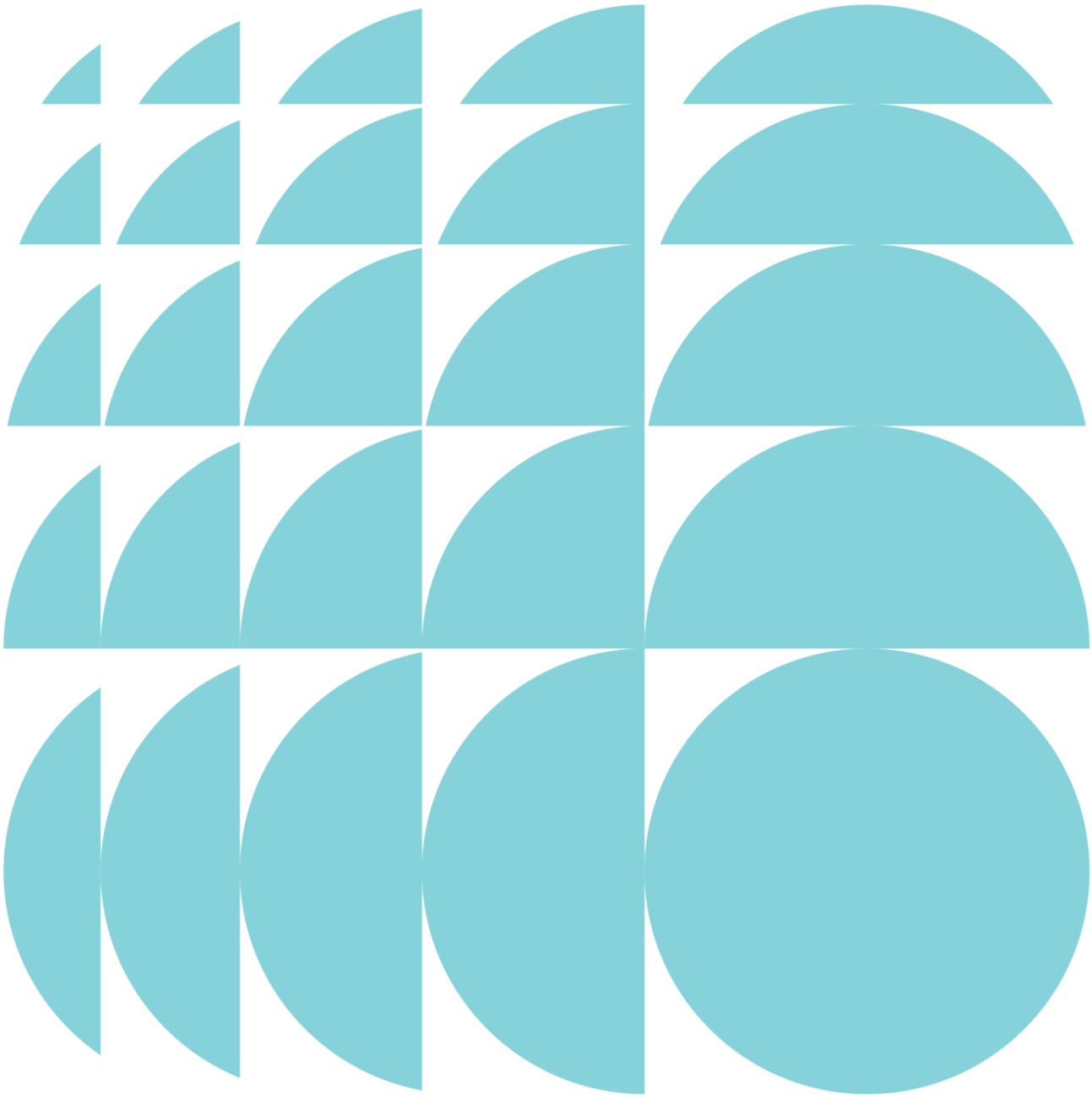
ETHOS URBAN

**State Significant Development Application**
**Environmental Impact Statement**

80-88 Regent Street, Redfern
Student Accommodation

Submitted to NSW Department of Planning and Environment
On behalf of Iglu Pty Ltd

13 September 2018 | 218001



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13 September 2018

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13 September 2018

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*Ethos Urban*

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*Ethos Urban*

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*Ethos Urban*

# Statement of Validity

| | |
|---|---|
| **Development Application Details** | |
| **Applicant name** | Iglu Pty Ltd |
| **Applicant address** | Level 4, 68 York Street, Sydney |
| **Land to be developed** | 80-88 Regent Street, Redfern |
| **Proposed development** | Student Accommodation as described in **Section 6.0** of this Environmental Impact Statement |
| **Prepared by** | |
| **Name** | Luke Feltis |
| **Qualifications** | B.Plan (Honours Class 1) MPIA |
| **Address** | 173 Sussex Street, Sydney |
| **In respect of** | State Significant Development - Development Application |
| **Certification** | |
| | I certify that I have prepared the content of this EIS and to the best of my knowledge:<br><br>it is in accordance with Schedule 2 of the Environmental Planning and Assessment Regulation 2000;<br><br>all available information that is relevant to the environmental assessment of the development to which the statement relates; and<br><br>the information contained in the statement is neither false nor misleading. |
| **Signature** |  |
| **Name** | Luke Feltis |
| **Date** | 13/09/2018 |

# 1.0 Executive Summary

**Purpose of this Report**

This submission to the Department of Planning and Environment (the Department) comprises an Environmental Impact Statement (EIS) for a Development Application under Part 4 of the Environmental Planning and Assessment Act 1979 (EP& A Act). It relates to the development of student accommodation at 80-88 Regent Street, Redfern.

Development within the Redfern Waterloo Sites with a Capital Investment Value (CIV) of more than $10 million is identified as a State Significant Site in Schedule 2 of *State Environmental Planning Policy (State and Regional Development) 2011*. As the proposed development will have a capital investment value of $38,900,000 it is State Significant Development (SSD).

A request for the issue of Secretary's Environmental Assessment Requirements (SEARs) was sought on 12 April 2018. Accordingly, the SEARs were issued on 10 May 2018. This submission is in accordance with the Department's guidelines for SSD applications lodged under Part 4 of the EP&A Act, and addresses the issues raised in the SEARs.

**Overview of the Project**

This State Significant Development Application (SSDA) seeks approval for the development of a new mixed-use student accommodation facility. Specifically, the proposal involves:

- construction and use of an 18 storey building comprising:
  - 265 student accommodation beds within 185 units, arranged as follows:
    - 163 x studio units;
    - 6 x loft units; and
    - 16 x 6-bed cluster units.
  - communal student facilities including study areas, rooftop terrace and laundry facilities;
  - three ground floor retail tenancies;
  - a single commercial tenancy;
- landscaping works including terrace planting; and
- extension and augmentation of services and infrastructure as required.

The proposal will operate as an integrated facility with the adjoining Iglu building located to the north at 60-78 Regent Street which commenced operation in early 2018.

**The Site**

The site is located at 80-88 Regent Street, Redfern within the City of Sydney Local Government Area. The site is located at the southern fringe of the Sydney CBD and is in proximity to a number of regionally significant facilities and amenities including the Australian Technology Park, University of Sydney, University of Technology Sydney, Sydney Institute of TAFE, Central Park and Prince Alfred Park.

The site is generally square in shape and is comprised of five lots with a total area of 821.7m$^2$. The site has three road frontages including Regent Street to the east (26.6m), Marian Street to the south (31.7m) and William Lane to the west (26.6m). The site currently comprises a row of five two-storey attached terraces with ground floor retail tenancies and upper level office and residential uses. The terraces are currently unoccupied and are in poor condition.

Recent developments within the street block are typically 18 storeys in height, with the remainder of the surrounding area typically characterised by 2-4 storey medium density retail and residential development.

### Planning Context

**Section 6.0** of the EIS considers all applicable legislation in detail. The primary planning controls for the site are those specified under *State Environmental Planning Policy (State Significant Precincts) 2005* with additional design and planning parameters established under the Redfern Centre Draft Urban Design Guidelines.

Under the State Significant Precincts SEPP, the site is zoned 'Business Zone – Commercial Core', within which student accommodation is permissible with consent. The site is subject to an 18 storey maximum building height control with a two storey maximum street frontage height at Regent Street and a three storey maximum street frontage height at Marian Street.

The maximum Floor Space Ratio (FSR) for the site is 7:1. The proposed development contains an FSR of 8.7:1, accordingly a SEPP 1 objection to the FSR development standard accompanies this EIS.

The site is within the Business Zone – Commercial Core, which the Department of Planning and Environment has advised is not an equivalent land use zone to the relevant zones listed under the *State Environmental Planning Policy (Affordable Rental Housing) 2009.* Further to this, the Department of Planning and Environment wrote to the Proponent on 10 May 2018 to advise that the provisions and floor spaces bonuses of Division 3 of the Affordable Rental Housing SEPP are not applicable to this project.

The site is subject to a recent development consent (SSD 7080). On 22 November 2017, the (then) NSW Planning and Assessment Commission granted development consent SSD 7080 for an 18 storey mixed-use development comprising ground floor retail tenancies and 80 residential apartments. The approved development contained 5,754m$^2$ of GFA which equates to an FSR of 7:1. Further discussion is provided at **Section 2.2.3.**

### Environmental Impacts and Mitigation Measures

The proposed development is considered to represent a substantial positive contribution to the urban renewal of the Redfern centre, the renewal and redevelopment of which has been designated as being significant to NSW under the State Significant Precincts SEPP.

This EIS includes an assessment of the key planning and environmental impacts of the proposed development, including issues of built form and public domain, privacy, amenity (for both existing and future residents), development patterns, safety and security and ecologically sustainable development. In our professional opinion, the proposed development does not give rise to any environmental impacts that cannot be adequately managed through the imposition of standard conditions of development consent.

### Conclusion and Justification

The EIS addresses the SEARs, and the proposal provides for the development of an 18 storey mixed-use building providing ground level retail facilities and accommodation for up to 434 students. Given the planning merits of the proposal, the proposed development warrants approval by the Minister for Planning or the Ministers' delegate.

# 2.0 Introduction

This Environmental Impact Statement (EIS) is submitted to the NSW Department of Planning and Environment pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in support of an application for State Significant Development (SSD).

Development within the Redfern Waterloo Sites with a Capital Investment Value of more than $10 million is identified as a State Significant Site in Schedule 2 of *State Environmental Planning Policy (State and Regional Development) 2011*. As the proposed development will have a capital investment value of $38,900,000 it is SSD, and as a result an EIS is required.

The report has been prepared by Ethos Urban on behalf of Iglu Pty Ltd (Iglu) and is based on the Architectural Drawings and Design Report provided by Bates Smart and other supporting technical information appended to the report (see Table of Contents).

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning and Assessment Regulation* 2000 (EP&A Regulation), and the Secretary's Environmental Assessment Requirements (SEARs) for the preparation of the EIS issued on 10 May 2018, which are included at **Appendix A**. This EIS should be read in conjunction with the supporting information and plans appended to and accompanying this report.

## 2.1 Overview of Proposed Development

This State Significant Development Application (SSDA) seeks approval for the development of a new mixed-use student accommodation facility. Specifically, the proposal involves:

- site preparation works;
- construction and use of an 18 storey building comprising:
  - 265 student accommodation beds within 185 units, arranged as follows:
    - 163 x studio units;
    - 6 x loft units; and
    - 16 x 6-bed cluster units.
  - communal student facilities including study areas, lounge rooms, laundry facilities and a rooftop terrace;
  - three ground floor retail tenancies;
  - a single commercial tenancy;
- landscaping works including terrace planting; and
- extension and augmentation of services and infrastructure as required.

The proposal will operate as an integrated facility with the adjoining Iglu building located to the north at 60-78 Regent Street which commenced operation in early 2018.

## 2.2 Background to the Development

### 2.2.1 Iglu Student Accommodation Model

Iglu Pty Ltd is an Australian student housing operator with five existing facilities in Sydney, two in Brisbane and one in Melbourne. Iglu provides accommodation to students who are enrolled at Australian tertiary institutions. Iglu provides an environment for both international and domestic students to support their studies whilst promoting the social and community aspects of student living.

Iglu has a reputation of delivering high quality, architecturally designed buildings and is committed to continuing this into future developments. Architectural quality is an integral part of Iglu's positioning as a modern, vibrant student accommodation provider, and good design contributes directly to the amenity of its student residents.

A number of Iglu facilities are shown at **Figure 1** below.

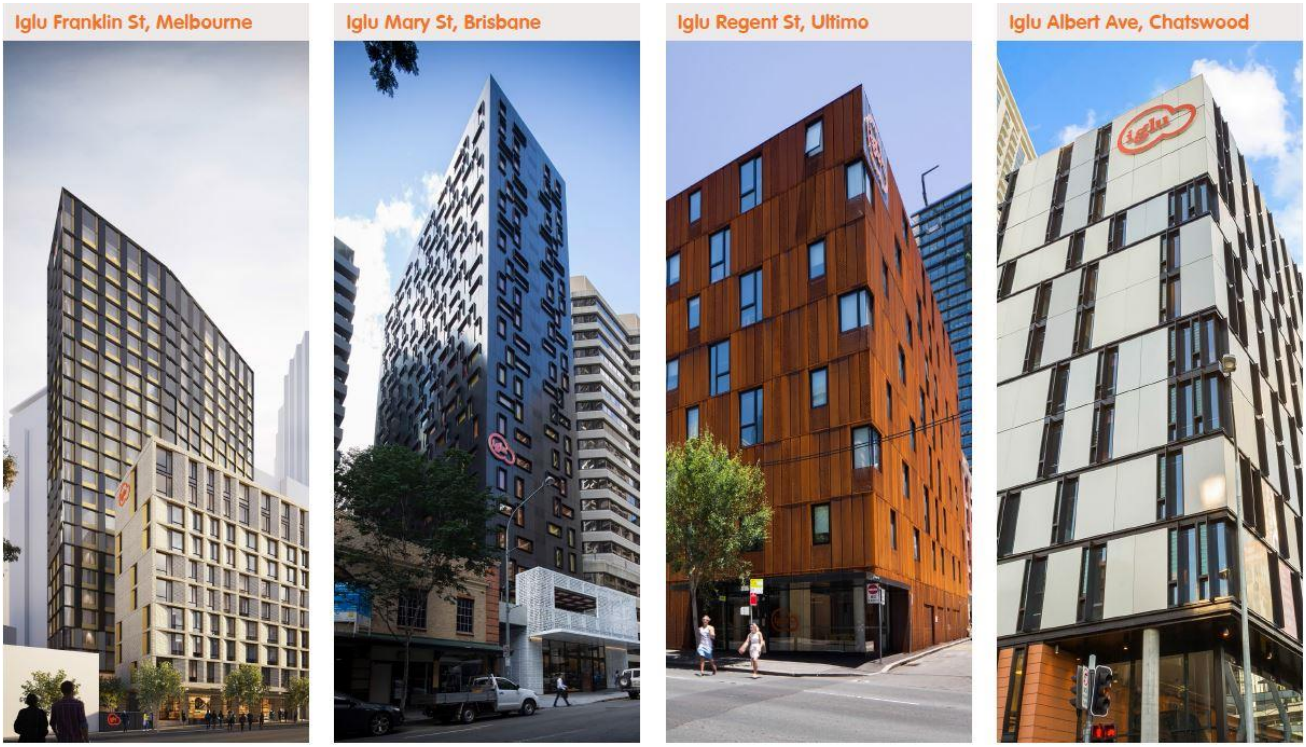



**Figure 1: Iglu's Australia developments**

*Source: Bates Smart*

### 2.2.2 Iglu 1 – 60-78 Regent Street, Redfern

On 25 August 2015, the (then) NSW Planning and Assessment Commission granted development consent SSD 6724 for a mixed-use student accommodation and retail development to be located on the adjoining site to the north identified as 68-70 Regent Street, Redfern. The originally approved development comprised:

- Partial retention of Regent Street facades and demolition of existing buildings within the site;
- Construction of an 18-storey building including student accommodation for 370 students;
- Ground floor retail and commercial tenancies;
- Provision of a through-site link; and
- Associated signage, streetscape improvements and landscaping, and extension of services and infrastructure.

There have been three modifications since the original approval. SSD 6724 Mod 1 facilitates a number of minor internal and external alterations and SSD 6724 Mod 2 relates to façade upgrades to the ground floor retail frontage. SSD 6724 Mod 3 allowed for the dual occupancy of the studio rooms within the facility which increased the maximum capacity of the building to 455 persons.

Construction of the building was finalised in January 2018 and the facility is now operational. A photo of the development is provided at **Figure 2** below. The proposed development is seeking to integrate with the adjoining Iglu development to function as the one site. The integrated function is an opportunity to diversify the room offerings and facilities available to the occupants, whilst creating spatial and operational efficiencies.

**Figure 2: Iglu Redfern at 68-70 Regent Street as viewed from Regent Street**

*Source: Bates Smart*

### 2.2.3 State Significant Development Application (SSD 7080)

On 22 November 2017, the NSW Planning and Assessment Commission granted development consent SSD 7080 for a mixed-use development on the site (refer to **Figure 3**). The approved development comprised:

- demolition of all existing structures on site;
- construction of an 18 storey mixed use residential and retail building comprising 56 residential apartments, a ground floor retail tenancy, and ground and first floor child care centre;
- four level basement car park for 60 car parking spaces;
- residential communal space on the roof top; and
- extension of services and infrastructure.

The proponent did not act on the approved development consent and Iglu subsequently purchased the site in late-2017.

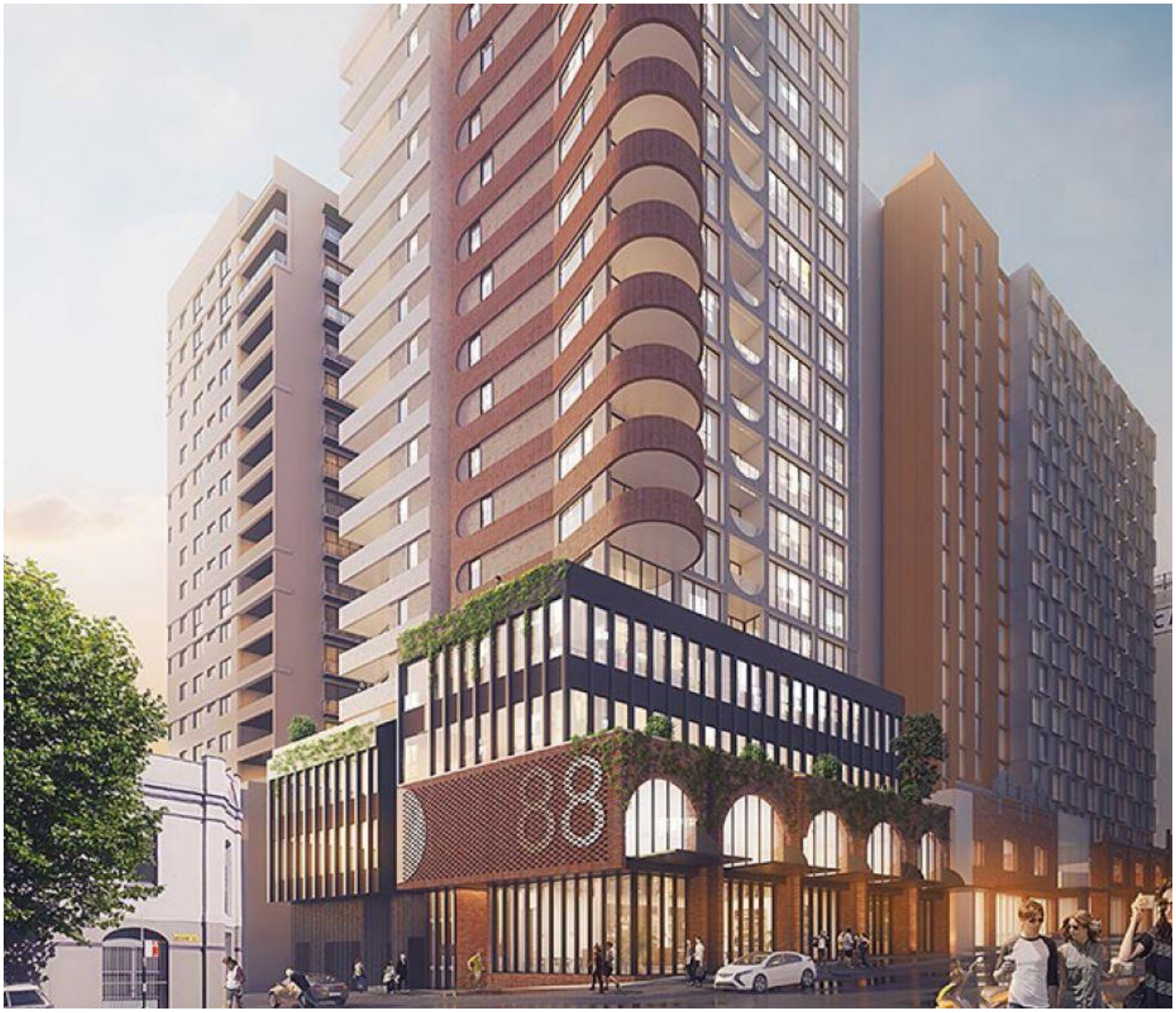



**Figure 3: Previously approved mixed-use development (SSD 7080)**

*Source: SJB*

## 2.3 Objectives of the Development

The objectives of the student accommodation proposal for 80-88 Regent Street, Redfern are to:

- Provide a building envelope that is materially consistent with the SSD 7080 approved envelope for the site;
- Provide student accommodation in close proximity to major tertiary education establishments;
- Provide student housing in a central location with close access to education facilities by walking, cycling and public transport;
- Ensure that appropriate communal facilities are provided on-site to support future students;
- Achieve a built form outcome for the site that is appropriate for its location and positively responds to surrounding buildings;
- Maintain ground level activation through the renewal of ground level retail facilities; and
- Integrate with the adjoining Iglu facility to facilitate diversified room offerings and communal amenities.

## 2.4 Analysis of Alternatives

### 2.4.1 Strategic need for the proposal

Sydney's universities rank highly in national and international comparisons, creating strong demand for housing from regional, inter-state and international students.

The education sector is critical not only in supporting education, but also in terms of its economic contribution to the Australian and NSW State economy. Student accommodation is also critical in allowing international and domestic students access higher education services provided in Sydney. Iglu's existing student accommodation in Sydney accommodates both domestic and international students.

Students typically have difficulties in competing for rental accommodation due to their lower income levels, lack of renting or credit history and shorter-term occupancy requirements and this creates a clear strategic need to provide student accommodation located in proximity to educational facilities, public transport and local services.

The 2015 Austrade report 'Growth and opportunity in Australian international education' states that Australia's onshore international education sector is forecast to grow from 650,000 enrolments today to 940,000 by 2025 and the international education sector's contribution to export earnings is expected to almost double to in excess of $33 billion by 2025.The subject site is uniquely located in close proximity to major tertiary education institutions such as the University of Sydney and University of Technology Sydney whilst also benefiting from near-direct access to the Sydney Trains network which provides connections to other major education establishments. Accordingly, there is significant demand for student accommodation beyond that anticipated during the establishment of the original planning controls.

The provision of purpose-built accommodation for students in proximity to major education facilities will also contribute to a reduction in competition for affordable rental housing stock in the Redfern and Waterloo areas. In the absence of more suitable accommodation, students often compete with low-moderate income households for more affordable rental properties, reducing their availability and placing upward pressure on rents. To address this, there is a need to substantially increase the supply of dedicated student housing in order to provide students with more appropriate accommodation options and free up private rental stock for other persons in need of accommodation.

### 2.4.2 Alternative Options

Iglu has acquired the site with the intent of providing student housing, based on strong demand for new accommodation and the site's proximity to major tertiary education providers, public transport and services. Notwithstanding this, the *Environmental Planning and Assessment Regulation 2000* requires an analysis of any feasible alternatives to the carrying out of the development, which is discussed below.

#### Do Nothing

This option would see the proposed development of the site be abandoned. It is likely that the site would be sold, and that alternative development options be sought. This would fail to address the strategic need for student housing identified above, and could impact on the attractiveness of major educational establishments in the area for new students. This option is therefore not considered viable.

#### Alternate Site Uses

If the site is not used for student accommodation, the most likely alternate development options for the site involve residential apartments in accordance with the current State Significant Development Consent discussed in **Section 2.2.3**. Given the proximity of the site to major universities, it is likely that a significant portion of this accommodation would in any case be informally used by students without the advantage of professional management or supervision, creating potential land use conflict.

There is not currently any strong demand for office accommodation in Redfern, given the availability of office stock in the established Sydney CBD employment centre and as evidenced by the proposed residential conversion of the former TNT Towers. Neither of these uses meet the identified strategic objectives, nor do they offer any unique opportunity that cannot be met on other sites throughout Sydney.

In light of the above, it is considered that there is a clear strategic need for the proposed student housing development, and alternatives are considered to be less desirable.

## 2.5 Secretary's Requirements

In accordance with section 4.39 of the EP&A Act, the Secretary of the Department of Planning and Environment issued the requirements for the preparation of the EIS on 10 May 2018. A copy of the Secretary's Environmental Assessment Requirements (SEARs) is included at **Appendix A**.

