Bondi Junction Urban Design Review, February 2013

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1. INTRODUCTION

This review has been commissioned jointly by Waverley Council and the NSW Department of Planning and Infrastructure to address a set of concerns about the planning environment in Bondi Junction. The centre has undergone a series of lengthy and involved planning processes in recent years. The scope of the Bondi Junction Urban Design Review includes site specific items as well as matters relating to generic controls. This review has a mandate to seek out issues and suggest remedies. In this sense, the brief is quite open because the scope and the content of the recommendations depend upon the findings of the analysis.

The review team has taken the attitude that much work has been done previously, including extensive consultation. Any modification that result from this review will not become effective until the first LEP amendment which is due late this year, so we will not propose changes unless there is strong reason to do so.

The key recommendations of this review relate to permitting flexibility in land use (zoning) creating a framework to consider great height. These revisions will protect solar access to important public open spaces and acknowledge opportunities for greater height on appropriate sites. These recommendations are supported with analysis including shadow studies and yield analysis. The effect of the modifications is improved amenity without significant net loss of development potential in the centre.

At the completion of the review stage, it became clear that

there were issues with the DCP, including lack of hierarchy, inconsistent language and illegible diagrams relating largely to the format and the ease of use of the document, not to its effect.

This review also highlighted the need for the holistic management of development of the centre. It has considered how the planning policy fits together with the other key elements that drive the built environment in Bondi Junction. Development assessment, the public domain, traffic, pedestrian movement and mix of land use all combine to produce the quality of the built environment. Recommendations identify the need for a much stronger focus on pedestrian amenity which can be derived from improved pedestrian circulation and limiting traffic impact in the centre together with improved public domain, including footpath widening, seating opportunities and landscape.

The nature of development control and assessment is changing as a natural product of maturity of Bondi Junction. As the centre moves into a more advanced stage of its development, each new project is being built in an increasingly well-established context. Furthermore, the increasing difficulty of assembling large consolidated sites tends to mean that developers are seeking to maximise yields on smaller and smaller sites. Whereas large sites might 'create their own context' smaller sites must be more contextresponsive. This requires skilful design and judgement.



Figure 1.1 Study Area

2. PURPOSE AND METHODOLOGY, BACKGROUND ASSESSMENT

Purpose and Methodology

The scope of services for the Bondi Junction Urban Design Review includes three tasks:

- Analysis of the existing built form and controls;
- Production of potential development controls; and
- Presentation and report.

This review of the appropriateness of Waverley Council's controls for the Bondi Junction Centre required a review of the controls within the Waverley Local Environmental Plan 2012 (LEP 2012) as well as the Waverley Development Control Plan 2012 (DCP 2012). The LEP 2012 was adopted by Council in December 2010 and placed on public exhibition between October and November 2011. The DCP 2012 supersedes the existing DCP 2010.

The focus of this review is to identify issues and problems with the existing development controls. The review has not sought to identify every site with greater development potential than described in the development controls. Therefore it is expected that some sites may be the subject of acceptable application for development greater than that allowed in the controls.

This review focused on the delivery of sustainable buildings that respond to the local context and topography whilst minimising amenity impacts on existing and potential neighbouring development, the public domain and residential developments in and surrounding the Bondi Junction Centre. The improvement of pedestrian access between Spring Street and the Bus and Rail interchange was also a focal point in the project which considered access and movement through the private and public domain. A review of the provisions for the Town Square as part of the Oxford Street Mall and its connectivity had been included in this part of the project. A further focus was on development options for Key Development Sites identified in the project brief. The potential development of these sites has been reviewed in the context of existing Development Controls as well as by comparison with recent development in the area.

The first task involved the collection of existing data and consultation with Waverley Council to determine the objectives and the desired outcome of the review. A peer review of the existing controls within the Bondi Junction LEP and the Waverley DCP 2012 determined their appropriateness for the production of a high quality design in the specific local context. The local context was further investigated to identify improvements for pedestrian connectivity between Spring Street and the Bus and Rail Interchange.

