

Our Ref: 80218055:JOG  
Contact: John O'Grady

18 April 2018

Deicorp  
Level 3  
161 Redfern Street  
**REDFERN NSW 2016**

Attention: Greg Colban

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Dear Greg,

**COL JAMES STUDENT ACCOMMODATION - EVELEIGH ST, REDFERN  
VISUAL IMPACT ASSESSMENT**

Cardno has been requested to provide advice on the potential impact of this proposal on local views. Specifically, the request is to address a submission to the public exhibition of a State Significant Development (SSD) Application for the project pertaining to the potential loss of views from 2 apartments within the existing residential apartment block at no.157 Redfern Street, Redfern.

Accordingly, our advice responds to the following request for additional information (RFI) from Department of Planning and Environment (DPE) with respect to this submission:

*"Consideration is required of the potential view loss impacts detailed within the public submission prepared by Design Collaborative on behalf of apartments within 157 Redfern Street. A view impact assessment should be provided that considers Tenacity principles to provide an analysis of the impacts of the development on views."*

## **1.1 Method**

The assessment has been carried out using the following method:

- A review of the Development Application and the accompanying response report from the Government Architect's Design Review Panel for the Pemulwuy Development (10 August 2017).
- A site and area inspection and photographic survey to gain an understanding of the general visual character of the locality.
- Review of photos provided by the submitter indicating existing views from the two subject apartments in 157 Redfern Street.
- Preparation of electronic view analyses to show:
  - Elements in the landscape that would be visible from the subject apartments if the proposed Student Accommodation building in Eveleigh Street was constructed to be consistent with the building envelope required by the Secretary General's Environmental Assessment Requirements (SEAR's); and
  - Elements that would be visible (and elements that would be screened in these views) if the development as proposed was constructed.
- Analysis of the outcomes of the above exercise against the view sharing principles adopted by the Court (the "Tenacity Principles").
- Provision of a conclusion regarding the impact of the proposal in its current form on views from the subject apartments.

## 1.2 Background

The proposed development is located in the context of an area under transition from traditional medium density residential (generally terrace style) development supplemented by low scale commercial / retail uses to high density, high rise mixed use. The Redfern / Waterloo State Significant Precinct incorporates both the development site and the apartments in Redfern Street.

A series of major urban renewal projects are at planning stages under the UrbanGrowth NSW Development Corporation. Urban renewal projects are under way at Redfern, North and South Eveleigh and Waterloo. The projects will ultimately result in major change to the existing built landscape of the Precinct with an emphasis on high density, high rise residential and mixed use development.

## 1.3 Visual environment

### 1.3.1 Existing visual character

Redfern is a highly urbanised inner city suburb and its visual character is reflective of this. In its current stage of development, the suburb supports a mix of high rise mixed use development around the station, generally within the existing Redfern CBD to the east of the rail line and traditional terrace style residences surrounding the CBD and to the west of the station. The station is on an east west trending ridgeline which affords panoramic views of the city skyline between Eveleigh Street and Redfern Street.



*Redfern Station forecourt – an urban environment softened by the existence of good quality street tree stock, northerly aspect and elevated views towards the city CBD.*



*Looking south west from the corner of Eveleigh and Lawson Streets illustrating existing high rise residential apartment blocks on Redfern Street and housing towers at Waterloo in the background.*



*Looking north from the corner of Eveleigh and Lawson Streets with the site of the proposed development on the right hand side of the image (Source - Google Earth).*





*View across the development site towards the rail line.*



*Terrace houses and community facilities in Caroline Street.*



*Street level view from Redfern Station overbridge looking north towards the CBD.*



*View across the development site towards Redfern Street illustrating recent and ongoing re-development of the precinct for high rise mixed uses.*



### 1.3.2 Emerging visual character

The visual character of the Redfern / Waterloo Precinct will change significantly in the medium timeframe under the proposed urban renewal program, along with changes likely to come out of the Central Sydney Planning Strategy for rail corridor lands between Central and Redfern stations. Grimshaw has modelled a potential outcome of the renewal strategies for building massing, illustrating what would clearly be a dramatic change to the local visual character of Redfern and its context. Essentially, this change would constitute a southerly extension of the Sydney CBD built form.



