioning units, service risers, toilets, kitchens and the like located together to allow larger free floor plate areas.
- (c) Design service areas and risers generously to make them readily accessible and capable of additional capacity.

### **3.8 Ceiling heights**

Higher ceilings can create better proportioned internal spaces, better air movement and greater sunlight penetration. Generous ceiling heights are particularly important in buildings with small, deep rooms or in rooms that have little sun penetration such as those facing south, this can help reduce the need for mechanical heating and cooling. On commercial levels; particularly the ground floor, higher ceiling are required to allow room for services such as air-conditioning as well as to help light penetrate further into the buildings.

#### **3.8.1 Objectives**

- Maximise heights in habitable rooms by stacking wet areas from floor to floor.
- Encourage use of taller, highlight windows and fan lights.

- Coordinate internal ceiling heights and slab levels with external height datum lines, e.g., datum and parapet lines set by surrounding existing buildings.
- Increase the sense of space in rooms and provide well proportioned rooms.
- Promote the penetration of daylight into the depths of buildings.

### **3.8.2 Controls**

- (a) Ground Level: 4.0m minimum floor to floor.
- (b) Level 1 to Level 5: 3.5m minimum floor to floor.
- (c) Above Level 5, commercial uses: minimum 3.5m floor to floor.
- (d) Above Level 5, residential uses: refer to Part D2.

### **3.9 External Living Areas**

External living area is space that extends the internal space of the building, particularly living areas. External living areas are generally paved or decked and may be covered. An external living area is part of the private outdoor recreational and relaxation space for a dwelling. External living areas can take the form of terraces, decks and the like and can be located either on ground or above ground. Small balconies and similar structures from bedrooms are not considered external living areas.

External living areas should not adversely impact on the amenity of neighbours. The location of the external living area needs to be carefully considered with regard to achieving privacy. The location of external living areas can assist in controlling sun access by promoting daylight access in winter and shade in summer. External living areas are to avoid facing the side boundaries as this causes privacy problems for neighbours.

#### **3.9.1 Objectives**

- Provide an external living area for each dwelling.
- Enhance the amenity of internal living spaces.

#### **3.9.2 Controls**

- (a) An external living area is to be provided for each dwelling.
- (b) External living areas are to be located adjacent to the internal living area so that they extend the internal ground level living spaces.
- (c) External living areas are to have a minimum size of 12m<sup>2</sup> and a minimum dimension of 2.5m.
- (d) External living area is to be screened to achieve visual privacy if located less than 4m from a side boundary.
- (e) The roof of developments can be used to extend external living areas.
- (f) External living areas are to be:
  - located adjacent to the main living areas, such as living room, dining room, kitchen to extend the dwelling living space,

- sufficiently large and well proportioned to be functional and promote indoor/outdoor living to fit a dining table and our chairs.

### 3.9.3 Design Guidelines

Detail and design balconies or terraces in response to the local climate and context, thereby increasing their usefulness. This may be achieved by:

- locating balconies and terraces facing predominantly north or east, utilising sun screens, shutters and operable walls to control light and wind,
- providing balconies or terraces with operable screens, Juliet balconies or operable walls/sliding doors with a balustrade may be preferable in special locations where noise or high winds prohibit other solutions,
- choosing cantilever balconies, partially cantilever balconies and/or recessed balconies in response to daylight, wind, acoustic & visual privacy,
- design balustrades to allow views and casual surveillance of the street while providing for safety and visual privacy. Design considerations may include;
- detailing balustrades using a proportion of solid to transparent materials to address site lines from the street, public domain or adjacent development (full glass balustrades do not provide privacy for the balcony or the dwelling interior),
- detailing balustrades and providing screening from the public, e.g., for a person seated looking at a view, for clothes drying areas, bicycle storage and air conditioning units. Coordinate and integrate building services, such as drainage pipes, within the overall facade and balcony design. Secondary balconies (including Juliet balconies or operable walls with balustrades) may be provided to increase residential amenity and dwelling choices, in larger dwellings, adjacent to bedrooms.

### 3.10 Wind Mitigation

BJC experiences a high frequency of natural wind currents, mainly as a consequence of its location and landform being located on a ridgeline and close to the highest point in the Sydney area south of the Harbour. The ridgeline at this point takes the form of a saddle, with its centre at Newland Street, between Oxford Street and Spring Street. From this central point the land rises up gently towards east and west, and drops down rather more steeply towards north and south. This geographical disposition results in the area being highly exposed to oncoming winds. BJC's proximity to the waters of Sydney Harbour and the South Pacific Ocean also plays an important role in wind conditions, mainly by influencing wind directions during the day and throughout the year.

In the morning the prevailing winds come from the west and north-west. This is with the exception of the warmer months of the year, October to March, when the prevailing winds come from north-east through to the south directions. In the afternoon, the wind's direction is somewhat reversed, as the prevailing winds come from north-east through to the

south directions, with the exception of the winter months, when the prevailing winds come mainly from the south and west directions. The strongest winds normally come in the form of southerly storms, which occur throughout the year and with greater frequency during the summer months. Wind storms that occur in the mornings tend to be dominated by the south direction, whereas in the afternoons the strongest winds tend to occur from both the south and north-east directions. Strong winds can also occur from other wind directions but are much less frequent.

As the wind speed and turbulence increase, so does the degree of discomfort. For example, winds at a speed of 5m per second create a feeling of discomfort, wind gusts of 10m per second become unpleasant, while at 16m per second gust wind speeds create inconvenience when walking. A wind speed of 23m per second could make a frail person fall to the ground. Sudden changes in wind speed or direction will further increase the feelings of discomfort and levels of danger mentioned above.

### 3.10.1 Objectives

- Mitigate the effects of strong wind at street level.
- Ensure wind does not preclude the functioning of the Town Centre's key uses.

### 3.10.2 Controls

- (a) Buildings shall not create uncomfortable or unsafe wind conditions in the public domain which exceeds the Acceptable Criteria for Environmental Wind Conditions. Carefully locate or design outdoor areas to ensure places with high wind level are avoided.
- (b) All applications for buildings over 5 storeys in height shall be accompanied with a wind environment statement. For buildings over 9 storeys and for any other building which may be considered an exposed building shall be accompanied by a wind tunnel study report (refer to Annexure F1-1).

#### *Calculation rules*

*Natural wind conditions are intensified by certain types of buildings by the way they relate to the surrounding area. In this section, those buildings are called exposed buildings.*

*A building may be considered exposed if half or more of its height rises above surrounding buildings and/or the building lies on the perimeter of a built up area. Exposed buildings are likely to create unpleasant and even dangerous high winds, mainly in three locations: at the base, around corners or through arcades or other openings at the base of the building.*

*In addition the areas within the exposed buildings that could potentially experience adverse wind effects are the areas on the podium, terraces on the roof or on setbacks in the tower as well as projecting or corner balconies.*

**Acceptable criteria for environmental wind conditions**

Area Classification	Limiting Weekly Maximum Gust-Equivalent Mean	Limiting Annual Maximum Gust
Outdoor dining areas, amphitheatres etc	3.5m/s	10 to 13m/s
Main retail centres such as Oxford St Mall, parks, communal recreational areas such as common swimming pool on the podium	5.5m/s	13m/s
Footpaths and other pedestrian access ways	7.5m/s	16m/s
Infrequently used laneways, easements, private balconies	10m/s	23m/s

Note: Gust-Equivalent Mean is defined as the maximum 3 second gust divided by a local Gust Factor for the local wind speed. It is recommended that the local gust factor be derived from the measured local turbulence intensity. If the mean wind speed happens to be greater than the Gust-Equivalent Mean then the Mean wind speed is to be adopted in place of the Gust-Equivalent Mean.

The Annual Maximum Gust wind speed criteria can be used as an alternative to the Gust-Equivalent Mean Criteria. If the Gust-Equivalent Mean criteria are being used then a check should also be made to ensure that all areas studied are within the Annual Maximum Gust wind speed of 23m/s.

When assessing the impact of a proposed development, no increase over the existing wind conditions is acceptable unless the increase over the existing conditions is such that the relevant criterion for that type of space is still satisfied.

**3.11 Reflectivity**

Reflection of light from the sun off the external surface of buildings can create uncomfortable and unsafe glare for pedestrians, drivers and occupants of other buildings, and reduce the amenity of streets, parks and other public or private spaces. For a building where all the reflecting surfaces are vertical, this effect is most pronounced when the sun is at low altitudes.

**3.11.1 Objectives**

- Mitigate adverse glare from reflective surfaces on street level.
- Ensure reflectivity does not preclude the functioning of the Town Centre's key uses.

### 3.11.2 Controls

- (a) Development shall be designed and sited to minimise adverse solar reflection. Limit the use of large areas of glass in facades to a maximum of 60% of the façade surface area.
- (b) Introduce as much diffuse reflective or matt surfaces into facades as possible.
- (c) Shade glass areas with horizontal, vertical or diagonal shading devices. Avoid the use of reflective glass.
- (d) Façade treatments containing large areas of glazing, even of quite low reflectivity, are to be avoided.
- (e) Reflected solar glare on drivers should not exceed 500 candelas / m<sup>2</sup>. A candela is the base unit for measuring the intensity of luminance under the International System of Units (SI).
- (f) Mirrored glass and other highly reflective materials should not be used on building exteriors. To minimise potential impact on pedestrians and occupants of neighbouring buildings all panels and elements on vertical façades are to have a maximum specular reflectivity of visible light from normal angles of incidence of 20%. Any surface inclined by more than 20 degrees to the vertical (inclined glass awnings or cladding on inclined roofs) are to have a maximum specular reflectivity of visible light from normal angles of incidence of 10%.
- (g) All applications for buildings which incorporate large areas of glazing (either clear or highly reflective) in external surfaces above ground floor level must be accompanied by a solar reflectivity report prepared by a suitably qualified consultant (refer to Annexure F1-1).
- (h) The above mentioned limits may need to be further reduced depending on the outcome of the analysis by the Reflectivity consultant of the impact on drivers' visibility.

