Strategic Planning Services

Response to Submissions

Student Accommodation
13-23 Gibbons Street, Redfern

State Significant Development Application
SSD 9194

November 2019

Contact

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Issue

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Table of Contents

List of Tables

List of Figures

Appendices

A.	Response to Agency Submissions	*CW Strategic Planning*
B.	Response to Public Submissions	*CW Strategic Planning*
C.	Architectural Plans	*Allen Jack + Cottier Architects*
D.	Supplementary Design Report	*Allen Jack + Cottier Architects*
E.	Landscape Report	*Turf Design Studio*
F.	Arborist Report	*Urban Arbour*
G.	Additional Visual Impact Assessment	*Richard Lamb and Associates*
H.	CPTED Assessment	*Elton Consulting*
I.	Environmental Wind Assessment	*SLR Consulting*

J.	Acoustic Statement of Compliance	*Northrop Consulting Engineers*
K.	Traffic and Swept Path Diagrams	*The Transport Planning Partnership*
L.	Sydney Airport OLS Approval	*Sydney Airport*
M.	BASIX Certificate	*SLR Consulting*
N.	ESD Report	*SLR Consulting*
O.	Mechanical Ventilation Statement	*Arcadis*
P.	Revised SEPP 1 Objection FSR	*CW Strategic Planning*
Q.	Quantity Surveyors Certificate	*WT Partnership*
R.	Flood Assessment and Stormwater Management Report	*JHA Consulting Engineers*
S.	Stormwater Concept Plan	*JHA Consulting Engineers*
T.	Student Washer Dryer Ratio	*CG Laundry Equipment*
U.	Owners Consent	*The Trust Company Australia Limited*
V.	Accessibility Assessment	*Accessible Building Solutions*
W.	Section J Report	*Vipac*

Abbreviations used in this report

ACHAR	Aboriginal Cultural Heritage Assessment Report
ADG	Apartment Design Guide
AHD	Australian Height Datum
ARH SEPP	State Environmental Planning Policy (Affordable Rental Housing) 2009
BCA	Building Code of Australia
CIV	Capital Investment Value
Council	City of Sydney Council
DCP	Development Control Plan
Department	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
LEP	Local Environmental Plan
OEH	Former Office of Environment and Heritage
OMP	Operational Management Plan
RMS	Roads and Maritime Services
RTS	Response to Submissions
SDRP	State Design Review Panel
SEARS	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SEPP 1	State Environmental Planning Policy No 1 – Development Standards
SEPP 65	State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
SSP SEPP	State Environmental Planning Policy (State Significant Precincts) 2005
Standard LEP	Standard Instrument – Principle Local Environmental Plan
TfNSW	Transport for NSW
UDPRC	Urban Design Principles, Redfern Centre

1.0 Introduction

1.1 Purpose of this Report

An Environmental Impact Statement (EIS) was prepared by CW Strategic Planning Services on behalf of Wee Hur Capital Pte Ltd (the applicant) to accompany a State Significant Development (SSD) Application under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) for a new 18 storey student accommodation building at 13-23 Gibbons Street, Redfern.

The SSD application, including the EIS and accompanying documentation, was placed on public exhibition in accordance with the requirements of the EP&A Act from 24 January to 22 February 2019 (30 days).

A total of 27 submissions were made in response to the public exhibition. These included 9 submissions from government agencies and authorities and 18 submissions from the general public. In addition, internal advice from the NSW Government Architect's office was provided to the Department.

The Applicant and its consultant team has given detailed consideration to all the issues raised in the submissions.

In accordance with clause 85A of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation), this 'Response to Submissions' (RTS) details the consideration given to each of the issues raised, and where appropriate, provides additional information or amendments to the proposal to address the relevant issue.

1.2 Supporting Information

This RTS is to be read in conjunction with the original EIS and supporting documentation, as amended by the plans and reports appended to this report, including:

- Response to Agency Submissions prepared by *CW Strategic Planning Services* (**Appendix A**)
- Response to Public Submissions prepared by *CW Strategic Planning Services* (**Appendix B**)
- Amended Architectural Drawings prepared by *Allen Jack + Cottier Architects* (**Appendix C**)
- Supplementary Design Report prepared by *Allen Jack + Cottier Architects* (**Appendix D**)
- Amended Landscape Report by *Turf Design Studio* (**Appendix E**)
- Arborist Report by *Urban Arbour* (**Appendix F**)
- Additional Visual Impact Assessment by *Richard Lamb and Associates* (**Appendix G**)
- CPTED Assessment by *Elton Consulting* (**Appendix H**)
- Wind Impact Assessment by *SLR Consulting* (**Appendix I**)
- Acoustic Statement of Compliance by *Northrop Consulting Engineers* (**Appendix J**)
- Traffic Assessment & Swept Path Diagrams by *The Transport Planning Partnership* (**Appendix K**)
- OLS Approval *Sydney Airport* (**Appendix L**)
- BASIX Certificate (**Appendix M**)
- ESD Report by *SLR Consulting* (**Appendix N**)

- Mechanical Ventilation Statement by *Arcadis* **(Appendix O)**
- Revised SEPP 1 Objection for FSR by *CW Strategic Planning Services* (**Appendix P**)
- QS Certificate 'Cost of Development' by *WT Partnership* (**Appendix Q**)
- Updated Flood Assessment and Stormwater Management Report by *JHA Consulting Engineers* (**Appendix R**)
- Updated Stormwater Concept Plan by *JHA Consulting Engineers* (**Appendix S**)
- Report on Student Washer and Dryer Ratio by *GC Laundry Equipment* (**Appendix T**)
- Owners Consent (**Appendix U**)
- Accessibility Assessment by *Accessible Building Solutions* (**Appendix V**)
- Section J Report by *Vipac* (**Appendix W**)

2.0 Amendments to the Application and Additional Information

2.1 Overview of Key Amendments to the development

The proposal has been revised in response to the issues raised in the submissions.

Key changes are outlined in detail in the responses in **Section 3**, but can be summarised as:

- an overall reduction in building bulk and scale, including:
  - reduced floor space (from FSR of 8.4:1 to 7.85:1),
  - increased building setbacks on all facades resulting in compliance with building height controls
  - a small reduction in building height.
- Associated changes to building massing floor plate layout
- Reduction in the number of bedrooms and beds from 488 to 419 rooms / beds.
- Redesign of the proposed through site link, to incorporate deep soil plantings in lieu of removable planters. Plantings include four canopy trees and understory plantings to ensure a landscaped appearance, improve amenity and wind outcomes, and still enable vehicular access.
- Reduction in the extent of service areas fronting the through site link
- Widening of the footpath on Margaret Street and incorporation of additional setback tree planting
- Improvements to materials and façade detailing to add articulation and visual interest
- Redesign of ground floor plane, including incorporation of double height foyer and communal spaces, introduction of a mezzanine level to improve communal amenities and improve activation and the relationship with the adjoining public domain, and improvements to building entries
- Redesign of Level 2 and 3 communal spaces. Removal of north facing communal spaces to improve privacy outcomes for the adjoining site and due to limited amenity as a result of overshadowing. Enlargement of west facing communal spaces to take advantage of outlook and good solar access.
- Redesign of Level 4 terrace including significant additional tree planting (16 trees)
- Redesign of student rooms, including an increase in all room sizes. The re-orientation of rooms to minimise north and south facing rooms, minimising privacy impacts to neighbours
- Incorporation of additional ESD measures to meet BASIX requirements including photovoltaic cells, resulting in the development exceeding water and energy efficiency targets
- Removal of requested exemption from Affordable Housing Contributions

A comparison of the key components of the development compared to the original proposal is provided in **Table 1**.

Images of the amended scheme are show in **Figures 1 to 3**.

Table 1: Comparison of Key Elements of Original Proposal and Modified RTS Scheme

Aspect	Original Proposal	Modified RTS Scheme
Areas		
Site Area	1365.5m²	1365.5m²
Gross Floor Area	11,470m²	10,713m²
- Commercial	- 92.7m²	- 86.7m²
- Student Housing	- 11,377.3m²	- 10,626.3m²
Floor Space Ratio	8.4:1	7.85:1
Built Form		
Height	18 storey building (3 storey podium and 15 storey tower) plus roof level plant and basement level maximum height: 64 m	18 storey building (3 storey podium incl. mezzanine and 15 storey tower) plus roof level plant and basement level maximum height: 63 m
Setbacks		
- Podium:	North 0 m South 0 – 4.0 m East 5.9 – 11 m West 0 m	North 0 m South 0.9 – 4.5 m East 6.4 – 11.4 m West 0 m
- Tower:	North 2.3 – 6.1 m South 1.4 – 6.5 m East 7.5– 11.0 m West 1.8 – 4.5 m	North 3.9 – 6.1 m South 4.0 – 7.0 m East 7.8 – 11.2 m West 4.0 m
Capacity and room size	488 single occupancy rooms, including: - 68 ensuite rooms (bathroom but no kitchen) - 420 studio rooms (kitchen and bathroom) - 19 accessible rooms included in the above Typical room sizes (including internal bathrooms and kitchens): - ensuite rooms 13m² - studio rooms 15m²	419 single occupancy rooms, including: - 44 ensuite rooms (bathroom but no kitchen) - 363 studio rooms (kitchen and bathroom) - 12 DDA / accessible rooms - Typical room sizes (including internal bathrooms and kitchens): - ensuite rooms 17m² - studio rooms 15.5m² – 21.4 m²
Floor by Floor		
Basement:	Gym, cinema rooms, laundry, bicycle parking, storage, waste room, plant	Bicycle storage, storage, waste room, plant
Level 1	Retail unit, building entry, reception, staff offices, meeting rooms, student lounge, games area, quiet area, bike repair and storage, plant, through site link	Retail unit, building entry, reception, staff offices, meeting rooms, student lounge, games area, communal kitchen, bike repair and storage, plant, amenities through site link Mezzanine: Gym, communal study area, cinema, laundry, amenities
Levels 2 & 3	Ensuite rooms, communal kitchen and dining, communal terraces / balcony	Predominantly ensuite rooms, communal kitchen and dining, communal balcony
Level 4	Studio rooms, communal study space, meeting rooms, communal terrace	Studio rooms, communal study space, meeting rooms, lounge area, communal terrace
Levels 5 – 17	Studio rooms	Studio rooms
Level 18	Studio rooms, student lounge	Studio rooms
Roof	Plant and lift overruns	Plant and lift overruns, photovoltaic cells
Parking		
Car / Motorbike	0	0
Bicycle	163	130
Materials and Finishes	Podium: Red-brown face brick cavity wall and dark grey precast concrete panel Feature projection windows in white to match neighbouring church building	Similar overall materials and finishes, although a wider variety provided for visual interest. Podium: Face brick cavity walls in two different red-brown tones. Brick header patterns incorporated for visual interest White feature projection windows deleted, but dark splayed reveals and window heads are provided for visual interest. Window frames, steel balustrading and terrace and footpath awnings in dark grey / black. White perforated

Aspect	Original Proposal	Modified RTS Scheme
	Tower: precast concrete panels in natural finish and yellow and grey shades Vertical aluminium fins and horizonal solar shadings in grey and brown shades Window frames, steel balustrading and terrace and footpath awnings in dark grey / black.	vertical fins / screens to southern podium windows Tower: precast concrete panels in yellow and natural shades. Warm shades to front of building and cool shades to rear. Vertical aluminium fins and horizonal solar shadings in warm to front of the building. White perforated mush fins and shading to the rear, Window frames, steel balustrading and terrace and footpath awnings in dark grey / black.
Public Domain and Landscaping	Creation of a through site link to connect with William Lane and retain the alignment of the existing laneways to the north and south. The link will provide public pedestrian access though the site as well as servicing for the development. The link will incorporate permeable paving, soft landscaping, seating areas and lighting. There is space within the link to enable a mobile coffee cart or similar use in the future. Retention and pruning where necessary of street trees on Gibbons Street, 2 x new street trees proposed on Margaret Street as part of wind mitigation. Associated changes to laybacks and footpath paving on Margaret Street and William Lane.	Through site link provided, but redesigned to incorporate deep soil planting of 4 trees in lieu of removable planters. Coffee cart and seating not proposed as part of the application, but there is sufficient space to provide in the future if a demand is established. Removal and replacement of street trees on Gibbons Street, 2 x new street trees proposed on Margaret Street and 4 x new trees proposed on through site link. As before, but footpath on Margaret Street is also proposed to be widened.
Access	Vehicular access from Margaret Street and William Lane Main pedestrian entry on Gibbons Street. Secondary entry on through site link.	Access locations generally unchanged but access design and articulation improved- refer to **Section 3.5**.
Public Art	Artwork by indigenous artists incorporated into the through site link space	Artwork by indigenous artists incorporated into the through site link space
Signage	Three non-illuminated signs: - Projecting wall sign at podium level to delineate the main building entry (0.7 x 5.2 m) - Two building identification signs on the western and southern parapets in 3D block lettering (0.95 x 10.01m)	Three non-illuminated signs: - Projecting wall sign at podium level to enable site identification (0.7 x 5.8 m) - Two top of building identification signs on the western and southern facades in 3D block lettering (0.9 x 9.5 m)
Use and Operational Management	Small retail space – Use, hours and capacity subject to future application. Well suited for café use or similar Student Accommodation - Residents must be students and will have a standard lease agreement with associated rules of occupation. Site will be operated by specialist experienced student accommodation provider, including 5 full time staff equivalent, in addition to maintenance, security and cleaning staff, as well as student resident advisors. Will operate in accordance with Operations Management Plan at Appendix W.	No change

2.2 Correction to EIS

The Applicant wishes to correct a statement in the EIS. Although the EIS acknowledged very limited basement excavation is required (less than 1 metre), the EIS did not identify that the proposal will require the provision of piles to depths of 8 – 12 metres for support. Sydney Metro may wish to consider if additional conditions are required accordingly.

Figure 1: Photomontage as viewed from Gibbons Street Reserve
(source AJ+C Architects)

Figure 2: Photomontage of podium detail as viewed from Gibbons Street
(source AJ+C Architects)

Figure 3: **Photomontage of proposed through site link**
(source AJ+C Architects)

3.0 Issues Raised and Response

On 26 March 2019, the Department wrote to the Applicant, outlining its key issues. 21 issues were identified and reflect the majority of issues raised in Council, agency and public submissions. This report provides a detailed response to the 21 key issues raised by the Department. Any additional issues raised in submissions have been responded to separately in **Appendix A** and **Appendix B**.

