

GIBBONS PLACE

44 - 78 ROSEHILL STREET, REDFERN

INDEPENDENT REVIEW

SYDNEY
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01 EXECUTIVE SUMMARY

The Gibbons Place site is located on the fringe of the Greater Sydney's Commission's "Innovation Corridor" on 44-78 Rosehill Street, Redfern. A Planning Proposal has been prepared by Willowtree Planning Pty Ltd for the proponents, Redfern Rosehill Ptd Ltd.

The Planning Proposal seeks an Amendment to Sydney Local Environmental Plan 2012 for Additional Building Height and Floor Space Ratio for the Purpose of a Mixed Use Towers on the subject site, as follows:

- _Height: from an existing 18 metres to proposed 99.6 meters (30 floors)
- _FSR: from an existing 2:1 to 10.40:1
- _No change to the zone (B4 Mixed Use) is sought.

An independent review has been conducted by the author of this report Ken McBryde. The focus of the review has been on the urban and architectural design merit of the mixed-use project presented in Appendix 2, Urban Design Report, April 2018 of the Planning Proposal. The author was engaged by Redfern Rosehill Ptd Ltd on behalf of the development team of Gibbons Place. The purpose of the report is as:

The author finds the intent of the Planning Proposal consistent with broader NSW Government Strategic Plans. The design proposal sits well on the fringe of the Greater Sydney Commission's "Innovation Corridor" given the ground & second-floor accommodation is delivered to attract technology support companies and tech start-ups. It is to be noted, Land-use is not part of the Planning Proposal.

With the benefit of the additional clarifications requested from Urban Designers RobertsDay, the conclusions drawn are that the design presented in the Planning Proposal:

_satisfies the Objective 3F-1 the ADG in terms of Building Separation

_has been developed with considerations that protect the development prospects of the block to the West bounded by Cornwallis Lane, Margaret Street, Cornwallis Street and Boundary Streets.

_the future development of the site to the west is well accommodated by the nature of its outlook to the west, the shared north-south Cornwallis, and the tower setbacks proposed in the Gibbons Place Planning Proposal.

_with the provision of the further clarifications to that shown in the Planning Proposal, the ADG deep soil requirements are satisfied.

_the proposed public realm meets ADG requirements.

_the proposed massing is contextually appropriate and will contribute a diversity of height in skyline around Redfern Station and the Central to Eveleigh Corridor.

With the addition of typical wind mitigation devices, such as glass screens, planting on the ground level, and a louvred trellis or pergola type structure over the Plaza area, Windtech Consultants have established conditions on balconies, elevated roof terraces, and the public domain are suitable for their intended uses.

Building on the well considered design work to date, skilful articulation of the architectural and urban form of this proposal will be necessary to manage the outcomes of this challenging site and proposed massing in order to achieve the desired outcomes for the City. A design excellence process is to be undertaken as is typical for the City of Sydney.

Its also noted:

_the Cornwallis Lane transformation included in the Planning Proposal will be a major asset to the precinct. Presently the Lane is inactive and presents a poor outlook for the residents of the block to the West and an uninviting experience for pedestrians.

The independent review of this Planning Proposal has resulted in a position of support for merit subject to five recommendations below:

01_ This review recommends that the Plaza design needs to be developed in a way that provides settings available for public use other than those limited to the customers of, and controlled by, the food & beverage outlets that flank the plaza. The inclusion of wind mitigation devices needs to be carefully designed so as to be an asset to the place making characteristics, proportions, and appeal of this Plaza.

02_ The Proposal be developed with resilient and robust accommodation typologies for both the ground & first floors with the characteristics outlined in The Eastern City District Plan's Planning Priority E8 "Growing and investing in health and education precincts and the Innovation Corridor" Objective 21.

03_ A design excellence process needs to be undertaken in order to be sure the best outcomes of this challenging site and proposed massing are delivered.

04_ That landscape design of all communal open spaces, including the wind mitigation elements, is considered together as part of delivering design excellence.

05_ The immediate context and transitions to the neighbouring sites are thoroughly developed in future stages as a requirement to achieve design excellence.

02 INTRODUCTION

This Review has been commissioned by Mr Will Messiter of Redfern Rosehill Pty Ltd on behalf of the development team for the project referred to as "Gibbons Place".

The site comprises 2,544 square metres and is located at 44-78 Rosehill Street, Redfern. It is identified as Lot 1 on DP 792628, which is bounded by Rosehill Street to the east, Margaret Street to the North, Cornwallis Lane to the west, and Boundary Street to the south.

Lot 1 occupies most of the block described above with the exception of five small and narrow land holdings at the southern end. (Refer to Image 2a).

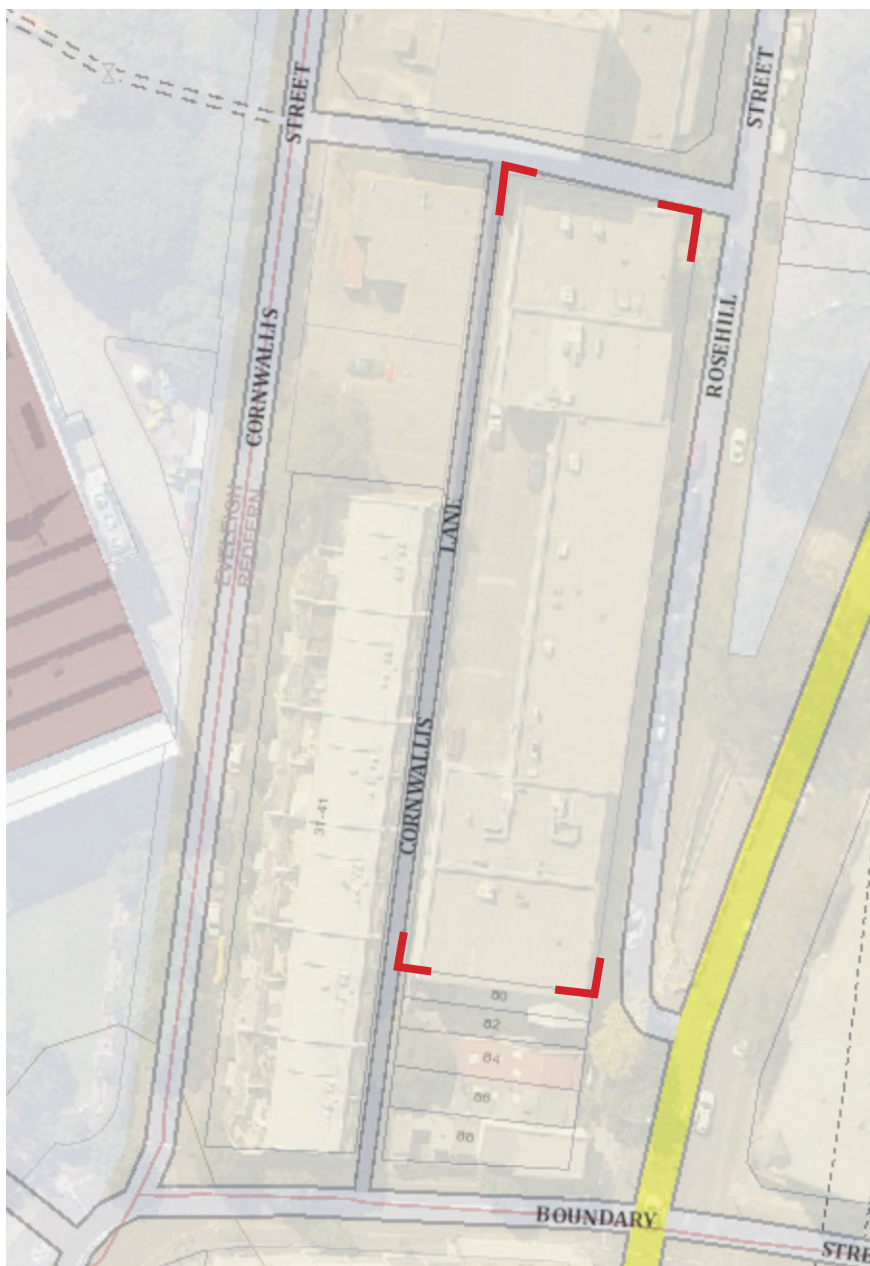


Image 2a. Extent of Gibbons Place site

This document was prepared for the exclusive use of Redfern Rosehill Pty Ltd. While the author Ken McBryde, holds the position of Adjunct Professor at The University of Sydney, it is important to distinguish this review has been undertaken as an employee at Sydney Architecture Studio Pty Ltd, and is it not to be construed the University of Sydney endorses the project in any way.

Ken McBryde acts as an independent advisor to Redfern Rosehill Pty Ltd, and has exercised reasonable skill and care in the provision of this review. The information presented herein has been compiled from a number of sources using a variety of methods.

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03 SCOPE

The scope of this Independent Review is focused on:

The Urban Design Report prepared by Roberts Day submitted as Appendix 2 in Planning Proposal for:

44-78 Rosehill Street, Redfern
 Lot 1 DP 792628
 Prepared by Willowtree Planning Pty Ltd on behalf of Redfern Rosehill Pty Ltd, dated May 2018.

The Planning Proposal seeks an Amendment to Sydney Local Environmental Plan 2012 for Additional Building Height and Floor Space Ratio for the Purpose of a Mixed Use Towers on the subject site.

Height: from an existing 18 metres to proposed 99.6 meters (30 floors)
 FSR: from an existing 2:1 to 10.40:1
 No change to the zone of B4 - Mixed Use is sought.