### 3.12 Green Star Environmental Rating Scheme for Buildings and BASIX

The basis for achieving sustainable building design is embodied and imbibed throughout the controls contained in this part. Technical information and guidance on building design is to be sought from the Green Building Council of Australia which relates to commercial buildings and the SEPP (building sustainability index - BASIX) 2004 or BASIX which relates to residential buildings.

The Green Star Environmental Rating Scheme for Buildings has been developed and is managed by the Green Building Council of Australia (GBCA) to provide industry with an objective measurement for sustainable building design for commercial buildings. The rating scheme is designed to encourage sustainable principles from the design stage of a development to construction and occupation.

The Green Star Rating Scheme and BASIX both aim to encourage the design and development of buildings in order to promote sustainable development and the transition towards sustainability by promoting green building technologies, design practices and operations which has been an ongoing vision for the Bondi Junction Centre.

### 3.12.1 Objectives

- Reduce greenhouse emissions and energy consumption.
- Reduce environmental impact during construction activities.
- Promote integrated, whole building design.
- Identify building life-cycle impacts.

### 3.12.2 Controls

- (a) New commercial buildings are to achieve a minimum 4 star Green Star Rating.

### 3.12A Sustainable Building Design

This section provides a framework for the implementation of environmentally sustainable design principles in development throughout the Bondi Junction Centre. Technical information and guidance on sustainable building design is to be sought from the Green Building Council of Australia (GBCA) and the Australian Building Greenhouse Rating Scheme (ABGR) (refer to [gbcaus.org/greenstar](http://gbcaus.org/greenstar), [nabers.com.au/](http://nabers.com.au/) and [abgr.com.au](http://abgr.com.au)).

#### 3.12A.1 Objectives

The objectives of these controls are to:

- provide a comprehensive set of sustainable building development guidelines and requirements to assist development applications;
- increase the application of sustainable building development principles and promote renewable energy sources and materials in the BJC; and
- ensure that future development minimises the adverse impacts on the environment, reducing the use of resources, amount of pollution and waste.

#### New Commercial Development

#### 3.12A.2 Controls

New commercial buildings with a net lettable area of 1000 square metres or more must achieve the following:

- (a) A minimum 4 star Green Star Certified Rating in accordance with the Green Star Office Design Assessment tool;
- (b) A minimum 4.5 star rating under the Department of Environment and Climate Change's (DECC) ABGR scheme;
- (c) Additional floor space will be considered where the development can demonstrate environmental sustainability excellence. For consideration of additional floor space, a minimum 5 Green Star GBCA or that which exceeds the current best practice rating should be provided; and
- (d) Prior to being issued a Construction Certificate, a completed Commitment Agreement is to be submitted to Council and an



Independent Energy Assessment Report is to be submitted to DECC.

### **Commercial Refurbishment**

#### **3.12A.3 Controls**

New commercial buildings undergoing a refurbishment with a net lettable area of 1000 square metres or more must achieve the following:

- (a) A minimum 4.5 star rating under the DECC ABGR scheme;
- (b) Prior to being issued a Construction Certificate, a completed Commitment Agreement is to be submitted to Council and an Independent Energy Assessment Report is to be submitted to DECC; and
- (c) A development application is to include an ESD Design Statement prepared by an Accredited Professional. The Statement must demonstrate how the proposal achieves the sustainable design principles and ABGR ratings by:
  - (i) entering into a Commitment Agreement with DECC to deliver the star rating for the base building, or for the whole building where there is to be one tenant to occupy the whole building. A Commitment Agreement means an agreement must be set out in accordance with DECC's ABGR Commitment Agreement;
  - (ii) Providing a copy of the Independent Energy Assessment Report to DECC following the current guidelines in DECC's ABGR Design Energy Efficiency Review and Energy Efficiency Design Review. Star rating refers to the benchmarking system applied by DECC for measuring the energy efficiency and known as the ABGR Scheme; and
  - (iii) Tenancies means office space within a building covering tenant light and power. This may include tenancy air conditioning if this has been installed to service particular tenant loads, but does not include central services.

#### **3.13 Community Crime Prevention**

Crime Prevention through Environmental Design (CPTED) seeks to encourage the design and management of the built environment to reduce the opportunity for crime. Refer to Section 6.0 of part D2 for controls.

#### **3.14 Roller Shutters**

Roller shutters are sometimes introduced as a precautionary measure, to protect glass shopfronts from anticipated damage resulting from break and enter, but they can be damaged and defaced, as a reaction against what is perceived to be part of a harsh environment.

The introduction of roller shutters, particularly along Oxford Mall, can transform this type of space into a neutral, alien environment for its users. Window shopping, and hence the legitimate presence of people on the street after hours, is discouraged when window display shopfronts are replaced with roller shutters. A well lit shopfront which

openly and honestly displays the internal parameters of the shop will be less of an incentive to vandalism and provides visual security against intruders who attempt to gain entry.

#### **3.14.1 Controls**

- (a) Roller shutters on shopfronts are prohibited.
- (b) Roller grilles on standard shopfronts are discouraged.
- (c) Applications involving a change of use of retail premises shall be required to retain or reinstate the window shopfront.
- (d) Where the nature of the proposed retail activity does not warrant a window shopfront display, the Council may instead give consideration to folding or sliding glass doors. Consider incorporating expanding security doors and grilles behind the display. These can be custom built to meet specific requirements, and when folded away during trading hours, require an absolute minimum area of retail floor space.

### **3.15 Outdoor Advertising Signs and Structures**

#### **3.15.1 Objectives**

- (a) General character and attractiveness of the streetscape;
- (b) Architectural integrity of the subject building and adjacent buildings;
- (c) Amenity of any adjacent non-commercial or residential uses;
- (d) Safety of pedestrians and traffic; and
- (e) Harmony with other features, having particular regard to the size and juxtaposition of other signs in the immediate vicinity.

#### **3.15.2 Controls**

- (a) Signage should relate to the use of the building on which it appears and be designed to complement the established streetscape character, views and vistas identified in this Part.
- (b) Design and Location: Features of the architecture of the building shall be considered in the design of the advertising sign or structure. Signs should not obscure decorative forms or moulding and should observe a reasonable separation distance from the lines of windows, doors, parapets, piers, and the like.
- (c) Proportion: Signs should be of a size and proportion which complement the scale of the existing façade, as well as surrounding buildings and signs. The design scale of lettering should be proportioned to the area of the panel to which it will be applied.
- (d) Colour: The colour used in the design of an advertising sign or structure should complement the colour finish of the building to which it will relate. Corporate colours should be limited to the advertising sign or structure, and should not be applied to the painted surface of the building. Careful consideration should be given to the use of illuminated red, green and amber colours in proximity to signalised intersections, to avoid the likelihood of motorist misinterpretation.
- (e) Illumination: Illumination of signs by floodlighting is preferable over the use of boxed fluorescent or neon lighting on buildings

and place of architectural significance. Floodlit illumination can also highlight the features of such buildings. The use of neon tubing to highlight the features of any building will not be permitted. For top hamper signs, consider using neon or skeletal backlit signage in preference to boxed fluorescent signs to help soften the impact of the sign and to complement the shop façade. Illuminated signage on buildings exceeding eight storeys can be viewed from the Harbour. Notwithstanding its regional significance, it is not intended that Bondi Junction compete with the established illuminated skylines of the City of Sydney or North Sydney. Any corporate advertising on the Bondi Junction skyline should only be for the purpose of serving the immediate region.

- (f) Number of Signs: The number of proposed signs per building or site shall take into account the following:
- (i) The number of existing signs on the subject premises;
  - (ii) The proportion of solid (wall surface area) to void (window and door openings) available for signage;
  - (iii) The length of frontage to the premises; and
  - (iv) The extent of façade detail and projecting features of the building which should remain unobscured by signage.

### 3.15.3 Specific Controls

- (a) Under awning signs, both illuminated and non-illuminated, shall:
- (i) Have maximum dimensions 1800mm x 300mm;
  - (ii) Be erected in a horizontal position at right angle to the building façade;
  - (iii) Have a minimum clearance of 2650mm above the footpath;
  - (iv) Be separated by at least 3000mm from other under awning signs; and
  - (v) Be setback 600mm from the footpath edge.
- (b) Top hamper signs:
- (i) May project up to 100mm from the building façade;
  - (ii) Minimum clearance of 2130mm above ground level;
  - (iii) Shall have dimensions proportionate to the size of the top hamper fascia;
  - (iv) Shall not exceed 600mm in height, with a maximum length of 4000mm;
  - (v) Shall be restricted to one sign per premises, unless the Council considers the buildings frontage sufficient to accommodate more than one such sign;
  - (vi) Should allow a proportion of the wall surface area of the top hamper to be exposed; and
  - (vii) Shall be set back 600mm from side boundaries to satisfy fire regulations.
- (c) Window shopfront Signs – Window shopfront signs, particularly those using fluorescent in iridescent paints, shall be temporary in nature, and shall not cover more than 60% of the window surface area.
- (d) Awning Fascia Signs – Awning fascia signs shall be part of the awning and not illuminated. They should not project above or below the awning fascia. Sign writing shall be limited to the street number, name and general nature of the business.

