

State Significant Development Application - SSD 14_6673 Environmental Impact Statement



Block 4N, Central Park

Mixed Use Development

Submitted to Department of Planning
On Behalf of Central Park JV No 2

November 2014 ■ 14642

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17/11/2014

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17/11/2014

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Executive Summary

Purpose of This Report

This Environmental Impact Statement (EIS) has been prepared for a State Significant Development Application (SSDA) for a mixed use development known as Block 4N at Central Park, Chippendale. This EIS is submitted to the Minister for Planning and Environment pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), and *State Environmental Planning Policy (State and Regional Development) 2011* (SEPP SRD).

Proposed Development

This EIS will accompany a SSDA for the development of a mixed use building known as Block 4N at Central Park, Chippendale. Central Park is located on the southern edge of the Sydney Central Business District (CBD) (see **Figure 1** of this EIS). The Block 4N site is located at the north western corner of the Central Park site (see **Figure 1** of this EIS).

More specifically, this SSDA seeks approval for the following components:

- Construction of an 18 storey mixed use building comprising:
 - a total of 48 residential apartments over six (6) levels (7 of which will be adaptable apartments), including:
 - 36 x 1 bedroom apartments.
 - 12 x 2 bedroom apartments, of which 10 apartments are 2 bedroom dual key.
 - Two (2) levels comprising a childcare facility, including external terraces for the use of the childcare facility.
 - Six (6) levels of office space.
- Construction of an eighteen (18) storey hotel building, connected to the mixed uses building, which will contain 283 hotel rooms, as well as conference facilities, gym and swimming pool.
- Four levels (4) of basement comprising car parking, bicycle parking, end-of-journey facilities, and services infrastructure to service Block 1 and Block 4N including;
 - 126 car parking spaces
 - 10 car share spaces.
 - 7 Motorcycle Spaces
 - Bicycle parking spaces to service residential/retail and visitor requirements.
 - Service vehicle loading are consisting of a total of 7 service vehicle bays.
- Total Gross Floor Area (GFA) of 25,930m² divided into the following uses:
 - 13,986m² for hotel uses;
 - 6,146m² for office uses;
 - 3,518m² for residential apartments;
 - 1,080m² for childcare;
 - 789m² for use of the heritage pub; and
 - 236m² for retail.
- Stratum subdivision of the site.

Planning Context

The proposed development has a total Capital Investment Value (CIV) of over \$10 million and is classified as State Significant Development (SSD) pursuant to Clause 2 Schedule 2 of the SEPP SRD.

A request to issue Secretary's Environmental Assessment Requirements (SEARs) for environmental assessment of the proposed development was made on 2 September 2014. The Draft SEARs were issued to the proponent on 7 October 2014. A copy of the SEARs is provided at **Appendix A**.

Section 5.0 of the EIS considers all applicable legislation in detail.

The Block 4N site is located on land that forms part of the Central Park (formerly Carlton United Breweries and then Frasers Broadway) Concept Plan MP 06_0171. A concurrent modification to the Concept Plan pertaining the land uses and built form will lodged concurrently to the Department of Planning.

Environmental Impact

The EIS provides an assessment of the environmental impacts of the project in accordance with the SEARs and sets out the undertakings made by the Applicant to manage and minimise potential impacts arising from the development (see **Section 5.0**). Key environmental assessment considerations identified include, amongst others:

- Compliance with the approved Concept Plan MP 06_0171 (as modified) dated 5 February 2009;
- Height, bulk and scale of the proposed development within the local context and approved Concept Plan (as modified) including solar access to the public park;
- Land uses;
- Environmental and residential amenity including minimum unit sizes, unit mix, floor to ceiling heights and storage;
- Landscape and public domain management;
- Transport and accessibility including traffic impact, provision for service vehicles and on-site car and bicycle parking;
- Implementation of ESD measures;
- Noise generation during construction and operation; and
- Drainage and flooding including Water Sensitive Urban Design (WSUD).

All identified impacts are addressed in this EIS and are capable of being ameliorated through the implementation of appropriate mitigation measures outlined in **Section 6.0**. It is noted that this SSDA is consistent with the Concept Plan (as modified), with the exception of the amendments subject to the concurrent Concept Plan Modification.

Benefits of the Proposal

Block 4N, a residential/mixed use development located at Central Park, Chippendale, will provide a mix of much needed residential and hotel/tourist accommodation in an area well serviced by public transport, and in close proximity to the retail, attractions, employment, services and education opportunities offered by the Sydney CBD and surrounds.

Conclusion

The mitigation measures are detailed in **Section 6.0** and have been prepared to inform the ongoing management of the Block 4N site throughout the construction and operational phase of the proposed development. This EIS fulfils the requirements of the EP&A Act and addresses the Secretary's Environmental Assessment Requirements, demonstrating that the impacts of the proposal can be satisfactorily managed or mitigated. In light of the above, and the benefits of the proposal, we recommend that the proposed development be approved.

Statement of Validity

Development Application Details

Applicant name	Central Park JV No 2
Applicant address	Suite 11, Lumiere Commercial Level 12, 101 Bathurst Street Sydney NSW 2000
Land to be developed	Lot 1 DP1142053
Proposed development	Development of a mixed use building known as Block 4N at Central Park, Chippendale

Prepared by

Name	Gordon Kirkby / Stephen Gouge
Qualifications	BEC Dip URP MPIA / BPlan (Hons)
Address	Level 7, 77 Berry Street, North Sydney, NSW 2060
In respect of	State Significant Development Application for a mixed use development known as Block 4N at Central Park, Chippendale

Certification

I certify that I have prepared the content of this EIS and to the best of my knowledge:

- it is in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*;
- all available information that is relevant to the environmental assessment of the development to which the statement relates; and
- the information contained in the statement is neither false nor misleading.

Signature



Name

Gordon Kirkby



Stephen Gouge

Date

November 2014

1.0 Introduction

This Environmental Impact Statement (EIS) is submitted to the Department of Planning and Environment (DPE) in support of an application for State Significant Development (SSD) for a mixed use building comprising of residential, hotel, commercial, childcare centre and retail at Block 4N, Central Park.

State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD) identifies development which is declared to be SSD. Under Clause 2 of Schedule 2 of the SEPP SRD, development on the 'Broadway (CUB) Site' (Central Park) with a capital investment value (CIV) of more than \$10 million is identified as SSD. Given the development of Block 4N will have a CIV of approximately \$125,220,000 the proposal is declared to be SSD for the purposes of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This EIS has been prepared by JBA Planning on behalf of Central Park JV No 2 and is based on the Architectural Drawings provided by Foster +Partners and PTW Architects (see **Appendix B**) and Architectural Design Statement prepared by Foster +Partners (**Appendix C**), and other supporting technical information appended to the report (see Table of Contents).

This report describes the subject site, its environs and the proposed development, and provides an assessment of the proposal in terms of the matters for consideration under Section 79C(1) of the EP&A Act.

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), and the Requirements of the Secretary of the Department for the preparation of the EIS (see **Appendix A**). In accordance with Clause 11 of the SEPP SRD, the requirements of Development Control Plans (DCPs) do not apply. However, the relevant DCPs (Namely, City of Sydney DCP 2012) have been considered in the design of the proposed development. This EIS should be read in conjunction with the supporting information and plans appended to and accompanying this report.

1.1 Overview of Proposed Development

The proposal relates to a detailed SSDA for the development of a mixed use building known as Block 4N at Central Park, Chippendale. Central Park is located on the southern edge of the Sydney Central Business District (CBD). The Block 4N site is located at the north western corner of the Central Park site (see **Figure 2** of this EIS).

More specifically, this SSDA seeks approval for the following components:

- Construction of an 18 storey mixed use building comprising:
 - a total of 48 residential apartments over six (6) levels (7 of which will be adaptable apartments), including:
 - 36 x 1 bedroom apartments.
 - 12 x 2 bedroom apartments, of which 10 apartments are 2 bedroom dual key.
 - Two (2) levels comprising a childcare facility, including external terraces for the use of the childcare facility.
 - Six (6) levels of office space.
- Construction of an eighteen (18) storey hotel building, connected to the mixed uses building, which will contain 283 hotel rooms, as well as conference facilities, gym and swimming pool.

- Four levels (4) of basement comprising car parking, bicycle parking, end-of-journey facilities, and services infrastructure to service Block 1 and Block 4N including;
 - 126 car parking spaces
 - 10 car share spaces.
 - 7 Motorcycle Spaces
 - Bicycle Parking Spaces to service residential/retail and visitor requirements.
 - Service vehicle loading are consisting of a total of 7 service vehicle bays.
- Total Gross Floor Area (GFA) of 25,755m² divided into the following uses:
 - 13,986m² for hotel uses;
 - 6,146m² for office uses;
 - 3,518m² for residential apartments;
 - 1,080m² for childcare;
 - 789m² for use of the heritage pub; and
 - 236m² for retail.
- Works to the existing Australia Hotel and Abercrombie St terraces inclusive of:
 - Make good of structure, facades, and roof
 - New external lift and stair at the rear of the Australia Hotel
- Public domain works including landscaping, paving, water feature, and drop off bays to Central Park Avenue.
- Stratum subdivision of the site.

1.2 Background to the Development

1.2.1 Concept Plan

MP06_0171 is a Concept Plan approval applying to the Carlton United Breweries (then Frasers Broadway, now Central Park) site which permits the construction of a mixed use precinct comprising:

- 11 development blocks;
- A maximum GFA of 255,500m², of which a minimum of 30% must be commercial floor space;
- Combined basement car parks, providing car parking for Blocks 1, 4 and 8 and Blocks 2, 5, 9 and the Kensington Precinct;
- A new public park;
- Tri-generation and re-cycle water treatment plants;
- Retention of heritage items;
- Public domain works; and
- Contributions.

In July 2008, Frasers Broadway Pty Ltd submitted an application to the Minister proposing the following modifications to the approved Concept Plan:

- Reconfiguration of the development blocks on the site;
- An increase in the amount of public domain on the site;
- Alterations to the building massing across the site;

- A 22,500m² increase in floor space across the site;
- A change in the mix of uses on the site (increase in commercial floor space and decrease in residential floor space);
- Installation of sustainable infrastructure including a tri-generation plant and a black water treatment plant; and
- Combined basements.

The modification application was approved by the Minister in February 2009. Since February 2009 there have been a total of eight (8) modifications and a further modification (Mod 9), pertaining to GFA reallocation, was lodged to the Department of Planning and Infrastructure (as previously referred at the time) in January 2014. The modifications to the approved Concept Plan for the Central Park site are outlined in **Table 1**.

Importantly, MOD 8 of the Concept Plan approved a variation to the maximum/minimum land use split on the Central Park site, permitting a maximum of 77% residential and minimum 23% non-residential.

Table 1 – Modifications to approved Concept Plan MP06_0171

Mod No	Description of Modification	Status
Mod 1	Correction of reference error in approval	Approved: 18 July 2007
Mod 2	Major amendment to Concept Plan (see above)	Approved: 5 February 2009
Mod 3	Amendment to timing of execution of Voluntary Planning Agreements	Approved: 16 May 2010
Mod 4	Modification to lapsing clause	Approved: 30 August 2011
Mod 5	Modification of future assessment requirement B12 'ESD and Sustainable Design'	Approved: 31 July 2012
Mod 6	Modification to GFA within the Kensington Precinct; modification to Block 6 and Block 10 envelopes; and corrections to property references	Approved: 24 July 2012
Mod 7	Amendment to the allocation of GFA of Block 3 within the Kensington Precinct	Approved: 17 January 2013
Mod 8	Amendment to the allocation of GFA and the mix of residential and non-residential GFA on the site to enable the redevelopment of Block 4S for student accommodation, and the potential for Block 1 as residential if the approved commercial development proves unviable. Reconfiguration of building envelopes to facilitate the separation of Blocks 1 and 4N from Block 4S, and minor modifications to the envelopes of Blocks 1 and 4N. The modification approved a revisions to the residential/non-residential land use split to a maximum 77% residential and minimum 23% non-residential.	Approved: 23 December 2013
Mod 9	Reallocation of GFA to Block 8 and other minor amendments to the Concept Plan	Pending determination

1.2.2 Other Applications

Other applications relating to the development of the Central Park site, and relevant to Block 4N, are outlined in **Table 2**.

Table 2 – Other applications relating to the Central Park site

Application No	Description of Application	Status
MP07_0120	Demolition and site preparation works to enable development in accordance with the approved Concept Plan	Approved: 12 March 2008
MP07_0163	Remediation / transitional works including demolition of basements and other structures, stabilisation and protection of heritage buildings, archaeological investigation and remediation of contaminated soil and groundwater	Approved: 15 August 2008
MP08_0210	Main Park and Stage 1 infrastructure services under Irving and O'Connor Streets, construction of temporary road and public domain services and permanent protection of the Ovoid Drain	Approved: 22 January 2010
MP09_0164	Stage 2 infrastructure services including power, water, gas, sewer, roads and footpaths and permanent protection of remaining existing services	Approved: 9 November 2010

In addition, a further application was made to the City of Sydney (CoS) pertaining to subdivision of the then Carlton United Breweries site (now referred to as Central Park). The application is described below.

Super Lot Subdivision Application

The City of Sydney has approved an application for subdivision of the Central Park site into eight super lots. This is the initial step in preparing lots to accommodate the Main Park and various blocks generally as defined within the approved Concept Plan (as modified). The continuing subdivision of the Central Park site will also assist some of the government agencies in the infrastructure design requirements. These lots will be further divided by a plan of subdivision providing both public and private stratum lots based upon the Development Application when approved.

1.2.3 Block 1 4N Project Application (MP 08_0253)

On 26 May 2010 the then NSW Department of Planning approved the construction of a commercial Building on Blocks 1 and 4 which consists of the following elements:

- The excavation of the basement under Blocks 1 and 4 and the brewery yard;
- Construction of a new commercial 10– 15 storey commercial building (72,780m² GFA) accommodating:
 - - 5 levels of basement car parking
 - - A shell for the future installation of a tri-generation plant;
 - - Retail floor space;
 - - Commercial floor space;
 - - Childcare centre;
- Demolition of the rear ground floor bar of the Australian Hotel;
- Demolition of the rear one storey bathroom additions of the heritage terrace group known as 8– 12 Abercrombie Street; and
- Construction of the surrounding public domain.

The approval has since been modified to include the installation of a Central Thermal Plant (previously described as a tri-generation plant) and associated

infrastructure within the approved basement space. The Central Thermal Plant (CTP) has now been the subject of a further modification to reduce its size. A third, administrative modification has been approved to clarify Green Star requirements.

Modification No 4 of the Project Application involved the excising of Block 4S from the Block 1 +4N approval, to allow for the delivery of Block 4S as student Accommodation. This modification (MP 08_0253 MOD 4) was approved in December 2013 by the Planning Assessment Commission.

The most recent Modification (MOD 5) is currently under assessment the Department of Planning and Environment and primarily involves the separation of Block 1 +4N from one and other as part of the approved commercial scheme. The application was submitted in order to enable Block 1 to be developed independent of Block 4N. The Modification to MP 08_0253 involves the removal of the upper level link bridge between Blocks 1 and 4N, resulting in amendments to the floor plates and the eastern facade of Block 4N.

1.2.4 Block 1 - Residential/Mixed Use SSDA

In August 2014, a State Significant Application was lodged to the DPE seeking approval for the following:

- Construction of an eighteen (18) storey mixed use building comprising a total of 281 residential apartments (52 of which will be adaptable apartments), including:
 - 94 x studio apartments.
 - 91 x 1 bed apartments.
 - 72 x 2 bed apartments.
 - 24 x 3 bed apartments.
- Four levels (4) of basement comprising car parking, bicycle parking, end-of-journey facilities, and services infrastructure to service Block 1 and Block 4N including;
 - 345 car parking space (216 to be allocated for use by Block 1).
 - 7 Motorcycle Space.
 - Bicycle Parking Spaces to service residential/retail and visitor requirements.
 - Service vehicle loading area consisting of a total of 20 service vehicle bays.
- 1,100m² of non-residential/retail floor area at ground level with active street frontages to all four frontages of the building (including the future pedestrian link between Block 1 +4N);
- Resident facilities including a gym and 20m swimming pool located on level 2, outdoor terrace area on level 16, with an accessible Jacuzzi, barbeques and outdoor furniture;
- Total Gross Floor Area (GFA) of 24,454m² including 1,000 m² of non-residential, 187m² of other GFA, and 23,167m² of residential use; and
- Stratum subdivision of the site.

1.3 Secretary's Environmental Assessment Requirements

In accordance with section 78A(8A) of the EP&A Act, and Schedule 2 of the Environmental Planning and Assessment Regulations 2000, the Secretary of the NSW Department of Planning and Environment issued their draft requirements

for the preparation of the EIS to accompany Block 4N, Central Park on 7 October 2014. A copy of the draft Secretary's Environmental Assessment Requirements (SEARs) is provided at **Appendix A**.

The SEARs require that the EIS must include the documents listed in Schedule 1 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation) and must meet the requirements of Schedule 2 of the Regulation, in particular the form specifications in Clause 6 and the content specifications in Clause 7. Several stakeholders were identified with whom consultation must occur during the preparation of the EIS.

Table 3 provides a detailed summary of the individual matters listed in the SEARs and identifies where these requirements have been addressed in this report and the accompanying technical studies.

Table 3 – Secretary's Environmental Assessment Requirements (SSD – 6673)

Secretary's Environmental Assessment Requirement	Location in Report	
	Report	Appendix
General Requirements		
The EIS must meet the minimum requirements in Schedule 2 the <i>Environmental Planning and Assessment Regulation 2000</i> , specifically: <ul style="list-style-type: none"> form specifications in clause 6; and specifications in clause 7. 	Pages i, ii, iii	-
EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.		-
Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: <ul style="list-style-type: none"> adequate baseline data; consideration of potential cumulative impacts due to other development in the vicinity; and measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment. 		-
The EIS must be accompanied by a report from a qualified quantity surveyor providing: <ul style="list-style-type: none"> a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and certification that the information provided is accurate at the date of preparation. 		
Key Issues		
Statutory and Strategic Context	Report	Appendix
Address the statutory provisions applying to the development contained in all relevant environmental planning instruments, including:	Section 4	
<i>EP&A Act 1979</i>	Section 4.2	
<i>State Environmental Planning Policy (State & Regional Development) 2011</i>	Section 4.3	
<i>State Environmental Planning Policy (Infrastructure) 2007</i>	Section 4.3	
<i>State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004</i>	Section 4.3	
<i>State Environmental Planning Policy No.55 – Remediation of Land</i>	Section 4.3	
<i>State Environmental Planning Policy No.64 – Advertising and Signage</i>	Section 4.3	
<i>State Environmental Planning Policy No.65 – Design Quality of Residential Flat Development and accompanying Residential Flat Design Code</i>	Section 4.3	
<i>Sydney Local Environmental Plan 2005</i>	Section 4.3	
<i>NSW 2021</i>	Section 4.2	
<i>Draft Metropolitan Strategy for Sydney</i>	Section 4.2	

Secretary's Environmental Assessment Requirement	Location in Report	
<i>Metropolitan Plan for Sydney 2036</i>	Section 4.2	
<i>Draft Sydney City Sub-Regional Strategy</i>	Section 4.2	
<i>Sydney 2030 (The City of Sydney Council)</i>	Section 4.2	
<i>Development Near Rail Corridors and Busy Roads - Interim Guideline</i>	Section 4.2	
<i>Guide to Traffic Generating Developments (RTA)</i>	Section 4.18	
<i>NSW Planning Guidelines for Walking and Cycling</i>	Section 4.18	Appendix R
<i>NSW Long Term Transport Masterplan</i>		
<i>City Centre Access Strategy.</i>	Section 4	Appendix R
<i>Sydney Development Control Plan 2012</i>	Section 4	Appendix R
Compliance with the Approved Concept Plan	Report	Appendix
The EIS shall demonstrate that the proposal is consistent with the Concept Plan approval MP 06_0171 dated 5 February 2009 (as modified), including the submission of a GFA summary across the Central Park site.	Section 4.6	
Built Form and Urban Design	Report	Appendix
<p>The EIS shall address:</p> <ul style="list-style-type: none"> the height, bulk and scale of the proposed development within the context of the locality and the approved Concept Plan; design quality, with specific consideration of the overall site layout, vistas, connectivity, street activation, façades, massing, setbacks, building articulation, materials, use of appropriate colours, building materials, landscaping and safer by design principles; details of how the proposal achieves design excellence; visual, streetscape and pedestrian safety impacts of the loading dock at the south-western corner and document the options that have been explored including sleeving alongside and active uses above; overlooking opportunities between land uses within the development, with specific consideration of means to manage the child care centre looking down upon the roof of the Australia Hotel; building name and tenant signage with specific consideration of visual, streetscape and heritage impacts in the context of the objectives and controls in Sydney Development Control Plan 2012; and consideration of the visual and streetscape impacts of the additional two levels along the southern side of the development. Photomontages or perspectives should be provided showing the proposed development with and without the additional two levels. 	Section 4.7	Appendix C
Environmental and Residential Amenity	Report	Appendix
The EIS show compliance with SEPP 65 and the Residential Flat Design Code recommendations to achieve a high level of environmental and residential amenity. In this regard, the EIS should consider the proposed accommodation, as well as surrounding residential development.	Section 4.8	Appendix K
Child Care		
The EIS shall address the relevant child care requirements for construction of a child care centre including the Children (Education and Care Services) Supplementary Provisions Regulation 2012 and Sydney Development Control Plan 2012.	Section 4.7	
Landscaping and Public Domain Management	Report	Appendix
The EIS shall provide details of the public domain works and landscaping adjacent to the site, considering City of Sydney Council's Public Domain Manual and other requirements including the Street Tree Master Plan, Streets Design Code and draft Interim Sydney Lights Design Code.	Section 3.10 + 4	Appendix E
Transport and Accessibility (Construction and Operation)	Report	Appendix
<p>The EIS shall:</p> <ul style="list-style-type: none"> include a construction traffic management plan detailing access arrangements at all stages of construction, potential vehicle routes, number of trucks, and traffic control measures. The plan shall also provide an assessment of pedestrian movements through and around the site, and if necessary, identify an appropriate alternate route for pedestrians during construction. Any alternate route should be well lit, offer passive 	Section 4.18	Appendix R and S

Secretary's Environmental Assessment Requirement	Location in Report	
<p>surveillance, and be easily identifiable;</p> <ul style="list-style-type: none"> demonstrate how users of the development will be able to make travel choices that support the achievement of State Plan targets. This includes describing the measures to be implemented to promote sustainable means of transport including public transport usage, car sharing scheme, pedestrian and bicycle linkages and parking provisions; detail the type of service vehicles, number of service vehicle movements and parking arrangements that enable entry and exit in a forward direction; provide accurate details of peak hour vehicle movements and assess the impacts of this traffic on the local road network, including intersection capacity; demonstrate appropriate provision, design and location of on-site car and bicycle parking, including bicycle parking at ground level (Note: The Department supports reduced car parking in areas well-served by public transport); and include a Workplace Travel Plan and Travel Access Guide for employees, residents, hotel users, and visitors to the site. 		
Ecologically Sustainable Development (ESD)	Report	Appendix
<p>The EIS shall:</p> <ul style="list-style-type: none"> detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development; and demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice and achieve a suitable Green Star rating, consistent with the approved Concept Plan (as modified). 	Section 4.19	Appendix J
Noise	Report	Appendix
<p>The EIS shall identify the main noise generating sources and activities at all stages of construction, and any noise sources during operation. The EIS shall outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.</p>	Section 4.20	Appendix T
Heritage	Report	Appendix
<p>The EIS shall provide:</p> <ul style="list-style-type: none"> a Heritage Impact Statement prepared in accordance with the NSW Heritage Office publication "Statement of Heritage Impact" having regard to the proposal's impact on the heritage significance of the Australia Hotel and the adjoining terraces; an appropriate elevation to Broadway and Abercrombie Street in order to protect the heritage significance of the Australia Hotel and adjoining terraces; and an interpretation plan for heritage and archaeology (including Ovoid Drain) and incorporation of a city datum line in accordance with Concept Plan Modification MP 06_0171 MOD 2. 	Section 4.12	Appendix F
Drainage and Flooding	Report	Appendix
<p>The EIS shall address drainage / flooding issues associated with the development / site, including stormwater, drainage infrastructure and incorporation of Water Sensitive Urban Design measures.</p>	Section 4.21	Appendix U
Staging	Report	Appendix
<p>The EIS is to include a schedule detailing the current status of contributions payable under the Voluntary Planning Agreement for the Concept Plan Approval.</p>		Appendix B
Contributions	Report	Appendix
<p>The EIS shall address the contributions applicable to the development / or details of any Voluntary Planning Agreement.</p>	Section 4.26	
Plans and Documents	Report	Appendix
<p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.</p> <p>In addition, the EIS must include the following:</p> <ul style="list-style-type: none"> architectural drawings; site survey plan, showing existing levels, location and height of existing and adjacent structures/buildings; 		Refer Appendices

Secretary's Environmental Assessment Requirement	Location in Report	
<ul style="list-style-type: none"> site analysis plan; shadow diagrams; access impact statement; view analysis/photomontage; stormwater concept Plan; sediment and erosion control plan; landscape plan, including any public domain works; preliminary construction management plan, inclusive of a construction traffic management plan and cumulative impact of construction activities on other nearby sites; geotechnical and structural report; signage details (if proposed); and schedule of materials and finishes. 		
Consultation	Report	Appendix
<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, and community groups (including the Chippendale Residents Interest Group).</p> <p>In particular you must consult with the City of Sydney Council, Transport for New South Wales, and Roads and Maritime Services.</p> <p>The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.</p>	Section 3.24	Appendix I
	Also, all appended reports include details of any relevant consultation undertaken with authorities / stakeholders etc.	
Further consultation after 2 years	Report	Appendix
If you do not lodge a development application and EIS for the development within 2 years of the issue date of these DGRs, you must consult further with the Secretary in relation to the preparation of the EIS.		
References	Report	Appendix
The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.		

1.4 Project Team

Client	Frasers Property Australia + Sekisui House (Central Park JV No.2.)
Development Manager	Frasers Property Australia
Architect	Foster + Partners
Local Collaborating Architect	PTW
Planning	JBA
Structure	Robert Bird Group
Building Services/	WSP
Fire Engineering	WSP
ESD Strategy	WSP Built Ecology
Quantity Surveyor	Slattery Australia
Landscape Architects	JAA +Turf Design Studio
BCA/DDA Consultant	City Plan Services
Acoustics	Acoustic Logic
Traffic	GTA Consultants
Wind, Reflectivity & Noise	Cermak Peterka Petersen
Facade Engineers	Surface Design
Safety Management	Elton Consulting
Community Consultation	Elton Consulting
Waste & Logistics	Arup
Civil Engineers	Mott MacDonald
Heritage	Urbis

2.0 Site Analysis

2.1 Site Description

Central Park is located on the southern edge of the Sydney Central Business District (CBD). Central Park is in close proximity to Central Station, Broadway Shopping Centre, the University of Technology, Sydney and the University of Notre Dame Australia. A location plan is provided at **Figure 1**.