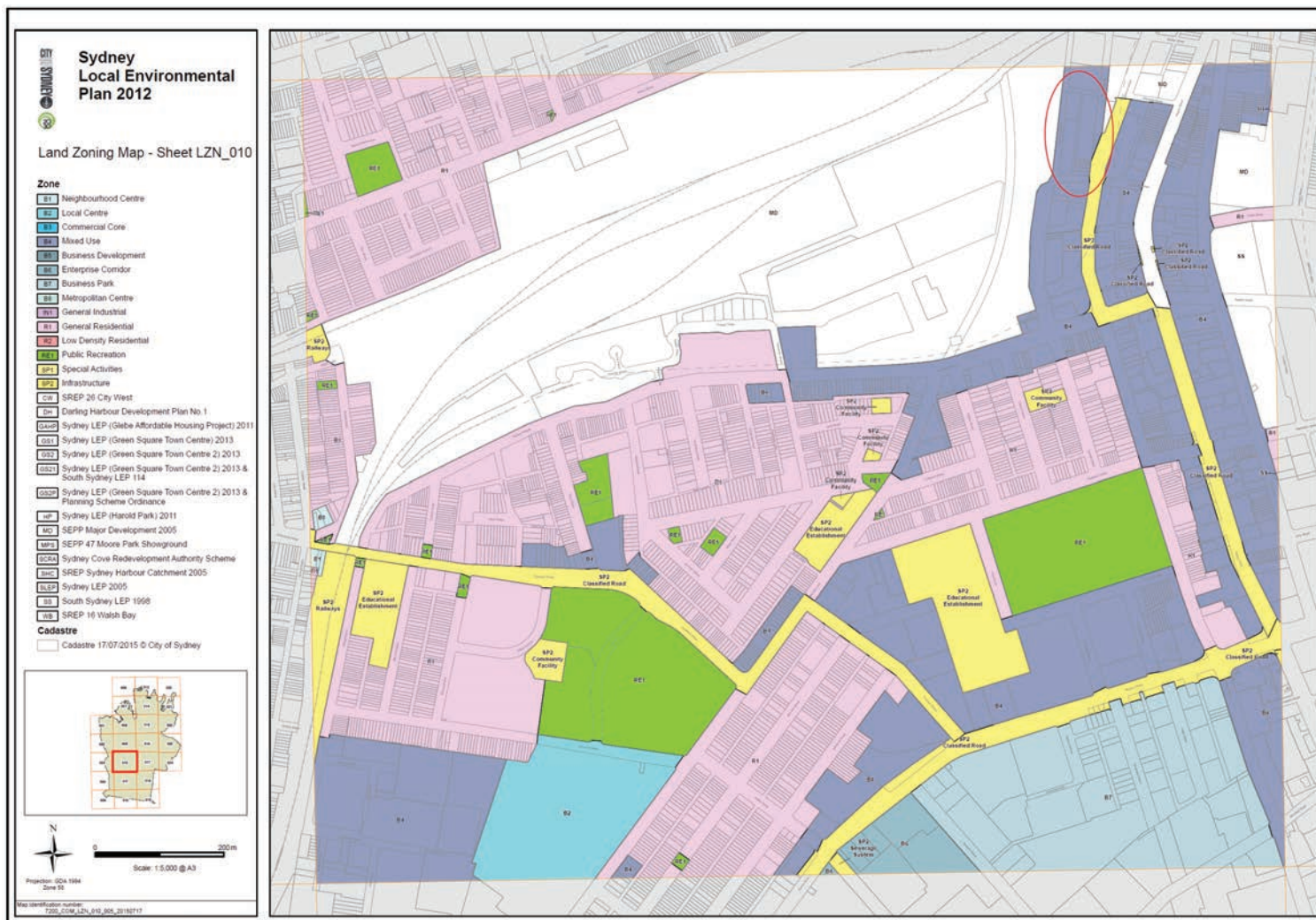


Image 3a. Sydney Local Environmental Plan 2012, Land Zoning Map, City of Sydney map, Sheet LZN. Sydney, Australia

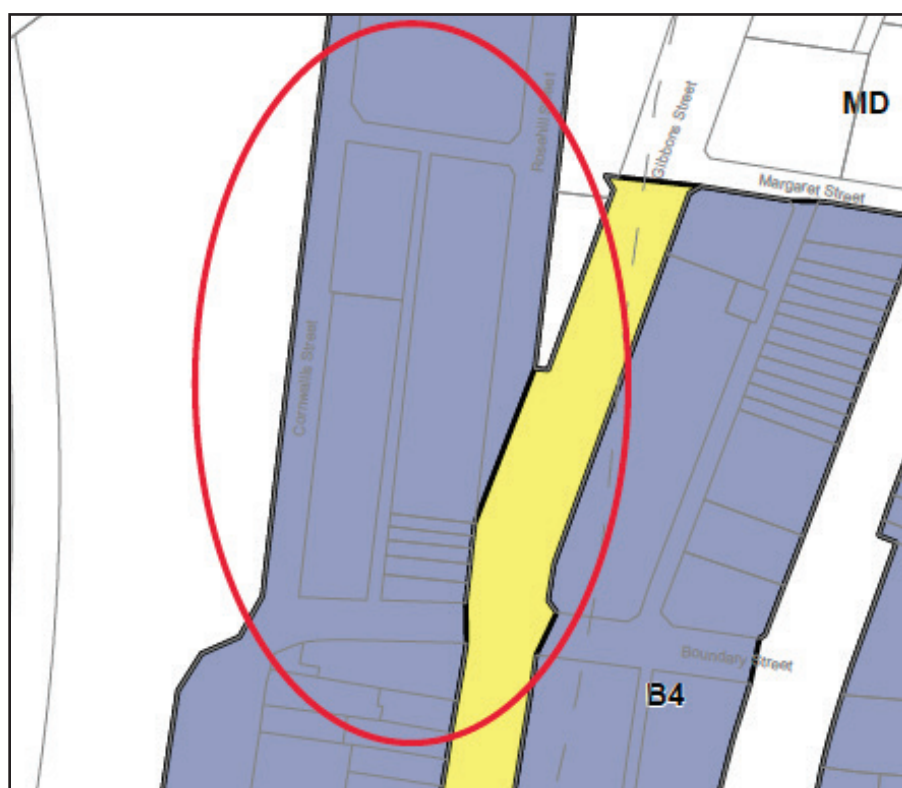


Image 3b. Sydney Local Environmental Plan 2012 (zoomed), Land Zoning Map, City of Sydney map, Sheet LZN. Sydney, Australia

04 STRATEGIC LOCATION

The site is strategically located within the context of Central to Eveleigh Transformation Area (2015) which is undergoing significant change.

It is also on the fringe of the “Innovation Corridor” established by the Greater Sydney Commission, in “Our Greater Sydney 2056, Eastern City District Plan - connecting communities, March 2018.” Refer to Diagram 4a below extracted from page 60 of the aforementioned document.

It is noted that the Central to Eveleigh Urban Transformation Strategy, Key Move 9 is to “Integrate new high-density mixed use buildings with existing neighbourhoods and places”.

What this means: “Transformed neighbourhoods can set a benchmark for integrating different types of buildings and structures old and new, and will promote a variety of uses.” (Urban Growth NSW, 25 November 2016, p52).

Worthy of note is that the site is contained within an island block located between Australian Technology Park and Gibbons Street. The island is subdivided along its long axis by Cornwallis lane north-south. These three characteristics: its location, the island, and its subdivision, present significant opportunities for increased height and density.)

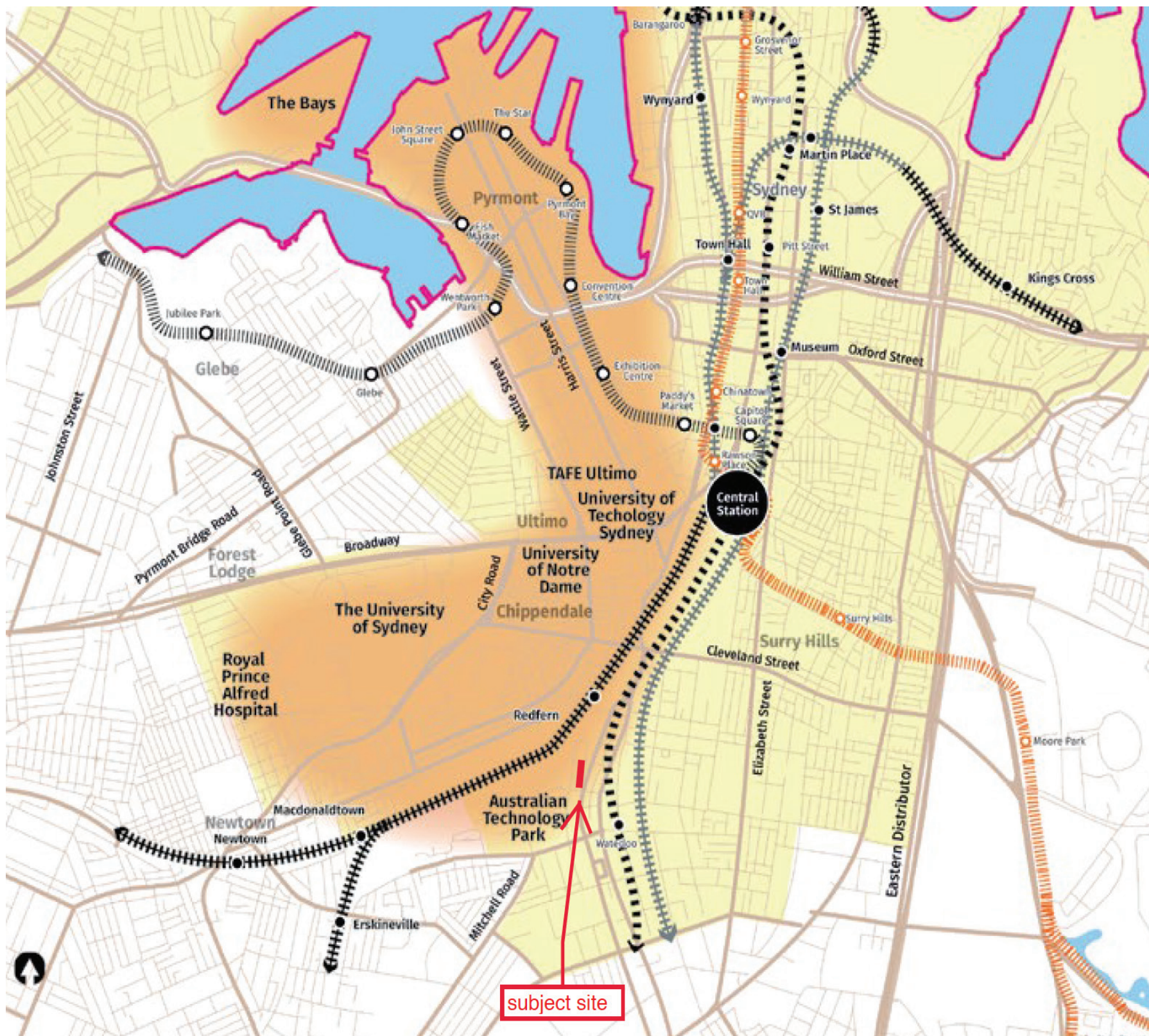


Image 4a. Location of site in reference to innovation corridor

04 STRATEGIC LOCATION

The Eastern City District Plan's Planning Priority E5: *"Providing housing supply, choice and affordability, with access to jobs, services and public transport"*

The body of the supporting text states: *"Housing supply must be coordinated with local infrastructure to create liveable, walkable neighbourhoods with direct, safe and universally designed pedestrian and cycling connections to shops, services and public transport."* (p36).



Image 4b. Walking distance from site to Redfern station.
Source: Sixmaps



Image 4c. Walking distance 275m from site to Redfern station.
Source: Google Earth
Walk time 4 mins. Source: Google Maps

Being approximately midway between Redfern Station and the Waterloo Metro, the site certainly addresses Priority 5. It is also between The Australian Technology Park and Redfern Station. There is a choice of two entries to Redfern station. The walking distance from the middle of the site to the main, northern entry to Redfern Station has been measured at 275m (Refer Images 4b & 4c). Depending on one's pace, this is approximately 4 minutes' walk (Refer to Image 4c. Source: Google Maps). The walk itself is highly desirable as the most direct path takes one through the green spaces of Gibbons Reserve, and under the expansive street trees and the landscaped buffer of Gibbons Street.