The result of the first task informed the second task, the amendment or production of new controls where appropriate for potential future development. Case studies have been researched and input has been sought from Waverley Council to underpin the conceptual framework for future development.

The third task included the production of a draft document

that outlined the research and analysis findings. The draft document was presented to Waverley Council and the Department of Planning for comments which were incorporated into this final report.

Background Assessment

The review is framed by a number elements that include the Land Zoning, the Height of Buildings, the Floor Space Ratio (FSR), the pedestrian network, the Oxford Street Mall Town Square and the identified Key Development Sites.

Land Zoning

Under the Waverley LEP (Bondi Junction Centre) 2010, the Study Area comprises of B3 Commercial Core and B4 Mixed Use zoning. The commercial core includes both sides of the Oxford Street Mall as well as the Westfield Shopping Centre between Grafton Street and Ebley Street. The Commercial Core extends to the west and includes an area between Grafton Street and Hegarty Lane. The Mixed Use zoning includes the western part of Oxford Street, Denison Street, Westfield Centre and Bondi Road, Eastgate Shopping Centre on Spring Street and the rail and bus interchange between Grafton Street and Grosvenor Lane.

The Urban Design Review analyses the appropriateness of the zoning boundaries with a view to achieving buildings with high design quality. This especially focuses on the Key Development Sites and the appropriateness of their zoning. It also includes an assessment of the LEP zone objectives in general.

Height of Buildings

While the LEP regulations for the Height of Building controls tend to be site specific around the Oxford Street Mall, the Height of Building controls are more block-based for the rest of the study area (see Waverley LEP 2012 Height of Buildings Map). A maximum height of 60m can be achieved along Grafton Street where city and harbour views can be achieved as well in the area surrounding the Westfield and Eastgate Shopping Centres. From these allowable heights, the Height of Building controls step down to 9.5 / 12.5m in the residential areas to the south.

The Urban Design Review focuses on the impact of building height on surrounding areas as well as the creation of a centre skyline. Additionally SEPP 65 regulations and the impact on the public domain (e.g. the Oxford Street Mall with the Town Square and Clementson Park) were assessed to analyse if the desired objectives are achievable.

Floor Space Ratio (FSR)

The Urban Design Review analyses the appropriateness of the FSR controls in regard to the production of buildings displaying design excellence and potential for flexibility and adaptability. Again, this especially focuses on the previously mentioned Key Development Sites and the appropriateness of their zoning; however an assessment of the LEP zone objectives for the Bondi Junction Centre in general is also included. It will be considered whether the inclusion of an 'incentive clause' in the LEP to allow for additional FSR would be an option.

For the purpose of this review the preferred Mixed Use building consists of 2 storeys commercial (ground Level and Level 1) and residential above (Level 2 and above). An 85% rate of the net floor space will be used for commercial levels and a 75% rate for residential levels to determine the respective Gross Floor Area (GFA).

Pedestrian Network

The Urban Design Review analyses and assesses the pedestrian network within the Study Area. Special consideration is given to increasing permeability and specifically the improvement of the pedestrian access between Spring Street and the Bus/Rail Interchange. Existing and potential connections are assessed and evaluated with the present LEP and DCP rules to determine their effectiveness in regard to increasing pedestrian access within the area. The analysis includes connections between Spring Street and the Bus/Rail Interchange, be it through buildings/block or within existing streets.

The Urban Design Review includes recommendations on how to improve the accessibility, visibility and performance of the existing arcades. Emphasis is given to access points and the public domain design in the surroundings including road lay out, paving and landscaping. Effective access to malls in the Study Area and elsewhere has been considered and analysed. This resulted in a number of positive case studies with principles and guidelines to be applied to the existing and potential connections between Spring Street – Oxford Mall – Bus and Rail Interchange. The aim is to incorporate Spring Street and connections into the Bus and Rail Interchange as part of a strong pedestrian network for Bondi Junction and improve the design quality of the public domain.