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

**Table 1: Secretary's Requirements**

| **Requirement** | **Location in Environmental Assessment** | |
|---|---|---|
| **General Requirements** | | |
| The Environmental Impact Statement (EIS) must be prepared in accordance with and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the Regulation). | Environmental Impact Statement | |
| **Key Issues** | **Report / EIS** | **Technical Study** |
| **1. Environmental Planning Instruments, policies and guidelines**<br>• Consideration of the relevant statutory provisions contained within the applicable EPIs, including:<br>- *State Environmental Planning Policy (State & Regional Development) 2011*<br>- *State Environmental Planning Policy (State Significant Precincts) 2005*<br>- *State Environmental Planning Policy (Urban Renewal) 2010*<br>- *State Environmental Planning Policy (Infrastructure) 2007*<br>- *State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)*<br>- *State Environmental Planning Policy No 64—Advertising and Signage*<br>- *State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development*<br>- *State Environmental Planning Policy (Affordable Rental Housing) 2009*<br>- *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017.*<br>• Consideration of the relevant provisions, goals and objectives in the following:<br>- NSW State Priorities<br>- Future Transport Strategy 2056 and associated plans<br>- Better Placed – An integrated design policy for the built environment of New South Wales.<br>- Guide to Traffic Generating Developments (RMS)<br>- Development Near Rail Corridors and Busy Roads<br>- The Greater Sydney Region Plan<br>- Eastern City District Plan<br>- Towards our Greater Sydney 2056<br>- Sydney Local Environmental Plan 2012<br>- Sydney Development Control Plan 2012<br>- Sustainable Sydney 2030<br>- Central to Eveleigh Urban Transformation Strategy<br>- Redfern-Waterloo Built Environment Plan (Stage One) August 2006<br>- Redfern-Waterloo Development Contributions Plan 2006<br>- Redfern-Waterloo Affordable Housing Contributions Plan 2006<br>- Redfern Centre Urban Design Principles<br>- Sydney's Cycling Futures<br>- Sydney's Walking Futures. | **Section 6.1** | N/A |
| **2. Design Excellence**<br>• A design excellence strategy shall be prepared in consultation with the NSW Government Architect, demonstrating how the proposal will achieve design excellence.<br>- if the proposed building envelope is materially outside the approved building envelope (SSD 7080) for the site, the strategy must provide for and outline the | **Section 6.1.1** | N/A |

| Requirement | Location in Environmental Assessment | |
|---|---|---|
| design competition process;<br>- if the proposed building envelope is otherwise within the approved building envelope (SSD 7080) for the site, the strategy must provide for and outline the design review process conducted by the State Design Review Panel. | | |
| **3. Built Form and Urban Design**<br>• An outline of the design process leading to the proposal with justification of the suitability of the site for the proposal.<br>• An urban design analysis with consideration of the proposed building form, height, setbacks, bulk and scale in the context of the immediate locality, the wider area, street activation and the desired future character of the area, including views, vistas, open space, the public domain and connectivity. | **Section 6.2** | **Appendix B**<br>**Appendix C** |
| **4. Building Use**<br>• A table identifying the proposed land uses including a floor-by-floor breakdown of GFA, total GFA and site coverage.<br>• Details of the proposed uses and operational details for each component of the development, including but not limited to:<br>- hours of operation<br>- patron capacity<br>- details of any music to be provided on the premises<br>- proposed lighting and illumination<br>- the relationship between the proposed uses of the building.<br>• A Plan of Management in accordance with the relevant City of Sydney Council guidelines where required. | **Section 4.4**<br>**Section 4.6** | **Appendix C** |
| **5. Amenity**<br>• Detail the impacts of the development on view loss, sunlight/overshadowing, wind impacts, reflectivity, visual and acoustic privacy to achieve a high level of environmental amenity<br>• Demonstrate any potential overshadowing onto the adjoining properties with shadow diagrams.<br>• Outline and address the proposed development's impacts in terms of safety and security, including consideration of Crime Prevention through Environmental Design (CPTED) principles.<br>• Detail any external lighting or illumination and consider the impacts of this lighting/illumination to surrounding properties and the public domain. | **Section 6.3**<br>**Section 6.17** | **Appendix C**<br>**Appendix D** |
| **6. Visual Impacts**<br>• A visual impact assessment to identify the visual changes and view impacts of the project to/from key vantage points and surrounding land. Photomontages or perspectives should be provided showing the project.<br>• The visual impact assessment must consider the impact of the development on any existing and proposed developments, including any view loss. | **Section 6.3.2** | **Appendix E** |
| **7. Transport, traffic, parking and access**<br>• A transport and accessibility impact assessment prepared in accordance with the relevant guidelines that provides, but is not limited to, the following:<br>Operation:<br>- current daily and peak hour traffic generation (light and heavy vehicle), public transport network, walking and cycling movements, existing traffic and transport facilities located within the vicinity of the proposed development<br>- estimated daily and peak hour traffic generation (light and heavy vehicle), public transport, point to point transport, walking and cycling trip generation during operation<br>- an assessment of the impact of additional traffic generated by the proposed development on the existing road network and bus service operation<br>- an assessment of the existing and future pedestrian and cycle facilities within the vicinity of the site and identify measures to manage the likely increase in public transport, pedestrian and cycle demands<br>- an assessment of the car parking, loading and servicing facilities for the proposed development and compliance with appropriate parking codes and | **Section 6.4**<br>**Section 6.18** | **Appendix F**<br>**Appendix G** |

| Requirement | Location in Environmental Assessment | |
|---|---|---|
| justification for the amount of car parking, loading and servicing facilities provided on the site<br>- access to, from and within the site from the road network including intersection locations, design and sight distance (i.e. turning lanes, swept paths, sight distance requirements)<br>- proposed access arrangements including vehicles access, drop-off and pick-up arrangements, service vehicles, emergency vehicles and loading areas for the development<br>- sustainable travel initiatives for employees, students and visitors, particularly for the provision of, green travel plans and wayfinding strategies<br>- details of bicycles parking facilities as these facilities need to be provided in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance<br>- the existing, proposed and any temporary pedestrian and bicycle routes as well as measures to maintain road and personal safety in accordance with CPTED principles<br>- an assessment of predicted impacts on road safety<br>- provisions for end-of-trip facilities and on-site bicycle parking in accordance with relevant RMS/Council guidelines and Australian Standards<br>- demonstrate adequate provision for servicing of the site in relation to loading demands, size of waste collection area and method of collection to/from and within the site.<br><br>Construction:<br>- an assessment of traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrians, cyclists, including the preparation of a draft Construction Pedestrian Traffic Management Plan. This Plan shall include vehicle routes, truck numbers, construction program, works zone location, hours of operation, access arrangements, cumulative impacts of other developments, mitigation measures and traffic control measures for all works<br>- details of construction vehicle routes, peak hour and daily trust movements, hours of operation, access arrangements at all stages of construction and traffic control measures for all works<br>- an assessment of construction impacts on road safety at key intersections and locations for potential pedestrian, vehicle and bicycle conflicts<br>- cumulative construction impacts of projects including Sydney Metro City and Southwest<br>- details of any temporary cycling and pedestrian access during construction<br>- detail of access arrangements for workers, emergency services and the provision for safe and efficient access for loading and deliveries. | | |
| **8. Signage**<br>• Provide detail on the location, size and content of any proposed signage.<br>• Consider any signage as part of the overall built form and urban design of the development. | **Section 4.8**<br><br>**Section 6.1.3** | **Appendix B** |
| **9. Heritage and Archaeology**<br>• A Statement of Heritage Impact (SOHI) prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual. The SOHI is to address the impacts of the proposal on any heritage significance of the site and adjacent areas and is to identify the following:<br>- all heritage items (state and local) within the vicinity of the site including built heritage, landscapes and archaeology, and provide detail on their heritage significance and location.<br>- the impacts of the proposal on heritage items<br>- compliance with the policies of any relevant Conservation Management Plan<br>- potential visual impacts of the proposal on the heritage significance of heritage items in the vicinity of the site<br>- the attempts to avoid and/or mitigate the impact on the heritage significance or cultural heritage values of the site and the surrounding heritage items. | **Section 6.5** | **Appendix H**<br><br>**Appendix I** |

| Requirement | Location in Environmental Assessment | |
|---|---|---|
| • A historical archaeological assessment prepared by a suitably qualified historical archaeologist in accordance with the Heritage Division, Office of Environment and Heritage Guidelines including but not limited to 'Assessing Significance for Historical Archaeological Sites and Relics' 2009. The assessment is to demonstrate the following;<br>- what historical archaeological relics, if any are likely to be present within the site and the assessment of the significance of the relics<br>- the likely impacts of the proposal on these relics<br>- opportunities for avoidance through careful consideration of redesign where state significant archaeological resources are identified and appropriate mitigation strategies where harm to local or State significant archaeological relics is likely to occur (in whole or part as a result of this project.<br>• An Aboriginal Cultural Heritage Assessment Report (ACHAR) is required to identify and describe the Aboriginal cultural heritage values that will be impacted by the proposed development. The ACHAR is to:<br>- identify cultural heritage values in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010), and be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) and consultation with OEH regional branch officers<br>- consult with Aboriginal people and document in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW)<br>- assess the impacts of the development on Aboriginal cultural heritage values and demonstrate attempts to avoid impacts and where impacts are unavoidable<br>- outline procedures for management the discovery of Aboriginal objects found at any stage of the life of the development. | | |
| **10. Public domain and public access**<br>• The scope of public domain improvements, street activation, key pedestrian linkages with and between other public domain spaces, existing and proposed buildings and surrounding areas. | **Section 4.5**<br>**Section 6.2.3** | **Appendix B**<br>**Appendix J** |
| **11. Noise and vibration**<br>• A noise and vibration assessment prepared in accordance with the relevant EPA guidelines. This assessment must detail construction and operational noise impacts on nearby noise sensitive receivers and outline proposed noise mitigation and monitoring procedures.<br>• Address the acoustic privacy between the residential rooms and the communal areas which share floors. | **Section 6.6** | **Appendix K**<br>**Appendix L** |
| **12. Air quality, odour and waste**<br>• The potential air quality, odour and waste impacts during the construction and operation of the development and appropriate mitigation measures. | **Section 6.7** | **Appendix M** |
| **13. Drainage and flooding**<br>• The drainage/flooding issues associated with the site, including:<br>- stormwater and drainage infrastructure<br>- assessment of any flood risk in accordance with the guideline contained in the NSW Floodplain Development Manual 2005, including potential effects of climate change, sea level rise and an increase in rainfall intensity. | **Section 6.8** | **Appendix N** |
| **14. Soil and Water**<br>• The potential impact of the development on groundwater levels, flow paths and quality.<br>• The potential impacts in terms of the NSW Aquifer Policy (DPI, 2012).<br>• Any water licensing requirements or other approvals required under the Water Act 1912 or Water Management Act 2000.<br>• The geotechnical issues (including Acid Sulphate Soils) associated with the construction of the development. | **Section 6.9** | **Appendix O** |

| Requirement | Location in Environmental Assessment | |
|---|---|---|
| **15. Biodiversity**<br>• Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act. | **Section 6.10** | **Appendix P** |
| **16. Ecologically Sustainable Development (ESD)**<br>• Detail of how best practice ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design, construction and ongoing operation phases of the development. | **Section 6.11** | **Appendix Q** |
| **17. Contamination**<br>• Compliance with the requirements of SEPP 55. | **Section 6.12** | **Appendix R** |
| **18. Developer contributions**<br>• The scope of developer contributions proposed. | **Section 6.13** | N/A |
| **19. Building Code of Australia and the Disability Discrimination Act**<br>• A BCA and access report demonstrating compliance with the Building Code of Australia and the Disability Discrimination Act 1992. | **Section 6.14** | **Appendix S**<br>**Appendix T** |
| **20. Infrastructure**<br>• Identify the existing infrastructure on-site and any possible impacts of the construction and operation of the proposal on this infrastructure.<br>• The existing capacity and any augmentation requirements of the development for the provision of utilities, including staging of infrastructure and additional licence/approval requirements in consultation with relevant agencies. | **Section 6.15** | **Appendix U** |
| **21. Land ownership and tenure**<br>• Detail of the current landownership and proposed management of future ownership. | **Section 4.11** | N/A |
| **Consultation** | | |
| During the preparation of the EIS, the applicant must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular, consultation is required for the following agencies:<br>• The City of Sydney Council<br>• NSW Government Architect's Office<br>• Roads and Maritime Services<br>• Sydney Coordination Office within Transport for NSW<br>• The Office of Environment and Heritage<br>• Environment Protection Authority<br>• Sydney Trains<br>• Adjoining sites<br>The EIS must describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.<br><br>If you do not lodge a development application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS. | **Section 5.0** | **Appendix CC** |

# 3.0 Site Analysis

## 3.1 Site Location and Context

The site is located at 80-88 Regent Street, Redfern within the City of Sydney Local Government Area. The site is located at the southern fringe of the Sydney CBD and is in proximity to a number of regionally significant facilities and amenities including the Australian Technology Park, University of Sydney, University of Technology Sydney, Sydney Institute of TAFE, Central Park and Prince Alfred Park.

The site's locational context is shown at **Figure 4** and **Figure 5** below.

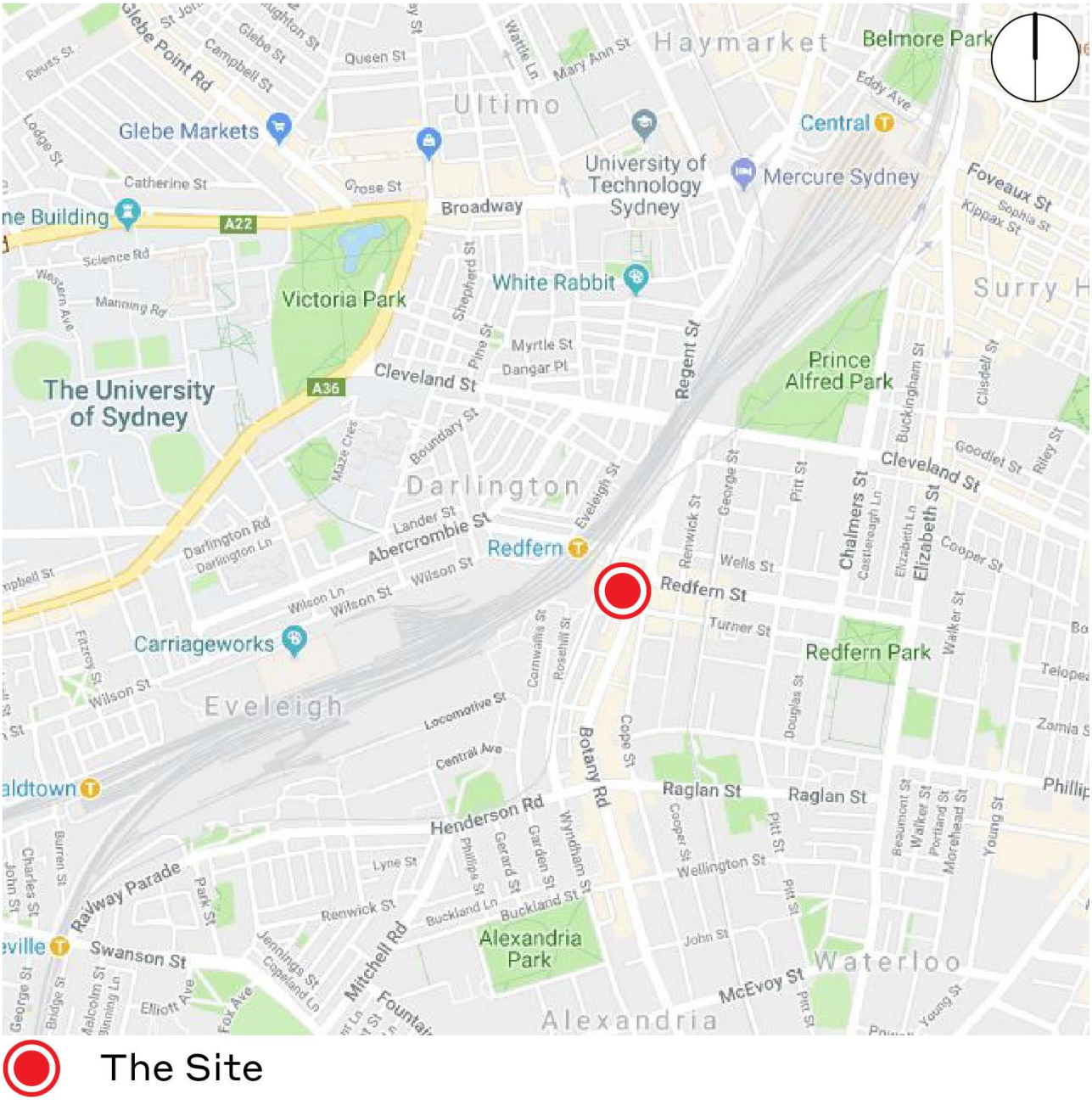



**Figure 4: Site location**

*Source: Google Maps & Ethos Urban*

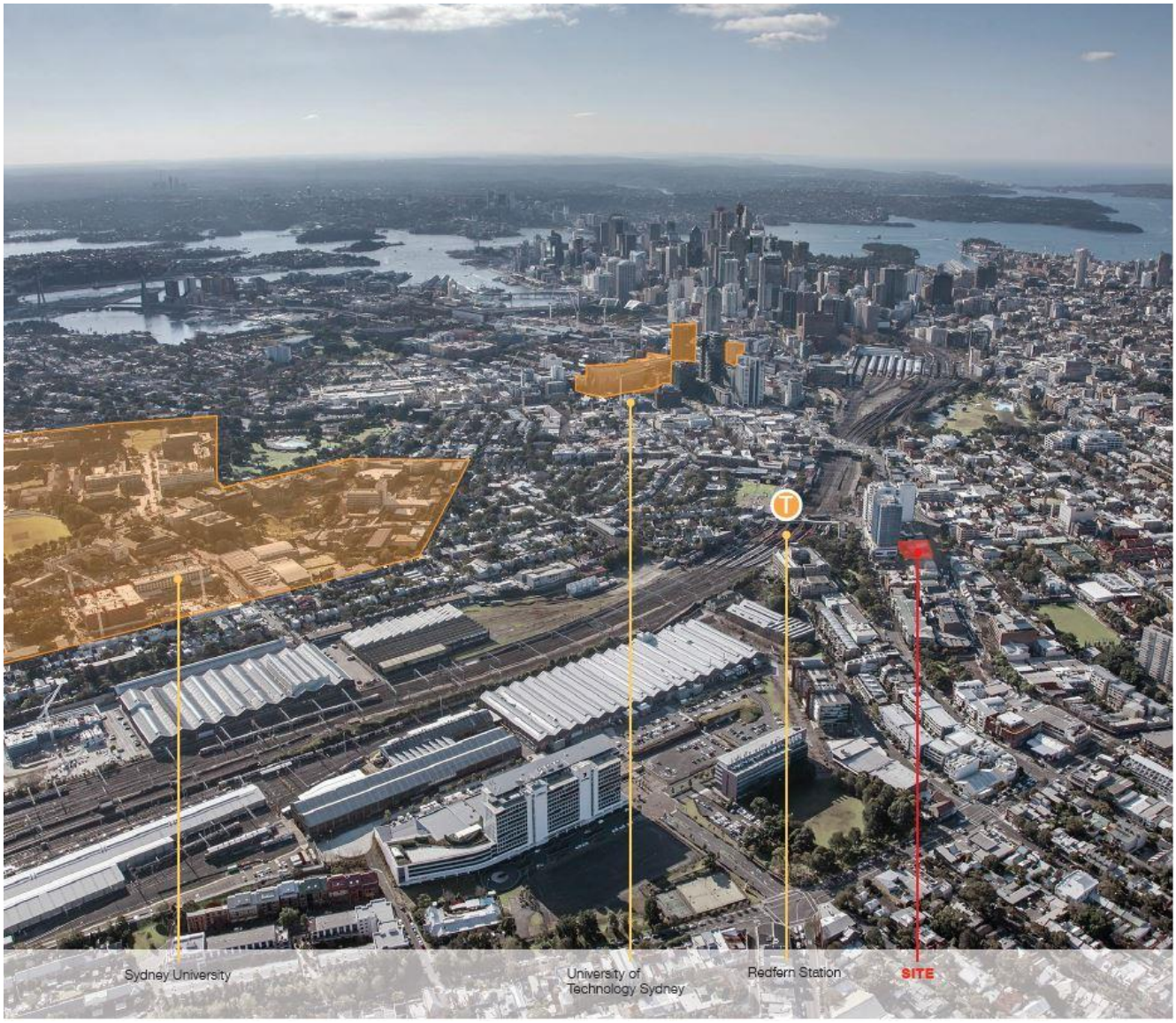



**Figure 5: Site Location and Context**

*Source: Bates Smart*

## 3.2 Site Description

The site is generally square in shape and is comprised of 5 lots which are legally described as:

- Lot A in DP105824;
- Lot B in DP105824;
- Lot C in DP105824;
- Lot D in DP105824; and
- Lot E in DP105824.

The site contains a total area of 821.7m$^2$ and has three road frontages including Regent Street to the east (26.6m), Marian Street to the south (31.7m) and William Lane to the west (26.6m). An aerial photo of the site is shown at **Figure 6**.


**Figure 6: Site Aerial**

*Source: Nearmap and Ethos Urban*

## 3.3 Topography and Vegetation

A Site Survey has been prepared by Mitchell Land Surveyors and is provided at **Appendix X**. The survey illustrates that the site has a fall of approximately 3m from the northern boundary down to the southern boundary. The site has a high point of RL 28.9 at the north-eastern corner and a low point of RL 25.9 at south-western corner.

The site is largely free of vegetation, with low scale planting present within the private terraces at the rear of the existing buildings.

## 3.4 Existing Development

The site currently comprises a row of five two-storey attached terraces with ground floor retail tenancies and upper level office and residential uses. The terraces are largely unoccupied and are in poor condition.

The terraces are of brick construction, however the street facades have been rendered and painted over in a variety of styles and colours. Awnings from the existing buildings project over the Regent Street footpath along the length of the site. The terraces are all provided with rear courtyards fronting William Lane.

Photographs of the existing buildings are included at below at **Figures 7** to **Figure 10.**

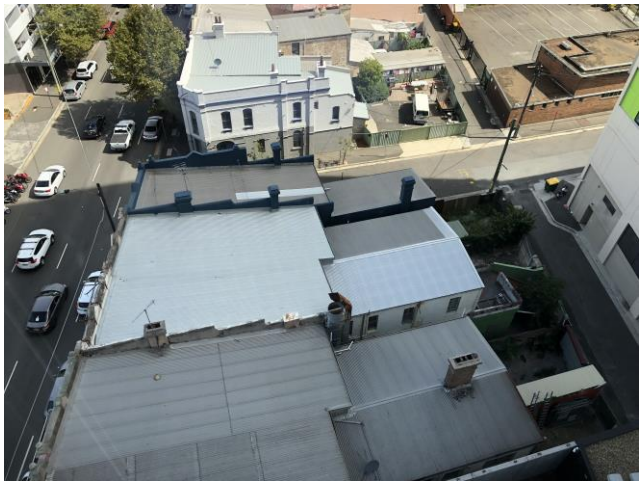


**Figure 7: Existing buildings as viewed from an upper level of the existing Iglu facility**

**Figure 8: Existing buildings and the existing Iglu facility as viewed from Regent Street**

**Figure 9: Existing buildings as viewed from Marian Street**


**Figure 10: Existing building retail frontages**

## 3.5 Surrounding Development

The street block bounded by Regent Street, Marian Street, Gibbons Street and Redfern Street has undergone significant urban renewal over recent years which reflects the blocks strategic and locational attributes, namely its proximity to the Redfern Railway Station. The site's immediate and future context is detailed below.

### 3.5.1 North

The adjoining site to the north contains the recently completed Iglu Redfern facility (**Figure 11**). The facility comprises ground floor retail tenancies and an 18 storey student accommodation tower above. The historic terrace facades fronting Regent Street were refurbished to maintain the existing fine grain character and scale of Regent Street. The tower above is slender in form and includes a staggered composition of windows which provide texture and depth to the facade.

Beyond the existing Iglu facility to the north is the Regent Redfern hotel (**Figure 12**). This hotel is a two-storey establishment with bar, bistro, TAB and gaming facilities. This site is currently the subject of preliminary development investigations in which SEARs have been requested for a 21 storey mixed use hotel development.

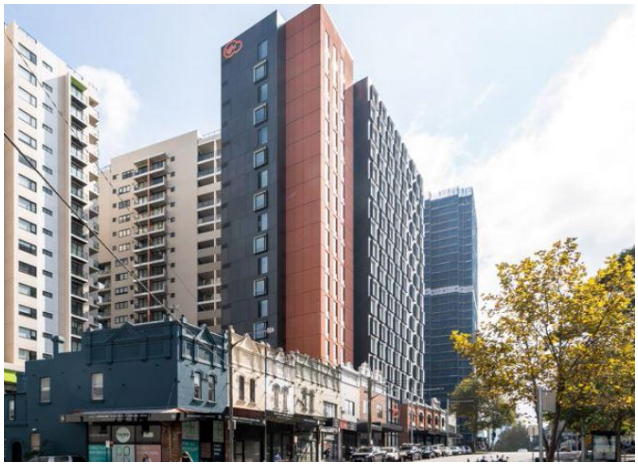


**Figure 11: Existing Iglu facility to the north**

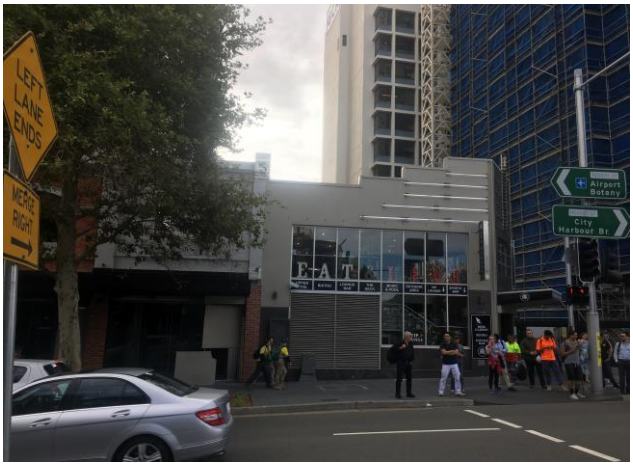



**Figure 12: The Regent Redfern Hotel to the north**

### 3.5.2 South

To the south, on the opposite side of Marian Street comprises a row of two to three storey attached terraces of similar design to the terraces on the subject site (**Figure 13**).

Sites within the block bounded by Marian Street, Regent Street, Gibbons Street and Margaret Street are subject to increase planning controls under the State Significant Precincts SEPP and a number have been the subject of preliminary development investigations:

- 90-102 Regent Street (corner of Regent Street and Marian Street) – SEARs issued for indicative mixed-use residential apartment building.
- 13-23 Gibbons Street (City of Sydney Depot site) – SEARs issued for affordable and social housing development in 2016.13-23 Gibbons Street – SEARs issued for indicative student accommodation facility.

An EIS had not been placed on public exhibition for any of these sites at the time of writing.

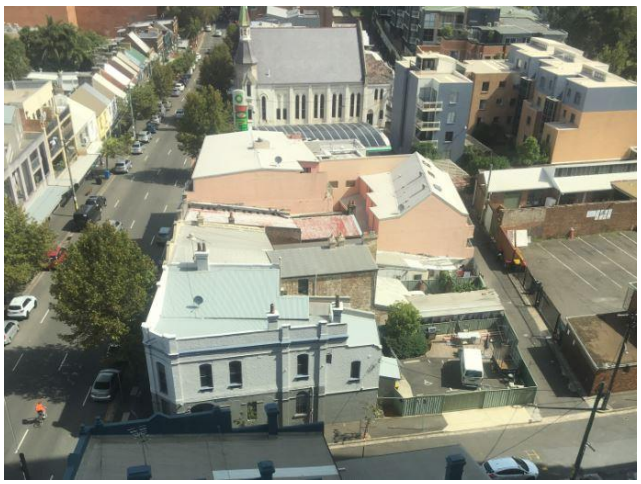


**Figure 13: Existing terraces to the south of the site as viewed from the existing Iglu facility**

**Figure 14: Existing terraces to the south fronting as viewed from Marian Street**

### 3.5.3 East

To the east, on the opposite side of Regent Street is a landscaped public open space area and a vehicle repair station (**Figure 15**). Behind this landscaped area is a mixture of original 2-3 storey retail and residential buildings, generally in terrace typologies, and 3-6 storey infill developments that are predominately residential flat buildings.

**Figure 15: Development to the east as viewed from the existing Iglu facility**

**Figure 16: Development to the east fronting Regent Street**

### 3.5.4 West

To the west, on the opposite side of William Lane, is an 18 storey mixed use residential development known as ‘Urba’ at 7-9 Gibbons Street (**Figure 17**). The building comprises ground and podium-level retail and commercial uses. The podium extends to the adjoining site to the north, which is also comprises an 18 storey mixed use development known as ‘Deicota’ (**Figure 18**). Both buildings include car park exits to William Lane.

**Figure 17: Development to the west as viewed from Gibbons Street**


**Figure 18: Development to the north-west as viewed from Gibbons Street**

## 3.6 Access and Connectivity

### Vehicular Access

Properties at 80-88 Regent Street can currently gain vehicle access via the rear William Lane from Marian Street. Limited off-street parking is currently provided on site, which includes single hard-stand spaces. On-street parking in the immediate vicinity of the site is available on most streets and is generally time restricted to one or two hours.

Car share vehicles are provided on-street in dedicated bays throughout the Redfern area by providers including GoGet. It is estimated that there are in excess of 25 car share vehicles within a 400m radius of the site.