The second entry is approached from the south end of the station, and is off Marian Street. Its is approximately 2 minutes walk from the middle of the site.



Image 4d. Walking distance 166m from site to Redfern station south entrance.
Source: Google Earth
Walk time 2 mins. Source: Google Maps

04 STRATEGIC LOCATION

The series of images below capture the nature of the four minute walk from the middle of the site to the northern entry of Redfern Station.



Image 4e. View of path from site to Redfern Station northern entry. Series 1 of 6. Source: Author



Image 4h. View of path from site to Redfern Station northern entry. Series 4 of 6. Source: Author



Image 4f. View of path from site to Redfern Station northern entry. Series 2 of 6. Source: Author



Image 4i. View of path from site to Redfern Station northern entry. Series 5 of 6. Source: Author



Image 4g. View of path from site to Redfern Station northern entry. Series 3 of 6. Source: Author



Image 4j. View of path from site to Redfern Station northern entry. Series 6 of 6. Source: Author

04 STRATEGIC LOCATION

The series of images below capture the nature of the two minute walk from the middle of the site to the southern entry of Redfern Station.



Image 4k. View of path from site to Redfern Station southern entry. Series 1 of 6. Source: Author



Image 4m. View of path from site to Redfern Station southern entry. Series 4 of 6. Source: Author



Image 4l. View of path from site to Redfern Station southern entry. Series 2 of 6. Source: Author



Image 4n. View of path from site to Redfern Station southern entry. Series 3 of 6. Source: Author

04 STRATEGIC LOCATION



Image 4o. View of path from site to Redfern Station southern entry. Series 5 of 6. Source: Author



Image 4p. View of path from site to Redfern Station southern entry. Series 6 of 6. Source: Author

04 STRATEGIC LOCATION

Based on the recently published “Waterloo Metro Quarter State Significant Precinct Study Prepared by UrbanGrowth NSW Development Corporation” (November 2018), there is anticipated entry to Waterloo Station near the corner of Raglan and Cope Streets.

The walking distance from the middle of the site to this entry has been measured on Six Maps and Google Earth. Both platforms show the walking distance from the middle of the subject site to the proposed Waterloo Metro entry to be in the order of 385 metres.



Image 4q. Walking distance from site to Waterloo Metro.
Source: Sixmaps

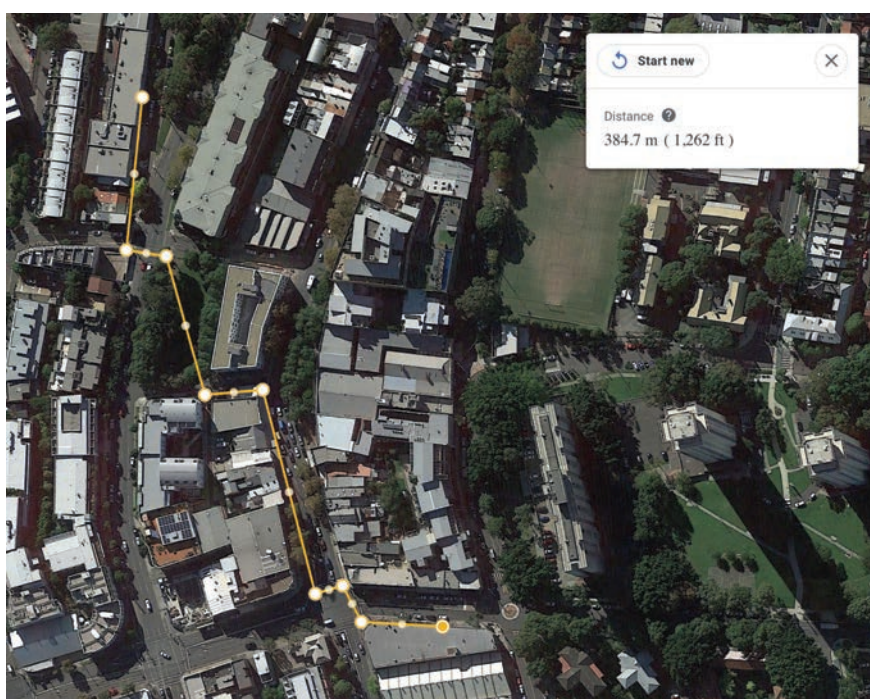
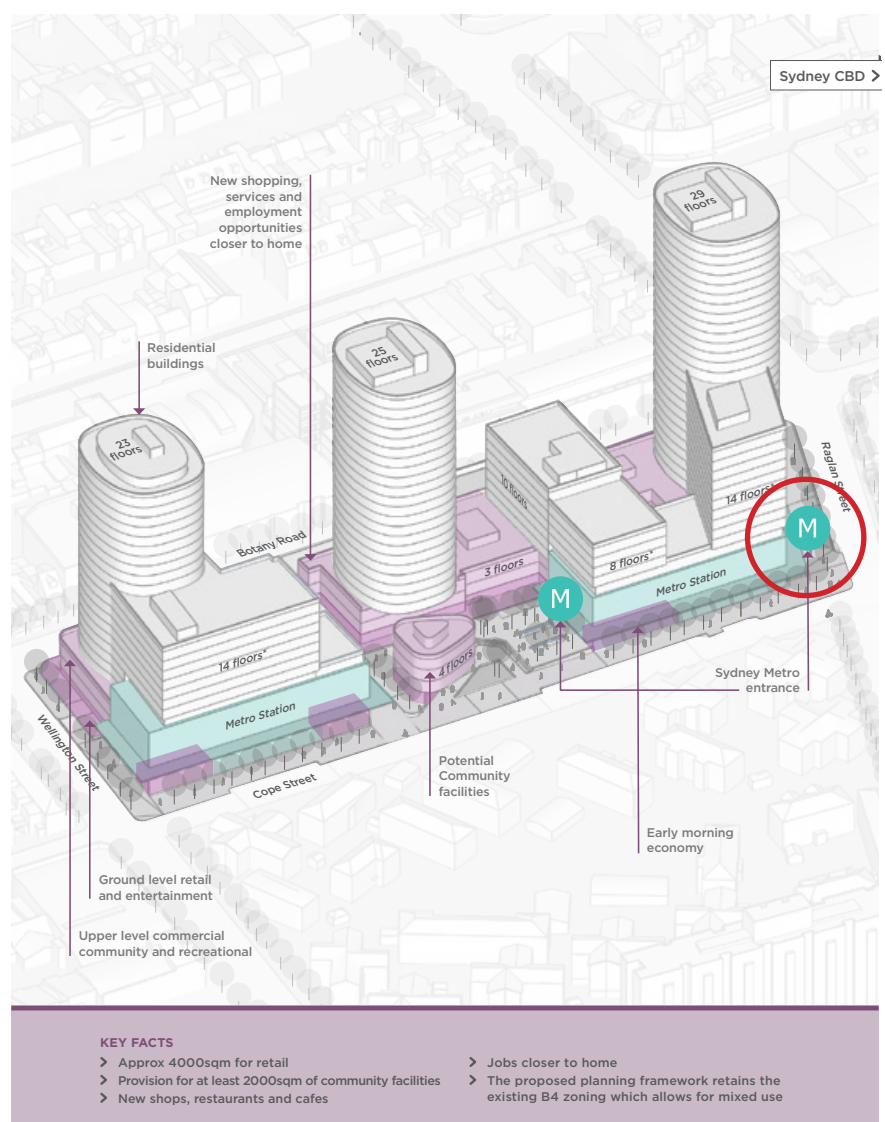


Image 4r. Walking distance from site to Waterloo Metro.
Source: Google Earth
Walk time 6 mins. Source: Google Maps

Again, using Google Maps, this distance represents a walk of approximately 6 minutes (Source: Google Maps)

This walk is also pleasant as the most direct takes one via the Daniel Dawson Reserve.

It is worthy of note at this point, the Waterloo Estate Concept Options include a significant number of towers including those with heights between 30 to 40 stories distributed across the estate and spaced approximately 60 metres apart. The Planning Proposal is consistent with this urban context.



Extract 4a. Station access and entry is via Corner of Raglan and Cope streets, highlight by author.
Source: Waterloo Metro Quarter, State Significant Precinct Study, Prepared by UrbanGrowth NSW Development Corporation, November 2018, page 15.

- KEY FACTS**
- > Approx 4000sqm for retail
 - > Provision for at least 2000sqm of community facilities
 - > New shops, restaurants and cafes
 - > Jobs closer to home
 - > The proposed planning framework retains the existing B4 zoning which allows for mixed use

04 STRATEGIC LOCATION

The series of images below capture the nature of the walk from the middle of the site to the closest future Waterloo Metro entry.



Image 4s. View of path from site to Waterloo Metro. Series 1 of 9. Source: Author



Image 4v. View of path from site to Waterloo Metro. Series 4 of 9. Source: Author



Image 4t. View of path from site to Waterloo Metro. Series 2 of 9. Source: Author



Image 4w. View of path from site to Waterloo Metro. Series 5 of 9. Source: Author



Image 4u. View of path from site to Waterloo Metro. Series 3 of 9. Source: Author



Image 4x. View of path from site to Waterloo Metro. Series 6 of 9. Source: Author

04 STRATEGIC LOCATION



Image 4y. View of path from site to Waterloo Metro.
Series 7 of 9. Source: Author



Image 4z. View of path from site to Waterloo Metro.
Series 8 of 9. Source: Author



Image 4aa. View of path from site to Waterloo Metro.
Series 9 of 9. Source: Author

04 STRATEGIC LOCATION

Objective 21 of the The Eastern City District Plan's Planning Priority E8 also states: "They require proximity to affordable and diverse housing options that can be multipurpose..."

The Voluntary Planning Agreement (VPA) dated 9th August 2018 submitted by Mills Oakley with the Planning Proposal offers a component of Affordable Housing calculated by applying the formula outlined in the currently exhibited Planning Proposal "City of Sydney Affordable Housing Review".

Given the subject site's immediate adjacency to the rapidly developing Australian Technology Park, the extract below from page 62 of the Eastern City District Plan is an insightful and specifically relevant observation to the Planning Proposal in question:

"Recent expansion of digital and creative industries has reduced the availability of suitable workspaces and substantially increased rents."

The desired characteristics of a successful innovation corridor also include: "...affordable and scalable office spaces."

Planning Priority E8

Growing and investing in health and education precincts and the Innovation Corridor

In giving effect to *A Metropolis of Three Cities*, this Planning Priority delivers on the following objective and the corresponding strategies:

Objective 21

Internationally competitive health, education, research and innovation precincts.