*Model illustrating the subject development in the context of potential local redevelopment in accordance with the Redfern / Waterloo State Significant Precinct urban renewal program and the Central Sydney Planning Strategy (Source: Grimshaw, December 2016).*

## 1.4 Impacts on views from the subject apartments

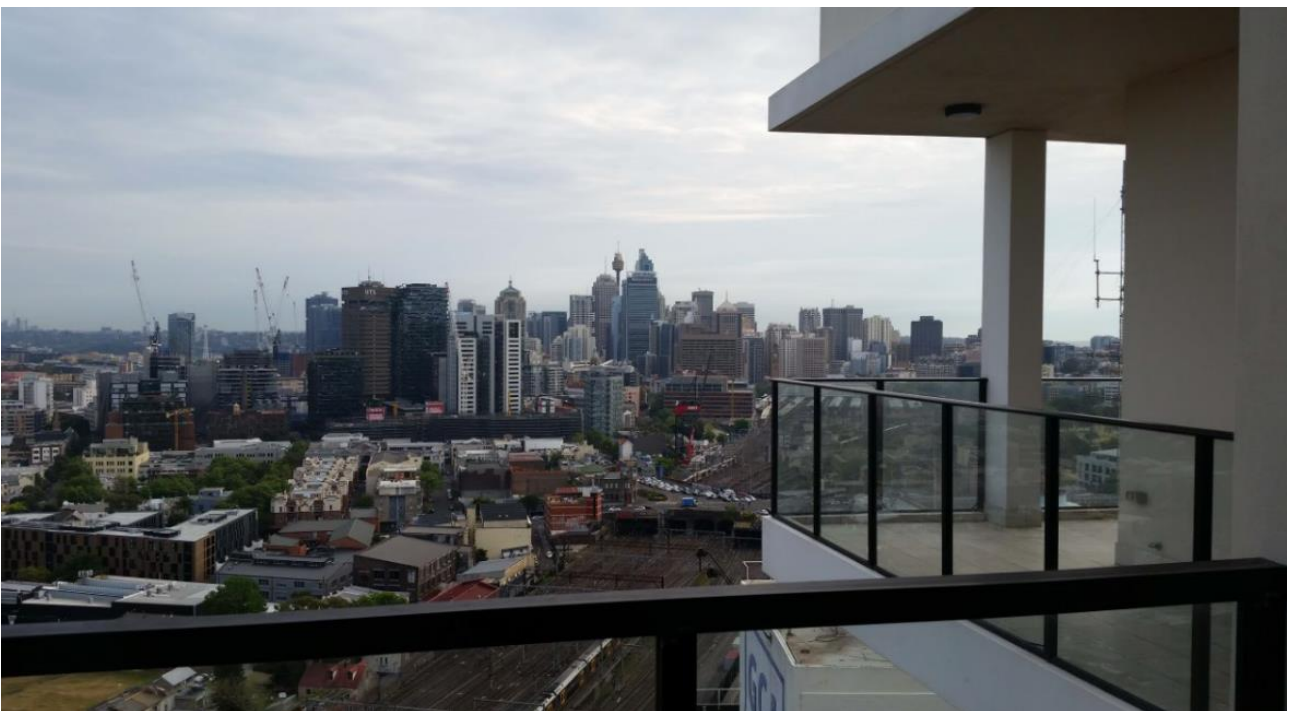
### 1.4.1 Existing views from the apartments

Photographs illustrating existing views available from the apartments at 157 Redfern Street have been provided by the submitter. A selection of these is included and analysed below. Essentially the photographs indicate that the existing views from the apartments on Level 18 and the rooftop terrace of 157 Redfern Street include a number of visually prominent elements including:

- The Anzac Bridge at Rozelle;
- High rise residential development at Pyrmont;
- Distant skyline views of the Chatswood CBD;
- The UTS Tower and Central Park Tower at Broadway;
- A small portion of the Barangaroo towers; and
- Broad views of the southern edge of the Sydney CBD with the Centrepoint Tower as a horizon element.