3.1 Key Issue 1: Built Form, FSR and Setbacks

Department's Issues:

(a) The Department wishes to reiterate that the subject site's Business Zone - Commercial Core zoning is not an equivalent land zone listed under the State Environmental Planning Policy (Affordable Rental Housing) 2009 (ARH SEPP). The proposal is therefore not eligible for the floor space bonuses under the ARH SEPP.

(b) The proposed contravention of the height and FSR controls requires further consideration and justification. It is unclear how there are sufficient grounds to justify the proposed contravention when no quantitative or qualitative analysis has been undertaken to compare the impacts associated with a complying scheme. A greater understanding of the effects and environmental impacts associated with varying the development standards is required to allow an assessment to be completed.

(c) The proposed northern tower setback does not provide sufficient building separation to 11 Gibbons Street. Further consideration shall be given to providing a greater northern tower setback to improve the visual relationship and building separation between the development and 11 Gibbons Street.

(d) Further consideration shall be given to providing a greater southern podium setback to St Luke's Presbyterian Church to reduce the visual impacts of the proposal on the heritage setting of the church (See Point 11).

(e) The Redfern Centre Urban Design Principles (RCUDP) require the consideration of opportunities to widen footpaths wherever possible. The zero setback to the southern boundary along Margaret Street restricts the potential for widening the footpath and improving pedestrian traffic flow. Given the William Lane through-site link will facilitate increased pedestrian flows along Margaret Street, further consideration shall be given to providing a greater southern setback and a more generous footpath to accommodate increased pedestrian flows.

3.1.1 Modifications and information to address the key issues

To address the matters raised at (a), (b), (c), (d), and (e) above, the following changes have been made to the proposal:

(a) Further information is provided on the applicability of the equivalent land use zoning provisions (**Section 3.1.2**) and the FSR has been reduced to 7.85:1.

(b) Minimum tower setbacks from the street frontages have been increased to 4 metres resulting in compliance with building height controls. FSR has been reduced and an updated SEPP 1 objection has been provided at **Appendix P**. To demonstrate that the proposed FSR would not result in any material impacts compared to an alternative building with an FSR of 7:1, a quantitative and qualitative analysis of the impacts of the proposal compared with a modelled complying 7:1 scheme has been provided throughout this report. **Section 3.1.3** outlines the comparison with the complying scheme.

(c) The northern tower setback and separation from 11 Gibbons Street has been improved, resulting in separation distances of 10.8 to 13.8 metres. As discussed in **Section 3.1.4**, this is consistent with the emerging character of the centre and the approach taken by the Department in the assessment of all other nearby developments.

(d) Consideration has been given to podium setbacks and separation from St Luke's Church – refer to discussion in **Section 3.11** (Heritage).

(e) Further information is provided on the need for footpath widening and the Margaret Street footpath width has been increased. Refer to discussion in **Section 3.1.5**

3.1.2 Zoning Equivalency and Floor Space Bonus

In response to the first issue of zoning equivalency and the applicability of a floor space bonus under the ARH SEPP, the Applicant requested the Department provide its reasoning as to why the subject zoning is not considered equivalent for the purpose of the ARH SEPP, noting that the Applicant had given compelling reasoning in the EIS (set out over pages 36 to 42) as to why the provisions apply to the proposal.

The Department responded by email on 14 May 2019, advising that:

> *As the 'Business Zone – Commercial Core' allows for a greater mix and diversity of uses resulting in a unique land zone, it is the Department's view that the 'Business Zone – Commercial Core' is not equivalent to any ARH SEPP Zones and therefore your proposal is not eligible for the ARH SEPP bonus.*

However, we reiterate that just because the 'Business Zone – Commercial Core' could allow a somewhat greater mix and diversity of uses, this would not, objectively, exclude the subject zoning from being considered equivalent for the purpose of a boarding house development under the ARH SEPP.

The view taken by the Department on equivalency has not properly taken into account a number of factors, including the matters detailed on pages 36 to 42 of the EIS, such as:

- the objectives of the ARH SEPP,
- the permissibility of boarding houses in all zones,
- the implications of Clause 5(2) of the SEPP,
- the qualitative similarities of the zones, and
- the underlying purpose of the equivalency test.

These factors have not been addressed in the response from the Department. It is our opinion that a proper consideration of these matters, would result in a determination of zoning equivalency and application of the floor space bonus provisions, consistent with the objectives of the ARH SEPP and the EP&A Act.

In particular, the purpose of the equivalent zone provisions should be considered. The provisions have been included to overcome inconsistencies across EPIs, that is, to ensure the objectives of the SEPP would still be achieved in areas that do not conform to the Standard Instrument LEP zones, and therefore would otherwise be inadvertently excluded by the SEPP. In this case the provisions seek to ensure the incentives for the development of boarding houses would also apply to zones with a similar character, objectives and environmental context.

We agree that the 'Business Zone – Commercial Core' zoning provisions have been drafted differently to the Standard Instrument, by defining permitted uses as 'any development not prohibited' and therefore potentially permitting a wider range of uses than the equivalent Standard Instrument zones (including uses from 'agriculture' and 'airports' to 'water treatment facilities' and 'wharfs'). However, this is more an anomalous and unintended consequence of the drafting and in no way relates to the expected or realised forms of development on the ground. In fact, it is precisely these inconsistencies in the drafting of EPIs that the equivalency provisions of the ARH SEPP seek to overcome.

Therefore, and contrary to the Department's opinion, 'the 'Business Zone – Commercial Core' is not 'unique' but is similar to the relevant Standard Instrument zones in that boarding houses are permissible across all of the zones and like a number of the Standard Instrument zones, the 'Business Zone –

Commercial Core' essentially also seeks to enable the integration of a wide range of residential, commercial and community uses within commercial centres that have good access to public transport. This is evidenced by all recent development in the Redfern Centre which is entirely characterised by such uses – all of which are permissible under the equivalent standard instrument zones without inclusion of any other 'unique' uses not permitted by the Standard Instrument.

Most importantly, there is nothing 'unique' about the zone as it relates to 'boarding house' developments. Clause 5(2) of the ARH SEPP specifically provides that any opinion of equivalency or non-equivalency must relate to the particular development that is proposed. Given boarding houses are permitted in the current zone, as well as all the identified zones in the ARH SEPP, it must be assumed that the ARH SEPP intended the provisions to also apply to boarding houses in the 'Business Zone – Commercial Core'.

On this basis, and for all of the reasons set out in detail in the EIS, the Applicant submits that objectively, the zones must be determined as equivalent for the purpose of a boarding house development and an FSR control of 8.4:1 therefore applies to the development.

Nevertheless, the Applicant has significantly amended the proposal, resulting in a reduced building size. The amended scheme, which is supported by a SEPP 1 objection at **Appendix P**, reduces the proposed GFA from 11,470 m^2 to 10,713 m^2, resulting in an FSR of 7.85:1, being significantly less than building massing expected by the 8.4:1 control under the ARH SEPP.

3.1.3 Comparison between the proposal and alternative 'compliant' scheme

As recommended by the Department, additional analysis has been carried out, to compare the impacts of the proposed built form, with a 'compliant' built form, that is with a building form that would comply with the height, FSR, and expected setbacks under State Environmental Planning Policy (State Significant Precincts) 2005 (the SSP SEPP) and Redfern Centre Urban Design Guidelines.

Although, as detailed above, we consider an FSR of 8.4:1 would apply to the proposal, to demonstrate the merits of the proposal, relative to a 'compliant' 7:1 scheme, the Applicant has modelled a 'compliant' scheme that would have:

(a) an FSR of 7:1,
(b) maximum height of 18 storeys or 65m (noting RCUDP equates 18 storeys to approximately 65m),
(c) a podium height of 3 storeys built to the street edge of Gibbons and Margaret Streets and to the northern boundary,
(d) a tower setback of 4 metres from Gibbons and Margaret Streets,
(e) a podium setback from the eastern boundary to enable provision of the through site link, and
(f) minimum tower setbacks of 9 metres to the eastern and northern boundaries.

The above parameters (a) – (d) are fully compliant with and as expected under the controls applying to the site.

In relation to the podium setback at (e), it is noted that the planning controls generally envisage the podium being built to the common boundary with the neighbours, although the controls do not preclude provision of a greater setback. In this case the 'compliant' scheme has included a setback to the eastern boundary to retain provision of the through site link, consistent with that in the proposed scheme. This

has been done to allow for a more realistic comparison with the built form of the proposed scheme, given the provision of the link is a key feature and public benefit of the proposal.

In relation to the tower setbacks at (f), a setback of 9 metres has been used for the 'compliant' scheme. Technically, there are no specific setback requirements applicable to the north and east elevations for student housing developments and setbacks on these elevations should be assessed on merit. However, a 9-metre setback has been used in this case, as under the UDPRC, commercial buildings are expected to have a setback of nine metres and a commercial building could be reasonably be expected on the site as an alternative to this proposal. Built form impacts in terms of shadowing, wind, and view loss would be the same regardless of the internal use of the building and therefore this approach allows for a reasonable comparison with an alternative 'compliant' built form on the site.

It is noted that if the building was to be used as a residential flat building, a 12 metre setback would apply to the northern and eastern tower facades under the provisions of SEPP 65 and the ADG. However, the complying scheme has not adopted a 12 metre setback as it does not technically apply to the proposal, nor is it realistic, given that the Department has consistently not applied the ADG setbacks, but allowed much smaller setbacks to all other new tower buildings in the locality (refer to discussion in **Section 3.1.4**).

A comparison between the proposed scheme and a 'complying' scheme can be seen in **Figure 4**.

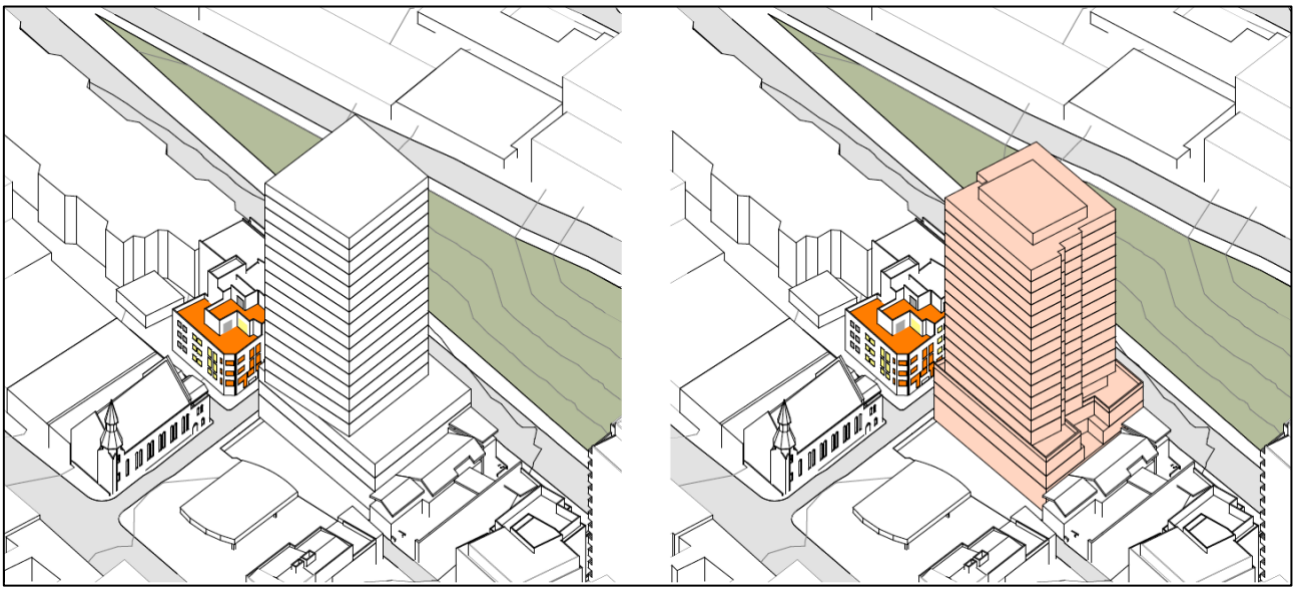

Figure 4: Comparison between massing of the complying scheme (left) and proposed scheme (right)
(source AJ+C Architects)

Throughout this Response to Submissions Report, consideration has been given to the impacts of the proposed development, compared to the modelled compliant scheme. Key findings are discussed in detail in the relevant sections of this report and demonstrate that the proposed scheme would not result in any material additional impacts as compared to a 'compliant' scheme on the site as follows:

Solar Access: the proposed development would result in no greater impact in terms of overshadowing than the modelled compliant scheme, and infact the proposal would result in improved outcomes for the most affected premises, being dwellings at 1 Margaret Street, compared to an alternative compliant built form (refer to detailed assessment in **Section 3.7** and solar studies in **Appendix D**).

Wind Impacts: the proposed development would result in similar and slightly improved impacts overall in terms of wind than the modelled compliant scheme (refer to detailed assessment in **Section 3.8** and wind impact assessment at **Appendix I**).

Heritage Impacts: the proposed development would result in no greater heritage impacts to St Luke's Church than the modelled compliant scheme, and infact results in a better outcome than a development built strictly in accordance with the controls which would be located closer to the Church (refer to **Section 3.11**).

Building Separation and Visual Impacts: the proposed development results in a building separation with 11 Gibbons Street that is entirely consistent with the emerging visual character of the Redfern Centre: and therefore the greater tower setback of the modelled compliant scheme would do nothing to improve visual consistency with the character of the area, but rather may render the site incapable of being developed in a manner consistent with the envisaged character for the area (refer to detailed assessment in **Section 3.1.4)**.

Building Separation and Privacy Impacts: Refer to detailed assessment of Privacy Impacts in **Section 3.9**. The proposed development results in a building separation with 1 Margaret Street that is greater than a development built strictly in accordance with the controls. The increased setbacks as compared to the compliant scheme allow for planting of two street trees and other setback plantings which will assist with softening direct view lines between the sites. Building separation with 11 Gibbons Street is entirely consistent with other residential developments in the Redfern Centre that have been assessed as acceptable in terms of privacy. Due to privacy measures proposed on both sites, there will be no direct overlooking between the towers on the two sites. Therefore provision of a greater tower setback, such as that of the modelled 'compliant' scheme, would do little to improve privacy between the two sites.

View Impacts: Outlook and views have been considered in the Supplementary Design Report and **Appendix D** and it is demonstrated that due to the privacy screening required at 11 Gibbons Street (under approval SSD 7749), the proposed development, regardless of the northern setbacks, will have no material impact on views and outlook from future dwellings at 11 Gibbons Street.

3.1.4 Northern Tower Setback to 11 Gibbons Street: Visual Impact

The Department raised concern with the proposed building setbacks and separation to 11 Gibbons Street.