Block 4N is located at the north western corner of the Central Park site and is bounded by Broadway to the north, Central Park Avenue to the south, adjacent Block 1 and Chippendale Way to the east, and Abercrombie Street to the west. Block 4N, along with Block 1, Block 2, the Clare Hotel (Block 3A) will form part of the northern edge of Central Park, providing an urban edge and separation of Chippendale Green and other areas of public domain within the Central Park site from Broadway. An aerial photograph of the Block 4N site within Central Park is provided at **Figure 2** below, and an image of the site is provided in **Figure 3**.

The Block 4N site occupies an area of 4,111m² and is currently vacant, with the exception of the existing Australian Hotel and three terrace houses located at the north-western corner of the site.

The site is legally described as Lot 1 in DP 807298 and part of Lot 12 in DP1194122 which is owned by Central Park JV No 2. A survey Plan of the Site is provided at **Appendix D**. A Plan of proposed Stratum subdivision is also provided at **Appendix V**.



Figure 1 – Location plan
Source: Foster + Partners

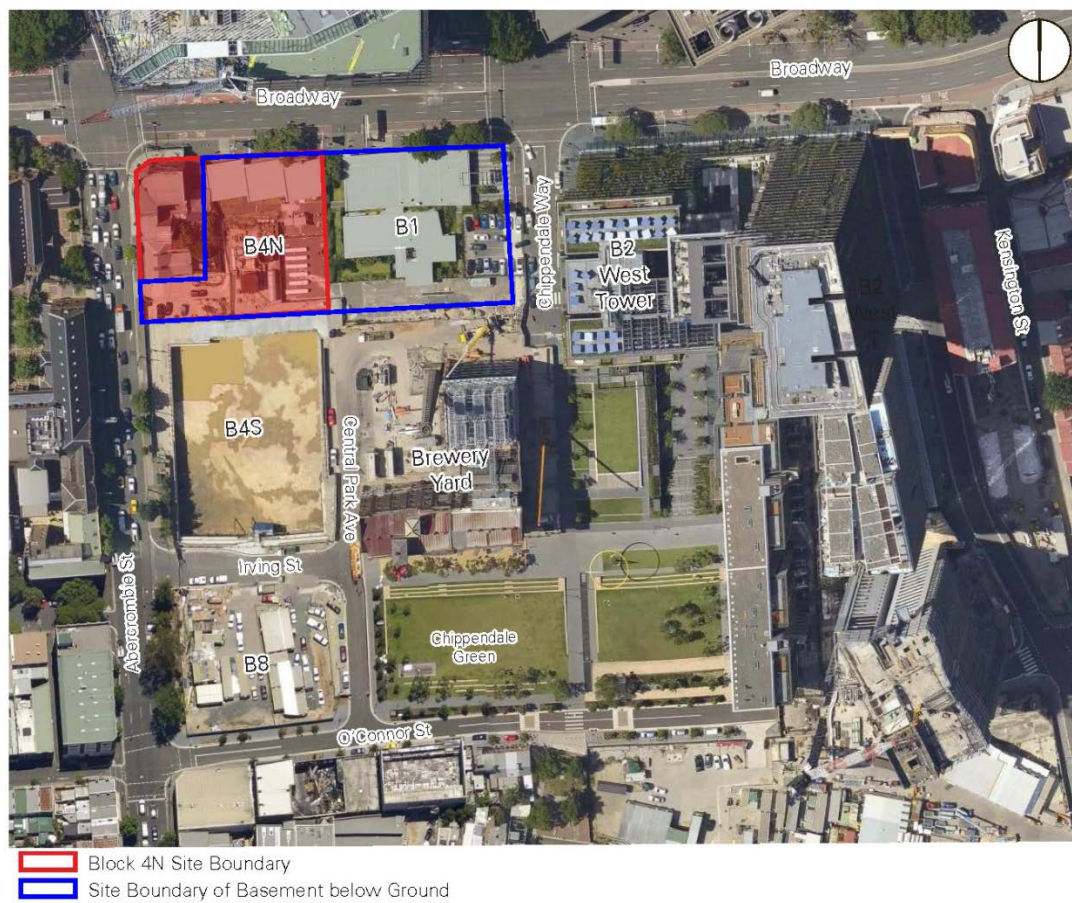


Figure 2 – Aerial photograph and site plan



Figure 3 – Australian Hotel
Source: Foster + Partners

2.1.1 Topography

The area of Chippendale, in which Central Park is located, has an overall topography grading down to the west at about two degrees. The Block 4N site has a fall from east to west and fall from south to north. The remainder of the site has a minor fall to the north-west. The through site link, and future pedestrian laneway has a variation in height from south to north of approximately 1m.

The Block 4N site is currently in the process of excavation as part of the early works approval (for remediation) and excavation in accordance with the Approval Project Application (MP 08_0253).

2.1.2 Heritage

The Australian Hotel and the terrace group known as 8-12 Abercrombie Street are the only existing buildings on the application site. The Australian Hotel is a part two / three storey building, with a simple face brick Interwar Functionalist façade. The terraces are 3 storey Victorian Georgian terraces from c 1858 which were altered to shops in the early twentieth century and are currently unused.

The Australian Hotel has heritage significance at the local level for its historic, aesthetic, associative and representative values. The building is considered to be of high significance for the overall integrity of its materials and form. The Hotel is associated with the Kent and Carlton Brewery's and the major redevelopment of the CUB site. The building is significant for its association with Tooth and Co and their architects, Copeman, Lemont and Keesing, who designed a number of Hotels in the 1930s and early 40s, many of which were designed in the Functionalist and related Art Deco styles. The Hotel is aesthetically representative of the Functionalist style and is one of the most intact Hotels internally, with a high degree of integrity in form, function and materials.

2.1.3 Geotechnical Conditions

The site is underlain by the intersection of three stratigraphic units: Hawkesbury Sandstone (at depths of 2-4m), Ashfield Shale, and man-made fill over Quaternary sands. The sandstone will provide an excellent foundation of high bearing capacity and the earthquake site factor is favourable as it is a 'rock' site.

The water table occurs at relatively shallow depth throughout the site and drainage will be required below the basement floor slab. The soils / groundwater are assessed as being moderately aggressive to buried concrete and mildly aggressive to buried steel structures.

Further detail is provided in the Geotechnical Investigation Statement prepared by JK Geotechnics and provided at **Appendix W**. This letter refers to the previous Geotechnical Report undertaken by JK Geotechnics for (approved) Block 1 +4N Basement. The report concludes that the site is capable of supporting the proposed development, the subject of this DA.

2.1.4 Contamination and Remediation

Remediation of the Block 4N site is currently being undertaken in accordance with MP07_0163 (Remediation) approved in August 2008. The site is now suitable for the approved Concept Plan (as modified) uses, including the Block 4N mixed use development proposal.

2.1.5 Infrastructure and Services

Decommissioning of most of the existing infrastructure on the site has been completed in accordance with MP07_0120 (Demolition and Site Preparation) approved in March 2008.

The site has since been serviced with potable water, electricity, sewer, gas and telecommunications, which will be augmented as necessary to accommodate the proposed development.

A Central Thermal Plant (CTP) is provided below the courtyard of the Brewery Yard Building, to the north east of the site. The CTP consists of chiller and boiler plant for the purposes of generating cooling and heating for air conditioning and domestic hot water needs for the whole of Central Park including Block 1. A recycled water plant (including sewer mining) is also provided.

2.1.6 Access

Pedestrian and Cycling

Formalised pedestrian facilities are provided on all road frontages in the vicinity of the Central Park site and include footpaths and ramps. Block 4N will integrate with the proposed Ultimo Pedestrian Network and existing City of Sydney Cycleway Network through the CBD and surrounds. A main pedestrian footway and cycle route (proposed City Council Route 20) will run through the middle of Central Park connecting Balfour Street with Broadway and Jones Street in the north. Signalised pedestrian crossing facilities are provided at the intersections surrounding the Central Park site.

Central Park incorporates a high number of pedestrian and cycle routes throughout, and within close proximity to Block 4N. A shared pathway is located on Abercrombie Street to the west of the Block 4N site. Additionally, a dedicated bike path is located on the northern side of Broadway that facilitates cyclists emanating from Newtown (south) travelling north (along the bike path on Jones Street).

Rail and Light Rail

Central Railway Station is located approximately 700m east of the Central Park site. The station offers regular suburban and interstate services on the Sydney rail network.

Central Railway Station also provides light rail services with the Central light rail stop located to the north of the station.

Bus

The Central Park site has excellent access to regular bus services along Broadway, as well as a connecting bus interchange on the corner of George and Lee Streets to the north east of the site.

Vehicle

The Block 4N site is easily accessible by vehicles via Broadway to the north, Cleveland Street to the south and City Road / Princes Highway to the west. Basement car parking is provided for residents and visitors of Block 4N, as well as Block 1 in accordance with the relevant planning controls.

2.2 Surrounding Development

To the North

To the north of the Block 4N site is Broadway, an eight lane roadway that runs east/west, and includes a dedicated bus lane in each direction. Further north of the site North of is the University of Technology, Sydney (UTS). UTS is currently undertaking construction, expansion and extension to the Broadway Precinct of its City Campus to enable the provision of improved education, social and sporting facilities for use by existing and future students and the local

community. The first in the redevelopment of UTS's billion-dollar City Campus Master Plan is the Faculty of Engineering and IT building (FEIT) located on the corner of Broadway and Wattle Streets, which has now been completed (see **Figures 4** and **5**).



Figure 4 – UTS REIT Building located north of the site
Source: Andrew Worssam

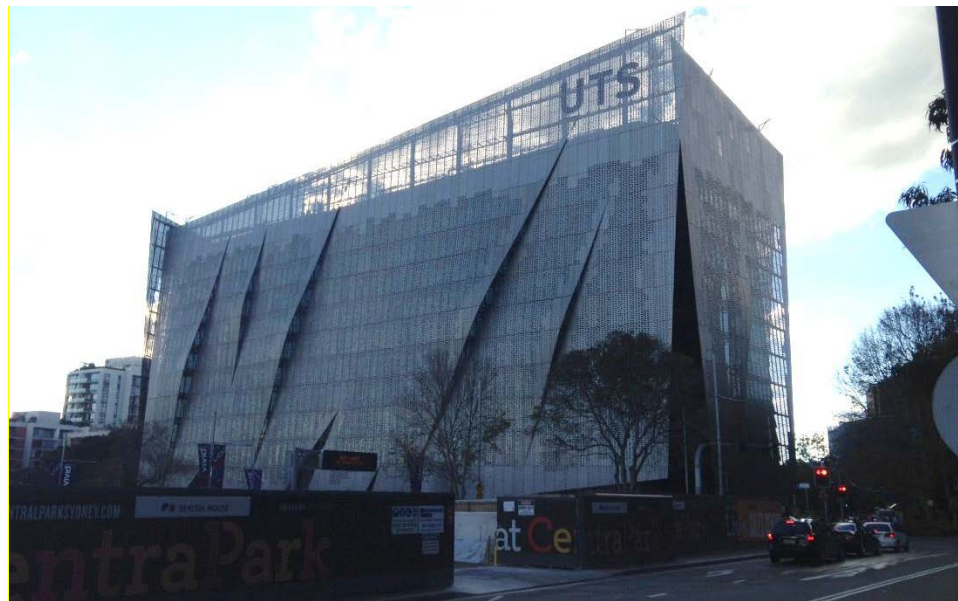


Figure 5 – UTS REIT Building as seen from Chippendale Way
Source: JBA

To the East

To the east of the Block 4N site is the Block 1 site of Central Park. An SD has been submitted to the DPE for a residential scheme as shown in **Figure 6** below. Further to the east is Chippendale Way that provides pedestrian vehicle access to and from the Central Park site. Although basement works for Block 1 are proposed within this application, the proposed building located on Block 1 will be the subject of a separate application.



Figure 6 – Photomontage of Block 1
Source: Foster + Partners

To the South

To the south of the site is Block 4S, a student accommodation building (approved in December 2013) which is currently under construction. This development consists of a 15/part 16 storey building comprising student accommodation and ground floor retail, including bicycle parking, and communal facilities.

Further south (and south east) of the site is Chippendale Green (formerly the Main Park) and an area, that was previously referred to a Block 2A within the Concept Plan, which is now an additional area of landscaped open space for use by the public.

These parks contribute to a generous hierarchy of public open spaces distributed to provide a variety of passive and active recreational opportunities and break up the urban form. **Figures 7** and **8** shows Chippendale Green to the south.



Figure 7 – Open space to the south-east of the site (Central Park Model)
Source: JBA



Figure 8 – Chippendale Green to the south-east of the site
Source: JBA

To the West

To the west is the mixed use, but predominantly residential suburb of Chippendale. Abercrombie Street forms a physical barrier on the western side of the Frasers Broadway site. Immediately to the west is Notre Dame University. Further west is City Road, Victoria Park and Sydney University (see **Figure 9**).



Figure 9 – St Benedict's Church and Notre Dame University, Abercrombie Street
Sourced

3.0 Description of the Development

This section of the report provides a detailed description of the proposed development. An Architectural Design Report (**Appendix C**) and Architectural Drawings (**Appendix B**) have been prepared by Foster +Partners in association with PTW. A Public Domain and Landscape Report including Landscape Drawings has been prepared by Jeppe Aagaard Andersen +Turf Design Studio (JAA +Turf) and is provided at **Appendix E**.

More specifically, this SSDA seeks approval for the following components:

- Construction of an 18 storey mixed use building comprising:
 - a total of 48 residential apartments over six (6) levels (7 of which will be adaptable apartments), including:
 - 36 x 1 bedroom apartments.
 - 12 x 2 bedroom apartments, of which 10 apartments are 2 bedroom dual key.
 - Two (2) levels comprising a childcare facility, including external terraces for the use of the childcare facility.
 - Six (6) levels of office space.
- Construction of an eighteen (18) storey hotel building, connected to the mixed uses building, which will contain 283 hotel rooms, as well as conference facilities, gym and swimming pool.
- Four levels (4) of basement comprising car parking, bicycle parking, end-of-journey facilities, and services infrastructure to service Block 1 and Block 4N including;
 - 126 car parking spaces (for Block 4N)
 - 211 car parking spaces (for Block 1)
 - 10 car share spaces.
 - 7 Motorcycle Spaces
 - Bicycle Parking Spaces to service residential/retail and visitor requirements.
 - Service vehicle loading are consisting of a total of 7 service vehicle bays.
- Total Gross Floor Area (GFA) of 25,755m² divided into the following uses:
 - 13,986m² for hotel uses;
 - 6,146m² for office uses;
 - 3,518m² for residential apartments;
 - 1,080m² for childcare;
 - 789m² for use of the heritage pub; and
 - 236m² for retail.
- Works to the existing Australian Hotel and Abercrombie St terraces inclusive of:
 - Make good of structure, facades, and roof
 - New external lift and stair at the rear of the Australian Hotel
- Public domain works including landscaping, paving, water feature, and drop off bays to Central Park Avenue.
- Stratum subdivision of the site.

Photomontages of the proposed development are provided at **Figure 10, 11, and 12**.



Figure 10 – Photomontage of the proposal – corner of Broadway and Abercrombie Street
Source: Foster + Partners



Figure 11 – Photomontage of the proposal, looking north west from Central Park Avenue
Source: Foster + Partners



Figure 12 – Photomontage of the Proposal – Western façade and corner of Abercrombie Street and Broadway

Source: Foster + Partners

3.1 Design / Urban Design Principles

A detailed Urban Design Report has been prepared by Foster +Partners (**Appendix C**) which describes the design, concept and planning of the proposal in detail. The concept for Block 4N is based on the following project-specific design principles:

- Arrive at a massing that consolidates the requirements of the brief within approved massing envelope of the Concept Plan and comply with required set-backs.
- Develop a massing which compliments and embraces the historical Australian Hotel and adjacent Terraces which occupies part of the site.
- Provide high quality hotel, residential and commercial accommodation
- Maximise sun and daylight to the apartments and child care facilities as well as the public realm, including the public park.
- Develop an architectural language that addresses the historical buildings on the site.
- Continue the urban design of the streetscape by maintaining set datum lines along Broadway
- Design an environmentally sustainable building.
- Ensure an animated ground plane and integrated landscape design that improves the public domain around the building.

3.2 Overview

Table 4 below provides the key numerical information of the proposed development. It is noted that the approved Concept Plan (as modified) is the principle planning document applicable to the Central Park site, which includes Block 4N.

The SSD application will be assessed against the relevant provisions under Part 4 of the EP&A Act. Where it does not provide development controls, CoS Local Environmental Plan (LEP) 2005 (which continues to apply to the Central Park site) apply. In accordance with clause 11 of the SEPP SRD, the requirements of Development Control Plans (DCPs) do not apply, however have been considered in the design of the development where relevant as best practice.

Table 4 – Key numerical information

Component	Proposal
Site area	3,535m ²
GFA (Total)	25,775m ²
Hotel GFA (Total)	13,986m ²
Office GFA (Total)	6,146m ²
Childcare SFA (Total)	1,080m ²
Residential GFA (Total)	3,518m ²
Heritage Pub inc. Cellars (Total)	789m ²
Height	
RL (to parapet)	RL 77.50 (Approximately 65m)
RL (to top of building storeys)	RL 81.50 (Approximately 68m)
No. of apartments	Total of 48 <ul style="list-style-type: none"> 36 x 1 bedroom apartments. 12 x 2 bedroom apartments, of which 10 apartments are 2 bedroom dual key.
No. of Hotel Rooms	Total of 283: <ul style="list-style-type: none"> 225 x studio rooms 48 x 1 bed rooms (of which 15 are accessible) 10 x 2 bed rooms (dual key)
Total no. of car spaces	Total of 345 <ul style="list-style-type: none"> Block1 - 216 Block B4N - 129 Brewery - 19
Total no. of bicycle spaces	57
Service Spaces	11 Service Vehicle Bays <ul style="list-style-type: none"> 4 truck bays 7 van/utility bays

3.3 Demolition and Site Preparation

The existing structures on the Block 4N site have been demolished in accordance with MP 07_0120 (Demolition and Site Preparation) approved in March 2008. Remediation of the site is underway MP07_0163 (Remediation) approved in August 2008. In accordance with the existing approval (MO 08_0253) as amended, excavation of the approved combined basement has commenced on the site.

3.4 Built Form

3.4.1 Massing

Block 4N is a part 16, part 18 storey building which is generally consistent with the development controls provided within the approved Concept Plan (as modified) in particular height, sun access plan and overshadowing, footprint envelope, and GFA (with some amendments subject to a concurrent modification).

The built form comprises two elements of the same height, with the additional two storeys within the eastern hotel element of the proposed development being accounted for by way of the void above the heritage Abercrombie Hotel and

terrace houses at the north-western corner of the site, as well as high floor to floor commercial ceiling heights than the hotel ceiling heights. This form (in section and elevation) is shown below in the elevations at **Figures 13** and **14** and section in **Figure 15**. An aerial montage of the built form is also shown in **Figure 16**.

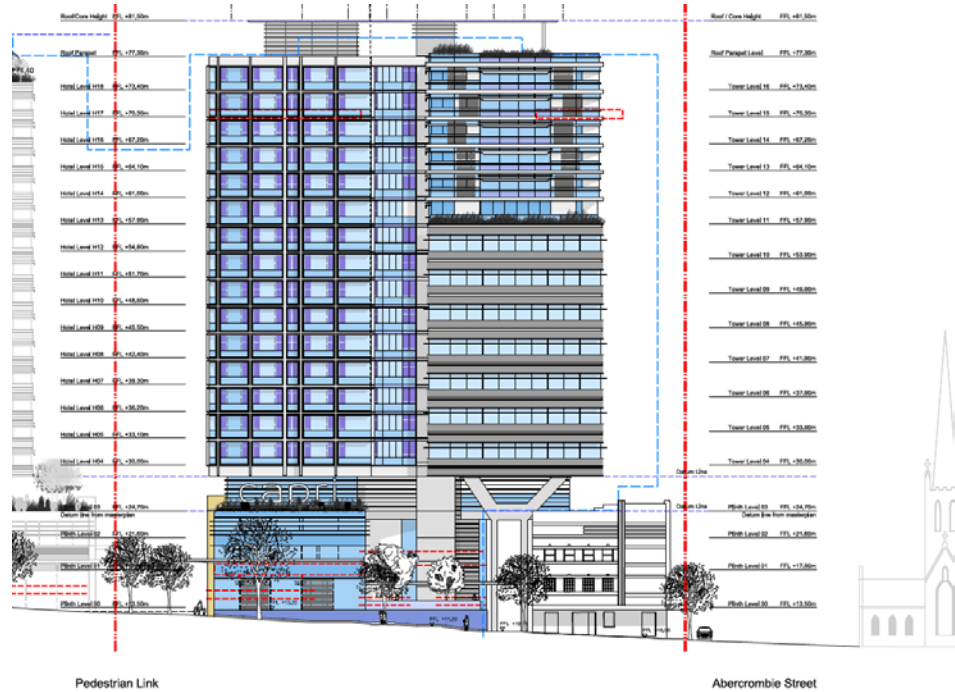


Figure 13 – Northern (Broadway) elevation of the proposal
Source: Foster + Partners

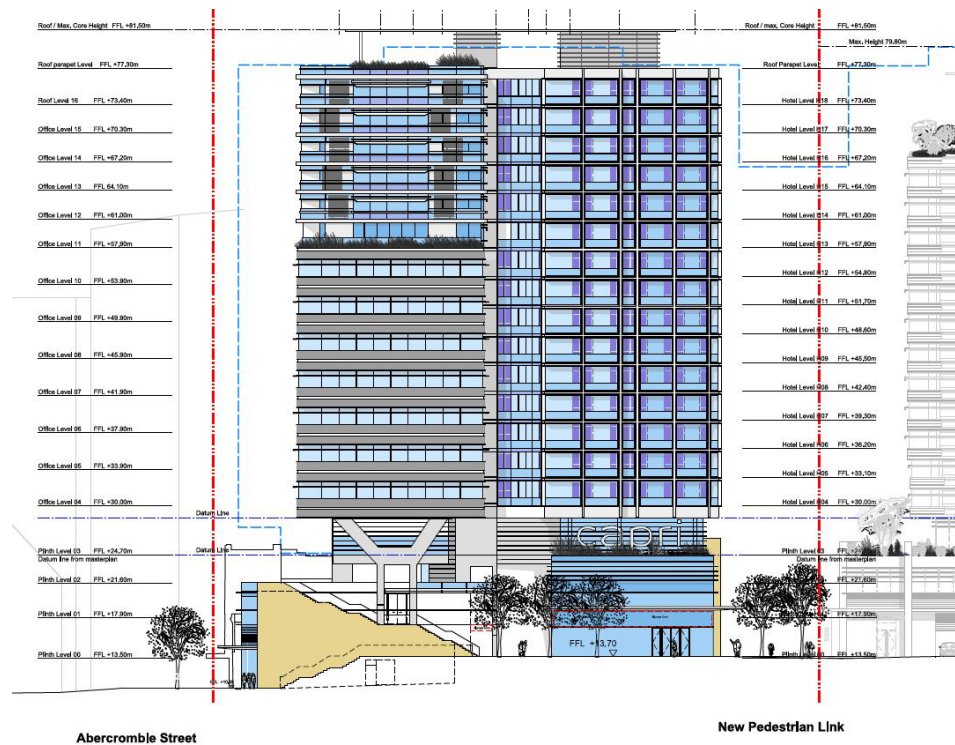


Figure 14 – Southern elevation of the proposal
Source: Foster + Partners

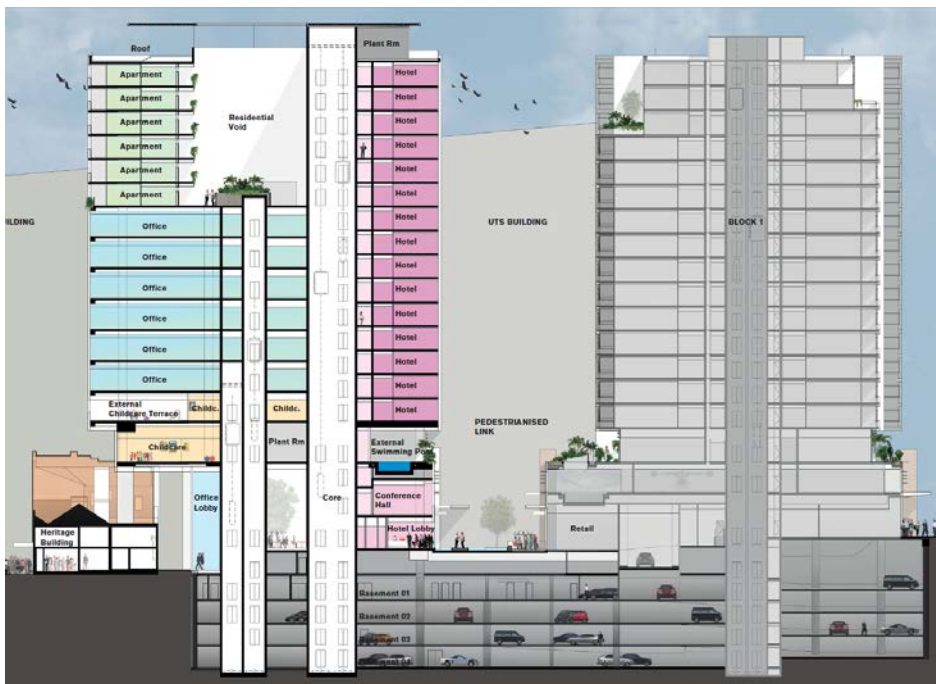


Figure 15 – East-West Section of the proposal
Source: Foster + Partners



Figure 16 – Aerial Montage of the site and surrounds
Source: Foster + Partners

The following elements were considered when establishing the concept and massing the proposal:

- Consideration of the concept plan parameters and the primary development controls (including setbacks and heights etc)
- Development of the plan and the expression of the mixed use nature in the form of the building

- The urban relationship of the streetscape with particular reference to the ground floor plan and interface behind the Abercrombie Hotel to be retained.
- Responding to the environment aspects of the site including views, sun, and ventilation

Concept Plan and Primary Development Controls

As a starting point, the key consideration of the proposed form was the parameters of the Concept Plan. This included the consideration of the maximum building height, GFA, podium, and neck design (heritage datum), and stepped form of the envelope for solar access.