*Existing view to the north west from one of the subject apartments (Level 18). The view includes the Anzac Bridge, parts of Darling Harbour and Broadway and the Sydney CBD skyline, including the Centrepont Tower.*



*View to the north from one of the Apartments (level 18). The full extent of the southern CBD is visible in this view, including the Centrepont Tower.*





*Rooftop terrace view to the north from one of the subject apartments, again including the entire southern city CBD skyline.*

#### **1.4.2 Impacts of the proposal on available views**

We have assessed the likely impact of the proposal on existing views by setting up viewshed diagrams to illustrate views that would be available from the rooftop terrace of No.157 Redfern Street under two scenarios:

- If the development site was built within the building envelope as recommended in the Secretary General's Environmental Assessment Requirements (SEARs); and
- If the site was developed to the building envelope as proposed in the Development Application.

The process for preparing the viewshed diagrams involved:

- A 1m Digital Surface Model (DSM) of the study area, including buildings and vegetation, was generated from NSW LPI 2013 LiDAR data.
- Within the DSM the two sites of interest, the proposed student accommodation site and the site from which the viewshed was considered, were cleared to elevations of 24.45m (from design plans) and 28.5m (advised) respectively.
- Two separate DSMs were generated to model the two scenarios, one with the student accommodation building built to the SEARS envelope, and one with it built to the proposed design envelope. The location and dimensions for these were taken from the supplied design plans, which depicted the design envelope alongside the SEARS envelope.
- A viewshed analysis was run examining the SEARS envelope and the design envelope in ArcGIS using an observer height of 66.12m above ground level at the approximate position of the observer's unit. The observer height was generated with reference to design drawings of the apartment block provided by the Applicant.

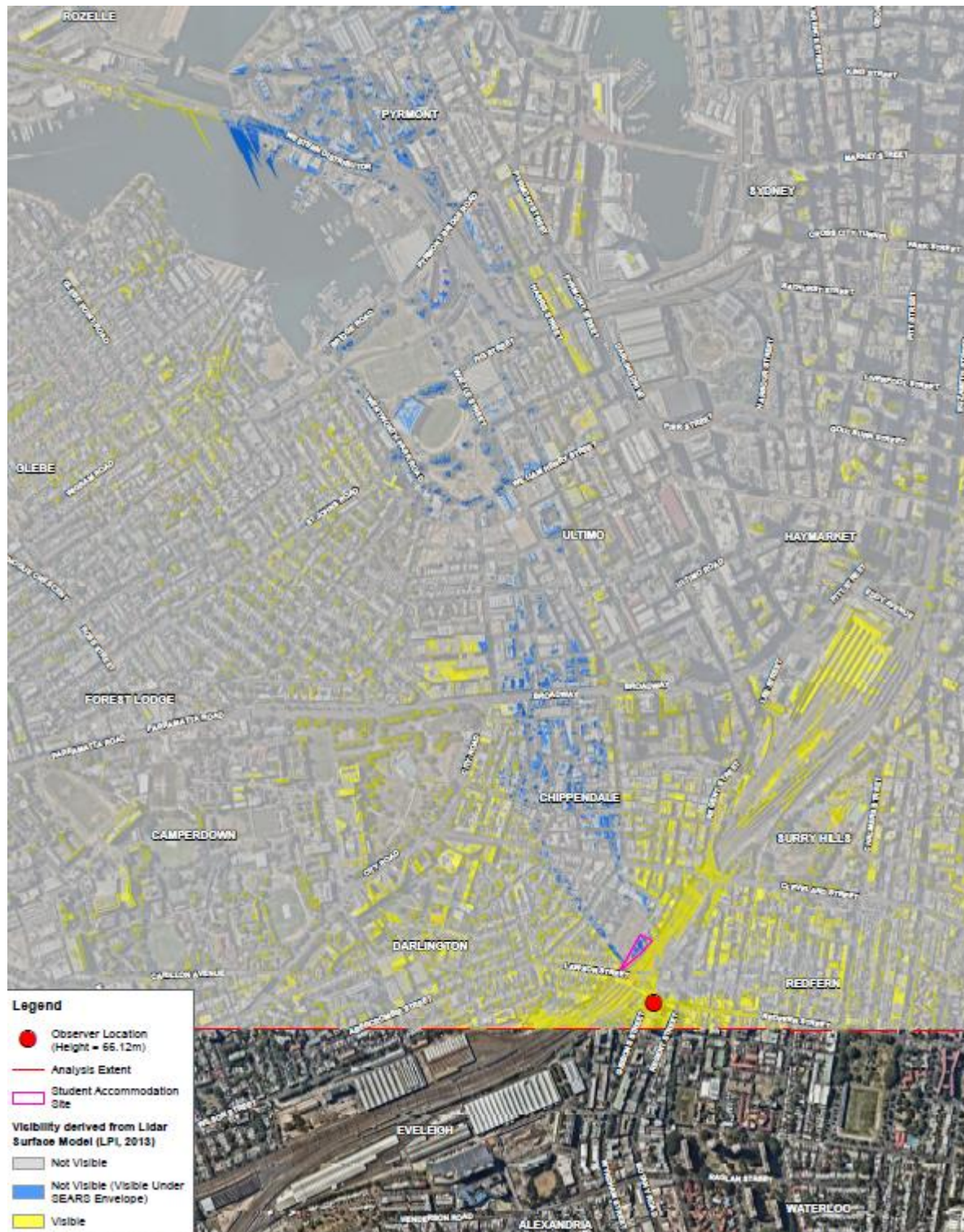
The diagrams for each scenario are included and explained below.