Oxford Mall – Town Square

The Urban Design Review includes an analysis and assessment of the LEP and DCP regulations for the development of the Town Square as part of the Oxford Street Mall. This considers their objectives and aims as well as their effectiveness. The development of a well designed Town Square with flexible functionality is not only essential for Oxford Street Mall but also for the Bondi Junction Centre. Furthermore the Town Square is an important stepping stone between Spring Street and Bus/Rail Interchange. Overshadowing of the Oxford Street Mall in general is addressed as a separate issue.

Key Development Sites

The Key Development Sites within the Study Area have been investigated in regard to Land Use Zoning, Height of Building, Floor Space Ratio and LEP designation to ascertain their appropriateness for achieving buildings displaying design excellence. A peer review of the proposed Bondi Junction controls as contained in Waverley DCP 2012 will determine whether it will be necessary to produce new and/or amended controls to be incorporated as amendments to both the LEP and the DCP. An important focus is on creating buildings with flexibility and adaptability potential. Consideration is given as to whether the development of individual lots or the development of merged lots is preferable and practicable.

3. KEY ISSUES, CONSTRAINTS AND OPPORTUNITIES

Key Issues

Identity

The issue of Bondi Junction's skyline raises questions about allowable building heights. Currently, there are tower forms that protrude beyond the maximum allowable Height of Building control producing an undulating skyline. An increase in allowable building heights may provide an opportunity for an iconic building that will enhance Bondi Junction's skyline. Potentially it will be a well designed tower of architectural merit. The development of which could be completed with public domain improvements in the Bondi Junction Centre.

Public Domain

Overarching plans should be created for Bondi Junction Centre. This should include a pedestrian circulation network that identifies through site links and emphasises pedestrian connectivity between Spring Street and the Bus and Rail Interchange. Whilst a Public Domain Technical Manual exists for Bondi Junction Centre, there is a need for a strategic Public Domain Master Plan (PDMP) that establishes a clear and unified direction for the future character of the centre. This should address design details such as material selections and construction details whilst also articulating an overarching conceptual vision for the public domain of Bondi Junction. A list of prioritised projects should guide future investment.

Solar Access

There is limited public open space in the Bondi Junction Centre. Clementson Park, Oxford Street Mall, the Boot Factory Plaza, Waverley Street Mall and Eora Reserve are the last remaining public open spaces. Overshadowing of these important public spaces should be avoided to maximise their amenity and encourage their use, especially during the winter time.

Traffic

A very important amenity issue that lies beyond the scope of this review is traffic in the centre. We consider that it is vital to improve the pedestrian and cyclist environment in the near future. Currently, vehicular traffic physically and visually dominates Bondi Junction Centre. Buses travel at high speeds despite segments of the road being designated as bus only. Preference appears to be given to the access and movement of public transport and private vehicles over the pedestrian and cyclist.

To achieve greater amenity to pedestrian and cyclist access and movement in the public domain, a number of improvements can be made including the greening of the streets and public spaces, the widening of footpaths, the prioritisation of pedestrian and cyclist movement, an increase in bicycle facilities, and crucially, traffic must be reduced and calmed in the centre possibly through the introduction of shared zones.

Lot Size

Large scale lot consolidation has been a factor that has driven many of the undesirable urban design outcomes of recent years. With the gradual maturing of the centre it is entering the phase when it is no longer possible to achieve the larger lots. This means a shift away from the typology of the large freestanding tower on a podium with large structured car parks. The principal impact of this change is that the blocks with rear lane access can be developed relatively easily because they can adequately accommodate car park access, rubbish bins and fire escapes without significant impact on the active primary frontage. Blocks without rear lane access will have to consolidate to a larger scale or compromise the streets.

Urban Form

The practical development of many of the remaining sites in the centre with regard to the podium and street frontage situation is constrained. The existing controls for upper level setbacks tend to produce a 'ziggurat' block form on streets with heritage buildings. In the past, sites have been able to develop within the form because they have adopted the podium-tower form. This is a form that can only be achieved on larger sites. Now and in the future there will be fewer large sites available. The remaining sites tend to be narrower. Better development outcomes will be in the form of perimeter-block configuration with small or zero front setbacks and zero side setbacks.