The objectives of building setbacks and building separation are generally twofold:

- To ensure an appropriate urban form of an area, with appropriate massing and spacing between the buildings, and
- To protect the internal amenity of buildings in terms of visual and acoustic privacy, natural ventilation, daylight and sunlight access and outlook.

This section of the report addresses the first of these objectives, being the concern raised by the Department at Key Issue 1(c). Amenity impacts of the setbacks have been considered separately in this report and the Supplementary Design Report and **Appendix D.**

As described in **Section 2**, improvements have been made to the setbacks of the tower on all elevations, resulting in a more slender appearance to the tower as viewed from all directions. Specific improvements to the northern tower setbacks and separation with 11 Gibbons Street are shown in **Figures 5 and 6**.

Figure 5: **Extract from submitted DA Tower Floor Plan showing minimum setbacks**
(source AJ+C Architects)

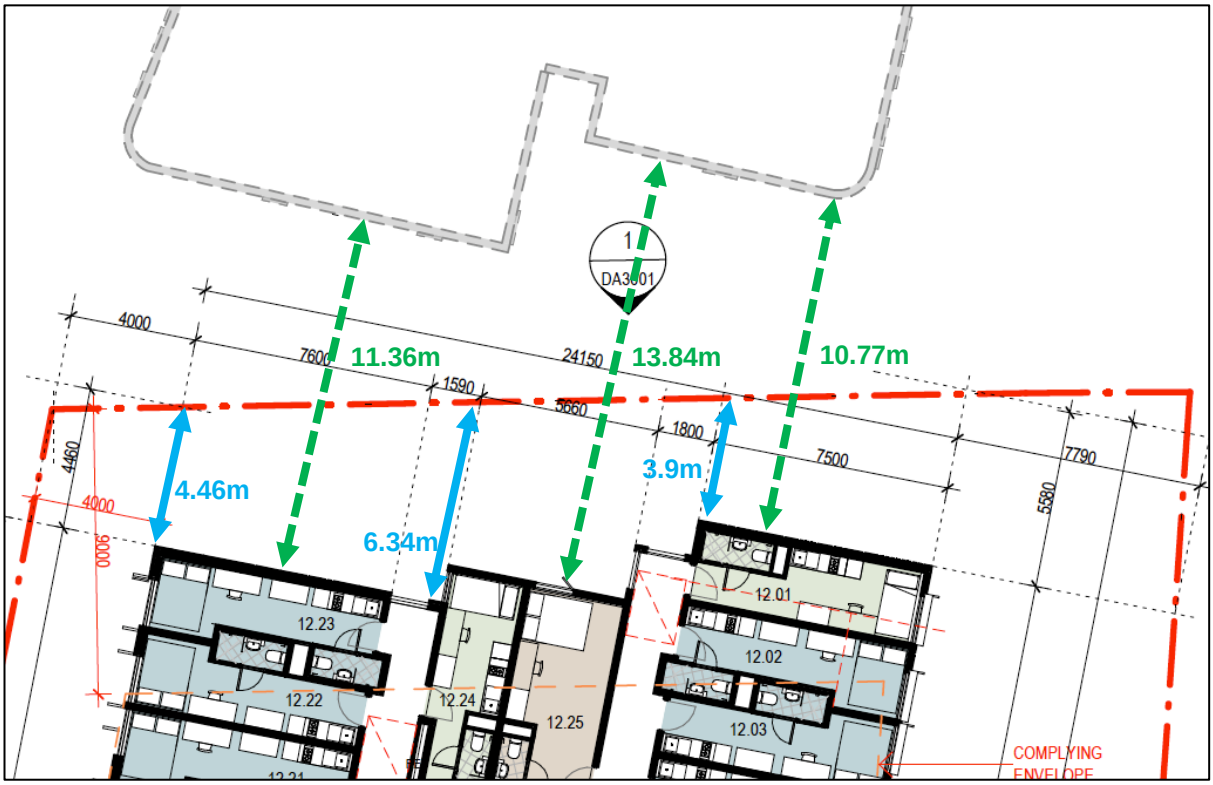

Figure 6: **Extract from proposed revised Tower Floor Plan showing setbacks**
(source AJ+C Architects)
Note: setbacks measured perpendicular to the building line as this is how they would be perceived in terms of urban form outcomes viewed from the public domain and the adjoining site

It should be noted that strictly speaking, there are no specific setback requirements applicable to the north and east elevations for student housing developments and setbacks on these elevations should be assessed on merit.

As illustrated in the above figures, northern boundary setbacks have improved from a minimum setback of 2.26 m at the point closest to Gibbons Street to 4.46 m at this point, with a proposed maximum setback of 6.34 m. This is similar to the approved setbacks of the adjoining building and would result in an overall building separation of 10.8 m to 13.8 m, with a predominant separation of 11.4 m as viewed from Gibbons Street and the wider area.

In its recent assessment of SSD 7749 (11 Gibbons Street), the Department considered the impacts of the tower setbacks with the subject site in terms of the emerging character of the Redfern Town Centre. The Department noted that the area is characterised by emerging high-density buildings with a predominant minimum tower separation distance of about 12 metres. In that case, the proposed setbacks with the subject site were considered to be consistent with the emerging built form character of the town centre. Importantly, the Department found that requiring a further increase to the setbacks to increase overall building separation distances would not result in any material improvements and would render the site incapable of being developed in a manner consistent with the envisaged character for the area, impeding the broader strategic objective for urban renewal and revitalisation of the Redfern Centre.

Therefore, for the same reasons, the proposed tower setbacks to the northern boundary must also be considered acceptable and consistent with the strategic objectives for development of the Redfern Centre.

Further to the Department's assessment of SSD 7749, we note that the recently approved student housing development at 80-88 Regent Street (SSD 9275), within close proximity to the site and subject to the same planning controls, included tower setbacks to the boundaries of 1.98 metres and 2.91 metres resulting in minimum building separation distances of 10 metres and 11 metres to adjoining development. The Department also assessed these setbacks as acceptable.

When considered in light of this development and the emerging character of the area, the proposal overall presents very generous setbacks to its side and rear boundaries.

Building separation along the northern boundary is therefore entirely consistent with and within the range of all other similar approved development within the area. This separation would predominantly be viewed from Gibbons Street and the wider area to the west of the site. When viewed from this perspective, the proposed tower would also be seen as the more narrow of the tower facades presenting to that street (refer to **Figure 7**). The relatively narrow tower, in conjunction with a building separation that is consistent with the character of the area, would result in a built form that presents as relatively unobtrusive in the context of surrounding development. Further, as demonstrated elsewhere in this report, the setbacks result in no adverse privacy or amenity outcomes to the adjoining development.

Figure 7: **Redfern Centre as viewed from west of Redfern Station**
(source Richard Lamb & Associates)

It should also be noted that the northern setbacks are in part a function of the desire to provide very generous setbacks to the eastern boundary to enable the provision of the through-site link. Proposed eastern tower setbacks range from 7.79 to 11.23 metres and therefore are very generous in the context of other surrounding approved developments, potentially resulting in a future building separation of up to double these distances. There is no requirement under the planning controls to provide the through site link, and it would be entirely reasonable to expect an alternative development of the site which may provide greater northern setbacks, offset by reduced setbacks to the east, however this would effectively remove the ability to provide the through site link and would be unlikely to result in any material benefits in terms of urban visual character or the amenity of residences at 11 Gibbons Street.

We also note that a tower which fully complies with the 8.4:1 FSR control (which we maintain applies to the development as described in **Section 3.1.2**), would result in a materially greater floorplate with smaller northern setbacks.

We therefore consider that the tower setbacks of the proposed development strike the right balance between enabling development of the site consistent with the development potential applicable under the ARH SEPP, providing eastern setbacks to enable the through site link with its associated public benefits and providing northern setbacks which maintain consistency with the emerging character of the area and do not result in unacceptable amenity impacts for neighbours.

3.1.5 Footpath Widening

Although the Department notes that the RCUDP recommends 'consideration of opportunities to widen footpaths wherever possible', the recommendation relates specifically to the design of structures within the public domain and to the provision of pedestrian crossings. The section of the RCUDP that applies to the development of high-rise buildings applies to the proposal. This section specifically identifies which streets should incorporate footpath widening and recommends that for all other streets (including Margaret Street) podiums should have a nil setback to the street boundary. It would therefore appear that on balance, the RCUDP promotes construction of buildings to the existing boundary line, rather than footpath widening on Margaret Street.

Additionally, in a previous meeting with The City of Sydney, the City also advised that it did not want additional land transferred to the City.

Nevertheless, to improve pedestrian amenity and the amenity of residents on the opposite side of the street, the podium has been setback from the Margaret Street boundary, allowing for the effective footpath width along the entire frontage to be increased from 1.7 m existing to 2.6 m proposed. It is proposed to retain ownership of the land but provide a right of way for pedestrians so that the land effectively functions as part of the footpath. The widened footpath would exceed the footpath width on the opposite side of the street, substantially improve circulation and pedestrian safety and allow for the provision of street trees to improve amenity.

The proposal therefore strikes an appropriate balance between improving pedestrian safety and amenity with the UDPRC objective of reinforcing containment and activation of the street.

3.2 Key Issue 2: Design Excellence

The Department's issues:

(a) Further consideration and justification must be provided demonstrating how the proposal exhibits design excellence in accordance with State Environmental Planning Policy (State Significant Precincts) 2005, having regard to advice from the State Design Review Panel and GANSW.

(b) The design response shall include, but not be limited to:

- *a. design excellence and quality outcomes*
- *b. bulk and scale*
- *c. William Lane activation*
- *d. building entries and articulation*
- *e. podium articulation, including the corner of Gibbons Street and Margaret Street*
- *f. internal amenity including cross ventilation, internal circulation, access to natural light.*
- *g. a stronger cultural response.*

Refer to the Supplementary Design Report by AJ+C Architects at **Appendix D** which addresses issues of design excellence and outlines how the design response has considered the above listed seven matters.

Table 2 provides a response to the design excellence matters for consideration as required by Clause 22 to Part 5, Schedule 3 of the SSP SEPP.

Table 2: Relevant Design Excellence Considerations under Clause 22, Part 5, Schedule 3 of SSP SEPP

Matter for consideration	Response
whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved	The Supplementary Design Report at **Appendix D** identifies the following key aspects of the high-quality architectural design: **Podium Design and Articulation** Gibbons Street: - podium designed to continue the local tradition of street wall buildings - scaled to match the existing residential flat building at 1 Margaret Street and approved building at 11 Gibbons Street - openings follow the historical pattern of large window openings at ground level for shops and commercial spaces with smaller, vertically proportioned openings in the levels above - massing and detailing follows the tradition of smaller buildings in rows, reading as distinct sub-blocks within the larger street block - podium is split into smaller sub-blocks by the recessed entry and common balconies on the levels above, with a distinctive parapet treatment using expressive brickwork, cornice lines - variable parapet heights reflecting the heterogeneous nature of the traditional streetscapes in the local area. Margaret Street & through site link: - podium articulation is simpler, reflecting the traditional difference between primary and secondary facades - simple, vertically proportioned, paired window pattern that reflects the arrangement of the rooms and responds to the fenestration in the side elevation of St Luke's church - splayed reveals and window heads are used to add articulation and emphasis to key openings to ground floor spaces. **Building Entries and Articulation** The RTS Scheme improves building entries by creating wider entryways, sheltered by distinctive awnings and set back from the street to improve delineation of the entry point and the site's address as well as improve ease of access.

Matter for consideration	Response
	Tower Design - the modern tower façade provides a contrast to the traditional brick podium - Level 4 is recessed with full height glazing and dark materials to provide a visual break between the tower and the façade - building massing is broken down and articulated by stepping the tower in plan form - a contrast between the front and rear components of the building is formed with the use of a different colour tone - horizontal breaks in the tower façade create a scale relationship with the podium and express the tower as a series of stacked blocks - the façade wraps around the corner and sides and expresses a stone inspired texture through grooves on panel and sun shading devices - further visual interest is added by shifting the pattern of the façade to enhance horizontal breaks
whether the form and external appearance of the building will improve the quality and amenity of the public domain	The building form makes a positive contribution to the public domain in the following ways: **William Lane / Through Site Link** The biggest contribution of the proposed building form to the public domain is the extensive eastern setbacks which allow for the provision of the through site link. Although this results in a different design outcome from that envisaged by the controls in the UDPRC, the proposal results in a superior outcome for the locality, with significant public benefits provided by the through site link as discussed elsewhere in this report. The overall design of the link and its relationship with the building has been improved in the RTS scheme as discussed in detail in **Section 3.4**. **Cultural Response** The provision of the extensive eastern setback and through site link also enables provision of substantial public artwork to celebrate Aboriginal cultural narratives, and to make the site a destination and part of the local public art trail. **Bulk and Scale** Overall bulk and scale have been reduced by the revised scheme and building setbacks have been improved on all boundaries. As demonstrated in **Section 3.1**, overall height, bulk, scale and setbacks are entirely consistent with all other emerging built forms within the Redfern Centre, ensuring the proposal presents an external form and appearance consistent with the emerging and desired character of the Redfern Centre. **Activation** In addition to a retail shop fronting Gibbons Street, the revised proposal has been designed to ensure good levels of activation and visual interaction between the public and private domains on all relevant elevations, including incorporation of double height common areas and entrances with floor to ceiling windows and extensive ground level and mezzanine communal student areas likely to be occupied at most times of the day and night with direct views over the public domain. Plant and service areas have also been minimised as discussed in detail in **Section 3.4**. **Margaret Street** The proposed building form improves the public domain as it allows for a wider footpath as well as street tree and on-site plantings on Margaret Street compared with an alternative compliant development of the site built strictly in accordance with the controls which would not increase footpath width or enable provision of such plantings. **Public Domain Solar Access** As demonstrated in **Section 3.7**, and the Supplementary Design Report in **Appendix D**, the proposed building form would result in negligible shadowing impacts to nearby areas of public open space and less impact than an alternative 'compliant 'scheme on the site. **Public Domain Wind** Refer to discussion in **Section 3.8** and Wind Assessment in **Appendix I.** The building form results in good levels of wind amenity in the through site link. Amenity on the footpath on Gibbons Street adjacent to the site is shown to be improved by the proposal and suitable for the intended use of pedestrian walking. The revised building form also allows for additional street tree and on-site plantings to improve outcomes with regard to wind impacts on Margaret Street, compared with an alternative compliant development of the site which would not enable the same level of plantings.