**View diagram 1 - Available views – proposed building within SEARs envelope.** The yellow toned areas on the aerial would be visible above the building envelope from the upper levels of the Redfern Street apartment block. Notably, the towers on the Anzac Bridge would remain in view as would apartment towers in Pyrmont adjacent to the bridge.





**View diagram 2 - Available and lost views – building envelope as proposed.** Yellow toned areas would remain in the view from the roof terrace at No.157 Redfern Street. The blue toned areas represent elements that would be visible if the proposal was built to the SEARs envelope but would be screened from view by the building as proposed. The diagram indicates that taller built elements to the north west of the development site would no longer be visible behind the proposed building. These would include residential towers in Pyrmont and the eastern tower of the Anzac Bridge. Notably, the diagram indicates that the western tower of the bridge would remain visible from the roof terrace.



## 1.5 Assessment against the Tenacity Principles

The proposal and its impacts on views from the upper level apartments at No.157 Redfern Street are assessed below against the principles of view sharing in *Tenacity Consulting vs Warringah Council* (2004, NSW LEC 140). The 4 steps set by the Commissioner are used to guide the assessment.

### 1.5.1 Step 1 – assessment of views to be affected.

Views of the Anzac Bridge might be considered to be “iconic” in that the bridge is a significant element in the Sydney landscape. We would argue, however, that the Anzac Bridge is a less “iconic” element than say the Harbour Bridge or the Opera House. With respect to levels of “iconic” significance, we would put the Anzac Bridge on a par with the Centrepont Tower, the Central Station platform and clocktower complex and the Central Park residential tower. These built “icons” are all available in views from the apartment roof terrace as part of panoramic views of the southern Sydney CBD.

### 1.5.2 Step 2 – From what part of the property are the views available?

We have not had the opportunity to visit the subject apartments so we rely on the Design Collaborative submission for advice on locations within the subject apartments that would be likely to be impacted by view loss as a result of construction of the building as proposed:

*“Apartment 1802 has a balcony and rooftop courtyard and apartment 1803 has a living / dining area / kitchen, balcony, bedroom and rooftop courtyard which enjoy panoramic views extending from the west in a northerly direction and incorporating the Anzac Bridge, Barangaroo and the Sydney City CBD.”*

So essentially, the views described above are available from living and private recreational areas from both apartments and they are thus a significant component of the enjoyment of each property by its residents.

