

Section 96(2) Development Application Statement of Environmental Effects



161 Sussex Street, Sydney

Section 96(2) Modification 4 to SSD_4972

Submitted to Department of Planning and Environment
On Behalf of GL Investment Co Pty Ltd GL No 1 Trust

March 2015 ■ 15038

Reproduction of this document or any part thereof is not permitted without prior written permission of JBA Urban Planning Consultants Pty Ltd.

JBA operates under a Quality Management System that has been certified as complying with ISO 9001:2008. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

This report has been prepared by:

A handwritten signature in black ink, appearing to read 'C Gough'.

Christine Gough

13/04/2015

This report has been reviewed by:

A handwritten signature in blue ink, appearing to read 'Clare Swan'.

Clare Swan

13/04/2015

Contents

1.0	Introduction	1
2.0	Background	2
3.0	Site Description	4
4.0	Proposed Modifications	5
4.1	Overview	5
4.2	Design Overview	6
5.0	Substantially the Same Development	8
6.0	Environmental Assessment	11
6.1	Section 79C(1)(a) Planning Instruments	11
6.2	Matters for Consideration under Section 79C(1)	12
6.3	Environmental Impact – Views and Vistas	12
6.4	Environmental Impact – Shadow Impacts	14
6.5	Environmental Impact – Traffic and Access	16
6.6	Environmental Impact – Heritage	16
6.7	Environmental Impact – Engineering and Design	17
6.8	Environmental Impact – Building Height	17
6.9	Social and Economic Impacts	18
7.0	Conclusion	19

Figures

1	Approved Tower vs Tower as Modified (Mod 3)	3
---	---	---

Tables

1	Proposed Amendments to approved development	5
2	Numerical Assessment of proposed development	9
3	Analysis of Shadow Impacts on the Northern Square, Darling Park	15

Appendices

A	Architectural Drawings <i>COX Richardson Architects</i>
B	Visual Impact Assessment <i>GMU Design</i>
C	Shadow Diagrams <i>Scharp Design</i>

Contents

- D** Solar Reflectivity and Glare Assessment
Windtech
- E** Wind Impacts
Windtech
- F** Hydraulic and Electrical Services
Aurecon
- G** Fire Safety Engineering Review
Defire
- H** Building Code of Australia Assessment
Philip Chun & Associates
- I** Structural Engineering Statement
Taylor Thomson Whitting

1.0 Introduction

This Statement of Environmental effects (SEE) is submitted to the Department of Planning and Environment ('the Department') in support of a Section 96(2) application to modify State Significant Development consent SSD_4972 relating to the development of the Four Points by Sheraton Hotel. The original consent involved the construction of a 25 storey tower, comprising 231 hotel rooms and approximately 5,775m² of commercial floorspace and approximately 4,810m² of convention, exhibition and function space.

This Section 96(2) application seeks to provide an additional two levels of commercial floorspace to the approved tower, provide additional end of trip facilities and reconfigure the plant and lift motor room to improve functionality.

The SEE has been prepared by JBA on behalf of GL Investment Co Pty Ltd (GL No. 1 Trust), and is based on the Architectural Drawings provided by Cox Richardson (see **Appendix A**) and other supporting technical information appended to this report (refer Table of Contents).

This report describes the proposed modifications to the approved building design, sets out the proposed amendments to the development consent conditions, and provides an assessment of the environmental impacts of the proposed changes. This SEE should be read in conjunction with the documentation which accompanied the original State Significant Development Application, including the Response to Submissions package dated February 2013, and subsequent modifications.

This report provides an assessment of the proposal in terms of the matters for consideration as listed under Section 79C(1) and Section 96 of the *Environmental Planning & Assessment Act, 1979* (the Act).

2.0 Background

Consent for SSD_4972 was granted by the Planning Assessment Commission (PAC) on the 5th August 2013 for the construction of a 25 storey tower, comprising 231 hotel rooms and approximately 5,775m² of commercial floorspace and approximately 4,810m² of convention, exhibition and function space.

There have been three previous Section 96 modifications approved in relation to the proposed development, each of these are addressed below.

Modification 1 to SSD_4972 was lodged with the then Department of Planning and Infrastructure (DP&I) in September 2013 as a Section 96(1A) Application. This modification sought to amend Condition A5 of the development consent relating to Section 94A Contributions. This application was approved by the PAC on 19 March 2014.

Modification 2 to SSD_4972 was lodged with the DP&I in February 2014 as a Section 96(1A) Application and sought a number of minor amendments to the building design, these being:

- Reduction in the convention, exhibition and function GFA of 300m² from approximately 4810m² to 4510m²;
- Changes to the structural columns, trusses and footings beneath the tower and convention/function area;
- Deletion of the pre-function area located at the northern end of the building; and
- Changes to the commercial lobby and lift core within the tower.

Modification 2 was approved under delegation from the Minister on 24th July 2014.