### Pedestrian and Cycling Network

Pedestrian footpaths are formed on both sides of all streets adjoining, and in the vicinity of, the site. The site has good pedestrian connectivity to local retail facilities, recreation areas and universities. Redfern Street Laneway is a shared pedestrian zone with one-way vehicular access. The Iglu development to the north includes a secured access laneway network from Regent Street connecting to the Redfern Street Laneway.

From the site, it is an 800m walk to the Shepherd Street edge of the University of Sydney campus and a 1.2km walk to the UTS Broadway campus.

There are a number of separated and ‘bike-friendly’ streets in the vicinity of the site. The George Street separated bike path is located 150m to the east of the site and is readily accessed by Turner Street, which is identified by the City of Sydney as a bike-friendly street. The George Street cycleway provides separated bike path between Green Square and Central and connects to the broader City of Sydney bike path network. The site is also located within the service catchment area of a number of dockless bike-share operators.

### Public Transport

The northernmost edge of the site on Regent Street is a 150m walk from the entrance to Redfern Station, one of the key interchange stations for Sydney's heavy rail network. Regular services depart from Redfern to destinations on the T1-T4 lines, as well as some inter-city and inter-state lines.

Public bus services on routes 305, 308, 309, 310 and L09 depart form the Regent Street bus stop opposite the site, Lawson Square and Gibbons Street. These services provide regular services between the City, Redfern and subregional centres including Marrickville Metro, Eastgardens, Mascot and Botany. As a result of the above, the site is one of the most accessible locations in Sydney by public transport.

## 3.7 Heritage

The site does not contain any heritage items, nor is it located within a heritage conservation area, however, the 'Redfern Estate Conservation Area' is located to the east on the opposite side of Regent Street as illustrated at **Figure 19**.


**Figure 19: Heritage Maps**

*Source: State Significant Precincts SEPP & Sydney LEP 2012*

# 4.0 Description of the Development

This chapter of the report provides a detailed description of the proposed development. Architectural Drawings prepared by Bates Smart detailing the proposed building design are provided at **Appendix B** and are described further in Bates Smart's Architectural Design Report provided at **Appendix C.**

This State Significant Development Application (SSDA) seeks approval for the development of a new mixed-use student accommodation facility. Specifically, the proposal involves:

- construction and use of an 18 storey building comprising:
  - 265 student accommodation beds within 185 units, arranged as follows:
    - 163 x studio units;
    - 6 x loft units; and
    - 16 x 6-bed cluster units.
  - communal student facilities including study areas, rooftop terrace and laundry facilities;
  - three ground floor retail tenancies;
  - a single commercial tenancy;
- landscaping works including terrace planting; and
- extension and augmentation of services and infrastructure as required

Photomontages of the proposed development are shown at **Figure 20.**

## 4.1 Development/Urban Design Principles

The development of the site for student housing provides an opportunity to improve the built form, urban functionality and community aspects of the site. From a design perspective, Bates Smart in conjunction with Iglu have set out a statement of intent for the precinct as follows:

> *"Our aim is to create a vibrant student community located in the heart of Redfern with excellent access to public transport. A 2-storey podium maintains the scale and character of the existing terraces while new retail and commercial uses expand the active street frontage realised through the recently completed Iglu development. A slender 'L shaped' tower form improves separation to the adjoining residential tower while reinforcing the corner of Regent and Marian Street. The use of concrete and masonry differentiates the new tower from the adjoining Iglu facility ensuring architectural diversity."*

The planning and design principles adopted for the proposed development of the site are as follows:

- Develop new student accommodation development that attracts both internal and domestic students to the locality, reaffirming Redfern as a vibrant mixed-use precinct;
- Develop new student accommodation in a highly accessible location to public transport and within easy walking distance to a wide range of tertiary facilities;
- Create a development that remains materially within the SSDA 7080 approved envelope, however reduces both building height and the overall volume towards the north western part of the tower;
- Create a podium that steps at regular intervals along Regent Street in sympathy with the sloping footpath to define an expression of 2-storey terraces consistent with the prevailing Regent Street street wall height;
- Create a seamless integration with the existing Iglu facility to the north to maximise service efficiencies and to diversify the amenities available to all students;
- Deliver a building which achieves a high level of internal amenity, benefiting from sweeping views to the east;
- Deliver an identifiable architectural language for the building form, which is immediately recognisable and commensurate with the site's highly visible location; and
- Ensure that pedestrian safety and occupant security is maximised through the use of lighting, materials, activation, passive and active surveillance and access control.

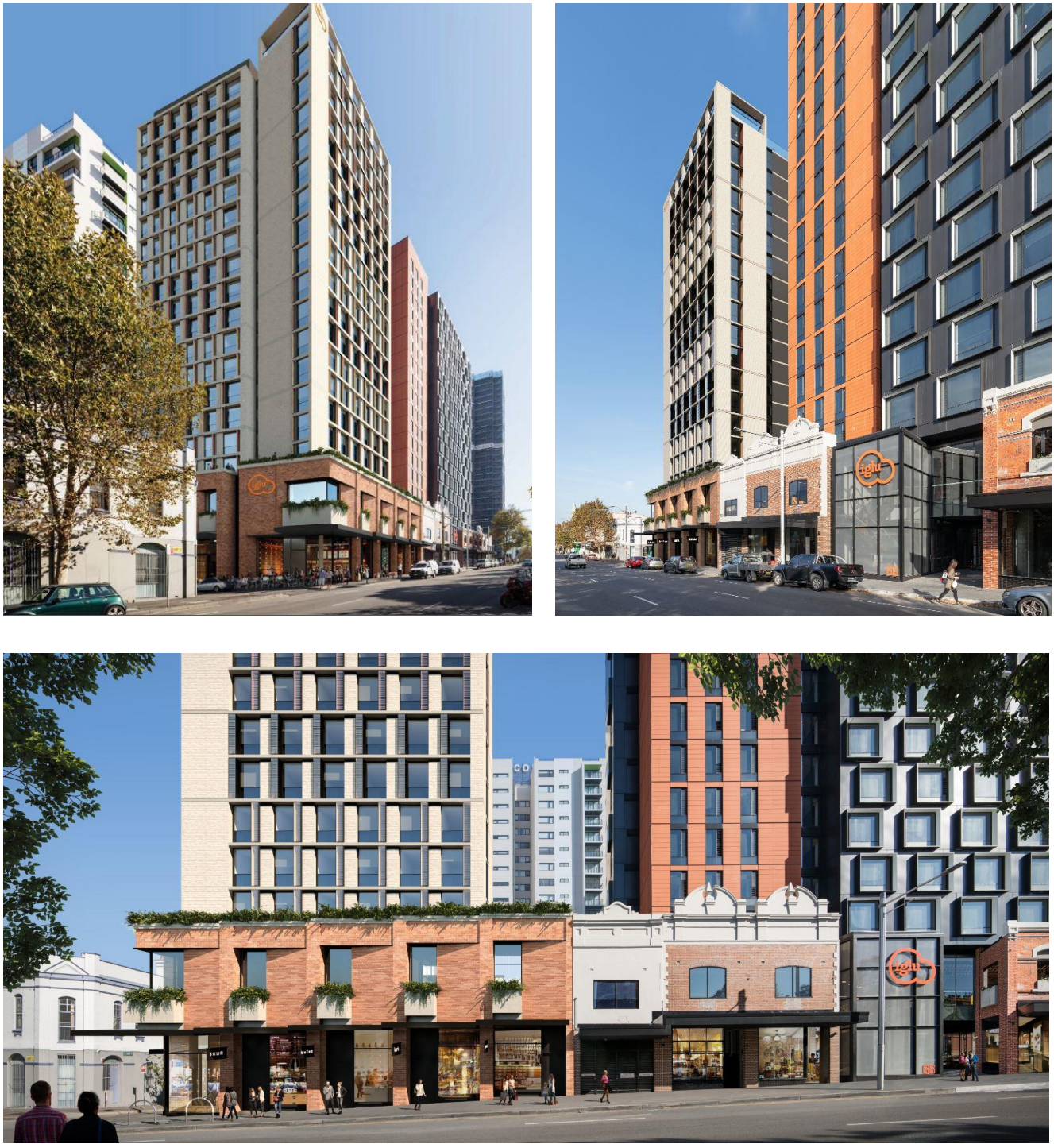


**Figure 20: Photomontages of the proposed development**

*Source: Bates Smart*

## 4.2 Numerical Overview

The key numeric development information is summarised in **Table 2.**

**Table 2: Key development information**

| Component | Proposal |
|---|---|
| Site area | 821.7m$^2$ |
| GFA:<br>- Total<br>- Student accommodation<br>- Commercial<br>- Retail | <br>7,169m$^2$<br>6,330m$^2$<br>438m$^2$<br>401m$^2$ |
| FSR | 8.7:1 |
| Maximum Height | 18 storeys<br>63.7m (RL90.2) |
| Number of Beds | 265 |
| Student Capacity (maximum) | 265 - 434 (Refer to **Section 4.6.4**) |
| Number of Units<br>- Total<br>- Studio Units<br>- Loft Units<br>- Cluster Units | <br>185<br>163 (including 3 accessible)<br>6<br>16 |
| Podium Setback | 0m |
| Tower Setbacks (approximate)<br>- North<br>- South<br>- East<br>- West | <br>2m – 10m<br>3m<br>3m<br>3m – 12m |
| Parking<br>- Car<br>- Bicycle | <br>0<br>84 |

## 4.3 Site Preparation

The existing SSD 7080 approval granted development consent for demolition of all existing buildings on the site. Pursuant to this, Iglu are concurrently progressing demolition works in accordance with the SSD 7080 conditions of consent. Whilst it is likely that demolition will be undertaken in accordance with the existing consent, this application nonetheless seeks development consent for all of the existing buildings and structures located within the subject site.

The proposal does not include basement parking, as such no significant earthworks are proposed. Some minor excavation may be required in order to provide for a level building footing and to deal with the change in site levels, as well as the provision of onsite stormwater detention tanks as detailed in the Architectural Drawings at **Appendix A**.

## 4.4 Built Form and Building Layout

### 4.4.1 Land Use and Floor Space by Level

A description of the proposed uses by level within the building is provided in **Table 3** below.

**Table 3: Description of land use by level**

| Level | Land Use | Gross Floor Area |
|---|---|---|
| Ground Level | - Three retail tenancies<br>- Commercial tenancy<br>- Bicycle storage (37 spaces)<br>- Waste storage facilities<br>- Plant | 536m$^2$ |

| Level | Land Use | Gross Floor Area |
|---|---|---|
| Mezzanine | - Mezzanine retail level<br>- Mezzanine commercial level<br>- Communal laundry facilities<br>- Bicycle storage (47 spaces)<br>- Plant | 362m$^2$ |
| Level 1 | - Integrated communal facilities<br>- Integrated communal open space<br>- 6 x double height loft studios<br>- 2 x accessible studios | 607m$^2$ |
| Level 2 – Level 17 | - 1 x 6 bedroom cluster (per level)<br>- 10 x studios (per level) | 354m$^2$ |
| Level 18 | - Roof terrace<br>- Plant | |

### 4.4.2 Building Form and Massing

The proposed development contains 18 storeys and is defined as two components including the podium and tower form as illustrated at **Figure 21**. The proposed podium presents a stepped two storey scale to Regent Street which is consistent with the prevailing street alignment (refer to **Figure 20** above). At the ground level the podium is built to boundary to create a strong street and corner address. The podium is broken down into two separate volumes along Marian Street to reinforce the finer grain character of the Redfern context and reinforce the separate identity of the commercial office component.

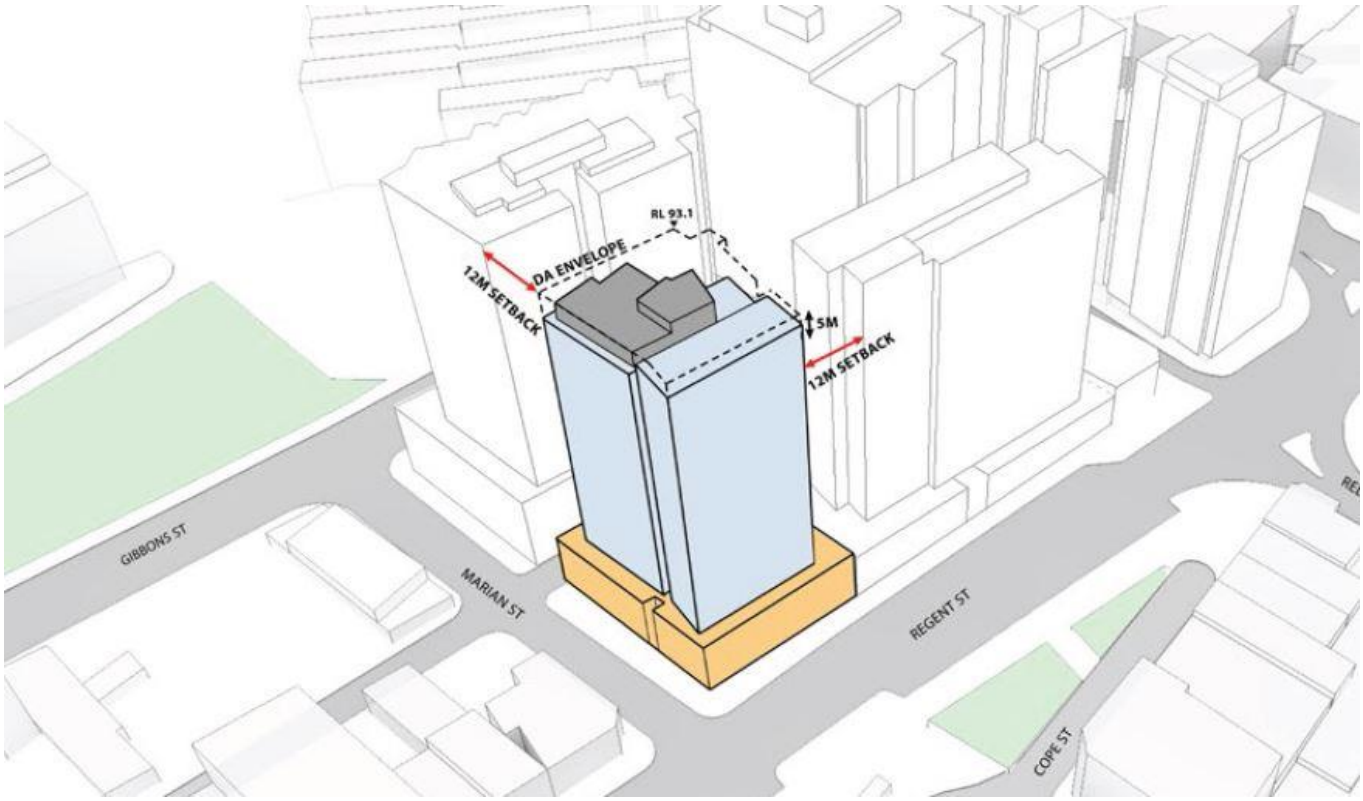



**Figure 21: Proposed Building Envelope**

*Source: Bates Smart*

The 16 storey tower is 'L-shaped' in form and is articulated into two slender volumes. The tower form is responsive to the surrounding development as it removes mass from the north western portion of the site allowing greater setbacks to the towers on the adjoining sites as illustrated at **Figure 22**.

The tower form is setback 3m above the Regent Street podium wall height which is consistent with the tower alignment set by the existing Iglu development to the north. The 3m setback along Marian Street retains the architectural treatment around the corner from Regent Street. The tower includes a northern boundary setback ranging from approximately 2m-10m and a western boundary setback ranging from approximately 3m-12m, which provides relief and articulation at these frontages.

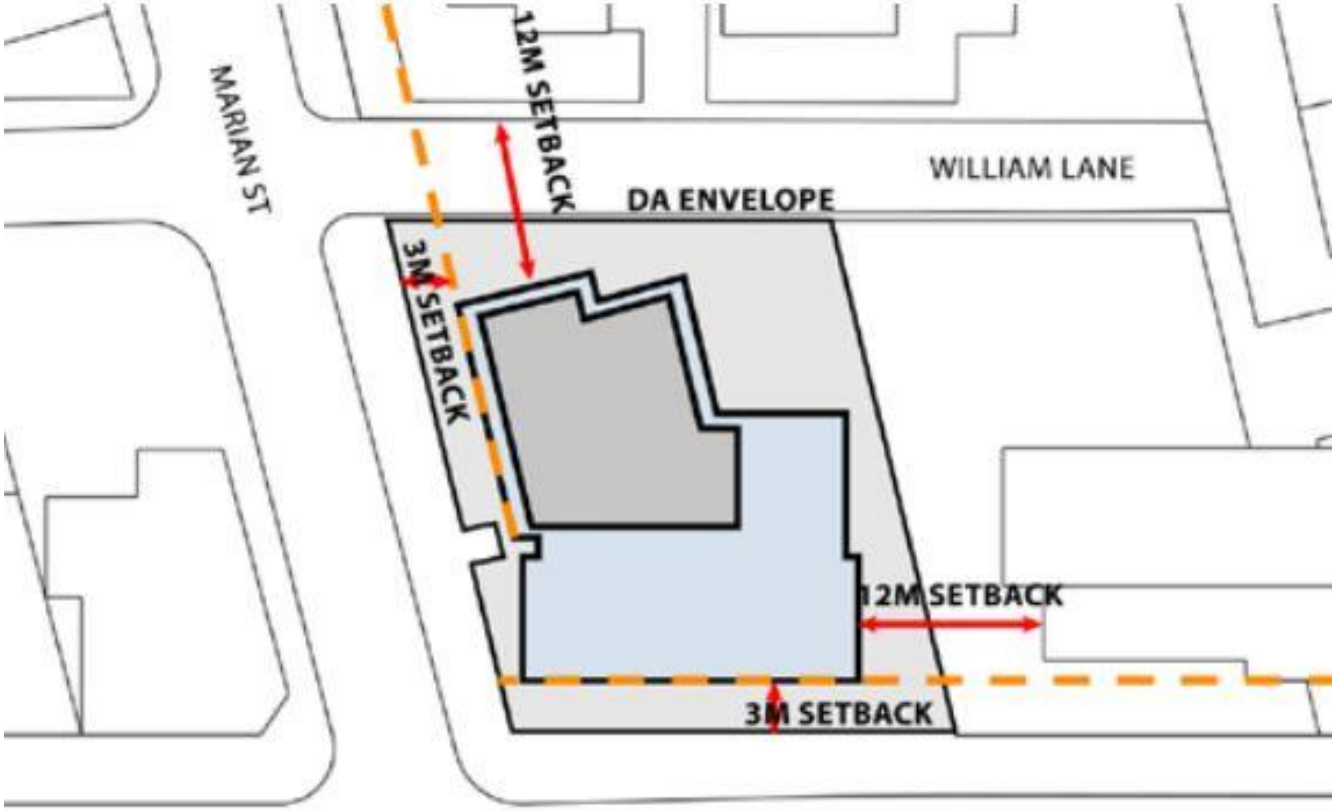



**Figure 22: Proposed 'L-shaped' tower floor plate**

*Source: Bates Smart*

### 4.4.3 External Materials and Finishes

A Schedule of Materials has been prepared by Bates Smart and is included in the Design Report provided at **Appendix C.** Whilst the proposal is linked to the adjoining Iglu facility for operational and communal integration, the external materials and finishes gives the proposal a distinct identity as illustrated at **Figure 23.**

The proposed development includes new brick and concrete facades to the podium to draw on the character of the existing brick terraces fronting Regent Street. Whilst retaining the existing terrace facades was explored, it became apparent during the construction of the Iglu facility to the north (in which the existing shopfront facades were retained) that the condition of the existing facades has significantly deteriorated. The retention of these facades places substantial cost and construction burdens on the project, as such a sympathetic alternative was developed. For clarity, these facades are not heritage listed and were approved for demolition under the previous SSD 7080 consent.

As detailed within the Design Report at **Appendix C,** the tower façade is defined by expressed concrete slabs and brick piers which express the break-up of the bedrooms and studios. Large format picture windows are recessed to provide depth and sun shading. Windows shift in position every two to four floors up the elevations to break up the modularity and introduce a horizontal scale. This shifting window position references the existing Iglu tower, drawing it into the architectural composition.


**Figure 23: Proposed external materials and finishes**

*Source: Bates Smart*

## 4.5 Landscaping and Public Domain

A Landscape Design Statement and Landscape Drawings have been prepared by 360 and are provided at **Appendix J.** Landscaping has been incorporated into two main zones including the internal courtyard and the rooftop terrace. In addition, podium façade planters have been included to soften the edges of the vertical built form. The proposed landscape scheme is further detailed below.

### Level One Internal Courtyard

The proposed development includes a courtyard at Level One which is an extension of the existing Iglu courtyard to the north. The additional 89m$^2$ extension provides a total of 188m$^2$ at this level. The communal terrace complements the indoor communal facilities at this level allowing students to relax and socialise in a safe, outdoor setting.

The courtyard will comprise of timber decking with loose furniture and landscaped planters. The perimeter planters will breakdown the scale of the interior wall, and the free-standing tree planters will offer wind protection. The proposed courtyard landscaped scheme is illustrated at **Figure 24.**

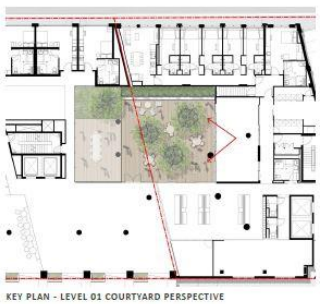



**Figure 24: Proposed integrated level one courtyard**

*Source: 360*

**Rooftop Terrace**

The proposed development incorporates a rooftop communal terrace at Level 17. The terrace is oriented to the east to maximise the site's sweeping views. A range of tables and seating options, as well as BBQ facilities are provided to cater to differing needs, with landscape plantings used to break up the area into smaller spaces and provide an attractive, green setting.

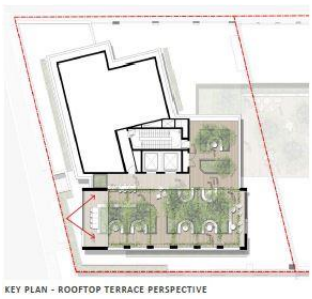



**Figure 25: Proposed rooftop terrace**

*Source: 360*

## 4.6 Facilities, Operational Characteristics and Ongoing Management

As detailed at **Section 2.2**, Iglu now owns and operates several facilities in Sydney and across Australia, therefore this experience has allowed Iglu to continually develop and refine best practice operational management procedures and room offerings within their facilities.

An Operational Management Plan (OMP) has been prepared by Iglu and is provided at **Appendix V**. The OMP addresses the proposed procedures to ensure the premise operates in conjunction with the existing Iglu Redfern facility to the north. The entire building will remain within the ownership of Iglu, as such Iglu has an ongoing commitment to ensure the students' needs are met.

Key features that are relevant to the planning process, as well as other operational matters, are discussed below.

### 4.6.1 Site Management and Operations

Iglu staff will be present on-site 24 hours per day, 7 days per week providing management and administrative services, pastoral care and facilities management services. Iglu will remain responsible for the general operation and maintenance of the property over the lifecycle of the development. This will enable Iglu to ensure that the occupation of the building complies with the parameters identified in OMP.

### 4.6.2 Security

At least one staff member will be present on the site at all times and 24/7 contact phone numbers will be provided to all students.

Students will be issued with swipe cards that are programmed specifically for zoned access, namely the main foyer door, communal areas, lift access to their floor, access to their studio or share apartment (and access to their room). Students will not be able to access any other share apartment/bedroom that they do not occupy. The electronic card system will allow Property Management to review and read every lock throughout the building and the cards that have accessed that point.

CCTV is installed to monitor all external access points, lifts and public areas within the property. In line with current operations for the existing Iglu facility, all external access points will have reed switches and are alarmed and linked to a 24-hour monitoring company which will call the duty manager if left open for an extended time. A duress button is installed within the reception/administration office that will be linked up to a 24-hour monitoring company in case of emergency.

### 4.6.3 Room Configurations and Communal Facilities

The proposed facility will provide 265 student accommodation beds within 185 units, arranged as follows:

- 163 x studio units;
- 6 x loft units; and
- 16 x 6-bed cluster units.

Each typical student accommodation floor accommodates ten studios and a six-bed cluster unit. The six double height loft studios, three accessible studios and the majority of the communal facilities are located at Level One. The proposed room offerings are illustrated at **Figure 26** and further detailed below.

#### Studio Units

The proposed studio units are 17m$^2$ in area, with the three accessible studios provided at 27m$^2$. A bed, ensuite (toilet and shower), kitchenette (sink, cook top microwave and fridge) wardrobe and study desk will be provided within each room.

Studio rooms have a maximum capacity of two students to accommodate co-habiting couples with both students registered on the lease agreement. This is consistent with the approved operations at the Iglu facility to the north (SSD 6724 MOD 3) and the Iglu Chippendale facility (D/2011/515). Further discussion is provided at **Section 4.6.4.**

#### Loft Units

The proposed development has presented an opportunity to offer a diversified unit to future occupants in the form of a loft unit. The loft units are double height and contain a total area of 26m$^2$. At the lower level, the loft studios contain an ensuite (toilet and shower), kitchenette (sink, cook top, microwave and fridge), lounge area, wardrobe and study desk. The upper level contains the bed. Similar to the studio rooms, loft studios have the capacity to accommodate cohabitating couples. Further discussion is provided at **Section 4.6.4**.

#### Cluster Units

The proposed cluster units include six private rooms arranged off a central shared kitchen and living area. The private rooms are 13-14m$^2$ and contain a bed, ensuite (toilet and shower), wardrobe and study desk. The cluster units will be single occupancy only. The cluster units are linked to a 25m$^2$ communal area containing comprehensive cooking facilities within the shared kitchen/living area including dining and lounging furniture.

#### Integrated Communal Hub

The proposed development seeks to integrate with the adjoining Iglu facility to the north to achieve spatial and operational efficiencies as well as create additional opportunities for student interaction.

Level One will be the hub for student communal facilities. The proposal seeks to provide 375m$^2$ of indoor communal area at this level which will result in a total of 888m$^2$ across the integrated level. The proposed communal facilities at this level includes communal study space (to supplement study space within individual units) as well as lounge and TV areas. The existing facilities at this level includes a gym, a media room, a games room as well as study and lounge areas.

By consolidating these facilities in a communal setting, rather than at distributed at each level, Iglu encourages students to interact and socialise, which is supported by organised pastoral care events and general staff interaction with students.