In addition to the Concept Plan, the key development controls of SEPP 65, and the RFDC were considered, specifically separation distance, access to natural light, and ventilation (see **Figure 17** and **18**).

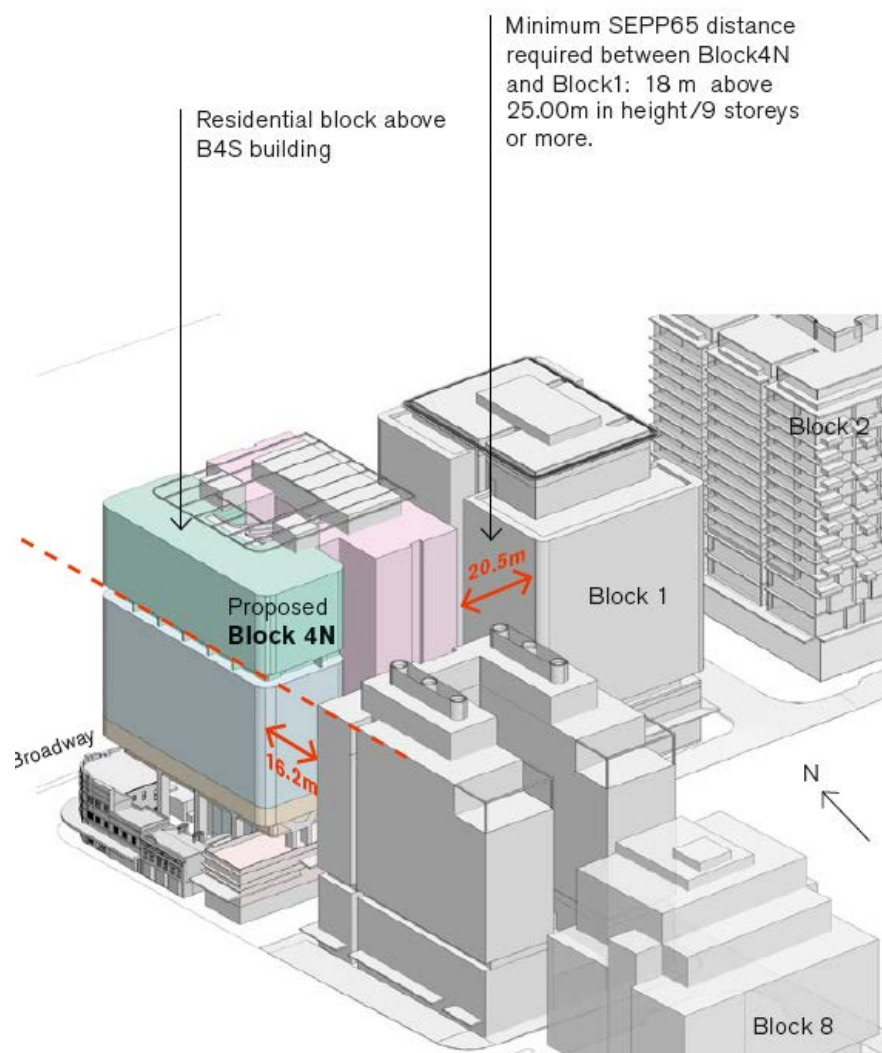


Figure 17 – Proposed Block 4N envelope and massing
Source: Foster + Partners

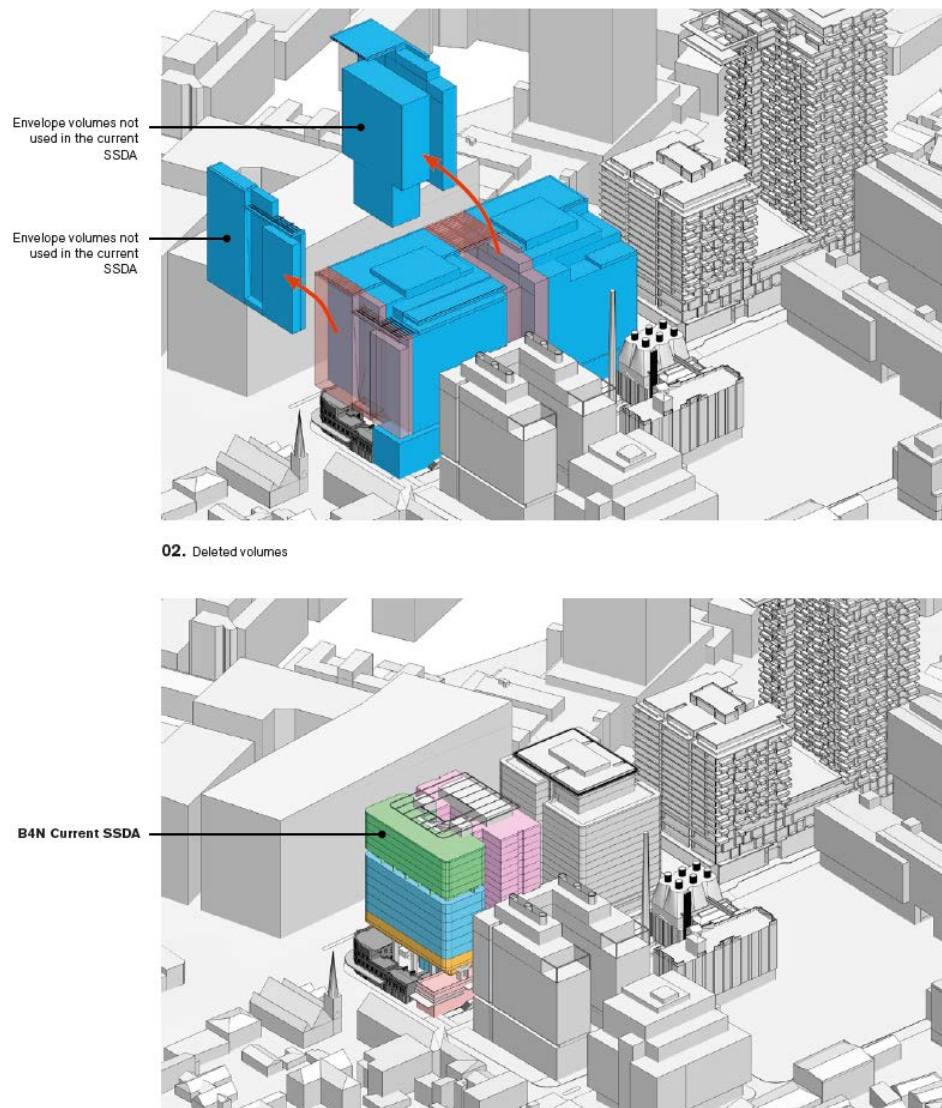


Figure 18 – Block 4N massing comparison
 Source: Foster + Partners

Expression of the Form

Once the general massing and form was established, the building is divided into two defined vertical blocks, where the proposed uses have been separated and stacked within the envelope.

The two defined blocks are linked using a centralised core arrangement which is split to serve the hotel for one core or the childcare, office or residential apartments in the case of the other.

Level 3 of the building incorporates a recessed 'neck' to assist in responding to the Australian Hotel and Abercrombie Street terrace. An additional 'neck' has also been added to Level 11 to indicate a break between the commercial and residential uses on the western tower.

The residential apartments are located above the commercial offices on the western side of the block to maximise the unobstructed views to the west.

Urban relationship to the streetscape and lower levels

The incorporate of the level 3 neck, allows for the building relate in scale and materiality to the retained heritage buildings at the corner of Broadway and Abercrombie Street, and is consistent with the Concept plan

Dividing the building into two defined blocks allows at Ground Level the opportunity for each use to have its own independent entrance while also increasing the permeability of the building at this level with the surrounding streets with the introduction of a passageway.

Permeability is further increased by the activation of the rear of the Heritage Buildings to form a courtyard space which engages with the office lobby. The courtyard is accessed from Broadway and Abercrombie Street via two small "laneways."

Responding to the environmental aspects of the site

This aspect involved further articulation of the block to include facade detailing. It also involved consideration of the specific orientation and shadowing requirements, with the emphasis of expression of living areas to the facade of the building.

3.4.2 Building Height and Setbacks

The building height has been primarily determined by the envelope as defined in the Concept Plan MP06_0171 (as modified). The building height has also taken into consideration the potential for overshadowing, and impacts to views and vistas, as well as a requirement provide functional and efficient floor plates for the uses within.

The height of the proposal is a part 16/part 18 storey building with a maximum building height (to the top of the lift overrun and architectural roof feature) of RL 81.5.

The proposal provides an additional setback of some 6m from the western boundary, shifting the building mass behind the ridge of the Australian Hotel and Abercrombie Street terraces, and improving access to sunlight along Abercrombie Street.

3.4.3 Roof Treatment

At the roof level of the western wing is proposed to be a permanently open pergola structure. The design and extent of this addition can be seen on the roof plan, elevations as shown below in **Figure 19**. The addition will provide

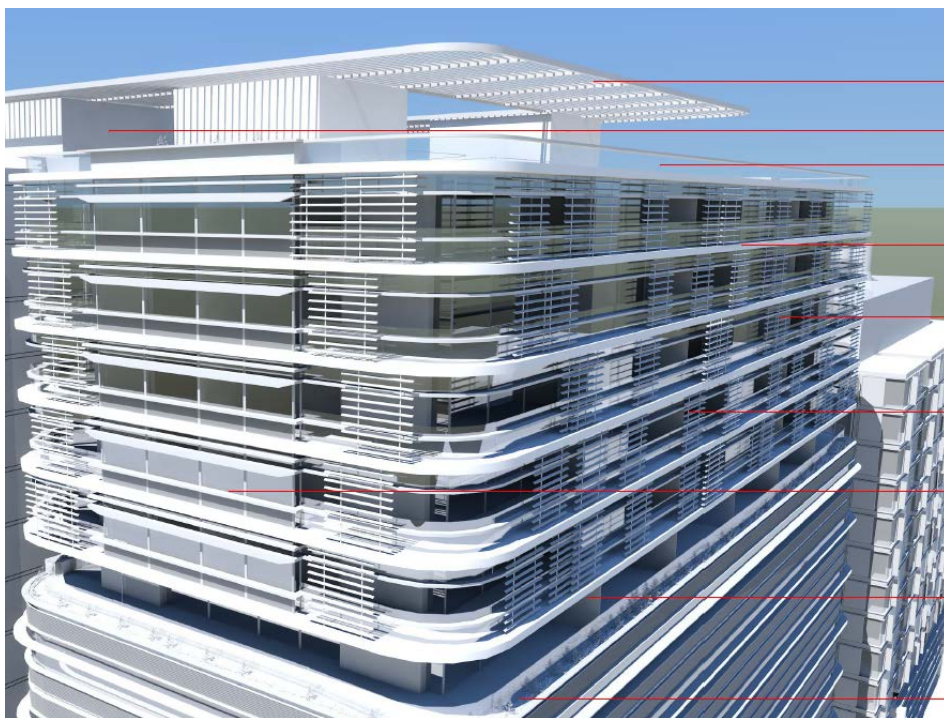


Figure 19 – Proposed roof Treatment
Source: Foster + Partners

3.5 Basement

The proposal includes a four levels of basement that are intended to service both Block 4N and Block 1 (residential scheme subject to the concurrent SSD) as shown on the Architectural Plans. The basement includes car/motorcycle parking, car share facilities, bicycle parking, storage, plant, services, and loading/waste collection areas and will be located underneath both Blocks 4N and 1. The proposed basement is arranged generally consistent with that approved within Project Application MP 08_0253, and concurrent SSD submitted for Block 1, with the exception of uses and some internal spatial arrangement.

Consistent with the existing approved basement (MP 08_0253) the proposed basement will have two vehicle access points, one for residential and non-residential uses parking, and a separate dedicated entrance for service vehicles only. The primary (non-service vehicles) entry point is proposed from Chippendale way at the western end of the southern elevation of Block 4N. The service vehicle entry point is located on Abercrombie Street, south of the existing (and retained) terraces.

The footprint of the basement sets back from the western boundary below basement level 1 as shown on the Architectural Plans at **Appendix B**. Compliant floor to ceiling heights are provided with additional clearance at entry ramps and within the service area (below Block 4N) – access from Abercrombie Street.

The internal layout and arrangement of uses are shown on the Architectural Plans (**Appendix B**) and detailed in the Architectural Design Report (**Appendix C**).

3.6 Gross Floor Area and Uses by Level

The use and GFA for each level within the proposed development is set out in the architectural drawings provided at **Appendix B** and reproduced in **Table 5** below. In accordance with the approved Concept Plan (as modified), the general arrangement of the site includes retail, entry lobby and communal areas at

ground level, with the upper levels occupied by residential/non-residential accommodation.

Table 5 – Uses and GFA by level

Level	Uses	GFAm ²
Lower Ground	Australian Hotel/Office Lobby	420
Ground	Hotel and key building entries	703
Level 01	Retail/Hotel	1,097
Level 02	Retail/Hotel	572
Level 03 (neck)	Childcare/Hotel	1,186
Level 04	Childcare/Hotel	1,585
Level 05	Commercial/Hotel	1,808
Level 06	Commercial/Hotel	1,817
Level 07	Commercial/Hotel	1,817
Level 08	Commercial/Hotel	1,817
Level 09	Commercial/Hotel	1,817
Level 10	Commercial/Hotel	1,817
Level 11	Residential/Hotel	1,326
Level 12	Residential/Hotel	1,387
Level 13	Residential/Hotel	1,387
Level 14	Residential/Hotel	1,387
Level 15	Residential/Hotel	1,387
Level 16	Residential/Hotel	1,387
Level 17	Hotel	798
Level 18	Hotel	798
Level 19 (roof)	Plant	
	TOTAL	24,454

The above GFA has been calculated as per the GFA Plans prepared by Foster + Partners and provided at **Appendix B**.

3.7 Ground Level Uses

The proposal comprises non-residential / retail uses at the street levels/entries (which consist of the ground and lower ground floors). These providing active and non-residential uses at ground level designed to animate the perimeter and provide the opportunity for seating within the public domain adjacent. These ground floor uses include:

- the lobby to the hotel portion of the development;
- through site links to the heritage courtyard, and between Blocks 1 and 4N;
- access lobbies to the residential, childcare and commercial portions of the development;
- an external restaurant / terrace;

These uses demonstrate consistency with the approved Concept Plan (as modified), providing active and non-residential uses at ground level designed to animate the perimeter and provide the opportunity for seating within the public domain adjacent. The layout of the different ground floor uses is provided below in **Figure 20** and detailed in the Architectural Design Statement provided at **Appendix C**.

The fit out and use of the future retail tenancies, including signage, will be subject to a separate Development Application to be determined by Council.

3.8 Vehicle Parking and Servicing

Car Parking

The proposal provides a total of 335 car parking spaces distributed throughout the combined basement levels, with a total of 126 allocated to Block 4N.

Access to car parking is available via the car park entry off the site's southern boundary, Central Park Avenue and will be security controlled via swipe card or remote. Once in the basement car park, residents, hotel guests and employees will have direct access to their apartments via lift.

Car Share

A total of ten (10) car share spaces are proposed as part of the proposal that will be made accessible to the public. Refer to Architectural Plans at **Appendix B**.

Bicycle Parking

The basement (allocation for Block 4N) includes a total of 47 bicycle parking spaces, as shown on the Architectural Plans (**Appendix B**). Staff will have access to the end-of-journey facilities at basement level 1 including dedicated lockers via the vehicle ramp (if using bicycles) or via the fire stairs.

3.8.1 Servicing and Loading Dock

A loading dock and waste services area for Block 1-4N uses combined is located on the western side of Basement Level 00. Access to the loading dock is off a dedicated entry from Abercrombie Street with adequate vehicle crossings to cater for the required service, delivery and waste collection vehicles in accordance with the relevant Australian Standards. Vehicles will enter in a forward direction and a turntable is provided to allow them to exit in a forward direction also. Provisions for a total of 11 loading vehicles including four truck bay (to accommodate 8.8m vehicles) and 7 van/utility type spaces are provided.

3.9 Connectivity and Entries

Given the various uses within the site, dedicated entries and lobbies have been provided via different access points within the building. This enables a clear definition of the different uses are located, and avoids any potential conflict. Given the complexity of the site entries and lobbies, a diagram has been prepared by Foster +Partners, and is provided in **Figure 20**. Further discussion on the arrival pathways and entry points is provided within the Architectural Design Report at **Appendix C**.



Figure 20 – Block 4N Access Strategy and Entries

Source: Foster + Partners

Heritage Courtyard

The Heritage Courtyard is access via and entry point from Abercrombie Street and Broadway. The courtyard will be a publically accessible space that will likely be used by the non-residential uses within the Abercrombie Street terraces and Australian Hotel. The courtyard also provides access to the Office lobby located on the lower ground floor, further contributing to the activation of this space.

Hotel Lobby

The hotel lobby is located along the eastern length of the site. Entrance to the hotel lobby is gained from the Through-Site Link between Blocks 4N and 1, and provides access to the ground floor lobby. Three dedicated passenger lifts are proposed to service the hotel, as well as one lift shared with the residential apartments on the site, and one goods lift for the hotel uses.

Pedestrian access to the lobby will be from Central Park Avenue (drop off bays), or Broadway, via the pedestrianised link. Water features guide pedestrians to the Hotel entrances whilst adjacent to Block 1 retail food +beverage outlets animate the route and spill out into areas of external cafe seating.

Residential Lobby

A residential lobby is provided on the ground floor (Level 00), accessed by way of the main internal north-south corridor located on Level 00. A separate and dedicated residential lift (Lift 5) provides a dedicated residential access point, and Lift 6 provides access to the residential apartments shared with hotel patrons.

Childcare Lobby

A lobby servicing the childcare centre is provided on the ground floor (Level 00), by way of the main internal north-south corridor. The childcare lobby is located opposite the residential lobby. A separate and dedicated childcare lift (Lift 10) provides access to the childcare centre. Allow has been made in the design for redundancy to use a lift which also services the commercial floors if required.

Commercial Lobby

An office lobby is provided on the ground floor (level 00), and is accessed from the open space to the west of the lobby. This space is located from the north gate, or the west gate of the site. The commercial lobby includes the provision of a reception desk, and a seated waiting area. Access to the commercial levels is provided by way of dedicated Lifts 7 and 8, and Lift 9 which provides access to the commercial floors shared with the childcare uses. Pedestrian access to the Heritage Courtyard will occur via entrances off Broadway and Abercrombie Street

Pedestrianized link and other access

The link located between Block 1 and Block 4N will be activated as a thoroughfare by residents, hotel patrons, office workers, customers of the childcare centre, and student accommodation, as well as other retail customers throughout all times of the day. Retail / food tenancies line the opposite boundary of the link, and include outdoor seating. The Block 4N boundary of the link will be occupied by the Hotel lobby, which will assist in further activating the link throughout the day.

Pedestrian access will also be provided to the site via paved footpaths to all street frontages, in accordance with Councils Public Domain Manual.

3.10 Landscaping and Public Domain

A Public Domain and Landscape Report including Landscape Drawings has been prepared by Jeppe Aagaard Andersen (JAA) +Turf Design Studio and is provided at **Appendix E**. The report provides details of the proposed street level landscaping, and public domain works as well as the upper level landscaping on Level 11(residential terrace). The key strategies of connectivity, access, street character, street planting and materials have been addressed and implemented within the proposed scheme.

Importantly, the landscape plans details the proposed public domain treatment to the pedestrianized link between Block 1 +4N. As shown below in **Figures 21** and **22**, the treatment of this space to the east of Block 4N includes a water feature, in addition to various planting and design for retail dining.

As stated in the landscape report, the pedestrian link will be characterised by active building frontages, a water feature that runs the length of the link, evergreen tree and garden bed plantings, seating walls, benches and a detailed granite paving palette.

The pedestrian link between Block 1 and Block 4N functions as a key thoroughfare while also providing a space for relaxation, socialising, eating and shopping. The water feature will not only provide a focal point to the building but also provide a sense of separate for the hotel lobby, and internal areas. The landscape has been designed to provide spill-out spaces for the retail and café activities within Block 1 with planting providing a sense of privacy and intimacy to the external dining areas.

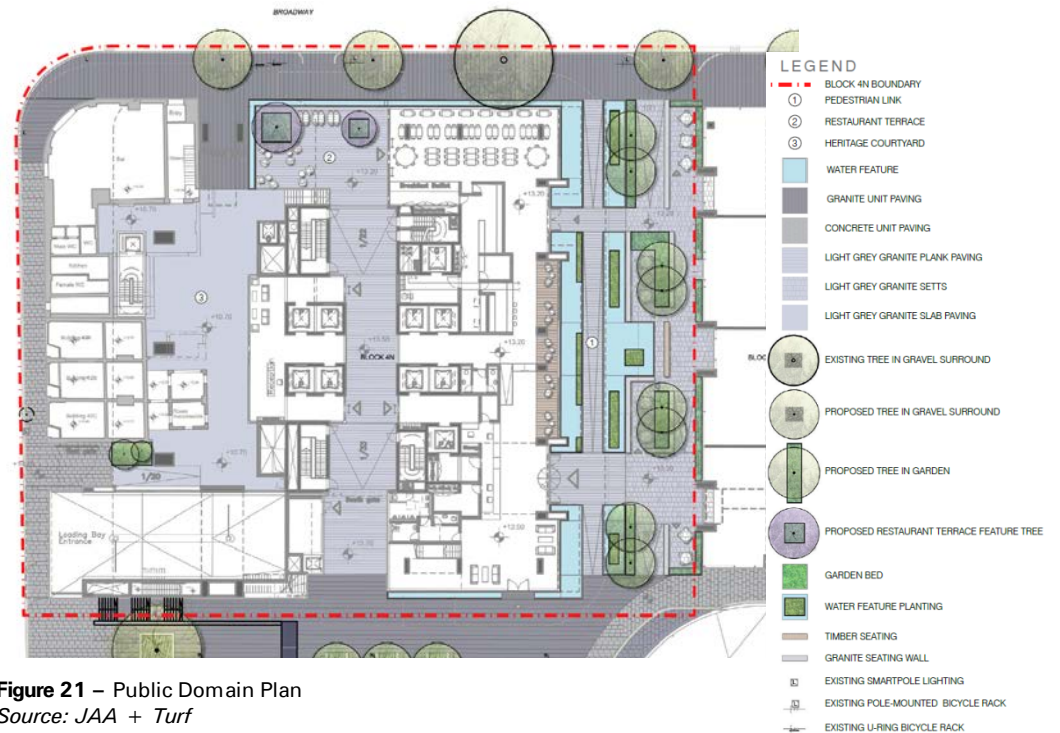


Figure 21 – Public Domain Plan
Source: JAA + Turf



Figure 22 – Photomontage of proposed link between Block 1 -4N
Source: JAA + Turf

3.11 Residential Use

The proposal seeks approval for residential use, totalling 48 residential units in a combination of 1-bed, 1-bed plus study, 2-bed and 2-bed dual key apartments, all provided with balconies and private open space, as well as communal open space and building services and facilities. The location of the residential uses is shown in **Figure 23**.

The Residential Apartments have typically been orientated to face west to maximise favourable views over western Sydney, maintaining privacy from neighbouring buildings to the north and south.



Figure 23 – Location of residential uses
 Source: Foster + Partners

3.11.1 Apartment Mix and Size

As part of the massing and built form design, the environmental aspects have been a focus of the proposal. Apartment configuration has been carefully considered to maximise views, outlooks, cross ventilation and access to natural light. The context of the site affords west facing apartments a high quality outlook over Chippendale and Victoria Park. The north facing apartments also achieve city vistas with increased levels of natural daylight.

As shown on the Architectural Plans at **Appendix B**, the typical residential level includes a mix of apartment sizes and types arranged to orientated predominantly west, with some north and south facing units which achieve easterly aspect.

The building comprises a total of 48 apartments distributed as follows:

- 36 x 1 bed apartments (75%); and
- 2 x 2 bed apartments (15%).

The proposed apartment mix responds to the existing and future demand, cognisant of the location and amenity, in conjunction with the existing and forecast demographic profile and market demand. Given the site's proximity to public transport and availability of car share facilities, high quality apartment design, residential access to hotel facilities (including swimming pool and gym), and highly desirable aspects and vistas, all apartments are afforded a high levels of amenity.

The average apartment sizes are provided below in **Table 6**. Details of the Apartment typologies and arrangements are illustrated within the Architectural Design Statement at **Appendix C**.

Table 6 – Average apartment sizes

Apartment Type	Average size
One Bedroom	52-58 m ²
One Bedroom + Study	45-50m ²
Two Bedroom	73-74m ²
Two bedroom(Dual Key)	94-96m ²

3.11.2 Adaptable Apartment

The proposal provides a total of 7 adaptable apartments, within the permanent residential. The mix of apartment types, as well as their potential location within the building provides flexibility and variation. Plans illustrating how the apartments can be adaptive are provided as part of the Architectural Plans (**Appendix B**) and Architectural Design Report (**Appendix C**).

3.11.3 Storage

Storage areas for the apartments are provided within each apartment and in the basement (generally 50% in each area). The total areas for storage provided are detailed in **Table 7** below. It is noted that as part of the proposed storage arrangement, the space within the basement will be capable of storing a bicycle (equivalent to a class 1 locker).

Table 7 – Proposed Storage

Apartment Type	Storage Size
One bedrooms	6 m ³
Two bedrooms,	8 m ³

3.11.4 Private Open Space

The proposed arrangement of the developments private open space is shown in detail within the Architectural Design Report prepared by Foster +Partners (**Appendix B**) and Landscape Design Report and Plan prepared by JAA +Turf (**Appendix E**).

All apartments within the development are provided with an area of private open space, as a balcony, with a minimum depth of 2m as shown on the Architectural Plans at **Appendix B** and **Figure 24** below..

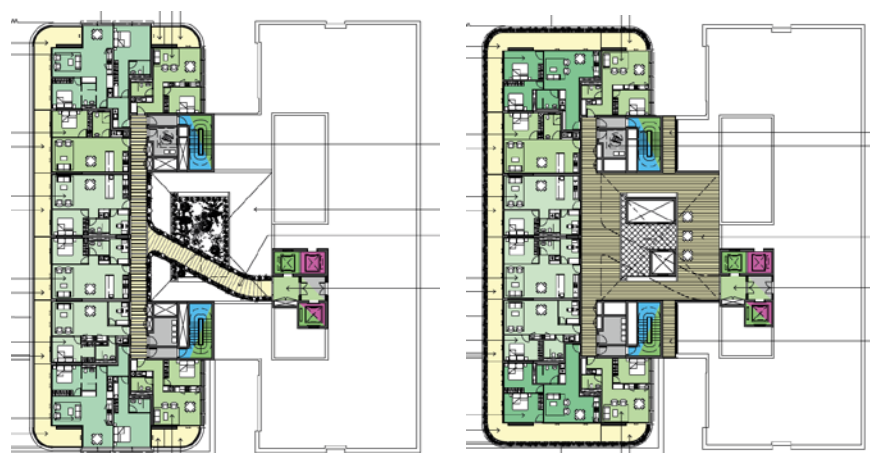


Figure 24 – Extent of balconies (typical floor –left, level 11 - right) – shown in yellow
Source: Foster + Partners

3.11.5 Communal Areas

The proposal comprises a centralised communal terrace on Level 11, being first level of residential. As shown in **Figure 25**, this area is provided at the base of a five storey void, and includes raised planter platform that encases the lift overruns, with perimeter planting and seating areas.