Modification 3 to SSD_4972 was lodged with the DP&I in May 2014 as a Section 96(2) Application and sought a number of design changes, including:

- Changes to the through site link;
- Amendments to the design of the public domain along Slip Street;
- Internal changes to the layout of the approved development;
- Changes to the design of the Porte Cochere and Northern Courtyard entrances along Sussex Street;
- Inclusion of the northern warehouse building;
- Changes to the design of tower building façade;
- Changes to the design of function building façade; and
- Amendments to Condition A5 and H5.

Modification 3 sought to:

- approve the overall design;
- facilitate a streamlined construction program and methodology;
- respond to engineering construction requirements; and
- respond better to the operational needs and requirements of the hotel.

The modification was approved under delegation from the Minister on 19 September 2014. The proposal included a number of changes to the public domain and pedestrian interface to improve functionality. This modification also had a positive impact on the external appearance of the proposed 25 storey tower, as demonstrated in Figure 1 below. The proposed changes did not significantly alter the design philosophy, however, the changes were considered to deliver a clear improvement in the design quality of the tower façade.



Figure 1 – Approved Tower vs Tower as Modified (Mod 3)
Source: Cox Richardson

While 3 modification consents have been granted, Modification 3 has had the greatest impact on the overall appearance and functionality of the approved building. It is considered that Modification 3 improved the overall quality of the development, while still maintaining a consistent theme and appearance. It was therefore considered to be 'substantially the same development' as that which was originally approved in accordance with the provisions of Section 96 of the EP&A Act.

A request for Secretary's Environmental Assessment Requirements was lodged with the Department on 17 September 2014 for a new DA seeking to convert the proposed commercial floor space within the subject tower to residential uses. While these requirements were issued by the Department (SSD 6689), it is not proposed to proceed with this Application.

The proposal to convert the commercial floor space into residential was conceived as at the time, the viability of the proposed commercial floorspace was uncertain and there was a belief that converting this floorspace to residential may result in an improved long term outcome for the site.

Since then, it is considered that a more appropriate option is to improve the economic viability of the commercial floor space by proposing two additional levels to overcome the constraints of the approved floorplates, which are comparatively small. This is discussed in further detail in the remainder of this SEE. It is not proposed to convert the existing approved commercial levels to residential.

3.0 Site Description

The Four Points by Sheraton is a four star hotel located at 161 Sussex Street, Sydney on the western edge of the Sydney CBD, overlooking Darling Harbour. The site has an area of 11, 223m² and fronts Sussex Street.

The site is legally described as Lots 101 and 102 in DP 1009697 and sits within the boundary of lands controlled by the Sydney Harbour Foreshore Authority (SHFA).

There are a number of items adjoining and within the site listed on the State Heritage Register in accordance with the *Heritage Act 1977*, including:

- The Corn Exchange Building;
- The Dundee Arms Hotel Building;
- Central Warehouses at 139-151 Sussex Street; and
- Commercial Building at 121-127 Sussex Street.

The site's location on the perimeter of Darling Harbour, places it in a busy and important tourist and commercial centre. The site is within walking distance of important City landmarks and is surrounded by a mix of uses including commercial towers, residential towers and tourism facilities. Immediately adjoining the site to the west is the Western Distributor and Darling Harbour.

The approved development on the site aims to adhere to the following design principles, as they apply to the subject modification application:

- Establish a building form with appropriate scale and massing that responds to the CBD built form morphology and topography;
- Address the corner location of the site through an articulation of the southern and western facades, whilst providing separation to the historic Corn Exchange building;
- Align the new tower with the Darling Park Tower to frame and reveal the vistas towards Darling Harbour across the Pyrmont Bridge and Market Street;
- Reinforce the entry into Sydney's CBD by creating a gateway with the Darling Park Tower; and
- Acknowledge the existing hotel building, whilst representing the new tower as a separate identity.

It is intended to demonstrate in this SEE that the proposed modifications continue to adhere to these design principles and are consistent with the intent of the original approved development.

4.0 Proposed Modifications

4.1 Overview

On 23 February 2015, the Department provided advice that the existing Director General Requirements, issued for SSD_4972 remain relevant to the subject application and updated requirements are not required to be issued.

This application seeks approval to modify the approved development, as set out below and detailed in the plans at **Appendix A**.