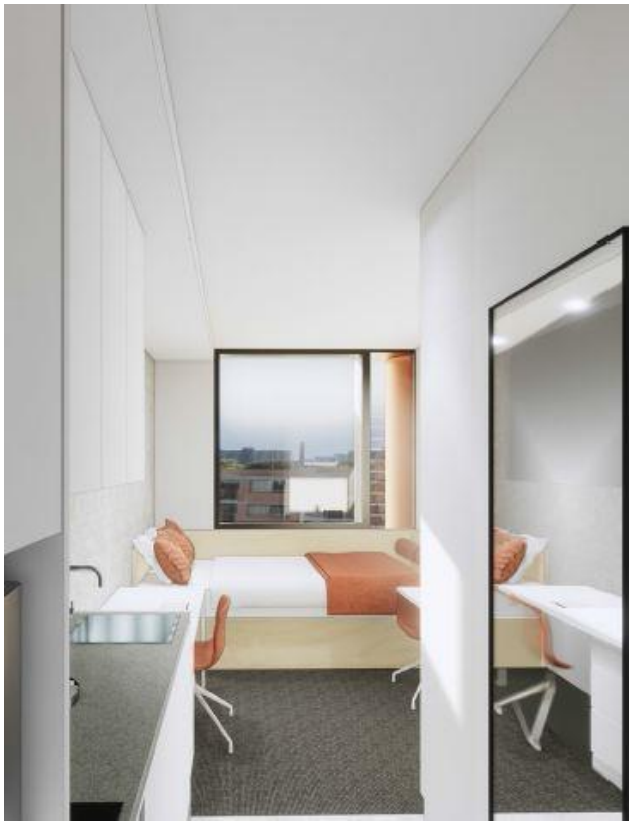
#### Outdoor Terrace and Courtyard

Except in the case of occasional Iglu hosted and managed events, (occurring less than a dozen times a year) the use of these spaces will be restricted to the hours of 9am to 10pm and will be enforced by on-site staff and door access control. The outdoor spaces will be used for general passive recreation and communal gatherings and relaxation.

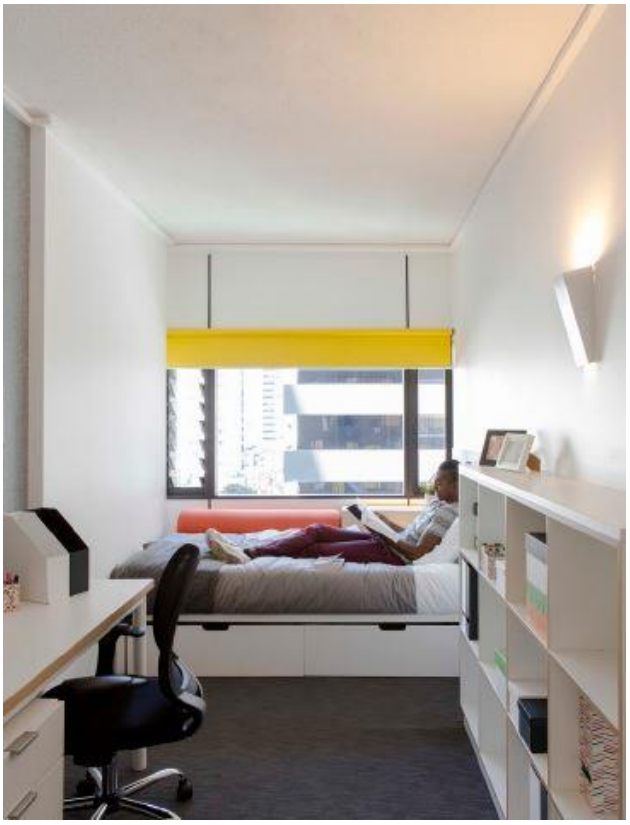
#### Retail and Commercial Tenancies

The fit out and use of the retail and commercial tenancies, including operational management will be subject to future Development Consent.

**Studio Unit**



**Cluster Unit**



**Loft Unit**

**Figure 26: Typical Studio, Cluster and Loft Units**

*Source: Bates Smart*

### 4.6.4 Student Capacity

The proposed cluster rooms are restricted to a single student, however for the larger studio and loft rooms, dual occupancy is available **only if required.** This is intended to permit co-habiting couples to live together in the larger units with both students registered on the lease agreement. This is consistent with the approved occupancy arrangement at Iglu's Chippendale facility (D/2011/515) and the adjoining Iglu facility to the north (SSD 6724) which both allow couples to occupy studio rooms.

Allowing couples to occupy these rooms on a permanent basis, with both students registered on the lease, will reduce pressure that would otherwise be placed on the private rental market leading to increased competition and rental prices. It also relieves the cost burden on couples that wish to live in this inclusive environment, that would otherwise have to pay for separate rooms.

For absolute clarity, this is an option only, it is not intended to lease all studio and loft rooms to couples. Whilst this option is available to students within the adjoining Iglu facility, **only 5 dual-occupancy studios have been leased**, representing 5.9% of the total available studios and 1.35% of the total student beds available. As such, whilst the maximum capacity of the proposed facility is 434 students, **occupancy is expected to be significantly less than this**, in the order of 270 students.

## 4.7 Transport, Access and Parking

### 4.7.1 Pedestrian Access

The proposed development includes pedestrian access from Marian Street to the central lift core as well as an emergency egress to William Lane and service egress to Regent Street. Notwithstanding this, the existing Iglu Lobby fronting Regent Street will be the main pedestrian access point. Access to the Central Lobby can also be gained via the existing through site link entrance at Redfern Street.

As noted at **Section 4.6.2**, all pedestrian access is restricted by swipe cards that are programmed specifically for zoned access. Pedestrian access the retail tenancies will be from Regent Street, and access to the commercial tenancy is from Marian Street.

### 4.7.2 Vehicular Access and Parking

No vehicle access or parking is provided on site as part of the development. As detailed at **Section 3.6** the site is highly serviced by public transport and is within walking distance to the surrounding tertiary institutions. Further discussion is provided at **Section 4.7.**

Secure bike parking for 84 bikes will be provided, of which 37 are located at the ground floor bicycle storage room and 47 are located at the mezzanine level bike storage room. Bike storage for the commercial and retail tenancies are contained within the existing Iglu buildings End of Trip facilities at the rear of the site. These facilities contain 16 bicycle parking spaces.

Loading for servicing and waste removal will occur via the loading dock within the existing building, accessible from William Lane.

## 4.8 Signage

Two business identification signs are proposed as part of this application as detailed in the Architectural Drawings provided at **Appendix B.** One flat mounted wall sign (approximately 2m (h) x 4.5m (w)) will be located at the top of the Marian Street elevation and the other will be an above awning sign (2.4m (h) x 1.85m (w)) will be located above the Marian Street entry point. These signs contain the Iglu logo, being the word 'Iglu' surrounded by an orange bubble. This signage scheme is consistent with the signage to the signs located on the adjoining Iglu building.

## 4.9 Waste Management

A Waste Management Plan has been prepared by Iglu (**Appendix Z**) that details how waste from the student accommodation and the commercial and retail tenancies will be managed.

Waste storage rooms will be located on the ground floor adjoining the loading dock. A separate waste storage room is provided for the retail/commercial uses.

Within the student accommodation building, Iglu will provide cleaning and waste disposal services to all communal areas, whilst students will be required to clean their units and transport their waste to the waste storage room. Tenants of the retail tenancies will be responsible for the transportation of their waste to the retail waste storage room. Waste will be removed by a private contractor via the loading dock on a regular basis.

Based on the estimated waste generation rates for the proposed development (calculated in accordance with the City of Sydney's 'Policy for Waste Minimisation in New Developments'), the following waste storage receptacle will be provided:

- Student Accommodation:
  - General Waste: 6 x 660L mobile garbage bins; and
  - Recyclable Waste: 2 x 660L for mixed recyclables and 2 x 660L for paper/cardboard mobile garbage bins.
- Retail/Commercial:
  - General Waste: 6 x 660L mobile garbage bins; and
  - Recyclable Waste: 2 x 660L for mixed recyclables and 2 x 660L for paper/cardboard mobile garbage bins.

### 4.10 Energy and Water Conservation

In order to meet and exceed its statutory requirements to comply with Section J of the National Construction Code, Iglu proposes to incorporate a number of design and operations measures to reduce energy and water consumption. These measures include:

- Energy efficient LED lighting;
- Occupancy sensing and switching of lighting;
- Facility to power-off unoccupied spaces;
- Extensive electrical metering and monitoring;
- High efficiency variable refrigerant flow air-conditioning system;
- Centralised air-conditioning controls to time-limit air-conditioning systems and limit temperatures;
- Low-flow hydraulic fixtures;
- High efficiency instantaneous gas hot water system; and
- Extensive water metering and monitoring.

As Iglu meets the cost of utilities as part of its accommodation package provided to students, there is a direct incentive to Iglu to work with students to reduce energy and water consumption. This includes active monitoring of electricity usage of common areas and individual studios and cluster units, which are displayed in the lobby in real time to show performance against facility and historical benchmarks. Using information material and in-house competitions, Iglu promotes awareness amongst its students to actively reduce their energy and water consumption to meet environmental objectives.

### 4.11 Site Ownership and Amalgamation

The proposed building is to be constructed and operated as an integrated student accommodation facility with the adjacent existing building owned by Iglu at 60-78 Regent Street. Prior to the issue of a final Occupation Certificate for the proposed development, the properties which are the subject of this application are to be amalgamated to a single title with the property at 60-78 Regent Street.

## 5.0 Consultation

In accordance with the SEARs issued for this project, consultation was undertaken with the NSW Department of Planning and Environment, NSW Government Architects Office, City of Sydney Council, the relevant public authorities and the community.

The consultation undertaken to date is detailed within the Consultation Outcomes Report prepared by Ethos Urban at **Appendix CC** and summarised at **Table 4**. Several consultants have undertaken additional consultation with relevant parties during the preparation of their reports.

The proposed development will be placed on public exhibition for 30 days in accordance with clause 83 of the *Environmental Planning and Assessment Regulation 2000.* During the public exhibition period Council, State agencies and the public will have an opportunity to make submissions on the project.

**Table 4: Summary of Issues Raised and Response**

| Key Issue | Response |
|---|---|
| City of Sydney Council – 6 July 2018 | |
| Email correspondence was sent to the City of Sydney Council on 3 July 2018 seeking a meeting and requesting feedback on the proposal. A response was received on 6 July requesting additional information which was subsequently provided, as summarised below. Council confirmed on 4 September 2018 that no further consultation was required prior to exhibition of the EIS. | |
| Proposed consistency with the boarding house provisions within the SEPP (Affordable Rental Housing) 2009 | The SEARs cover letter dated 10 May 2018 confirms that the provisions of the SEPP (Affordable Rental Housing) 2009 do not apply to the proposed development, as such no further assessment is provided. |
| Proposed consistency with the boarding house provisions within the Sydney DCP 2012 | The provisions of a DCP do not apply to State Significant Development in accordance with Clause 11 of *State Environmental Planning Policy (State and Regional Development) 2011.* Notwithstanding this, **Section 6.1.6** sets out a high-level assessment against the key Sydney DCP provisions. |
| Integrated facilities with the existing Iglu development and provision of communal indoor and outdoor space and laundry facilities | The OMP addresses the proposed procedures to ensure the premise operates in conjunction with the existing Iglu Redfern facility to the north. The proposed facilities to service staff and students are detailed throughout this EIS. |
| Provide information about the separation distance of your proposed tower to the proposed tower (SSD 9454) at 90-102 Regent Street | The tower setback to the Marian Street site boundary is predominately 3m, consistent with the existing planning approval on the site for a residential apartment building. Marian Street has a street width of approximately 12m Accordingly, there is approximately 15m of separation between the proposed tower and the 90 Regent Street property boundary. |
| NSW Government Architect's Office & State Design Review Panel - 30 May 2018 | |
| The proposal has been subject to ongoing consultation with the NSW Government Architect's Office and has undergone a design review process in consultation with the State Design Review Panel (SDRP). The Design Review Strategy included a presentation to the SDRP on the 30 May 2018 and the written feedback was received on 6 June 2018. The written feedback and the subsequent design development are detailed below. | |
| A single entry point is impacting the permeability of the building | The proposal has been amended to incorporate a secondary entry point to Marian Street which improves pedestrian and bicycle access. An entry to William Lane was explored, however there is potential pedestrian conflict with vehicles accessing the loading bay and the Redfern Police Station basement. |
| Improve façade activation and respond to the parapet heights of existing terrace shopfronts | A detailed façade strategy has been prepared by Bates Smart at **Appendix C** and the podium is designed to step down Regent Street whilst maintaining a two storey scale. |
| Prepare a wind study to understand the wind impacts from the proposed development | A Wind Impact Assessment has been prepared by Windtech and is provided at **Appendix Y.** Further discussion is provided at **Section 6.16.** |
| Prepare detailed solar and wind studies to demonstrate the comfort and amenity of the courtyard and increase the internal volume of the courtyard. | Solar Access Diagrams have been prepared by Bates Smart and are provided within the Design Report at **Appendix C** and a Wind Impact Assessment has been prepared by Windtech and is provided at **Appendix Y.** |

| Key Issue | Response |
|---|---|
| | The proposal comprises a range of communal spaces including the integrated Level One facilities as well as the rooftop communal terrace. The roof terrace has an abundance of solar access and the courtyard compliments this space, as an area for events and passive recreation. |
| Support for the overall design response to the approved building envelope that reduces the height bulk and footprint of the tower to create greater amenity to surrounding development. | Noted. |
| Consider increasing north facing units, reducing the number of units facing Regent Street and reconfiguring the common lounge area to maximise the available building perimeter for units away from street noise. | Refer to the Architectural Design Report prepared by Bates Smart at **Appendix C.** |
| Increase modulation of the tower and the variety of materials to break up the tower form. | Refer to the Architectural Design Report prepared by Bates Smart at **Appendix C.** |
| Provide Analysis of acoustic and ventilation performance of the building. | An Acoustic Impact Assessment has been prepared by Acoustic Logic at **Appendix K** and the rooms are capable of receiving both natural and mechanical ventilation. |
| Provide further information on the proposed bicycle parking facilities and access to these areas. | Two bicycle parking areas are proposed. The ground level bike parking room contains 37 spaces and the mezzanine level bike parking room contains 47 spaces. As such, 84 spaces are provided across the proposed development. |
| Provide further information on retail strategy for the building in relation to the adjacent Iglu building | Iglu seeks retailers that will complement the student accommodation use and create an active and vibrant ground plane. Retailers within the existing Iglu site are generally food and drink premises. The fit out and use of the retail and commercial tenancies, including operational management will be subject to future Development Consent. |
| Demonstrate a response to aboriginal culture and heritage through the design. | Refer to the Heritage Impact Statement prepared by Urbis at **Appendix H.** |
| Roads and Maritime Services (RMS) | |
| Email correspondence was sent to RMS on 31 August 2018 confirming Iglu's intent to submit the development application and requesting RMS to advise of any issues in relation to the application. No response has been received at the time of lodgement. This consultation is detailed within the Traffic and Parking Impact Assessment prepared by Varga at **Appendix F.** | |
| Sydney Coordination Office within Transport for NSW (TfNSW) | |
| Email correspondence was sent to TfNSW on 31 August 2018 confirming Iglu's intent to submit the development application and requesting TfNSW to advise of any issues in relation to the application. No response has been received at the time of lodgement. This consultation is detailed within the Traffic and Parking Impact Assessment prepared by Varga at **Appendix F.** | |
| The Office of Environment and Heritage (OEH) | |
| A letter has been sent to OEH on 23 August 2018 confirming Iglu's intent to submit the development application and requesting OEH to advise of any issues in relation to the application. No response has been received at the time of lodgement. This consultation is detailed within the Heritage Impact Statement prepared by Urbis at **Appendix H.** | |
| Environment Protection Authority (EPA) | |
| The EPA correspondence dated 26 April confirms that the EPA is generally satisfied that the draft SEARs provides a reliable appraisal of the environmental impacts of the proposal. The EIS will be referred to the EPA during the exhibition period. | |
| Sydney Trains | |
| Sydney Trains was contacted via telephone on 20 August confirming Iglu's intent to submit the development application and requesting Sydney Trains to advise of any issues in relation to the application. This consultation is detailed within the Geotechnical Report prepared by Argus at **Appendix O.** | |
| Community/Adjoining Sites | |
| Ethos Urban developed a consultation program for the proposed development which designed to be practical and effective in capturing valuable feedback, mitigating risks, and highlighting key benefits of the project. Community consultation included:<br>- Establishment of project email address;<br>- Postcard letterbox drop to 2,200 surrounding residents;<br>- Letters to neighbouring building owners; and<br>- One community information session held on site on 01 August 2018.<br>Key issues raised by the community related to parking and access, height and privacy, urban design, building uses and | |

| Key Issue | Response |
|---|---|
| construction impacts. These issues are addressed throughout this EIS and further details are contained within the Consultation Outcomes Report prepared by Ethos Urban at **Appendix CC.** | |

The proposed development will be placed on public exhibition for 30 days in accordance with clause 83 of the *Environmental Planning and Assessment Regulation 2000*. During the public exhibition period Council, State agencies and the public will have an opportunity to make submissions on the project.

# 6.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the proposed development. It addresses the matters for consideration set out in the SEARs (see **Section 2.5**). The Mitigation Measures at **Section 8.0** complement the findings of this section.

## 6.1 Relevant EPIs, Policies and Guidelines

The relevant strategies, environmental planning instruments, policies and guidelines as set out in the SEARs are addressed in **Table 5**.

**Table 5: Summary of consistency with relevant Strategies, EPIs, Policies and Guidelines**

| Instrument/Strategy | Comments |
|---|---|
| **Strategic Plans** | |
| NSW State Priorities | This proposal is consistent with the NSW State Priorities in that it will:<br>- Create additional employment opportunities within the student accommodation, commercial and retail uses;<br>- Increase the supply of housing that is available for students in proximity to major tertiary education campuses; and<br>- Improve access to and increase participation in tertiary education for local students, by providing suitable and affordable housing to allow international and regional students to access Sydney's major tertiary institutions. |
| The Greater Sydney Region Plan 'A Metropolis of Three Cities' | The Sydney Region Plan is the current metropolitan planning strategy that establishes a vision for the future growth of Sydney to 2056. The proposal broadly supports the ten directions outlined in the Strategy in that it:<br>- Increase the supply of housing that is available for students in proximity to major tertiary education campuses;<br>- Contributes to the development of a more accessible and walkable city;<br>- Integrates land uses with public transport;<br>- Supports the economic sectors that contribute to investment and business; and<br>- Continues the urban renewal of the subject site and Redfern-Waterloo precinct. |
| Eastern City District Plan | The Eastern Region Plan identifies five 'districts' within metropolitan Sydney, of which the CoS is located within the Eastern City District. The proposal supports the objectives of the Eastern City District in that it:<br>- Support Sydney's role as a global city for education, and contribute to the provision of affordable and suitable housing options for domestic and international students;<br>- Delivers an integrated land use and transport outcome;<br>- Contributes to the strengthening and competitiveness of the Eastern City District;<br>- Promotes walkable neighbourhoods; and<br>- Strengthens the diversity and availability of accommodation within the Eastern City District. |
| Towards our Greater Sydney 2056 | Towards Our Greater Sydney is the strategy that informed the development of The Greater Sydney Region Plan and the Eastern City District Plan. The proposal's consistency with these strategies is set out above, accordingly the proposal also aligns with Towards our Greater Sydney 2056. |
| Future Transport Strategy 2056 | The proposal provides a high-density student accommodation development which has been appropriately integrated in an area which is well served by public transport. Improved access to the Redfern Station has been prioritised by linking the development to the existing laneway network through the adjoining Iglu facility to the north. These measures are consistent with key goals within the Future Transport Strategy 2056. |
| Better Placed | The proposal's consistency with the objectives and principles contained under Better Placed is demonstrated in the Architectural Design Report prepared by Bates Smart at **Appendix C.**<br><br>In addition, the proposal has been subject to the State Design Review Process facilitated by the NSW Government Architect's office as detailed at **Section 5.0.**<br><br>The NSW Government Architects Office 'Overview of the pilot design review program for state significant projects' acknowledges that *"the NSW State Design Review Panel (NSW SDRP) pilot program has been established to deliver on the intent of the revised EP&A Act, as well as implementing the principles and ambitions of Better Placed".* Accordingly, the design has been developed to align with Better Placed. |

| Instrument/Strategy | Comments |
|---|---|
| Guide to Traffic Generating Developments (RMS) | Refer to the Transport Impact Assessment prepared by Varga at **Appendix F.** |
| Development Near Rail Corridors and Busy Roads | The proposal has been assessed against the Development Near Rail Corridors and Busy Roads-Interim Guideline. This assessment is outlined in the Noise and Vibration Impact Assessment prepared by Acoustic Logic at **Appendix K.** |
| Sustainable Sydney 2030 | This proposal will facilitate the site's regeneration and in doing so will deliver new student accommodation and employment opportunities in an inner urban area with good access to existing transport networks. It will therefore help reinforce the city's global role and identity by contributing to its urban renewal in a sustainable matter and will support the creation of a new vibrant, creative and diverse community in the local area. |
| Central to Eveleigh Urban Transformation Strategy | The Central to Eveleigh Corridor Strategy guides a key strategic urban renewal program in Sydney. The regeneration of this corridor is essential in maximising use of land and infrastructure within Sydney's CBD fringe. The delivery of housing and employment is key to the strategic vision and the proposal is entirely consistent with this. |
| Redfern-Waterloo Built Environment Plan (Stage One) August 2006 | Refer to **Section 6.1.4** |
| Redfern Centre Urban Design Principles | Refer to **Section 6.1.5** and **Section 6.2.** |
| Redfern-Waterloo Development Contributions Plan 2006 | The proposal's development contributions are further discussed within **Section 6.13** of this EIS. |
| Redfern-Waterloo Affordable Housing Contributions Plan 2006 | |
| Sydney's Cycling Futures | The proposal activates the street fronts which encourages a pedestrian friendly environment. In addition, it incorporates improvements to materiality and way finding for both pedestrians and cyclists. Further, bicycle storage facilities have been accommodated within the proposed building. These measures are consistent with the State's plans for walking and cycling. |
| Sydney's Walking Futures. | |
| **State Legislation** | |
| EP&A Act | The proposed development is consistent with the objects of the EP&A Act for the following reasons:<br>- the provision of student accommodation in a location that has close proximity to tertiary education campuses and public transport supports the orderly and economic functioning of the city;<br>- the proposal supports the orderly and economic use of land by ensuring that surrounding land parcels are able to be developed in the future;<br>- is able to be satisfactorily serviced by existing utilities and communications services;<br>- provides a new publicly accessible through-site link that will improve pedestrian flows and amenity in the area;<br>- supports the principles of ecologically sustainable development by incorporating a range of measures to actively reduce energy and water consumption within the building; and<br>- provides housing that is suitable for and attainable by students, thereby supporting the ability of regional, interstate and overseas students to access Sydney's major tertiary education institutions, whilst also reducing competition from students in the private rental market for more affordable housing products.<br><br>The proposed development is consistent with Division 4.7 of the EP&A Act, particularly for the following reasons:<br>- the development has been declared to have state significance;<br>- the development is not prohibited by an environmental planning instrument; and<br>- the development has been evaluated and assessed against the relevant heads of consideration under section 4.15(1). |
| EP&A Regulations | The EIS has addressed the specification criteria within clause 6 and clause 7 of Schedule 2 of the EP&A Regulation. Similarly, the EIS has addressed the principles of ecologically sustainable development through the precautionary principle (and other considerations), which assesses the threats of any serious or irreversible environmental damage (see **Section 8.0**). |

<table>
<tr><th>Instrument/Strategy</th><th>Comments</th></tr>
<tr><td></td><td>As required by clause 7(1)(d)(v) of Schedule 2, the following additional approvals will be required in order to permit the proposed development to occur.<br><br>
<table>
<tr><th>Act</th><th>Approval Required</th></tr>
<tr><td colspan="2">Legislation that does not apply to State Significant Development</td></tr>
<tr><td>Coastal Protection Act 1979</td><td>N/A</td></tr>
<tr><td>Fisheries Management Act 1994</td><td>N/A</td></tr>
<tr><td>Heritage Act 1977</td><td>N/A</td></tr>
<tr><td>National Parks and Wildlife Act 1974</td><td>N/A</td></tr>
<tr><td>Native Vegetation Act 2003</td><td>N/A</td></tr>
<tr><td>Rural Fires Act 1997</td><td>N/A</td></tr>
<tr><td>Water Management Act 2000</td><td>N/A</td></tr>
<tr><td colspan="2">Legislation that must be applied consistently</td></tr>
<tr><td>Fisheries Management Act 1994</td><td>No</td></tr>
<tr><td>Mine Subsidence Compensation Act 1961</td><td>No</td></tr>
<tr><td>Mining Act 1992</td><td>No</td></tr>
<tr><td>Petroleum (Onshore) Act 1991</td><td>No</td></tr>
<tr><td>Protection of the Environment Operations Act 1997</td><td>No</td></tr>
<tr><td>Roads Act 1993</td><td>No</td></tr>
<tr><td>Pipelines Act 1967</td><td>No</td></tr>
</table></td></tr>
<tr><td>SEPP (State and Regional Development)</td><td>Under Schedule 2 clause 2, Development within the Redfern-Waterloo Sites with a capital investment value of more than $10 million is State Significant Development. As the proposed development will have a capital investment value of $38,900,000 (see Appendix W) it is defined as SSD.</td></tr>
<tr><td>SEPP (State Significant Precincts)</td><td>Refer to Section 6.1.1.</td></tr>
<tr><td>SEPP (Urban Renewal)</td><td>The site is located within the Redfern-Waterloo ‘potential precinct’ identified in the Urban Renewal SEPP. The proposed development is consistent with the provisions of clause 10 of the SEPP in that it supports the urban renewal of the precinct by:<br>- providing a high-quality building that intensifies the existing use of the site;<br>- incorporating ground-level retail and through-site link to improve activity at street level;<br>- does not impede the future amalgamation or development of sites for the purpose of urban renewal; and<br>- locates new development in an area that has good access to services that is in close proximity to public transport.</td></tr>
<tr><td>SEPP (Infrastructure)</td><td>Refer to Section 6.1.2</td></tr>
<tr><td>SEPP 55 Remediation of Land</td><td>A Phase I Environmental Site Assessment has been prepared by Aargus and is provided at Appendix R. The report demonstrates that whilst there is the potential for contamination of the site due to previous uses. It is considered that the site is or can be made suitable for the proposed development subject to additional site investigations being undertaken during site preparation works. The recommendations of the Phase 1 assessment are included as mitigation measures at Section 6.12.</td></tr>
<tr><td>SEPP 64 Advertising and Signage</td><td>Refer to Section 6.1.3</td></tr>
<tr><td>SEPP 65 Design Quality of Residential Apartment Development</td><td>SEPP 65 applies only to development for the purpose of residential flat buildings. The proposed development is not defined as a residential flat building under clause 3 or Clause 4 of the SEPP. As such, neither this policy or the Apartment Design Guide apply. Notwithstanding this, implications of the proposed development for the residential amenity of existing and future residential development in the immediate vicinity of the site is discussed in Section 6.3.</td></tr>
</table>

| Instrument/Strategy | Comments |
|---|---|
| SEPP Affordable Rental Housing | The site is within the Business Zone – Commercial Core, which the Department of Planning and Environment have advised is not an equivalent land use zone to the relevant zones listed under the ARH SEPP. The proposal does not rely on any incentive floor space provisions contained within the ARH SEPP. The Department of Planning and Environment wrote to the Proponent on 10 May 2018 to advise that the provisions and floor spaces bonuses of Division 3 of the Affordable Rental Housing SEPP are not applicable to this project. Accordingly, no further assessment against these provisions is required. |
| SEPP Vegetation in Non-Rural Areas | The site does not contain any significant vegetation or natural habitat, as such biodiversity values of trees and other vegetation will not be impacted. |
| **Local Planning Instruments and Controls** | |
| Sydney Local Environmental Plan 2012 | The site is not classified as land to which the Sydney Local Environmental Plan applies as it is contained within The Redfern–Waterloo Authority State Significant Precinct. |
| Sydney Development Control Plan 2012 | The site is not classified as land to which the Sydney Development Control Plan applies as it is contained within The Redfern–Waterloo Authority State Significant Precinct. Furthermore, the provisions of a DCP do not apply to State Significant Development in accordance with Clause 11 of State Environmental Planning Policy (State and Regional Development) 2011. Notwithstanding this, **Section 6.1.6** sets out a high-level assessment against the key Sydney DCP provisions. |

### 6.1.1 State Environmental Planning Policy (State Significant Precincts) 2005

The site is located within Redfern-Waterloo Sites area which is identified as a State Significant Site under the State Significant Precincts SEPP. As such, the SEPP prescribes the principle statutory land use planning and development controls for the site. The specific controls applying to this area (including the site) are set out in Schedule 3 – Part 5 of the SEPP and are addressed in the following sections.