On the northern and western side of level 11 are open slots in the building form to provide access for light and ventilation, improving the quality of this space. The residential void is further animated by landscaped circulation bridges which cross this space, taking residents from the lifts in the residential core (within the eastern wing) across to the apartments on the western wing.

Residents within the building will also be provided access to the hotel health facilities, which include a pool, Jacuzzi and gym.

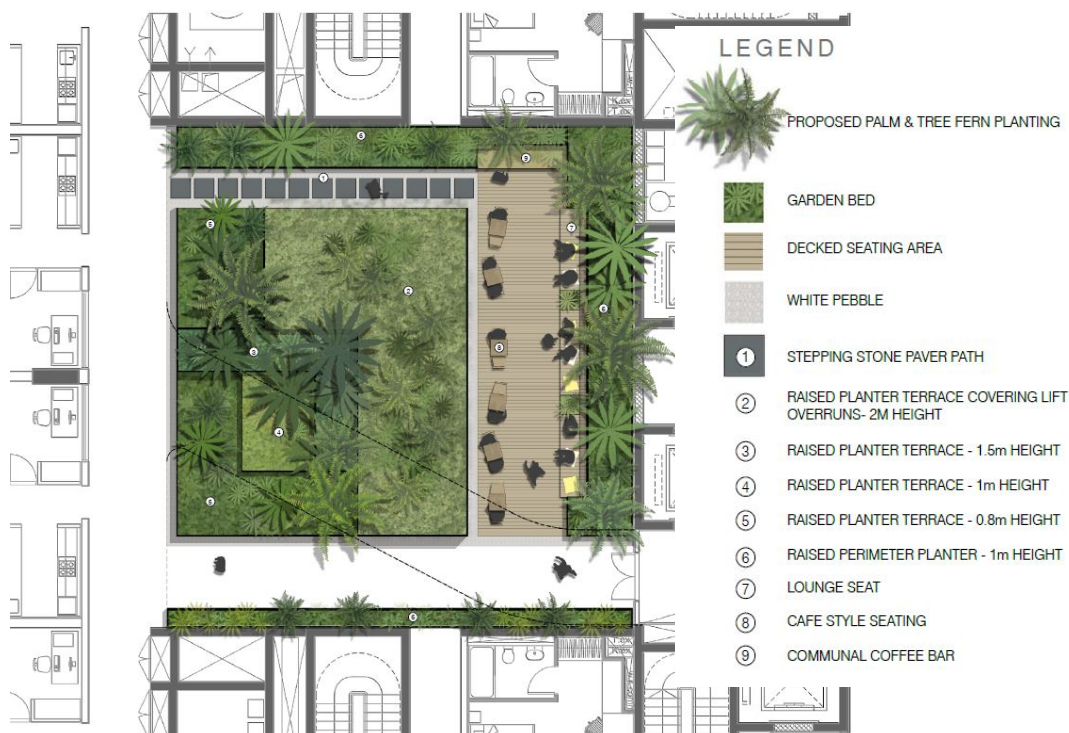


Figure 25 – Level 11 communal terrace
Source: Foster + Partners

3.12 Hotel Use

Construction of an eighteen (18) storey hotel building, which will contain 283 hotel rooms, as well as conference facilities, gym and swimming pool. The hotel forms the eastern wing of the proposed building, occupying use from ground floor to level 18. The location of the hotel use within the building is shown below in **Figure 26**.



Figure 26 – Location of Hotel use
 Source: Foster + Partners

3.12.1 Lobby and Ground Floor

The hotel lobby, restaurant and bar located on the Ground Floor help to activate the western edge of the new pedestrian link between Block 1 and Block 4N as a counterpoint to the podium retail of Block 1. The ground floor of the hotel overlooks the “lanai” water feature running through the length of the pedestrianized space, with a façade that has the capability to open up via an operable system.

3.12.2 Hotel Mix

The hotel will have a total capacity of 283 units, consisting of:

- 225 x studio unit – 30sqm;
- 3 x 1 bed units– 40sqm;
- 15 x accessible units – 40sqm; and
- 10 x 2 bed/dual key units – 70sqm.

The layout of the hotel floor plate allows for the mix of large units to be provided on the north eastern and south eastern corners to maximise amenity.

3.12.3 Layout

The proposed hotel floor layout is provided below in **Figure 27**. Rooms are orientated to the north and east to maximum exposure to sunlight and views along Broadway, while rooms to the south/south-east will be orientated to take advantage of views over the Brewery Building and courtyard.



Figure 27 – Typical Hotel Floor layout
Source: Foster + Partners

3.12.4 Facilities

The hotel provides a range of facilities and services to cater for guests. These include recreation and business function, as well as restaurant and bar on the ground floor. The following facilities are provided between ground and level 3 of the hotel, as shown on the Architectural Plans (**Appendix B**) and **Figure 28**:

- Conference facilities including pre-function room;
- Restaurant and bar on the ground floor;
- Pool and Jacuzzi; and
- Gym, sauna, steam room and associated change rooms.

Importantly, the facilities of the hotel will be made available for use by the permanent residential dwellings within the building.

3.12.5 Concierge

The hotel will provide a 24 hours concierge on the ground floor, located within the hotel lobby. The concierge will also cater for the permanent residential dwellings,



Figure 28 – Location of hotel facilities (Level 3)

Source: Foster + Partners

3.13 Commercial

The proposal includes six (6) floors of commercial office space, consisting of some 6,146sqm of GFA. The commercial component is located within the western wing of the building from level 4 to 10 (as shown in **Figure 29**).

The design of the commercial office space and location within the building was driven by the structural design and other uses (above and below). The commercial office floorplate has been designed to align with the residential module of residential above, in an effort to achieve the most efficient floor plates (see **Figure 30**). Various modules and tenancy arrangements within a typical commercial floorplate are provided in the Architectural Design Report at **Appendix C**.



Figure 29 – Location of Commercial floors
 Source: Foster + Partners

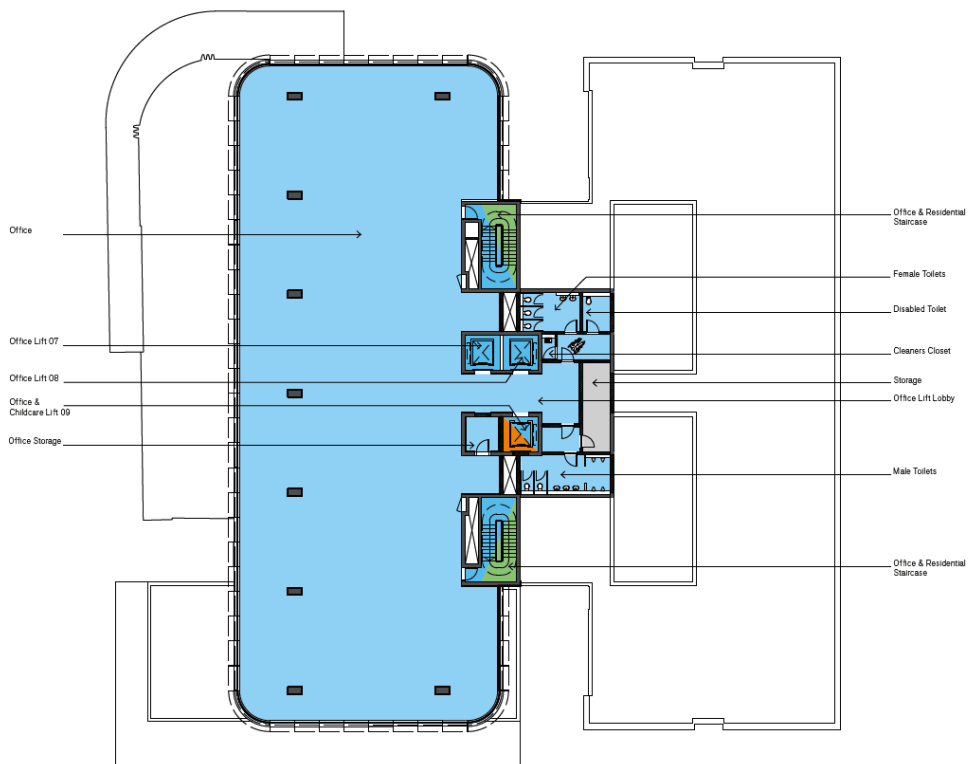


Figure 30 – Commercial floorplate layout
 Source: Foster + Partners

3.14 Retail Uses

The proposal comprises retail uses at lower ground and ground level, with frontages to all four elevations of the site, including the street frontages of Broadway and Abercrombie Street. These uses demonstrate consistency with the approved Concept Plan (as modified), providing active and non-residential uses at the lower levels.

As shown in **Figure 31** and **32** below, the retail uses will consist of

- Australian Hotel and Abercrombie Street Terraces including the rear heritage courtyard;
- Retail tenancies along the southern elevation, entry and new building element above the Service entry; and
- Hotel/retail uses on the eastern and northern elevation.

The fit out and use of the retail tenancies, including signage, will be subject to a separate Development applications to Council.

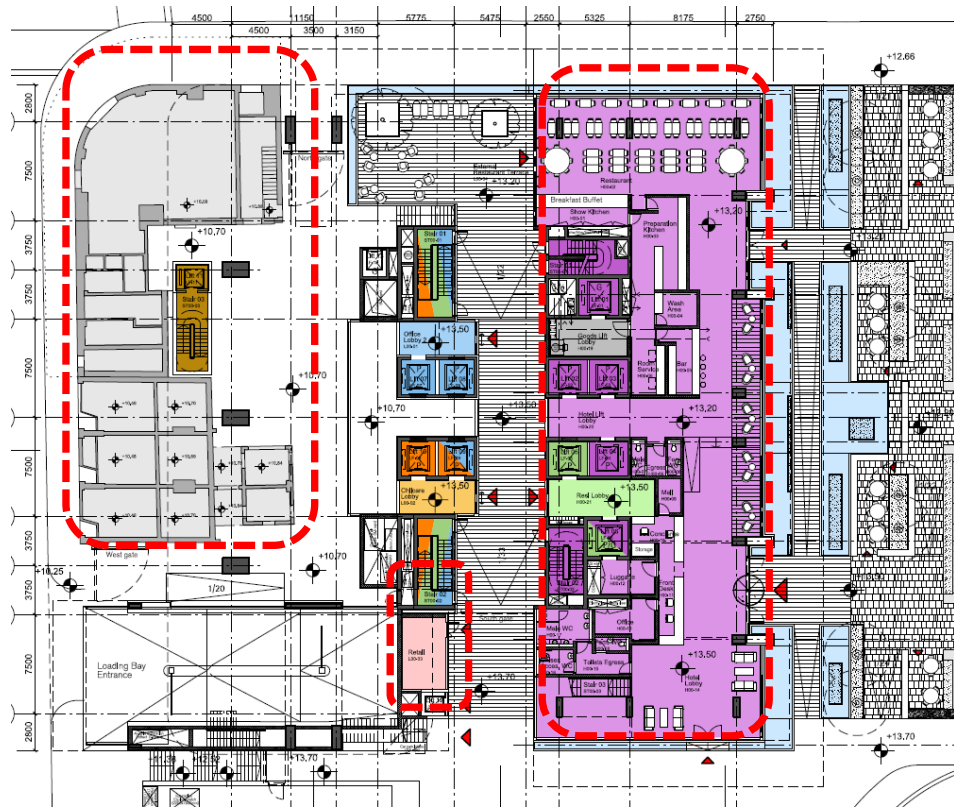


Figure 31 – Location of retail – Ground level – shown outlines in red
Source: Foster + Partner + JBA



Figure 32 – Location of Retail – Level 1 – Shown outlines in red

Source: Foster + Partners + JBA

3.15 Childcare Centre

A childcare centre is proposed within Block 4N, that will provide an additional 90 childcare spaces for the precinct, split between those children below the age of 2 years (32 spaces) and those children above 2 years of age (58).

The Childcare is located on Level 03 and Level 04 of the western wing below the residential apartments and the commercial office floors. The detailed design of the childcare centre will be the subject of a separate application, however to demonstrate that the proposal is able to comply with the minimum room requirements and other controls an assessment against the Sydney DCP is provided in the Tables of Compliance at **Appendix K**.

Parents using the facility by foot drop off their children via the dedicated entrance lobby in the passageway between the main lift cores on the southern elevation, or if by car either by the basement car parking accessed from the podium of Block 1 or the lobby using the lay-by on Central Park Avenue.

The elevated position of the facility prevents the childcare from being overlooked by the other uses within the development or from street level below while also providing views to the West. The location in the building is shown below in **Figure 32**.



Figure 33 – Location of Childcare Centre

Source: Foster + Partners

3.16 Heritage Works

The proposal involves the retention and restoration of the existing heritage buildings on the site being the Australian Hotel and the Abercrombie Street terraces. The application acknowledges the previous approval on the site (MP 08_0253), relating to the alteration of these building

The Heritage Report (**Appendix F**) provides clear guidance to which elements of these buildings should be retained as well as providing advice on the preferred method to repair the fabric of the building, which has subsequently been reflected on the Architectural Plans. In some instances this will include the structural rectification of floors, walls and ceilings as required.

The report also highlights the need to provide additional items to bring the building in line with the latest building codes such as an accessible means, and to this extent it is proposed that a new stair and lift is introduced which complements and is sympathetic to the restoration. The extent of proposed works is shown below in **Figure 33** and on the Architectural Plans at **Appendix B**.

Additionally, as shown in **Figure 33** below, it is proposed to reinstate a code compliant stair within the Abercrombie Street terraces in place of the existing location for the historical stair which has collapsed. It is proposed that the works covering the restoration of the buildings to a “shell and core” tenancy will be covered as part of this SSDA for Block 4N and include the external fabric. The fit-out of these historical buildings will then form part of a separate DA submission.

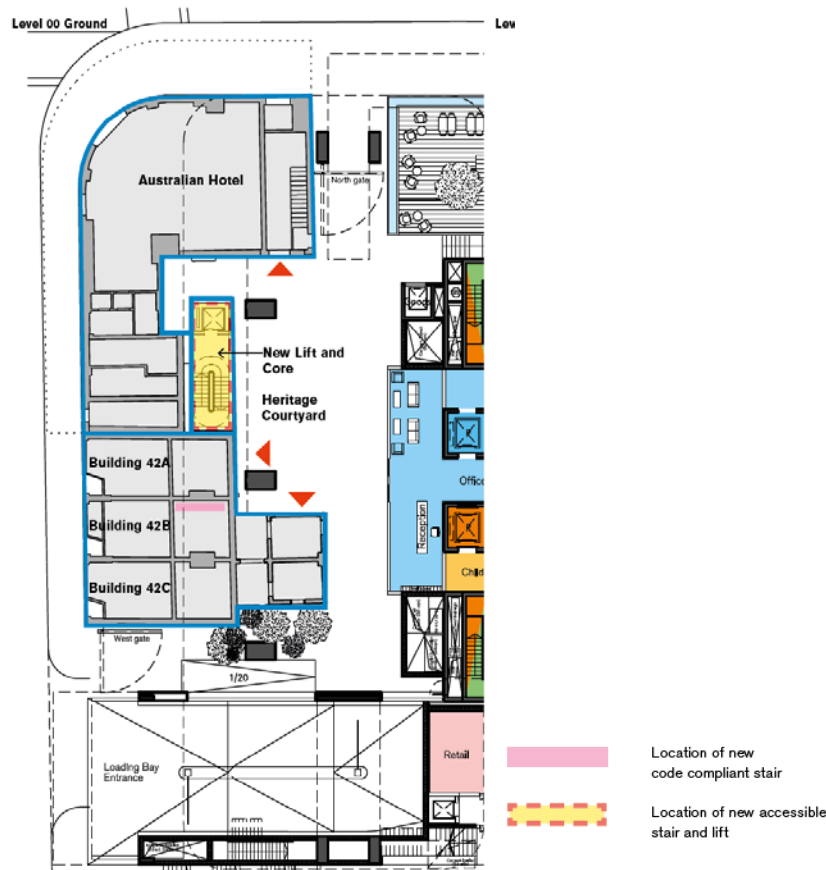


Figure 34 – Heritage works plan
 Source: Foster + Partners

3.17 Façade Treatment

A detailed analysis of the respective façade components of the proposal have been prepared by Foster +Partners at **Appendix C**. Given the various uses in the building, a number of façade systems are proposed, which can generally be broken down into the following:

- Podium;
- Commercial/childcare;
- Residential; and
- Hotel.

The location of the proposed façade systems are shown below in **Figure 35**.As noted above. Details of the proposed materials and finishes are discussed below.

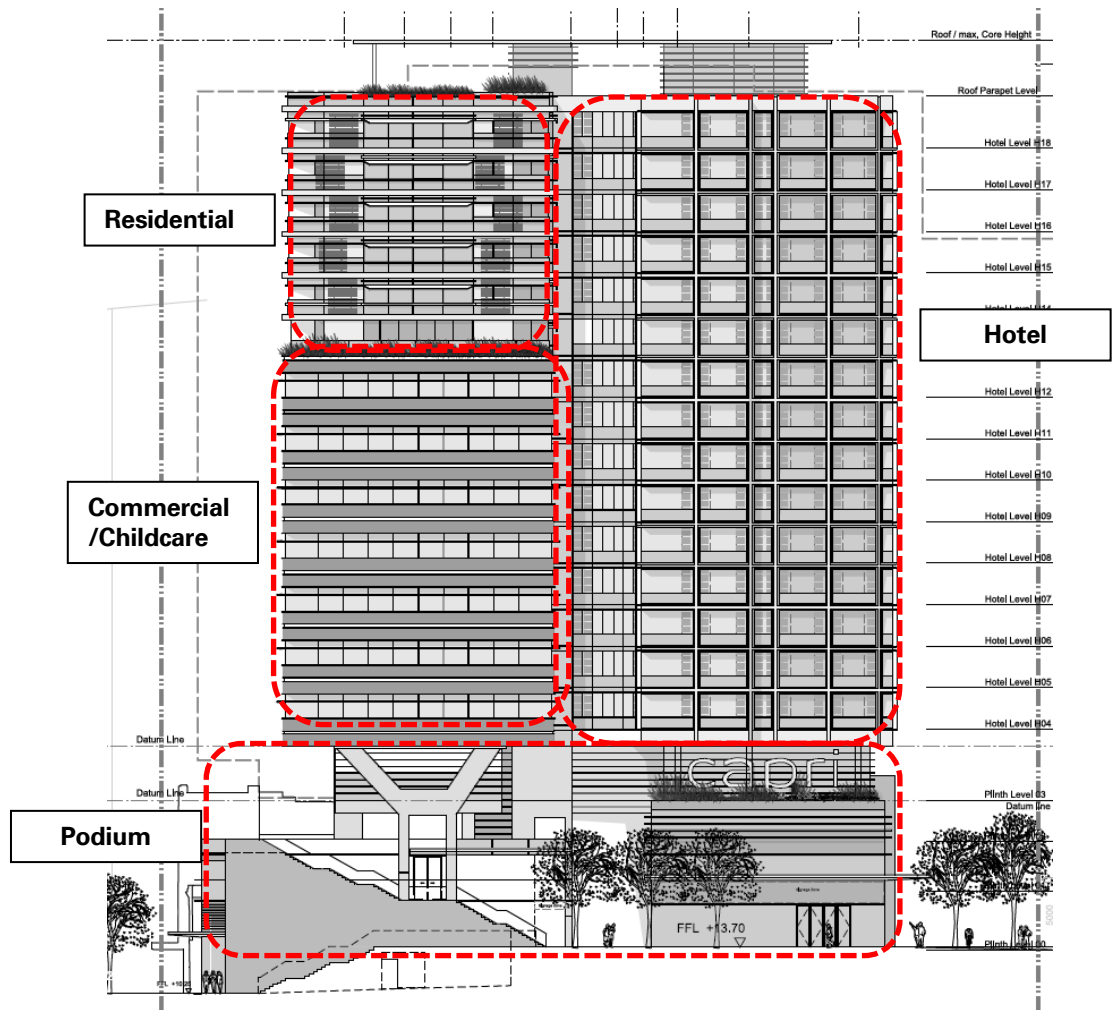


Figure 35 – Different façade treatments
 Source: Foster + Partners and JBA

3.17.1 Materials and Finishes

The materials palette for the facade now includes white concrete precast panels and some areas of tinted glass for the block, but otherwise remains consistent with the Concept Plan and previously approved materials for Block4N. Details of the materials proposed to be used are detailed in the Architectural Design Report (**Appendix C**).

Two main colours will be used for all principle façade elements; A light gun metal grey will be used for the custom profile metal cladding, and a dark grey will be used for the mullions / transoms and all horizontal shading or louvered façade elements. A Materials and sample board has been prepared by Foster +Partners and submitted under separate cover. In summary the following materials are proposed:

Lower Levels

The lower levels of the proposal will be finished in a palette of materials that are inspired by the heritage buildings located at the junction of Broadway and Abercrombie Street. The proposal

Below the datum line (level 3 'neck') the range of materials will include sandstone or similar, granite, terracotta, metal finished in copper brown and dark grey paint, clear and tinted vision glass to shop fronts and studios and copper brown back painted glass to spandrels.

Upper Levels

The upper levels in keeping with the strategy adopted on Block 1 and seek to use a range of contemporary material finishes above the level 3 'neck' and datum line. Horizontal shading facade elements are proposed to be installed in extruded aluminium profiles.

Glazing

The glass type will be double glazed units with a very light grey neutral low E coating.

3.18 Signage

As part of this application, signage zones have been identified for both building name sign and retail signage. These location have been shown on the Architectural Plans at **Appendix B** and are also discussed within the Architectural Design Report (**Appendix C**). It is noted that the final signage detail and design will be subject to separate approval.

3.19 Lighting

External lighting of the building, courtyards, entries and signage will be installed in accordance with the relevant Australia Standards. The selection of these elements as part of design development will be in keeping with the design and finish of the building and are anticipated to be time clock and level controllable.

It is proposed to provide photovoltaic cells to the building rooftop that will assist in the offset of the energy used by the external lighting installation.

3.20 Future Applications

Whilst this application makes provision for the location and general arrangement of uses within the proposal, it is anticipated that separate approvals will be obtained for the following elements in the future.

- Fit out of the commercial office space;
- Fit out of the retail units;
- Fit out and operation of the Child Care centre;
- Signage; and
- Adaptive reuse and fit out of the Australian Hotel and the Abercrombie Street terraces.

3.21 Subdivision

The proposal seeks consent for the stratum subdivision of the site, in accordance with the draft subdivision plans provided at **Appendix V**.

3.22 Building Infrastructure and services

The site is serviced with potable water, electricity, sewer, gas and telecommunications, which will be augmented as necessary to accommodate the proposed development.

A Central Thermal Plant (CTP) is provided as part of the site-wide infrastructure and consists of chiller and boiler plant for the purposes of generating cooling and heating for air conditioning and domestic hot water needs for the whole of Central Park including Block 4N.

A Recycled Water Plant (including sewer mining) is also provided to service the non-potable water needs of the whole of Central Park, including Block 4N, such as for irrigation to landscaped areas (public domain and private planters), toilet flushing, clothes washing in apartments and general basement cleaning where required.

Further details in relation to the infrastructure requirements and provision at Block 4N are provided in Services Infrastructure Report prepared by WSP and provided at **Appendix G**.

All required service inputs (including mechanical, electrical, communications, hydraulics, vertical transport and fire services and safety) have been considered in accordance with the relevant responsible criteria and will be designed in accordance with the relevant standards and authority requirements.

3.22.1 Waste

A Waste Management Plan has been prepared by Arup (**Appendix H**), which sets out the proposed storage, handling and collection procedures proposed. At the southern end of each residential floor is a waste room which includes a waste chute and space for co-mingled recycling storage. Ground floor non-residential waste is proposed to be stored within the tenancies, before being transported to the waste room within the basement.

3.23 Consultation

3.23.1 Background

The SEARs for the proposed development require that consultation be undertaken with the relevant local, State or Commonwealth Government authorities, service providers, community groups including the Chippendale Residents Interest Group (CRIG), affected landowners and particularly City of Sydney Council. A Consultation Outcomes Report has been prepared by Elton Consulting and is provided at **Appendix I**.

Throughout development of Central Park the proponent's approach has been to facilitate active partnerships with key stakeholders and the community. For Block 4N this has included meeting with DPE, City of Sydney Council, community consultation and information sessions with the CRIG, and consultant meetings and correspondence with relevant authorities. The consultation also included a public information session. The consultation approach for Block 4N is consistent with the 'inform' and 'consult' levels of the IAP2 (International Association of Public Participation) spectrum and as defined in the City of Sydney Community Engagement Policy.

3.23.2 Consultation

Department of Planning and Environment

Prior to lodgement of this SSDA, the proponent, architect and JBA met with DPE to discuss the proposal for Block 4N on 7 May 2014 and again on 14 October 2014. At the meeting the high level design and intent of the proposal were discussed, include the land use, and strategic approach to the submission of concurrent modification to the Block 1 +4N Project Application.

City of Sydney

A meeting was held with City of Sydney Council staff on 4 June 2014. It is noted that this meeting was prior to the receipt of the SEARs, and prior to Council compiling their comments in response to the request for SEARs

The meeting was attended by the proponent, JBA, and CoS representatives specialising in planning, and urban design. Council did not make any formal comment on the plans presented at this meeting, however comments were provided in response to the plan package submitted as part of the request for SEARs.

Authorities

Authorities have been consulted with in relation to: services and infrastructure to ascertain the extent of provision and/or augmentation of services to the site; ESD compliance including BASIX and Green Star; and traffic generation including updated rates for high density residential developments. This, and further consultation, is described in the appended reports.

Community

An open community information and feedback session was held on Tuesday 30 September 2014 from 5pm to 8pm in an office at Level 1, Central Shopping Centre at Central Park, Broadway. The session was designed for community members to drop in at a time that suited them and view a number of information displaying images and information about the proposed design.