Zoning

There are a complex set of strategic targets and development feasibility issues at play in the zoning of the Bondi Junction Centre. Whilst the Metropolitan Plan for Sydney 2036 has set employment growth targets for Bondi Junction as a Major Centre, there is also a desire for a mix of uses to encourage activity, diversity and vibrancy.



Figure 3.1 Constraints

Constraints

The following constraints for development within the Bondi Junction Centre have been identified:

- There are conflicting modes of transport connecting to Bondi Junction – pedestrians, cyclists, private motor vehicles, taxis, buses and trains;
- There are high traffic volumes which result in a public domain that is dominated by motor vehicles rather than pedestrians or cyclists;
- There are limited sites available for possible future public open space as most of the centre has already been developed;
- There are many strata title developments with more than 20 owners, thus making them less likely to redevelop in the near future;
- There are few large lots available for development (larger than 2,000 sqm), thus larger developments will require lot consolidation;
- The east-west orientation of Grafton, Oxford, Spring and Ebley Streets means that the northern side of these streets is predominantly in shade.

- Height increase would overshadow of areas south of Ebley Street
- Special protection required for Clementson Park. Height limit to control overshadowing at 12 noon, 21 June
- Tall buildings along the north side of centre block views to harbour and beyond and have shadow impacts on areas to the south. No additional height increase recommended
- ④ Poor pedestrian connection to Oxford Street Mall and Waverley Street Mall
- Seduce bus travel speed to create a safer pedestrian and cycle environment
- Fragmented ownership of small sites restricts location of large footprint buildings
- Steep streets present accessibility issues
- 8 Solar access to Waverley Street Mall limits building heights
- 9 Physical boundary through elevated bypass road



Figure 3.2 Opportunities

Opportunities

The following opportunities for development within the Bondi Junction Centre have been identified:

- To enhance the quality of the public open spaces by preventing overshadowing;
- To improve the public domain with widened footpaths, street trees and planting, improved pedestrian and cyclists connections with prioritised pedestrian and cyclist movement;
- To provide better access and circulation for all modes of transport;
- To create a more transit oriented centre where conflicts between modes are minimised;
- To increase the vibrancy and vitality of the centre with more workers, more residents and more diverse offerings such as restaurants and cafes throughout the day and evening;
- To encourage better built form outcomes that addresses the public realm at a pedestrian scale through high quality sustainable architecture;
- To enhance Bondi Junction's skyline with an iconic tower form.

- Improve connection from Oxford Street to Rail Interchange and Spring Street, develop proposed Town Square
- Upgrade and improve public domain design, opportunities to create shared zone
- 8 Potential for additional storeys within LEP height limit
- ④ Development of transition zone with mixed use buildings
- 5 Development of mixed use buildings
- Development of Oxford Street as local street with low scale block edge
- Potential for height and FSR increase
- 8 Create links through blocks (preferably open to the sky)
- (9) Create solar access planes for open space
- Improve relation to elevated bypass road
- Opportunity for lane activation
- Create a 3-meter-wider bus lane on north side of eastern block Oxford Street

4. SUMMARY OF RECOMMENDATIONS

Recommendations in of this report relate to three main areas: Public Domain Amenity; Development Potential and; Planning Policy.

Recommendations: Public Domain Amenity

- Develop a new Public Domain Master Plan to identify key public domain projects;
- Develop a movement strategy that integrates pedestrian and vehicular movements and has a clear focus on the quality of the public domain;
- Improve the connection from the Rail Interchange to Oxford Street and further on to Spring Street possibly including the proposed Town Square;
- Use various opportunities to create links through blocks (as indicated in Figure 3.2);
- Improve public domain of Grafton Street and towards and underneath Syd Enfield Drive;
- Identify opportunities to create shared zones in parts of Spring Street and Bronte Road;
- Create solar access planes for important public open spaces within the Bondi Junction Centre;
- Prevent midwinter lunchtime overshadowing of Clementson Park by amending the Waverley LEP 2012 Height and FSR along the northern side of Ebley Street.