Table 1 – Proposed Amendments to approved development

Building Level	Proposed Amendment	Plan Ref No.
Lower Ground Level	<ul style="list-style-type: none"> Provide 15 additional bike racks (68 to be provided, 53 approved) Amend the fire stair door location 	A-DA-0002 Rev Q
Level 15 – Tower Plant Level	<ul style="list-style-type: none"> End of trip facilities amended to include 2 additional showers and 15 additional lockers 	A-DA-0208 Rev Q
Level 16 to 24 - Tower	<ul style="list-style-type: none"> Change the RL to RL92.160. Add two additional commercial levels, replicating the existing approved footprint Change the description of the drawing title to refer to Levels 16-24. 	A-DA-209 Rev P
Plant Level Plan	<ul style="list-style-type: none"> Change the RL to RL96.285 Amend the level from Level 23 to Level 25 Provide access to mezzanine plant and access to Lift Motor Room. 	A-DA-0210 Rev Q
Roof Level Plan	<ul style="list-style-type: none"> Change the RL to RL103.285 Provide a Lift Motor Room to RL 106.025 to enable access through the roof plant for maintenance purposes, rather than through the commercial floorspace. 	A-DA-0211 Rev P
North and South Elevation	<ul style="list-style-type: none"> Two additional levels added to the commercial tower; Extend the Lift Motor Room to enable access from the roof; RL and building heights amended; Amend cladding on Level 15 on the north elevation from Louvres to Glass. 	A-DA-0301 Rev N
East Elevation	<ul style="list-style-type: none"> Two additional levels added to the commercial tower; Extend the Lift Motor Room to enable access from the roof; RL and building heights amended; 	A-DA-0302 Rev N

	<ul style="list-style-type: none"> Amend cladding on Level 15 on the east elevation from Louvres to Glass. 	
West Elevation	<ul style="list-style-type: none"> Two additional levels added to the commercial tower; Extend the Lift Motor Room to enable access from the roof; RL and building heights amended. 	A-DA-0303 Rev N

As a result of the changes listed above, the overall floor area associated with the development will increase by approximately 1620m², which represents the addition of the two commercial floorplates of 810m².

In increasing the commercial floorspace, we also note that Modification 2 reduced the total GFA of the development by 300 m² so the net increase in the GFA from the original application to the subject modification is actually 1320m².

The key change to the ground level public domain is the introduction of 15 additional bike racks in Slip Lane.

The two additional commercial levels are proposed for a number of reasons. The key driver being the desire to increase the overall commercial floorspace within the tower to make it more attractive to future tenants.

The proposed commercial tower enjoys an enviable position within the CBD with the availability of space in proximity to the reinvigorating western corridor. Due to site constraints, which resulted in a reduced tower footprint, the commercial floorplate is relatively small and is well under the area required to be classified as A grade commercial floorspace, based on area. It is commonly accepted that floorplates in excess of 1500m² are required for premium commercial premises.

In order to generate appropriate interest in the commercial tower, and to offset the limitations on the floorplate, there is a need to increase the overall area by introducing two additional floors, which will enable the development of 7,395m² commercial GFA, which from a marketing perspective, will improve the commercial attractiveness of the tower.

As will be demonstrated in the remainder of this report, there are no planning restrictions, qualitative or quantitative that would restrict the provision of the two additional levels of commercial property within the tower, and it is considered that an increase in commercial floorspace is suitable for this CBD location.

4.2 Design Overview

The addition of two additional commercial levels to the existing approved tower will result in the elongation of the tower and will continue to provide and improve the contrast with the horizontal nature of the existing hotel which was part of the original design intent. The proposed tower, as modified, will continue to address the corner site position and respond appropriately to its surroundings, as per the original consent, forming a gateway with the Darling Park Tower.

The architectural treatment of the tower will be continued through the additional levels, to replicate the already approved/modified façade. When viewed from the public domain, the two additional levels will be barely perceptible in terms of the additional height and scale and there will be no significant impact on the heritage fabric located at the street level.

Under the existing approval, access to the roof plant and lift motor room is provided through a man-hole in the ceiling of the uppermost commercial floor. This is considered to be undesirable from a functionality or safety point of view. As a result, it is proposed to amend the roof plant and lift motor room to enable access from the roof

level for maintenance purposes. This will result in an increase in the height of the plant room and significantly improve the functionality of the building, noting that this is an issue that is required to be resolved, in isolation of the addition of two additional commercial levels. The façade treatment of the plant room is not proposed to change, and will result in an extension to the mechanical louvres already approved.

The amendments to roof level will result in a small projection of the lift motor room above the plant, which is proposed to be treated with Equitone Panelling. Both the plant room and the lift motor room are set back from the façade of the dwelling to minimise visibility from the ground level and the public domain. These essential services have been given appropriate architectural treatment to integrate them as far as possible with the overall design intent of the tower.

5.0 Substantially the Same Development

Section 96(2)(a) of the EP&A Act states that a consent authority may modify a development consent if “it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all)”.

There is significant case law on the application of the test contained in Section 96(2)(a) of the EP&A Act, as to whether a proposal constitutes, ‘substantially the same development.’ In *Moto Projects (No 2) Pty Ltd v North Sydney Council* [1999] NSWLEC 280 Justice Bignold held that:

The requisite factual finding obviously requires a comparison between the development, as currently approved, and the development as proposed to be modified. The result of the comparison must be a finding that the modified development is essentially or materially the same as the (currently) approved development. The comparative task does not merely involve a comparison of the physical features or components of the development as currently approved and modified where that comparative exercise is undertaken in some type of sterile vacuum. Rather, the comparison involves an appreciation, qualitative, as well as quantitative, of the developments being compared in their proper context (including the circumstances in which the development consent was granted).