Notification of the meeting was provided via a letterbox to surroundings residents in Chippendale (1800 letters) and One Central Park West (250 Letters), as well as on the Central Park website, facebook page, and internal Central Park notification system. A total of 25 Chippendale residents attended the session, including a number of residents from One Central Park West.

CRIG and other Groups

A part of the consultation process an individual briefing was offered in the consultation period to the Chippendale Residents Interest Group (CRIG). This offer was not taken up, but representatives of the CRIG were present at the Community information and feedback session, where individual discussions and feedback was obtained from the CRIG representative. Additionally the CRIG have indicated that they will be submitting feedback on the proposed design, which at the time of preparing this report was still outstanding.

The University of Technology Sydney, and the University of Notre Dame were also information of the consultation process being undertaken.

3.23.3 Outcomes

The Consultation Outcomes Report prepared by Elton Consulting (**Appendix I**) provides a detailed description of the items raised/outcomes of the stakeholder and public consultation undertaken as part of this project, as well as identifying the proponents response to each. A summary of the issues during this consultation is provided below, with a detail response to each of these issues included as part of the Consultation Report provided at **Appendix I**.

- Interest in the existing Australian Hotel building, its future use, size and proposed operations.
- Queried whether student accommodation would be included in the proposed design for Block 4N.
- Queried whether the proposal was consistent with the height in the concept plan.
- Concern relating to late night licensed venues and anti-social behaviour.
- Concern around the overshadowing impact on the western side of Abercrombie Street.

- Concern relating increased number of residents and the impact on the use of Chippendale Green.
- Support for the external façade of Block 4N.
- Support for the new design and external facade, when compared to the concept plan.
- Concern relating to the loss of privacy as a result of Central Park buildings, particularly Block 4S and Block 8.
- Concern relating to the height of the building.
- Interest in the size of the single bedroom apartments.
- Queried whether the Block's use had changed from the concept plan.
- Queried the number of Capri Hotels Frasers Property owns.

4.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the proposal.

4.1 Secretary's Environmental Assessment Requirements

Table 1 in **Section 1.3** provides a summary which sets out the individual matters listed in the SEARs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

4.2 Compliance with Relevant Planning Policies

The proposal's consistency with the relevant strategies, policies and guidelines as set out in the SEARs is addressed in **Table 8**. Variations to, and non-compliance with, the strategies, policies and guidelines as highlighted in the table are discussed in detail in the following sections of this report.

Table 8 – Consistency with relevant strategies, policies and guidelines

Instrument/Strategy	Comments
Strategic Plans	
Draft Metropolitan Strategy for Sydney	<p>In considering the strategic context, the Department has reviewed the framework provided by the Draft Metropolitan Strategy for Sydney. The Draft Strategy is intended to guide the development of the Sydney Metropolitan area towards 2031 and beyond and aims to achieve the sustainable growth of Sydney, built around five key outcomes:</p> <ul style="list-style-type: none"> ▪ balanced growth; ▪ a liveable city; ▪ productivity and prosperity; ▪ healthy and resilient environment; and ▪ accessibility and connectivity. <p>The Draft Strategy's Balanced Growth objective seeks to strengthen and grow Sydney's centres by encouraging mixed use within centres including central commercial areas where there is market demand and complementary land uses such as residential. As previously considered and determined by the Department of Planning and the Planning Assessment Commission the proposed residential use meets the identified demand for residential floor space in the context of the sites city edge location. The proposed development is consistent with the Strategy in that it will:</p> <ul style="list-style-type: none"> ▪ encourage patronage on public transport by being in close proximity to rail, light rail, bus and ferry services.; and ▪ encourage alternative modes of travel by providing bicycle parking for residents, visitors and retail patrons.
Metropolitan Plan for Sydney 2036	<p>The Metropolitan Plan for Sydney 2036 (The Metropolitan Plan) has been prepared to guide Sydney's growth to 2036 and act as a tool for coordination between Councils and the State government to deliver the action points. One of the central objectives of the plan is to provide improvements to the affordability of housing across Sydney, within the intention to increase the number of smaller (affordable) dwellings. The following actions are relevant to the proposal.</p> <ul style="list-style-type: none"> ▪ Action B1.3 – locate 80 percent of new housing within walking catchments of centres with good public transport ▪ Action D1.1 – locate 70 percent of housing within existing urban areas <p>The proposed development is consistent with the Strategy in that it will:</p> <ul style="list-style-type: none"> ▪ provide residential accommodation and within walking catchments of centres with good public transport; and ▪ provide a quantum of residential accommodation within existing urban areas ▪ Provides a significant number of tourist/visitor accommodation place within close proximity to the CBD and public transport.

Instrument/Strategy	Comments
Metropolitan Transport Plan 2010	<p>In March 2010, the Department of Planning announced the first five year review of the Metropolitan Strategy. The resulting Metropolitan Plan for Sydney 2036 seeks to respond to recent challenges facing growth in Sydney including the global financial crisis, housing affordability and climate change.</p> <p>The review integrated the Metropolitan Strategy with the Metropolitan Transport Plan, while accommodating increased population projections across Sydney, such as:</p> <ul style="list-style-type: none"> ▪ a population forecast to reach nearly 6 million by 2036 (an increase of 1.7 million from the 2006 projections); ▪ a need for 770,000 additional homes by 2036; and ▪ a need to provide 760,000 more jobs by 2036. <p>The Concept Plan will capitalise on the site's accessible location to public transport, retail facilities and employment opportunities, to ensure the proposal supports key actions within the Metropolitan Plan for Sydney 2036, namely:</p> <ul style="list-style-type: none"> ▪ A3 contain Sydney's urban footprint; and ▪ B1.3 locate new housing within the walking catchments of centres of all sizes with good public transport.
Draft Sydney City Sub-Regional Plan	<p>The Sydney Metropolitan Strategy outlines seven key strategies for the development of Sydney over the next 25 years. The strategy sets specific targets for increasing housing and jobs in the major centres of Sydney. Central Park is located within the Sydney City subregion. The Sydney subregion is nominated as a 'Global Centre' which is the <i>"main focus for national and international business, professional services, specialised health and education precincts, specialised shops and tourism, it is also a recreational and tourist destination for the Sydney region and has national and international significance"</i>.</p> <p>The specific targets that are set for the Sydney region are approximately:</p> <ul style="list-style-type: none"> ▪ 48,400 new jobs ▪ 31,793 new dwellings <p>The proposed development is consistent with the Strategy in that it:</p> <ul style="list-style-type: none"> ▪ is located within Central Park which is within the Sydney City sub-region which is nominated as a 'Global Centre'; and ▪ will contribute to the achievement of specific targets relating to new jobs and new dwellings.
Sydney 2030 (The City of Sydney Council)	<p>The future development of the site supports the objectives of the Sydney 2030 Strategy by promoting the development of a lively and engaging City Centre, supporting a City for pedestrians and cyclists, providing housing for a diverse population, delivering a building that will embody design excellence, and providing for fine grain streets and laneways that enhance pedestrian connectivity.</p> <p>The proposed development is consistent with the Strategy in that it:</p> <ul style="list-style-type: none"> ▪ will achieve a 5 star Green Star rating; ▪ will provide residential accommodation in support of Sydney's growing economy and population; ▪ Will provided a large quantum of floor space for employment generation on the site; and ▪ will provide physical connections through alternative modes of transport and community connections with the overall Central Park development.
Development Near Rail Corridors and Busy Roads-Interim Guideline	<p>The proposed development is located adjacent to a road with traffic volumes greater than 40,000 vehicles (Broadway). Accordingly, a noise impact assessment has been undertaken and mitigation measures such as acoustic treatments including upgraded glazing and acoustic seals are proposed to reduce the impact of road noise on the proposed development see Section 4.20.</p>
Guide to Traffic Generating Developments (RTA/RMS)	<p>The proposed development will improve walkability and cycle access across the City through the provision of bicycle parking and end-of-journey facilities which facilitate the use of pedestrian and bicycle paths and support a reduced reliance on private vehicles.</p>
NSW Planning Guidelines for Walking and Cycling	<p>The proposed development is consistent with the Strategy in that it:</p> <ul style="list-style-type: none"> ▪ will provide increased density within a site highly accessible to public transport; ▪ is within walking distance of other services and amenities, including retail and employment opportunities offered by the CBD; and ▪ is in close proximity to pedestrian and cycle facilities within Central Park as proposed in the approved Concept Plan (as modified).

Instrument/Strategy	Comments
Sydney City Access Strategy	<p>The proposed development is consistent with the Sydney City Access Strategy, encouraging the use of existing and future public transport linkages in close proximity to the site, notably the railway network, light rail, and bicycle connections currently under construction adjacent the site. In addition, the site is well located on an identified bus corridor within a bus stop precinct.</p> <p>The proposal is consistent with the Strategy, providing accommodation and services in a location highly accessible to existing and planned public transport and commuter linkages. The proposal will not impact on the ability for the Government to deliver the planned infrastructure and service upgrades as part of the Strategy.</p> <p>Finally, the construction of program of the proposal will be contained within the site, and will not impact the flow of vehicle, pedestrian or cyclist traffic along Broadway.</p>
NSW 2021	<p>NSW 2021 is a 10 year plan to rebuild the economy, provide quality services, renovate infrastructure, restore government accountability, and strengthen our local environment and communities. Central Park has an important role in the NSW 2021 Plan as it will assist with achieving multiple goals set out in the Plan, including building liveable centres.</p> <p>As discussed below, Block 4N plays a role in the success of Central Park and achievement of goals identified with the Plan.</p>
NSW Long Term Transport Master Plan	<p>The NSW Long Term Transport Master Plan provides a framework for delivery of and integrated and modern transport systems. The master plan identifies the challenges and needs and the actions proposed to address these challenges. Given the proximity of the site to existing and planned public transport services, the proposal will support the proposed actions contained within the Plan, as well as encouraging a modal shift away from private vehicle use.</p>

4.3 Compliance with Environmental Planning Instruments

The proposal's consistency and compliance with the relevant statutory plans and policies is addressed in **Table 9** and further detail is provided below. Variations to, and non-compliance with, the statutory plans and policies as highlighted in the table are discussed in detail in the following sections of this report.

Table 9 – Consistency with relevant environmental planning instruments

Instrument	Comments
SEPP (State & Regional Development) 2011	<p>Pursuant to the SEPP a project within the Broadway (CUB) Site will be SSD if it has a capital investment value (CIV) of \$10 million or more.</p> <p>The proposed development has a CIV of over \$10 million, and is therefore identified as SSD and considered to be development of State and/or Regional Significance. This EIS has accordingly been prepared in support of the DA.</p>
SEPP (Infrastructure) 2007	<p>The proposed development is not immediately adjacent to the Metro Light Rail corridor. Accordingly, the proposal does not trigger consultation with the relevant rail authority under Clause 85 of the SEPP.</p> <p>The proposed development has access to a classified road / road that connects to a classified road, and provide a mix of tourist and permanent residential accommodation. Accordingly, it is defined as traffic generating development under Schedule 3 of the SEPP and is to be referred to the Roads and Maritime Services (RMS). See Section 4.20.</p>
SEPP 55 (Remediation of Land)	<p>Clause 7 of SEPP 55 specifies that a consent authority must not consent to the carrying out of any development on land unless it has considered whether land is contaminated and if the land is contaminated, it is satisfied that the land is/can be suitable for the proposed development.</p> <p>Remediation works have been carried out on the site in accordance with MP 07_0163. Accordingly, the site is suitable for the proposed development.</p>
SEPP 64 – Advertising and Signage	<p>As shown on the Architectural Plans at Appendix B, the proposal includes indicative signage locations for the future ground floor retail and proposed hotel use. The proposed locations have been included to provide guidance and</p>

Instrument	Comments
	<p>consistency to signage that will accompany future operators of the tenancies. The locations shown on the plan have considered criteria set out in Schedule 1 of the SEPP.</p> <p>Given the detail of the signage is not sought for approval as part of this application, and will form part of a separate application, a detailed assessment against SEPP 64 and relevant local planning controls will be provided as part of future application for tenancy signage.</p>
SEPP 65 (Design Quality of Residential Flat Development)	The proposed development has taken into consideration the principles of SEPP 65 and the Residential Flat Design Code (as it applies to relevant uses only). Compliance with the SEPP and the RFDC 'Rules of Thumb' is outlined in the Compliance Tables provided at Appendix K and discussed below in Section 4.8 . A Design Verification Statement prepared by Foster + Partners in accordance with the requirements of the SEPP has also been provided at Appendix K .
Sydney Local Environmental Plan 2005	The approved Concept Plan (as modified) is consistent with the relevant controls in the Sydney LEP 2005. Accordingly, Block 4N, which is proposed in accordance with the Concept Plan, is consistent with the LEP.
City of Sydney Development Control Plan 2012	The approved Concept Plan (as modified) is the prevailing document for the development controls applicable to the proposal. However, where the Concept Plan is silent the DCP has been referred to as a guide for best practice. In particular, compliance with energy efficiency, storage, end-of-journey facilities, bicycle parking and waste management provisions for best practice. It is however noted that, in accordance with clause 11 of the SEPP SRD, the requirements of Development Control Plans (DCPs) do not apply.

4.3.1 Environmental Planning and Assessment Act 1979

State Significant Development

The EP&A Act establishes a specific assessment system to consider projects classed as State Significant Development (SSD). SSD is development deemed to be of significance to the State and for example includes projects located in precincts regarded as important by the NSW Government, such as Central Park. As noted in **Table 10**, the proposed development the subject of this DA is classed as SSD.

This EIS has examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed development. **Table 10** provides an assessment of the proposed development against the objects of the EP&A Act.

Table 10 – Objects of the EP&A Act 1979

Object	Comment
5(a)(i) To encourage the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment	<p>The proposed development will contribute to the proper management, development and conservation of the artificial resources of the site. In particular, design features and construction methods have been outlined in the ESD (see Appendix J) and Construction Environmental Management Plan (see Appendix L). These measures will be implemented throughout the construction and operational phases of the proposal, and existing artificial resources and infrastructure will be retained where practicable.</p> <p>The proposed development will promote the social and economic welfare of the community by providing an improved urban environment and will contribute to the enhancement of a key CBD location that is presently underutilised.</p>
5(a)(ii) To encourage the promotion and co-ordination of the orderly economic use and development of land.	The proposed development involves the orderly redevelopment of a site currently underutilised in a prime CBD location so service a various range of land uses.

Object	Comment
5(a)(iii) To encourage the protection, provision and co-ordination of communication and utility services.	The proposed development will not impact on the provision or coordination of communication and/or utility services. Relevant utility providers have been consulted during the development of the proposal. In addition, the proposal will connect to the site CTP for potable hot and cold water.
5(a)(iv) To encourage the provision of land for public purposes.	The proposed development supports the provision of a high quality public domain, in particular Chippendale Green located to the south of the proposal. Publically access space has been provided throughout the site, in particular to the rear of the heritage terraces, and the link between Block 1 + 4N.
5(a)(v) To encourage the provision and co-ordination of community services and facilities.	The proposed development provides open spaces which will enable community interaction and recreational pursuits, in particular Chippendale Green.
5(a)(vi) To encourage the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats.	The proposed development will take place in a highly modified and disturbed urban environment and will not impact on biodiversity values. The site is not considered to have habitat suitable for any threatened flora and fauna, and the only vegetation proposed to be removed are introduced street trees.
5(a)(vii) To encourage ecologically sustainable development.	The proposed development accords with the principles of Ecologically Sustainable Development, as set out in Schedule 2 of the EP&A Regulation 2000. This is further considered in Section 4.19 (ESD) of this EIS.
5(a)(viii) To encourage the provision and maintenance of affordable housing.	In lieu of the provision and maintenance of affordable housing The Affordable Housing Planning Agreement between the Redfern Waterloo Authority and the landowner was accepted by Deed Poll dated 29 July 2007. A payment plan was established and payments have been made in instalments over the last five years.
5(b) To promote the sharing of the responsibility for environmental planning between different levels of government in the State.	Consultation has been undertaken with various levels of government and government agencies, and community groups and the public during the preparation of the Block 4N SSD the broader Central Park redevelopment as a whole, and all government agencies will be afforded the opportunity for further input into the development process during the public exhibition period.
5(c) To provide increased opportunity for public involvement and participation in environmental planning and assessment.	The community and key stakeholder consultation carried out assisted development of the proposal and is detailed in Section 3.23 of this EIS. Further consultation will be carried out during design development, prior to the commencement of construction, and throughout the construction period.

4.4 Design Excellence

Commitment No 2 (Schedule 4) of the approved Concept Plan (MP06_0171) as modified, related to ensuring design excellence for the delivery of Blocks identified within the Concept Plan states:

Schedule 4 – Modified Statement of Commitments

[Item 2] The following is the list of architects agreed with the Department of Planning to be appointed for each of the nominated blocks on the site

Block 1 and 4A – Foster and Associated with Peddle Thorpe and Walker

In accordance with this commitment, Block 4N is being undertaken by Foster + Partners in conjunction with Peddle Thorpe and Walker (PTW).

4.5 Land Use

The Block 4N site is zoned City Edge under the Sydney Local Environmental Plan 2005. The proposal is consistent with the objectives of the City Edge Zone :

- *to encourage an increase in the permanent residential population through new residential development or the conversion of existing buildings and to ensure the maintenance of a range of housing choice;*
- *to recognise the development potential of certain major sites within the zone and to encourage development of them which is consistent with other zone objectives, and*
- *to ensure wind levels are consistent with pedestrian comfort and the amenity of the public domain;*
- *to ensure adequate levels of daylight to streets, and*
- *to facilitate the conservation of items and areas of heritage significance.*

The proposed mixed use building support the objectives of the zone being located in close proximity to services employment and attractions, as well as contributing to employment opportunities, and long term residential housing stock.

Proposed residential uses are highly suited to the dense inner city location and improve the vitality of the area. The amenity of the adjacent Chippendale Green is both protected, and enhanced by locating a mix of uses adjacent to the park, improving overlooking and surveillance. As discussed in **Section 3.4**, the removal of the current approved bridge link between Block 1 and 4N, as a result of the proposed change in land use, has significant solar access benefits to the usable public domain within Central Park.

The proposed development will meet demand, contributing the delivery of identified strategic planning housing targets, provide hotel and employment generating floor space, preservation and adaptive reuse of important heritage elements on the site, ensure the completion of the northern gateway of the Central Park site in a timely manner, representing a positive outcome for the site, which has otherwise been disused or vacant for the past 10 years.

4.6 Consistency with Concept Plan

The proposal is generally consistent with the approved Concept Plan (as modified). However, in order to facilitate the propose Block 4N proposal, a concurrent modification will be submitted to the Concept Plan pertaining to building envelope and uses.

The proposal's consistency with the approved Concept Plan (as modified), and the proposed modification, is discussed below.

4.6.1 Land Use

The Block 4N site is currently identified as being non-residential, with active uses on the ground floor plane. The proposed uses, with the exception of the residential component are consistent with the uses identified within the Concept Plan (as amended).

As part of the concurrent modification to the Concept Plan, it is proposed to include an element of the Block 4N site as permissible for residential land use. As discussed further below, the alteration of part of this building from non-residential to residential does not impact the overall approved land use mix across the Concept Plan site. The floor area to facilitate the delivery of residential dwelling on Block 4N is as a result of modification and amendments to other blocks across the site.

Critically, the location of the proposed residential land use, allows for high levels of amenity to be accessed on the Central Park site, including views, sunlight, and outlook. Furthermore, the proportion of residential land use within the building is

comparatively low, ensuring the intention of employment generation, services, and community function (such as childcare) are provided on the site, consistent with the intent of the Concept Plan.

As shown on the Architectural Plans at **Appendix B**, the proposal is consistent with the Concept plan in providing ground and lower ground level (street frontages) with active non-residential and retail tenancies.

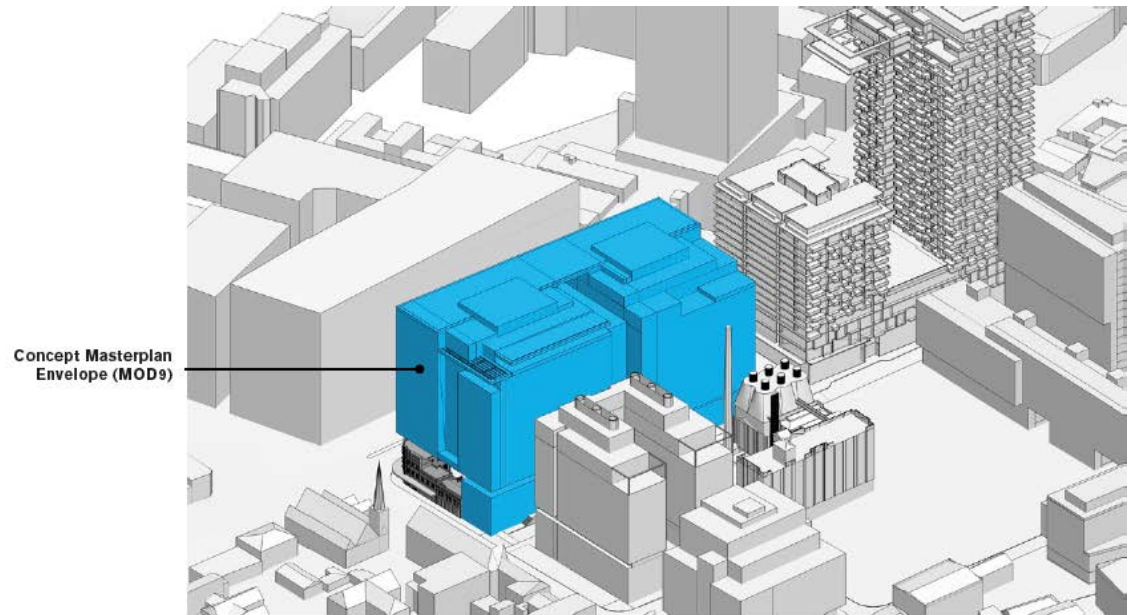
4.6.2 Height and Massing

It is noted that concurrent to this SSDA, a modification to the Concept Plan will be submitted to the DPE, which will seek to revise the Concept Plan envelope to more closely reflect the proposal.

When reviewed against the current Concept Plan, the proposal is generally consistent, with some variations to the upper level roof feature and two portions on the southern elevation of Block 4N. Notwithstanding these areas, the proposed sits wholly within the existing Concept Plan envelope (as shown in **Figure 36**).

It is noted that concurrent to this SSDA, a modification to the Concept Plan will be submitted to the DPE, which will seek to revise the Concept Plan envelope to more closely reflect the proposal.

The marginal variation to the concept plan envelope is located on the southern elevation as shown in **Figure 36** and the architectural roof feature **Figure 37**. The impacts associated with the variation to the existing envelope are negligible, as discussed in the following sections. The proposed variation to the Concept Plan is also addressed in the concurrent S75W amendment.



01. Concept Masterplan Envelope (MOD8)

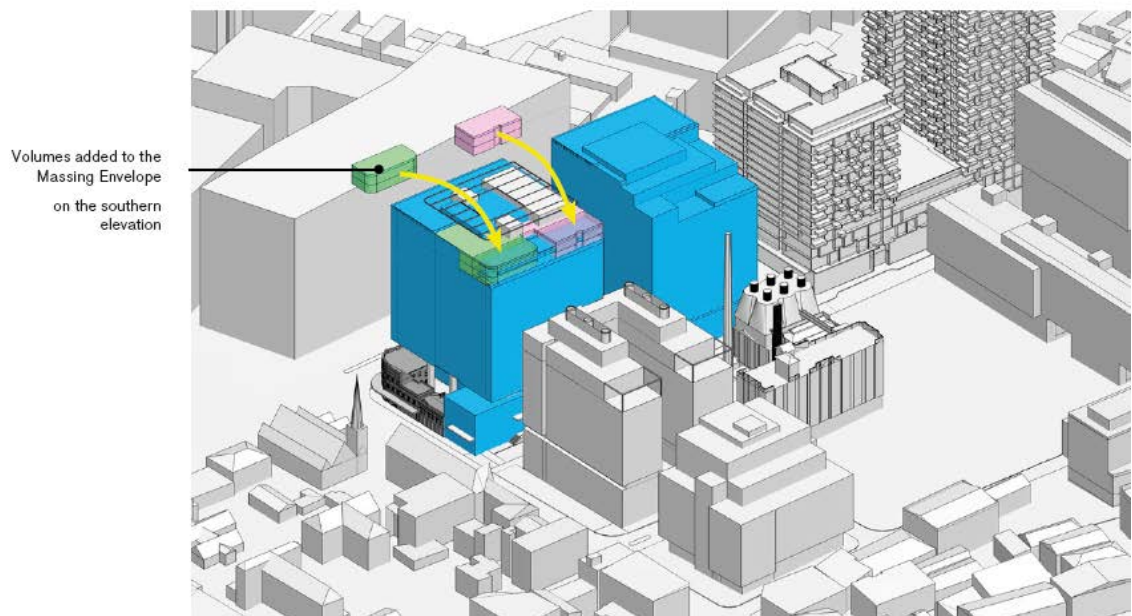


Figure 36 – Proposed massing variation to the Concept Plan
Source: Foster + Partners

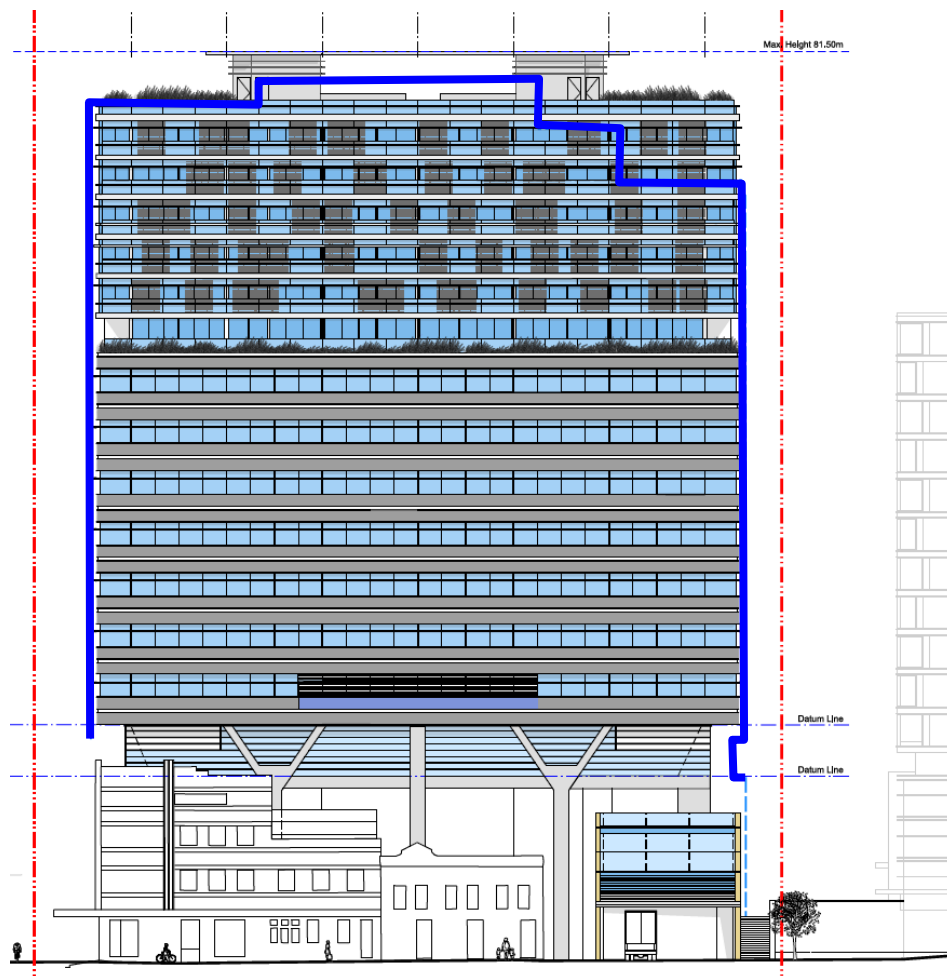


Figure 37 – Extent of proposal against the concept plan envelope
 Source: Foster + Partners

4.6.3 Sun Access Plane and Building Envelope

The sun access plane for the Block 4N site is defined in State Environmental Planning Policy (Major Projects) 2005. The building envelope is shown in the drawings prepared by Foster +Partners as part of the approved Concept Plan (as modified). The drawings show minor incursions on the sun access plane, which occur on the southern side of the site, and contribute only slight elements of additional overshadowing and limited hours of the day.