Matter for consideration	Response
whether the building meets sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security and resource, energy and water efficiency	**Sunlight** All rooms in the building receive a good level of natural light during the day. Common areas and communal open space at levels 2, 3 and 4 have been oriented to the west to ensure good levels of direct solar access, noting sunlight from the north will be limited due to the approved building at 11 Gibbons Street. Double height glazing to ground floor communal areas has been included in the revised design to maximise natural light and solar access. **Natural Ventilation** Operable windows are fitted at both ends of the common corridors on each level and to common areas to facilitate natural cross ventilation and reduce loads on the mechanical ventilation system. Openings to the corridors are designed to be south and north-eastern oriented to draw in a cool breeze during hot days. All rooms have large operable window openings to allow fresh air into the room when desired. **Wind** Refer to discussion in **Section 3.8.** The revised scheme includes additional plantings and amendments to the design to ensure acceptable outcomes with regard to wind impacts. **Reflectivity** The tower includes a variety of materials and finishes including solid elements resulting in overall low levels of reflectivity. **Visual and Acoustic Privacy** The proposal has been designed to minimise privacy impacts to adjoining properties by orienting rooms and open space areas primarily to the east and west away from adjoining development, and incorporating landscaping and screening to further reduce opportunities for overlooking and acoustic impacts. Refer to discussion in **Section 3.9**. **Safety and Security** The proposal has been designed to provide high levels of safety and security. Refer to CPTED assessment in **Appendix H** and detailed discussion in **Section 3.4.5**. **Resource, Energy and Water Efficiency** The amended scheme is accompanied by a Basix certificate (**Appendix M**) which demonstrates the proposal meets and exceeds energy and water efficiency requirements.
The Redfern–Waterloo Authority may draft a guideline to be approved by the Minister detailing what matters are to be addressed for design excellence	The proposal has been designed having regard to the UDPRC which have been prepared under this clause and which detail the matters to be addressed for design excellence. Table 8 of the EIS demonstrates compliance with the UDPRC and the assessment would continue to apply to the revised RTS scheme.

3.3 Key Issue 3: Gross Floor Area

The Departments Issue:

(a) In accordance with the definition of GFA in the standard instrument, provide justification for the following exclusions or recalculate the GFA to include the following;

- *Bicycle parking (definition only excludes car parking)*
- *Ground floor corridors*
- *Waste chute and storage to each floor plate (adjoining the stairwell)*

Refer to drawing DA5103 which details floor space inclusions and exclusions.

Bicycle parking at ground floor level has been included in GFA calculations. Bicycle storage at the basement level has been excluded, in accordance with part (e) of the definition of GFA in the Standard Instrument, which excludes '*any basement storage'*.

Ground floor corridors have been included in GFA calculations, with the exception of corridors predominantly used for access to the loading areas, in accordance with part (h) of the same definition:

(h) any space used for the loading or unloading of goods (including access to it)

The mechanical / services plant room at each level and the *waste chute* have been excluded as provided for by parts (f) and (j) respectively of the definition:

(f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting
(j) voids above a floor at the level of a storey or storey above

3.4 Key Issue 4: William Lane Through Site Link

The Departments Issue:

(a) The proposed William Lane through-site link is supported in principle. However, the Department considers the current proposal will not facilitate a functional and meaningful pedestrianised space which provides a broader public benefit. The following is to be provided:

- *a detailed CPTED analysis for the space and how it will connect into William Lane and the proposed development to the north*
- *justification for the large proportion of service space fronting the laneway and how this will facilitate pedestrian activity*
- *Further wind mitigation details to manage adverse wind impacts*
- *More opportunities for tree plantings and meaningful landscaped elements i.e. deep soil zones, canopy plantings.*

Careful consideration has been given to improving both the design and amenity of the through site link and the interface between the development and the link to improve activation and amenity. Key changes are set out below and a detailed CPTED analysis has been provided in **Appendix H**.

3.4.1 Reduction in service space

The extent of service space / back entrances has been reduced from 14.4 metres (40% of the laneway) to 10.6 m (29%). Further, plant areas have been setback from the main building line so that they are not dominant visual elements within the laneway. In this regard, the proposal would result in a significantly better outcome than all other recently approved development north of the site with frontage to William

Lane – all of which is dominated by service space fronting the laneway. It is considered that services have been appropriately reduced and located, noting that:

- some services and fire egress are required on the façade of the building, and therefore back entrance / service space cannot be eliminated altogether,
- the northern façade adjoins private land and therefore can't be used for services, and
- the western and southern facades front public streets, where activation is of greater importance.

As demonstrated below, the introduction of a mezzanine level above part of the service area also assists to improve activation and offset the impacts of the service areas (**Figure 8).**

3.4.2 Increase in the extent of active facades

The extent of active façade facing the laneway has been significantly increased with:

- the incorporation of a double height common area and entrance allowing for greater window area and light spill facing the laneway,
- the incorporation of a new communal kitchen at the ground floor level with floor to ceiling windows opening on to a communal balcony overlooking the laneway,
- the incorporation of floor to ceiling windows to the bike storage and workshop area facing the laneway,
- incorporation of a new mezzanine level with an extensive communal study area directly overlooking the laneway, and
- reduction in floor levels to bring them closer to the level of the laneway (but still meet flooding requirements.

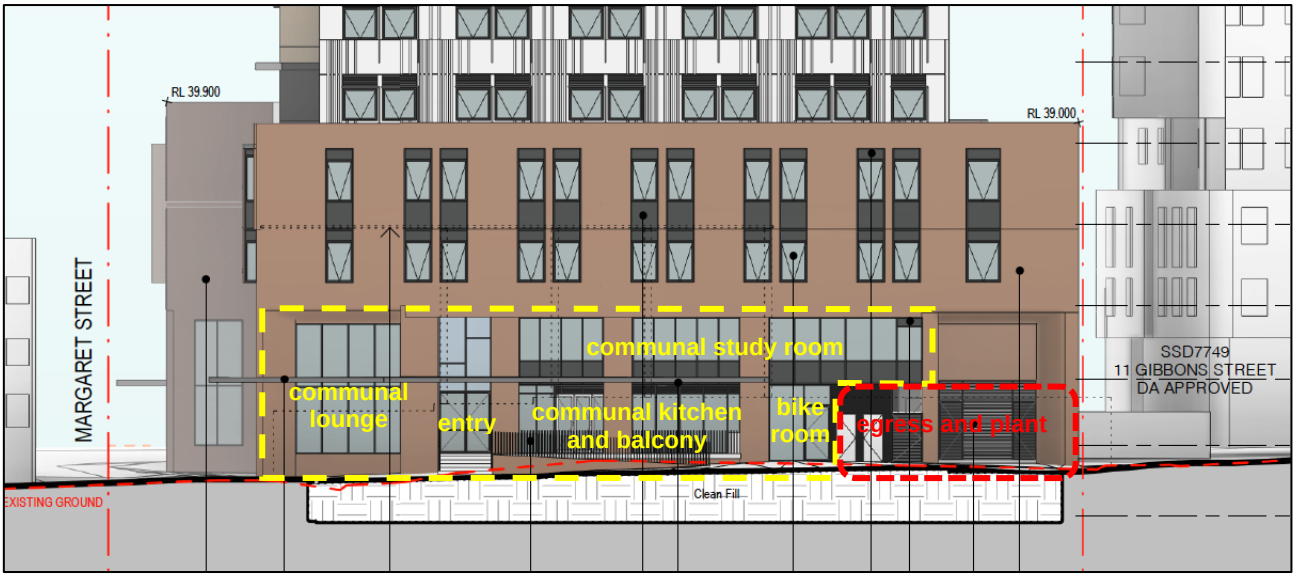

Figure 8: Extract from Eastern Elevation showing active façade elements (yellow) and service areas (red) (base source AJ+C Architects)

3.4.3 Improved landscaping and plantings

The link has been significantly redesigned to improve plantings. Previously proposed small planter boxes and furniture have been removed in favour of provision of a deep soil landscape zone at the entrance to the laneway which will allow for provision of 4 new trees as well as other understory plantings. In conjunction with a proposed 1.8 metre boundary fence covered in climbers along the entire length of the

eastern side of the laneway, the proposal will present as an attractive landscaped pedestrian space whilst still balancing the need to allow vehicle access and servicing. Plantings are considered to have been maximised in the context of competing requirements for vehicle access, stormwater management and wind mitigation requirements. As viewed from the entrance at Margaret Street, and compared to all other sections of William Lane to the north and south of the site (which do not include any plantings), the proposed through site link will present a very landscaped and civic space.

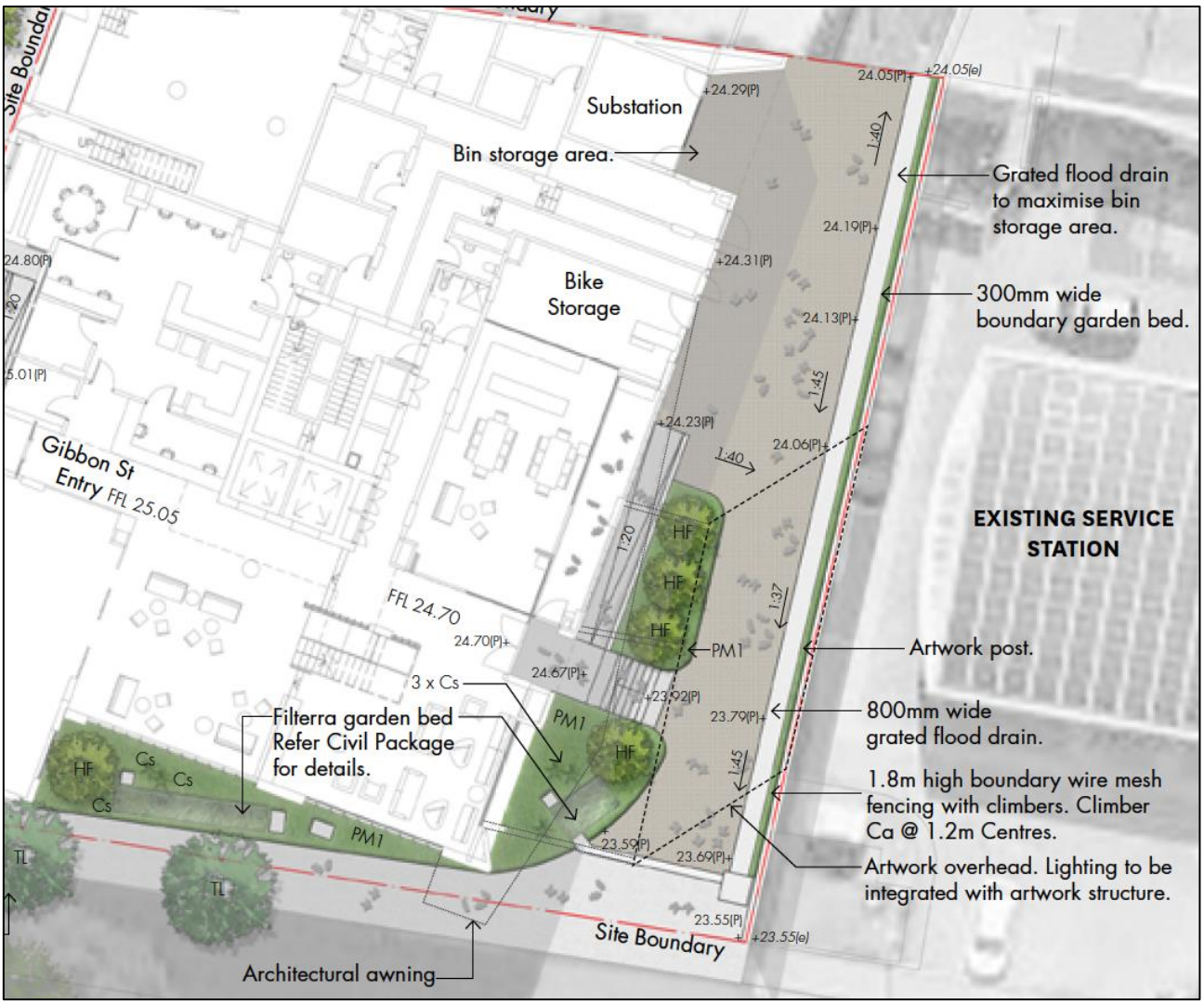

Figure 9: Proposed Through Site Link including tree plantings
(source: Turf Design Studio)

3.4.4 Improved Wind Mitigation

Refer to discussion in **Section 3.8**. The revised design would result in peak annual gusts in the through site link ranging from 10 m/sec to 12.5 m/sec, which are all below the 13m/sec level suitable for standing – waiting – window shopping. Given the testing did not include the proposed landscaping or the public artwork canopy, actual impacts are likely to be less and consistent with levels suitable for outdoor dining (10 m/sec), ensuring a very comfortable wind environment within the link.

3.4.5 Crime Prevention Through Environmental Design

A detailed CPTED analysis has been provided in **Appendix H**. The proposed through site link will be consistent with the four key CPTED principles as follows:

Natural surveillance: the through site link will be visible from the public domain at both ends (Margaret Street and William Lane) and will be highly overlooked by the development. In addition to student rooms overlooking the link at levels 2, 3 and above, extensive common space will directly overlook the link as discussed above in **Section 3.4.2** providing high levels of passive surveillance. It is expected that the common areas would be used by students well into the night-time, and these areas will provide clear sightlines into the link, deterring criminal behaviour in this area. In addition, security cameras are proposed which will allow onsite staff and security staff direct views of the link at all times. Lighting of the link will be provided to ensure safety at entrances, and along the length of the laneway, with no unlit areas, whilst ensuring no undue light spill to private residences.

Access Control: The proposal has been designed to encourage pedestrian access through the link, but at the same time adopts different materials and finishes to the adjoining public roads and footpaths to clearly distinguish the site as privately owned property and distinguish the boundaries of the site. Distinguishing the site as privately owned will reduce the sense of entitlement to be on the property and therefore assist with deterring criminals from loitering on the through site link. The site design, with narrow paved area and removable bollards at each entrance will also ensure that the site is not seen as a vehicular extension of William Lane and make it clear that public assess is for pedestrians only. The paved access path will interface with William Lane with a standard driveway crossover, with detailed design to be approved by Council prior to construction. Entrances to the building along this façade will all include security card / key access control and there will be no public access to the building from the through site link.

Territorial Reinforcement & Space Management: The proposal includes a high quality publicly accessible space, incorporating landscaping, artwork and materials to provide a pleasant and attractive space. The design encourages use of the space by pedestrians and by the student population of the building, with the later having a distinct interest in its use and condition. The upkeep of the space will be the responsibility of the future operator of the student housing in accordance with the Operations Management Plan and the areas will be maintained to a high standard at all times. As described above, clear design cues identify who is to use space and what it is to be used for without the need for any gates or enclosures.