The development, as originally approved, is for the,

“Redevelopment of the Four Points by Sheraton Hotel, including:

- *Construction of a 25 storey tower, comprising 231 hotel rooms and approximately 5,775m² of commercial floorspace and approximately 4,810m² of convention, exhibition and function space;*
- *Extension of the existing podium space to provide new convention and exhibition space;*
- *External and internal demolition works;*
- *Upgrades to the port cochere, building entries on Sussex Street, the hotel lobby and reception areas and other internal alterations;*
- *Public domain works on Slip Street; and*
- *Realignment of an existing pedestrian link through the site.”*

The proposed modification seeks consent for a number of changes including:

- Introduction of two additional commercial levels,
- An increase in end of trip facilities,
- Minor façade changes to the Level 15 façade to reflect the increase in floorspace attributed to end of trip facilities;
- Modification to the approved plant room and lift motor room to allow roof access to these facilities for maintenance purposes.

According to ‘Development and Planning Law in New South Wales’ by John Whitehouse (2012, CCH Australia Limited), a number of key principles need to be taken into account when considering a proposal to modify a development. Of these Principles 13 and 17 are of particular importance, and are as follows:

Principle 13 - *‘The meaning to “modify” is to alter without radical transformation (Ilenace, Michael, Standley, Mason P in Transport Action Group).’*

Principle 17 - *‘The term “substantially” in “substantially the same development” means essentially or materially having the same essence’.*

There are a number of factors to consider in terms of whether a development is 'substantially the same'. In terms of a numerical assessment, **Table 2** below provides an assessment of the proposed development against that which was originally approved.

Table 2 – Numerical Assessment of proposed development

Component	Original SSD Consent	Approved Modifications	Proposed	Change
Levels				
Levels in the new Tower	25		27	2 additional levels
Commercial Levels	7 levels		9 levels	2 additional levels
Hotel Levels	14 levels		14 levels	No change
Existing tower (hotel)	18 levels		18 levels	No change
GFA				
GFA – total (whole site)	102636m ²	+ 284m ²	+1620m ²	Increase of 1.5% GFA for the whole site.
GFA – approved new development	60297m ²	+ 284m ²	+1620m ²	Increase of 2.6% in GFA
GFA – commercial component	5775m ² including lobby		+1620m ²	Increase of 28% total commercial floorspace
Building Height				
RL of Roof level	88.250	89.085	96.285	8.035 metres (+9.1%)
RL top of Plant (excluding Lift Motor Room)	93.60	93.60	103.285	9.685 metres (+10%)
RL top of Plant (including Lift Motor Room)	93.60	93.60	106.025	12.425 metres (+13%)
Other				
Bike Racks	53		+15	Total 68 to be provided
End of Trip Facilities (Lockers)	53		+12	Total 68 to be provided
End of Trip Facilities (showers)	6		+2	Total 8 to be provided
Footprint	Extended footprint to create tower, as per consent	Minor changes	Unchanged	Nil
Facade		Changes to materials and treatment of external façade, changes to lower levels and convention centre	Maintain existing façade treatment. Minor changes to plant room and lift motor room.	Minor

From a quantitative viewpoint, we consider the proposal to be 'substantially the same' as:

- The addition of two storeys of commercial office space will not change the nature of the original approved mixed use development which included new hotel rooms, office space and a new convention, exhibition and function space;

- The overall increase in GFA (1.5%) is minor in the context of the whole development and is not considered to constitute a radical transformation of the intent and structure of the approved building;
- The increase in height is considered to be minor in the context of the approved tower, representing a total increase in height of approximately 10%, or 10 metres;
- The proposed changes will not significantly change the overall scale, bulk, form or appearance of the tower.

It is evident from the above that the proposed modified development maintains the same 'essence' and does not represent a 'radical transformation' or departure from the approved development. For these reasons, we consider that the Department can be satisfied that the modified proposal represents substantially the same development for which consent was originally granted in accordance with Section 96(2)(a).

A qualitative assessment of the impacts of the proposal are provided in Section 6.0 of this Report, in accordance with the requirements of Section 96(3), and the case law established in *Moto Projects (No 2) Pty Ltd v North Sydney Council* [1999] NSWLEC 280 (quoted above) which requires the consent authority to take into account the qualitative elements of the proposal. These have been assessed as part of the consideration of Section 79C (1). This is particularly relevant when considering whether the proposal contributes to any additional environmental impacts.

6.0 Environmental Assessment

This section considers the planning issues relevant to the proposed modifications and contains our assessment of the associated environmental impacts. Section 96(3) of the EP&A Act requires the consent authority to take into consideration such of the matters referred to in section 79C(1) as are of relevance to the development the subject of the application.