- Product identification on awning fascias is not permitted. Where a building comprises a number of tenants, such as in an arcade, the awning fascia should identify the name of the arcade only.
- (e) Flush Wall Signs – Opportunities may exist for flush wall signs on the blank side or rear walls of some buildings, provided that:
    - (i) The commodities or services advertised are sold within the premises to which the sign is affixed or painted;
    - (ii) The total area of signage is no greater than 4.5m<sup>2</sup>; and
    - (iii) The number of such signs is limited to one only.
  - (f) Above Awning Signs – These may be permitted above awning height on buildings of traditional design which incorporate a place for an advertising panel (generally at parapet height). The content of the sign should relate only to the business name or services provided.
  - (g) Building Identification Signs – These should be located at building parapet height, for the purpose of identifying the building. They will be permitted where, in Council's opinion, there is sufficient wall surface area to display the sign, and where the sign is proportionate to the façade area, and appropriate to the design and decoration of the building. Where the building comprises a number of tenants, only one identification sign will be permitted to identify the building or the principal tenant. Such signs shall only be permitted where that tenant occupies floor space above awning level. Building identification signs should be positioned at the local point of the building façade, generally central to the top parapet, and shall not project by more than 300mm from the wall. They shall be integrated with the character and form of the buildings and shall not alter its roofline.

#### 3.15.4 General Matters

- (a) The following will not be permitted:
  - (i) Wall signs projecting more than 300mm from the wall.
  - (ii) Flashing or moving signs.
  - (iii) Advertising on display window piers or below the display window sill/kick plate.
  - (iv) Sky, roof, or fin signs.
  - (v) The display of bunting, banners, canvas, or fabric signs.
  - (vi) Inflatable signs and the like.
  - (vii) Advertising on garbage bins, telegraph posts, telephone booths, or other surfaces of a public nature.
  - (viii) Any sign which in Council's opinion, would adversely affect the operation of traffic lights, motorists or obstruct their vision.
  - (ix) Third party advertising.
  - (x) A-Broad (sandwich boards).
  - (xi) Advertising on canvas shade blinds.
- (b) Council may give consideration to temporary advertising in the form of bunting, banners, inflatable or canvas signs for special events provided that the temporary display period does not exceed four weeks.

(Note: Council does not favour and will not approve third party advertising. In accordance with the requirements of clause 3.15.2(a)

signage must relate to the use of the building or land it is on. Council has always held the position to prohibit third party advertising and will continue to do so.)

#### **4.0 ACCESS AND MOVEMENT**

##### **4.1 Introduction**

Access to and movement through the centre is a key determinant of a busy and vibrant place. The centre is well located on a train stop which generates a significant amount of pedestrian traffic into the centre. Car access is also important to the centre with some parts of the centre being more easy to access and gain parking in than other therefore making them for a convenience shopping experience.

This Part is to ensure Bondi Junction's street and laneway reserves (refer to Figure 32) remain in public ownership, remain interconnected and provide for movement at street level as street or laneway closures exacerbate inaccessibility and work against the economic and development growth of the centre.

This Part provides direction on the location and type of new links that are to be provided mid-way through large blocks to provide a fine grain pedestrian network linking between streets and where possible new mid-block laneways to encourage more continuous active street frontages free from car park entries, loading bays and ramps. This part ensure that private developments do not diminish the streets and laneways at ground level as the primary civic, commercial and retail space of the centre by ensuring that pedestrians are not redirected into underground tunnels or overhead walkways. This Part provides information on vertical circulation spaces that extend the street in a vertical direction to provide direct visual and physical access to premises located on level above ground level.



## **4.2 Arcades, Through-Block Links and Squares**

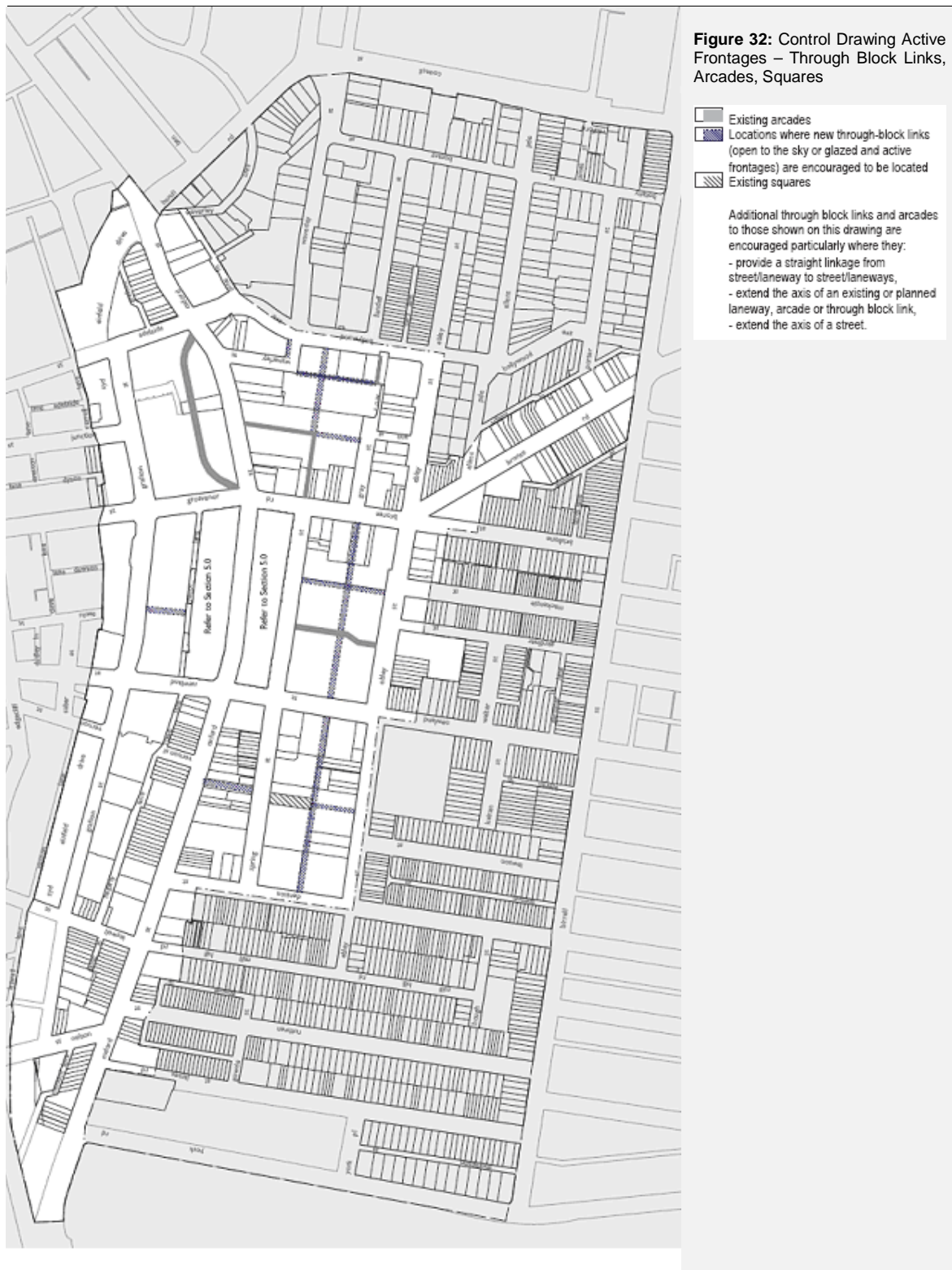
Arcades and through-block links are small scale pedestrian routes that provide a more direct or shorter path from one street to the next. Arcades have enclosed roofs whereas through-block links are either open to the sky or glazed. Arcades and through-block links can be either part of a private development or in public ownership. Arcades and through-block links provide a high level of pedestrian connectivity between streets and increase the ease of movement throughout the centre. Arcades must be highly visible, easily accessible, continuous, well lit and supported by active retail street frontages.

### **4.2.1 Objectives**

- Develop a comprehensive, compact, easy to follow, safe and accessible pedestrian network.
- Provide alternative and convenient ways of moving through the centre on foot.
- Ensure that arcades are safe.
- Expand and enhance the public domain.
- Promotes pedestrian activity throughout the centre.
- Increase active street frontages throughout the centre.

### **4.2.2 Controls**

- (a) Retain all arcades and through-block links as shown on the Figure 32.
- (b) Provide new through-block links in the general locations shown on the Figure 32. Variations to these locations may be considered.
- (c) New through-block links must:
  - connect to a public street on both ends,
  - be in a straight alignment, bends or dog legs are not allowed.
  - have visual connection from street to street,
  - have active frontages on the ground level and ideally have active frontages also on levels 1 and 2.
  - be either open to the sky or with a glazed roof.
- (d) The design of through-block links must:
  - continue 6m wide shopfronts along the arcade;
  - provide clear glazing for windows and doors from floor to ceiling at ground level. Sill heights must not be more than 500mm above the adjacent paving; and
  - be open for public use for at least between the hours of 7:00am and 7:00pm daily.
- (e) New arcades in addition to the through block links shown on the control drawing are encouraged. They must:
  - either connect to a public street or extend the axis of an existing street, laneway, arcade or through block link;
  - have active frontages on the ground level and ideally have active frontages also on levels 1 and 2; and
  - achieve the controls set out in 4.2.2d.





### **4.3 Vehicular and Service Access to Lots**

The location and design of vehicle and service entrances needs to be carefully considered to avoid disrupting pedestrian movement and promote pedestrian safety. This is particularly important for large development which can have a major impact on streets if dimensions are not minimised and vehicle entrances are not located on minor streets or laneways.