3.5 Key Issue 5: Ground Floor use, layout and accessibility

The Departments Issue:
(a) The ground floor layout requires further consideration to facilitate an active, functional space:

- *the ground floor is to accommodate more retail/commercial space to facilitate an active frontage to the proposed through-site link, Gibbons Street and Margaret Street*
- *further consideration of the northern podium is required to ensure its provides for greater passive surveillance*
- *review the proposed design of the ground floor entry and pedestrian ramp to improve access and integration*
- *review the provision for end-of-trip facilities and amenities for the ground floor retail use and any commercial use.*
- *consider providing rear access to the retail space to connect to the loading space.*

Detailed consideration has been given to the design of the ground floor and the amended design responds to the above matters as follows:

3.5.1 Active Frontages

It is not proposed to provide further retail or commercial floor space beyond the retail unit already proposed on the Gibbons Street frontage. However, the Ground Floor of the proposal has been substantially redesigned to improve the sense of activation along all frontages. It is considered that the proposal provides a very good level of activation, noting the following:

- Office areas, similar to any other commercial office space, have been located to overlook Gibbons Street and thus also contribute to activation of that street.
- The proposed ground floor student common areas, being the primary space for gathering and recreation for up to 419 students plus friends (inclusive of the proposed games area, lounge areas, terrace and dining areas, mezzanine level gym and study areas), will make a significant contribution to activity levels as perceived on all three frontages. It is expected that these areas will be well utilised and therefore provide a sense of activity to the benefit of the adjoining public domains similar to that provided by a café and much greater than the activation provided by most other retail and commercial uses. Further, unlike many other retail and commercial developments, the space is also likely to be well utilised in the evenings and on weekends, thereby providing a better level of activation compared to many other retail or commercial uses.
- The visual interrelationship between the public and private domains, and therefore the sense of activation has also been improved on all frontages, due to the reduction in service areas, incorporation of double height rooms and windows and additional mezzanine uses as discussed above in **Section 3.4.** Floor levels have also been lowered slightly to further improve the visual connection between the public and private domains.
- Entrances are provided on the through site link and Gibbons Street which add to the sense of activation. While no entries are provided on Margaret Street, the level of activation is considered appropriate, having regard to the need to balance visual privacy impacts for residential neighbours in close proximity opposite the site.
- Activation is significantly improved compared with the existing use of the site.

3.5.2 Northern Podium Surveillance

It is unclear in which direction surveillance from the northern podium should be improved. Land directly to the north is private property and it is not appropriate to increase overlooking of this area. Additional surveillance to the northern end of the through site link is achieved by the proposed mezzanine study room as discussed in **Section 3.4**.

3.5.3 Ground Floor Entry

The main entry, including the access ramp, has been redesigned to provide an improved and simpler access route for all persons. The revised design also creates a bigger recessed area at the main entry, improving delineation of the entry point and the site's address and articulation to the podium façade.

3.5.4 End of Trip Facilities

Office staff and employees of the retail unit will have access to the bike storage area. Separate end of trip facilities (toilet / shower / changeroom) have been provided for the retail space. Office staff and employees of the student accommodation also have access to a shower and changeroom on the ground floor level. Lockers for staff can readily be provided within the bike storage area or within the retail unit and office area.

3.5.5 Retail Loading Access

The back of house areas have been redesigned to enable access from the through site link / loading area to the retail unit.

3.6 Key Issue 6: Basix and Sustainability

The Departments Issue:
As the proposed boarding house includes self-contained rooms, a BASIX certificate is required in accordance with the judgement found in SHMH Properties Australia Pty Ltd v City of Sydney Council [2018] NSWLEC 66.

A Basix certificate has been provided (refer to **Appendix M**).

3.7 Key Issue 7: Solar and Overshadowing

The Departments Issue:

(a) Provide hourly shadow diagrams to demonstrate a comparison between the overshadowing from the existing development, a development compliant with the required height and setbacks and the proposed development.

(b) The overshadowing impact of the proposed development must be quantified. This is to demonstrate and justify the amount of overshadowing from the proposed development in comparison to a development compliant with the required height and setbacks. Specifically, further information and justification is required for the following sites

- *Gibbons Street Reserve*
- *St Luke's Presbyterian Church*
- *1 Margaret Street (each unit)*
- *National Centre of Indigenous Excellence playing field, 160-202 George Street*

Appendix D includes hourly shadow diagrams and 15-minute sun view diagrams to demonstrate in detail the difference between the existing development on the site, the proposed development and an alternative development of the site that is compliant with the controls. Refer to discussion in **Section 3.1.3** for an explanation of the modelled compliant scheme.

The diagrams demonstrate that overall, there is not a significant difference in overshadowing from the proposed development as compared to an alternative development built strictly in compliance with the controls. If anything, any small areas of additional overshadowing created by the proposed development are more than offset by other areas of reduced overshadowing compared to a 'compliant' built form, so that the proposed development results in slightly reduced impacts compared to development expected by the controls. This is particularly the case for impacts to residential development at 1 Margaret Street.

Detailed consideration has been given to the impacts on the four key sites identified by the Department:

3.7.1 Gibbons Street Reserve

Gibbons Street Reserve is only materially affected by shadowing in the early mornings at midwinter. Following development, about half of the reserve will be in sunlight after 9.40am, and after 10.00am the reserve will generally be free from shadows and enjoy very good levels of solar access throughout the day. The shadow and sun view diagrams demonstrate that once the shadows of adjacent approved buildings are taken into account, the shadow impacts of the proposed building on the reserve are negligible, given the proposed building sits largely within the shadows of the surrounding approved buildings (**Figure 10**). Further, the proposal would result in no greater impact to the reserve than a compliant scheme. Calculations demonstrate that 80% of the reserve will retain 7 or more hours of solar access through the day.

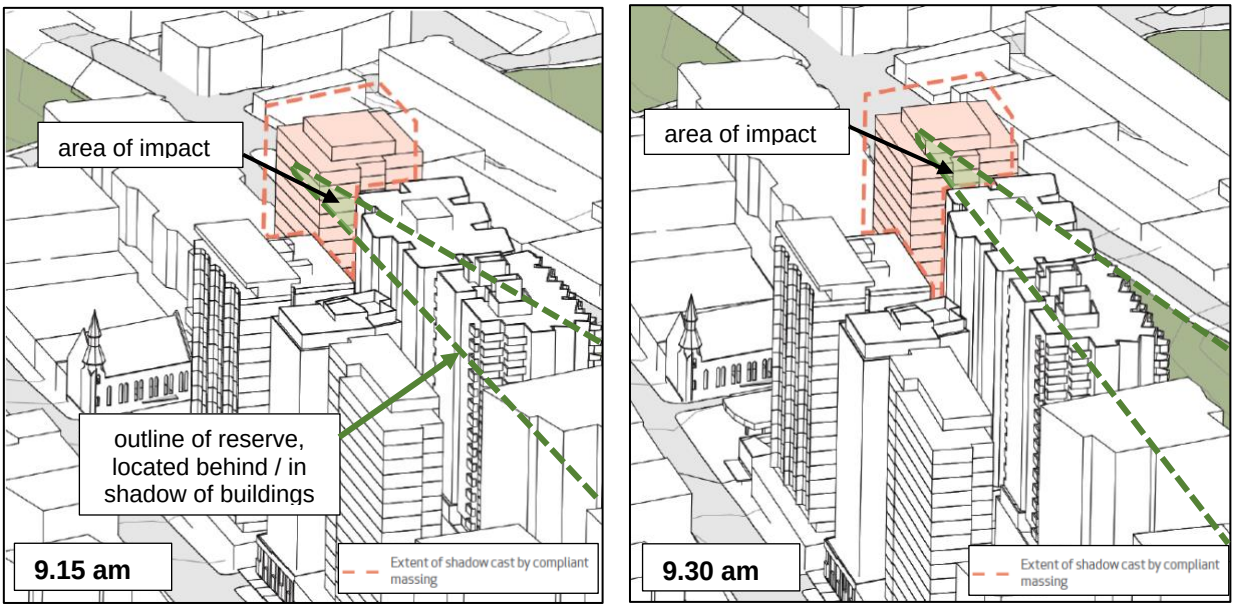

Figure 10: Early Morning Winter Sun View Diagrams showing impact of proposal (coloured orange) and impact of compliant scheme (orange dash) on Gibbons Street Reserve
(source AJ+C Architects)

3.7.2 Former St Luke's Church

The former church building is located directly to the south of the block where 18 storey buildings are expected under the planning controls. As such, overshadowing of the church is inevitable as the block develops in accordance with the planning controls. Planning controls applicable to the site do not require solar access to be maintained to the church building, which no longer functions as a church, but currently operates as a kitchen supply store.

It is noted that regardless of development on the subject site, future adjoining buildings at 11 Gibbons Street and on Regent Street are likely to overshadow the church for much of the day. The proposed development would result in some material additional overshadowing of the church beyond the shadows cast by the existing and adjoining development, particularly after 1.30 pm as shown in **Figure 11**. However, the additional shadows will fall largely on the roof of the church and the extent of the impacts are exactly the same as would be expected by any development of the site in accordance with the controls.

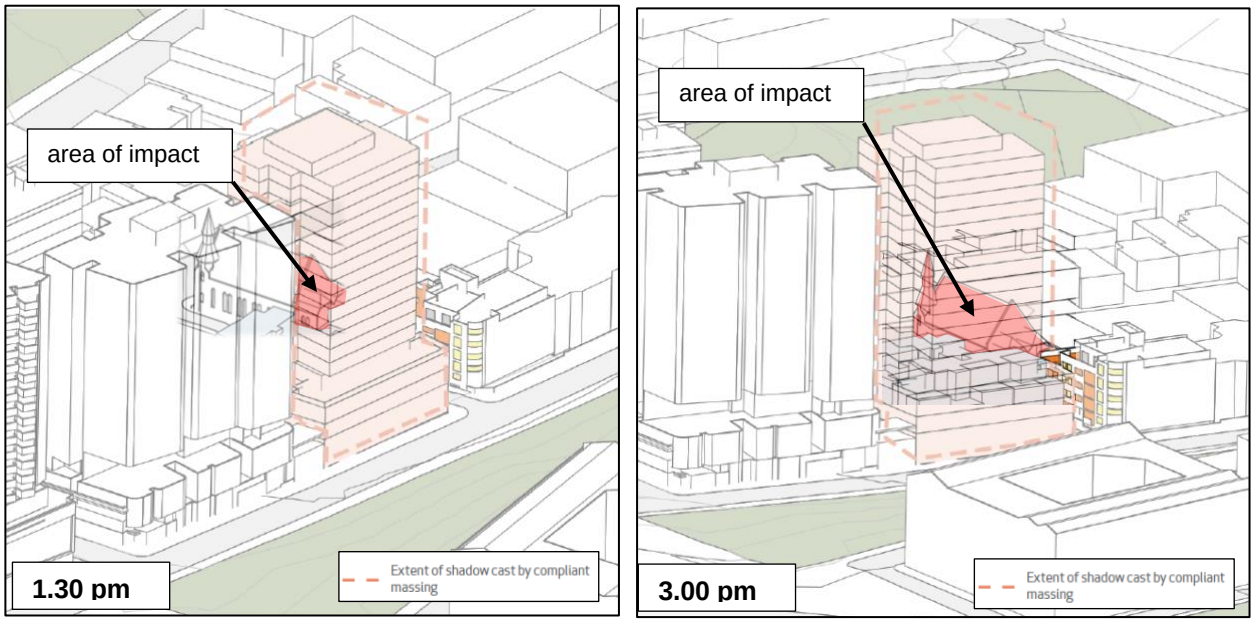

Figure 11: Afternoon Winter Sun View Diagrams showing impact of the amended proposal on St Lukes Church Building
(source AJ+C Architects)

3.7.3 1 Margaret Street

The apartment building at 1 Margaret Street is also located directly to the south of the site and therefore overshadowing impacts are inevitable under any development of the site. Shadows to the living room windows and balconies of the units at 1 Margaret Street have been extensively examined in the Supplementary Design Report at **Appendix D**. The results are shown in **Figure 12**.

Solar Access Comparison

This analysis calculates hours of sunlight received between 8am - 4pm.
NOTE: At least 1sqm of an opening must receive sunlight to be counted

			Number of hours			Comparison	
Apt	Window	Room Type	Existing	Complying	Proposed	Proposed Against Existing	Proposed Against Complying
1	1.1	LIVING	2.75	2.5	2.75	0	+0.25
	1.2	P.O.S.	0	2.5	3	3	+0.5
2	2.1	P.O.S.	1	0.5	1.25	0.25	+0.75
3	3.1	P.O.S.	2.5	1.5	1.75	-0.75	+0.25
	3.2	LIVING	4.5	3.75	3.75	-0.75	0
5	5.1	LIVING	2.75	2.5	2.75	0	+0.25
	5.2	P.O.S.	3.25	2.5	3	-0.25	+0.5
6	6.1	P.O.S.	1.75	1	1.5	-0.25	+0.5
	6.2	LIVING	0.75	0	0.25	-0.5	+0.25
7	7.1	P.O.S.	2.75	1.75	2	-0.75	+0.25
	7.2	LIVING	4.75	4	4	-0.75	0
9	9.1	LIVING	2.75	2.5	2.75	0	+0.25
	9.2	P.O.S.	5.75	2.5	3	-2.75	+0.5
10	10.1	P.O.S.	6.75	2.75	3	-3.75	+0.25
	10.2	LIVING	4	0.5	1	-3	+0.5
11	11.1	P.O.S.	4.5	3.5	3.5	-1	0
	11.2	LIVING	5.5	5	5	-0.5	0
13	13.1	P.O.S.	8	5	6	-2	+1
	13.2	LIVING	8	2.75	3.75	-4.25	+1
14	14.1	P.O.S.	7.5	3.75	4	-3.5	+0.25
	14.2	LIVING	6.5	5.25	5.25	-1.25	0
16	16.1	P.O.S.	7.75	4.75	5.75	-2	+1
	16.2	LIVING	8	5.25	5.25	-2.75	0

Figure 12: Solar Access to 1 Margaret Street
(source AJ+C Architects)

The above results demonstrate that of the 12 units affected by the proposed development, 8 units will maintain more than 2 hours of solar access (and in many cases, substantially more) to both private open space areas and to living room windows at mid-winter, consistent with levels of amenity expected under SEPP 65 and the ADG.