Section 79C(1) of the EP&A Act states:

"In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) the provisions of:

- (i) any environmental planning instrument, and*
- (ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority, and*
- (iii) any development control plan, and*
- (iv) any matters prescribed by the regulations, that apply to the land to which the development application relates,*

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,

(c) the suitability of the site for the development,

(d) any submissions made in accordance with this Act or the regulations,

(e) the public interest."

We discuss each of these matters below.

6.1 Section 79C(1)(a) Planning Instruments

The Environmental Impact Statement submitted with the original State Significant Development Application addressed the proposed development's level of compliance against relevant planning instruments, including:

- State Environmental Planning Policy (State and Regional Development) 2011;
- State Environmental Planning Policy (Infrastructure);
- Darling Harbour Development Plan No.1; and
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005.

While the proposed modification will result in some adjustments to the building's appearance in terms of overall height, they do not result in changes to the land use of the approved development. The above policies do not contain any specific numerical requirements that would prevent the proposed modification from proceeding. The proposed development remains consistent with the design and built form quality guidelines within each of these documents.

Further, given there are no substantial amendments to the public domain, other than the provision of 16 additional bike racks, there is not considered to be any impact on the heritage fabric, or quality of the public domain as a result of the proposed modification.

On this basis the proposed modifications do not significantly affect the proposed development's level of compliance with the relevant planning instruments.

The end of trip facilities have been provided in accordance with the City of Sydney Development Control Plan 2012. While this DCP does not apply to the subject development, the numerical requirements within this DCP have been considered. End of Trip facilities have been increased for the additional commercial floorspace within the development, in accordance with the requirements of the original approval. It is noted

that end of trip facilities were only required to be provided for the commercial floorspace within the proposed tower.

6.2 Matters for Consideration under Section 79C(1)

Section 79C(1)(b) requires consideration of the environmental, social and economic impacts of a proposed development. The EIS submitted with the original application addressed the following matters:

- Compliance with Statutory Plans and Policies
- Urban Design and Built Form
- Visual Impact
- Shadow Impacts
- Ecologically Sustainable Development
- Amenity
- Reflectivity
- Noise
- Transport and Accessibility
- The reserved Rail Corridor
- Geotechnical and Groundwater conditions
- Compliance with the Building Code of Australia
- Tree Removal
- Crime and Public Safety
- Construction Impacts
- Waste Management

The planning assessment of the modified development is considered to remain unchanged with respect to many of the above matters. It is important to recognise that in submitting a modification application, only those matters that are potentially impacted by the proposal are required to be addressed.

As such, this SEE undertakes further assessment of the proposed modification application to demonstrate that the proposed development will not have an adverse environmental impact on surrounding landuses.

Given the proposed modification relates to the uppermost levels of the tower, we have reassessed the environmental impacts of the development relating to views and vistas, overshadowing and solar access as part of this SEE. Documentation has also been submitted to demonstrate that the proposed modification will not have an adverse impact in relation to the engineering and design aspects of the proposal that are relevant to the modification application. Each of these have been addressed in the following sections of this SEE.

As established in the original EIS submitted, we consider the site is highly suited to the proposed development and that it is in the public interest to encourage the provision of commercial floorspace in a highly prominent CBD location.

6.3 Environmental Impact – Views and Vistas

A central component of the original assessment was the impact of the proposed tower on views and vistas from surrounding areas, including both the private and public domain.

A revised Visual Impact Report has been prepared by GMU and is located at **Appendix B**. The updated Visual Impact Report considers the additional impacts of the proposed modification, as compared to the approved building. The original Visual Impact Assessment considered 75 views from both the public and private domain. As part of the revised assessment, each of these views were reanalysed in the context of the proposed modification. From this, 6 views from the public domain and 25 views from the private domain were selected to be reassessed.

The original EIS addressed view loss from the Astoria Tower, The Berkley Apartments and the Allianz building. The impact on the Astoria Apartments, the Berkley Apartments and the public domain is addressed in the GMU Report.

Importantly, the view analysis addresses the view from the uppermost floor of the Astoria Residential tower to ensure that the impact of the additional height can be appropriately assessed and that the Department can be assured that no additional apartments become impacted as a result of the proposed modification.

The Visual Impact Report concludes that,

'The report shows that the proposed modifications have nil public domain view impacts given that the scale of the modifications is barely noticeable or perceivable when viewed from the majority of the selected locations. Views to the Sydney Tower on the western end of Pyrmont Bridge will have a minor or negligible impact due to the additional building height.

There are nil to minor impacts to the private approved views of residential units in the vicinity of the subject site due to slight loss of the amount of available view to the sky. It does not impact on available view corridors to scenic areas such as Darling Harbour, Balls Head Reserve and Goat Island that are retained by the original development approval.

Due to the negligible level of visual impact from the approved view locations, the proposed modifications to the development are considered acceptable and no mitigation measures are required.' (GMU Visual Impact Assessment, March 2015)

The View Impact Report clearly indicates that the additional height that will be generated by the approval of the modification will not have a significant additional environmental impact on either the public domain or private views from surrounding residential towers. In this respect, it is considered that the proposal is acceptable and the underlying planning principles relating to view sharing remain intact.