#### **4.3.1 Objectives**

- Promote active frontages, pedestrian safety and undisturbed pedestrian movement in the location and design of vehicle and service entrances.
- Ensure that car parking is not visible from the street.
- Ensure that the building facade and active frontages are the dominant streetscape element on all streets.
- Limit the number of carpark entry points to a development.
- Minimise the size and quantity of vehicle and service crossings.

#### **4.3.2 Controls**

- (a) Carpark entries and exits cannot occur along primary shopping streets except for lots that do not have secondary frontages or laneways (refer to Figure 33).
- (b) All carpark entries onto streets and laneways are to be enclosed by entry gates, roller doors or the like to be located in alignment with the street boundary.
- (c) Vehicle entries to buildings are to cross the footpath at 90 degrees and be a maximum width of 6m.
- (d) Properties with laneways must have vehicle entry off the laneway and cannot have entries off the street.
- (e) Properties which have two street frontages are only permitted to have one vehicular crossing.
- (f) Separate and clearly differentiate pedestrian and vehicle access and locate vehicle access a minimum of 3m from pedestrian entrances.
- (g) Provide no more than one 2-way vehicular access point per individual development.
- (h) Minimise the size, quantity and visual intrusion of vehicle access ways. The preferred width of driveway crossings and car park and service entries is 3m, however a maximum width of 6m is permitted.
- (i) Applicants may only achieve greater widths if they demonstrate that the greater width is necessitated by compliance with Australian Standards related to Off-Street Parking and that pedestrian safety is ensured.
- (j) Vehicular access may not ramp along boundary alignments edging the public domain, streets, laneways, parks and the like.



#### **4.4 Pedestrian Overpasses and Underpasses**

Pedestrian activity is to be concentrated at street level. Activity and pedestrian density create animation, vitality and vibrancy which is a key characteristic of town centres. This should not be diminished by providing alternative pedestrian routes that divert pedestrian traffic from the public street and laneway system.

Ensuring that pedestrian movement and connection occurs within the public domain; the street and laneway system helps protect the viability of all commercial frontages along a street. Overpasses and underpasses between properties in the same ownership can provide an unfair advantage over other businesses in the street which rely on passing trade.

Any structure that builds into or over the street effects the spatial arrangement of the street space. They also create difficulties in term of light, air, access and safety to lots in proximity to the structure. In addition the public street and laneway system are the urban heritage of the place and should remain free of development in perpetuity.

##### **4.4.1 Objectives**

- Protect and enliven streets by ensuring people circulate at street level.
- Protect street level as the primary retail and commercial space of the town centre.
- Retain the character of street and laneways spaces.
- Protect view corridors along streets.
- Protect the street as the primary frontage for light and air to buildings.
- Avoid overshadowing on streets.
- Avoid pedestrian overpasses and underpasses.

##### **4.4.2 Controls**

- (a) Underpasses under public streets and laneways are not permitted unless linking directly into the public transport interchange (refer to Figure 34).
- (b) Overpasses over public streets and laneways are not permitted (refer to Figure 34).
- (c) Streets and laneway are not to be built into, onto or over.



**Figure 34:** Control Drawing No Overpasses or Underpasses

■ No overpasses or underpasses over or under streets or laneways

#### **4.5 On-Site Parking**

Poorly located and designed on-site carparking can have significant impacts on the quality of the centre and its streets. Carparking located adjacent to the street boundary sterilises the street edge and:

- Negates the opportunity to create active and vibrant pedestrian areas,
- Works against community safety and crime prevention measures,
- losing the opportunity for commercial opportunities along the street,
- creates unsightly streetscape and ugly urban environments.

##### **4.5.1 Objectives**

- Value Town Centre land. Avoid compromising street character, building quality, pedestrian amenity and safety.

##### **4.5.2 Controls**

- (a) Carparks, carparking structures, vehicular manoeuvring areas private parking bays, loading docks and the like are to be located no closer than 5m from the street boundary.
- (b) Underground Carparks, carparking structures, vehicular manoeuvring areas private parking bays, loading docks and the like are generally to be located under street level.
- (c) Carparks, carparking structures, vehicular manoeuvring areas, private parking bays, loading docks and the like are generally not to be located adjacent to or visible from the street.
- (d) Underground carparking is generally to be located below natural ground level. Where this cannot be achieved due to topographic constraints, a maximum protrusion of 1.2m is permissible.

##### *Parking rates*

- (e) Refer to Part I1.

#### **5.0 TOWN SQUARE PROVISIONS**

##### **5.1 Building Form**

Building form and character refers to the individual elements of building design that collectively contribute to the character and appearance of the built environment. The development provisions in this section are intended to encourage high quality design for new buildings, balancing the character of BJC with innovation and creativity. The resulting built form and character of new development should contribute to an attractive public domain in BJC and produce a desirable setting for its intended uses.

The controls in this section aim to:

- Provide strong definition to the public domain;
- Achieve active street frontages with good physical and visual connections between buildings and the street;
- Ensure consistent street frontages with buildings having

<p>common alignments;</p> <ul style="list-style-type: none"> <li>• Provide for pedestrian comfort and protection from the weather;</li> <li>• Define the public street so that it provides spaces that are legible, safe and easy to maintain;</li> <li>• Ensure building depth and bulk is appropriate to the environmental setting and landform and allow for view sharing and good internal amenity;</li> <li>• Ensure building separation is adequate to protect amenity, daylight penetration and privacy between adjoining developments;</li> <li>• Achieve an articulation and finish of building exteriors that contributes to a high quality and sustainable urban environment; and</li> <li>• Provide for a high quality urban landscape which contributes to the amenity of the Town Square and a sustainable urban environment.</li> </ul>	
<p><b>5.1.1 Building to street alignment and street setbacks</b></p>	
<p>Street setbacks and building alignments establish the front building line and reinforce the spatial definition of streets. These help to contribute to the public domain by strengthening the visual character and the continuity of street facades.</p>	
<p>Generally, in Commercial Centres buildings should be built to the street alignment to reinforce the urban character and improve pedestrian amenity and activity at street level. Depending upon the context, elements of taller buildings may need to be set back to provide for sunlight to streets, daylight to pedestrian areas and amenity to adjoining buildings. In all situations, buildings should be designed to offer comfortable wind conditions, maintain view corridors, an appropriate building scale for pedestrians, and good growing conditions for street trees. In all areas of the commercial centre consistent building lines are desirable.</p>	
<p><b>5.1.2 Objectives</b></p>	
<ul style="list-style-type: none"> <li>• Provide street edges which reinforce, improve or support the hierarchy and character of specific streets.</li> <li>• Establish desirable spatial proportions within the street and definition of street edge.</li> <li>• Create a clear transition between public and private space.</li> <li>• Locate active uses, such as shopfronts, closer to pedestrian activity areas.</li> <li>• Assist in achieving visual privacy to apartments from the street.</li> <li>• Create good quality entry spaces to lobbies, foyers or individual dwelling entrances.</li> <li>• Allow an outlook to, and surveillance of, the street.</li> <li>• Maintain sun access to the public domain.</li> </ul>	
<p><b>5.1.3 Controls</b></p>	
<p>(a) Comply with the street building alignment and front setbacks specified in Figure 36.</p>	



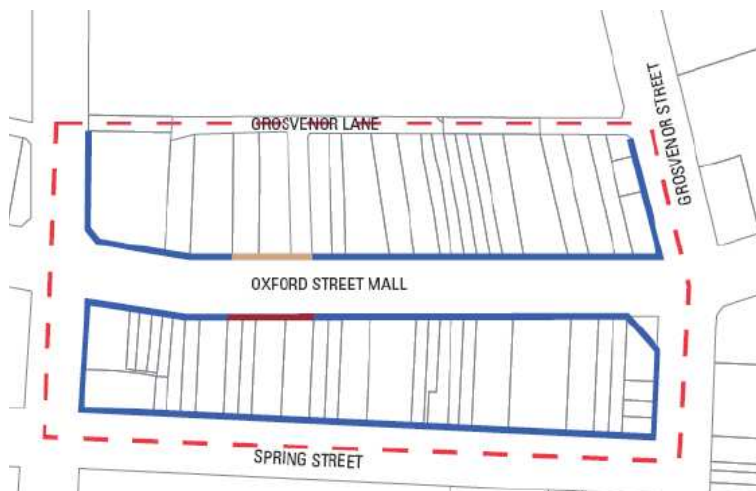
- (b) Where a continuous built edge to the street alignment is required, 0m side setbacks are required at the street frontage. Where a discontinuous built format the street alignment is permitted, side setbacks are permissible at the front building alignment as prescribed by Figure 35.
- (c) Minor projections into front building lines and setbacks for sun shading devices, entry awnings and cornices are permissible (see also Section 5.2.5).

#### 5.1.4 Street Frontage Heights

Well framed streets are an important characteristic of a commercial centre. Buildings built to the street alignment and with appropriate street width to building-height ratios provide a sense of enclosure to the street and contribute to the character. Street frontage heights refer to the height of the building that is built to the street alignment and therefore directly addresses the public street. Street sections specify the required street frontage height and the required setbacks for development above that height.

#### 5.1.5 Objectives

- Strengthen the urban form of the Town Square with consistent street wall heights.
- Achieve comfortable street environments for pedestrians in terms of daylight, scale, sense of enclosure and wind mitigation as well as a healthy environment for street trees.
- Enhance the distinctive character of streets within BJC.
- Protect solar access to key streets and public spaces.