Innovation underpins 21st century cities. An Innovation corridor is emerging along the western and southern fringes of the Harbour CBD (refer to Figure 17). The creative and digital industries and business support services in this corridor are important to the competitiveness and attractiveness of Greater Sydney and need to be fostered and supported.

The health and education sectors, creative, cultural and digital industries, business support services and start-ups are often referred to as the innovation ecosystem.

Camperdown-Ultimo health and education precinct and Randwick health and education precinct contribute to internationally competitive economic sectors and precincts; support changing technologies; grow knowledge-intensive jobs; and help create a 30-minute city. With support, these precincts will consolidate Greater Sydney's economic future and its national and international competitiveness.

Innovation Corridor

More than any other sector, digital innovation and start-ups rely on physical location to maximise success and ultimate profitability. Digital and cultural industries require events spaces, and affordable and scalable office spaces. They seek out space in character buildings in suburbs like Sydney CBD, Pyrmont, Surry Hills and Ultimo and are attracted to a diverse pool of talent and expertise, research facilities, customers and investors.

Competitive innovation precincts depend on high levels of amenity and walkability, with good transport connections spurring the rapid exchange of ideas and the establishment of networks. They require proximity to affordable and diverse housing options that can be multipurpose, and a range of cultural, entertainment and leisure activities, including strong night-time activities.

Recent expansion of digital and creative industries has reduced the availability of suitable workspaces and substantially increased rents. Planning controls to allow a sufficient supply of workspaces and provide flexibility for these enterprises include providing for a range of permissible uses and activities and allowing for suitable night-time operations. Urban regeneration projects should capitalise on opportunities to deliver cultural infrastructure, and walking and cycling connections, alongside these spaces.

Extract 4b: Planning Priority E8

Source: Planning Priority E8, *Eastern City District Plan*, Greater Sydney Commission, p. 62)

04 STRATEGIC LOCATION

The Planning Proposal has maximised retail and commercial space on the ground and first floor. As the project progresses to the next stages of design, it is recommended the nature of tenancies be developed to offer character double-height spaces with edgy flexible mezzanine spaces, that are raw, affordable, scalable and embedded with flexible digital infrastructure - the kind of spaces that start-up look specifically to take advantage of the site's adjacency to ATP. The beauty of the location of the site for technology start-ups is, of course, the inevitable chance encounters that will occur in the walking-friendly streets & lanes between ATP, Redfern Station and Waterloo Metro. The attraction of people walking in the immediate precinct is captured below in Image 3.

The NSW Government (UrbanGrowth NSW Development Corporation & Communities Plus), has released insights into future aspirations for the area.



Image 4ab: Chance encounter with those walking between ATP Redfern Station. Source: Author

04 STRATEGIC LOCATION

The fundamentals of the narrow site and its immediate context also are well suited for increased density and indeed taller buildings. To the east, the site provides a generous outlook over Gibbons Reserve and the 20 meter wide Gibbons Road corridor. Similarly, the neighbouring narrow site across Cornwallis Lane to the west of the subject site benefits from a generous unencumbered outlook to the west over the heavily treed, low height heritage brick National Innovation Centre at the north-east end of the Australian Technology Park.

The following series of diagrams capture the author's first impressions upon visiting the site to consider its suitability for the proposed developed with specific consideration of the neighbouring block to the west.