Having regard to the Allianz building, the Response to Submissions dated February 2013 addressed the visual impacts of the proposed tower from this site. It was noted that the Allianz building is a commercial building and as such, the expectation that views will be protected is unrealistic given the building's location in a highly urbanised city centre.

This view was supported by the Department in their assessment of the original development application, which stated in their report to the PAC, *"It should be noted that given the Allianz building is a commercial building, view loss impacts associated with the proposal should not be given the same weight as if it were a residential building. As such it is considered that the view loss impacts are reasonable and the retained views will provide a reasonable level of amenity for commercial tenants."* (Planning & Infrastructure Assessment Report, June 2013)

The approved Tower resulted in some impact on views available to Darling Harbour from the Allianz building. The Allianz building has a parapet height of RL 83.20 (plus 10m for plant). As a result, the existing approved tower is already taller than the Allianz building at RL 93.6. Therefore, the additional of two commercial levels will not add additional height that would result in the loss of further views from the Allianz building, over and above those which have already been approved.

It is therefore considered that the proposed modification will have a minimal additional impacts on views and vistas over and above that which has already been approved. The original development assessment concluded that the view loss resulting from the Tower was reasonable, having regard to the principles established by *Tenacity Consulting vs Warringah [2004] NSWLEC 140*. Appropriate documentation has been provided to demonstrate that any additional view loss caused by the proposed modification remains reasonable and that no mitigation measures are required.

In this respect, it is considered that the proposal continues to satisfy the *Tenacity Principles*, with regard to view sharing.

6.4 Environmental Impact – Shadow Impacts

The original development application focused on the shadow impacts of the proposed tower on the public domain. Amended shadow diagrams, which detail the shadow caused by the approved tower, and the shadows caused by the proposed modification have been prepared and are provided at **Appendix C**.

As per the previous consideration, the impacts of shadows on the following localities have been assessed:

- The circular garden at the Darling Park development;
- Cockle Bay;
- Darling Park – Northern Square
- 222 Sussex Street (Astoria Apartments);
- 25 Market Street.

6.4.1 Circular Garden

Revised shadow diagrams prepared by Scharp Design are included at **Appendix C**. The shadow diagrams illustrate that the proposed development will result in some additional overshadowing of the Circular Garden within the Darling Park site from just after 10.30am in the morning until just before 12.30pm on 21st June. This additional impact is considered minimal and represents a minor encroachment of shadow over and above that which has already been approved. The original assessment remains relevant in that,

- *“Darling Park is located due south of the subject site. It is therefore reasonable to expect some form of overshadowing will occur as a result of the proposed development.*
- *The extent of overshadowing will only affect a small portion of the north-west corner of the Circular Garden.*
- *The Circular Garden will continue to have partial or full access to sunlight through the entire day, with more than 50% of the garden being in full sunlight from 12:00 noon onwards.*
- *Part of the Circular garden will be in sunlight from 10:00am onwards, with the large majority of overshadowing being caused by the existing northern Darling Park tower. (JBA Response to Submissions, February 2013)”*

Based on the above, the proposed additional height is considered to have minimal shadow impact on the Circular Garden, over and above what has already been approved.

6.4.2 Cockle Bay

The approved development causes partial overshadowing of Cockle Bay Marina from 9am until approximately 9.45am on the morning of June 21. The additional impact caused by the proposed modification is considered acceptable as it is limited to a small period of time, with this part of Cockle Bay having access to full sunlight from 10.30am on June 21.

6.4.3 Darling Park – Northern Square

The approved development will cause overshadowing of the Darling Park – Northern Square from 12pm until 3pm on the 21st of June. The proposed additional of 2 commercial levels will not have an additional impact on this public space, over and above what has already been approved, due to the length of shadows at this time of year.

A detailed shadow assessment has been provided for 21st September as there is a minor additional impact on shadows to this public space as a result of the additional building height. This is provided at **Attachment C**.

The shadowing impacts caused by the additional building height occur from 12pm to 3.30pm on 21st September. The following table demonstrates the increase in 'shadow creep' across the public domain as a result of the additional height between 12pm and 1.30pm.