#### Land Use Permissibility

The site is zoned 'Zone E - Business – Commercial Core' under the SEPP, which permits residential development including student accommodation as well as commercial and retail uses. Furthermore, the proposed use is consistent with objectives of the zone in that it:

- facilitates the development of the Redfern town centre by providing a high quality architecturally designed building with a strong, activated ground plane whilst also injecting new activity through the addition of 265-434 new students into the centre;
- provides employment generating uses with modern, well designed retail tenancies and a commercial tenancy as well as ongoing employment to support Iglu's operations;
- provide student accommodation that is compatible with adjoining residential and non-residential development;
- maximises public transport use by not providing any on-site parking in recognition of the close proximity to Redfern Station and good bus connections, whilst also supporting cycling and walking through the provision of bike storage facilities and the future provision of information to students and staff;
- establishes a new standard for design excellence in the Redfern centre through the introduction of a new building designed by well-regarded architects Bates Smart; and
- provides a new publicly-accessible through site link that increases community access to and which is appropriate to the site's central, urban context.

#### Building Height

Under the Major Development SEPP, the site is subject to a maximum building height of 18 storeys, with a maximum two storey height portion along Regent Street and a three storey height portion along Marian Street as illustrated in **Figure 27** below.

The main student accommodation tower complies with the 18 storey building height limit, however the tower setback intrudes into the podium setback height zones. Accordingly, a SEPP 1 Objection to the Development Standard is provided at **Appendix AA.**

### Floor Space Ratio

The site is subject to a maximum floor space ratio (FSR) of 7:1 as illustrated at **Figure 27** below. The proposed development has a GFA of 7,169m$^2$ which, based on the site area of 821.7m$^2$, equates to an FSR of 8.7:1. Accordingly, a SEPP 1 Objection to the Development Standard is provided at **Appendix BB.**

**Maximum Building Height** **Floor Space Ratio**

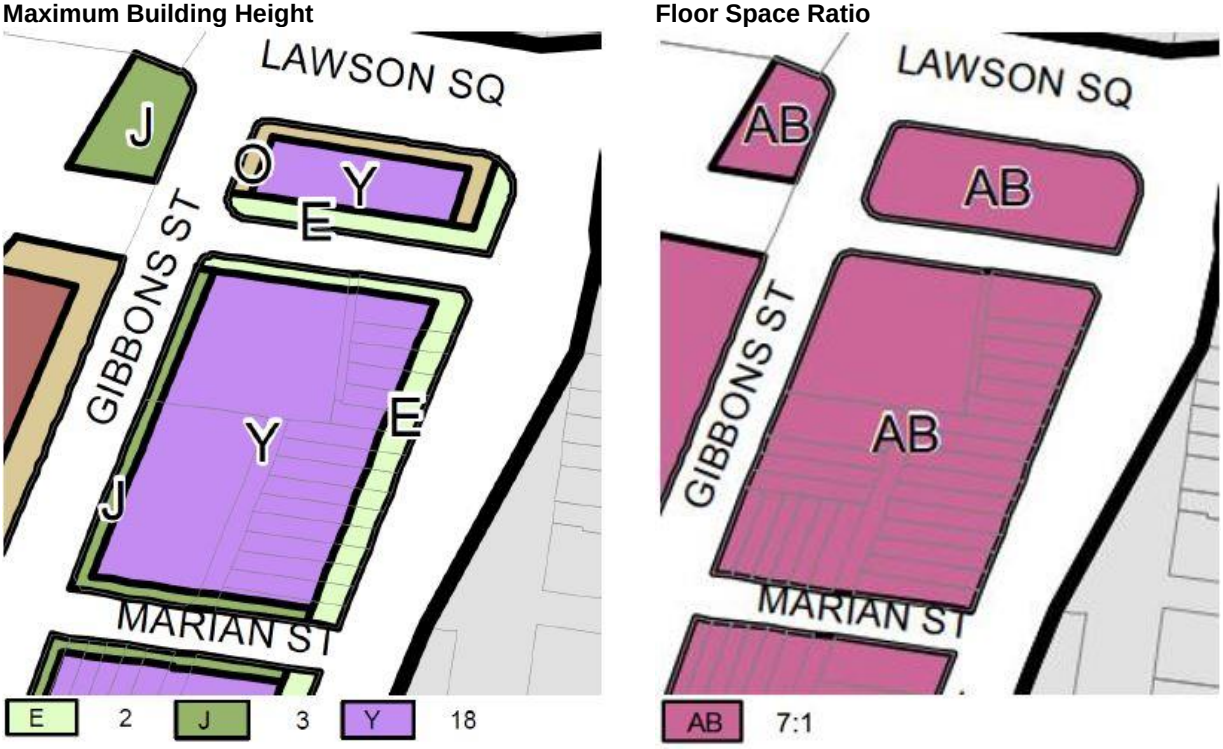



**Figure 27: Maximum Building Height and Floor Space Ratio Map Extracts**

*Source: State Environmental Planning Policy (State Significant Precincts) 2005*

### Design Excellence

Clause 22 of Part 5 of Schedule 3 of the SEPP requires that the consent authority consider whether a proposed development exhibits design excellence. In considering whether a proposed development exhibits design excellence, clause 22 requires the consent authority to have regard to the following matters:

*a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,*
*b) whether the form and external appearance of the building will improve the quality and amenity of the public domain,*
*c) 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.*

Achieving excellent and innovative architectural design is integral to Iglu's student experience and market positioning which has been realised through its collaboration with Bates Smart on a number of other projects in Sydney. This successful partnership has contributed to Iglu's position in Sydney as a leading provider of student accommodation, and the long-term owner of the Iglu assets.

Iglu's approach is not to replicate the same building in different locations, but rather to design a distinctive building which responds to context in each location. This is demonstrated in the Iglu Central Building at Chippendale, which won the Australian Institute of Architects (AIA) NSW Awards, Residential Architecture Awards, Multiple Housing 2013 and the Iglu Chatswood building which was shortlisted for the same award category in 2014. Images of these buildings are included at **Figure 1.**

Under clause 22(3) of Schedule 3 of the SEPP the consent authority may require a design competition to be undertaken for any building over 12 storeys in height within the Redfern-Waterloo area, however the SEARs state that:

*A design excellence strategy shall be prepared in consultation with the NSW Government Architect, demonstrating how the proposal will achieve design excellence:*

- *if the proposed building envelope **is materially outside the approved building envelope (SSD 7080)** for the site, the strategy must provide for and outline the design competition process* (**our emphasis**)
- *if the proposed building envelope is otherwise within the approved building envelope (SSD 7080) for the site, the strategy must provide for and outline the design review process conducted by the State Design Review Panel.*

A detailed comparison between the proposed and approved (SSD 7080) envelope is provided within the Architectural Design Report at **Appendix C.** This analysis confirms the proposal is not materially outside the approved envelope, and in fact is largely within and smaller than the approved building particularly in terms of overall height and mass to the north western portion of the building.

Pursuant to the SEARs, the proposal has been subject to a design review process in consultation with the State Design Review Panel (SDRP). As the site contained a recent development consent (SSD 7080) and the proposed building envelope was materially consistent with this approval, the Design Review Strategy progressed to a presentation of the Developed option to the SDRP on the 30 May 2018 and the written feedback was received on 6 June 2018.

The SDRP's written feedback has informed the proposed development as detailed within **Table 4** at **Section 5.0.** In accordance with the Design Review Strategy, further presentation with the SDRP will be undertaken during the exhibition of the DA and following this as deemed to be necessary.

### 6.1.2 State Environmental Planning Policy (Infrastructure) 2007

The subject site is located adjacent to a Classified Road (Regent Street) and is within 150m of Redfern Rail Station and the future CBD Rail Link (Zone B - Tunnel). As such, the provisions of the *State Environmental Planning Policy (Infrastructure) 2007* applies to the proposed development as set out below.

**Excavation in, above or adjacent to rail corridors**

Whilst the proposed development does not involve penetration of the ground to more than 2m below existing ground level, the proposal does involve the erection of a building that is more than 10m in height and the CIV is well in excess of $200,000. As such, the EIS must be referred to Transport for NSW as the relevant rail authority.

With regard to the matters to be considered by Transport for NSW, it is noted that only limited excavation is proposed to resolve site levels and footings, and no basement car parking is proposed. As a result, the proposed development would have substantially less interference with future tunnel development than the recent mixed-used buildings to the north and west of the site.

**Impact of noise or vibration on non-road development**

Regent Street is identified as having an annual average daily traffic volume of more than 40,000 vehicles adjacent to the site based on the maps published by the NSW Roads and Maritime Services. In accordance with clause 102 of the Infrastructure SEPP, the 'Development Near Rail Corridors and Busy Roads – Interim Guideline' has been addressed at within the Acoustic and Vibration Impact Assessment prepared by Acoustic Logic at **Appendix K.** Further discussion is provided at **Section 6.6**.

**Traffic generating development**

The site is approximately 50m from Gibbons Street which forms part of a classified road (State Road 170). As the proposed development involves new commercial/retail uses with a total gross floor area in excess of 500m$^2$ (839m$^2$) it is classified as traffic generating development under clause 104 of the Infrastructure SEPP. As such, the EIS must be referred to the NSW Road and Maritime Services for their input. Regarding the matters in clause 104(3)(b), it is noted that the proposal has no on-site parking, is highly accessible by public transport and does not raise any adverse road safety issues.

### 6.1.3 State Environmental Planning Policy No 64 - Advertising and Signage

Two 'business identification signs' are proposed as part of this application as detailed in the Architectural Drawings provided at **Appendix C** with one sign located at top of the Marian Street elevation and one above the awning at the Marian Street entry. These signs contain the Iglu logo, being the word 'Iglu' surrounded by an orange bubble.

SEPP 64 applies to all signage that under an environmental planning instrument can be displayed with or without development consent and is visible from any public place or public reserve. Schedule 1 of SEPP 64 contains a range of assessment criteria which are matters for consideration by the consent authority in assessing applications incorporating signage. The compliance of the proposed signage against these criteria is discussed in **Table 6** below.

**Table 6: SEPP No. 64 – Advertising and Signage Controls**

| Assessment Criteria | Comments | Compliant |
|---|---|---|
| **1. Character of the area** | | |
| Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located? | The proposed signage is compatible with the desired character for new buildings within the Redfern area. The proposal recognises the importance of providing high quality signage that is integrated with the building design. The design and scale of the signage is consistent with the approved signage applied to the adjoining Iglu building, therefore it is not out of character with the area. | Yes |
| Is the proposal consistent with a particular theme for outdoor advertising in the area or locality? | The proposal includes business identification signage therefore is consistent with the other signage in the locality, particularly the retail frontages along Regent and Redfern Streets. | Yes |
| **2. Special areas** | | |
| Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas? | The proposal is consistent with the provision of signage within the Sydney CBD and Redfern and does not detract from the visual quality of the area and is not within any environmentally sensitive area, heritage area, natural conservation area, open space areas, waterways or rural landscapes. | Yes |
| **3. Views and vistas** | | |
| Does the proposal obscure or compromise important views? | The proposal will not obscure or compromise important views. | Yes |
| Does the proposal dominate the skyline and reduce the quality of vistas? | The proposal is contained to two zones including the Marian street elevation and the Marian Street entry awning. Accordingly, it will not impact on the skyline, nor reduce the quality of vistas. | Yes |
| Does the proposal respect the viewing rights of other advertisers? | The proposal will not impact on the viewing rights of any advertisers. | Yes |
| **4. Streetscape, setting or landscape** | | |
| Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape? | The scale, proportion and form of the proposal is considered appropriate as, it responds to the overall size of the building and broader precinct. | Yes |
| Does the proposal contribute to the visual interest of the streetscape, setting or landscape? | The proposal will improve the visual interest of the streetscape, by facilitating high quality signage that integrates with the architectural characteristics of the Iglu facility. | Yes |
| Does the proposal reduce clutter by rationalising and simplifying existing advertising? | The consistency between the scale and location of the signage detailed within the proposal will ensure that it will not result in unnecessary visual clutter. | Yes |
| Does the proposal screen unsightliness? | Whilst the proposal does not directly screen unsightliness, it is will improve the physical presentation of the building. | Yes |
| Does the proposal protrude above buildings, structures or tree canopies in the area or locality? | The proposal is contained to two zones including the Marian Street elevation and the Marian Street entry awning. Accordingly, it will not protrude above buildings, structures or tree canopies in the area or locality. | Yes |
| Does the proposal require ongoing vegetation management? | The proposal does not require any ongoing vegetation management. | N/A |
| **5. Site and building** | | |

| Assessment Criteria | Comments | Compliant |
|---|---|---|
| Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located? | The proposal has been carefully designed to be compatible with the scale, proportions, and presentation of the building. The scale of the proposal is considered to be appropriate for the context of the site and will support the character of the area. | Yes |
| Does the proposal respect important features of the site or building, or both? | The proposal is respectful in its design and will not dominate the surrounding locality or detract from any of the important features of the building. | Yes |
| Does the proposal show innovation and imagination in its relationship to the site or building, or both? | The proposal has been specifically designed to recognise the importance of providing high quality signage that is integrated with the building and contributes to the character of the public domain. The proposal is innovative in design and is imaginatively integrated into the building. | Yes |
| **6. Associated devices and logos with advertisements and advertising Structures** | | |
| Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed? | The signage detailed in the proposal includes lettering and logos, which are an integral part of the business identification signage. | Yes |
| **7. Illumination** | | |
| Would illumination result in unacceptable glare? | The illumination of the signage will be minimal and consistent with the existing level of illumination presented by the Iglu signs on the building to the north. Illumination will not result in unacceptable glare or affect the safety of pedestrians or motorists. | Yes |
| Would illumination affect safety for pedestrians, vehicles or aircraft? | | Yes |
| Would illumination detract from the amenity of any residence or other form of accommodation? | | Yes |
| Can the intensity of the illumination be adjusted, if necessary? | | N/A |
| Is the illumination subject to a curfew? | | N/A |
| **8. Safety** | | |
| Would the proposal reduce the safety for any public road? | Due to the design, placement, scale, and intensity of the proposal, it will not reduce road safety. | Yes |
| Would the proposal reduce the safety for pedestrians or bicyclists? | As above, due to the design, placement, scale, and intensity of the proposal, pedestrian or cyclist safety will not be reduced. | Yes |
| Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas? | As discussed above, the proposal will not obscure sightlines, and thus will not reduce safety for pedestrians. | Yes |

### 6.1.4 Redfern-Waterloo Built Environment Plan Stage 1

The Redfern Waterloo Authority's 'Built Environment Plan Stage 1 (BEP 1) sets out the strategic land use and urban design principles for the sites identified in the State Significant Precincts SEPP. The proposed development aligns with the BEP 1 by:

- strengthening the connection between Redfern and nearby university campuses;
- supporting local employment;
- providing additional housing and housing choice;
- activating the street fronts; and
- incorporating a podium design that is consistent with the traditional character of area.

The proposal is considered consistent with the land use and design concepts for the Redfern town centre precinct (Redfern Railway Station, Gibbons and Regent Streets). The proposal supports the objectives for character and urban scale in the centre by:

- maintaining the established character and scale of the Regent Street frontage by incorporating new terraces consistent in scale and architectural language of the existing retail frontages along Regent Street;
- providing new retail spaces that further activate the Regent Street ground plane; and
- providing for passive surveillance of all public spaces in the vicinity of the site by addressing windows at upper levels toward the street.

### 6.1.5 Draft Urban Design Principles – Redfern Centre

The Draft Urban Design Principles for the Redfern Centre were developed by the Redfern Waterloo Authority in 2009 to provide additional detail regarding the expectations for design excellence within the Redfern-Waterloo State Significant Sites under clause 22 of Part 5 of Schedule 3 of the State Significant Precincts SEPP.

These principles apply to the area generally bounded by Marian Park, Margaret Street, Regent Street and Lawson Square. The principles were publicly exhibited in 2010 and were subsequently endorsed by the (then) Minister for Planning and Infrastructure.

The proposed development is considered to be consistent with the objectives for high-rise development within the centre as it:

- provides a high-quality building that achieves architectural design excellence;
- supports a high-quality pedestrian environment and public domain with modern retail tenancies and the provision of new awnings;
- maintains the established character and scale of the Regent Street frontage by incorporating new terraces consistent in scale and architectural language of the existing retail frontages along Regent Street;
- provides a slim tower form in relation to existing developments in the street block, therefore maximising view-sharing and solar access;
- contributes to a 'dramatic and recognisable' skyline for Redfern with a new building that sets a high benchmark for design excellence within the centre; and
- promotes usage of public transport, walking and cycling by providing no on-site car parking.

**Table 7** below discusses the consistency of the proposed development with the design principles for high-rise development within the centre.

**Table 7: Draft Redfern Urban Design Principles – High-Rise Development Design Principles**

| Design Principle | Summary of Control | Assessment | Complies |
|---|---|---|---|
| **Site controls** | | | |
| Building Heights | Max. 18 storeys, 2 storeys along Regent Street and 3 storeys along Marian Street | The proposal does not exceed 18 storeys, however encroaches into the 2 storey podium area to Regent Street. Accordingly, a SEPP 1 Objection to the Development Standard is provided at **Appendix AA**. | Partial |
| FSR | 7:1 | The proposed development has an FSR of 8.7:1. Accordingly, a SEPP 1 Objection to the Development Standard is provided at **Appendix BB.** | No |
| Floor to floor heights | Retail/Commercial:<br>- 3.6 to 4.2m at ground and 3.2m to 3.8m above<br>Residential:<br>- 2.9 to 3.2m | The proposal is generally contains floor to floor heights of 4.64m at the ground floor and 3.9m to the upper levels. | Yes |
| Minimum site area | Minimum site area of 1,400m$^2$ | The site 821.7m$^2$. Notwithstanding this the approved development under SSD 7080 achieved 18 storeys on site, and the proposal demonstrates design excellence is still achieved. | No |
| **Podium Design** | | | |
| Setbacks | Regent Street: nil setback<br>Marian Street: 1.5m<br>William Lane: 0.8m<br>Side: nil setback | The proposed podium is generally built to boundary. The proposed podium setbacks are consistent with the approved building on site under SSD 7080. | No |
| Character | Retain fine-grain shopfronts, provide consistent street edge and architectural character to respond to use and function | The proposal maintains the established character and scale of the Regent Street frontage by incorporating new terraces consistent in scale and architectural language of the existing retail frontages along Regent Street. | Yes |
| Continuity | Respond to parapet heights of adjoining buildings and provide a consistent street wall. | The proposed 2 storey podium massing responds to the prevailing street alignment and ensures a consistent street wall. | Yes |
| Ground level Activation | Provide active uses at ground level, minimise blank walls and provide passive surveillance. Lobbies to create a “dramatic and exciting” entry. | The proposal maximises ground-level activation, with active retail/commercial frontages to Regent Street and Marian Street. Both Regent Street and Marian Street are provided with entry points, with the Regent Street entry within the adjoining Iglu building which clearly defined. | Yes |
| Awnings | Preserve the continuity of existing awnings to street frontages and use solid materials rather than glazing. | An awning is proposed to step down Regent Street responding to the sites topography and wraps around the street corner to a Marian Street. The awning is designed using darker materials | Yes |
| Signage | Reference should be made to the City of Sydney DCP. | Signage has been informed by the provisions of the Sydney DCP relating to flat mounted wall sings and above awning sings. | Yes |
| Heritage | Provide development that is complementary to the grain of adjoining fabric. | The proposal is appropriate from a heritage perspective as detailed within the Heritage Impact Statement at **Appendix H.** | Yes |
| Vehicular Access | Loading access to be via William Lane, and have a minimum width of 6m. | No loading dock is proposed within the site. The proposal seeks to use the existing loading dock within the adjoining Iglu site. Further discussion is provided at **Section 6.4** | No |
| **Tower Design** | | | |
| Setbacks | 4 metres to Marian Street<br>8 metres to Regent Street | Refer to **Section 6.2.1.** | No |
| Building Separation | 13m for buildings below 8 storeys<br>18m for buildings in excess of 8 storeys. | Refer to **Section 6.2.2.** | Partial |
| Character and architectural expression | Maximum tower footprint of 2,000m$^2$. Building massing above 2 storeys to provide | The proposed tower footprint is substantially smaller than the maximum, with an articulated footprint. The facades are heavily articulated as demonstrated at **Appendix C**. | Yes |

| Design Principle | Summary of Control | Assessment | Complies |
|---|---|---|---|
| | windows/balconies to all building facades. | Windows on the eastern and southern facades have been maximised to captures the available vistas. | |
| Proportions | Define the building form with a strong 2-3 storey base, use columns, distinct massing elements and articular to achieve a high-quality architectural outcome | The proposal provides a strong, distinct base that reflects the existing built form. The proposed tower would rise above this with strong vertical elements with the facades broken up with architectural window elements. | Yes |
| Skyline/ roof top design | Provide a dramatic silhouette, screen rooftop plant equipment. | As the proposed building is lower in height than existing and proposed buildings to the north and west, the building will not significantly contribute to the silhouette of the centre. Lift overruns and any plant equipment will be fully enclosed in a manner consistent with the form and materials of the other building facades. | Yes |
| Materials/ treatments | Promote high quality finishes with innovative architectural concepts, and avoid highly reflective glass. | It is considered that the materials and finishes proposed satisfy these provisions. | Yes |
| Environmental Impact | | | |
| Solar access/ overshadowing | Minimum of 3 hours of solar access to the living rooms and private open space between the hours of 9 - 3pm on 22 June to for at least 70% of residential units | As the proposal is not defined as a residential flat building, SEPP 65 does not apply. Overshadowing is addressed at **Section 6.3.1.** | Yes |
| Wind Mitigation | Minimise wind from downdrafts which impact on pedestrian comfort and safety and inhibit the growth of street trees. | A Wind Impact Assessment has been prepared by Windtech and is provided at **Appendix Y.** Refer to **Section 6.16.** | Yes |
| Acoustics | An acoustic assessment may be required depending on the proposed use. | An Acoustic Impact Assessment has been prepared by Acoustic Logic and is provided at **Appendix K.** Refer to **Section 6.6.** | Yes |
| Green star rating | Maximise outcomes by engaging ESD consultant and incorporate measures to reduce energy consumption and improve thermal efficiency. | The proposal involves a number of energy and water consumption reduction measures that have been developed in consultation with ESD consultant IGS, as detailed in **Section 4.10** and **Section 6.11.** | Yes |

### 6.1.6 Sydney Development Control Plan

The Sydney Development Control Plan 2012 (the DCP) **is not applicable** to State Significant Development in accordance with clause 11 of the State and Regional Development SEPP. Furthermore, the DCP provision applies to both purpose-built student accommodation and boarding house developments, which have entirely different day to day operating and occupancy conditions.

Notwithstanding the above, the proposal's compliance with Section 4.4.1 of the DCP which sets out provisions that apply specifically to development for the purpose of boarding houses and student accommodation in the City of Sydney is set out in **Table 8** below.