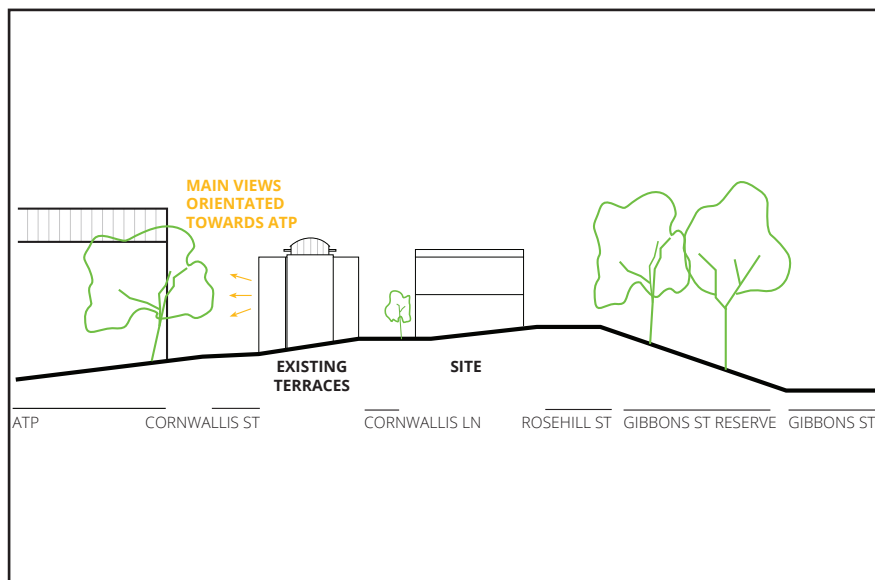


Diagram 4a. Existing terraces in relation site

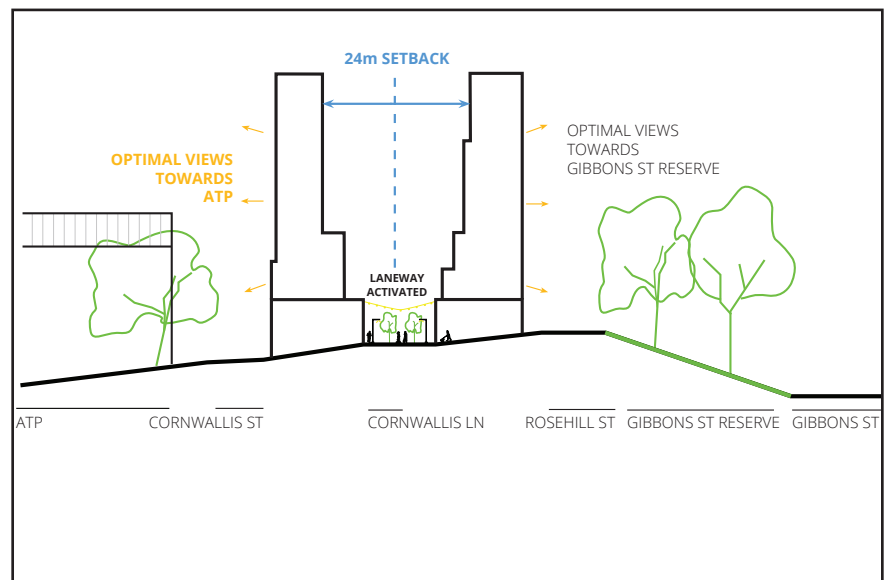


Diagram 4d. Future conditions

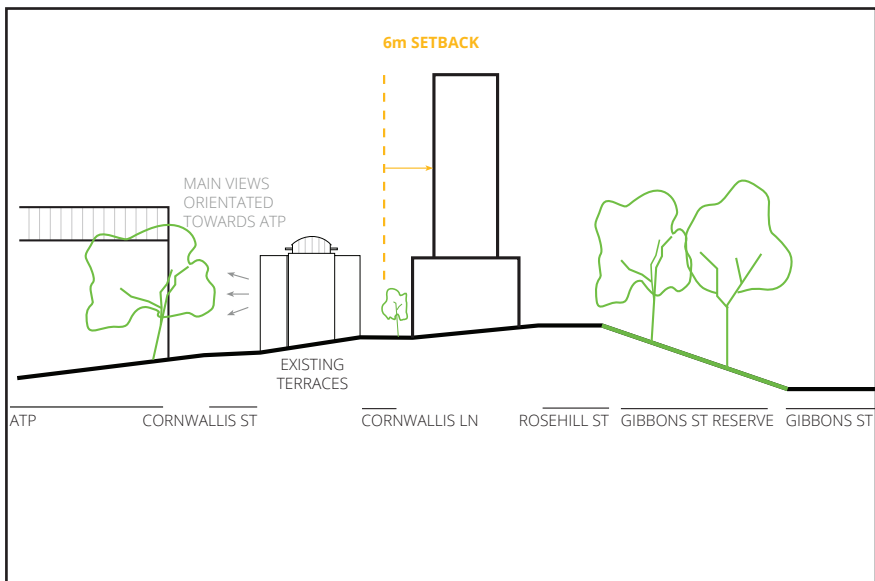


Diagram 4b. Typical response to site

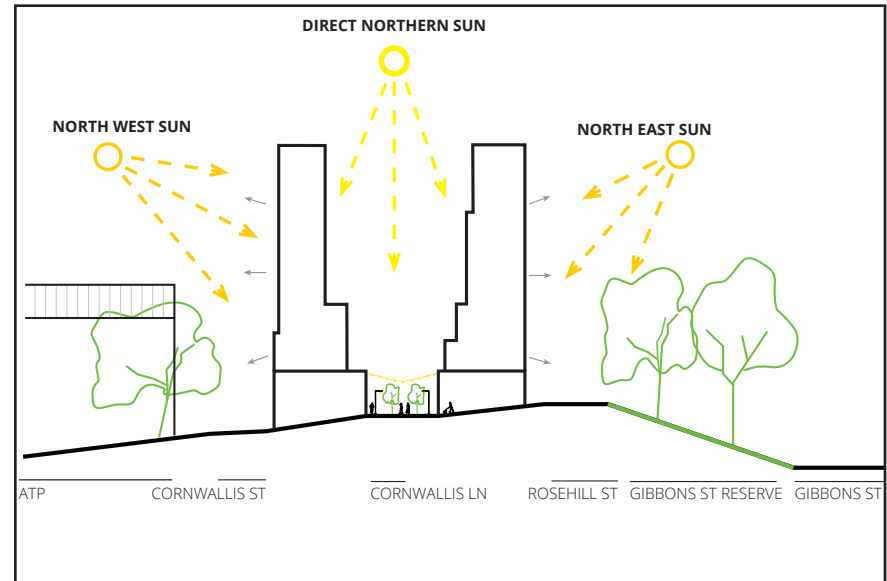


Diagram 4e. Solar access

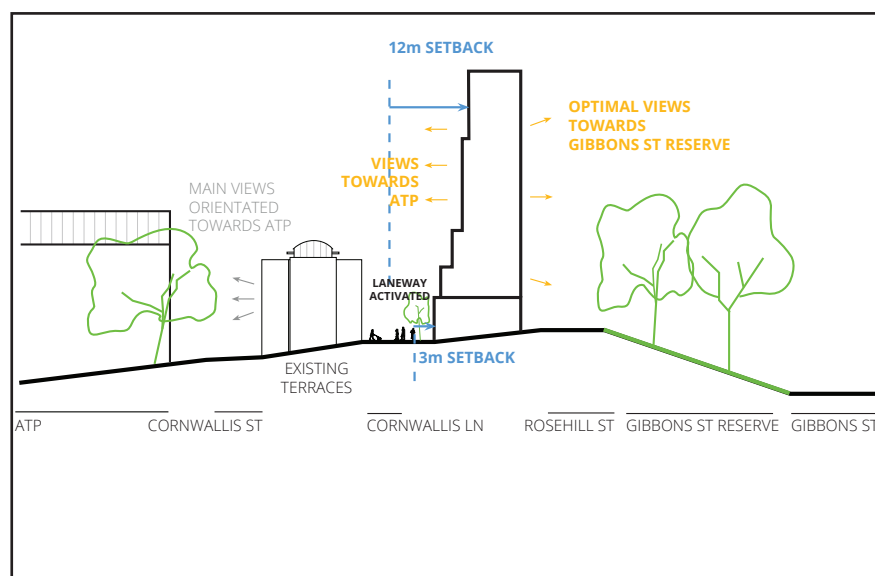
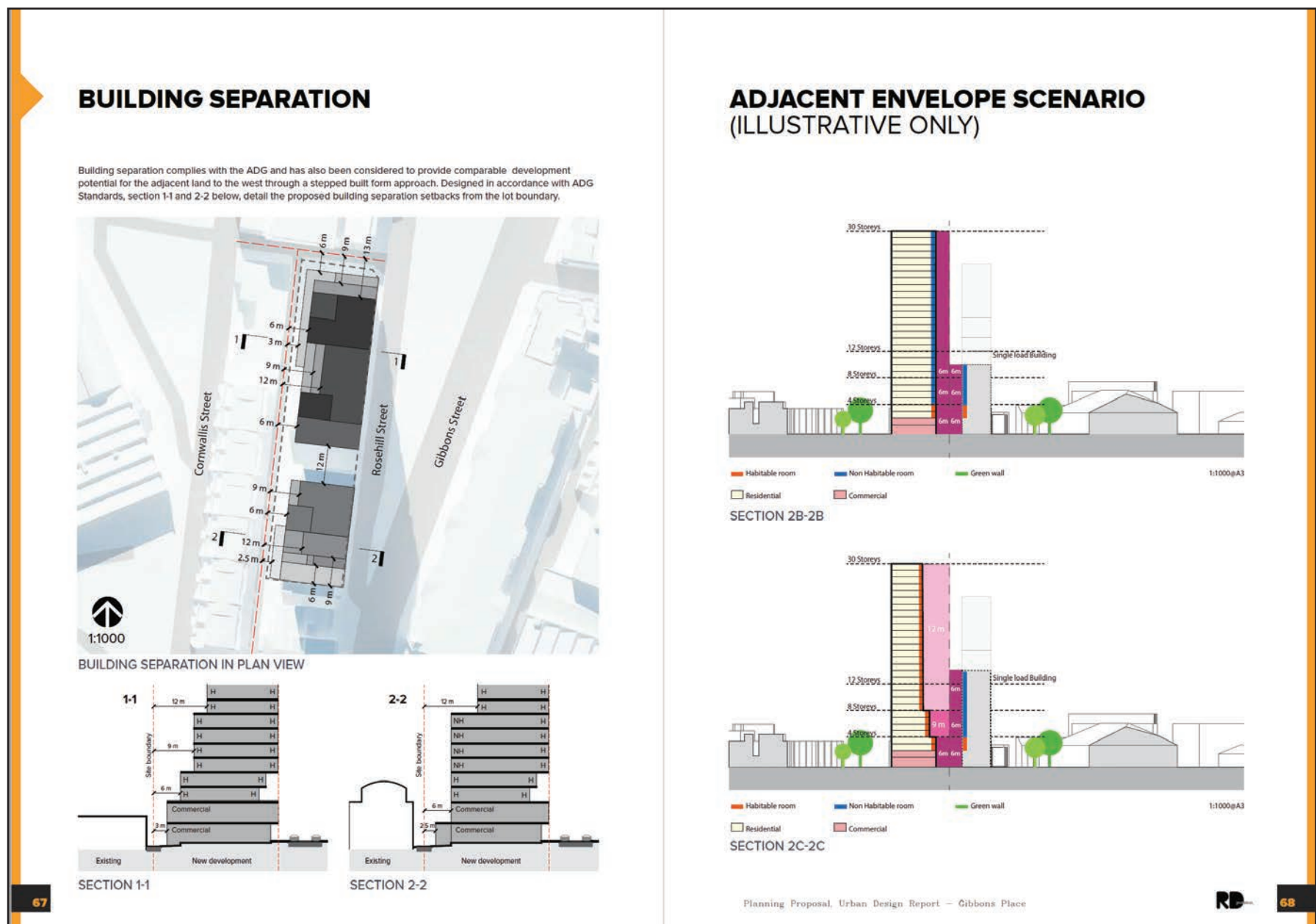


Diagram 4c . Proposed response

05 ADG - BUILDING SEPARATION

Diagrams 4a to 4e demonstrate how the Apartment Design Guidelines' principles of separation and protecting neighbouring sites' future development prospects are well addressed by the nature of the subject site and its neighbours.

The details of how these principles would be implemented are alluded to in the Planning Proposal reviewed. They are found on pages 67 - 70 inclusive.



Extract 5a.
Source: RobertsDay Planning Proposal Urban Design Report.
April 2018.

05 ADG – BUILDING SEPARATION

The ADG issues of separation and protection of neighbours' future development prospects are of fundamental importance to the viability of this project and indeed to that of the neighbours to the east. Therefore, further clarification was requested from the Roberts Day acting on behalf of Redfern Rosehill Pty Ltd. The following material was submitted for consideration as part of this review.

With the benefit of the additional clarifications, the conclusions drawn are the design presented in the Planning Proposal are two-fold:

1. The design proposal satisfies the Objective 3F-1 the ADG in terms of Building Separation
2. The design proposal has been developed with considerations that protect the development prospects of the block to the West bounded by Cornwallis Lane, Margaret Street, Cornwallis Street and Boundary Streets.

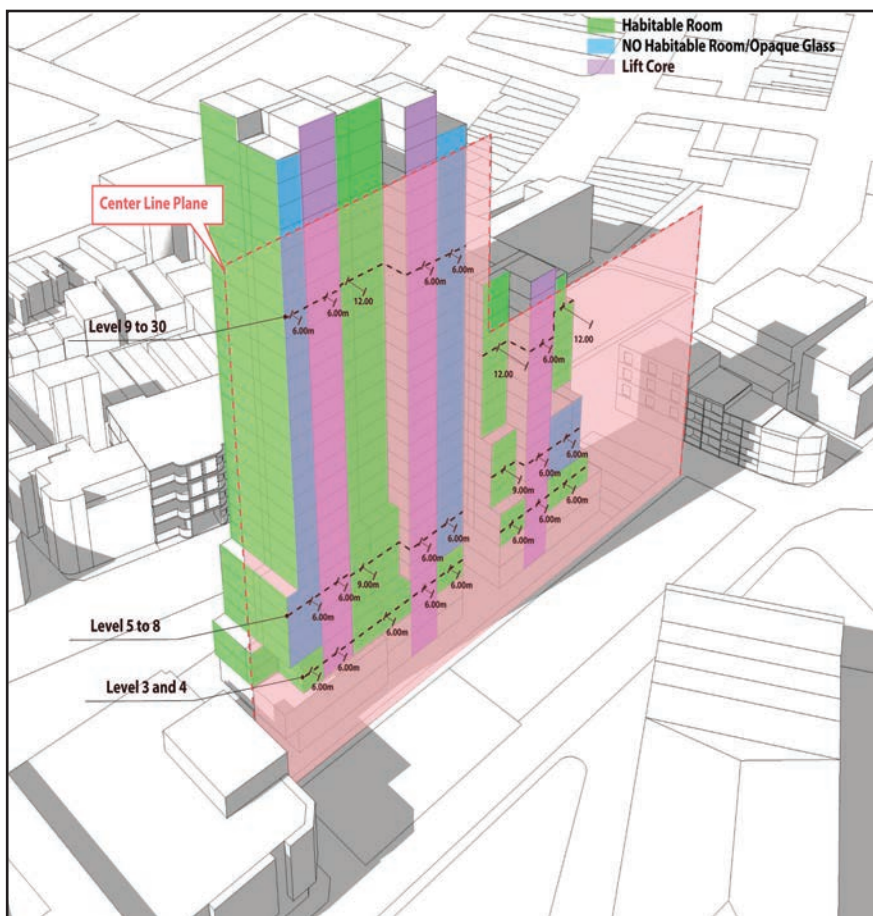


Diagram 5b. Source: RobertsDay diagram of habitable and non habitable Rooms

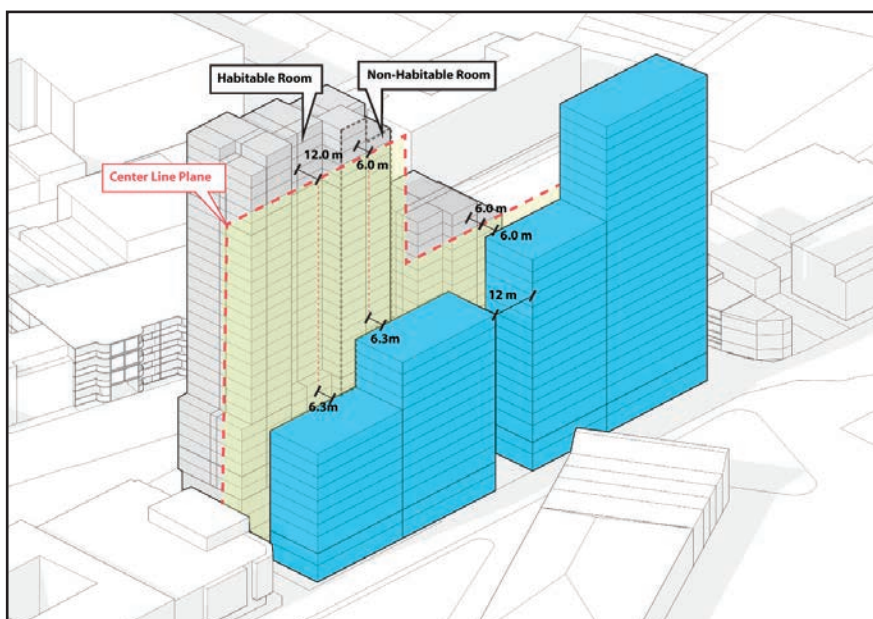


Diagram 5c. Source: RobertsDay diagram of separation across Cornwallis Lane to the west