Table 3 – Analysis of Shadow Impacts on the Northern Square, Darling Park

Date/Time	Existing % shadow of public domain	Additional m2 shadow of public domain	Proposed % coverage of public domain	% change
Sept 21 12pm	1.8%	18.9m2	4.1%	+2.3%
Sept 21 12.30pm	18.3%	191.7m2	25.5%	+7.2%
Sept 21 1pm	35.4%	371.7m2	48.3%	+12.9%
Sept 21 1.30pm	19.8%	208.3m2	24.5%	+4.7%

The above analysis demonstrates that while the additional building height will have an additional shadow impact in September, this is minor in the circumstances of the case and only for a relatively short period of time between 12pm and 1.30pm. The Study indicates that even when the impact is at its greatest, at 1pm, this additional impact still allows 50% of the park to remain unaffected by shadows from the proposed modification. This Study also clearly indicates that the shadows are very fast moving across the site and therefore, the impact is considered minor. It is considered that the justification for the creation of shadows as part of the original approval remain valid in the context of the proposed modification. These are:

- 'Darling Park is located to the immediate south of the application site. It is therefore reasonable to expect that overshadowing of Darling Park will occur as a result of the proposed development.'*
- The Darling Park northern square comprises a pedestrian entrance into the northern Darling Park tower, pedestrian walkways, landscaping and an outdoor seating area serving the existing café. The area is therefore considered to be more of a transition space that people use as a means for meeting up as opposed to a genuine public open space (such as a park) that serves recreational and leisure needs.*
- The area located at the northern end of the Darling Park development is not identified as significant public space in the City of Sydney.*
- Inspection of the site during the weekday as confirmed that the area is mainly used for pedestrian circulation to, from and through the site. The majority of people using the space are either entering or exiting the northern Darling Park tower, or are walking to and from Pyrmont Bridge.*
- The outdoor seating area is a commercial area that is restricted in its use to café customers rather than a public open space.*

- f) *Overshadowing impacts caused by the proposed tower shift from west to east throughout the day. As a result no part of this northern square will be overshadowed by the development for the entire day. Particularly it is highlighted at its worst (i.e. June 21) the outdoor seating area is overshadowed by the proposed development between 12:00 noon and 2:00pm, being just two hours of the entire day.* (JBA Response to Submissions, February 2013).

In conclusion, the proposed modification does not result in any additional impact to the Northern Square on June 21st, over and above the impact that has already been approved. It is considered that the additional impact on September 21st described above is minimal in the circumstances of the case and is therefore acceptable.

6.4.4 222 Sussex Street – Astoria Tower

Detailed shadow analysis of the impact of the proposed increase in height on the façade of the Astoria Tower is submitted with the Shadow Study at **Appendix C**. The analysis shows that Astoria Tower experiences shadow impacts from 2.15pm to 3.15pm, and that no window is shadowed for more than 30 minutes. Currently, the northern windows on levels 9-13 are impacted by the approved tower.

As a result of the additional building height, the northern windows on levels 14-16 will be impacted by the proposed building height, from 2.15pm to 3.15pm. As per the previous consent, no window will be shadowed for more than 30 minutes. The shadowing impacts of the proposal on the Astoria Tower are therefore considered to be acceptable.

6.4.5 25 Market Street – Berkley Tower

The approved tower will not result in any overshadowing impacts on this building. The proposed increase in building height will not cause any overshadowing impacts and is therefore considered acceptable in this regard.

6.5 Environmental Impact – Traffic and Access

No carparking was provided for the commercial floorspace as part of the original development approval and this is to be retained. Justification for this was provided as part of the original development application and it was concluded that this was acceptable given the site constraints and the excellent access to public transport available from the site.

The end of trip facilities are being augmented as a result of the increase in commercial floorspace. The end of trip facilities have been calculated in accordance with the City of Sydney Development Control Plan 2012 requirements. The end of trip facilities are proposed to be provided on Level 15 of the commercial tower, as per the existing consent.

6.6 Environmental Impact – Heritage

Significant consideration was given to the impact on heritage items as part of the original development assessment. The heritage assessment focused on the Corn Exchange, the conservation of Wharf Lane and the interpretation of the Sussex Street frontage.

The proposed modification will not have an impact on any of these heritage matters as there are no significant changes proposed to the lower levels or public domain within the site. The addition of 15 bike racks to the approved designated bicycle parking in Slip Lane will not have an impact on the heritage fabric in the locality.

6.7 Environmental Impact – Engineering and Design

6.7.1 Solar Reflectivity

Windtech have provided an updated technical memo with regard to solar reflectivity and glare, which is provided at **Appendix D**. Windtech have assessed the potential for glare impacts and solar reflectivity, based on the assessment they carried out in support of Modification 3, which involved changes to the façade design and materials. The updated Report concludes that, *‘there will be no adverse glare impact from the additional 2 levels of the tower to drivers and as such the development complies with the relevant planning controls and guidelines as detailed in the original report.’* (Windtech, March 2015)

6.7.2 Wind Impacts

Windtech have provided an updated technical memo with regard to the impacts of the additional building height on the local wind environment. This Memo is provided at **Appendix E**. The technical advice concludes that the, *‘additional levels will not alter the wind conditions on the Lower Ground level and Upper Ground Level areas or at the openings of the through-site link’* (Windtech, March 2015). Therefore, the proposed additional building height is considered acceptable in this regard.

6.7.3 Hydraulic and Electrical Services

Aurecon have provided updated advice at **Appendix F**. This updated advice states that the addition of two new commercial levels will not require any further augmentation of hydraulic or electrical services within the building over and above what has already been approved.