**Table 8: Assessment against Section 4.4.1 of City of Sydney DCP 2012**

| Summary of Control | Assessment | Compliance |
|---|---|---|
| **4.4.1.1 Subdivision** | | |
| Boarding houses/ student accommodation buildings should not be subdivided. | Subdivision is not proposed. | Yes |
| **4.4.1.2 Bedrooms** | | |
| Minimum area of:<br>• 12m$^2$ (including 1.5m$^2$) wardrobe, plus<br>• 4sqm when a second adult occupant is intended, which must be clearly shown | The calculations below equate to a minimum area of 14.9m$^2$ for cluster bedrooms and 16.9m$^2$ for studios. The minimum area for dual occupancy studios is 20.9m$^2$. | Generally complies Refer to discussion below |

| Summary of Control | Assessment | Compliance |
|---|---|---|
| on plans; plus<br>• 2.1m$^2$ for ensuite, plus<br>• 0.8m$^2$ for shower in ensuite,<br>• 1.1sqm for any laundry, which must comprise a wash tub and washing machine;<br>• plus 2m$^2$ for kitchenette. | The proposal contains:<br>- Standard studios: 17m$^2$<br>- Accessible studios: 27m$^2$<br>- Loft studios: 26m$^2$<br>- Cluster bedrooms: 13-14m$^2$ linked to 25m$^2$ communal area<br><br>Accordingly, there are minor variations to the area requirements for dual occupancy studios and cluster bedrooms. These variations are reasonable and justified as detailed below this table. | |
| Each bedroom must have access to natural light, from a window or door with a minimum aggregate area of 10% of the floor area of the room. Skylights are not to be the sole source of light. | Windows to bedrooms are approximately 2m$^2$ to 5m$^2$ in area and the number of east facing studios has been maximised to ensure access to natural light. | Yes |
| Ensure the ceiling height in any bedroom containing double bunks is 2.7m.<br>Triple bunks are not permitted. | No bedrooms contain bunk beds. | Yes |
| In boarding houses classified as Class 3 by the BCA, each bedroom is to meet the fire safety standards of a sole occupancy unit for a Class 3 building in the BCA, whether it is provided as a sole occupancy or not. | The proposed development will satisfy all of the applicable requirements of the BCA, either by compliance with Deemed to Satisfaction Provisions or through the development of satisfactory alternate solutions. | Yes |
| **4.4.1.3 Communal kitchen areas** | | |
| A communal kitchen area is to be provided with a minimum area that is the greater of 6.5sqm in total or 1.2sqm for each resident occupying a bedroom without a kitchenette. | All studios and lofts are provided with kitchenettes. Communal kitchen areas associated with the 6 bedroom clusters are 25m$^2$ in area, allowing for 4.1m$^2$ per cluster bedroom. | Yes |
| At least 1 sink and 1 stove per 6 people | A kitchen and stove are provided in each cluster communal kitchen. | Yes |
| Minimum of:<br>• 0.13 cubic metres of refrigerator storage space;<br>• 0.05 cubic metres of freezer storage space; and<br>• 0.30 cubic metres of lockable drawer | This will all be provided within the kitchen areas. | Yes |
| **4.4.1.4 Communal living areas and open space** | | |
| **Indoor:**<br>Provide indoor communal living areas with a minimum area of 12.5sqm or 1.25sqm per resident and a width of 3 metres. | The proposal provides 595m$^2$ of indoor communal living area. The existing Iglu facility provides 1,221m$^2$ of communal indoor area equating to a total of 1,816m$^2$ across the integrated site.<br><br>Assuming the proposal is at capacity of 434 students and applying the proposed 595m$^2$ will allow for 1.37m$^2$ per student which is in excess of the DCP requirement.<br><br>Notwithstanding this, as detailed at **Section 4.6.4,** the proposal is anticipated to be significantly under the maximum capacity as not all studio rooms will be occupied by couples. Accordingly, there is ample indoor communal area provided. | Yes |
| Be located near commonly used areas. | The proposal delivers an integrated indoor communal area at Level One that is expected to be well-used. | Yes |
| Adjacent to the communal open space | Level One is an integrated level whereby the courtyard adjoins the indoor communal facilities. | Yes |
| On each level of a multi-storey boarding house, where appropriate | Communal cluster kitchens are on each level, however, the main communal area has been consolidated on Level One. Iglu intentionally consolidates communal area to ensure interaction among all students, not just those living on each floor. | Yes |

| Summary of Control | Assessment | Compliance |
|---|---|---|
| Receive at least 2 hours solar access to at least 50% of windows. | Windows to the Level One indoor communal living area are east facing to Regent Street and as such are expected to receive 2 hours of sunlight each day. | Yes |
| Where they will have minimal impact on bedrooms and adjoining properties. | The Level One indoor communal area is an extension of the approved communal areas associated with the existing Iglu building, as such they are considered appropriately located. | Yes |
| **Outdoor:**<br>Minimum of 20m$^2$ of communal outdoor open space with a minimum dimension of 3m$^2$ | The additional 89m$^2$ level one courtyard extension provides a total courtyard area of 188m$^2$ at this level. The rooftop terrace is approximately 201m$^2$, accordingly the proposal significantly exceeds this requirement. | Yes |
| Outdoor open space to be north-facing, receive at least 50% sunlight for 2-hours at winter solstice. | While the surrounding built form limits the direct solar access to the Level One courtyard, the proposal has provided a rooftop terrace to ensure the development contains an outdoor area with ample solar access. The rooftop terrace achieves more than two hours of direct sunlight at the winter solstice. | Yes |
| Be provided at ground level in a courtyard or terrace area, where possible; | The ground plane has been dedicated to retail and services. Level One and the rooftop terrace are the most appropriate locations for the outdoor communal areas. | Yes |
| Provide partial cover from weather; | The Level One courtyard is partially covered by the tower form above and the rooftop terrace offers partial awning coverage. | Yes |
| Incorporate soft or porous surfaces for 50% of the area; | The communal outdoor areas are above ground and the site is in a dense urban area. As such this restricts the provision of soft porous open space. Notwithstanding this, a comprehensive landscape scheme has been prepared by 360 and is provided at **Appendix J.** | Yes |
| Be connected to communal indoor spaces, such as kitchens or living areas | The Level One Courtyard connects directly to the Level One indoor communal open space. | Yes |
| Contain communal facilities such as barbecues, seating and pergolas where appropriate; and | The courtyard and terrace areas contain communal facilities as illustrated on the Landscape Plans at **Appendix J.** | Yes |
| Be screened from adjoining properties and the public domain with plantings, such as a trellis with climbing vines. | The courtyard and terrace areas are appropriately screened. | Yes |
| 30% of all bedrooms to have access to at least 4m$^2$ of private open space. | Due to the location, noise, proximity to adjoining residential buildings, nature of the use as student accommodation and the building design, private open space in the form of balconies is not considered to be necessary or desirable. This also conflicts with Iglu's intended operation to get students to interact with each other within the high-quality communal areas. | Refer to discussion below |
| **4.4.1.5 Bathroom, laundry and drying facilities** | | |
| Communal bathroom available 24 hours per day. | Communal bathroom facilities are available at the Level One communal facility within the existing Iglu facility. | Yes |
| One washing machine and dryer per 12 residents and drying facilities. At least one large laundry tub with hot and cold running water. | The mezzanine level contains a communal laundry providing five 8kg (or larger) washing machines and six 9kg dryers, notice board, clothes folding table and chairs for those waiting for their washing. We note that the current laundry provision is less than the required provision, however this is consistent with existing Iglu approvals and is consistent with the level of usage within existing Iglu facilities as detailed below this table. | Refer to discussion below |
| Drying facilities are to be located to maximise solar access and ensure that the usability of the space is not comprised | Communal areas are not provided with drying wracks or clotheslines. | Refer to discussion below |
| **4.4.1.6 Amenity, safety and privacy** | | |
| Communal facilities are located in safe and accessible locations. | Communal facilities are provided on Level One, which is co-located with staff areas and is expected to be actively used. The rooftop terrace will have CCTV cameras to provide constant visibility of this space to staff. | Yes |

| Summary of Control | Assessment | Compliance |
|---|---|---|
| Bedrooms to be sufficiently noise insulated to provide reasonable amenity | Suitable noise insulation between rooms will be provided as part of detailed design and construction. The Traffic Noise Assessment provided at **Appendix L** confirms that noise criteria are able to be achieved through standard construction and design methodologies. | Yes |
| Structural fittings and fixtures for all internal rooms that enhance nonchemical pest management of the building | All structural fittings and fixtures will be designed to comply. | Yes |
| Appliances to achieve minimum 3.5 star energy efficiency rating | Whilst appliances have not been selected at this stage, these will be selected with efficiency in mind as the cost of their operation will be charged on a flat fee basis to students as part of the overall accommodation package. | Yes |
| Where fewer than 12 occupants are accommodated, at least two bedrooms have north or east windows and at least one bedroom is adaptable for residents with a disability | The proposal accommodates in excess of 12 occupants | N/A |
| Minimise visual and acoustic privacy impacts on adjoining neighbours. | The proposal has been designed to minimise visual and acoustic impacts on neighbours as detailed at **Section 6.3.** | Yes |
| Acoustic report may be required. | An Acoustic and Vibration Impact Assessment has been prepared by Acoustic Logic and is provided at **Appendix K.** | Yes |
| Waste to be collected by a private contractor from Class 3 buildings. | Waste will be collected by private contractors via the existing loading dock at 60-78 Regent Street. | Yes |
| Traffic Report to be provided | A Traffic Impact Assessment has been prepared by Varga and is provided at **Appendix F.** | Yes |
| **4.4.1.7 Plan of Management** | | |
| An operating 'Plan of Management' is to be submitted | Iglu has prepared an Operational Management Plan and is provided at **Appendix V.** | Yes |

**Cluster Bedrooms – Internal Size**

The 13m$^2$ to 14m$^2$ cluster bedrooms are smaller than the 14.9m$^2$ minimum size set out for this type of room in the DCP. Similarly, no individual bedrooms are provided with private open space. This is acceptable as:

- students have quite different requirements to typical boarding house residents, and are typically residents of this accommodation for shorter time periods;
- the student lifestyle is typically more social, and students spend less time in their rooms and more time using communal areas than in a boarding house;
- the site has good amenity in the local area, with students having access to the facilities of their respective tertiary education provider in addition to local areas of open space;
- students can choose from a higher level of privacy in their communal living/kitchen area of the bedroom cluster units or a more social setting in the Level One and rooftop facilities;
- Iglu furnishes each room and installs custom-made joinery suited to each room type, including built-in study desks, wardrobes and storage areas that allow for the more efficient use of space than would otherwise be achieved; and
- the cluster room sizes and rooms without private open spaces are consistent with approved Iglu facilities.

In light of the above it is considered that the size of the cluster bedrooms will provide students with a high and acceptable level of amenity.

**Dual Occupant Studio – Internal Size**

The 17m$^2$ studio rooms are smaller than the 20.9m$^2$ DCP requirement if they are to be occupied by two students. This is considered to be acceptable as:

- Iglu furnishes each room and installs custom-made joinery suited to each room type, including built-in study desks, wardrobes and storage areas that allow for the more efficient use of space than would otherwise be achieved;
- Iglu provides a surplus of indoor and outdoor communal living area with a variety uses to draw students out of their private rooms for communal benefit; and
- The Department and City of Sydney Council have both approved dual occupancy of studio rooms within Iglu facilities (SSD 6724 & D/2011/515) and the proposed rooms are only marginally smaller (2.5m$^2$) than the approved studios.

Dual occupancy of the studio rooms will allow for the orderly and efficient use of a facility which includes rooms that have been designed and constructed to allow occupation of larger studio rooms by up to two students. Allowing couples to occupy these rooms on a permanent basis, with both students registered on the lease, will reduce pressure that would otherwise be placed on the private rental market leading to increased competition and rental prices.

The site is well-located in immediate proximity to services and public transport, as well as significant tertiary educational establishments including Sydney University and the University of Technology Sydney. Maxing efficient use of existing student accommodation in proximity to these institutions will ensure that suitable accommodation options are available to accommodate planned growth in education capacity.

Accordingly, this proposed arrangement is considered to be a positive planning outcome as it will provide for efficient use of existing student accommodation, complies with the applicable amenity standards, reduce pressure on local private housing market affordability and will support the growth of major education providers within the locality.

**Laundry and drying facilities**

The proposed development contains a communal laundry providing five 8kg (or larger) washing machines and six 9kg dryers as well as a notice board, clothes folding table and furniture for students waiting for their washing. The existing Iglu facility contains a total of nine washing machines and ten dryer machines. We note that the current laundry provision is less than the required provision under Section 4.4.1.5 of the DCP.

The provision of laundry facilities was considered in detail by the (then) Planning Assessment Commission (PAC) during the determination of the adjoining Iglu facility (SSD 6724) with the PAC concluding that non-compliance with the DCP rate was acceptable and that the proposed (now constructed) laundry facilities were adequate.

In the information provided by Ethos Urban to the PAC, we noted the following comments from the Department's assessment of a modification to the student accommodation development at Block 4S Central Park, Chippendale (SSD 5700-2012 MOD 1):

- the provision of 26 washing and drying machines for 770 students is consistent with the previously approved ratio of 1:29.5;
- other student accommodation developments within the Central Park development operate successfully with laundry facilities at a ratio of 1:45 and 1:50;
- each machine is between 8-9 kg which exceeds the SDCP 2012 requirement of 5 kg and can therefore wash larger loads; and
- the proposed machines to be installed are designed to ensure water efficiency, reduced waste and user wait times.

In addition, a letter of support was provided to the PAC during the assessment of the original application from UniLodge in relation to the Block 4S application at Central Park, which notes that across its portfolio of 2,338 beds their ratio of 1 washing machine/dryer per 53 beds operates without issue.

Based on the anticipated occupancy of the facility (approximately 270 students) the proposal provides a ratio of 1 washing machine per 53 students and 1 dryer per 45 students. Based on Iglu's historical statistics of usage from Iglu Redfern, Iglu Chatswood, Iglu Central Park and Iglu Brisbane City this provision is considered more than adequate to support the laundry requirements of proposal.

## 6.2 Built Form and Urban Design

The proposed development is well suited to its location and appropriately responds to the existing constraints and the surrounding development. The building achieves a balance between internal functionality and external aesthetics which contributes to a “dramatic and recognisable” skyline for Redfern with a podium design consistent in scale and architectural language of the existing retail frontages along Regent Street, as required by the Redfern Waterloo Authority’s Draft Urban Design Guidelines for Redfern.

The Architectural Design Report prepared by Bates Smart (**Appendix C)** details the design approach and the key built form parameters are further discussed below.

### 6.2.1 Street Frontage Height and Setbacks

The Redfern Waterloo Authority’s Draft Urban Design Guidelines for Redfern require the provision of the following:

- Tower height:
  - 18 Storeys
- Street frontage height:
  - 2 storeys to Regent Street; and
  - 3 storeys to Marian Street
- Tower setback:
  - 8m to Regent Street; and
  - 4m to Marian Street.

The maximum height of the tower is 18 storeys and the podium massing presents a 2-3 storey scale to Regent Street and Marian Street through the provision of ground floor retail tenancies incorporating a mezzanine level. The podium massing has been designed to continue the prevailing terrace scale and rhythm and provides a consistent character along Regent Street as illustrated at **Figure 28** below. In this regard, the podium is appropriately scaled to ensure consistency with the desired future character of the area.

**Figure 28: Street alignment comparison**

*Source: Bates Smart*

The requirement for the 8m setback above podium level, as prescribed in the Draft Urban Design Guidelines for Redfern and the maximum building height map in the State Significant Precinct SEPP, originates from provisions of BEP 1. In BEP 1, two rationales are given for this setback, being:

- the mitigation of potential wind downwash; and
- the presentation of a consistent street character with a human scale.

The Wind Impact Assessment prepared by Windtech (**Appendix Y**) concludes that an appropriate pedestrian environment will be achieved from a wind perspective despite the reduced tower setback, primarily through the new awnings (refer to **Section 6.16**). Accordingly the first objective is satisfied.

In order to present a consistent street character with a human scale, the proposal has drawn reference to the surrounding development and the approved development on the site. The 3m tower setback along Regent Street is consistent with the tower setback provided by the existing Iglu development to the north. The 3m setback is also consistent with the approved SSD 7080.

As detailed within the Design Report at **Appendix C,** the prevailing 3m setback along Marian Street retains the architectural treatment around the corner from Regent Street. A minor variation to the predominant 3m setback occurs at the south eastern portion of the site which is considered a superior urban design outcome by emphasising the street corner.

Whilst the proposal varies the tower setback provisions stipulated under the Draft Urban Design Guidelines, the proposal is consistent with the prevailing tower alignment along Regent Street and the delineation of a separate podium and tower form is clearly articulated through the massing, form and materiality of the podium and tower.

### 6.2.2 Building Separation

The Redfern Waterloo Authority's Draft Urban Design Guidelines for Redfern require the provision of the following:

- For any tower elements above the street wall, the separation distance between non-habitable rooms is to be:
  - 13m for buildings below 8 storeys;
  - 18m for buildings in excess of 8 storeys; and
  - Each development site is to provide a minimum of 50% of the required separation distance as measured from the boundary.

The proposed tower setbacks have been informed by the approved building on site, as the approved tower setbacks were subject to a thorough planning assessment by the NSW Department of Planning and Environment and the (then) Planning Assessment Commission, and are therefore considered acceptable for the site, albeit that they applied to residential development, which is a more sensitive use than the proposed student accommodation.

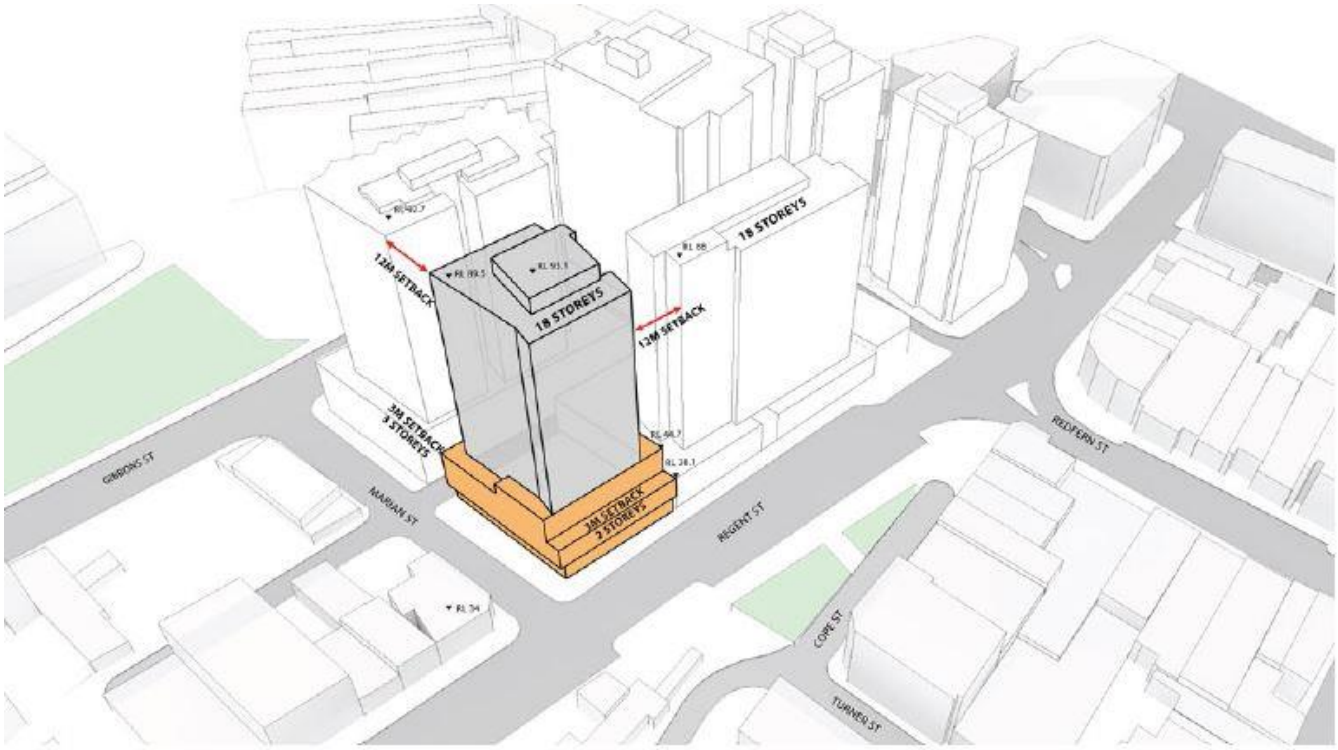
The northern and western boundaries are the only instances of a direct interface with existing high-rise development. The proposed tower setback is varied to the northern boundary, extending from approximately 2m to 10m, therefore achieving a physical separation of approximately 12m to the existing Iglu tower. Similarly, the tower setback to the western boundary is varied, ranging from approximately 3m to 10m, therefore achieving a physical separation of approximately 12m to the 7-9 Gibbons Street tower.

The proposed development has been consciously designed to improve the relationship with the development to the west of the site. This includes reducing the building height and removing massing from the north western portion of the tower to achieve greater physical separation to the neighbouring development. In this regard, the proposed separation is extended to a generous 20m at this portion of the site.

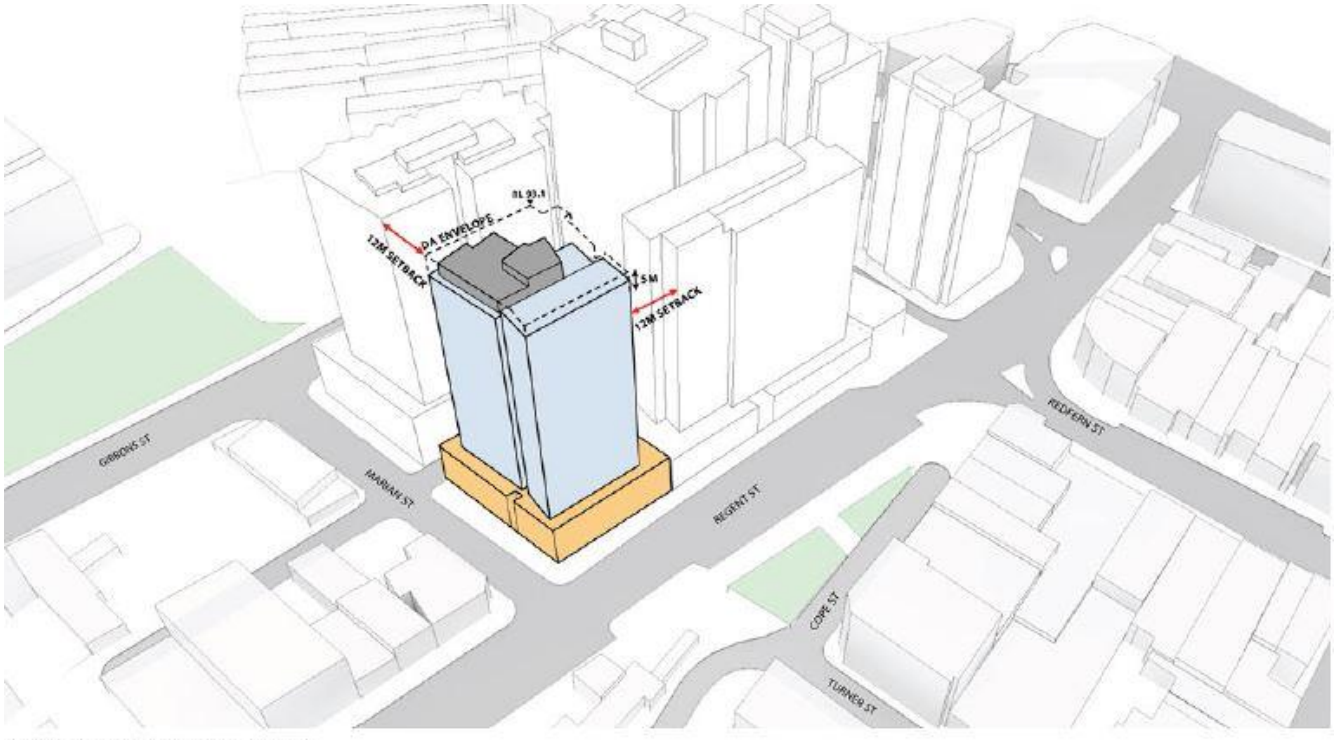
In considering the variation to the Draft Urban Design Guidelines setback and separation controls for the approved development on site, the Department concluded that:

> *"Although the proposal includes some variations to setback controls contained in the SSP SEPP, BEP and Draft UDG, the Department notes these controls are intended to achieve the objectives of the zone which are primarily to facilitate development of a town centre and provide compatible residential and non-residential development"*
>
> (SSD 780 Assessment Report)

For reference, the approved and proposed building envelopes are illustrated at **Figure 29** below, and the net separation improvement is illustrated at **Figure 30.**




**APPROVED DA ENVELOPE**




**PROPOSED DA ENVELOPE**

**Figure 29: Building envelope comparison**

*Source: Bates Smart*

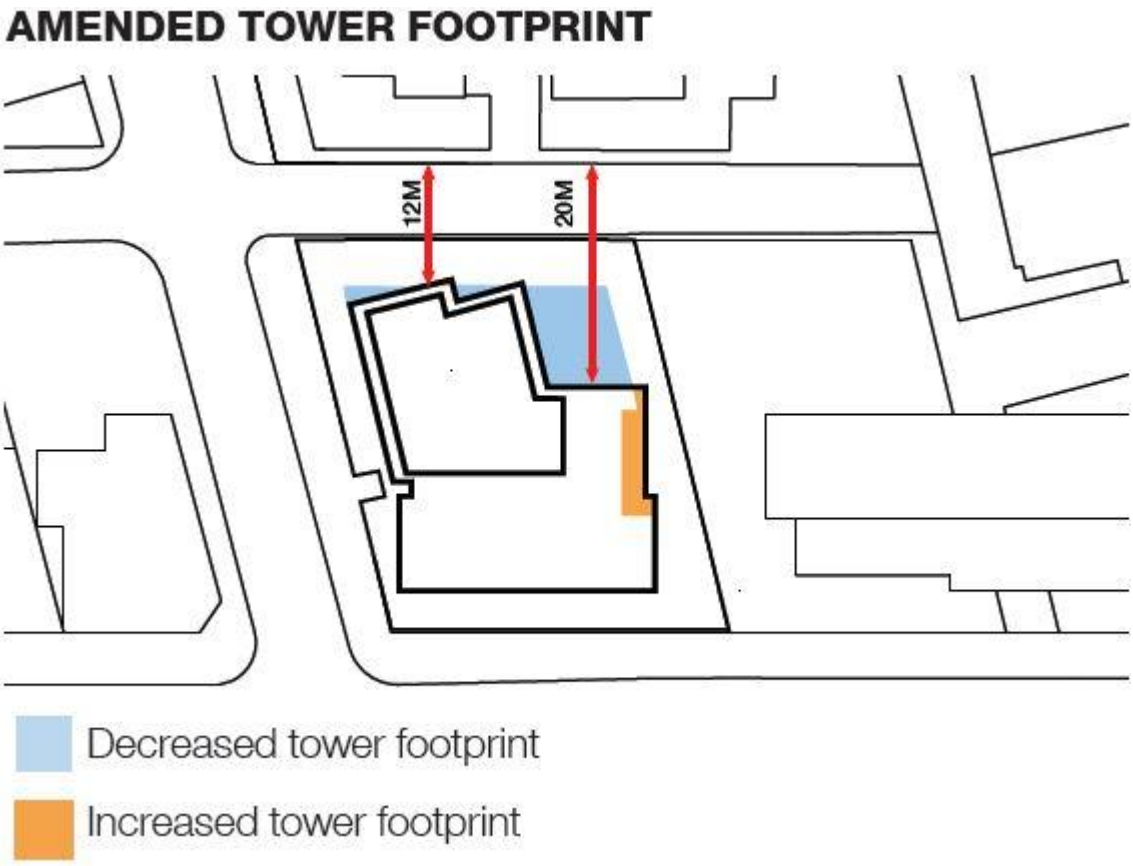



**Figure 30: Proposed tower setback improvement**

*Source: Bates Smart*

### 6.2.3 Streetscape and Public Domain

The proposed development will make a significant, positive contribution to the activation of Regent Street and Marian Street. The existing street front facades have significantly deteriorated and present a poor street interface. The proposal incorporates a podium design that maintains the established character and scale of the Regent Street frontage by incorporating new terraces consistent in scale and architectural language of the existing retail frontages along Regent Street.

The new retail frontages will be partially glazed, allowing a direct visual relationship to the street. Students have the option of using the central main entrance on Regent Street, or the secondary access point at Marian Lane. As such, the proposed development will result in substantial new pedestrian movements to and from the site that will inject activity into the centre

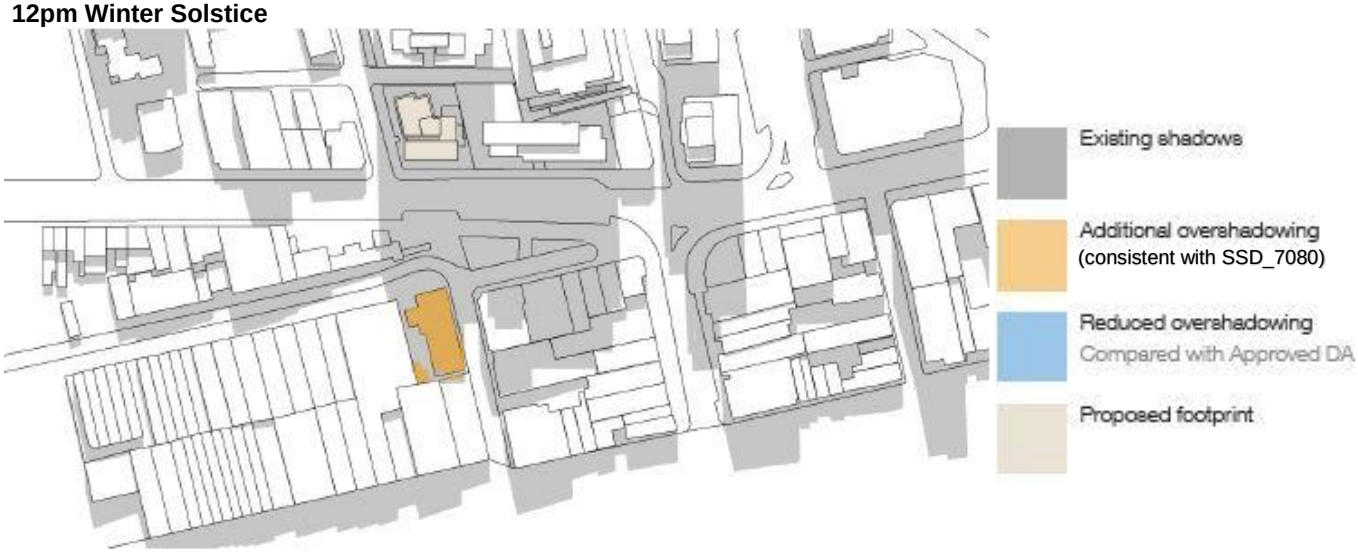
## 6.3 Residential Amenity of Nearby Dwellings

### 6.3.1 Overshadowing

Bates Smart has prepared a shadow analysis of the site and the proposed development which is provided at **Appendix C**. This study illustrates the shadow cast by the proposal on winter solstice, summer solstice and the equinox at intervals of 9:00am, 12:00pm and 3:00pm. The worst-case scenario, being the winter solstice is illustrated at **Figure 31** below.