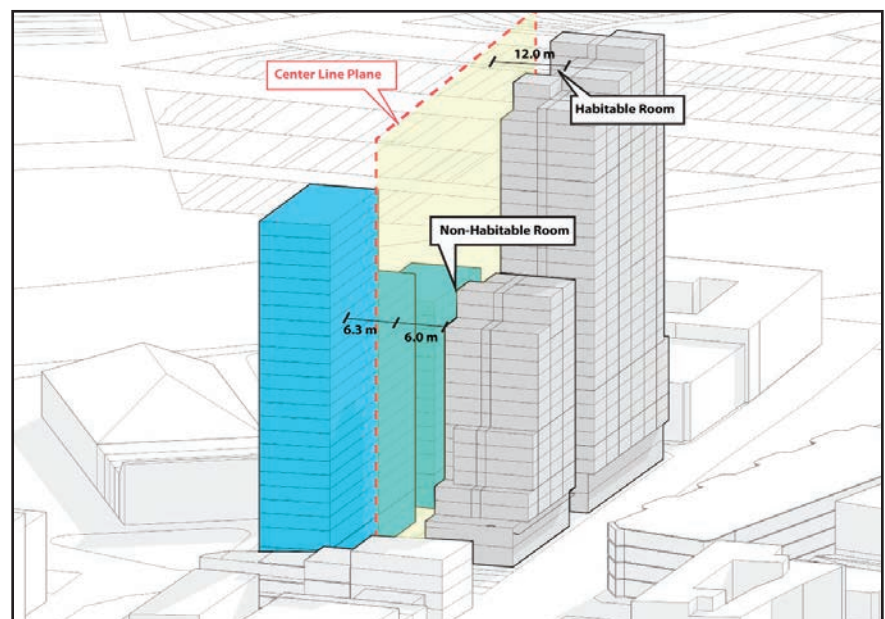


Diagram 5d Source: RobertsDay diagram of separation across Cornwallis Lane to the west

06 THE PLAZA



Image 6a. RobertsDay Plaza Visualisation 1
Source: RobertsDay Planning Proposal Urban Design Report. April 2018, p. 21



Image 6b. RobertsDay Plaza Visualisation 1
Source: RobertsDay Planning Proposal Urban Design Report. April 2018, p. 20

The visualisations while preliminary demonstrate good intention, however, the proportion of the space should be further studied through the design excellence process. It is suggested the Plaza should either be smaller and more intimate or preferably more generous in proportion. It is also noted, the Plaza needs to be protected from downdraft winds with a horizontal screen of louvres, and vertical wind screens (refer Windtech report. Reference is also made to this requirement in Section 09 of this Review

Recommendation 01:

This review recommends that the Plaza design needs to be further developed in a way that provides settings available for public use other than those limited to the customers of, and controlled by, the food & beverage outlets that flank the plaza. The inclusion of wind mitigation devices need to be carefully designed so as to be asset to the place making characteristics, proportions, and appeal of this Plaza.

07 RETAIL & COMMERCIAL COMPONENT

As discussed above, the site is located in very close proximity to the Australian Technology Park (ATP) and with pedestrian access to Redfern Station and the Waterloo Station.

The ATP is forecast to accommodate 10,000 workers (source: <https://www.afr.com/real-estate/first-look-at-mirvac-and-cbas-future-at-australian-technology-park-20170228-gun0xs>, Updated 28 Feb 2017, 5:20 PM, first published at 1:47 PM).

The precinct is already alive with pedestrian movement particularly at during the mornings and afternoons with people moving to and from the ATP. This increasing amounts of pedestrian movement will not only support but also benefit from additional food and beverage offers in the precinct.

The Gibbons Place Planning Proposal shows predominantly retail/commercial at ground level (refer Indicative Floor Plan page 72).

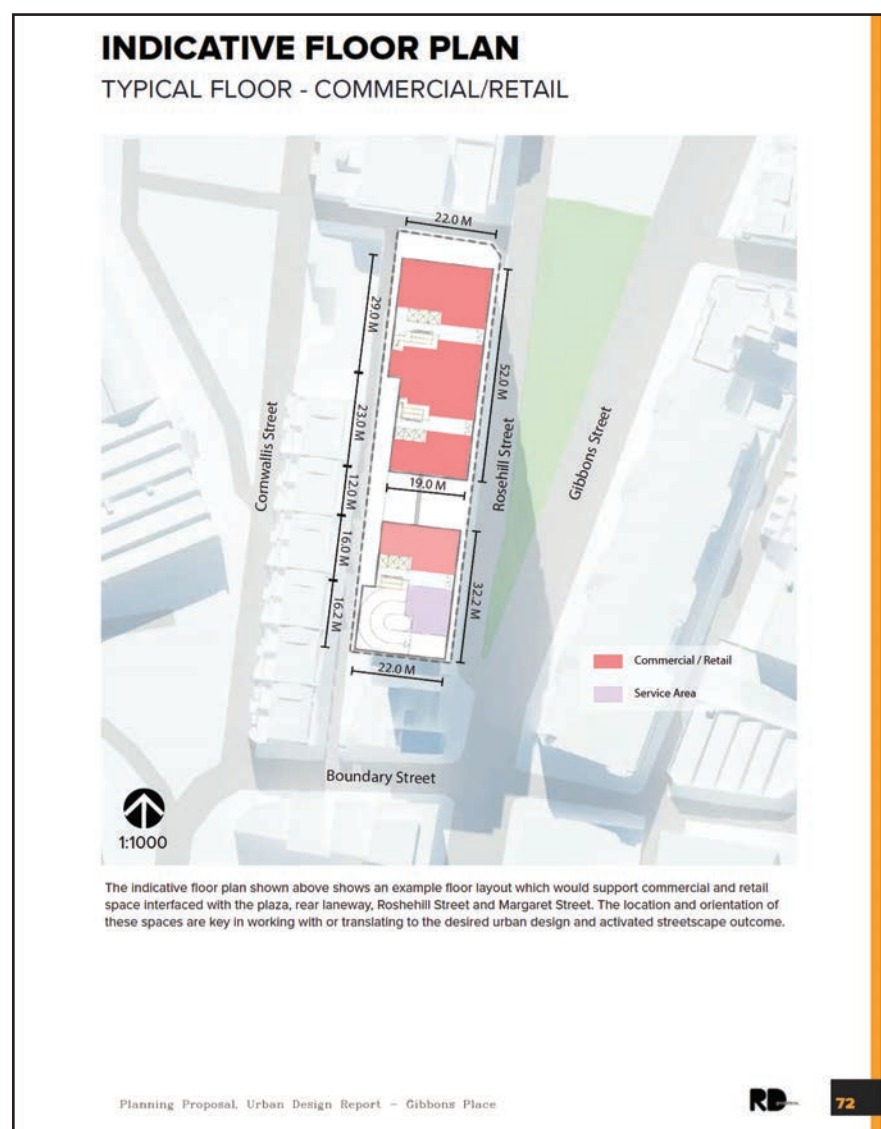
The tenancies benefit from double frontage in that they open up to east overlooking the Gibbons Reserve, and also to the west, which will serve to activate Cornwallis Lane.

The “Movement & Access” diagram (page 63) is more specific in terms of the extent of retail versus commercial.

Page 63 below shows retail frontage focussed on the corner tenancies that also address the “new retail Plaza area”. This is an ideal proposition as it sets up an intimate double-sided retail condition in the Plaza (ie: retail facing retail).



Extract 7a. Movement and Access
Source: RobertsDay Planning Proposal Urban Design Report. April 2018.



Extract 7b. Indicative Floor Plan
Source: RobertsDay Planning Proposal Urban Design Report. April 2018.

07 RETAIL & COMMERCIAL COMPONENT

To the west, the site faces the narrow Cornwallis Lane boundary wall. The unloved boundary wall would benefit from creative urban design initiatives to assist the visual appeal and anticipated vibrancy of the lane.

To the east is Gibbons Reserve which offers a sunny morning outlook. An upgrade of Gibbons Reserve in order to offer a more functional and appealing setting for those with young children for example (have a coffee in the park while the children play).

Retail success is driven by demand. Until that demand is present, occupied office accommodation would be more desirable to unoccupied retail tenancies. If the marginal ground floor accommodation were built and approved for mixed uses, then later as the real estate becomes more valuable, it can naturally transition to a ground plane dominated by retail. A shop/office top typology, for example, could serve this transition period to 2036, or sooner when the ATP provides adequate pedestrian traffic.

Recommendation 02

In the interim, it is recommended the Proposal be developed with resilient and robust accommodation typologies for both the ground & first floors with the characteristics discussed above and outlined in The Eastern City District Plan's Planning Priority E8 "Growing and investing in health and education precincts and the Innovation Corridor" Object 21.

It is intended these characteristics will attract tech start-ups, and technology support companies that will benefit from the site's adjacency to the Australian Technology Park and support the State Government's initiative to establish an "Innovation Corridor".

08 MASSING

44-78 Rosehill Street, Redfern is a long narrow site of 2,544 square metres, only 24m wide and 102m long. The long axis aligned approximately north-south. The narrow proportions deliver long elevations facing east and west. The apartment occupants enjoy abundant solar access when at home in the morning and returning home in the evening.

The challenge for designers is to find an efficient floor plate. The usual tower setbacks from the podium that could be expected is not a viable design strategy for this site. Careful consideration needs to be given in order to articulate the proposed envelope.

Without carefully considered articulation, the project will appear in a far less favourable light. The image below demonstrates this. It is a black and white screenshot of Figure 1 on page 6, the City of Sydney, Transport, Heritage and Planning Committee, 10 September 2018, Item 2, Request to Prepare a Planning Proposal - 44-78 Rosehill Street, Redfern, File No: X018231.

By comparison, the Planning Proposal includes preliminary architectural design work that explores articulation and proportional studies on the tower - podium condition. Attached below is a screenshot of Figure 2e on page 5 of the "Pedestrian Wind Environment Study" by Windtech May 2nd, 2018, submitted as Appendix 7 to the Planning Proposal. The yellow colour saturation of the original image has been reduced in order to make the comparison of the two images more legible.

First impressions count. Since the two different model images are from similar northeast points of view, they provide a worthy comparison when considering the merit of this Planning Proposal.

It is the opinion of the author that successful articulation the architectural and urban forms of this proposal will lead to a desirable outcome for the City as presented in the Planning Proposal concept work.