6.7.4 Fire Safety

Defire have provided a Fire Safety Engineering Review of the proposed modification, which is provided at **Appendix G**. The report concludes that, *‘It is Defire’s professional opinion that the additional alternative solution can be supported without major changes to the proposed design for the section 96 modification’* (Defire, March 2015). As such, it is not considered that the proposed modification requires changes to the existing consent with regard to the implementation of the fire safety measures within the proposed building.

6.7.5 Building Code of Australia

Philip Chun & Associates has prepared a Capability Statement in relation to the proposed Section 96, which is provided at **Appendix H**. The report concludes, *‘We have assessed the Section 96 architectural drawings and we have reviewed the scheme with respect to the Building Code of Australia 2013. The design is at a point where the inherent BCA philosophies have been checked and development consent can be sought. The finer details with respect to BCA 2014 compliance can be finalised prior to the issue of a Construction Certificate’* (Philip Chun & Associates, March 2015).

6.7.6 Structural Engineering

Taylor Thomson Whitting have submitted a Structural Engineering Statement in support of the Section 96, which is provided at **Appendix I**. The Structural Engineering Statement confirms that the approved structure, *‘has been designed to cater for the proposed additional two commercial floors.’* (Taylor Thompson Whitting, 4 March 2015).

6.8 Environmental Impact – Building Height

The potential additional environmental impacts of increasing the height of the proposed tower have been addressed in this section of the SEE. It has been demonstrated that

the additional height does not cause an adverse impact in relation to views or overshadowing, which were two of the most significant issues to be addressed as part of the assessment of the original application.

We conclude that the additional height will have a minimal environmental impact and is suitable for the site given its prominent CBD location.

The proposed tower will continue to act as a transitional building between the taller Darling Park towers adjacent and the existing Four Points Hotel. The role of the Tower as a corner landmark, marking an important gateway into the CBD is retained. Therefore, we consider that the proposed additional height is appropriate for the site and will not have an adverse environmental impact.

6.9 Social and Economic Impacts

We do not consider that there are any adverse social impacts arising out the proposed modification. The subject site is ideally placed to accommodate increased commercial floorspace, being a gateway development into the CBD.

We consider that the proposed development will have positive economic benefits through the expansion of commercial floorspace in this location. This is one of the key Actions in the new Metropolitan Strategy, 'A plan for Growing Sydney'. Action 1.1.1 in the Plan requires the Government to, *"Create new and innovative opportunities to grow Sydney CBD office space by identifying redevelopment opportunities and increasing building heights in the right locations."*

In developing this Action within the Metropolitan Strategy it is recognised that in order for the Sydney CBD to continue to grow into a more internationally competitive CBD, and supply sufficient office space to satisfy future demand, the CBD will need to, amongst other strategies, grow upwards.

While the addition of 1820m² of commercial floorspace is minor in the context of the CBD, the proposed modification will provide an additional 28% of floorspace over what is already approved on the subject site. Again, in the context of the whole development, this increase in GFA is minor, in the order of 1.5%, however, it is considered the provision of commercial uplift for this site is appropriate and will aid in creating economically feasible and desirable commercial floorspace, which will only benefit the CBD.

7.0 Conclusion

The proposed modifications comprise the addition of two commercial levels to the approved tower, modifications to the roof plant to enable roof top access for maintenance and augmentation of the end of trip facilities to accommodate the additional commercial floorspace.

As demonstrated in this statement, the proposed additional building height will not result in any new environmental impacts on the surrounding area. The proposed changes are relatively minor in the context of the approved development and as such, the original assessment remains relevant and valid in terms of the environmental impact and no further mitigation measures are required to be imposed.

It is considered that the economic and social benefits of increasing the commercial floorspace in this prominent CBD location are important in the context of the modification assessment and the opportunity to create additional commercial floorspace should be supported.

As part of this modification, it is proposed to modify the approved architectural drawings. It is considered that the proposed modification will continue to facilitate a complying and high quality development outcome.

The modified height should be viewed in the context of recent developments in the City, which demonstrate that additional height is able to be accommodated in the CBD without detrimental impacts on the City skyline, including notable examples such as Barangaroo, Frasers Broadway and the strategic site at 1 Alfred Street.

As demonstrated in the accompanying photomontages, in the context of the modified tower and surrounding tower developments, the proposed maximum height increase is not overtly discernible or dramatic and remains comparable to other tower structures in the City when viewed from key vantage points. The modified proposal will continue to contribute positively to the City skyline.

In accordance with Section 96(2) of the EP & A Act 1975, it is considered that the Department may modify the consent as:

- The consent, as proposed to be modified, is substantially the same development as that originally approved; and
- The proposed changes have a minimal environmental impact.

In light of the above, we therefore have no hesitation in recommending that the proposed modification be supported by the Department of Planning and Environment.