Of the remaining four units which do not receive 2 hours of solar access to both living rooms and private open space in mid winter:

- One (Unit 2) will receive slightly improved levels of solar access compared to the existing situation, with sunlight to the balcony increasing from 1 hour to 1.25 hours under the proposal,

- One (Unit 3) will only slightly fall short of recommended minimum levels to the balcony (receiving 1.75 hours of sunlight) but will still receive very good levels (3.75 hours) to living room windows,
- One (Unit 10) will receive good levels of solar access (3 hours) to the balcony and some sunlight (1 hour) to living room windows, and
- The remaining unit (Unit 6) will still receive some sunlight to both the balcony (1.5 hours) and living room windows (0.25 hours) with better levels of solar access achieved at other times of the year.

Importantly, these results also demonstrate that the proposal results in better outcomes to solar access to all affected units at 1 Margaret Street compared to a 'compliant' scheme built strictly in accordance with the planning controls.

The proposal is therefore considered to retain in a reasonable level of solar access to units at 1 Margaret Street given the planning controls which apply to the site and the location of the residential units immediately to the south of the site.

3.7.4 The National Centre of Indigenous Excellence playing field, 160-202 George Street

The playing field will be affected by shadows from the development from 2.30 pm onwards at mid-winter. However, the extent of the shadowing is not significant, and as can be seen from **Figure 13**, shadow impacts are less than impacts of an alternative 'compliant' scheme. Despite shadowing from the proposal, the entire field will receive at least 6 hours of solar access daily at mid-winter with most of the field (83%) receiving more than 7 or more hours of solar access.

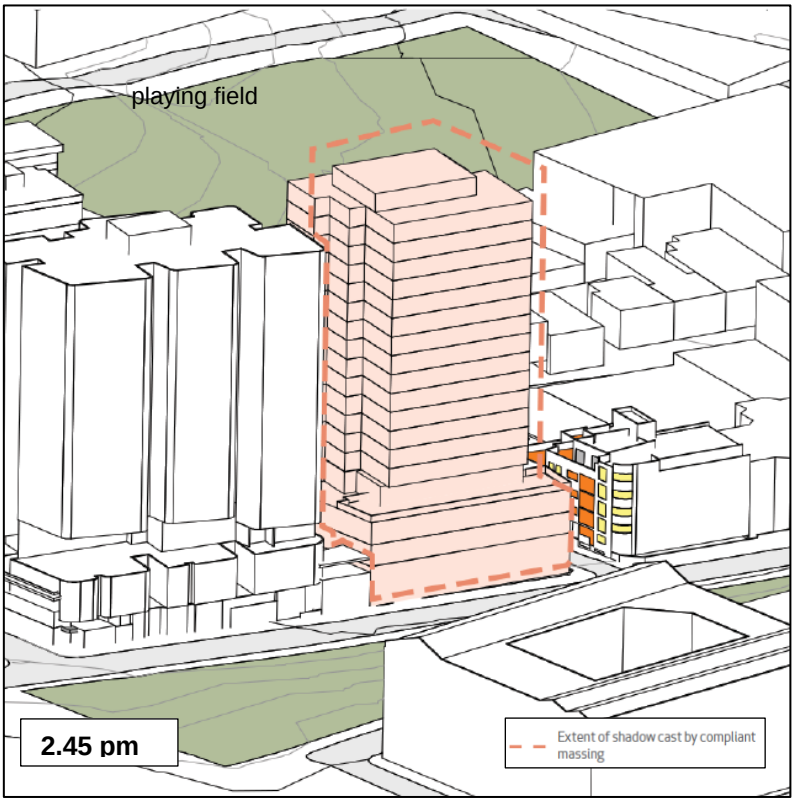

Figure 13: Afternoon Winter Sun View Diagram showing impact of proposal (coloured orange) and impact of compliant scheme (orange dash) on Playing Field
(source AJ+C Architects)

3.8 Key Issue 8: Wind

Department's Issue:

(a) Provide a Wind Impact Analysis comparing the wind impacts of the proposed design and a design compliant with the required height and setbacks.
(b) Further investigation is required into design features to mitigate potential wind impacts

A revised wind impact analysis has been provided based on the amended scheme, as well as an analysis of the potential impacts of a compliant scheme: refer to **Appendix I**. The assessment outlines the existing wind conditions in the locality and based on a wind tunnel test, assesses the impact of the proposed building and a 'compliant' building on outdoor areas within and surrounding the site. The report finds that the proposed development would be comparable wind-wise compared to a 'compliant' scheme and in fact overall, it would perform slightly better than a compliant design. Key findings include:

The through site link: Expected peak annual gusts range from 10 m/sec to 12.5 m/sec and are all below the 13m/sec level suitable for standing – waiting – window shopping. Given the testing did not include the proposed landscaping or the public artwork canopy, actual impacts are likely to be less, ensuring a very comfortable wind environment within the link.

Gibbons Street footpath adjoining the site: Expected peak annual gusts range from 14.5 to 16 m/sec. This will result in a better outcome than both existing conditions (14 - 18 m/sec) and a compliant scheme (14 – 18.5 m/sec). Wind levels will comply with the 16m/sec level considered suitable for walking comfort. Given that this section of Gibbons Street is not developing as a shopping street, but primarily a pedestrian thoroughfare, the 16m/sec walking comfort level is considered appropriate and a lower level suitable for window shopping is not required. However, given the testing did not include the existing and proposed street tree plantings and site landscaping, actual impacts are likely to be less and closer to the 13m/sec level suitable for standing – waiting – window shopping in any case.

Margaret Street footpath adjoining the site: Expected peak annual gusts range from 19 to 21 m/sec. This will result in windier conditions than the existing development (13 - 17 m/sec) but slightly better conditions than a compliant scheme (19 – 21.5 m/sec). Importantly, compared to a scheme built strictly in accordance with the controls, which envisage a nil street setback, the proposed scheme includes setbacks which enable new street tree and on-site plantings which will assist to ameliorate wind impacts, further improving on the outcomes compared to a compliant development. Awnings have also been included on sections of the elevation where they will not interfere with plantings. Wind levels will remain comfortably below the 23m/s safety criterion level, and once the additional mitigation effects of podium and street level plantings are considered, pedestrian comfort levels would be acceptable, especially given the very short distance pedestrians would need to travel along this section of Margaret Street.

Level 4 Podium: Expected peak annual gusts range from 13 to 18 m/sec. The revised design results in improved wind conditions compared to the original scheme (12 to 21.5 m/sec). Although wind in the central parts and southern parts of the podium will be comfortable (13 to 14 m/sec, or less, once mitigating effects of the proposed 28 new podium trees are factored in), significant wind conditions remain at the north-west corner (18 m/s before landscaping is factored in). To ameliorate these impacts the wind report recommends augmenting the proposed awing at the northern end of the roof terrace. This can be achieved by the erection of a 3-metre-high wind protection pergola structure, set just below and integrated with the architectural awning. This has been indicated on the landscape plans and an appropriate condition could be included on the approval. Subject to augmentation of the awning, and in conjunction with proposed tree plantings, the outdoor terrace can be expected to provide good levels of amenity.

3.9 Key Issue 9: View (Privacy)

Department's issue:

(a) A visual impact assessment is required to determine visual privacy impacts of the proposed development on 1 Margaret Street and 11 Gibbons Street.

A visual impact assessment, including consideration of visual privacy impacts has been included in the Supplementary Design Response at **Appendix D**. A detailed consideration of how privacy has been addressed on the elevations facing 1 Margaret Street and 11 Gibbons Street is set out below.

3.9.1 South Elevation facing 1 Margaret Street

Ground Floor and Podium Levels:
The proposal aims to strike the right balance between protecting the privacy of dwellings immediately opposite the site at 1 Margaret Street and good levels of visual connection between the site and the street, as this is considered important for street activation, casual surveillance and security as discussed in **Sections 3.4** and **3.5**.

The proposed podium provides greater setbacks than expected under the SSP SEPP and the UDPRC and therefore is likely to result in a better outcome for visual privacy than a development built strictly in accordance with the controls. The increased setbacks as compared to the controls allow for planting of two street trees (Watergums to a mature height of 7 metres) as well as setback plantings including a native frangipani which will assist with softening direct view lines between the sites.

Vertical screens are proposed for the ground floor common room windows and south facing bedrooms at Levels 2 and 3 to redirect view lines, and maintaining views of the street, but reducing direct overlooking between the two sites (**Figures 14** and **15**). Obscure glazing is also proposed for corridor and secondary windows at Levels 2 and 3.

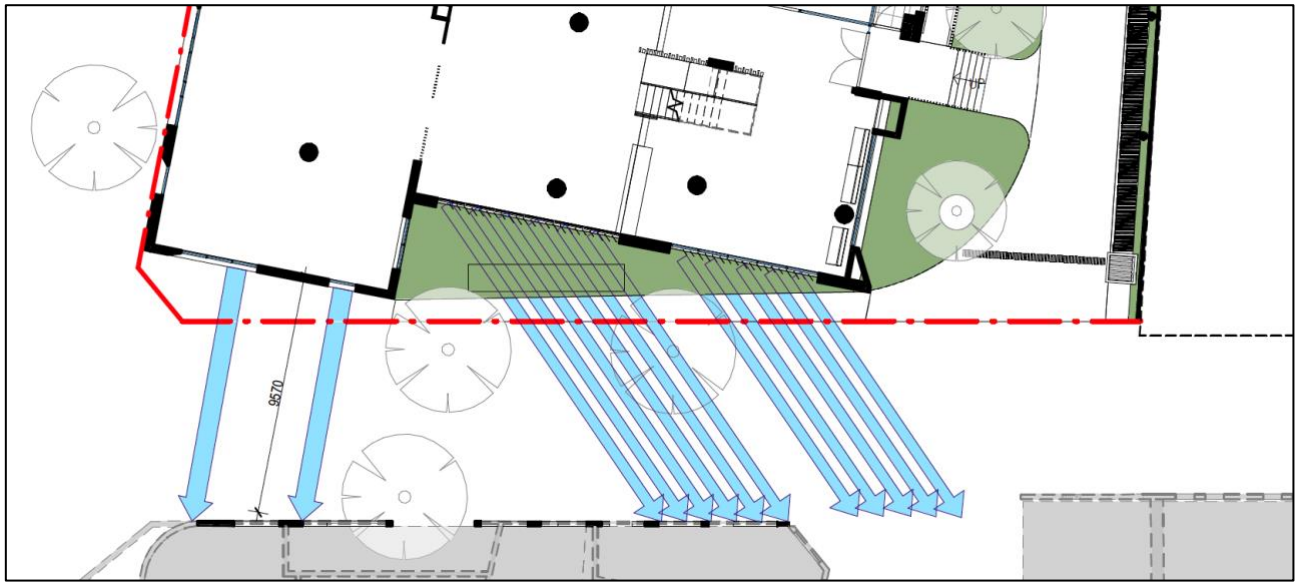

Figure 14: View lines at Ground Floor level
(source: AJ+C Architects)

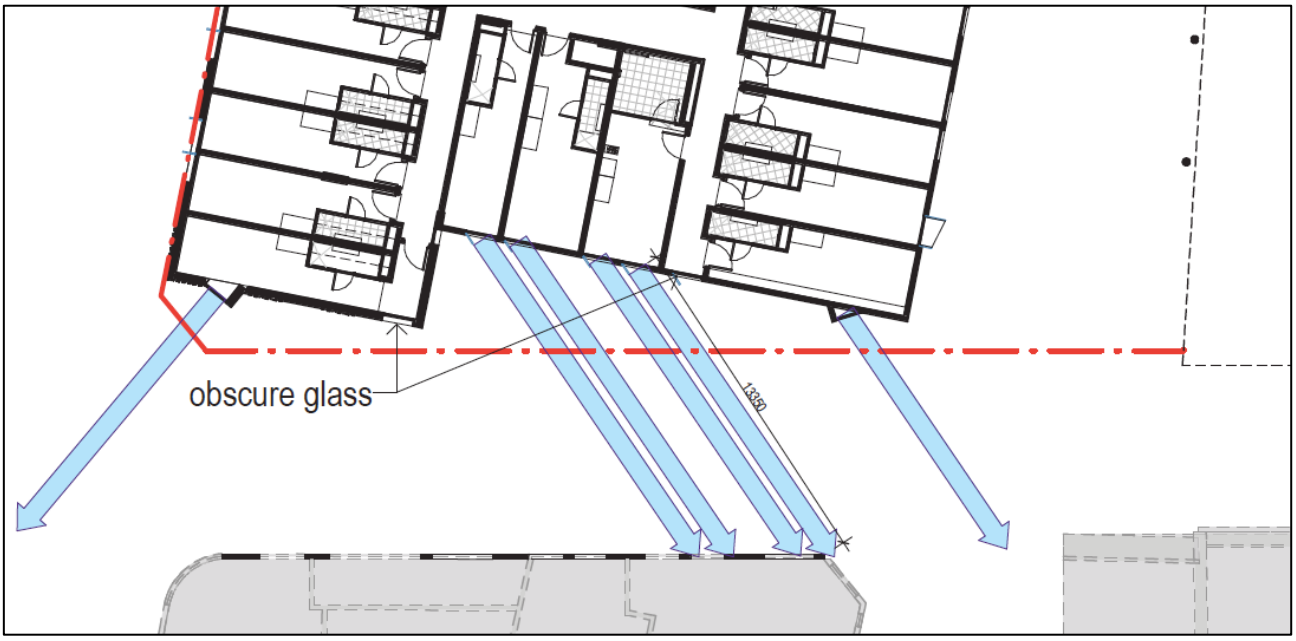

Figure 15: View Lines at Levels 2 and 3
(source: AJ+C Architects)

Overall, as compared to the existing development on the site (**Figure 16**), the proposed podium (**Figure 17**) would result in less opportunities for direct overlooking of 1 Margaret Street but will improve street activation due to the inclusion of the double height ground floor common areas with outlooks towards the street.