**9am Winter Solstice**

**12pm Winter Solstice**




**3pm Winter Solstice**

**Figure 31: Winter Solstice shadow diagrams**

*Source: Bates Smart*

The shadow diagrams indicate that the proposal will be acceptable from an overshadowing perspective as:

- it does not contribute to any significant additional overshadowing due to the existing high-density development within the street block which includes buildings greater in height and massing than the proposal;
- it results in less overshadowing than the approved development under SSD 7080 on site;
- it will not preclude high level of solar access to any future development of 90 Regent Street given the site has east and north facing street frontages; and
- the site's location at the southern end of the street block ensures it will not result in any additional overshadowing to the adjoining residential development at 7-9 Gibbons Street.

Considering the site's high-density context, the reduction in overshadowing from the existing approval and the absence of any significant additional overshadowing to significant public places, the proposal is considered appropriate from an overshadowing perspective.

### 6.3.2 Visual and View Impacts

A Visual Impact Assessment (VIA) has been prepared by Ethos Urban and Bates Smart and is provided at **Appendix E.** The VIA considers the impact of the proposal on the residential development to the west at 7-9 Gibbons Street. The VIA appropriately details the view impacts considering the current site situation, the existing approved situation and the proposed situation.

Key differences arising between the existing approved scheme and the current proposal for the purpose of a visual assessment are as follows:

- Reduced podium height;
- Different architectural aesthetic;
  - Changes to tower floorplate;
  - Substantial reduction in floorplate in north-west corner, increasing building separation;
  - Minor protrusion (approx. 900mm) of western building edge arising from angular floorplate;
  - Slight reduction in northern tower setback (approx. 1m) and infill of articulation zone in existing approval; and
- Reduced maximum building height by approx. 2.8m, arising from lower floor-to-floor levels required for student accommodation.

The view assessment identifies that the proposal would have view impacts on adjoining dwellings in the Urba building at 7-9 Gibbons Street however, it is not reasonable nor the intent of the applicable planning controls for these views to be retained. The existing views obtained from the Urba building arise due to the under-developed nature of the subject site, and it is not reasonable nor appropriate to sterilise the site from redevelopment based upon the retention of these views.

The approval of SSD 7080 for an 18 storey mixed-use residential apartment building is also a consideration in this assessment. The current proposal is for a building that is generally within the envelope of the approved building, including being lower in maximum height, and is therefore generally consistent with the view impacts that have previously been the subject of a thorough planning assessment by the NSW Department of Planning and Environment and the (then) Planning Assessment Commission. Having regard to these matters, the proposed Iglu development is considered to have acceptable view impacts which do not require any design amendments of other mitigation measures.

### 6.3.3 Privacy

The tower has been planned to largely eliminate overlooking to the neighbouring developments including the Iglu building to the north and the residential building at 7-9 Gibbons Street to the west. In addition to the provision of appropriate building separations as discussed at **Section 6.2.2** above, the proposal mitigates privacy impacts through the façade design and orientation of the rooms.

The tower form is heavily modulated at the north and western frontages to provide relief and articulation to the adjoining development. The façade design carefully locates blank elements and removes windows where opportunities for direct lines of site would have been created as illustrated at **Figure 32**. In addition, the layout of the proposed rooms has allowed the view lines to be oriented away for the neighbouring dwellings also shown at **Figure 32**. Accordingly, the proposal protects the privacy and amenity of the adjoining development, and presents an improved privacy outcome compared to the approved development.

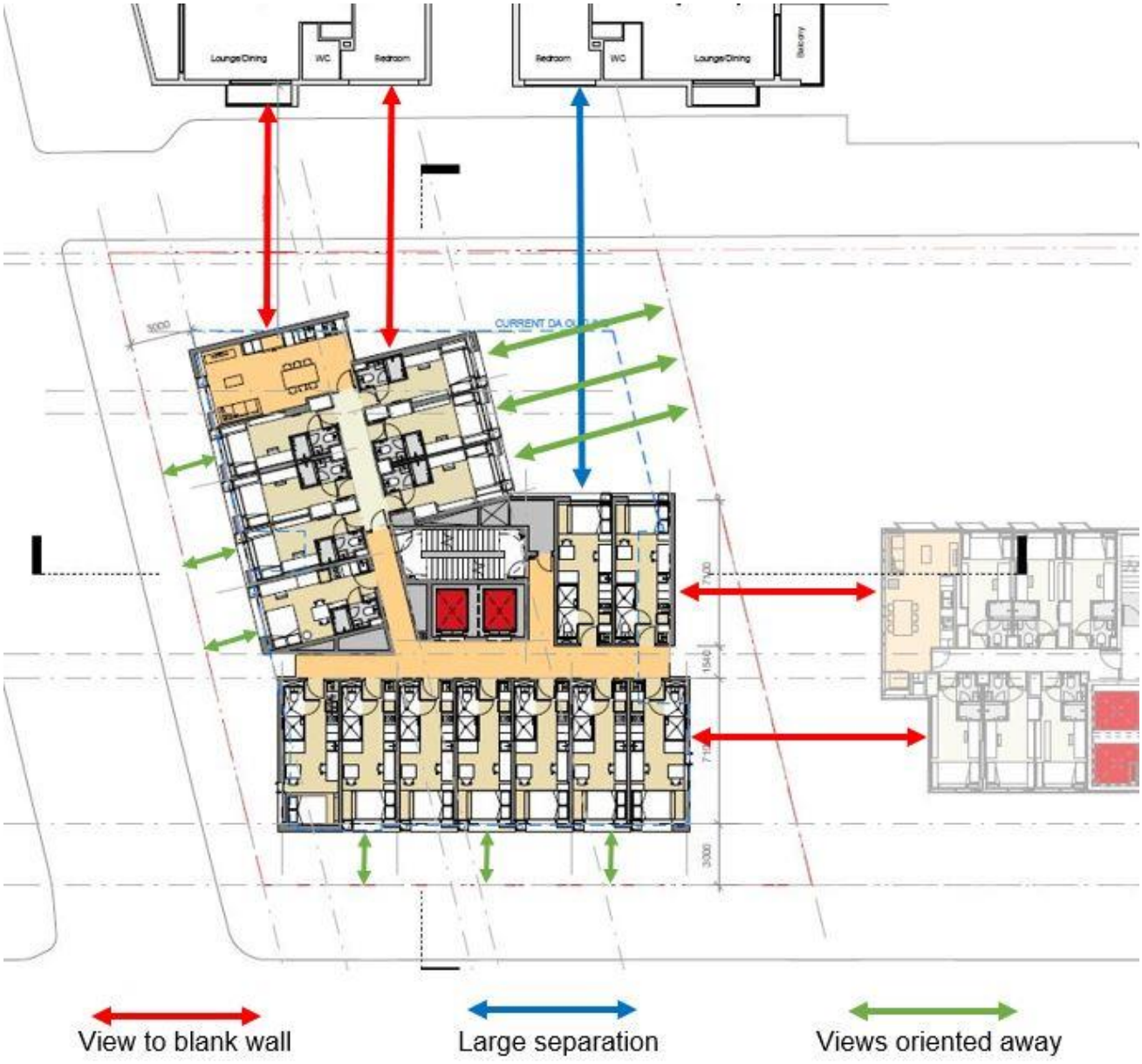



**Figure 32: Visual privacy measures**

*Source: Bates Smart with Ethos Urban additions*

## 6.4 Transport, Traffic, Parking and Access

A Traffic and Parking Impact Assessment (TIA) has been prepared by Varga is provided at **Appendix F.** The TIA includes an assessment of the operational traffic generation including the cumulative impacts of the proposal. A summary of the assessment and proposed mitigation measures are provided below.

### 6.4.1 Assessment

#### Traffic Generation

Neither the RMS *Guide to Traffic Generating Developments* or the updated traffic generation rates in the RMS Technical Direction (TDT 2013/04a) nominate a traffic generation rate for small, local shops and student accommodation. As there will be no on-site parking provided, the only traffic generated by the proposed development will be service vehicles for deliveries to the retail and student accommodation operations and for the collection of waste. The TIA notes that movements associated with service vehicles are expected to be minimal, and therefore will have a negligible impact on the performance of local roads or intersections.

In addition, the TIA notes that the previously approved development would generate 35 vehicle trips per hour in the morning and afternoon peaks. As the proposal will generate less vehicle movements than this, the proposed development is considered acceptable from a traffic generation perspective.

#### Vehicle Parking

No on-site car parking is to be provided as part of the development. This is considered to be appropriate for the following reasons:

- Redfern is one of the best-serviced areas for Sydney in the availability of carshare vehicles, as identified in **Section 3.6;**
- Redfern Station, which is located within immediate walking distance of the site, has one of the highest frequencies of train services in Sydney, providing access to nearly all suburban lines;
- Students are likely to walk to their main commuting destination (education campuses), particularly given that University of Sydney and the University of Technology, Sydney are likely to be the predominant places of study and are both within easy walking distance of the site;
- Students are typically less likely to own cars than normal residential occupants;
- Public transport use, walking and cycling will all be promoted, and new travel behaviours learnt;
- The provision of no car parking is consistent with the planning controls across the City of Sydney, which provide maximum rather than minimum controls for on-site car parking; and

The exclusion of onsite car parking is consistent with the approved Iglu development to the north.

#### Bicycle Parking

The Sydney DCP does not specify a bike parking rate for student accommodation uses. As such, the provision of bike parking within the ground and mezzanine level bike parking rooms has been informed by existing Iglu developments as detailed at **Appendix F.**

Varga have determined that on a pro-rata basis, the proposal is expected to generate a bicycle parking demand of 6 to 13 bicycle parking spaces. That projected bicycle parking requirement of 6 to 13 bicycle parking spaces is accommodated by the proposed provision of 37 bicycle parking spaces at ground floor level plus a 47 bicycle parking spaces at mezzanine level, yielding a total bicycle parking provision of 84 bicycle parking spaces.

Based on Iglu's experience operating existing facilities, this is well in excess of the typical actual demand for bike parking amongst its students. Due to the site's close proximity to local tertiary education providers, Redfern Station and local retail facilities, it is considered that the vast majority of trips made students will also include walking or public transport.

**Loading and Servicing**

The servicing and loading will be accommodated within the existing loading dock in the adjoining Iglu building, accessed from William Lane. The TIA concludes that the loading and servicing movements will be minimal and therefore the existing loading dock is adequate to service the proposal.

The site will be serviced by medium rigid vehicles up to 8.8 metres in length. These vehicles will be able to enter William Lane in a forward direction, reverse into the loading dock and exit in a forward direction, as demonstrated within the assessment of the existing Iglu development assessment. This size vehicle is considered to be appropriate given that waste will be collected from the loading dock by private contractors, who will be able to select vehicles to suit this site.

**Pedestrian Access**

Pedestrian access to the proposed student accommodation facility will be primarily via the existing entrance to the 60-78 Regent Street building. Student's will enter the foyer, which is swipe-pass access controlled, and travel to Level 1 via the staircase or lift. This allows casual surveillance of all student entry/exit by facility administration staff and creates opportunities for interaction between staff and students which is an essential part of Iglu's pastoral care of its residents. At Level One, students will traverse through the communal areas to the lift core providing access to the proposed tower.

A secondary student access is proposed at Marian Street, however, this is intended primarily to provide student access to and from the at-grade bike storage room within the proposed facility. Students with authorised access to the bike room will be able to use the lifts to travel directly to ground and exit via the Marian Street doorway.

### 6.4.2 Mitigation Measures

As identified in TIA, the proposal will have a negligible impact on the surrounding road network and is expected to generate significantly less vehicle trips than the approved development. In addition, the proposed bike parking provision and use of the existing Iglu loading dock will adequately service the proposed development. In order to reduce the impact of the proposal the following mitigation measures are proposed:

- The promotion of employee and student travel by walking, bicycle and public transport; and
- Prior to the issue of an Occupation Certificate, a Workplace Travel Plan and Travel Access Guide will be prepared and distributed to new students and staff. The Travel access guide will be distributed as part of the welcome pack for new students and will provide information on local public transport, pedestrian paths and car share.

## 6.5 Heritage and Archaeology

A Heritage Impact Statement and a Historical Archaeological Assessment have been prepared by Urbis and are provided at **Appendix H** and **Appendix I** respectively. These reports have been prepared to investigate and assess impacts to Aboriginal and non-Aboriginal heritage values which may be impacted by the proposed development.

### 6.5.1 Assessment

**Indigenous Heritage**

The Historical Archaeological Assessment assesses the potential impacts of the proposed development in accordance with the Heritage Division, Office of Environment and Heritage (OEH) guidelines, including but not limited to 'Assessing Significance for Historical Archaeological Sites and Relics' (2009).

Documented evidence of Aboriginal occupation of the Sydney region dates back more than 15,000 years, and it is expected that Aboriginal occupation of this area occurred much earlier than this time. There are no recorded Aboriginal sites in the immediate vicinity of the site, with the closest recording on the Aboriginal Heritage Information Management System being located approximately 200 metres away. Due to the extensive disturbance of inner-Sydney areas since European occupation, evidence on other sites had demonstrated that there is only limited potential for Aboriginal archaeological items to be present.

Based on an understanding of the historical development, existing disturbance of the site and of the sub-surface ground conditions, Urbis has concluded that the site is unlikely to have any Aboriginal archaeological potential and that the proposed development is not expected to result in any impacts. As the proposal does not provide a basement, no significant excavation is required, however, standard conditions relating to unexpected finds during construction works should be imposed as part of any determination.

The SEARs issued for this project require the preparation of an Aboriginal Cultural Heritage Assessment Report (ACHAR). Given that the Due Diligence report, prepared in accordance with OEH's Due Diligence Code of Practice, determined that no further Aboriginal archaeological investigation is required for the subject site and that no harm is expected, the OEH's *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*, does not strictly require the preparation of an ACHAR. Under the Guide, an ACHAR is only required where a Due Diligence Report concludes that further investigation is required, or where harm to Aboriginal objects or declared places is expected. Notwithstanding the above, the Proponent has commenced the preparation of an ACHAR report based upon feedback provided by OEH and the NSW Department of Planning and Environment in relation to this project. The ACHAR will be provided to the Department prior to the finalisation of the planning assessment process.

**European Heritage**

The Heritage Impact Statement confirms that the site is not subject to any statutory heritage listings. The Redfern Station Railway Group is listed on the State Heritage Register is located approximately 100m to the west of the site and is physically and visually separated from the site by existing development.

The Redfern Estate Heritage Conservation Area (HCA) is located immediately to the east of the site across Regent Street and is identified as having local significance under the Sydney LEP 2012. The current backdrop to the site when viewed from the HCA will be the existing Iglu building, the residential flat buildings on Gibbons Street and Lawson Square (which are slightly greater in mass and scale than proposed Iglu building). The proposal will complete the pattern of similar development that has occurred in the subject block, and therefore Urbis conclude the impact of the proposal on this HCA in terms of character and scale is neutral.

The removal of the shopfronts has been assessed in accordance with the assessment of significance. Urbis support that a better urban design outcome for the site would be achieved by their removal and the construction of an entirely new development with a sympathetic podium which is appropriate to the scale of the streetscape. Notwithstanding, the podium would respect the forms and rhythm of the remnant early shopfront adjacent to the north. The podium would be broken up into vertically proportioned bays and would represent a contemporary interpretation of the historic building typology on the street.

In terms of European archaeology, Urbis' research indicates that there is a low to moderate degree of potential for the site to contain archaeological remains of the previous phase of occupation (c1865-1903). However, based on historical research, development from this phase was not associated with any particularly significant people, businesses or activities. If archaeological remains associated with this previous phase of occupation are present on site, it is likely to be limited to structural remnants, such as footings. As such, Urbis conclude that such remains are unlikely to provide information that would contribute to a greater understanding of the local area's history.

It is noted that an archaeological assessment of the neighbouring Iglu site at No. 60-78 Regent Street was undertaken by Artefact Heritage in 2016. The assessment concluded that "the potential remains relating to the period prior to c1871 (when the extant buildings were constructed) are of local heritage significance, due to their research potential."

On this basis, the report provided a research design and methodology and recommended that an historical archaeological investigation program should be incorporated into the construction schedule. Test excavations were consequently undertaken at the neighbouring site, and included the excavation of three test pits, measuring approximately 2 x 4 metres in size. The test excavations did not uncover any archaeological remains associated with earlier phases of development due to the extent to which the site had been disturbed by the latest phase of development.

### 6.5.2 Mitigation Measures

As identified in the Heritage Impact Statement and the Historical Archaeological Assessment, the potential heritage and archaeological impacts of the proposed development are assessed as negligible. Notwithstanding this, Urbis recommend the following mitigation measures:

- In the unlikely event that unexpected archaeological material was encountered during works, it would be necessary to stop all work in the immediate vicinity of the identified deposits. The NSW Heritage Council would be notified, and a qualified archaeologist would be engaged to assess the significance of the material and recommend whether further investigation is required.
- In the unlikely event that any Aboriginal objects were discovered during site works, work should cease immediately in the affected area and the Office of Environment and Heritage should be notified, in accordance with Section 89A of the National Parks and Wildlife Act 1974 (NSW). Further assessment or approval may be required before works could recommence.

## 6.6 Noise and Vibration

An Acoustic and Vibration Assessment Report and a Traffic Noise Impact Assessment have been prepared by Acoustic Logic and is provided at **Appendix K** and **Appendix L** respectively. The assessment considers the likely impacts of noise and vibration both received by and generated from the proposed development.

### 6.6.1 Assessment

#### Internal Amenity – Acoustic

The measured existing noise levels are presented in **Table 9** below. Traffic noise from vehicle movements along Regent Street, will be the primary external noise source impacting the subject development. High levels of mechanical noise were also measured towards the western boundary of the site, from louvres located along the eastern façade of the property at 7-9 Gibbons Street.

**Table 9: Existing Noise Levels**

| Location | Measured Traffic Noise Level | |
|---|---|---|
| | **Daytime** | **Night time** |
| Along Regent Street (approx. 3m from curb) | 69 dB(A)Leq(1hour)<br>68 dB(A)Leq(15 hour) | 68 dB(A)Leq(1hour)<br>66 dB(A)Leq(9 hour) |
| Along William Lane (site boundary) | 66 dB(A)Leq(1hour)<br>65 dB(A)Leq(15 hour) | 64 dB(A)Leq(1hour)<br>62 dB(A)Leq(9 hour) |

Accordingly, the measured noise levels are in excess of the noise level criteria applicable for residential development set out within the Sydney DCP the Infrastructure SEPP and for non-residential development the *AS2107-2016 "Acoustics – Recommended design sound levels and reverberation times for building interiors*".

Acoustic Logic note that external noise intrusions are primarily a result of noise transfer through the roof, windows and doors, as these are relatively light building elements, which offer less resistance to the transmission of sound. Accordingly, Acoustic Logic conclude that specific acoustic attenuation will be required to achieve compliance the internal amenity criteria.

#### Internal Amenity – Vibration

Acoustic Logic assessed the potential impact of vibration from rail tunnels and the rail corridor on the internal amenity in accordance with the requirements of the Infrastructure SEPP with reference to the NSW EPA *Assessing Vibration: a technical guideline document* and British Standard BS 6472:1992 *"Evaluation of Human Exposure to Vibration in Buildings (1Hz to 80Hz)"*.

Acoustic Logic conclude that all measured vibration levels comply with the tactile vibration and structure borne noise level requirements of the NSW Department of Planning's 'Development Near Rail Corridors and Busy Road – Interim Guideline'. As such, no adverse vibration impacts are expected from the underground rail infrastructure on the proposed development, and no additional ameliorative treatments required.

**Acoustic Emissions**

There are two potential sources of noise emissions during the operational phase of the proposed development, being emissions from mechanical plant and from use of the outdoor communal areas. These potential noise sources have been assessed in accordance with the NSW EPA 'Noise Policy for Industry (NPfI)' and the relevant requirements of Australian Standard AS1055-1997 Acoustics – Description and measurement of environmental noise. Acoustic Logic concludes that the proposed development is capable of compliance with the established amenity criteria for existing dwellings of background noise provided that acoustic treatments and management controls are employed.

### 6.6.2 Mitigation Measures

In order to manage the impacts of noise and vibration both received by and generated from the proposed development, the following mitigation measures are proposed:

- Internal:
  - Development is to provide the recommended minimum glazing construction set out within **Appendix K.**
  - All external windows and doors identified at **Appendix K** are required to be fitted with acoustic seals.
- Emissions:
  - The use of the communal areas will be in accordance with the OMP (**Appendix V**) with no amplified music and this area only being utilised between 9am and 10pm.
  - Provision of a solid screen (FC, timber, glass, Perspex etc.) along the western edge of the rooftop terrace.
  - A detailed review of all external mechanical plant and equipment be undertaken at CC stage (once plant selections and locations are finalised), to determine minimum acoustic treatments required to ensure compliance with NSW EPA requirements.

## 6.7 Air Quality

### 6.7.1 Assessment

**Construction**

A Construction Management Plan has been prepared by Iglu and is provided at **Appendix M.** Air quality is potentially affected by dust generation throughout the construction process. Dust control will be implemented in areas of all active construction to maintain worker safety and minimise amenity impacts on the surrounding area.

The CMP will be a responsive document which continues to be refined throughout the detailed design, builder procurement and construction phases of the proposed development to ensure air quality is appropriately managed.

**Operation**

Regent Street is highly trafficked, and the proposed development includes rooms that are oriented to Regent Street to maximise solar access and the site's sweeping eastern views. East facing rooms are provided with operable windows contained within an acoustically sealed box, which allows natural ventilation. Alternatively, occupants can rely on the buildings centralised air-conditioning. This is generally consistent with the approved Iglu building to the north, which also includes rooms fronting Regent Street. In addition, the approved development on site included windows, and private open space at this frontage, therefore the air quality impacts are considered acceptable.

### 6.7.2 Mitigation Measures

In order to mitigate the impact of the development on the downstream environment, the following is proposed:

- Encapsulating work zones through the construction of full height dust proof scaffolds and hoarding;
- Reviewing tool and plant selection techniques to reduce dust generation;
- Continuous cleaning throughout dust generating work activities; and
- Provision of centralised mechanical ventilation.

## 6.8 Water Cycle Management

A Stormwater Drainage and Water Quality Report has been prepared by TTW and is provided at **Appendix N.** The report provides a full assessment of the proposed water cycle management methodologies for the site in conjunction with the proposed development. The key water cycle management components are detailed below.

### 6.8.1 Assessment

#### Stormwater

The site stormwater system for the development has been designed to capture concentrated flows from impermeable surfaces including floor open to the sky, roofing area, impermeable pavement. The proposed stormwater management system for the development includes:

- Pit and pipe drainage network to collect runoff from areas;
- Stormwater flows up to the 5% annual exceedance probability (AEP) event are conveyed by a minor drainage system;
- Stormwater flows above the 5% AEP event are conveyed by a major drainage system; and
- an OSD system with a minimum storage of 13cu.m and a permissible site discharge (PSD) of 30l/s.

The size, grade and level of the pits, pipes, and overland flow paths have been designed to comply with Council's requirements.

#### Water Quality

The proposed water quality control strategies will be arranged to manage rainfall runoff. The preliminary civil engineering design includes number of water quality control measures including:

- Rainwater tank re-use system for irrigation reuse; and
- Stormwater treatment system incorporated within the OSD tan system to provide tertiary stormwater treatment. This water quality control measure uses media-filled cartridges to remove pollutants from stormwater runoff including total suspended solids, hydrocarbon, nutrients and other common pollutants.

#### Sediment and Erosion Control

The proposed Sediment and Erosion Control Plan provides strategies to prevent potential soil degradation and pollution of waterways include the adequate provision of sedimentation and erosion control measures. The Plan has been prepared in accordance with the Landcom 'Blue Book', which is considered to be industry best-practice, and will ensure that the proposed development does not result in any adverse water quality impacts.

#### Flooding

The site is not affected by flooding.

### 6.8.2 Mitigation Measures

In order to mitigate the impact of the development on the downstream environment, the following is proposed:

- The OSD at the proposed site have a minimum volume of 13$m^3$ to limit the flow to 30L/s for storms up to and including the 100-year ARI storm event;
- Water quality control measures are to be provided to reduce or minimise the development's adverse impact on the environment; and
- An Erosion and Sediment Control Plan will be implemented to minimise pollutants being washed into the receiving stormwater network/waterways.

## 6.9 Geotechnical

A preliminary Geotechnical Investigation has been carried out by Aargus and is provided at **Appendix O**. The Report presents the findings of a desktop study, which determines the likely geotechnical and soil characteristics the site and their appropriateness for the proposed development.

### 6.9.1 Assessment

#### Geology and Ground Profile

The Geotechnical investigations have indicated that the site is located within an area underlain by Quaternary Age Holocene Deposits, denoted as Qhd. The deposits are described as “Medium to fine-grained ‘marine’ sand with podsols.” The Geotechnical investigation has identified the following soil profile:

- approximately 0.5m of fill, underlain by
- silty clays encountered at depths of between 3m and 6m, underlain by
- shale encountered at depths of 6m to 29m , underlain by
- bedrock sandstone encountered at depths beyond 40m.

Acid Sulphate Soil Maps indicate that the site is free of acid sulphates.

#### Groundwater

There was no groundwater information available within 0.5km radius of the site. No surface water seeping was observed within and surrounding areas of the site during site visit. Based Aargus’ experience in the area, groundwater is expected to be in order of 3.0 - 4.0m depth and in the form of seepage through the marine sands. According to the publicly available geotechnical investigation reports referenced in Section 2, the groundwater level measured during the borehole drilling within the property No. 157 Redfern Street ranges from approximately 4.2m to 5.0m depth.

The building is only expected to have minor cut for earthworks and therefore:

- The development is unlikely to have any impact on groundwater levels, flow paths and quality.
- The development is not likely to have any impact with respect to the NSW Aquifer Policy (DPI, 2012).
- No licensing requirements or approvals are likely to be required under the Water Act 1912 or Water Management Act 2000.

The proposed development does not include a basement, therefore excavation is minimised. The Geotechnical Investigation Report concludes that the proposed development is considered feasible from a geotechnical perspective, subject to the appropriate additional site investigation, design assessments, and construction monitoring. Additionally, consideration should be given to the influence of the construction of the future tunnel on the proposed building development.

### 6.9.2 Mitigation Measures

No specific mitigation measures are required as the proposal is considered geotechnical and structurally feasible. Aargus does however provide specific recommendations during the construction phase of development to minimise damage to adjacent property and infrastructure

## 6.10 Biodiversity

The site does not contain any significant vegetation, having been previously cleared and currently used for car parking and the storage of construction material. Accordingly, the proposal will not cause any significant impacts on biodiversity or the natural environment as recognised by the Department of Planning and Environment and the Office of Environment and Heritage in their granting of a waiver for the preparation of a Biodiversity Development Assessment Report (BDAR) on 5 September 2018 (refer to **Appendix P**).

## 6.11 Sustainability and Energy Efficiency

The principles of ecologically sustainable development are set out in section 6(2) of the *Protection of the Environment Administration Act 1991* (NSW). The principles of ESD include intergenerational equity, the precautionary principle, conservation of biological diversity and ecological integrity and improved valuation, pricing and incentive mechanisms. The principles of ESD have informed the design, construction and proposed operation of the student accommodation building.