### 1.5.3 Step 3 – extent of the impact

Notwithstanding that we have not visited the apartments, the extent of the view loss has been measured as accurately as possible with the information available to us. In summary, we have found that the view loss as illustrated in View Diagram 2 would be in a triangular area stretching north west from the development site. Significant elements in the view that are likely to be lost include:

- The eastern end of the Anzac Bridge, incorporating the eastern tower;
- Wentworth Park and its grandstand; and
- High rise residential towers in Pyrmont near the eastern end of the Bridge.

Our analysis has found that the elements of existing views that will not be affected by the development as proposed include:

- Barangaroo towers, the Central Park and UTS Towers at Broadway; and
- The southern CBD including Centrepont Tower.

Our opinion on the significance of this view loss is based on the fact that only a portion of the existing panoramic views from the apartments would be affected. The majority of the “iconic” components within the view (the Central Station platforms and clocktower, the UTS and Central Park Towers and the Centrepont Tower) would not be screened by the development as proposed.

On this basis, we would assess the loss of views resulting from the proposal as minor to moderate.

### 1.5.4 Step 4 – The reasonableness of the proposal

There are no specific height controls that pertain to development on the subject site. However, a building height envelope has been set by the SEARs and the proposal in its current form breaches this. In order to gain a clear understanding of the weight that should be placed on this breach, it is important to review its origin.

We understand that the SEARs building envelope resulted from a proposal for a 16 storey student accommodation complex that was submitted for SEARs in December 2016. The Secretary adopted the envelope set by the proposal but also required that a Design Review Panel (DRP) be established to review proposals for the site in order to ensure design excellence. The DRP consequently reviewed a proposal by Turner Architects that was consistent with the SEARs envelope. The DRP identified a number of significant design shortcomings in the proposal and encouraged the design team to explore alternative massing arrangements, including height increase, to resolve a number of amenity issues and produce a slender, less

massive built form. The DRP's report of 10 August 2017 makes the following relevant comments with regard to the departure of the proposal from the SEARs building envelope:

*"While it is noted by the Panel that the formal expression of the additional height was at odds with the intent of the stepped form of the SEARs reference scheme, the stepped (waterfall) effect in the SEARs was considered to be neither the optimum, nor the only solution for the built form for this site. A breakup of the mass of the tower has been achieved through the varied treatment of the façade and emphasis on verticality."*

So effectively the form of the building as proposed is the result of an iterative design process between Turner Architects and the Design Review Panel. In its current form, the building is considered by the DRP to be a superior design outcome when compared to the SEARs building envelope. On this basis, it is our opinion that the building as proposed is a high quality response to its site. Having the support of the DRP, it cannot be described as being inconsistent with planning controls that apply to the site

## 1.6 Conclusion

Cardno has carried out an assessment of the potential impacts of this proposal on views from 2 apartments on the upper (18<sup>th</sup>) floor of a building at 157 Redfern Street. The assessment has been carried out in accordance with the "Tenacity Principles" of view sharing, as required by the Departments request for additional information. Our conclusions to the assessment are:

- The apartments in question currently have panoramic views from the Anzac Bridge to the southern Sydney city CBD. Many of the elements in these views could be described as "iconic". In our opinion these elements would include the Anzac Bridge, the Central Station clocktower and platforms complex, the Central Park tower, the UTS tower and the Centrepoint Tower.
- A development that is within the building envelope adopted by the Secretary General in the SEARs would not screen any of the above described "iconic" items.
- The development as proposed would substantially screen views of the Anzac Bridge but would not screen any other of these "iconic" items. The panoramic views of the City CBD would not be impacted by the proposed development. We consider the impact of the proposal on views from the subject apartments to be minor to moderate.
- Given that the proposal is a result of an iterative process between the design team and a Design Review panel set up under instruction of the Secretary General, it is our opinion that the development as proposed is "reasonable".

Assessed against the principles of view sharing, it is our opinion that the proposal would have an acceptable impact on views from the subject apartments. With respect to impacts on views from the apartments, we see no reason why the proposal should not be approved.

Yours sincerely,



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