Figure 16: Southern façade of existing building showing 25 windows and 8 balconies in the southern elevation
(source: Google Street View)

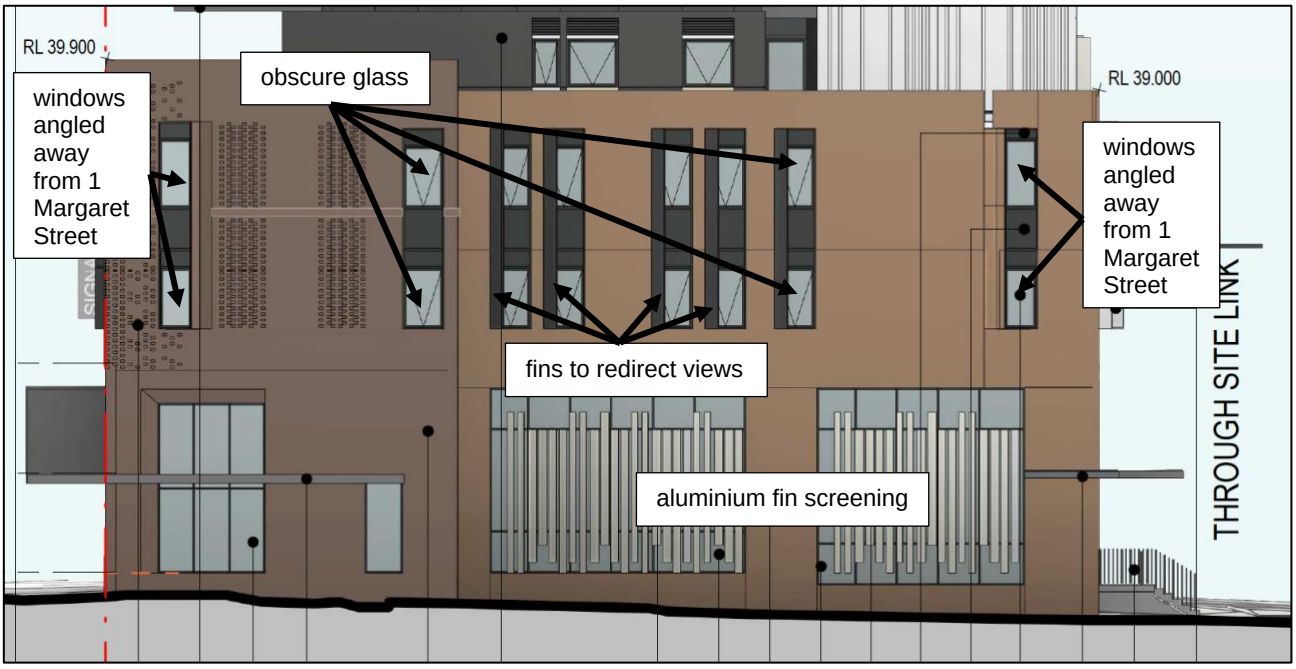

Figure 17: Proposed southern façade of podium showing 20 windows, many with privacy treatments
(source: AJ+C Architects)

Level 4 / Terrace:
The number of south facing windows at Level 4 has been reduced (from 7 bedrooms to 2 bedrooms). Views from the remaining bedrooms towards 1 Margaret Street would be restricted as windows would be setback from the podium parapet. Further, windows would be setback more than 12 metres from the adjoining site, exceeding expectations for building separation and privacy under SEPP 65 and the ADG at this level. High walls and dense landscaping to the southern end of the Level 4 terrace including seven new trees would also ensure there would be no overlooking of 1 Margaret Street from the terrace area.

Tower:
Windows in the southern façade of the tower would generally overlook the roofs of premises towards the south and would not cause significant privacy impacts. Although it would be possible to overlook some roof terraces in this direction, including terraces at 1 Margaret Street, any 18-storey development on the site would enable views of the roofs and roof terraces in this direction. It should be noted that:

- windows in the amended scheme all exceed the 4-metre tower setback control on this elevation and therefore would exceed expectations for privacy on this elevation compared with a compliant development, and
- the amended scheme has re-oriented rooms so that the number of windows in this elevation has been reduced as much as possible (reduced to 2 rooms per level).

3.9.2 North elevation facing 11 Gibbons Street

Podium:
The previously proposed north facing external common open space areas at Levels 2 and 3 have been deleted to improve privacy outcomes for the adjoining site to the north. Rooms at Levels 2 and 3 would be primarily oriented away from the adjoining site to the north. The two rooms on each level which face towards 11 Gibbons Street are well setback from the site boundary and separation between habitable

rooms would be 12.4 metres, exceeding expectations for separation and privacy under SEPP 65 and the ADG.

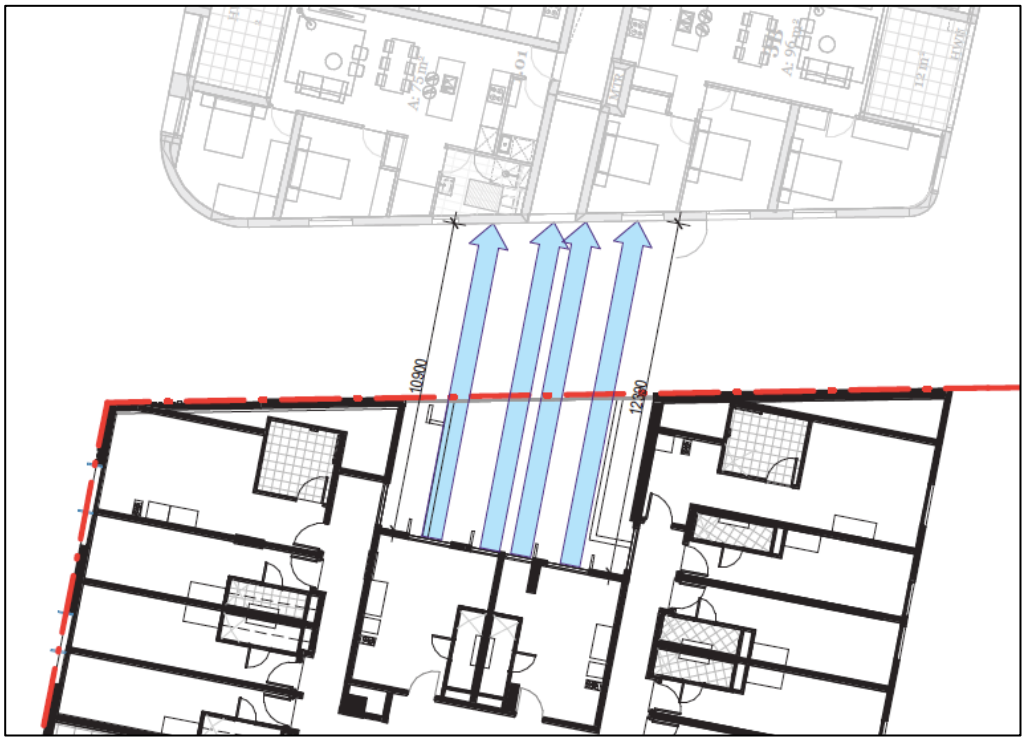

Figure 18: View Lines at Levels 2 and 3
(source: Supplementary Design Report, AJC Architects)

Level 4 / Terrace:
Only 1 bedroom at Level 4 has a window facing the adjoining development. The window would be offset from the bedroom on the adjoining site and would have a separation of 13.9 metres, exceeding expectations for separation and privacy under SEPP 65 and the ADG. It is also noted that the affected window on the adjoining site is a secondary window only and is required to be constructed of translucent glass, so there could be no direct views between the two sites.

High walls and dense landscaping to the northern end of the Level 4 terrace including nine new trees would also ensure there would be no overlooking of 11 Gibbons Street from the terrace area.

Tower
In the revised scheme, bedroom windows in the northern elevation are limited to one window on each level as rooms are primarily oriented away from the adjacent development (**Figure 19**). That one window would have a separation of 14.1 metres from the building at 11 Gibbons Street, however, it would be offset from the bedroom window opposite and proposed fins would ensure views are directed away from that bedroom window. Further, and regardless of any privacy treatments to windows on the proposed development, all south facing windows in the tower of 11 Gibbons Street are approved as secondary windows only with translucent glass. As such there could be no opportunity for any overlooking between the two sites.

In addition to the bedroom window, two hallway windows would be provided for light and ventilation, but these would be constructed of obscure glass to eye level to further ensure no overlooking of the adjoining development.

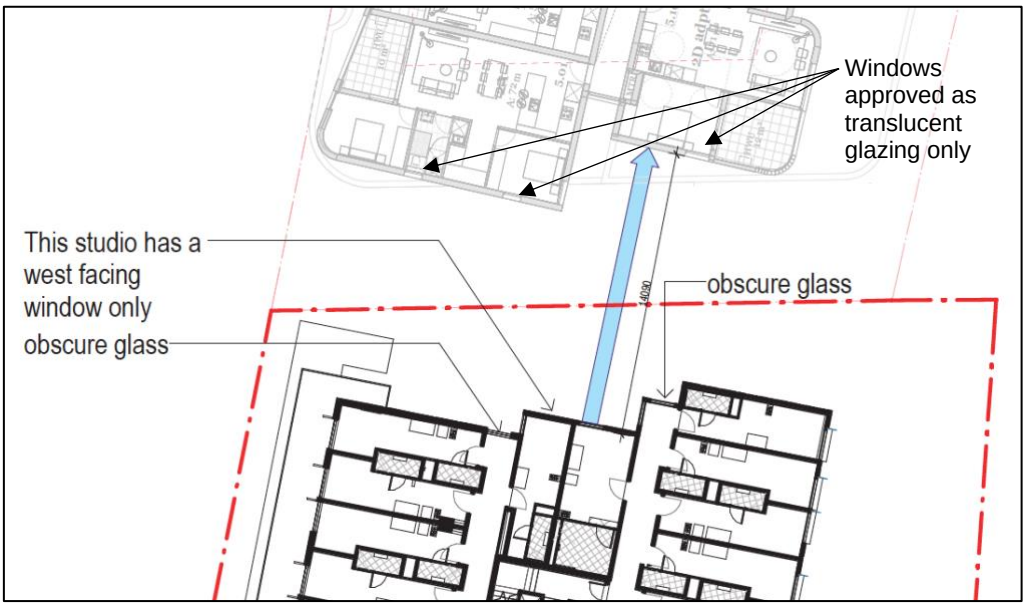

Figure 19: Tower View Lines
(source: Supplementary Design Report, AJC Architects)

As the proposed design, in conjunction with the approved design of 11 Gibbons Street, ensures there is no possibility of overlooking between the two sites, the proposal results in no impacts for privacy. A greater northern setback, such as that expected under a 'complying' scheme, would make no perceptible difference in terms of privacy.

3.10 Key Issue 10: Communal open space and room size

The Departments Issue:
(a) Further consideration shall be given to increasing student room sizes to provide enhanced living and amenity opportunities.
(b) The communal open space areas are to be improved to include landscaping, amenities and connectivity, including consideration of providing roof top communal open space.

3.10.1 Room Size

A detailed breakdown of the floor areas for each room type is provided in Section 4.4 of the Supplementary Design Report (**Appendix D**) which also demonstrates that all room sizes have been increased as follows:

- Ensuite rooms (including bathroom but no kitchen) have increased from 13m² to 17.5m²,
- Typical studio rooms (including bathroom and kitchenette) have increased from 15m² to 15.5m², and
- Other studio rooms (including bathroom and kitchenette) range in size from 15.7m² to 28.4 m² and also exceed the sizes originally sought.

Overall the proposal incorporates a range of different room sizes to suit different needs. Although the typical studio room (15.5m²) would still be smaller than the room size recommended by Council's DCP (16.9m²), the proposed range of room sizes is considered acceptable for the reasons previously outlined in the original EIS being:

- The rooms are well designed, with custom-made built-in furniture which is designed to maximise storage and make efficient use of the space,
- The rooms have generous floor to ceiling heights of 2.7 metres (and 3.2 metres at lower levels) which exceed minimum requirements for boarding houses and provide a feeling of spaciousness.
- The rooms are provided with large windows which also add to the amenity of the room and result in a less 'enclosed' feeling,
- The controls apply to all boarding houses, but students have different needs to typical residents in a boarding house, usually residing for shorter periods of time, and typically spending less time alone in their rooms and more time socialising and using common areas,
- The smaller room size is offset by increased areas of communal living space, communal kitchen and dining space and communal outdoor spaces, which all exceed the areas recommended by the DCP and ARH SEPP,
- The site is well located in an inner-city area with immediate access to a park opposite the site and numerous cafes in close proximity, which add to the amenity of the accommodation and provide further alternative spaces for study and leisure time,
- The Department has recently approved other student housing developments with similar sized rooms, including at the University of Sydney (SSD 7417) (581 rooms between 10m² and 11m²) and Darling Harbour (SSD 7133) (372 rooms 10.9m²) indicating that smaller room sizes can still provide reasonable levels of amenity, and
- Other jurisdictions in Australia typically allow for smaller room sizes, including 7.5m² in Victoria, Queensland, Northern Territory and 9m² - 10 m² in the ACT, indicating that smaller room sizes can still provide reasonable levels of amenity.
- Smaller rooms result in the provision of greater housing supply as well as more affordable housing, consistent with strategic planning objectives.

3.10.2 Communal Open Space

The revised scheme also includes a substantial improvement to communal open space. The previously proposed north facing terrace and balcony on Levels 2 and 3 have been deleted in favour of improvements to west facing open space areas on levels 2, 3 and 4. The originally proposed north facing open space areas would have had limited amenity due to the location of the neighbouring development to the north which would entirely overshadow, enclose, and restrict any outlook from the proposed spaces. Instead the revised scheme includes improvements to the size, dimensions and layout of the west facing balconies and terrace and Levels 2, 3 and 4. These areas will enjoy good levels of solar access and extensive outlook towards the park opposite and beyond.

The design of these open space areas has also been improved as shown in the Landscape Plans at **Appendix E** with significant additional podium level tree planting now proposed (refer to **Section 3.12** below).

Overall the quantum of open space (207m^2) significantly exceeds the minimum requirement of 20m^2 specified by Council's DCP.

Roof top communal open space is not proposed as the roof space is required for provision of photovoltaic cells and ventilation outlets.

3.11 Key Issue 11: Heritage

The Departments Issue:
(a) The proposed development should provide greater setbacks to Margaret Street to maintain sufficient separation to St Luke's Presbyterian Church. Any encroachment is to be justified within the context of heritage impact.
(b) A photomontage is required from view Plate 17 to demonstrate the view westward along Margaret Street.
(c) The arched 'feature window' proposed on the south east-facing elevation is likely to detract from St Luke's Presbyterian Church and should be reviewed.

A photomontage from view Plate 17 is provided in the visualisations at **Appendix C** and shown in **Figure 22** below. The arched feature window has been also removed in the revised RTS design.

The RTS has also revised the design of the building so that both the podium and the tower will be setback further from the former church than the original proposal.

Overall, the amended proposed setbacks represent a significant improvement from the planning controls which apply to the site and which do not seek a setback from the former church, but rather, envisage a podium built to the eastern and southern boundaries, which would result in a setback of 7 metres from the church.