Importantly, the proposed development is consistent with the principles of ESD as it meets the needs of the present without compromising the ability of future generations to meet their own needs. ESD design measures have been integrated into the design of the proposed building as discussed at **Section 4.10** and detailed in the Section J Assessment Report prepared by IGS at **Appendix Q.**

## 6.12 Contamination

A Preliminary Site Investigation (PSI) has been prepared by Aargus and is provided at **Appendix R.** This PSI was prepared in accordance with the NSW Environment Protection Authority (EPA) "Guidelines for Consultants Reporting on Contaminated Sites" (2011).

### 6.12.1 Assessment

Based on the site inspection, site history, previous reports and review of available information from the desktop study, the potential Contaminants of Concern (CoC) for the site were identified:

- Contaminated soil from placement of uncontrolled fill across the site;
- Use of OCPs;
- Metal degradation;
- Hydrocarbon spills and leakages from parked vehicles; and
- Asbestos.

The PSI notes that the contaminants that may be present in some of these areas were considered to be of low significance in terms of risk to the human and environmental receptors identified. The PSI concludes that based on the information collected during this investigation and in reference to Clause 7 (DA development of SEPP 55), the site will be suitable for the proposed development subject to the completion of a Detailed Site Investigation (and after remediation and validation, if required).

### 6.12.2 Mitigation Measures

In order to remove the risks posed by contaminated soils, to make the site suitable for permissible land uses, while ensuring the protection of human health and the surrounding environment, a detailed site investigation will be prepared and any remediation and validation will be undertaken (if required) prior to CC.

## 6.13 Development Contributions

Development contributions will be paid in accordance with the Redfern Waterloo Contributions Plan 2006, which requires a cash contribution to the Minister of 2% of the development cost.

The Redfern-Waterloo Authority Affordable Housing Contributions Plan 2006 seeks to levy a contribution for the provision of affordable housing within the Redfern-Waterloo area. The EP&A Act defines affordable housing as:

> *housing for very low income households, low income households or moderate income households, being such households as are prescribed by the regulations or as are provided for in an environmental planning instrument.*

Very low income households, low income households or moderate income households are defined in the State Environmental Planning Policy (Affordable Rental Housing) 2009 as households that respectively earn less than 50%, 50- 80% or 80-120% of the Sydney median household income. Full-time students are unlikely to earn more than the Sydney median income during their studies. Whilst it is noted that Iglu is not a registered affordable housing provider, it is contended that the student accommodation nonetheless meets the objectives of section 6 of the Affordable Housing Contributions Plan that exempts affordable housing providers.

In light of the above, development contributions will be paid in accordance with the Redfern Waterloo Contributions Plan 2006, however, it is requested that the levies under the Redfern-Waterloo Authority Affordable Housing Contributions Plan 2006 not be imposed.

## 6.14 BCA and Accessibility

A BCA Assessment Report has been prepared by Steve Watson & Partners (**Appendix S**) and an Accessibility Report has been prepared by Architecture and Access (**Appendix T**).

### 6.14.1 Assessment

#### Building Code of Australia

A BCA Assessment Report concludes that the design is capable of meeting the requirements of the BCA, subject to the inclusion of the report's recommendations as part of detailed design. Where compliance with the Deemed to Satisfy provisions of the BCA cannot be achieved, an alternative solution will be developed prior to the issue of a Construction Certificate. The proposed design is considered to be capable of complying and compliance with the BCA is not deemed to have any likely significant impacts on the current design.

#### Accessibility

The Access Review has been developed to ensure that ingress and egress, paths of travel, circulation areas and sanitary facilities comply with the relevant statutory guidelines.

The three accessible studio units are provided within the building that will have sufficient manoeuvring space within the units and accessible bathrooms/showers. All communal areas within the building will be designed to allow equitable access.

In general, the development has accessible paths of travel that are continuous throughout. The Architectural Drawings indicate that compliance with statutory requirements relating to site access, common area access, and adaptable units can readily be achieved, subject to implementation of the recommendations prior to the issue of a Construction Certificate which may be required as a condition of development consent.

### 6.14.2 Mitigation Measures

The detailed design of the development must ensure that the proposal complies with the applicable requirements of the BCA or appropriate alternative solutions should be developed and verified by a qualified BCA Consultant and the Access Consultant.

## 6.15 Infrastructure and Services

An Engineering Services and Infrastructure Report has been prepared by IGS and is provided at **Appendix U.** This report demonstrates that the proposal can be adequately serviced to the standard of the relevant service providers.

### 6.15.1 Assessment

The Report prepared confirms that the proposal is capable of being appropriately serviced through the augmentation/extension of existing infrastructure. Arup has identified the existing infrastructure in the vicinity of the site and detailed expected connections to this infrastructure for the new building.

IGS has confirmed that the large majority of existing services are adequate to service the proposed development without need for amplification. The final connection details and any required augmentation/amplification will be determined in consultation with the relevant service providers. With the implementation of these works as detailed in the proposal will be adequately connected to electricity, communication, water, sewer, stormwater and natural gas services.

### 6.15.2 Mitigation Measures

Ongoing consultation and design development with the relevant utility providers should continue to be undertaken throughout the process.

## 6.16 Wind Impacts

A Wind Impact Assessment (WIA) has been prepared by Windtech and is provided at **Appendix Y.** This assessment has studied the existing wind conditions in the locality and the potential effect of the proposed building. In particular, Windtech have examined the likely effect of wind on the various trafficable outdoor areas within and surrounding the site. The assessment is based on a visual inspection and analysis of the proposed design as well as wind tunnel testing.

### 6.16.1 Assessment

The acceptability of wind conditions of an area is determined by comparing the measured wind speeds against an appropriate criteria. The WIA measured wind conditions for the various critical outdoor trafficable areas around the subject development and compared them against the criteria presented in the Draft Sydney Development Control Plan 2012 - Central Sydney Planning Review Amendment.

The results of the analysis indicate that wind conditions for the majority of trafficable outdoor locations within and around the development will be suitable for their intended uses. However, some areas will experience strong winds which will exceed the relevant criteria for comfort. These areas include:

- The south-east area of the development on the Ground floor experiences uncomfortable conditions due to an exceedance in the comfort criteria. This is a result of the westerly winds side streaming along the southern aspect of the development and passing through the gap in the awning and on to the ground level.
- The north side of the adjoining Level One courtyard located on 60-78 Regent St is exposed to wind conditions which exceed the comfort criteria due to the west and south-west wind directions. The prevailing westerly winds are seen to funnel between the neighbouring developments to the west which are down washing into the courtyard area.

### 6.16.2 Mitigation Measures

In order to ensure that the pedestrian wind environment is acceptable, the following mitigation measures are recommended to be implemented:

- Inclusion of full spaning awning along southern aspect. The awning should not contain any gaps to prevent strong wind from passing down on to the ground level; and
- Strategic planting of densely foliating evergreen trees capable of growing up to 2.0m – 4.0m in height with 4.0m interlocking canopies along the centre line of the courtyard which adjoins.

In relation to the above mitigation measures, an awning has been provided along the Marian Street frontage, however the awning design includes small breaks. It is considered that the awning design can be resolved through the detailed design of the development. As illustrated on the Landscape Drawings at **Appendix J,** the Level One courtyard comprises larger tree species within raised planters and dense bamboo screening.

## 6.17 Crime Prevention Through Environmental Design

A Crime Prevention Through Environmental Design Report (CPTED) has been prepared by Ethos Urban is provided at **Appendix D.** The assessment has been prepared in accordance with the CPTED framework and Australian and New Zealand Risk Management Standard AS/NZS 31000:2009.

### 6.17.1 Assessment

Crime levels in Redfern have substantially decreased over recent years, however, there is still a need to ensure that new development reduces opportunities for crime to occur. The site is located in close proximity to Redfern Local Area Command, which is positioned to the north of the Redfern Street Laneway.

An assessment of the proposal using the CPTED principles has found that, with the implementation of the recommendations, the rating would still remain within the 'moderate' category.
The report confirms that the development is well designed from a CPTED perspectives given that:

- The design of the proposed development will be integrated with the existing Iglu.
- The design clearly divides intended uses comprising of the student housing accommodation, retail and commercial.
- The proposed mix of uses will encourage people to frequent the site beyond standard business hours.
- The proposed development will undoubtedly increase opportunities for natural surveillance, both within the site and to the immediate surrounds.
- The frontages including entries from Regent Street, Marian Street and William Lane will be naturally supervised by capable guardians such as the students entering and exiting the development and the general public passing by.
- The operational plan of management provides operating parameters for the student housing operations on the site.

Overall it is considered that the proposed mixed-use development, which will generate additional retail activity and foot traffic in the immediate vicinity of the site, will make a positive contribution to security and perceptions of safety in the local area.

### 6.17.2 Mitigation Measures

The CPTED Assessment makes a number of recommendations in relation to the ongoing use and detailed design of the proposed development, which have been incorporated as mitigation measures. The key recommendations to further improve the safety and security of the proposed development are detailed below:

- The operational plan of management should be integrated to create one plan of management for the proposal and existing Iglu to ensure all procedures are consistent for the Iglu facility.
- A lighting strategy should be developed by or in consultation with a suitably qualified and experienced lighting expert.
- A CCTV strategy is suggested for the frontages of the retail and commercial tenancies and along the public domain areas and William Lane. The CCTV strategy is to be designed in consultation with a suitably qualified security consultant with a Class 2A licence under the Security Industry Act 1997 who can provide specific advice on the placement, installation, monitoring and maintenance of the CCTV network.
- Provide wayfinding signage and building / business identification signage where appropriate to reinforce perceptions of safety and legibility and clearly define the uses of the building.

The additional detailed recommendations are provided in the CPTED report.

## 6.18 Construction Management

A Construction Management Plan (**Appendix M**) and a Construction Traffic Management Plan (**Appendix G**) have been prepared by Iglu and Varga which demonstrates how the site will be managed during the demolition and construction phases in order to minimise environmental impacts associated with these works.

### 6.18.1 Assessment

The CMP outlines the actions and staging of construction deemed necessary to address the concerns of neighbouring properties, authorities and the requirements of Iglu whilst maintaining a safe and productive construction site with efficient surrounding pedestrian/traffic movements.

The CMP includes specific management plans which set out the procedures and measures to be adopted which will covering the following aspects of the proposed development:

- Site Management;
- Construction Traffic Management;

- Construction Waste Management;
- Materials handling; and
- Pedestrian and site protection.

### 6.18.2 Mitigation Measures

In order to mitigate against any adverse impacts during the construction phase of the proposal, the management measures provided in the CMP (**Appendix M**) should be implemented. The CMP will be a responsive document which continues to be refined throughout the detailed design, builder procurement, demolition and construction phases of the proposed development.

## 6.19 Waste Management

A Waste Management Plan has been prepared by Iglu and is provided at **Appendix Z.** The plan details the proposed management practices and procedures for waste generated by the development. Based on the City of Sydney's Policy for Waste Minimisation.

### 6.19.1 Assessment

Based on Iglu's proposed operation and use, it has been determined that the proposal will generate the following waste volumes set out in **Table 10**.

**Table 10: Waste Generation**

| Waste | Student Accommodation | Retail/Commercial |
|---|---|---|
| General | 10,600 L/week | 2,146L/week |
| Recycling | 5,300 L/week | 1,633 L/week |

The separate retail and student accommodation waste storage rooms have been designed to accommodate bins with sufficient capacity to accommodate the proposed waste volumes, in accordance with Council's requirements.

The collection of waste by a private contractor will allow the removal of waste to be tailored to suit the final operational characteristics of the building. As such no adverse impacts are anticipated as a result of waste storage and collection from the site.

### 6.19.2 Mitigation Measures

In order to appropriately manage and mitigate any adverse impacts arising from waste, the development will be operated in accordance with the Waste Management Plan.

## 6.20 Site Suitability

Having regard to the characteristics of the site and its location, the proposed development is considered suitable for the site as it:

- Will contribute to urban renewal of Sydney's CBD fringe area;
- Will contribute to the urban regeneration of an underutilised site;
- Is capable of being developed in a manner that will minimise impacts to the natural, historical, and environmental qualities of the site; and
- Will result in only minor environmental impacts that can be appropriately managed and mitigated.

Conversely, the site is considered suitable for the proposed development in that:

- It is zoned to accommodate the proposal;
- The location of the site at the edge of the Sydney CBD and in the vicinity of existing transport, other educational institutions is considered to be an optimal location for a student accommodation facility;
- The current development on site is in poor condition and is not commensurate with the site's strategic and locational attributes

- It is well served by frequent existing and planned public transport; and
- Is in proximity to high quality public open space (existing and proposed) to encourage a healthy for new students.

### 6.21 Public Interest

The proposed development is in the public interest as it will:

- Contribute to on-going redevelopment of the street block;
- It will facilitate the economic and orderly development of land;
- Demonstrate excellence in design and environmental sustainability;
- Facilitate high levels of public transport usage for students;
- Deliver a rejuvenated site that is not inconsistent with the character of the locality;
- Create a more vibrant and activated precinct that provides a range of day to day services and offerings for students, employees, visitors and the local community; and
- Create new jobs during the construction and operational phases of the development.

## 7.0 Environmental Risk Assessment

The Environmental Risk Assessment (ERA) establishes a residual risk by reviewing the significance of environmental impacts and the ability to manage those impacts. The ERA for the proposed mixed-use student accommodation facility has been adapted from Australian Standard AS4369.1999 Risk Management and Environmental Risk Tools.

In accordance with the SEARs, the ERA addresses the following significant risk issues:

- the adequacy of baseline data;
- the potential cumulative impacts arising from other developments in the vicinity of the Site; and
- measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

**Figure 33** indicates the significance of environmental impacts and assigns a value between 1 and 10 based on:

- the receiving environment;
- the level of understanding of the type and extent of impacts; and
- the likely community response to the environmental consequence of the project;

The manageability of environmental impact is assigned a value between 1 and 5 based on:

- the complexity of mitigation measures;
- the known level of performance of the safeguards proposed; and
- the opportunity for adaptive management.

The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented.

| Significance of impact | Manageability of impact | | | | |
|---|---|---|---|---|---|
| | 5 Complex | 4 Substantial | 3 Elementary | 2 Standard | 1 Simple |
| 1 – Low | 6 (Medium) | 5 (Low/Medium) | 4 (Low/Medium) | 3 (Low) | 2 (Low) |
| 2 – Minor | 7 (High/Medium) | 6 (Medium) | 5 (Low/Medium) | 4 (Low/Medium) | 3 (Low) |
| 3 – Moderate | 8 (High/Medium) | 7 (High/Medium) | 6 (Medium) | 5 (Low/Medium) | 4 (Low/Medium) |
| 4 – High | 9 (High) | 8 (High/Medium) | 7 (High/Medium) | 6 (Medium) | 5 (Low/Medium) |
| 5 – Extreme | 10 (High) | 9 (High) | 8 (High/Medium) | 7 (High/Medium) | 6 (Medium) |

**Figure 33: Risk Assessment Matrix**

| | | | | Risk Assessment | | |
|---|---|---|---|---|---|---|
| **Item** | **Phase** | **Potential Environmental Impact** | **Proposed Mitigation Measures and / or Comment** | **Significance of Impact** | **Manageability of Impact** | **Residual Impact** |
| Key: C – Construction, O – Operational | | | | | | |
| Visual Impact | O | • Visual impact from surrounding residents and public places | • Massing has been removed from the south-western portion of the building to increase building separation.<br>• Windows on the northern and western facades have been minimised.<br>• Views have been oriented away from the adjoining development to the west. | 2 | 2 | 4<br>Low/Medium |
| Transport, traffic, parking and access | C +O | • Increased traffic on local roads<br>• Increased parking on local roads | • No on-site car parking is proposed as the site is highly serviced by public transport.<br>• Iglu will encourage employee and student travel by walking, bicycle and public transport.<br>• Prior to the issue of an Occupation Certificate, a Workplace Travel Plan and Travel Access Guide will be prepared and distributed to new students and staff. | 2 | 2 | 4<br>Low/Medium |
| Heritage and Archaeology | C + O | • Impact on surrounding heritage items / conservation areas<br>• Impact on archaeological heritage (Aboriginal and European) | • An unexpected finds protocol will be implemented throughout construction. Depending on the nature of the find and its confirmation as an Aboriginal object, then the relevant regulatory authorities would be contacted for further advice. | 3 | 2 | 5<br>Low/Medium |
| Noise and vibration | C + O | • Increase in noise levels during construction activities<br>• Adverse noise impacts on proposed uses, such as rail/traffic noise<br>• Adverse noise impacts from proposed uses on surrounding receivers | • The proposal will accord with the minimum glazing and material specifications set out within **Appendix K.**<br>• The use of the communal areas will be in accordance with the OMP at **Appendix V** which restricts amplified music and usage of the communal outdoor areas to 9am – 10pm.<br>• A detailed review of all external mechanical plant and equipment be undertaken at CC stage (once plant selections and locations are finalised), to determine minimum acoustic treatments required to ensure compliance with NSW EPA requirements.<br>• Acoustic and vibration management measures to be implemented through refinement of the CMP at **Appendix K.** | 3 | 2 | 5<br>Low/Medium |
| Air quality, odour and waste | | • Potential air quality impacts on occupants, neighbours and the | • Dust control measures such as encapsulation of work zones and continuous cleaning throughout dust generating work activities will be implemented.<br>• The building is provided with a mechanical ventilation system for occupant | 3 | 2 | 5<br>Low/Medium |

| | | | | Risk Assessment | | |
|---|---|---|---|---|---|---|
| | | public | comfort. | | | |
| Drainage and flooding | O | • Potential stormwater impacts | • The site is not flood prone<br>• Stormwater and water quality measures will be implemented in accordance with the Stormwater Drainage and Water Quality Report at **Appendix N.** | 2 | 2 | 4<br>Low/Medium |
| Soil and Water | C + O | • Potential geotechnical impacts and instability of future development | • No specific mitigation measures are required as the proposal is considered geotechnical and structurally feasible. | 2 | 2 | 4<br>Low/Medium |
| Biodiversity | C | • Loss of biodiversity | • Given the developed nature of the site and current and historical uses, there are not likely to be any impacts on any threatened species, populations or ecological communities or their habitats. | 1 | 1 | 2<br>Low |
| Contamination | C + O | • Exposure of contamination or hazardous materials during construction and operation | • Implementation of a Detailed Site Investigation (and after remediation and validation, if required). | 3 | 2 | 5<br>Low/Medium |
| Infrastructure and Utilities | C + O | • Adequate connection to infrastructure and utilities;<br>• Impacting on existing infrastructure below the site | • Ongoing consultation and design development with the relevant utility providers will be undertaken throughout the design development and construction process. | 3 | 2 | 5<br>Low/Medium |
| Wind Impact | O | • Adverse wind environment and pedestrian discomfort | • Provision of an awning on Marian Street to meet the recommendation of the WIA and larger tree screen planting within the Level One courtyard. | 3 | 3 | 5<br>Low/Medium |
| Crime and Public Safety | O | • Anti-social intimidating behaviour, increased crime | • Operate in accordance with the security measures within the OMP and integrate recommendations of the CPTED report into the detailed design. | 2 | 1 | 3<br>Low |
| Construction Management | C | • Noise, dust, air quality and traffic impacts | • Operate accordance with the Construction Management Plan and Construction Traffic Management Plan which details full mitigation measures to manage environmental impacts | 3 | 2 | 5<br>Low/Medium |

## 8.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 11** below. These measures have been derived from the previous assessment in **Section 6.0** and those detailed in appended consultants' reports.

**Table 11: Mitigation Measures**

| Mitigation Measures |
|---|
| Transport, Traffic, Parking and Access<br>• Iglu will encourage employee and student travel by walking, bicycle and public transport;<br>• Prior to the issue of an Occupation Certificate, a Workplace Travel Plan and Travel Access Guide will be prepared and distributed to new students and staff. |
| Heritage and Archaeology<br>• An unexpected finds protocol will be implemented throughout construction. Depending on the nature of a find (if relevant) and its confirmation as an Aboriginal object, then the relevant regulatory authorities would be contacted for further advice. |
| Noise and Vibration<br>• The proposal will accord with the minimum glazing and material specifications set out within **Appendix K.**<br>• The use of the communal areas will be in accordance with the OMP at **Appendix V** which restricts amplified music and usage of the communal outdoor areas to 9am – 10pm.<br>• A detailed review of all external mechanical plant and equipment be undertaken at CC stage (once plant selections and locations are finalised), to determine minimum acoustic treatments required to ensure compliance with NSW EPA criteria.<br>• Acoustic and vibration management measures to be implemented through refinement of the CMP at **Appendix K.** |
| Air Quality, Odour and Waste<br>• Construction air quality will be managed through dust control measures such as encapsulation of work zones and continuous cleaning throughout dust generating work activities.<br>• The building will be provided with a central mechanical ventilation system for occupant comfort. |
| Water Cycle Management<br>• Provision of a rainwater tank re-use system for irrigation reuse; and<br>• Provision of a stormwater treatment system incorporated within the OSD tank system to provide tertiary stormwater treatment.<br>• Sediment control will be managed in accordance with the Erosion and Sediment Control Plan within **Appendix N.** |
| Contamination<br>• In order to ensure that the site will be suitable for the proposed development a Detailed Site Investigation will be undertaken prior to construction commencing. If required, remediation and validationwill be undertaken. |
| BCA and Accessibility<br>• The detailed design of the development will be designed to comply with the applicable requirements of the BCA or appropriate alternative solutions will be developed and verified by a qualified BCA Consultant and the Access Consultant. |
| Infrastructure and Services<br>• Ongoing consultation and design development with the relevant utility providers will continue to be undertaken throughout the development process. |
| Wind Impacts<br>• An awning will be provided along the Regent Street and Marian Street frontages and the detailed awning design will minimise wind impacts on pedestrians.<br>• The landscaping to the Level One courtyard includes large tree species and screening to mitigate wind impacts. |
| Crime Prevention Through Environmental Design<br>• The detailed recommendations within the CPTED report at **Appendix D** will continue to be developed and integrated into the detailed design of the development. |
| Construction Management<br>• Construction will be in accordance with the CMP which is a responsive document which will continue to be refined throughout the detailed design, builder procurement, construction phases of the proposed development. |

| Mitigation Measures |
| --- |
| Waste Management<br>• Waste facilities have been provided and waste will be managed in accordance with the WMP at **Appendix Z.** |

## 9.0 Justification of the Proposal

In general, investment in major projects can only be justified if the benefits of doing so exceed the costs. Such an assessment must consider all costs and benefits, and not simply those that can be easily quantified. As a result, the EP&A Act specifies that such a justification must be made having regard to biophysical, economic and social considerations and the principles of ecologically sustainable development.

This means that the decision on whether a project can proceed or not needs to be made in the full knowledge of its effects, both positive and negative, whether those impacts can be quantified or not.

The proposed development involves the demolition of existing buildings and construction and operation of a new mixed-use student accommodation facility. The assessment must therefore focus on the identification and appraisal of the effects of the proposed change over the site's existing condition.

Various components of the biophysical, social and economic environments have been examined in this EIS and are summarised below.

### 9.1 Social and Economic

The proposed development will have significant social and economic benefits for the communities of Redfern, the City of Sydney and the NSW State. In particular, these benefits include:

- provision of suitable accommodation for students close to Sydney's major education institutions, facilitating improved education outcomes for the general population, and particularly for those students required to travel from regional NSW;
- flow-on economic benefits to the tertiary education sector associated with an increased ability to accommodate students from travelling to Sydney for study;
- economic benefits of local and city-wide expenditure of the accommodation of 265-434 additional students in Redfern;
- improved safety outcomes associated with the introduction of new pedestrian activity, active street uses and casual surveillance into the Redfern town centre;
- potential for reduced competition for private affordable rental housing stock by students, assisting other persons who are not students to access rental stock in the locality;
- ensuring that new development allows the efficient development of surrounding land at a future time;
- equitable access will be provided throughout the proposed development, including the provision of student accommodation dedicated to persons with mobility disabilities;
- approximately 30 additional construction jobs created during the development; and
- full-time jobs created on-site in the proposed student accommodation facility and retail shops, as well as potential creation of new indirect jobs in the tertiary education sector and the local retail and service sectors.

### 9.2 Biophysical

The environmental impact assessment of the proposed development has demonstrated that:

- the proposal does not give rise to any impacts on the local road or transport network;
- noise from the operation of the proposed development will not give rise to any impacts on nearby sensitive receivers;

- future occupants of the building will not be subject to adverse noise impacts;
- there is not expected to be any impacts on Indigenous or European heritage values associated with the site;
- water and energy consumption will be reduced in accordance with contemporary standards for Class 3 buildings;
- any potential contamination of the site can be addressed, and the site made suitable for the proposed use;
- wind impacts associated with the development of the proposed building can be managed through detailed design and wind tunnel testing;
- waste will be managed in an efficient and coordinated manner to avoid potential wastage, odour impacts or pollution including improvements to the existing management of waste by adjoining landowners in the laneway;
- the site will be managed during construction to avoid amenity or physical environmental impacts; and
- the proposed development is able to be adequately serviced by existing utilities and stormwater management infrastructure.

## 9.3 Ecologically Sustainable Development

The EP&A Regulation lists 4 principles of ecologically sustainable development to be considered in assessing a project. They are:

- The precautionary principle;
- Intergenerational equity;
- Conservation of biological diversity and ecological integrity; and
- Improved valuation and pricing of environmental resources.

An analysis of these principles follows.

### Precautionary Principle

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment.

This EIS has not identified any serious threat of irreversible damage to the environment and therefore the precautionary principle is not relevant to the proposal.

### Intergenerational Equity

Inter-generational equity is concerned with ensuring that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations. The proposal has been designed to benefit both the existing and future generations by:

- not impacting on heritage listed items for future generations to appreciate and enjoy;
- implementing safeguards and management measures to protect environmental values;
- facilitating job creation and the provision of housing in close proximity to public transport; and
- improving the public domain and amenity in Redfern town centre.

The proposal has integrated short and long-term social, financial and environmental considerations so that any foreseeable impacts are not left to be addressed by future generations. Issues with potential long-term implications such as waste disposal would be avoided and/or minimised through construction planning and the application of safeguards and management measures described in this EIS and the appended technical reports.

**Conservation of biological diversity and ecological integrity**

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration. The proposal would not have any significant effect on the biological diversity and ecological integrity of the study area.

**Improved valuation, pricing and incentive mechanisms**

The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources which may be affected by a proposal, including air, water, land and living things. Mitigation measures for avoiding, reusing, recycling and managing waste during construction and operation would be implemented to ensure resources are used responsibly in the first instance.

Additional measures will be implemented to ensure no environmental resources in the locality are adversely impacted during the construction or operational phases.

## 10.0 Conclusion

The Environmental Impact Statement (EIS) has been prepared to consider the environmental, social and economic impacts of the proposed mixed-use student accommodation development at 80-88 Regent Street, Redfern. The EIS has addressed the issues outlined in the SEARs (**Appendix A**) and accords with Schedule 2 of the EP&A Regulation with regards to consideration of the proposed development's social, economic and biophysical impacts.

The development of student housing on the site will have significant benefits to Redfern by delivering a new integrated facility that injects additional activity throughout the centre, and particularly at the ground plane around Regent Street and Marian Street. Provision of well-designed and appropriate student accommodation will support the provision of education to students from Sydney, regional NSW, inter-state and overseas, resulting in improved social and economic outcomes for NSW.

The proposed development does not give rise to any significant environmental effects that cannot be effectively managed through the normal conditions of consent and the implementation of the mitigation measures identified in **Section 8.0** of this EIS.

Given the merits described above it is requested that the application be approved.