The shadow footprint of the proposal is generally consistent with the principles established in the approved Concept Plan (as modified), overall resulting in an improvement to the level of solar access to the Central Park site.

While the envelope presents a minor variation to the approved envelope, it does so without creating and significant or adverse overshadowing.

It should be noted that as a direct result of the proposed Block 4N envelope (as part of the concurrent S75W modification to the Block 1 +4N Project Approval), that significant solar gains to the Brewery Yard Courtyards, public domain on Chippendale Way as well as to the proposed pedestrian street (through-site link to Broadway) are created. These benefits can be seen on the diagrams prepared by Foster and Partners (**Appendix B**) as well as **Figure 38**.

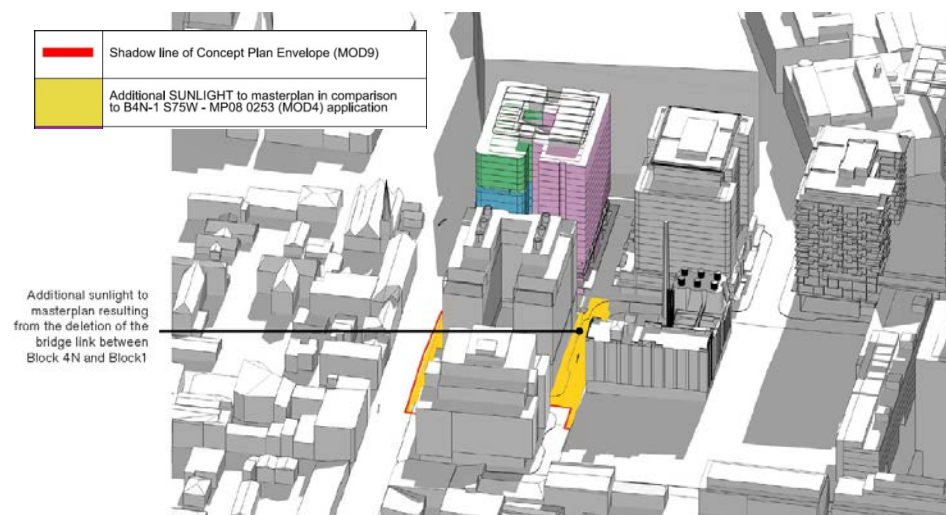


Figure 38 – Additional Sunlight gained from reduced envelope compared to Concept Plan
Source: Foster + Partners

4.6.4 Gross Floor Area

The proposal the subject of this DA seeks approval of a maximum GFA of 25,755m², with a maximum residential GFA of 3,518m². This GFA, and land use mix is a result of detailed design and delivery of the remainder of the Central Park development. However, the maximum GFA proposed reflects the approved Concept Plan (as modified), being less than the maximum currently permissible for the site.

Accordingly, modification of the approved Concept Plan (as modified) is required. A modification to increase the maximum GFA and modify the percentage of residential vs non-residential GFA will be lodged concurrently with this SSDA with DPE.

Table 11 – Block 4N GFA – Comparison between approved Concept Plan

Instrument	Concept Plan (Mod 9)	Proposal	Complies
Maximum GFA	25,930m ²	25,755m ²	YES
Residential	0m ²	3,518m ²	NO – Subject to concurrent modification
Non Residential	25,930m ²	22,237m ²	YES

4.6.5 Land Use Mix Across the Concept Plan

Consistent with the requirements of the Concept Plan, as a result of the proposed development, the proposal will maintained the land use split of 23% non-residential (minimum) and 77% residential (maximum). The detail of the proposed GFA as a result of this proposal and other modification across the site are addressed in the concurrent Concept Plan modification submitted to the DPE.

4.6.6 Design Integrity Panel Recommendations

Recommendations of the CUB/Frasers Design Integrity Panel as they relate to Block 4N were considered as part of the design and formation of the proposed scheme. Specifically, the compatibility of scale of the proposed building has been considered, to match the adjoining Block1 and height and form.

4.6.7 Public Art

The public art strategy endorsed under the approved Concept Plan (as modified) requires the provision of numerous artworks and installations across the Central Park site.

Jennifer Turpin Studio and Michelle Crawford have prepared a Public Art Strategy for the Central Park site. This strategy covers the following:

- Themes of the artworks;
- Permanent and temporary artworks;
- Digital art;
- Heritage interpretation; and
- Budgets and implementation strategies.

For Block 4N, the public art will likely be incorporated into the publicly accessible open space within the rear courtyard of the heritage terraces and Australian Hotel, or within the pedestrianized link between Block 1 +4N .

The proposal is subject to detailed design and it is recommended that a condition of consent be imposed requiring that design of the public art proposal is to be developed in consultation with CoS and DPE and that the art be approved prior to the issue of the final Occupation Certificate.

The proposal is generally consistent with the approved Concept Plan (as modified). The proposal's consistency with the approved Concept Plan (as modified), is discussed below.

4.6.8 ESD

A 5 star Green Star pathway (Principles led) has been established for Block 4N proposal to support the application of ESD initiatives across a full range of environmental categories, noting that there are no pre-existing tools applicable for the proposed building (given the various uses). This is consistent with the requirements of the Concept Plan condition.

4.6.9 Heritage

The proposal, in particular the elevation and interface of the building massing with the Australian Hotel and Abercrombie Street terraces has been carefully considered, picking up on detail and design cues of the hotel.

In order to incorporate the retained heritage items into the overall building design, a datum line has been established by way of the podium of the building which is articulated vertically and horizontally and differentiated from the tower by way of different materials. The use of distinctly different materials at the base and tower assists in strengthening the position of the heritage building in relation to the overall development.

4.7 Built Form and Urban Design

The approved Concept Plan (as modified) provides a number of development controls which have informed the design of Block 4N, in particular the uses height, sun access plane and envelope, footprint and GFA. The evolution of the design is shown in Architectural Design Report prepared by Foster +Partners (**Appendix C**).

As discussed in **Section 4.2** and **Section 3.4**, the built form of the proposal was developed by Foster +Partners after consideration of various options for the site, starting with the existing approved Concept Plan envelope. Key development controls, such as separation and amenity drivers were then considered, followed by environmental factors and articulation of the façade. The proposal takes advantage of the corner site, capturing views, promoting ventilation and achieving access to natural light and sunlight.

The design of Block 4N follows the intent of the Concept Plan guidelines in respect of massing and height and retains the podium datums that are informed by the heritage buildings at the corner of Abercrombie Street and Broadway.

The building has multiple pedestrian entrances to address the mixed-use nature of the scheme. The commercial office is accessed from Broadway through the Heritage Courtyard as well as Via Abercrombie Street (as shown on the Architectural Plans at **Appendix B**). The residential lobby and childcare entrance are primarily approached from the south via a passageway between the hotel and mixed-use massing, close to the proposed drop-off on Central Park Avenue. The hotel is accessed off the pedestrian link between Block 1 and Block 4N.

The residential accommodation is located on the upper levels on the western side of the site, with the commercial and childcare below, to maximise the views towards the University of Sydney and beyond. It provides a range of 1-bedroom units to 2-bed/dual key bedroom apartments with a shared residential garden space at Level 11. It is also proposed that the residents would also have access to the hotel health club provided at Level 03.

Abercrombie Street - Visual and Streetscape impacts

As required by Council, visual, streetscape and pedestrian safety impacts of the loading dock at the south-western corner and document the options that have been explored by Foster +Partners, as part of the development design; This is illustrated in the Report (Appendix C) on pages 457 and 49, as well as in the development of the massing on pages 191. Consideration was also given to the suitability of sleeving the entry was considered, as well as the placement of active uses above, as shown on the architectural plans at **Appendix B**, and illustrated in the Architectural Design Report at **Appendix C** (Page 47)

Additional Levels to the south

As required by the SEARs (from Council Comments), Foster +Partners have reviewed the urban design and amenity impact of the additional massing proposed to the rear of Block 4N as shown in **Figure 39**. This urban design review, and perspectives are included at **Appendix C** (at Appendix A of Architectural Design Report) demonstrates that the additional massing will not have an adverse impact on the streetscape. As demonstrated in other sections in this report, the additional massing will not have any significant adverse impacts to amenity.

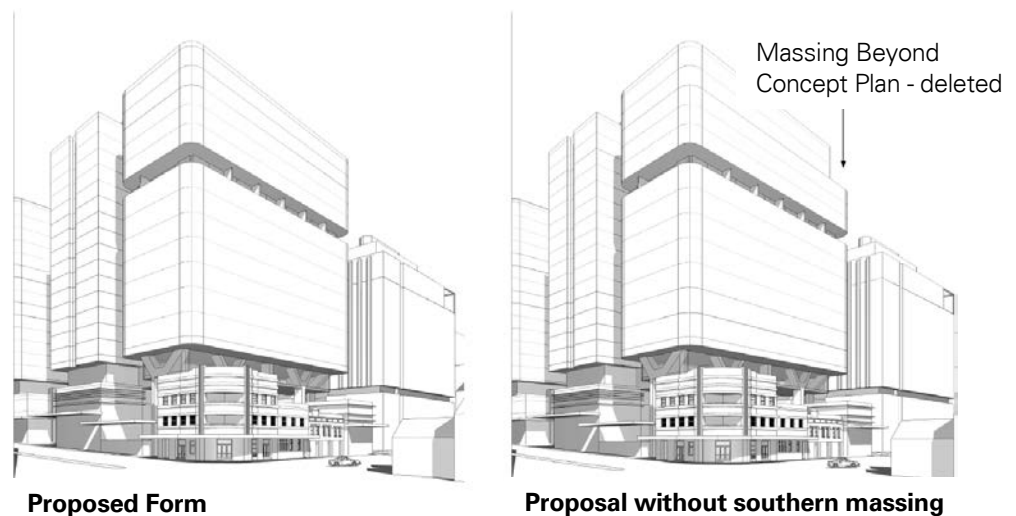


Figure 39 – Massing Comparison Study
Source: Foster + Partners

4.8 Environmental and Residential Amenity

The proposed development has been designed in accordance with the principles of SEPP 65 and the Residential Flat Design Code (RFDC) with consideration of the Sydney DCP 2012. The proposed development meets the objectives of the SEPP and demonstrates consistency with the intent and design guidelines of the RFDC 'Rules of Thumb' as outlined in the Compliance Tables provided at **Appendix K** and detailed below.

The Residential Flat Design Code (RFDC) was established to support the design principles within SEPP 65 providing guidance for the application of these principles. At the heart of both the SEPP and the RFDC, is to deliver high quality, attractive, development that affords residents high levels of amenity.

Critical in achieving high levels of amenity is the recognition of the valuable aspects of amenity that can be achieved on a site, in its context. Given the site's inner city location, the western aspects towards the west (Broadway and Sydney University) are unique and important aspects that contribute to the amenity of the development additionally; the site proximity to employment opportunities (CBD), frequent public transport, key services, and recreation/leisure, and education opportunities are important amenity factors in the location.

When establishing the proposed design, it was important to understand the aspects of the site and its context. For the development to achieve high levels of amenity, as well as meet the amenity expectations of the future occupants, the proposal design demonstrates and understanding of the characteristic that drive amenity on the site.

In this instance, the aspect and views both immediate and distant have been identified as being highly valuable in the inner city location. The immediate aspect and vista is to the north and west, with expansive and relatively uninterrupted views.

In addition to the contextual characteristics detailed above, the following elements of the proposal significantly contribute to the amenity of apartments proposed:

- Proximity to public transport, services, employment and leisure/entertainment locations
- High quality swimming pool, Jacuzzi, communal area, and gym provided for hotel guests, but accessible via the Block 4N residents;
- Communal terrace located on level 11 which includes landscaping, outdoor furniture (as discussed in **Section 3.10**);
- Availability of a 24 hour concierge service;
- Provisions of appropriate car parking within the basement, and storage within both the apartment and basement;
- Availability to a large number of car share vehicle on the Central Park Site; and
- Well designed and efficient apartment layouts with various orientation and sizing options.

Design Quality

A SEPP 65 Statement addressing the ten design quality principles of the SEPP has been prepared as part of the Design Report provided at **Appendix C** and **Appendix K**. The statement also assesses the Residential Flat Design Code 'Rules of Thumb'. The proposed development has been designed in accordance with

the principles and 'Rules of Thumb' to provide a high quality development, affording high levels of amenity to residents.

It is important that when considering amenity and design quality on the whole, equal weighting be given to the various aspects. The context and site constraints must also be considered in the determination of amenity.

Building Separation

Block 4N is adequately separated from surrounding buildings in accordance with the RFDC guidelines. To the north, Block 4N is separated from the UTS REIT building by Broadway. To the east, Block 4N is separated from Block 1 by 20m, consistent with the RFDC guidelines. To the south, block 4N is separated from Block 4S by 17m at the ground floor and

Communal Open Space

The residential dwellings within the building will have access to a private communal open space on Level 11 (**Figure 40**), as well as having access to the hotel amenities, which include gym, pool, and jacuzzi. The communal open space that is provided on Level 11 is discussed in further detail at **Section 3.10** (landscaping), but provide an area that is naturally ventilated and well lit, for passive recreation of the 48 residential units.

Importantly, the amenity of the open space within the development is high quality, providing services solely for the use of residents, with views to the west and high levels of solar access.

In addition, the context of the site located to the north of Chippendale Green, Block 2A (which was previously intended to be development and has since been landscaped) and the future Brewery Yard Courtyard, are all located immediately to the south east, easily accessible to residents.

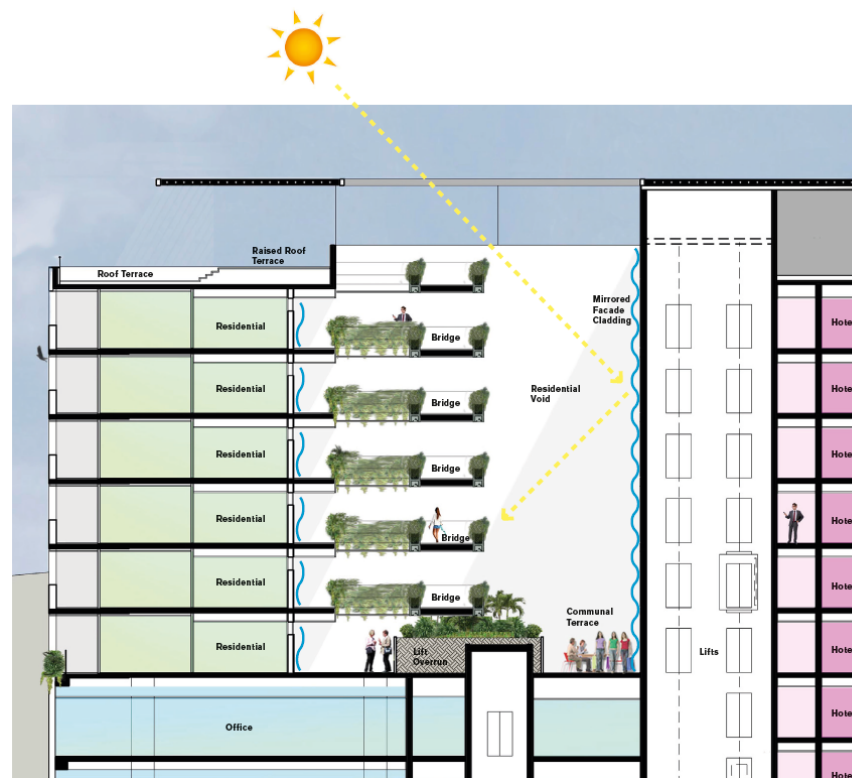


Figure 40 – Penetration of sunlight to the residential communal terrace
Source: Foster + Partners

Private Open Space

All apartments within the development are provided with an area of private open space as shown on the Architectural Plans (**Appendix B**). These spaces are orientated to the north, west and south, and are directly accessible from the living spaces within the apartments. All private open spaces achieve a minimum depth of 2m to allow high level of functionality of the space.

The private open space of each apartment has been designed to be a flexible extension of the internal living space or “lanai.” As detailed in the architectural design report, this is articulated in the facades by the way the elevation “opens up” along its length, with their position and orientation allowing maximum solar access during the late afternoon hours.

Solar Access

Assessment of the proposed development against SEPP 65/ RFDC (as well as Sydney DCP 2012) has been undertaken by Foster +Partners as part of the Architectural Design Report (**Appendix C**). The RFDC establishes the following:

“Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three hours direct sunlight between 9 am and 3 pm in mid-winter. In dense urban areas a minimum of two hours may be acceptable”

For a consistent comparison of the solar access achieved by the proposed development (compared to other buildings on the Central Park Site), the same methodology that was adopted during the preparation of the Concept Plan (as amended) prepared by COX/ATA has been used. This study identified parameters for solar access being: 2 hours of solar access should be provided to apartments between the hours of 7:30am and 4:30pm on 21 June (mid-winter)

Consistent with the current sunlight planning principles, sunlight achieved to the balconies/lanais which would reach seated or standing occupants has been considered. This assumption was also used in the modelling established by COX/ATA.

An assessment against the RFDC rule of thumb and the extended hours provided the following results

Date	Time	2 hours
March	9am – 3pm	25%
	7:30am – 4:30pm	88%
June	9am – 3pm	25%
	7:30am – 4:30pm	88%

Private open spaces are placed along the northern, western and southern perimeter of the residential apartments in the form of balconies. Their position and orientation takes advantage of the significant solar access they receive during afternoon/evening hours of the day.

Given the RFDC rule of thumb measurement concludes at 3pm, the remainder of the day, including the times that the balconies receive ample solar access, are not included in the assessment. It is also critical to note the competing rules of thumb such as passive shading, and balcony depth (as required by the RFDC) are contrary when considering solar access compliance (if being considered in isolation).

The proposed balconies provide a sufficient large and well- proportioned outdoor space, directly adjacent to the living room area, with a minimum depth of 2.0 m clear. The design of the balustrade and the height of the horizontal louvers allow

for views out towards north, west and south while providing for safety and visual privacy.

Accordingly, it is considered that the balance of the overall merits of the apartment orientation, views, size and usability of the open space, as described within the Architectural Design Report (**Appendix C**) and throughout this EIS, offsets variation to the RFDC rule of thumb relating to solar access non-compliance.

Passive Shading Devices and Light Shelves

Daylight the building façade and habitable rooms through the use of passive shadowing devices and light shelves, as discussed in the Architectural Design Report, **Appendix C**. These elements to the building façade reflect and diffuse high level sun onto the ceiling of apartment during summer, whilst shadowing from the direct hot summer sun. Alternatively in winter, with a low angle sun, the design of the shading devices allow for direct sunlight to penetrate into the building, whilst also washing onto the ceiling increasing the level of natural light. This is particularly relevant for the predominantly west facing balconies and living spaces of the residential units.

The inclusion of these elements on the façade, also adds to the visual interest of façade, assist in reflectivity from the building, and improve the building energy efficiency during different times of the year. In addition to this, the proposal also utilises horizontal banding of windows to balance solar access, views outwards and privacy without resulting in a compromise of one and other. As well as improving the level of natural light and opportunity for views, this proposed arrangement also contributes to additional articulation and visual interest in the façade.

Building Separation and Depth

The proposed provides a separation from the proposed Block 1 scheme to the east of 20.5m, and approximately 16.2m from Block 4S to the south as shown below in **Figure 41** and **42**. Given the proposed land use on the eastern tower of Block 4N (hotel) and proposed uses within Block 1(residential) this distance is consistent with the guidelines of the RFDC.

It is importantly to note that whilst the distance between Block 4N and 4S is less than the recommended separation prescribed by the RFDC, the treatment of the northern elevation of Block 4S is such that there is no potential for any overlooking directly north (toward Block 4N). The windows on this elevation of Block 4S are splayed to look north east and north-west (refer to approved plans of Block 4S).

Finally, as shown in **Figure 41**, the height of the proposed residential on Block 4N is located above the student accommodation located within Block 4S.

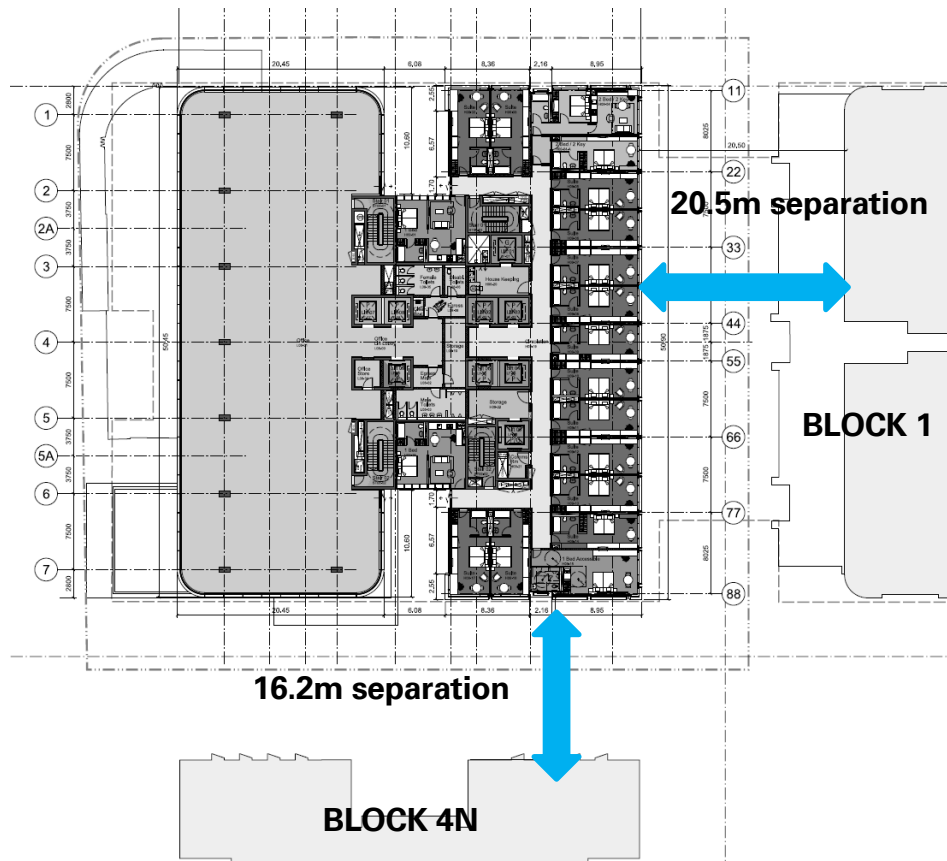


Figure 41 – Building separation
Source: Foster + Partners and JBA

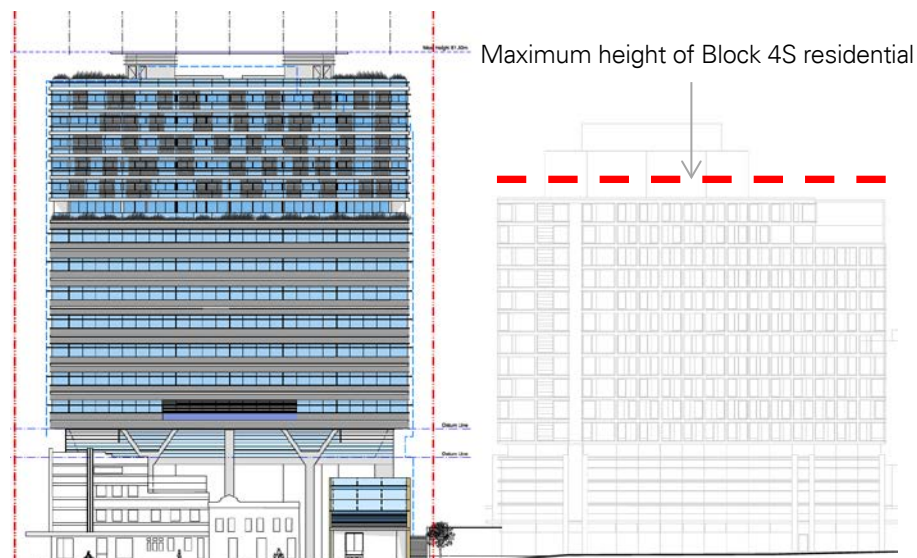


Figure 42 – Context of Block 4N and 4S
Source: Foster + Partners and JBA

Natural Ventilation

The RFDC uses 'cross-ventilation' as a convenient way of checking the likely contribution of natural ventilation to projected comfort conditions. Cross ventilation describes where a dwelling has operable openings to two or more distinctly different orientations, making it likely that in any conditions of breeze, the relative pressure differentials will result in some air movement through the

dwelling. The Rules of Thumb in the RFDC give a quantified recommendation with respect only to cross ventilation, relating to the overall proportion of complying apartments.

The residential apartments have been designed to enhance natural cross ventilation and daylight access opportunities to apartments and common areas. This is largely achievable by virtue of the access to the internal void space at the centre of the western tower. Out of 48 apartments, 48 can be cross ventilated naturally, which equates to 100% of the total GFA of all apartments, and 100% of all units. The cross flow ventilation compliance of the proposal is shown below in **Figure 43**.