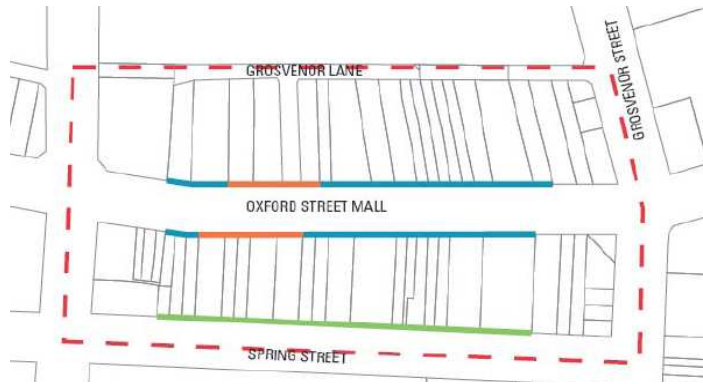


**Figure 35:** Street alignments and setbacks

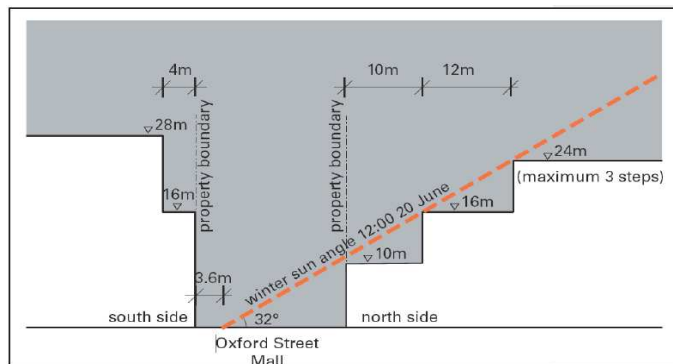
Continuous built edge to street alignment  
Public Square - 9.0m minimum setback  
Public Square - 6.0m minimum setback

#### 5.1.6 Controls

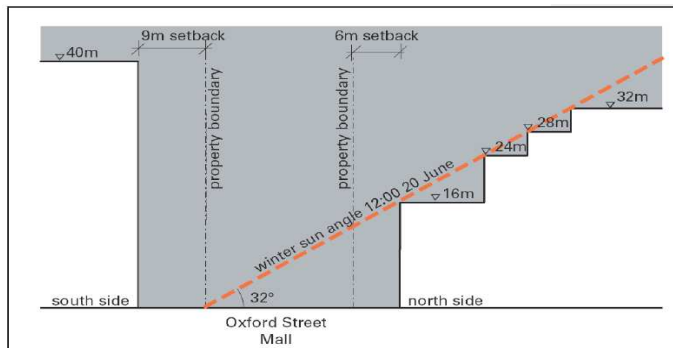
- (a) Buildings must comply with the relevant street frontage heights as shown in Figure 36, 37, 38 and 39.



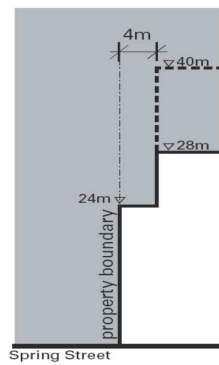
**Figure 36:** Street Frontage Heights



**Figure 37:** Street Frontage Height A - Oxford Street Mall



**Figure 38:** Street Frontage Height B - Bondi Junction Town Square



**Figure 39:** Street Frontage C - Street Frontage



### **5.1.6 Building Depth and Bulk**

BJC features a temperate climate and pleasant outdoor conditions for much of the year. Controlling the size of floor plates allows for good internal amenity, access to natural light and ventilation and mitigates potential adverse effects that tall and bulky buildings may have on the public domain.

Building depth is typically related to building use where mixed use buildings have larger commercial floor plates combined with smaller residential floor plates. The following controls are therefore classified into residential or commercial at the detail level.

### **5.1.7 Objectives**

- Promote the design and development of sustainable 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 floor plates of buildings.
- Allow for view sharing and view corridors.
- Reduce the apparent bulk and scale of buildings by breaking up expanses of building wall with modulation of form and articulation of facades.

### **5.1.8 Controls**

- (a) On land zoned B3 Commercial Core, above street frontage height: preferred max. floor plate area of a building is 900m<sup>2</sup>.
- (b) All points on an office floor should be no more than 10m from a source of daylight (e.g. window, atria, or light wells). The preferred depth for office floors with openings on one side is 10m. The preferred depth for office floors with openings on two opposite sides is 20m.
- (c) Use atria, light wells and courtyards to improve internal building amenity and achieve cross ventilation and/or stack effect ventilation.

### **5.1.9 Planting on Structures**

The following controls apply in the B3 Commercial Core zone for planting on roof tops or over carpark structures, particularly for communal open space required as a component of non-residential developments where the landscaping proposed is not on natural ground. Constraints on the location of car parking structures due to water table conditions may mean that open spaces and courtyards might need to be provided over parking structures. The plants in these areas are grown in total containment with artificial soils, drainage and irrigation and are subject to a range of environmental stresses that affect their health, and ultimately their survival. Quality landscape design and open space amenity relies in part on the quality and health of plants.

#### 5.1.10 Objectives

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

#### 5.1.11 Controls

- (a) Areas with planting on structures are to be irrigated with recycled water.
- (b) Design for optimum conditions for plant growth by:
  - providing soil depth, soil volume and soil area appropriate to the size of the plants to be established; and
  - providing appropriate soil conditions and irrigation methods, and
  - providing appropriate drainage.
- (c) Design planters to support the appropriate soil depth and plant selection by:
  - ensuring planter proportions accommodate the largest volume of soil possible and soil depths to ensure tree growth; and
  - providing square or rectangular planting areas rather than narrow linear areas.
- (d) Increase minimum soil depths in accordance with:
  - the mix of plants in a planter for example where trees are planted in association with shrubs, groundcovers and grass;
  - the level of landscape management, particularly the frequency of irrigation;
  - anchorage requirements of large and medium trees; and
  - soil type and quality.
- (e) Provide sufficient soil depth and area to allow for plant establishment and growth. The following minimum standards are recommended:

Plant Type	Min Soil Depth	Min Soil Volume
Medium trees (2m to 8m high)	1.0m	35m <sup>3</sup>
Small trees (up to 2m high)	800mm	9m <sup>3</sup>
Shrubs and ground cover	500mm	N/A

#### 5.1.12 Sun Access to Public Spaces

Good solar access is a key contributor to the amenity of public spaces, particularly during winter. Protecting solar access to the key public space of Oxford Street Mall and its Town Square is achieved through the definition of sun access planes that ensure development does not overshadow these spaces.

#### **5.1.13 Objectives**

- Allow sunlight access to new and existing significant public spaces in the Town Square.
- Provide for an appropriate transition in building heights from key public spaces.
- Provide well scaled enclosure to the significant public spaces.

#### **5.1.14 Controls**

- (a) All new buildings and additions or alterations to existing buildings on the north side of Oxford Street Mall must comply with the sun access plane illustrated in Figures 38 and 39, irrespective of the existing height of nearby buildings.
- (b) The erection of a building so that any part of the building is above the envelope specified in the relevant sun access diagram (refer to Figures 38 and 39) is prohibited, unless that part of the building is a minor architectural roof feature.

### **5.2 Pedestrian Amenity**

Pedestrian amenity incorporates all those elements of individual developments that directly affect the quality and character of the public domain. The pedestrian amenity provisions are intended to achieve a high quality of urban design and pedestrian comfort in the public spaces of the Town Square area. This environment needs to be safe, functional and accessible to all. It should provide a wide variety of opportunities for social and cultural activities. The pedestrian environment is to be characterised by excellence of design, high quality materials and a standard of finish appropriate to a Major Centre. BJC's lanes, arcades and through site links should form an integrated pedestrian network providing choice of routes at ground level for pedestrians.

Essential to pedestrian amenity is the creation of a legible system. The controls in this section aim to increase the vitality, safety, security and amenity of streets, laneways, arcades and through site links by:

- Encouraging future through site links;
- Ensuring active street frontages and positive building address to the street;
- Ensuring provision of awnings along the B3 Commercial Core zone street frontages and Oxford Street Mall;
- Protecting significant views and vistas along streets; and
- Mitigating adverse impacts on the street arising from driveway access crossings, advertising signage and selection of building finishes and materials.

#### **5.2.1 Permeability**

#### **5.2.2 Objectives**

- Improve access in the Town Square area by providing new through site links and enhancing existing links as redevelopment occurs.
- Ensure through site links have active frontages along their

- length where possible.
- Provide for pedestrian amenity and safety.
- Encourage removal of vehicular entries from primary street frontages.
- Retain and further develop laneways and small spaces as useful and interesting pedestrian connections as well as for service access.

### 5.2.3 Controls

- (a) Through site links, arcades, shared ways and laneways are to be provided as shown in Figure 41.
- (b) Retain existing or replace all arcade connections and walkways.
- (c) Where possible, existing dead end lanes are to be extended through to the next street as redevelopment occurs and should provide clear sightlines from one end to the other.
- (d) New through site links should be connected with existing and proposed through block lanes, shared zones, arcades and pedestrian ways and opposite other through site links to enhance legibility to the whole laneway system.
- (e) Existing publicly and privately owned lanes are to be retained.
- (f) The design and finish of new through site links need to be provided in accordance with Council's Public Domain Technical Manual

#### *Pedestrian links*

- (g) Through site links for pedestrians are to be provided as shown in Figure 41, and: have active ground floor frontages; be legible and direct throughways for pedestrians; provide public access at all business trading times or as otherwise stipulated by Council's conditions of approval; have a minimum width of 3m non-leasable space clear of all obstructions (including columns, stairs and escalators); where practicable, have access to natural light for at least 30% of their length; where air conditioned, have clear glazed entry doors comprising at least 50% of the entrance; have signage at street entries indicating public accessibility and the street to which the through site link connects; and maximise opportunities for integration of public art installations.
- (h) Internal arcades will not be approved in preference to activation of an existing or required lane. Where developments front a lane that is also a pedestrian route, provide an active frontage and design details that create visual interest such as landscaping, awnings, paved finishes and good lighting.
- (i) When a publicly accessible pedestrian connection is proposed to link directly to the railway line, RailCorp must approve connections to railway stations and approve designs. In addition, the developer will be required to enter into an agreement with RailCorp defining the controls to be implemented in managing access.