Recommendations: Development Potential

- Improve flexibility in land use by amending the Waverley LEP 2012 to Change the zone of the commercial core that lies to the west of Newland Street from B3 Commercial Core to B4 Mixed Use;
- Consider tall office buildings on the block between Oxford Street, Bronte Road and Gray Street (facilitating the opportunity for A-grade office space in Bondi Junction);
- Use potential for additional storeys within LEP height limit at selected locations (at present the number of storeys is limited by the DCP which at some locations does not correspond with the full LEP height potential);
- Acknowledge that certain sites may be the subject of acceptable development applications which exceed development controls, if they do not create unacceptable impacts and they meet obligations to improve infrastructure and facilities.

Recommendations: Planning Policy and Design:

- Develop a framework for Voluntary Planning Agreements and Section 94 contributions particularly for sites that might the subject of Development Applications significantly over the existing controls;
- The report suggests a set of minor corrections and refinements to the Waverley DCP 2012 structure and content to improve its usability. These are set out in Chapter 8 – Proposed Control Amendments.
- Refer to national and state legislation such as the National Construction Code (NCC) or the NSW Residential Flat Design Code (RFDC) for specific matters, e.g. determination of ceiling heights;
- Rename the SEPP 65 panel the "Design Excellence Panel" and improve its utilisation by referring a wider range of projects and seeking pre-DA review;

- Require development applications to consider impacts on surrounding sites. This may include three dimensional testing of shadowing;
- Where appropriate require development applications to illustrate how neighbouring sites can be renewed or redeveloped adjacent to the proposal;
- Introduce environmental design into the DCP including passive solar design and natural ventilation;
- Permit commercial uses on sites on the south side of Ebley Street between Hollywood Avenue and Denison Street where they face potential overshadowing from development to the north
- Conduct a block-by-block analysis to assess building massing options for redevelopment sites. This analysis may determine appropriate setbacks in the context of existing building massing, block depth, lot size and access considerations.
- Develop a strategic plan for the renewal of the area between Ebley Street and Birrell Street to consider the possible expansion of Bondi Junction southward.

Commentary on Key Recommendations

The review identified the opportunity for greater height potential on some sites in Bondi Junction. These include the block to the south of Oxford Street occupied by Westfields. There may be other sites in the centre that also have greater height potential than permitted under the existing LEP. This report does not recommend a simple change to the development controls increasing Height and FSR, because this would imply in increase in development potential without proper testing of any impact. Furthermore it would leave council with limited opportunity to fund the upgrades to infrastructure and public domain which should accompany any such large scale development.

This review proposes to resolve this by establishing a framework to permit greater development potential and to capture value in this uplift for public benefit. The framework may use voluntary planning agreements and the Section 94 plan in the process. The other related recommendation (which council has already commenced) is to develop a plan for public domain improvements so that council can explicitly identify projects to be funded though this framework.

Appropriate building setbacks on any site depend significantly on the immediate context. The context in Bondi Junction is highly varied. Therefore generic controls will not provide the optimal outcome in all instances. The DCP provides for relatively conservative (large) setbacks. This is intended to allow the assessors discretion (following advice from the design review panel) to vary setbacks in instances where this variation meets the objectives and represents an improvement over the application of the full setback. Deliberations regarding setback could be supported by a block-by-block analysis to assess building massing options for redevelopment sites. This analysis may determine appropriate setbacks in the context of existing building massing, block depth, lot size and access considerations. With regard to the street sections in the DCP, the current controls set up a 'double step'. This is sub-optimal because it applies in some instances where there is no heritage context (though it is intended as a response to heritage). Furthermore the small 2m step is insufficient to preserve the integrity of the heritage facade. It typically leaves a two storey facade overwhelmed by the bulk of the building above it by a further four storeys. Another issue is that the reviewed information on the behaviour of wind downdraft suggests that a minimum step dimension of 6m is required to provide effective wind deflection for street level comfort (City of Melbourne Built Form Review 2012).