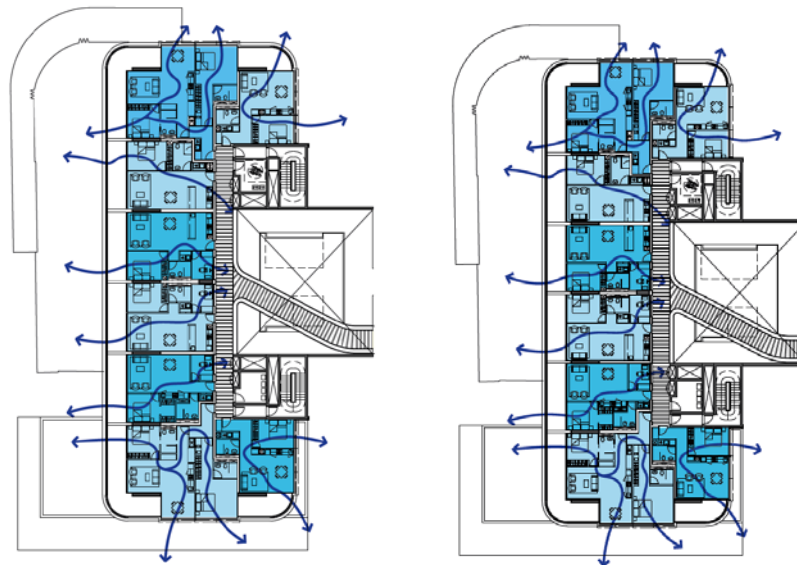


Figure 43 – Natural ventilation to apartments (various levels)
Source: Foster + Partners

Privacy

The interface and treatment of the separation between the non-residential and residential uses, as well as between the Commercial and hotel uses has been carefully considered by Foster +Partners. In particular, at the centre of the site on the northern and southern elevation, the use of fixed screening and privacy materials (high textured glass) has been incorporated. The detailed design and treatment of these elevations is shown on the Architectural Plans (**Appendix B**) and within the Architectural Design Report (**Appendix C**).

It is also important to note that none of the uses are proposed to be oriented to the centre of the site, instead, they used the articulation and internal building edge to provide additional light and cross ventilation to improve amenity.

Storage

The proposed development provides internal storage to each apartment and Class 1 bike lockers (caged) for bicycle storage within the basement levels, providing apartments with some 6m³, 8 m³ and 10 m³ of storage in accordance with SEPP 65. All apartments will comply with the storage requirements of the RFDC.

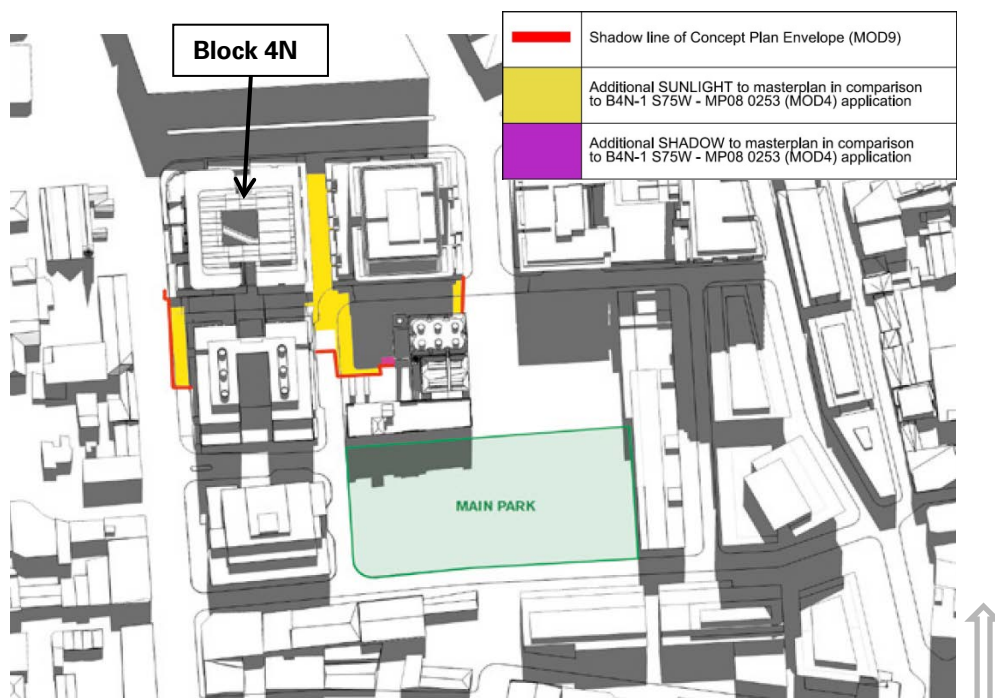


4.9 Overshadowing and Solar Access

Shadow Diagrams have been prepared by Foster +Partners and are provided at **Appendix B**. The building envelope of Block 4N is in keeping with the principles of the approved Concept Plan (as modified) with a number of considerable reductions as a result of increased setbacks, and the removal of the bridge link between Block 1 and Block 4N (the subject of a spate modification).

As demonstrated on the overshadowing plans, the proposal results in a net increase of solar access to the public domain, including to Abercrombie Street, Chippendale Green, Brewery Yard Courtyard, and the pedestrianized link between Block 1 +4N that will be utilised as outdoor seating for food speciality tenancies and passive recreation area.

Importantly, as can be seen from the shadow diagrams, the minor variation to the approved concept plan envelope at the rear of Block 4N on the southern side of the building envelope (at the upper levels – as shown in **Figures 44 and 45**), does not result in any significant overshadowing to surrounding land uses.



22 March, 12.00

Figure 44 – Proposed Overshadowing (12pm, March 22)

Source: Foster + Partners



21 June, 12.00

Figure 45 – Proposed Overshadowing (12pm, 21 June)

Source: Foster + Partners

4.10 Wind

A Wind Engineering and Solar Reflectivity Report has been prepared by Cermak Peterka Petersen (CPP) and is provided at **Appendix M**. The report refers to the assessment undertaken for the original Central Park Concept Plan in which a physical model was produced for the purposes of wind tunnel analysis.

The general massing, orientation, and form of the building have remained similar, with only relevant changes occurring in the plan form geometry rather than the massing. The inclusion of a water feature along the pedestrianized laneway to the east of the site was also identified. Given the massing of the building has remained largely unaltered CPP expect the wind conditions to be similar to original testing

The wind report notes that the more open nature of the north and south façade near the pedestrian entrances to the through site link will increase the flow through the laneway. Given the geometry of the proposed buildings on either side (Block 4N and Block 1) being consistent, any wind through this area is considered to be uniform throughout.

The significant change in the articulation of the south and north façade is noted as having potential to cause an increase in vertical flow in this channel and through the link for winds from the south. However, it is noted that the southern elevation of Block 4N is substantially shielded by Block 4S to the south.

The outdoor restaurant area at the north of the laneway would require amelioration measures, such as vertical screens or planting to the north and south, to make the area suitable for outdoor café-style seating.

All locations around the site are expected to be classified for pedestrian walking or better, and pass the relevant distress criterion. The semi-outdoor spaces and residential outdoor areas throughout the site are expected to meet the wind speed for café-style activities for approximately 80% of the time. These

anticipated wind conditions are considered by CPP to meet the City of Sydney DCP 2012 requirements for a non-active frontage.

4.11 Reflectivity

A Wind Engineering and Solar Reflectivity Report has been prepared by CPP and is provided at **Appendix M**. CPP undertook analysis of Blocks 1 +4N as part of the previous Project Application. As part of this process, two solar reflectivity issues were identified. Whilst the design of the built form and envelope has changed slightly, the orientation has not, meaning the identified issues are required to be addressed. These are:

- Between 7am and 9am between March and October, with the morning sun reflecting off the northern sun to the west along Broadway
- Around 5pm during April to September when the afternoon setting sun reflects off the northern elevation to the east-north-east along Broadway.

To alleviate these potential reflection, vertical fins are required along the northern façade. CPP have recommended the use of these fins to block high incident angle reflections off the northern façade. From the previous studies the additional relevant recommendation was for all areas of the northern façade of Block 1 and 4N and along the north half of the east façade of Block 4N to install cladding or glazing with a reflectivity coefficient of less than 10%.

As detailed in the Architectural Design Report prepared by Foster +Partners (**Appendix C**), efforts have been made to the treatment of the facade, in particularly the northern and eastern elevations to minimise reflectivity whilst still providing access to sunlight and views from the floorplate. The final design will ensure compliance with Council's reflectivity provisions, specifically those within the DCP 2012.

4.12 Heritage

In accordance with the relevant SEARs a Heritage Impact Statement has been prepared by Urbis and is provided at **Appendix F**. The HIS considered the proposed development impact the significance and ongoing value of the existing heritage items on the site.

A Heritage Interpretation plan for the CUB site, including the Ovoid Drain, was previously prepared by Urbis in July 2009. This plan included specific recommendations for the Hotel and Terraces. Heritage Interpretation of the Hotel and Terraces should be incorporated with the design development and construction stages of the project.

Following the commercial scheme (MP 08_0253), the scheme has been revised and considered by Urbis to further protect the heritage significance of the Australian Hotel and the adjoining terraces.

Australian Hotel

Similarly, refurbishment of the rear façade of the Hotel is supported with consideration for the lesser significance of the elevation and the new prominence of the façade in the context of its relationship to the western tower, courtyard and commercial lobby entry. The proposed works will improve on the manner in which the Australian Hotel (and Abercrombie Street Terraces) are appreciated in the streetscape and the overall site.

Abercrombie Street Terraces

The works proposed to the Abercrombie Street terraces involves the demolition of the one storey bathroom additions on the rear wings of terraces. Urbis note that as the elements have been assessed as having low significance, the works will assist in reading the rear wings of the terraces. As part of their previous report (MP 08_0253), Urbis noted that the reuse of the terraces will enhance their appreciation as heritage items, given they are currently in poor condition.

Archaeology

No excavation is proposed under main footprint of the Australian Hotel or Abercrombie Street terraces. As such the cellar of the Australian Hotel, which incorporates a previous cellar on the site, will be retained. There is however Archaeological potential under the back bar of the Hotel

Much of the archaeological investigation was identified to be undertaken as part of the remediation works on the site (under a separate approval).

Recommendations

The proposal is therefore recommended for approval subject to the following recommendations:

- The proposed base building and conservation works to the Australian Hotel and Abercrombie Street Terraces to allow for tenancy should be subject to and undertaken in accordance with a detailed conservation schedule for the buildings. Works should be monitored by a suitably qualified Conservation Architect throughout the design development, contract documentation and construction stages of the project.
- Proposed façade works to the rear elevations of the Hotel and terraces should be subject to conservation architect advice and should have regard to the Special Element Conservation Plan (SECP) July 2009.
- Heritage Interpretation of the Hotel and Terraces should be incorporated with the design development and construction stages of the project, in accordance with the Heritage Interpretation Plan for the CUB site (Urbis: July 2009) which included specific recommendations for the Hotel and Terraces.

4.13 Separate Entry Requirements

As required by the City of Sydney DCP 2012, the proposal incorporates separate entry points, and lift cores for each of the proposed land uses, including childcare, hotel, commercial, and residential.

Importantly, the design of the ground floor, allows for the permanent residents to have access to the concierge services (mail, storage etc), that will also be used for the hotel.

4.14 Childcare Requirement

The proposal allows for space on Levels 2 and 3 to cater for a future childcare Centre, in accordance with the requirements of the central park Concept plan.

Whilst separate approval will be required for the detailed fitout and use of the space as a childcare centre, as part of this application the provisions of the Sydney DCP 2012 and Children (Education and Care Services) Supplementary Provisions Regulation 2012 have been considered, including allience of services and space to meet the facilities and equipment, staff and child number requirements. A preliminary compliance table again the childcare provisions of the Sydney DCP 2012 is provided at **Appendix K**.

4.15 Building Code of Australia

A Building Code of Australia Assessment Report has been prepared by City Plan Services and is provided at **Appendix N**. The report establishes the proposal's compliance with the BCA and relevant Acts and Regulations. The proposal comprises some areas of non-compliance which can be addressed by justification against the performance requirements of the BCA, and some minor deemed-to-satisfy non-compliances which can be addressed by amendments to the plans.

The report concludes that the proposal is capable of complying with the BCA, including in relation to structure and fire safety, and that the areas of non-compliance with the deemed-to-satisfy provisions will be addressed by alternative solutions which will not significantly impact on the design of the proposed development.

4.16 Accessibility

An Access Review has been undertaken by Accessibility Solutions and is provided at **Appendix O**. The review identifies that the proposal incorporates the following design elements:

- The access to the ground floor hotel, retail areas and lift lobbies will provide appropriate access for people with disabilities in accordance with Part D3 of the BCA, DDA Premises Standards and Council's DCP 2012; and
- The lifts provide access from the ground floor to all upper levels, which incorporate appropriate width corridors for Turning and Passing and enabling access to all apartment entrance doorways to comply with Table D3.1, Parts D3.2, D3.3 of the BCA and DDA Premises Standards; and
- The development proposes two hundred eighty-three (283) hotel suites including a minimum of fifteen (15) accessible suites which are designed in accordance with AS1428.1 to satisfy Table D3.1 of the BCA, DDA Premises Standards; and
- The development can provide eleven accessible parking spaces, four (4) for the hotel/commercial and seven (7) for the adaptable apartments to comply with Part D3.5 of the BCA, DDA Premises Standards and Council's DCP 2012;
- There will be at least 15% of the forty-eighty (48) apartments – seven (7 rounded down) that will be adaptable generally in accordance with AS4299, which is consistent with SEPP 65, SEPP 65 Design Code and Council's DCP 2012 clause 3.12.2.

The review concludes that the proposed development has demonstrated an appropriate degree of accessibility in accordance with DCP 2012, SEPP 65/RFDC, the AS1428 series, BCA, DDA Access to Premises Standards (including DDA Access Code) and the Commonwealth Disability Discrimination Act (DDA).

4.17 Structural Certification

A Structural Statement has been prepared by Robert Bird Group (RBG) (**Appendix P**), which confirms that the proposed design is capable of complying with relevant standards and codes for construction, in relation to load bearing. In particular, the architects and structural engineer have worked closely to establish the design of the cantilever element of the building, particular in the location above the rear of the Abercrombie Street Terraces and Australian Hotel.

4.18 Crime Prevention Through Environmental Design

A Crime Prevention Through Environmental Design (CPTED) Report has been prepared by Elton Consulting and is provided at **Appendix Q**. The report demonstrates the proposal's commitment to CPTED principles, consistent with the approved Concept Plan (as modified). In preparing the report Elton Consulting has undertaken consultation with the following stakeholders:

- City of Sydney Council Community Safety officer;
- NSW Police (Redfern Local Area Command and Parramatta Crime Prevention Office);
- NSW Department of Planning and Environment;
- UTS Security Service;
- TAFE (Sydney Institute); and
- State Transit Authority (STA).

The CPTED design and management features of Block 4N are:

- The Block 4N public domain will be legible, easy to navigate, promote social interaction and contain lively public spaces that are filled with activities compatible with surrounding uses;
- Block 4N will be located within a safe, locatable and easily accessed pedestrian and public transport network;
- Development of Block 4N will be managed to provide a safe and amenable environment for surrounding business owners, visitors and residents throughout the construction process;
- The specific crime prevention needs of special user groups (e.g. children, younger people, older people and people living with a disability) are understood and will be addressed;
- Residents, visitors, business owners and service providers (e.g. UTS, TAFE, CoS, NSW Police, fire, ambulance, security, State Transit, taxi operators, etc.) will be supported as active partners in creating a safe environment;
- Encourage residents and visitors to work and live a healthy lifestyle and take an active role in safety and injury prevention;
- Ensure publicly accessible areas will be safe for all user groups through the use of formal surveillance and signage; and
- Block 4N will have a legible, durable and well maintained built environment that is secure, feels safe to users and deters crime.

A Community Safety Management Plan has been prepared in accordance with the approved Concept Plan (as modified) to assess the design of Block 4N, including the physical (built form) and non-physical (management) elements. The plan makes a number of recommendations to meet the CPTED principles including use of appropriate street and under-awning lighting, maintaining clear internal and external sight lines, providing appropriate security to back of house / loading dock areas, use of passive and active surveillance measures i.e. CCTV, providing access control at street level and to the basement, use of durable materials, providing appropriate way-finding signage and public domain amenity and ensuring maintenance is undertaken promptly.

The report concludes that the proposed development is considered worthy of support from a safety and crime prevention perspective, subject to the recommendations above and contained within the report.

4.19 Transport and Accessibility

A Traffic and Transport Report has been prepared by GTA Consultants and is provided at **Appendix R**. The report addresses the proposed parking, servicing arrangement and traffic generation from the proposal. It is noted that the proposal includes the combined basement to service both Blocks 4N and Block 1.

4.19.1 Traffic Generation

Traffic impacts for the whole of the site were assessed and deemed satisfactory as part of the approved Concept Plan (as modified), and allowing for recent applications across the site. The assessment estimated that the development would generate some 493 vehicle trips per hour (vph) and that the access intersections serving the site would have a good level of service with additional spare capacity.

From the proposed development, the traffic report estimates that the number of vehicle trips generated by Block 4N is approximately 98vph. The proposed childcare centre is not anticipated to generate significant volume of development traffic given that the majority of uses will be from local residents and businesses – with a worst case generation of 5vph during peak periods to allow for the 5 spaces allocated for pick up and drop off.

In conjunction with the proposed development of adjoining Block 1, Brewery Yard, and Block 4S these buildings are expected to generate 164vph during the busiest peak period. The traffic report therefore considers that the proposed development with consideration of other recent changes on the Central Park site will increase the number of vehicle trips in the busiest peak hour by some 47 vph for Block 1 +4N.

However, the effect of this increase has been assessed, considering the impact to the performance of surrounding intersections, namely Abercrombie Street, Broadway and Regent Street. The traffic report concludes from a before and after analysis of the intersection performances that the surrounding road network would continue to operate well into the future, and would have negligible traffic effects.

4.19.2 Vehicle Parking and Access

The proposal provides a total of 126 car parking spaces to service Block 4N which is made up of:

- 32 residential spaces (including 7 accessible spaces);
- 28 commercial tenant parking spaces;
- 5 retail spaces;
- 56 hotel parking spaces; and
- 5 childcare centre parking spaces (drop-off and pick up).

The provision is consistent with the maximum provision permissible (for the respective land uses within the proposal) under the LEP 2005 and Sydney DCP 2012, and is compliant. The provision is also in accordance with the approved Concept Plan (as modified) which stipulates a minimum parking provision for the entire site of either the LEP requirements or 2,000 spaces. A total of 11 motorcycle parking spaces are also provided throughout the basement as shown on the Architectural Plans at **Appendix B**.

Access to car parking is available via the car park entry off Central Park Avenue and will be security controlled via swipe card or remote. The four basement levels are configured as split level accessed via a ramp at either end. The car park and associated elements have been designed in accordance with the relevant Australian Standards while providing sufficient car parking spaces to satisfy the requirements of the LEP. Details regarding access to, and location of car parking space is shown on the Architectural Plans at **Appendix B**, and detailed further in the traffic and parking report.

Childcare Centre Drop Off

To service the childcare centre proposed on level 3 and 4 of Block 4N, a total of five (5) car parking spaces are provided, in accordance with the requirements of the LEP 2005. These spaces are located in the south eastern corner of basement level 2 (below Block 4N), adjacent the designated childcare centre lift lobby, which will provide direct access from the parking spaces to the childcare centre lobby (on ground floor) and upper levels.

Vehicle access to the childcare centre car parking spaces will be via the shared driveway of Central Park Avenue. Pedestrian access to the childcare centre will be via the western core of Block 4N, which is accessible from the southern elevation of the block (between Block 4N and Block 4S).

4.19.3 Bicycle Parking and Access

The proposal provides 57 bicycle parking spaces distributed throughout basement levels 1 – 4, and at grade within Central Park in accordance with the requirements of DCP 2012. End-of-journey facilities are provided at basement level 1 and include lockers for in accordance with the DCP.

Designated staff bicycle parking is also provided, of some 53 spaces space for are also provided. Retail staff will have access to the end-of-journey facilities at basement level 1 including dedicated lockers via the vehicle ramp (if using bicycles) or via the fire stairs.

Access to the bicycle parking spaces will be provided via the various lift cores to coincide with each of the proposed land uses.

4.19.4 Loading and Deliveries

A loading dock and waste services area for the various uses within Block 4N and Block 1 is located in the western portion of the upper level basement as shown on the Architectural Plans at **Appendix B**. Access to the loading and servicing area is provided off Abercrombie Street in accordance with the relevant Australian Standards (and consistent with the current Project Application Approval MP 08_0253). This entry will be restricted to service, authorised and waste removal vehicles only. Vehicles will enter in a forward direction with adequate internal dimensions to allow them to exit in a forward direction also.

It is proposed to provide a total of 11 service vehicle bays consisting of:

- 4 truck loading bays (8.8m x 3.5m); and
- 7 van/utility type vehicles bays (2.6m x 5.4m).

Whilst it is noted that the DCP ordinarily requires 15 service vehicle bays for Block 4N, the loading dock will be managed by an appointed loading dock manager to ensure its efficient operation.

Waste collection will be conducted from the loading dock in accordance with the Waste Management Plan provided at **Appendix H** and described in **Section** .

4.19.5 Alternative Modes of Transport

Public Transport

The site has excellent access to public transport, being well served by regular bus services along Broadway, as well as a connecting bus interchange on the corner of George and Lee Streets to the north east of the site. Central Railway Station is located approximately 700m east of the site and offers regular suburban and interstate services on the Sydney rail network. The station also provides light rail services with the Central light rail stop located to the north of the station.

While it is expected that residents, visitors and retail staff would make use of the existing available public transport services, given the type and frequency of services, it is not expected that further augmentation would be required. Further, any improvement to the services would be a matter for consideration by Transport for NSW as part of its long term strategic planning and implementation process.

Walking and Cycling

The site is very well situated in terms of provision for walking and cycling with a number of strategic and local cycling routes and links in the vicinity of the site. Public footpaths are currently provided along the majority of roads in the local network which continues into the residential streets to the south and west of the site as well as across Broadway into the area north of the site.

There is an existing on-road cycle path which, along Broadway, is provided as an off-road shared pedestrian / cycle path. A combination of other on- and off-road cycle links provide access to the surrounding suburbs. In addition, on-road cycling is also permissible on the local road network where traffic volumes are generally considered to be moderate.

It is expected that the development will attract some additional walking and cycling trips which will necessitate augmentation of the network. Pedestrian crossing facilities will be provided across the main roads surrounding the site and pathways will be provided on both sides of all internal streets within the site. A shared pedestrian / cycleway link to Wellington Street will be provided through Chippendale Green connecting to Chippendale Way. A raised pedestrian threshold is also proposed across O'Connor Street, adjacent to Chippendale Green, at the centre of the site.

The provision of bicycle facilities throughout the site accounts for the external linkages to existing and proposed bicycle routes as part of City of Sydney Bicycle Plan. Recreational cyclists will utilise the shared links to access Central Park Avenue before making their way to Broadway and non-recreational cyclists will utilise the sign posted cycle route through the site.

The result will be a permeable pedestrian / cycle network through the Central Park site which will be fully accessible to locals and those traversing the site, and will enhance existing pedestrian / cycle accessibility between Chippendale and the public transport node represented by Central Station.

In addition, CoS has plans for an off-road shared pedestrian / cycle pathway along the eastern side of Abercrombie Street.

Car Share

In accordance with the approved Concept Plan (as modified) and the DCP, a total of 10 car share spaces will be provided as part of the proposal. These spaces will be suitably located to allow access to the public, whilst not comprising the security arrangements of the residential/non-residential basement.

Green Travel Plan

A Green Travel Plan (GTP) is a package of measures aimed at promoting sustainable travel and reducing reliance on private vehicles, to ensure that the transport infrastructure, services and policies both within and external to the site are tailored to the users and coordinated to achieve the most sustainable outcome possible. A Green Travel Plan is provided as part of the Traffic and Transport Report prepared by GTA (**Appendix R**). This GTP includes:

- Compliance with stringent parking controls applicable to the site;
- Creation of street networks and cycle ways, footpaths and links to encourage cycling and walking;
- A Travel Access Guide provided to each new occupant detailing public transport access to the site, and providing frequency of services and maps;
- Public transport information boards making residents and visitors more aware of the available alternative transport options;
- Provision of high quality telecommunication points providing residents with the opportunity to work from home, reducing the need to travel;
- Provision of resident and visitor bicycle parking;
- Provision of a newsletter for up to two years after occupation bringing the latest news on sustainable travel initiatives in the area, and
- Provision of half yearly membership to a car share scheme.

4.19.6 Construction Traffic

A Construction Traffic Management Plan (CTMP) has been prepared by GTA Consultants and is provided at **Appendix S**. Details in relation to construction traffic are provided in **Section 4.18**.

4.20 Ecologically Sustainable Development

An Ecologically Sustainable Design (ESD) Report has been prepared by WSP and is provided at **Appendix J**. In accordance with the commitments made as part of the approved Concept Plan (as modified), the proposed development aims to meet appropriate environmental benchmark standards for multi-residential developments, and has been designed to demonstrate consistency with industry best practice, specifically to achieve a 5 star Green Star rating. The proposed development is part of the Central Park site which incorporates a precinct and centralised plant approach thereby improving the efficiency and environmental performance of the proposal.

As detailed in this EIS, the mixed use development is designed in accordance with the principles of ecologically sustainable development as defined in clause 7(4) of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. The proposed development:

- Does not pose threats of serious or irreversible environmental damage, and measures to prevent environmental degradation will be implemented throughout construction as per the 'Precautionary Principle';
- Ensures that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations by creating a vibrant mixed use environment, maximising the facilities of a well-resourced asset, and ensuring no damage to the environment during construction and operation, as per the 'Intergenerational Principle';
- Has considered the conservation of biological diversity and ecological integrity in its design as per the 'Biodiversity Principle'; and

- Is designed to be energy and water efficient to reduce lifetime environmental impacts and running costs as per the 'Valuation Principle'.

A 5 star Green Star pathway (Principles led) has been established for Block 4N proposal to support the application of ESD initiatives across a full range of environmental categories, noting that there are no pre-existing tools applicable for the proposed building (given the various uses).

The equivalency pathway that has been developed combines the Multi Unit Residential v1, Office v3 and Public Buildings v1 Tools. The details of the pathway approach undertaken by WSP is provided at **Appendix J**. This will be achieved through best practice design, and will cover:

- Material selection with low environmental impact
- Indoor environment quality, including thermal and acoustic comfort
- Occupant health
- Promotion of public transport and alternative methods of transport
- Reduction in greenhouse gas emissions through connection to the Central Thermal Plant
- Reduction in potable water use through the connection to the Recycled Water Treatment Plant
- A minimum of 60 points will be targeted in order to achieve the 5 star Green Star rating.