#### *Lanes*

- (j) New through site laneways for pedestrians and vehicles are to be provided as indicated in Figure 36; and have active ground floor frontages; be clear and direct throughways for pedestrians; provide public access at all times or as otherwise stipulated by

- Council's conditions of approval; have a minimum width of 6m clear of all obstructions; and have signage indicating public accessibility and the street to which the lane connects.
- (k) Provide interest in these spaces, public art installations are encouraged in laneways, particularly where there may be terminating views. Potential street to street connections involving sites in separate ownership should consider liaising to develop compatible proposals and submitting concurrent applications to create new through site links.

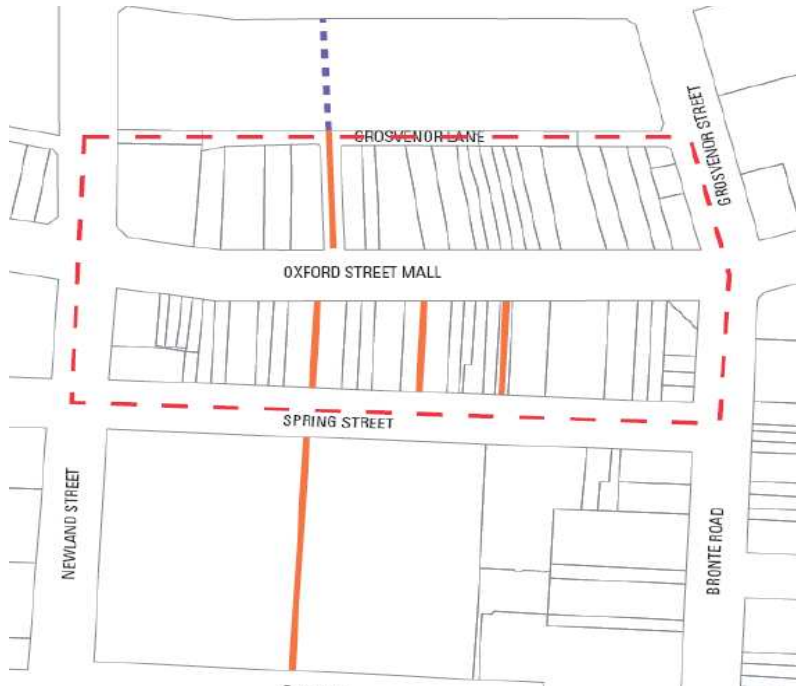


Figure 40: Through Site Links

Existing pedestrian links to be maintained and enhanced

Desired new link to train concourse

#### 5.2.4 Active Street Frontages and Address

Active street frontages 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 street fronts.

#### 5.2.5 Objectives

- Promote pedestrian activity and safety in the public domain.
- Maximise active street fronts in Bondi Junction.
- Define areas where active streets are required or are desirable.
- Encourage an address to the street outside of areas where active street frontages are required.

#### 5.2.6 Controls

##### Active Street Frontages

- (a) Active frontage uses are defined as one, or a combination of, the following at street level: Entrance to retail; Shop front;

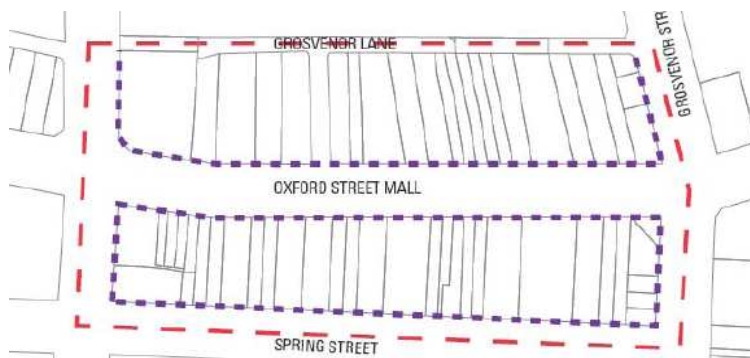
- Glazed entries to commercial and residential lobbies occupying less than 50% of the street frontage, to a maximum of 12m frontage; Café or restaurant if accompanied by an entry from the street; Active office uses, such as reception, if visible from the street. Public building if accompanied by an entry.
- (b) Active street fronts in the form of non-residential uses on ground level are required along streets, lanes and through site links shown in Figure 41.
  - (c) Active ground floor uses are to be at the same general level as the footpath and be accessible directly from the street.
  - (d) For all commercial ground floor frontages outside the streets shown in Figure 41, provide clear glazing where ever possible to promote passive surveillance and contribute to street activity.
  - (e) Restaurants, cafes and the like are to consider providing openable shop fronts.
  - (f) Provide multiple entrances for large developments including an entrance on each street frontage.

*Active frontage above Ground Floor*

- (g) Extend active frontages above ground floor level with uses and building design, which provide transparency, and visual contact with the street. Orient buildings to address streets. Build street frontages along or parallel to the street alignment.
- (h) Integrate landscaping above ground floor levels to provide interest in design and amenity for uses of these spaces.

*Street Address*

- (i) Street address is defined as entries, lobbies, and habitable rooms with clear glazing to the street not more than 1.2m above street level and excluding car parking areas. Street address is required on Ground Level of all areas identified in Figure 42.
- (j) Provide multiple entrances for large developments including an entrance on each street frontage.



**Figure 41:** Active Frontages Required



### 5.2.7 Awnings

Awnings increase the useability and amenity of public footpaths by protecting pedestrians from sun and rain. These encourage pedestrian activity along streets and, in conjunction with active edges such as retail frontages, support and enhance the vitality of the local area. Awnings, like building entries, provide a public presence and interface within the public domain and contribute to the identity of a development.

### 5.2.8 Objectives

- Increase pedestrian amenity by providing protection from wet weather and sunlight with awnings and colonnades.
- Create a protected transition area between internal and external spaces for public and commercial buildings.
- Improve pedestrian amenity by extending the footpath at ground floor level, and providing shelter and opportunities for outdoor dining.

### 5.2.9 Controls

- Continuous street frontage awnings are to be provided for all new developments as indicated in Figure 42.
- Awning design must match building facades and be complementary to those of adjoining buildings.
- Wrap awnings around corners for a minimum 6m from where a building is sited on a street corner.
- Awnings dimensions should generally be:
  - Minimum soffit height of 3.3m.
  - Low profile, with slim vertical facias or eaves (generally not to exceed 300mm height).
  - Setback a minimum of 600mm from the kerb.
  - 3.0m deep.
- Where street trees are required the entire length of the awning is to be set back from the kerb by 1.2m. Cut outs for trees and light poles in awnings are not acceptable.
- To control sun access/protection, canvas blinds along the street edge may be permitted, subject to design merit and assessment.
- Signage on blinds is not permitted.
- Provide under awning lighting to facilitate night use and public safety.

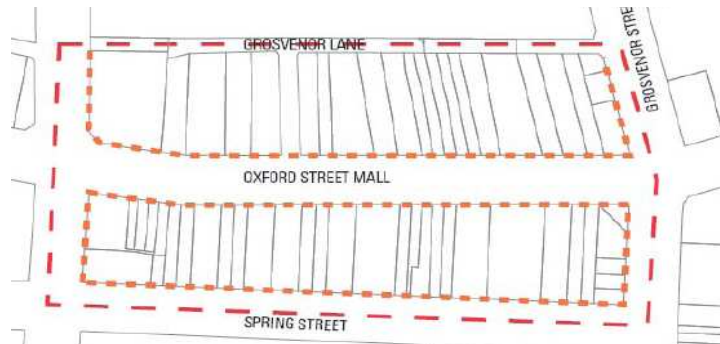


Figure 42: Awnings

### 5.2.10 Vehicle Footpath Crossings

Vehicle crossings over footpaths disrupt pedestrian movement and threaten safety. The design of vehicle access to buildings also influences the quality of the public domain. Overly wide and high vehicle access points detract from the streetscape and the active use of street frontages. The design and location of vehicle access to developments



should minimise both conflicts between pedestrians and vehicles on footpaths, particularly along pedestrian priority places, and visual intrusion and disruption of streetscape continuity.

#### 5.2.11 Objectives

- Make vehicle access to buildings more compatible with pedestrian movements and the public domain.
- Ensure vehicle entry points are integrated into building design and contribute to high quality architecture.

#### 5.2.12 Controls

##### *Location of Vehicle Access*

- (a) No additional vehicle entry points will be permitted into the parking or service areas of development along those streets identified as significant circulation routes in Figure 43.
- (b) In all other areas, one vehicle access point only (including the access for service vehicles and parking for non-residential uses within mixed use developments) will be generally permitted.
- (c) Where practicable, vehicle access is to be from lanes and minor streets rather than primary street fronts or streets with major pedestrian activity.
- (d) Where practicable, adjoining buildings are to share or amalgamate vehicle access points. Internal on-site signal equipment is to be used to allow shared access. Where appropriate, new buildings should provide vehicle access points so that these are capable of shared access at a later date.
- (e) Vehicle access may not be required or may be denied to some heritage buildings.