Recommendation 03

A design excellence process needs to be undertaken in order to be sure the best outcomes of this challenging site and proposed massing are delivered. Mr Will Messiter of Redfern Rosehill Pty Ltd has confirmed the intention to pursue design excellence irrespective of whether it is a requirement of the approvals process. (Email communication with Mr W Messiter, 12.55pm, 6th December 2018)



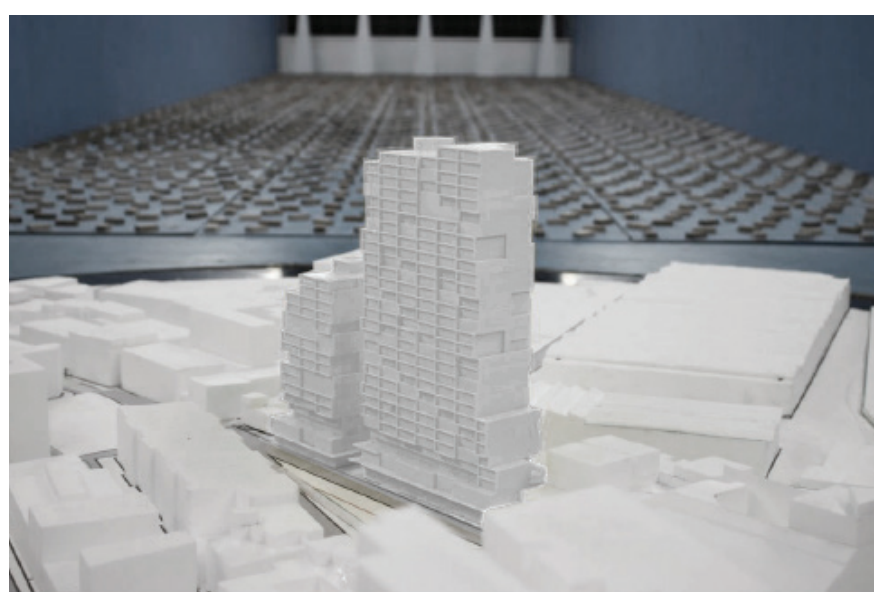
South eastern elevation

Figure 1: 44-78 Rosehill St, Redfern Concept model



North eastern elevation

Figure 1: 44-78 Rosehill St, Redfern Concept model



**Figure 2e: Photograph of the Wind Tunnel Model – Proposed Scenario
(view from the north-east)**

09 MANDATORY COMMUNAL OPEN SPACE

The communal open space of the Planning Proposal has been reviewed with the benefit of additional clarity requested from the authors of Appendix 2, Urban Design Report, Roberts Day.

The following updated diagram was provided.

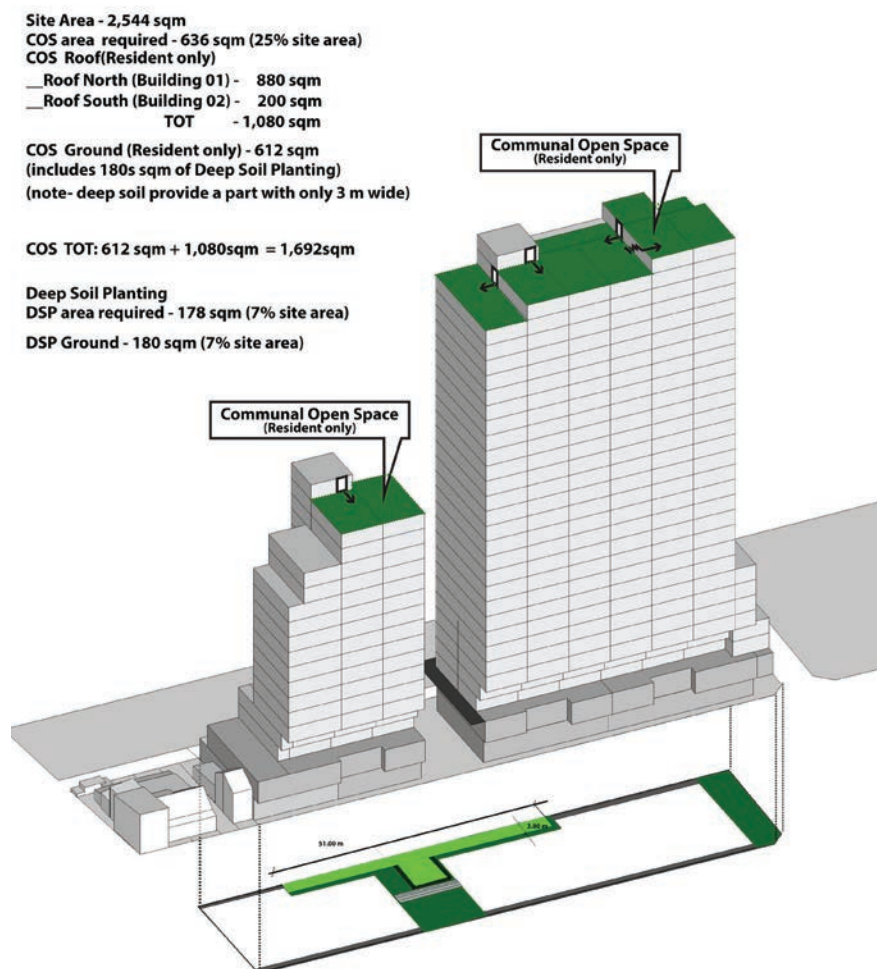


Image 9a. Communal Open Space
Source: RobertsDay COS Option 1. December 2018

The revised proposal shows a total of 1,692 of Communal Open Space.

The mandatory communal open space is 25% of the site area (ADG, Objective 3D-1 Design Criteria No.1, page 55)

With a site area of 2,544 sqm, 25% equates to 636sqm.

The Planning Proposal shows 1692sqm, which 42% of the site area, and 170% of the mandatory provision.

ADG Figure 3D.2, p54 "Communal open spaces can be located in the podium or roofs and should offer gathering areas to provide opportunity for social interaction amongst residents "

Principal 8: Housing Diversity and Social Interaction (ADG p13) states that: "Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents."

09 MANDATORY COMMUNAL OPEN SPACE

Consistent with Principle 8 above, different types of communal open space are offered in two quite different settings:

1. At street level as part of the ground plane
This space is comprised of 612 sqm and is available to the public. This is consistent with the ADG, Part 03 Siting, Section 3D, Page 54 which reads "Some communal space is accessible and usable by the general public."

It includes allocations of contiguous space around the project and therefore serves to provide opportunities to maximise passive surveillance around the full extent of the project's ground plane, with the exception of the southern boundary which is a party wall. (ADG Principal 7: Safety, p13)

The communal open space on the ground plane includes 215 sqm of deep soil planting. ADG Objective 3E-1, Design Criteria 1 requires a minimum of 7% of the site area, p61. 7% of the 2544 sqm site equals 178 sqm, so this Objective is satisfied.

The deep soil planting is integrated with the primary public gathering plaza space of the site, which is consistent with Objective 3D-1 Design Guidance "Communal open space should be co-located with deep soil areas" (ADG p55)

2. On the rooftops.

"Landscaped communal open space should be provided at podium or roof levels" (ADG Objective 4S-2, page 123)

The Planning Proposal provides 1,080 sqm of Communal Open Space (Residents only) on the roof terraces of the two towers. These areas will benefit from an abundance of sunlight. Refer above.

Worthy of note, is that the proposal includes set backs to the east, north and west. The setback to the east and west are less than 3 metres and so not included in the calculations of Communal Open Space discussed above.

Observation

The Planning Proposal satisfies the ADG guidelines for Communal Open Space.

10 WIND

As is typical for Sydney development projects designers need to be cognizant of our prevailing stronger southerlies, north-easterlies in the warmer months, and the more unpleasant cold westerlies in the winter months.

In the preparation of this review of the design proposal, clarifications on the nature of the Planning Proposal in relation to wind conditions were sought from Windtech, the authors of 44-70 Rosehill Street, Redfern Pedestrian Wind Environment Study, WD516-02F02 (Rev0)-WE Report, May 2, 2018 (telephone conversation with Windtech, 5th December 2018)

The wind speeds and frequencies associated with this location of this site in Redfern are no worse than typical than the Sydney Region generally. Windtech base their studies using the Sydney Regional Wind Climate Model.

There are three key conditions that are to be addressed in this Planning Proposal, the roof terraces, the apartment balconies, and the ground plane.

1. The Roof Terraces

It is commonly understood by architects and urban designers familiar with tall building a design that as we go higher above the ground level, more frequent winds of higher speeds are to be expected.

Therefore, by their very nature, upper levels of towers, including those of the scale of the Gibbons Place Planning Proposal, experience wind conditions that need to be mitigated if open areas are to be enjoyed. Consequently, there is a lot of experience in the design industry around techniques to address these conditions in order for users to make the most of the highly desirable locations such as rooftops. It is a well-founded intention to allocate these locations for taking advantage of the views, gathering and social activities. Their dedication to Communal Open Space rather than for the typical rooftop mechanical equipment is to be encouraged.

Windtech has recommended for the Roof Terraces on Levels 29 & 30 of the North Tower "inclusion of 1.8m high impermeable parapets/screens..." (p30). Assuming the designers will choose to maintain views, glass meets this requirement. The author's personal and professional experience suggests it is highly desirable for roof terraces to be provided with higher balustrades or parapets than code requires in order to improve one's sense of personal safety in elevated locations.

Similarly, Windtech has recommended for the Roof Terraces on Levels 16 & 17 of the south Tower "...inclusion of 3m high impermeable parapets/screens..." (p30). The additional height is recommended to deflect and prevent the reattachment of the strong side streaming effects from the north tower and the upwash from the south tower itself.

2. The Apartment Balconies and Terraces

As can be expected, the wind tunnel testing indicated accommodation associated with the corners of the towers require additional treatments to ensure comfort for the users of balconies and certain elevated terraces. 1.8m high screens address these few locations.

The Planning Proposal includes extensive planted areas including on upper levels and vertical green walls. It references the highly regarded Milanese project "Bosco Verticale / Vertical Forest" by Stefano Boeri Architetti. The apartments benefit from extensive balconies and planters suitable for an impressive number of trees in that range from three to nine metres high. ("The Incredible Vertical Forest Residential Towers in Milan, Italy" in TwsitedSifter.com 13 June 2016)



Image 10a. Bosco Verticale, image, Booking.com, viewed 12 December 2018, <https://www.booking.com/hotel/it/bosco-verticale-halldis-apartments.en-gb.html>

Windtech did not include planting in their studies: "Any proposed vegetation was also excluded from testing": (page iii) and furthermore, despite the extensive planting shown in the Planning Proposal, "The effect of vegetation was also excluded from the testing." (page 29). Windtech has also re-confirmed that planting is unnecessary for wind mitigation in the upper levels of the project and have clarified that excluding the vegetation from testing the base case is best practice in wind tunnel testing. While planting is unnecessary for wind mitigation in the upper levels of the project, additional planting is expected to further enhance wind conditions. (tc Windtech 5/12/18)

10 WIND

3. The Ground Plane

Windtech does recommend planting to achieve the desired wind speed criteria for pedestrians on the ground plane. Planting on the ground plane is readily maintained and therefore is commonly proposed. They suggest “densely foliating evergreen planters capable of growing up to a height of 2m” in several locations around the ground plane, in particular along the west in Cornwallis Lane, and the northwest corner of the site.