Further, the proposed building arrangement results in an improved area of visual curtilage for the church as compared to the existing development on the site. The existing building on the site has a setback of 10.7 metres from the church at its closest point. The proposed podium would also have a setback of about 10.7 metres, but increases the visual curtilage of the church, particularly as viewed from the front of the church on Regent Street, due to the reduction in building massing in the area proposed for the through site link. That is, as viewed from Regent Street the proposed building would be further away, and therefore more in the background of views of the church as compared to the existing building (refer to **Figures 20** to **22**).

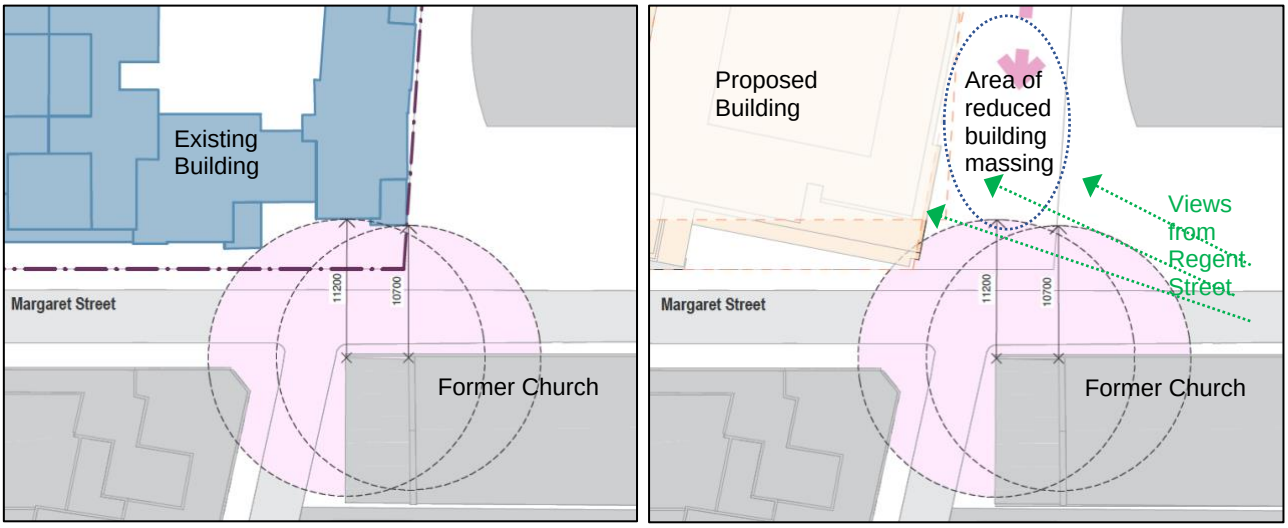

Figure 20: Existing (left) and Proposed (right) setbacks from Church building
(source: AJ+C Architects)

Figure 21: Existing Building as viewed from Margaret Lane near Regent Street
(source: Richard Lamb & Associates)

Figure 22: Revised Proposal viewed from Margaret Lane near Regent Street.
Building massing located further west and away from the view point than existing development.
(source: AJ+C Architects)

3.12 Key Issue 12: Landscaping

Department's issues:
(a) Provide an arborist report to identify all trees to be removed and their significance.
(b) The landscape plan is to be updated to include a schedule of replacement tree plantings including species, pot size, location and size at maturity.
(c) Further detail is required for the landscaping to the communal open space areas.
(d) Further detail is required regarding the proposed rain garden, it's purpose and how it will benefit the development.

An Arborist Report has been prepared and is provided at **Appendix F**. It identifies 19 trees would need to be removed, including 3 street trees and 16 trees on the site. The existing trees on the site are all small trees (5 to 7 metres in height) and have generally been assessed as having low retention value. Three London Plane trees 9 to 12 metres in height located on Gibbons Street are also recommended to be removed as the proposed development would adversely impact on the canopy of the trees. The street trees are also assessed as having low retention value as much of the canopy has already been removed during previous pruning for overhead powerlines.

Replacement planting is proposed in the updated Landscape Plan (**Appendix E**), including 26 new trees, consisting of:

- 5 street trees on Gibbons Street and Margaret Street (London Plane Trees and Water Gums),
- 5 new trees at Ground Level on the site (Native Frangipani), and
- 16 additional trees on the Level 4 Terrace (Water Gums and Tea Trees).

Species, pot size, location and size at maturity are all indicated on the plans.

As recommended by the City of Sydney, proposed new street trees would be London Plane trees on Gibbons Street and Water Gums on Margaret Street in order to align with the City of Sydney Street Tree Master Plan.

As requested, the updated Landscape Plan also provides detail of the landscaping of the communal open space areas, including details of materials, furniture, wall and balustrade heights and planting arrangements.

Two Filterra garden beds are proposed. Stormwater runoff will be directed though the beds which incorporate multiple natural treatment systems to remove pollutants. Treated water will then drain to the OSD tank and then to the stormwater system. A detailed description of the treatment process is set out in the Stormwater Management Report at **Appendix R**.

3.13 Key Issue 13: Noise

The Department's Issue:
Provide details of mechanical ventilation and demonstrate on architectural plans, consistent with the recommendations in the noise report.

Refer to **Key Issue 16** below for details of mechanical ventilation. Mechanical ventilation has been considered by the Acoustic Engineer at **Appendix J** who has certified that the design is in accordance with normal engineering practice to meet the requirements of Clauses 87 (rail noise) and 102 (road noise) of State Environmental Planning Policy (Infrastructure) 2007.

3.14 Key Issue 14: Retail Strategy

The Department's Issue:
(a) Provide further information regarding the future use of the retail space.
(b) Provide further information regarding the use and operation of the bicycle repair station.

As stated in the EIS, the Applicant is not seeking approval for use of the retail space. The future use of the space is not yet known and will be dependent on the future tenant. The zoning permits a range of uses and it is expected that the use will be subject to a future, separate DA to Council and in accordance with the planning controls applicable to the site.

The Applicant is also no longer seeking approval for a commercial bicycle repair workshop. The bicycle repair facility was included in the original application to assist with activation of the laneway while providing a service for future occupants and neighbours of the site. Further investigations have revealed it is not viable to staff the facility as part of the student housing operation or secure a tenant to operate the small facility.

The RTS scheme retains a small bike storage and repair space at the ground floor level, with an opening to the through site link. It is now intended that this space is for the communal use of the residents only. Bicycle repair facilities (workbench, pump, basic tools) will be included for use of the residents.

However, as discussed in detail in **Section 3.4**, the revised RTS scheme significantly improves the sense of activation along the through site link, with increased communal student areas addressing the link, including new communal terrace area and extensive mezzanine study area. The amount of student activity and casual surveillance between these communal areas and the through site link is expected to provide a much greater sense of activation than the small bike repair area previously proposed.

3.15 Key Issue 15: Laundry Facilities

The Department's Issue:
The submitted justification for provision of 10 washing machines (ratio of 1 per 49 students) and 10 dryers refer to the 'Applicants' experience with other student developments', however the Applicant does not manage student accommodation developments. It appears there is also sufficient space within the basement to accommodate more machines

The modified proposal retains 10 washing machines and 10 dryers, resulting in a ratio of 1 machine per 42 students.

The Applicant has extensive international experience in developing Student Accommodation buildings to meet the needs of the market, both internationally and within Australia.

In addition, its washing machine supplier, GC Laundry Equipment also has been supplying laundry equipment for over 15 years to Student Accommodation sites. A report from GC Laundry Equipment is included at **Appendix T** and demonstrates that based on past experience at a rate of 1 machine per 50 students, their washing machines on average complete 3.35 wash cycles each per day and dryers 2.58 cycles each. The cycle time for each washing machine is 25 minutes and for each dryer it is 30 minutes. As such, each machine is in use for about 1 hour and 20 minutes every day. Based, on this experience, the proposed rate of 1 machine per 42 students would be more than adequate to meet student needs.

As described in the EIS, the machines have very large capacities of 9.1 kg and 14 kg respectively so that most students would not need to wash more than once a week, possibly less, inclusive of towels and

bedlinen. However, even if each student each did two loads of washing per week, and the site was at full capacity, each washing machine would only be in use for on average 5 hours per day, ensuring plenty of capacity to meet student's needs.

While there is additional space within the laundry, it is proposed to use some space for temporary storage of washed / dried loads to allow students to empty unattended but finished loads to reduce wait times for the machines.

3.16 Key Issue 16: Mechanical Ventilation

The Departments Issue:
Provide details as to how each room will be mechanically ventilated.

A Statement from the Mechanical Engineer is provided at **Appendix O** and provides the following advice:

> *Each room will be provided with mechanical ventilation through roof mounted fans, the fans will connect to ductwork risers which will reticulate down the building in the riser shaft located between each SOU bathroom. Each individual riser will provide outside air to two (2) SOU per level. The fans on the roof will be arranged to achieve separation clearances to all discharges. Rooms located on Mezzanine Ground and basement will be provided with outside air ducted from various locations on the façade, including rooms like the cinema, gym and basement rooms, where rooms are provided with exhaust, make-up air will be drawn from the adjacent corridors.*
>
> *The main corridors in the tower will be provided with ventilation from the façade located at the end of each corridor.*

Mechanical ventilation details are also shown on Plan DA 5109 at **Appendix C**.

3.17 Key Issue 17: Access

The Department's Issue:
Provide entry and exit swept path diagrams for the longest vehicle to service the site in accordance with AUSTROADS.

Swept path diagrams are provided in **Appendix K** and demonstrate that the site can accommodate heavy rigid vehicles up to 12.5 metres in length as well as City of Sydney waste trucks.

3.18 Key Issue 18: Landowners consent and lot consolidation

The Department's Issue:
(a) Provide landowners consent.
(b) Provide a lot consolidation plan. Consideration is required to how the William Street lane will be managed, and any require easements.

Landowners consent is provided at **Appendix U**.

There is no requirement for lot consolidation. The existing Strata Plan will be extinguished in accordance with usual practice. Easements / rights of way will be included on the title ensuring public pedestrian access to the through site link and the 'widened footpath' on Margaret Street and can be dealt with by standard condition of consent.

The through site link will be managed and maintained by the operator of the site in accordance with the Operations Management Plan. As discussed in the EIS, the privately-owned land has been designed to be distinguished from Council owned land (through the use of different materials etc) which will assist with clearly delineating responsibility for maintenance and upkeep.

3.19 Key Issue 19: Quantity Surveyors report

The Department's Issue:
A Quantity Surveyors report is required for the proposed cost of works to determine the contributions amount under the Redfern Waterloo Authority Contributions Plan 2006. This is to be in accordance with Section 25J of the Environmental Planning and Assessment Regulation 2000.

Refer to **Appendix Q** for the QS Report which calculates the cost of carrying out the development, based on the revised scheme as $64,955,000.

3.20 Key Issue 20: Development Contributions

The Department's Issue:
The Department does not support the proposed exemption to the Redfern Waterloo Authority Affordable Housing Contributions Plan as Plan as student housing is not considered a form of affordable housing and the development would not be managed by a registered affordable housing provider or Family and Community Services

Agreed. The Applicant acknowledges the proposal does not strictly meet the exemption requirements and is no longer seeking an exemption from the Redfern Waterloo Authority Affordable Housing Contributions Plan.

3.21 Key Issue 21: Additional Plan Details

The Departments Issue:
The following additional plan details are required:
- *demonstrate the natural ground levels on the elevation plans*
- *the proposed awning is to be consistently shown across all plans*
- *demonstrate access points from the communal open space study areas on level 4 to the outdoor communal open space area*
- *provide a breakdown of the proposed area of communal open space*
- *demonstrate the total floor area of each room type and the floor area excluding the kitchenette and bathroom.*

The updated plans include all of the above requirements:
- Natural ground levels are shown on elevations in **Appendix C**
- Awnings are shown consistently on all plans in **Appendix C**
- The open space access is shown on Plan DA2003 in **Appendix C**
- A breakdown of communal open space is provided in the Supplementary Design Report (**Appendix D**). A total of 207 m² of communal open space is proposed including 39.5 m² on both the Level 2 and 3 balconies and 127.8 m² on the Level 4 terrace. An additional area of 18 m^2 is also provided adjacent to the ground floor kitchen.
- The breakdown of floor areas of each room type is provided in the Supplementary Design Report (**Appendix D**). Room size and amenity were also discussed above in **Section 3.10**.

4.0 Conclusion

This RTS has considered all the submissions made in response to the public exhibition of the proposed student housing development. A detailed response to each of the key issues raised in the submissions has been provided with this report and consideration of additional issues raised by public authorities and the public have been considered in **Appendix A** and **B** respectively.

Key concerns have been addressed by:

- reducing the overall scale of the proposal, including reducing the floor space to less than that permitted by the planning controls (the ARH SEPP) and reduction in the number of bedrooms
- improving setbacks to all boundaries,
- improving room sizes and internal amenity, re-orientation of rooms to improve privacy outcomes
- redesign of the though site link to enable tree plantings for improved amenity outcomes
- reduction in service space fronting the link,
- widening of the footpath on Margaret Street and incorporation of additional setback tree planting
- improvements to materials and façade detailing to add articulation and visual interest,
- redesign of ground floor plane, including improvements to building entries and incorporation of double height spaces and a mezzanine level to improve communal amenities and improve activation and the relationship with the adjoining public domain,
- improvements to communal open space design including improved planting and improved orientation and solar access,
- incorporation of additional ESD measures including photovoltaic cells, and
- removal of requested exemption from Affordable Housing Contributions.

It has also been demonstrated that the proposal results in a better outcome for urban design, the public domain and amenity of neighbours than an alternative scheme built strictly in accordance with the controls.

Overall the proposal is found to be worthy of support as it would:

- Provide a high-quality building that would contribute to the growth and vitality of the Redfern Centre in a manner consistent with that expected by the controls and the other emerging built forms in the Centre,
- Deliver public benefits and improvements for pedestrian amenity and circulation by the provision of a well-designed through site link,
- Provide high-density purpose-built student housing in close proximity to a number of universities, transport nodes and service centres, consistent with strategic planning policies aimed at improving housing supply, housing affordability and use of public transport, and
- Not result in any material adverse impacts to adjoining development or the locality beyond those expected by any development on the site built under the planning controls, and impacts can be effectively managed with standard conditions of consent and mitigation measures as identified throughout this report.

Accordingly, in the absence of any unacceptable environmental impacts, and the significant benefits for the Redfern Centre, benefits for the supply of housing and affordability, and general consistency with strategic and statutory planning objectives, the proposal is demonstrated to be in the public interest and approval of the proposal is warranted.