##### *Design of Vehicle Access*

- (f) Wherever practicable, vehicle access is to be a single lane crossing with a maximum width of 2.7m over the footpath, and perpendicular to the kerb alignment. In exceptional circumstances, a double lane crossing with a maximum width of 5.4m may be permitted for safety reasons.
- (g) Vehicle access ramps parallel to the street frontage will not be permitted. Doors to vehicle access points are to be tilting doors fitted behind the building façade and to be of materials that integrate with the design of the building and contribute to a positive public domain.
- (h) Vehicle entries are to have high quality finishes to walls and ceilings as well as high standard detailing. No service ducts or pipes are to be visible from the street.

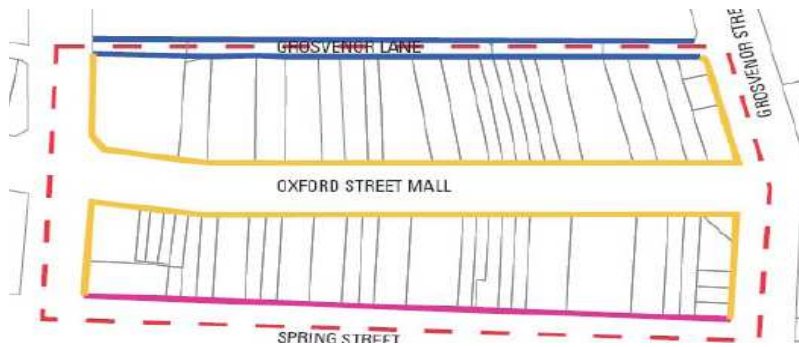
#### 5.2.13 Building Exteriors

Bondi Junction's centre and public domain is defined by its buildings, streets and public places. The maintenance and improvement of the public domain is dependent on a consistent approach to the design of new development including the articulation and finish of building exteriors.



#### 5.2.14 Objectives

- Contribute positively to the streetscape and public domain by means of high quality architecture and robust selection of materials and finishes;
- Provide richness of detail and architectural interest especially at visually prominent parts of buildings such as lower levels and roof tops;
- Present appropriate design responses to 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; and
- Maintain a pedestrian scale in the articulation and detailing of the lower levels of the building.



**Figure 43:** Vehicle Access Restrictions

— No additional vehicle access  
— Lane ways - primary vehicle access  
— Limited hours vehicle access

#### 5.2.15 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.
- Articulate façades so that these address the street and add visual interest.
- External walls should be constructed of high quality and durable materials and finishes with 'self-cleaning' attributes, such as face brickwork, rendered brickwork, stone, concrete and glass.
- Finishes with high maintenance costs, those susceptible to degradation or corrosion that result in unacceptable amenity impacts, such as reflective glass, are to be avoided.
- To assist articulation and visual interest, avoid expanses of any single material.
- Limit opaque or blank walls for ground floor uses to 30% of the street frontage.
- Maximise glazing for retail uses, but break glazing into sections to avoid large expanses of glass.
- Highly reflective finishes and curtain wall glazing are not permitted above ground floor level.
- A materials sample board and schedule is required to be

- submitted with applications for development over \$1 million or for that part of any development built to the street edge.
- (j) The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building.

#### **5.2.16 Courtyards and Squares**

##### **5.2.17 Objectives**

- Expand and enhance the public domain.
- Reinforce the importance of Oxford Street Mall as BJC's main pedestrian thoroughfare.

##### **5.2.18 Controls**

- (a) Integrate forecourts, squares and courtyards with through block links where appropriate.
- (b) Design forecourts, squares and courtyards to visually and physically extend the public domain.
- (c) Forecourts, squares and courtyards should be delightful outdoor rooms, and must be well considered with regard to aspect and height to width, and depth to width proportions.

##### *Squares*

- (d) Squares are permitted on Oxford Street Mall as shown in the special area plan for the Town Square (see Section 5.4).

#### **5.3 Access, Parking and Servicing**

##### **5.3.1 Vehicular Driveways and Maneuvering Areas**

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

##### **5.3.2 Objectives**

- Minimise the impact of vehicle access points and driveway crossovers on streetscape amenity, pedestrian safety and the quality of the public domain by:
- Designing vehicle access to required safety and traffic management standards,
- Integrating vehicle access with site planning, streetscape requirements, traffic patterns and Minimising potential conflict with pedestrians.
- Minimise the size and quantity of vehicle and service crossings to retain streetscape continuity and reinforce a high quality public domain.

##### **5.3.3 Controls**

- (a) Driveways should be: Provided from lanes and secondary streets rather than the primary street, wherever practical. Located taking into account any services within the road reserve, such as power poles, drainage inlet pits and existing

- street trees. Located a minimum of 10m from the perpendicular of any intersection of any two roads. If adjacent to a residential development, setback a minimum of 1.5m from the relevant side property boundary.
- (b) Vehicle access is to be designed to minimise the impact on the street, site layout and the building façade design, and if located off a primary street frontage, integrated into the building design.
  - (c) Where practicable, buildings are to share, amalgamate, or provide a rear lane for vehicle access points.
  - (d) All vehicles must be able to enter and leave the site in a forward direction without the need to make more than a three point turn.
  - (e) Separate and clearly differentiate pedestrian and vehicle access. Locate vehicle access a minimum of 3m from pedestrian entrances.
  - (f) Minimise the size and quantity and visual intrusion of vehicle access points. The preferred width of driveway crossings and car park and service entries is 2.7m.
  - (g) Vehicular access may not ramp along boundary alignments edging the public domain, streets, lanes parks, water frontages and the like.
  - (h) Driveway widths must comply with the relevant Australian Standards.
  - (i) Car space dimension, driveway grades, vehicular ramp width/grades and passing bays must be in accordance with the relevant Australian Standards. Vehicular ramps less than 20m long within developments and parking stations must have a maximum grade of 1 in 5 (20%).
  - (j) Access ways to underground parking should not be located adjacent to doors or windows of the habitable rooms of any residential development.

#### 5.3.4 On-Site Parking

On-site parking include underground (basement), surface (at-grade) and above ground parking, including parking stations (refer also to Part I1).

#### 5.3.5 Objectives

- Facilitate an appropriate level of on-site parking provision in the Town Square area to cater for a mix of development types.
- Minimise the visual impact of on-site parking.
- Provide adequate space for parking and maneuvering of vehicles (including service vehicles and bicycles).
- Recognise the complementary use and benefit of public transport and non-motorised modes of transport such as cycling and walking.

#### 5.3.6 Controls

*General (all development)*

- (a) Generally provide car parking in basements and semi-basements.
- (b) Consolidate basement car parking areas under building footprints to maximise the area available for soft landscaping.

- (c) Maximise the efficiency of car park design with predominantly orthogonal geometry and related to circulation and car space sizes.
- (d) Design parking structures, which minimise reliance on artificial lighting and car exhaust ventilation.
- (e) Provide 1–2% readily accessible parking spaces, designed and appropriately signed for use by people with disabilities.
- (f) Provide motorcycle parking equivalent to one car parking space in every building with on site parking.
- (g) Parking provided as part of a development may only be used by the occupants of the building.
- (h) On-site parking must meet the relevant Australian Standards.
- (i) Car parking and associated internal maneuvering areas which are surplus to Council's specified requirements under Part I1 will count towards the gross floor area, but not for the purpose of determining the necessary parking.
- (j) Provide marked pedestrian pathways with clear lines of sight and safe lighting especially at night.

*Bicycle Parking*

- (k) Bicycle parking in public car parks will achieve safe, easy and convenient access from the building to public streets.

*Commercial and mixed use developments in all other zones*

- (l) Natural ventilation should be provided to underground parking areas where possible, with ventilation grilles and structures:
  - integrated into the overall façade and landscape design of the development, not located on the primary street façade, and
  - oriented away from windows of habitable rooms and private open spaces areas.

### 5.3.7 Site Facilities and Services

#### 5.3.8 Objectives

- Ensure that site facilities (mail boxes, recycling and garbage disposal units/areas, screens, lighting, storage areas, air conditioning units and communication structures) are effectively integrated into the development and are unobtrusive.
- Ensure that site services and facilities are adequate for the nature and quantum of development.
- Establish appropriate access and location requirements for servicing.
- Ensure service requirements do not have adverse amenity impacts.

#### 5.3.9 Controls

*Mail boxes*

- (a) Provide letterboxes for commercial tenancies in one accessible location adjacent to the main entrance to the development.
- (b) These should be integrated into a wall where possible and be constructed of materials consistent with the appearance of the building.
- (c) Letterboxes shall be secure and large enough to accommodate

articles such as newspapers.

*Communication structures, air conditioners and service vents*

- (d) Locate satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures:

- away from the street frontage;
- integrated into the roof design; and
- adequately setback from the perimeter wall or roof edge of buildings.

*Fire service and emergency vehicles*

- (e) For developments where a fire brigade vehicle is required to enter the site, vehicular access, egress and maneuvering must be provided to, from and on the site in accordance with the NSW Fire Brigades Code of Practice – Building Construction – NSWFB Vehicle Requirements. Generally, provision must be made for NSW Fire Brigade vehicles to enter and leave the site in a forward direction where: NSW Fire Brigade can not park their vehicles within the road reserve due to the distance of hydrants from the building or restricted vehicular access to hydrants; or The site has an access driveway longer than 15m.

## 5.4 Controls for Special Areas

### 5.4.1 Objectives

- The Rowe Street and Bronka Arcade sites, on the north and south sides of Oxford Street Mall, lie at the crossing of important pedestrian routes through Bondi Junction. These sites offer an opportunity to enliven the centre of BJC area by creating a new public Town Square which frames the mall on both sides, as illustrated in Figure 45.
- On the Rowe Street site, a major new link is to be created between Oxford Street Mall and the railway interchange. This connection should consist of a staircase, lift and escalator. This link will encourage greater pedestrian traffic on the Mall, improving the desirability of retail floorspace in BJC.
- On the Bronka Arcade site, existing connections are to be maintained and enhanced by the new, north facing Town Square and a more generous, double height arcade connection to Spring Street.