4.20.1 ESD Initiatives

A key ESD feature is the location of the building within a precinct that produces a proportion of its own electricity via a tri-generation plant incorporated into a central thermal plant (CTP). Waste heat from the tri-generation plant is used to generate a proportion of the space and domestic hot water (DHW) heating and comfort cooling energy needs of the precinct. In addition, a recycled water treatment plant (RWTP) collects wastewater from all of the buildings in the precinct and provides Grade A water to meet all of the non-potable water uses in the precinct. A summary of the ESD initiatives for Block 4N are provided below:

- The building fabric design will meet thermal comfort and energy consumption requirements of BASIX and the BCA;
- Materials will be selected for their durability, embodied energy, renewable sources content, ease of manufacturing, ability to be recycled / reused / reconditioned, maintenance, local availability, VOC content, emission production, affordability and toxicity;
- Apartments and lobby spaces will operate as a mixed mode, with the building fabric comprised of operable elements and loggias to facilitate natural ventilation;
- A central heating and cooling system will be provided with connection to the site CTP providing chilled and hot water to the building;
- A centralised hot water system will be installed and will be serviced by the CTP;
- lobbies will be afforded natural light and ventilation
- Internal light fittings specifications will be efficient and limited to fluorescent and LED fittings where appropriate;
- All external lighting, except where required for security reasons, will be solar powered where appropriate;

- Metering will be provided throughout the building and central services for all major building plant and equipment, as well as in apartments; and
- Personal vehicle usage will be discouraged by provision for motorbikes, bicycles, car share schemes, access to public transport networks, and proximity to retail and related amenities, through the implementation and communication of a Smart Travel Plan on the site; and
- Water fixtures and fittings will be specified to high Water Efficiency Labelling Scheme (WELS) rating with 4 star toilets, 3 star showers, and 6 star bathroom and tap fittings.

4.20.2 BASIX and BCA Compliance

BASIX sets sustainability targets for water and energy as well as minimum performance levels for the thermal comfort of the building. The proposed development will target a minimum 20% in energy improvement in greenhouse gas emissions compared to the NSW benchmark of 3,292kg of CO₂ per person per year. The following items are to be implemented to reach the energy reduction target:

- High performance building fabric which includes the adoption appropriate double glazing and façade treatment to all elevations;
- Detailing and specification of appropriate insulation to all exposed floors, roofs and external walls;
- Final construction details are subject to detailed NatHERS modelling assessments;
- Use of efficient lighting fixtures to apartments and common areas. Typically apartment lighting will be limited to LED and fluorescent fittings only. Common plant areas will be fluorescent fittings only, and metal halide fittings will be limited to car park entry points only. All common residential areas will be either LED or fluorescent fittings only;
- Lighting operation to common areas will be fitted with time-clock controls, motion sensors or timer settings to improve energy efficiency;
- Basement car park ventilation systems will include carbon monoxide monitors with variable speed fans to limit operation when not required;
- Installation of energy efficient appliances;

In order to maximise the water efficiency of the development, all fixtures in the proposed development are to meet the WELS (Water Efficiency Labelling Scheme). Specification and implementation of water efficient fixtures and appliances will also be implemented, along with the selection of planted or indigenous and drought-tolerant or low water species.

4.20.3 Section J – National Construction Code

The building fabric constructions are to be designed to meet the minimum National Construction Code (NCC) Series Section J Energy Efficiency 2014 provisions. Part J1 and J2 apply for Retail, Office, Childcare and Hotel Areas of the proposal. Details in relation to the retail building fabric and its compliance with Section J of the BCA are provided in the ESD Report prepared by WSP

Overall, the proposed development meets the BASIX requirements. A BASIX Certificate(s) has been produced is provided as part of this application (Refer to **Appendix J**).

4.20.4 Green Star

Green Star is a voluntary environmental rating system for assessing different building types against environmental design targets. Block 4N at Central Park is a mixed use development targeting a 5 star rating (principles with the Green Building Council of Australia (GBCA)).

The GBCA (Green Building Council of Australia) has provided a formalised eligibility response (that the building does not meet the eligibility criteria of the established measurement tools. Therefore, to demonstrate the building meets the high level of environmentally sustainable design performance expected of a building with a 5 Star Green Star rating, a Green Star 'Principles Led' approach has been followed, which demonstrates that the ESD initiatives implemented in this building's design are equivalent to a 5 Star Green Star development.

The project has been registered with the Green Building Council and formal rating is anticipated within the first twelve months of the construction stage. To achieve a 5 star Green Star rating, the project must achieve more than 60 weighted points across all categories – management, indoor environmental quality, energy, transport, water, materials, land use, emissions and innovation – while meeting the minimum environmental conditional requirements. A full list of targeted Green Star initiatives and pathways, for each credit and category in relation to Block 1 is provided at **Appendix J**. A minimum of 64 points has been targeted to allow a safety margin, in case points are dropped during the future project stages. The buffer with the current Green Star strategy is 4 points.

4.21 Acoustic Impacts

A Noise Impact Assessment has been prepared by Acoustic Logic and is provided at **Appendix T**. The assessment provides an analysis of acoustic impacts associated with the proposed development and recommends acoustic treatments to ensure that internal noise levels comply with statutory requirements, as well as identifies potential noise sources generated by the site and determines noise emission goals to meet the acoustic requirements of the NSW EPA Industrial Noise Policy. The report also considered the potential impact of the operation of the development from mechanical plant and equipment. Details in relation to the noise impact during construction of the proposed development are provided in **Section 4.23**.

Traffic noise (particularly from Abercrombie Street and Broadway) is assessed as being the most noise impacting activity, given Block 4N's proximity to Broadway and Abercrombie Street, while noise from mechanical plant and equipment (including air conditioners) is likely to be generated by the development itself.

4.21.1 Nearest Receivers

The nearest potentially affected noise receivers are the residential properties on the western side of Abercrombie Street as well as those existing and future residential receivers within the Central Park Precinct to the south, east and west, particularly within Block 1 and 4S.

4.21.2 Background Noise Levels

A survey of the existing noise environment was carried out between 28 August 2014 and 10 September 2014. Background noise levels measures at the nearest property boundary are set out below in **Table 12**. The measures traffic noise at the sites broadways façade are set out in the table below.

Table 12 – Traffic Noise – Measured on Broadway

Location	Traffic Noise Level	
	Broadway	Abercrombie Street
Day (7am – 10pm)	73dB(A) Leq(1 Hour)	72dB(A) Leq(1 Hour)
Night (10pm – 7am)	70 dB(A) Leq(1 Hour)	69 dB(A) Leq(1 Hour)

Unattended noise logging was carried out on the site between 28 August 2014 and 10 September 2014, to establish the background noise levels as shown in **Table 13**.

Table 13 – Background Noise Levels

Description	Day Noise Level 7am to 6pm (dB(A))	Evening Noise Level 6pm to 10pm (dB(A)) Night Noise Level	Night Noise Level 10pm to 7am (dB(A))
Minimum Repeatable Background L90,15min	56	53	50

4.21.3 Consideration Requirements

Broadway, to the north of the site, carries high traffic volumes of greater than 40,000 vehicles and is required to be assessed on conjunction with NSW State Environmental Planning Policy (Infrastructure) 2007 criteria. Traffic noise requirements of DCP 2012 pertaining to the control of traffic noise to living areas, and the Australian Standard AS2107:2000 have also been considered.

4.21.4 Noise Generators and Emissions

Potential noise generated by mechanical plant and equipment has also been assessed against the City of Sydney Standard Conditions and NSW EPA Industrial Noise Policy, with consideration of the nearest potentially affected noise receivers. City of Sydney Council's standard conditions specify that the transmission of noise, being the sound pressure level at the boundary of any affected receiver is not to exceed the background noise by more than 5dB.

Mechanical plant

While mechanical plant and equipment has not yet been selected it is anticipated that all plant can be satisfactorily attenuated to levels complying with noise emission criteria through appropriate location and (if necessary) standard acoustic treatments such as noise screens, enclosures and in-duct treatments (silencers / lined ducting) or similar. It is also noted that the requirement for mechanical plant and equipment within Block 4N is largely reduced due to it being centralised, such as within the CTP. Accordingly, potential noise impact is further reduced.

Childcare

The potential impact to adjoining properties arising from the operation of the childcare centre has been considered. based on the size, and occupancy numbers. Given this information, predicted noise levels to the future residents to the south and east of the site were determined, which both complied with the relevant criteria.

The potential noise disturbance to the future residential receivers located above the childcare centre has also been considered. These dwellings will comply with the relevant criteria based on the occupancy number, and assumptions within the Acoustic Report.

4.21.5 Internal Noise Criteria

The assessment recommends the glazing construction specifications for each of the proposed uses to adequately manage traffic noise and ensure adequate internal amenity.

Calculations were performed by the acoustic consultant by taking into account the orientation of windows, the total area of glazing, facade transmission loss and room sound absorption characteristics to allow the likely interior noise levels to be predicted.

The construction recommendations for each of the proposed uses to comply with the relevant internal noise criteria are set out below. The noise criteria for each use are provided within the acoustic report at **Appendix T**.

Childcare

The recommended acoustic treatments to the building façade to ensure internal noise levels comply with the criteria above is 6.38mm laminated glass to the perimeter of the proposed childcare centre.

Residential/Hotel

Table 14 – Glazing Construction – Residential/Hotel

Façade	Level	Room	Glazing	Acoustic Seals
Broadway	All Levels	Living Areas Bedrooms	12.38mm laminated 12.38mm laminated	Yes Yes
East Facades	All Levels	Living Areas Bedrooms	10.38mm laminated 10.38mm laminated	Yes Yes
West Facade	All Levels	Living Areas Bedrooms	12.38mm laminated 12.38mm laminated	Yes Yes
South Facade	All Levels	Living Areas Bedrooms	10.38mm laminated 10.38mm laminated	Yes Yes

In addition to glazing, the proposed construction methodology of concrete roofing and wall systems will not require any further acoustic restatement themselves, however any penetrations will be required to be acoustically sealed. With regard to ventilation requirements, all proposed tenancies are required to be provided with an alternative ventilation or air conditioning system to maintain adequate ventilation with the windows closed.

Commercial/Retail

Table 15 – Glazing Construction – Commercial/Retail

Façade	Level	Room	Glazing	Acoustic Seals
All facades	All Levels	All	10.38mm laminated	Yes

4.21.6 Assessment/Conclusion

The assessment concludes, with the above recommendations implemented, noise intrusion from traffic associated with surrounding roads including Broadway and Abercrombie Street will comply with the relevant Sydney City Council, Australian Standards and the ISEPP noise provisions.

In order to control the noise impact associated with the use of the Childcare centre, the Acoustic report recommends the following management controls:

- Children's outdoor play area to be operational between 8am and 6pm on any given day.

- Minimum 10.38mm laminated glazing with acoustic seals around perimeter is required, with minimum Rw of 35.
- Signs reminding staff and visitors to minimise noise at all times shall be installed at ingress/egress points from the child care centre.
- Management is to ensure children are supervised at all times to minimise noise generated by the children whenever practical and possible.
- Install a contact phone number at the front of the centre so that any complaints regarding centre operation can be made.

4.22 Drainage and Flooding

A Stormwater Report has been prepared by Mott Macdonald and includes a Stormwater Drainage Concept Plans. The report is provided at **Appendix U**. The report considers the existing site and stormwater arrangements, as well as the proposal, site stormwater management plan and the quality of water leaving the site. Appended to the report at **Appendix U** are the previous Stormwater Management Report prepared for the site.

Flooding and Stormwater

The overall Central Park site is situated within the Blackwattle Bay (SWC 17) catchment. The site is traversed by two major drainage systems, the Prince Alfred Park Branch which has a catchment area of 25 hectares upstream of the site, and the Tooth's Brewery Branch which has a catchment area of about 9 hectares. A site-wide stormwater system has been designed to accept the 20 year and 100 year design flows (piped and overland) respectively to connect to the detention tank beneath Chippendale Green prior to discharge to Sydney Water's stormwater mains. Stormwater Plans have been provided along with the Stormwater Report at **Appendix U**.

Final ground level RLs for Block 4N provide the recommended minimum freeboard levels or higher to protect people and buildings. Overflows will be provided to cater for greater than 100 year ARI flows and will discharge into Council's drainage system and/or overland flow path.

Water Sensitive Urban Design

A Water Sensitive Urban Design (WSUD) strategy has been prepared for the overall Central Park site. The strategy identifies site-specific opportunities which allow for development while achieving industry accepted / best practice water quality targets.

The strategy considers the entire Block 4N roof to drain into a rainwater tank to provide irrigation water to landscaped/communal areas, toilet flushing and water for clothes washing in apartments. The pipe system from the roof to the rainwater tank will be designed to provide a minimum 100 year ARI capacity. The strategy also includes the combination of gross pollutant trap to treat runoff from the rainwater tank prior to discharge into the Council's trunk drainage system.

Non-potable water will be provided from the site-wide recycled infrastructure system and the site CTP will be used to generate potable hot water for apartments. Water metres for all major water uses will be provided in apartments and retail tenancies and linked to a Building Management System.

The WSUD measures are also provided to assist the building in achieving a 5 star Green Star rating as detailed in **Section 4.19** and the Sustainable Design Report provided at **Appendix J**.

Erosion and Sediment Control

Erosion and sediment control details and plans are provided at **Appendix U**. These will be installed to ensure all existing surface pits will be protected, and all boundaries where there is potential for runoff to contaminate downstream property (private or public) will be protected by use of erosion fencing and earth berms.

The measures consider site access by construction vehicles, sediment and dust control, maintenance of erosion and sediment control devices and use of a temporary pump out system (where required).

4.23 Waste Management

A Waste Management Statement has been prepared by Arup and is provided at **Appendix H**. The statement provides details in relation to the waste generated during operation of the proposed development, particularly given the various land uses proposed within Block 4N. Details in relation to the waste generated during construction of the proposed development are provided in **Section 4.23**. The statement makes an assessment against the legislative requirements including the *Protection of the Environment Operations Act, 1997*; *Waste Avoidance and Resource Recovery Act, 2001*; *NSW Waste Reduction and Purchasing Policy, 2007*; and *Council of the City of Sydney Policy for Waste Minimisation in New Developments, 2005*; as well considers Green Star requirements.

4.23.1 Operational Waste

The proposed development is likely to generate the following waste streams;

- Mixed general waste;
- Organic (wet) waste
- Co-mingle recycling;
- Electronic waste;
- Hard rubbish; and
- Cardboard and paper recycling.

Waste Generation Estimations

Based on the area schedule and understanding of the types of use proposed within the development, the following table has been established by Arup, as an estimation of waste generated per day (**Table 16**).

Table 16 – Block 4N Estimated Waste Generation

Location/Use	Mixed Landfill (L/Day)	C-mingled recycling (L/Day)
Commercial	615	615
Residential	549	274
Hotel	1,784	100
General Retail	118	118
Childcare	540	540
Restaurant/Bar	395	395

Waste Storage Areas

The Waste Management Report identified the waste storage components for each land use, including the number and size of bins proposed within each waste room to service each use. All waste storage rooms will be designed according to the provisions stipulated by the City of Sydney Waste Policy (Section A, All Developments – Construction).

Collection

Waste collection services for each waste stream will be provided by appropriate licenced contractors / Council. Written evidence of a valid and current contractor with a licenced collector for waste and recycling collection and disposal will be provided and held on site at all times. A waste collection summary and frequency is provided below in **Table 17**.

Table 17 – Waste Collection Summary and frequency

Stream	General Waste	Recycling
Commercial	2 x per week (every 3 – 4 days)	2 x per week (every 3 – 4 days)
Residential	1 x per week	1 x per week
Hotel	2 x per week (every 3 – 4 days)	2 x per week (every 3 – 4 days)
Retail, Childcare, Bar / Restaurant	2 x per week (every 3 – 4 days)	2 x per week (every 3 – 4 days)
Electronic Waste	Collection scheduled as necessary	
Hard rubbish	Collection scheduled as necessary	

Amenity

The garbage rooms have been designed so as not to be visible from the exterior of the building. The waste management equipment to be selected will not generate significant noise and will be located in areas containing adequate acoustic insulation. Any putrescible waste to be collected will be stored in a Council approved containers and all waste storage areas will be fitted with mechanical vertical ventilation systems. Waste will be collected regularly which will reduce the risk of odour to building occupants and neighbours.

Overall, the proposed waste management areas and waste management practices will ensure high levels of occupant and neighbourhood amenity.

4.24 Construction Management

A Construction Environmental Management Plan (CEMP) has been prepared by Frasers Property Management Pty Ltd and is provided at **Appendix L**. The CEMP is to be read in conjunction with the CTMP prepared by GTA Consultants and provided at **Appendix S**, the Waste Management Plan prepared by Arup and provided at **Appendix H** and the Erosion and Sediment Control Plan prepared by Mott MacDonald and provided at **Appendix U**. The CEMP addresses the following issues:

- Heritage and archaeology;
- Noise and vibration;
- Air quality;
- Soil and water management;
- Chemical management;
- Traffic management; and
- Health and safety management.

The CEMP will be revised and issued to the Private Certifying Authority prior to the commencement of the works.

4.24.1 Construction Traffic

A CTMP has been prepared by GTA Consultants and is provided at **Appendix S**. It is anticipated that construction activities will take approximately 25 months (with

public domain works a further 1 month), with construction expected to generate between a maximum of 30 truck movements (two-way) per day.

It is noted that construction of Block 4N is anticipated to overlap with construction of Block 4S and Block 8, and Block 1. Accordingly, the cumulative construction is expected to generate up to a maximum of 90 vehicles per day or 18 vehicles per peak hour. It is noted that these figures assume the worst case scenario of construction on the site, and is less than the future traffic volumes determined in the Concept Plan for the site. Construction vehicle movements to and from the site can be satisfactorily accommodated by the surrounding road network.

Construction traffic will be managed in accordance with the following measures;

- A traffic control plan will be prepared and implemented to assist vehicles entering and exiting the site and alert other drivers, pedestrians and cyclists that construction movements are taking place;
- A number of driver protocols will be established as part of the site induction procedure for drivers to ensure the safety of motorists, pedestrians and cyclists; and
- Emergency vehicle access to, from and around the site will be maintained at all times.

The CTMP concludes that the proposed measures contained within the report will adequately address potential traffic related impacts associated with the construction of Block 4N, as well as the construction of the basement.

4.24.2 Construction Noise and Vibration

During construction, noise and vibration will be managed in accordance with the CEMP prepared by Frasers Broadway Pty Ltd and provided at **Appendix L**. Construction noise and vibration has also been considered in detail by Acoustic Logic at **Appendix T**.

Based on typical construction practices and equipment used, it is anticipated that the principal source of noise emissions during the construction process will be generated during the ground excavation phase including from jack hammering and piling works.

The specific construction noise and vibration criteria have been considered against City of Sydney Council's Construction Hours/Noise within the Business District provisions, as well as the relevant Australia Standards. Noise Objectives for the works have also been considered, based on the background noise levels recorded on the site.

Structure borne and human comfort vibration caused by construction has been considered by Acoustic Logic against the following:

- For structural damage vibration, German Standard DIN 4150-3 Structural Vibration: Effects of Vibration on Structures; and
- For human exposure to vibration, British Standard BS 6872 – 'Guide to Evaluate Human Exposure to Vibration Buildings (1Hz to 80Hz).

Noise management will include noise and vibration monitoring, carrying out of works during approved hours and minimising the duration of high noise activities, and a register of noise complaints will be maintained.

For both construction Noise and construction vibration, site specific ameliorative measures have been included within the Noise Impact Assessment which will be

adhered to during construction. Further noise and vibration control measures including the appropriate selection of equipment, site procedures and materials handling, acoustic barriers, silencing devices and noise monitoring have also been detailed in the report.

Importantly, the Noise Impact Assessment (**Appendix T**) refers to the establishment of direct communication with any affected parties as well as complaints handling procedures be implemented, along with reporting requirements.

4.24.3 Construction Waste

Construction waste and a CWMP are detailed in the Waste Management Statement prepared by Arup and provided at **Appendix H**. Construction of the proposed development is likely to generate excavation and construction waste streams, with natural materials, concrete, steel reinforcement, plastics and recyclable materials likely to comprise the greatest volume. The primary goal for waste management in the construction phase is to ensure at least 80% of waste is recycled or reused, which also supports Green Star goals.

During construction, suitable areas on- and/or off-site will be provided and will include adequate space and access for:

- Storage of building materials;
- Storage of demolition and construction waste;
- Sorting of demolition and construction waste; and
- Removal of demolition and construction waste for recycling, re-use or landfill.

Construction vehicles (including construction waste collection vehicles) will enter and exit the site via Abercrombie Street, in a forward direction only. Traffic will be directed via two gates. A truck turning bay will be provided in the same location as the future loading dock.

4.24.4 Erosion and Sediment Control Plan

An Erosion and Sediment Control Plan is provided as part of the Flooding, Stormwater and WSUD Report prepared by Mott MacDonald and provided at **Appendix U**.

4.24.5 Cumulative Construction Impacts

Consideration has been given to the cumulative construction impacts likely to occur on the Central Park site during the construction of Block 4N. In particular, additional consideration is to be given to the location of access and egress of cars and construction vehicles. It is noted however that the location of Block 4N is the most substantially separated from surrounding residential receivers on the Central park site, and (as set out on the Staging plan provided at **Appendix B**), will be delivered following the construction/completion of other blocks on the site.

The Construction Traffic Management Plan notes that whilst at the commencement of construction of Block 1, Block 4N, and Block 4S and Block 8 will be occurring concurrently, for the last approximately 12 months of the delivery of the project, the site will generate approximately half the truck movement, minimising the impact of construction to surrounding receivers and traffic.

4.25 Contamination

Remediation and transitional works on the Frasers Broadway site were approved by the Minister on 15 August 2008 (MP 07_0163). In order to ensure that the site

is made suitable for the proposed commercial use, a commitment has been made which requires the submission of a copy of a Site Audit Statement for the site which outlines that the site has been successfully remediated and is suitable for the proposed use.

4.26 Staging

The proposed development is intended to be delivered as a single project, to include Block 1 +4N basement. However, as part of the construction this includes successive phasing of the works and there is allowance for contingency in the delivery. The works on site are intended to be carried out in accordance with the Staging Plan provided as part of **Appendix B**. This identifies the delivery of Block 1 +4N together.

4.27 Contributions

The Affordable Housing Planning Agreement, between the Redfern Waterloo Authority and the landowner, was accepted by Deed Poll dated 29 July 2007 and outlines how contributions towards affordable housing will be calculated for the Frasers Broadway site. A payment plan was established and payments have been made in instalments over the last five years. The AHPA does not specifically relate to Block 1, nor is there an Owners Consent Deed for Block 1.

The Voluntary Planning Agreement between the Minister for Planning and the landowner dated 9 February 2007 requires that 'design excellence' be achieved in the architecture developed across the site. In relation to Block 1, the nominated architects as required by Commitment 2 of the Concept Plan (Design Excellence) are the selected architects completing the project.

As required by the SEARs, a Schedule of the current status of the contribute contributions payable under the Voluntary Planning Agreement for the Concept Plan approval is provided at **Appendix X**.

4.28 Site Suitability

Having regard to the characteristics of the site and its location both within the overall Central Park site and Central Sydney, the proposal is considered suitable for the site as it:

- Is located within Central Park which is within the Sydney City sub-region which is nominated as a 'Global Centre';
- Will take place in a highly modified and disturbed urban environment and will not impact on biodiversity values;
- Will contribute to the enhancement of a key CBD location that is presently underutilised;
- Will accord with the principles of Ecologically Sustainable Development by contributing to the proper management, development and conservation of the artificial resources of the site;
- Is within walking distance of other services and amenities, including public transport, retail and employment opportunities offered by the CBD;
- Is in close proximity to the pedestrian and cycle facilities within Central Park; and
- Will support the provision of a high quality public domain, in particular Chippendale Green located to the east of the proposal.

4.29 Public Interest

The proposed development is considered to be in the public interest as it:

- Will promote the social and economic welfare of the community by providing an improved urban environment;
- Will provide a substantial quantum of residential accommodation within an existing urban area which has easy access to good public transport;
- Will provide residential accommodation in support of Sydney's growing economy and population;
- Will encourage patronage on public transport by being in close proximity to rail, light rail, bus and ferry services;
- Will encourage alternative modes of travel by providing bicycle parking for residents, visitors and retail patrons;
- Will provide community connections within the overall Central Park development;
- Will achieve a 5 star Green Star rating; - Pathways Approach
- Has adopted a Green Star 'Principles Led' approach has been followed, which demonstrates that the ESD initiatives implemented in this building's design are equivalent to a 5 Star Green Star development.
- Will contribute to the achievement of specific targets relating to new jobs and new dwellings;
- Will address the provision and maintenance of affordable housing by adhering to the agreement established between the Redfern Waterloo Authority and the landowner; and
- Has responded to extensive consultation undertaken with various levels of government, authorities and the community.

5.0 Conclusion

This Environmental Impact Statement (EIS) has been prepared to consider the environmental, social and economic impacts of the development of a mixed use building known as Block 4N, within the Central Park site. The EIS has addressed the issues outlined in the Secretary's Environmental Assessment Requirements (see **Appendix A**) and accords with Schedule 2 of the EP&A Regulation in regards to the form and content of the EIS.

The carrying out of the proposal is justified and warrants approval for the following reasons:

- The proposal is permissible with consent and is consistent with the relevant statutory planning controls;
- The proposal is consistent with the approved Concept Plan (as modified) which establishes land uses, building envelopes, street layouts and general development parameters;
- The proposal is consistent with the principles of ecological sustainable development as defined by Schedule 2 Clause 7(4) of the *Environmental Planning and Assessment Regulation 2000*;
- The proposal exhibits a high quality design, achieving a strong relationship with the surrounding future and existing built form;
- The proposal provides a high standard of residential amenity through a mix of unit types and sizes, outlook, daylight and ventilation, and provision of exceptional internal and external communal areas;
- The proposal provide for a various range of land uses, including hotel accommodation childcare centre, commercial office, and retail, that not only provide services to the community but contribute to localised employment generation.
- The use supports the ESD and WSUD principles on the site, with connection the site's CTP and harvesting rainwater on the site.
- The proposal encourages active use of public transport with attributes including secure bicycle storage and end of journey facilities, and its proximity to public transport hubs, walking paths and amenities; and
- The proposal contributes to the activation of Central Park through provision of active ground level uses, and the creation of a new pedestrian street between Block 4N and Block 1.

In light of the environmental, social and economic benefits of the proposal and the planning merit and significant public benefits associated with the proposal, it is recommended that this application be approved.