Therefore the street sections recommended for inclusion in the DCP consist of two types. On street blocks with no 'Heritage Items or Buildings of Historic Character', the street wall is to rise to six storeys on the lot boundary, then step back 6m before rising to full height. On street blocks with 'Heritage Items or Buildings of Historic Character', the heritage or historic facade is to be preserved (or matched on neighbouring sites), then set back 6 metres before rising to the full building height.

5. PEER REVIEW OF EXISTING CONTROLS AND URBAN FORM ANALYSIS

Previous Studies and Planning Policies

CPUD reviewed previous studies and planning policies relating to Bondi Junction to understand the context within which the existing built form and controls have developed. In the last ten years, a series of public domain, heritage, economic, traffic and transport studies have been completed as well as the Bondi Junction Town Square Precinct Urban Design Master Plan (2004) and the Bondi Junction Centre Structure Plan (2006). In 2010, the NSW Government released the Metropolitan Plan for Sydney 2036 which designates Bondi Junction as a Major Centre, i.e. the main shopping and business centre for its subregion with a 1km walking catchment characterised by an employment base of 8,000+ jobs. The Metro Plan set an employment growth target of an additional 2,000 jobs in Bondi Junction from its 2006 base employment of 12,000 to a long-term employment capacity target of 14,000 by 2036. A list of previous studies and planning policies follows:

Year	Title	Prepared By
1996	Waverley Local Environment Plan 1996	Waverley Council
2004	Bondi Junction Town Square Precinct Urban Design Master Plan	Jann Associates
2004	Bondi Junction Strategic Plan Economic Review	Leyshon Consulting
2004	Bondi Junction Strategic Plan Traffic and Transport Review	Arup
2004	Bondi Junction Heritage Assessment	Colin Brady and Ines Meyer
2006	Bondi Junction Centre Structure Plan	Connell Wagner
2006	Waverley Local Village Centres DCP and Public Improvement Plan Economic Assessment	Hill PDA
2006	Waverley Development Control Plan 2006	Waverley Council
2007	Bondi Junction Traffic and Transport Study	Maunsell / AECOM
2008	Bondi Junction Public Domain Technical Manual	Waverley Council
2009	Bondi Junction Planning Review - LEP Modelling	Allen Jack + Cottier
2010	Bondi Junction Business Activity Report	Waverley Council
2010	Waverley Together 2 Strategic Plan for 2010-2022	Waverley Council
2010	Metropolitan Plan for Sydney 2036	NSW Government
2010	Waverley Development Control Plan 2010	Waverley Council
2010	Waverley Local Environment Plan (Bondi Junction Centre) 2010	Waverley Council
2012	Waverley Development Control Plan 2012	Waverley Council
2012	Waverley Local Environment Plan 2012	Waverley Council

Previous Studies and Planning Policies

Historic Evolution

Bondi Junction's urban form has undergone significant transformation over time. In the 1940s, Oxford Street and Grafton Street were primary commercial streets, composed of fine grain multi-storey developments, surrounded by terrace houses. In the 1970s, surface parking lots began to appear as part of the lot consolidation for the future development of Westfield, Eastgate, the bus and rail interchange, as well as the commercial and residential towers on Grafton Street. In the 1980s, Westfield was built, Eastgate was under construction and the bus interchange existed at surface level with the railway station below grade. In the 1990s, Westfield had built another commercial tower, Eastgate was complete and three commercial towers existed on Grafton Street.

Today, Westfield has undertaken expansion and renovation, two residential towers have been built on top of the bus and rail interchange, and a further two residential towers exist on Grafton Street. Bondi Junction's urban form has been transformed from primarily fine grain development to primarily large-block development where a sense of human scale, pedestrian permeability and architectural diversity are lacking. A series of aerial photographs documenting this historic evolution and lot consolidation is documented on the following pages.



Figure 5.1 Bondi Junction 1943



Figure 5.2 Bondi Junction 1961