### 5.4.2 Controls

*Public Space*

- The public square is to frame the Oxford Street mall on both sides. On the Bronka Arcade site a setback of at least 9m will create a north facing outdoor space. On the Rowe Street site, a setback of at least 6m will help accommodate pedestrian traffic, while providing an area for outdoor café seating. This space will lead into an arcade which accommodates the new connection to the rail interchange and Tiffany Plaza development. Minimum dimensions for public space are illustrated in Figure 44.
- The new square should be a coherent and legible urban space, with a consistent palette of paving and materials.

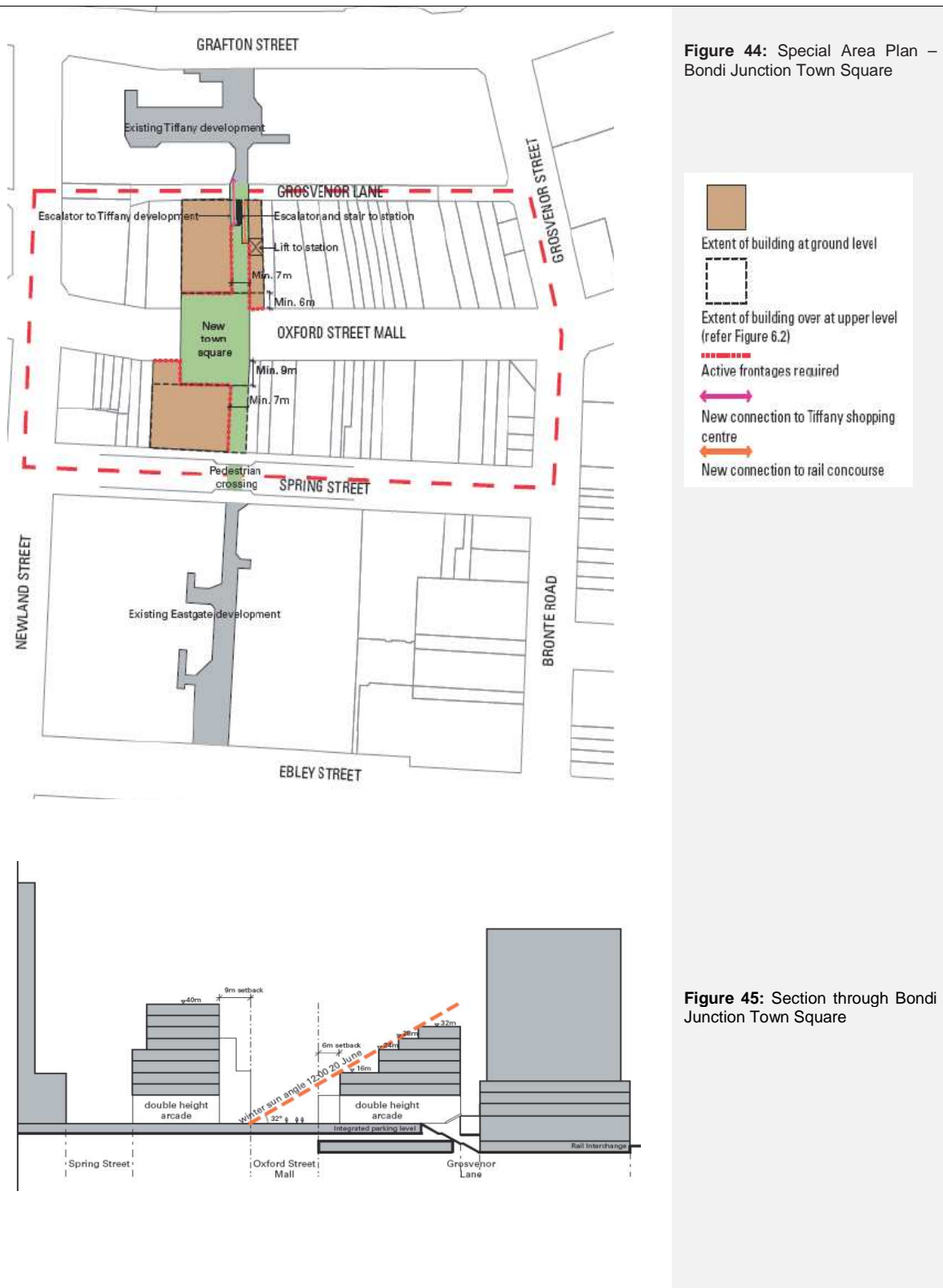
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*Built Form*

- On the Rowe Street site, new development must comply with the solar access plane illustrated in Figure 45, which ensures that new development on this site does not overshadow the town square in winter. On the Bronka Arcade site, new development is permitted to rise to 40m from the 9m setback to the Oxford Street Mall (refer to Figure 45).

*Public Domain Interface*

- As the new public square lies at the crossing of two important pedestrian routes, active uses are to be encouraged along all frontages at ground level. In order to encourage oversight of the space, active uses should also be provided at first floor level along the town square.
- In order to ensure a high quality interface with the retail frontage along its length, the covered arcade connecting Oxford Street Mall and the railway concourse/Tiffany Plaza development should have the same finished floor level as the mall, and should be level along its entire length. The connection down to the railway station and up to the Tiffany Plaza development should consist of escalators, stairs and a lift. Development on the Rowe Street site is to be serviced from Grosvenor Lane.
- In order to encourage the activation of Spring Street, development on the Bronka Arcade site is to be serviced below ground, or on a limited hours basis from Spring Street.
- Because of limited opportunities for vehicle access, new developments are encouraged to consolidate parking.





## ANNEXURE F1-1

The two different types of wind studies that may be carried out are:

Wind Environment Statement: This is to be carried out if a wind tunnel study is not required and the building is greater than 5 storeys in height. This is to be prepared by a suitably qualified wind consultant and is an expert evaluation of the wind conditions occurring on the various outdoor spaces within and around the development. The assessment is based on an understanding of the local wind climate, a site inspection, as well as an inspection of the proposed design. If any areas within or around the development are likely to be adversely affected then in-principle recommendations should be made to address these wind effects.

Wind Tunnel Study is to be prepared for all building over 9 storeys in height or is considered exposed. This is the most definitive method of modelling wind effects. Wind effects are modelled in a wind tunnel facility and local speeds are measured at the various critical outdoor areas within and around the site and compared directly against the relevant comfort criteria. Any recommendations for treatments such as altering the building form, the implementation of awnings, canopies, strategically placed screens or dense planting to protect entrances or podium areas should be modelled in the wind tunnel and tested.

### Requirements for the preparation of a wind tunnel report

1. The wind tunnel report required under this plan should
  - (a) assess the likely wind effects of the development;
  - (b) if the wind conditions in any of the areas surrounding the site exceed the relevant criteria then model the existing wind conditions to accurately quantify the impact.
  - (c) recommend measures required to improve adverse wind conditions created by the proposal and demonstrate that the recommended measures will be effective in mitigating the adverse wind effects.
2. Wind tunnel tests must be carried out as follows:
  - (a) Surround models are to be placed around the model of the proposed building to a radius of approximately 500m. The model scale should not be smaller than 1:500.
  - (b) The boundary layer flow pertaining to the upstream terrain from the various wind angles must be reproduced at the appropriate scale. This includes the modelling of the variation with height, of mean velocity and turbulence intensity of the wind, up to the height of the boundary layer. Other modelling parameters that must be considered are the integral scale of turbulence of the wind, the effect of scale on the Jensen and Reynolds numbers and a zero longitudinal pressure gradient. The Jensen and Reynolds numbers are dimensionless numbers used to predict full scale results from tests performed using reduced scale models. Note that the mean wind speed and turbulent intensity boundary layer profiles must be modelled to within 10% of the target values. It is recommended that the target values be based on the Deaves and Harris (1978). Bondi Junction Centre Waverley Development Control Plan 2010. The



integral scale of turbulence must be matched to within a factor of 3. The maximum permissible blockage is 10% (maximum sectional area of the model divided by the sectional area of the wind tunnel test section). The maximum height of the model must not exceed half the height of the wind tunnel test section. The minimum permissible Reynolds Number is  $5 \times 10^4$ .

- (c) Measurements of local wind velocities should be based on the maximum 2 to 3 second duration gusts (in full scale), taken from a sample length of 1 hour (in full scale). If the gust-equivalent mean criteria are used then the mean and local turbulence intensity should also be measured.
- (d) Analysis of the wind effects must be based on measurements taken from an adequate number of locations, covering all the potentially affected areas. For each of the locations, wind speed measurements should be taken from a minimum of 16 wind directions. Initial tests to be performed without the effect of the proposed trees or other wind mitigation devices.
- (e) Analysis of results must be based on reliable meteorological data for Sydney (preferably from the Sydney Airport Observation office), taken over a minimum of 30 years of continuous data. In the case where treatments are required, their effectiveness must be confirmed with further wind tunnel measurements.

**Reflectivity Report** The reflectivity report required under this plan shall:

- (a) Identify and analyse the various areas accessible by vehicles that are likely to receive solar reflections from each of the aspects/surfaces of the development.
- (b) Determine / document whether luminance intensity of 500 candelas /  $\text{m}^2$  (as calculated by Holladay formula) will be exceeded. Alternatively specify the limiting reflectivity such that luminance intensity of 500 candelas /  $\text{m}^2$  is not exceeded. Propose measures reduce potentially undesirable / hazardous solar reflections.