The success of the central plaza area as a gathering place and will rely on achieving suitable wind conditions for long-term stationary activities like dining. Windtech has recommended two key elements for this area:

1. “...a louvred trellis or operable awning that encompasses the central area up to the heights and extents of the awnings at Rosehill Street and Cornwallis Lane.” (page 30)
2. “...full height porous screens in the communal area between the two towers, as well as on the northern end of the north tower near Margaret Street.” (page 30)

The Windtech report concludes that with these treatments discussed above that include planting and porous screens on the ground level, and parapets and screens on some balconies and all the roof terraces “it is expected that wind conditions for all outdoor trafficable areas within and around the proposed development will be suitable for their intended uses.” Setting the towers back further from the podium is not “necessary for wind mitigation” (email communication Windtech 18 December 2018). (44-70 Rosehill Street, Redfern Pedestrian Wind Environment Study, WD516-02F02 (Rev0)-WE Report, May 2 2018 (telephone conversation with Windtech, 5th December 2018, page 30)

Recommendation 04

That landscape design of all communal open spaces, including the wind mitigation elements, is considered together as part of delivering design excellence.

11 CONTEXT AND SCALE

The site is located in the midst of an area undergoing change. It is in the midst of a rich offering of diverse building types, building ages, uses and demographics.

Immediately to the north on Margaret and Rosehill Streets are a range of mid-scale buildings in the order of five to six stories.

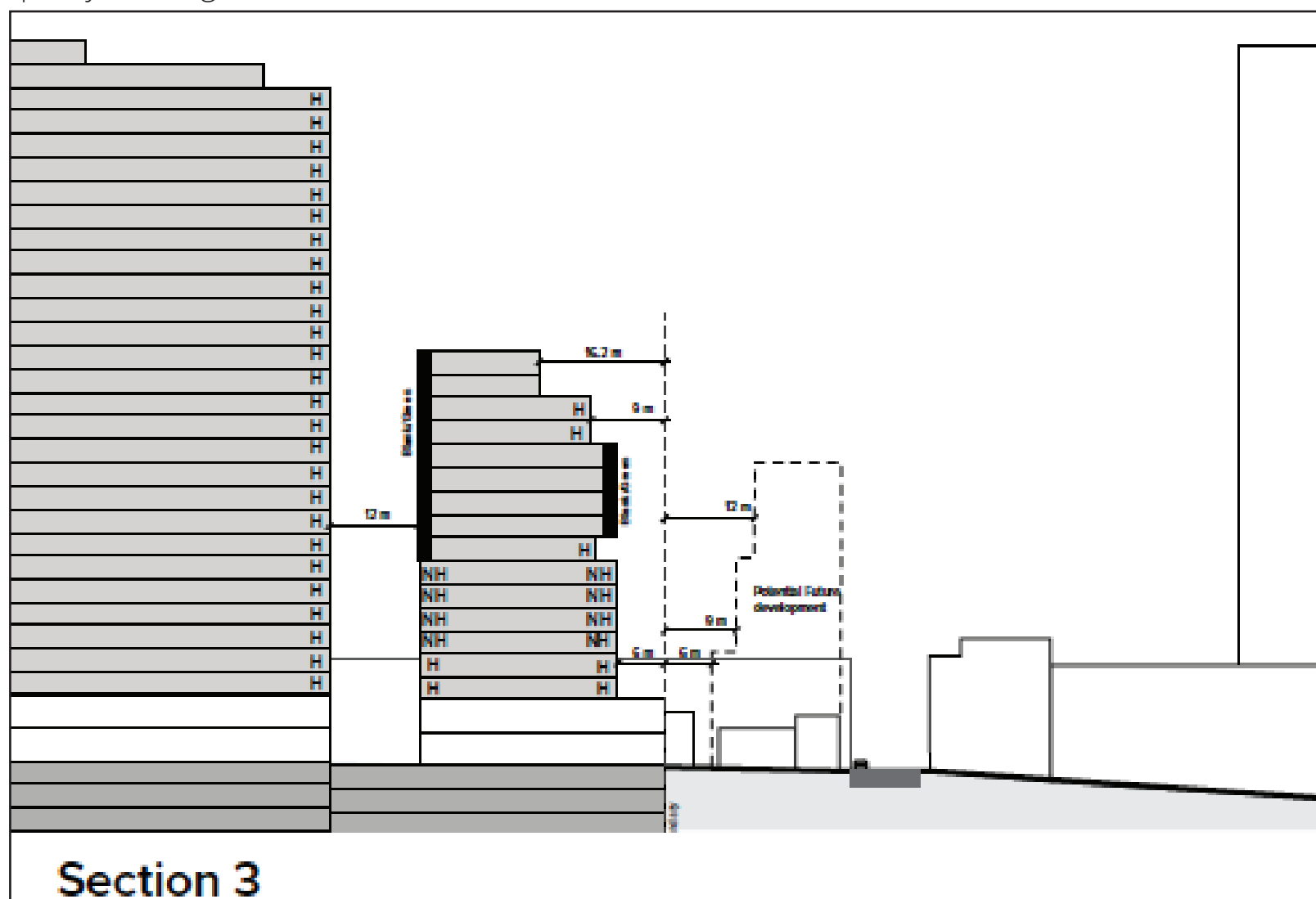
To the west across Cornwallis Lane are the four story walk-up apartments. As demonstrated earlier in this report, it is the opinion of the author that this site has the prospect to carry a high-density development due to the consideration of building separation across Cornwallis Lane and the fundamental outlook to the West from which it benefits.

Immediately to the south of the subject site are five narrow landholdings that extend from Gibbons Street to Cornwallis Lane. From north to south there is a two-story terrace house, a burnt-out vacant site, two more single story terraces houses, bookended by a taller two-story shop top terrace on the corner of Gibbons and Boundary Streets. These buildings are not heritage listed by the City of Sydney and remain in poor condition and are devoid of visually appealing heritage features or quality building materials.

With amalgamation, these five land holdings would create a site of 560sqm approximately, benefiting from three street frontages, and outlooks onto green open spaces to the north-east (over Gibbons Reserve), the south-east (over Daniel Dawson Reserve) and west (over the well-treed junction of Locomotive, Garden and Cornwallis Streets).

Such an amalgamation has the potential for a project of a medium scale, which serve as a transition to the smaller scale buildings that may remain to the south of Boundary Street, or to the east on Cornwallis Street.

The scenario of such an amalgamation has been studied by Roberts Day in Attachment B: Supplementary Information for Site Specific Merit Matters, Planning Proposal at 44-78 Rosehill St, Redfern, October 2018, page 3, Section 3 (refer extract below)



Extract 10a.
Source: RobertsDay Supplementary Information for Site Specific Merit Matters, Planning Proposal at 44-78 Rosehill St, Redfern, October 2018, page 3, Section 3

11 CONTEXT AND SCALE

The extract above includes a study showing ADG separation addressed given the distribution of Habitable and Non Habitable rooms proposed on the southern facade of 44-78 Rosehill St, Redfern. This distribution generates a well-articulated tower form of 17 stories that step back from the south capped with a Communal Open Space on the roof terrace

In a scenario where these five sites were not amalgamated, then quite typical of Sydney's development history, we would see these smaller single-family terrace houses and finer grain shops sites adjacent to a newer, much larger scale development. The Planning Proposal acknowledges this possibility and provides an articulated two-storey podium that serves as a localised scale transition device. The podium proposed shows generous planting.

This juxtaposition in scale is common in Sydney, particularly so along transport corridors that are in a state of transition following identification by Government for increased development. It is also common on the grounds of retaining our older buildings.

Two well-known examples come to mind.

1. Governor Phillip Tower
2. One Central Park

Both these projects juxtapose buildings of very different scales and serve to draw attention to the character and diversity of each typology. They demonstrate the success of large-scale towers adjacent to small-scale terrace houses. Both scales benefit from that juxtaposition, and the public domain is all the more vibrant as a result.

Studies conducted by Roberts Day (refer Attachment B: Supplementary Information for Site Specific Merit Matters, Planning Proposal at 44-78 Rosehill St, Redfern, October 2018) are quite thorough, summarising eight precedents in Sydney with similar juxtapositions in scale.

The juxtaposition studies referred to above in Attachment B, page 3, conducted by Roberts Day also include work the site to the east has the potential to be a larger scale form thus serving as a transition in form from the ATP.

Observation

The work concerning context and transitions is well considered and supported by the author.

Recommendation 05

The immediate context and transitions to the neighbouring sites are further developed more thoroughly in future stages as a requirement to achieve design excellence.

12 CONCLUSIONS

The author agrees with the intent of the Planning Proposal that the project is consistent with broader Strategic Plans and sits well on the fringe of the “Innovation Corridor” given the ground & second floor accommodation is delivered to attract technology support companies and tech start-ups.

With the benefit of the additional clarifications requested from RobertsDay, the conclusions drawn are that the design presented in the Planning Proposal :

_ satisfies the Objective 3F-1 the ADG in terms of Building Separation

_ has been developed with considerations that protect the development prospects of the block to the West bounded by Cornwallis Lane, Margaret Street, Cornwallis Street and Boundary Streets.

_ the future development of the site to the west is well accommodated by the nature of its outlook to the west, the shared north-south Cornwallis, and the tower setbacks proposed in the Gibbons Place Planning Proposal.

_ with the provision of the further clarifications outlined above, deep soil requirements are satisfied.

With the addition of typical wind mitigation devices, such as glass screens, planting on the ground level, and a louvred trellis or pergola type structure over the Plaza area, the well-regarded specialist consultants Windtech have established conditions for occupants on their balconies, those enjoying the elevated roof terraces, and those in the public domain on the ground plane are suitable for their intended uses.

Skilful articulation of the architectural and urban form of this proposal will be necessary to manage the outcomes of this challenging site and proposed massing in order to achieve the desired outcomes for the City. A design excellence process is to be undertaken as is typical for the City of Sydney.

The author’s independent review of this planning proposal has resulted in a position of support for merit subject to five recommendations below:

01_ This review recommends that the Plaza design needs to be developed in a way that provides settings available for public use other than those limited to the customers of, and controlled by, the food & beverage outlets that flank the plaza. The inclusion of wind mitigation devices needs to be carefully designed so as to be asset to the place making characteristics, proportions, and appeal of this Plaza.

02_ The Proposal be developed with resilient and robust accommodation typologies for both the ground & first floors with the characteristics outlined in The Eastern City District Plan’s Planning Priority E8 “Growing and investing in health and education precincts and the Innovation Corridor” Objective 21.

03_ A design excellence process needs to be undertaken in order to be sure the best outcomes of this challenging site and proposed massing are delivered.

04_ That landscape design of all communal open spaces, including the wind mitigation elements, is considered together as part of delivering design excellence.

05_ The immediate context and transitions to the neighbouring sites are thoroughly developed in future stages as a requirement to achieve design excellence.

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