E T H O S U R B A N

Response to Submissions and Further Amended Concept Proposal

Redevelopment of Harbourside Shopping Centre Darling Harbour

Submitted to NSW Department of Planning, Industry and Environment On behalf of Mirvac Projects Pty Ltd

12 October 2020 | 14657



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- L Wind Tunnel Assessment and Addendum Cermak Peterka Petersen

- M Design Excellence Strategy Ethos Urban
- N Preliminary Site Contamination Assessment Coffey
- Preliminary Acid Sulphate Soil Management Plan Coffey
- P Preliminary Remediation Action Plan Coffey
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- R Flooding, Stormwater and WSUD Report Arcadis
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- X Demolition Acoustic Report Renzo Tonin & Associates
- Y Public Benefit Offer Mirvac

1.0 Introduction

A State Significant Development Application (SSDA 7874) and accompanying Environmental Impact Statement (EIS) in support of a concept proposal for the redevelopment of Harbourside Shopping Centre in Darling Harbour (the site) was first lodged in December 2016 with the Department of Planning, Industry and Environment (the Department).

The SSDA was publicly exhibited for a period of 62 days from 15 December 2016 until 14 February 2017. During this time, sixteen (16) submissions were received from government agencies, organisations, and the City of Sydney Council and over 155 submissions were received from the public.

Following this exhibition, a response to submissions was submitted to the Department in early 2020 and the SSDA included an amended concept proposal.

The SSDA and amended concept proposal was publicly exhibited for a second time from 2 April to 29 April 2020. During this time, six (6) submissions were received from government agencies and City of Sydney Council and 57 submissions were received from the general public and organisations.

The key issues raised in this second round of submissions can be broadly grouped into the following categories:

- Built form and urban design;
- Public domain and open space;
- Impact on views;
- Overshadowing;
- Traffic and parking;
- Heritage;
- Land use;
- Strategic planning; and
- Wind impacts.

Following the second exhibition of the proposal in April 2020 and given the nature and range of submissions made from agencies and the public, Mirvac has again reviewed the overall approach and elements of the concept proposal. This has accordingly led to developing a further amended concept proposal. This further amended concept proposal therefore includes amendments made by Mirvac pursuant to Clause 55 of the *Environmental Planning & Assessment Regulation 2000*, mainly to address matters raised in the submissions and deliver an overall significantly improved outcome on the site, and for the broader Darling Harbour precinct and Pyrmont Peninsula.

The following further key amendments have been made to the Concept Proposal since its April 2020 public exhibition:

- Further reduction in height of the northern part of the building podium from RL 25m to part RL 17.6m and part RL 13.75m (reduction of 1 – 3 storeys) to maximise view sharing and allow incorporation of a 1,500sqm public open space 'Guardian Square';
- The provision of a new public open space, 'Guardian Square', above the now-reduced northern podium to provide 1,500sqm of 24 hour/7 days a week publicly accessible open space basked in northern sunlight and that allows for views of Darling Harbour, Pyrmont Bridge and the CBD skyline; and
- Increase in height of the residential tower from RL 153.76m to RL 166.95m to offset loss of area in the podium and align with the height identified for this key catalyst site under the Draft Pyrmont Place Strategy. The final GFA has been maintained at a maximum of 87,000sqm.

The further amendments in the whole represent additional improvements to the proposal from the response to submission scheme. In addition to the further amendments made to the Concept Proposal, Mirvac is also now including detailed Stage 1 early works, comprising demolition of the existing shopping centre down to ground slab level (no ground disturbance) into the concept approval. Revised SEARs were accordingly issued by the Department on 12 May 2020.

This report, prepared by Ethos Urban on behalf of the proponent, sets out the responses to the issues raised in accordance with Clause 85A of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), and details the key amendments, final concept design, updated environmental assessment of the amended concept proposal (as relevant) and final mitigation measures for which approval is now sought.

Where individual issues are not discussed in this report, a detailed response can be found in the response tables attached at **Appendix A** (agency submissions), **Appendix B** (public submissions), and **Appendix C** (50 Murray Street submission).

1.1 Amendments to proposed development

To reflect the design changes that have been made to the proposed development following the second round of public exhibition for the proposal and for which approval is now sought (the further amended concept proposal), and to address issues raised in the submissions, a range of updated plans and documentation have been prepared.

The revised plans include Architectural Drawings by FJMT. A drawing schedule outlining the new amended plans for approval is provided at **Section 3.6**, with the Drawings included at **Appendix D**. A number of consultant reports and supporting information has been updated or further supplements both the material originally submitted in support of the EIS and that was subsequently submitted in support of the first response to submissions, as noted in the Table of Contents.

The revised supporting documentation enables DPIE to undertake an informed assessment of the further amended proposal. The findings of the revised supporting consultant documentation are summarised at **Section 5.0** of this report as relevant. A final schedule of the mitigation measures proposed to mitigate the impacts associated with the concept proposal is provided at **Section 6.0**.

This report should be read in conjunction with the EIS prepared by JBA, dated November 2016, and the Response to Submissions and Amended Concept Proposal Report prepared by Ethos Urban, dated March 2020.

The further amended concept proposal seeks approval for the following key components and development parameters:

- A concept proposal and building envelope for the redevelopment of the Harbour Shopping Centre, including the following elements:
 - A network of open space areas and links generally as shown within the Public Domain Concept Proposal, to facilitate re-integration of the site into the wider urban context;
 - Building envelopes;
 - Land uses across the site, including non-residential and residential uses;
 - A maximum total Gross Floor Area (GFA) across the Harbourside site of 87,000sqm for mixed use development (45,000sqm non-residential and 42,000sqm residential development);
 - Basement car parking;
 - Car parking rates to be utilised in subsequent detailed (Stage 2) Development Applications;
 - Urban Design and Public Realm Guidelines to guide future development and the public domain; and
 - Strategies for utilities and services provision, drainage and flooding, and ecologically sustainable development.
- Stage 1 early works comprising the demolition of existing site improvements, including the Harbourside Shopping Centre, obsolete monorail infrastructure, and associated tree removal.

To ensure the development complements and enhances the area Mirvac has completed over 3.5 years of extensive stakeholder consultation to develop its vision for the site. This has included consulting and collaborating with the landowner, adjoining landowners, residents, action groups, authorities and agencies. Mirvac has listened to the feedback received and positively responded at each step of the process. Significant amendments and improvements have occurred throughout the planning assessment process. **Figures 1 – 3** illustrate the evolution of the proposal from the original submission to the current further amended concept proposal. While **Figure 4** illustrates the key moves made between the last amended concept proposal and the further amended concept proposal the subject if this RTS.



Figure 1 Originally submitted concept proposal (December 2016)



Figure 2 Amended concept proposal (April 2020)



Figure 3 Further amended concept proposal (October 2020)



Amended Concept Proposal (April 2020)

Further Amended Concept Proposal (October 2020)

Envelope reduced to form 'Guardian Square' (level with Pyrmont Bridge)

Figure 4 Further amended concept proposal (October 2020)

Figure 5 depicts a high level/aerial illustration of the further amended concept proposal for which approval is now sought, as viewed from the east. Imagery used throughout this report to illustrate the potential future detail and form of the development is indictive only and subject to the competitive design process and detailed design.



Figure 5 Artist's impression of the further amended concept proposal including widened 20m wide waterfront promenade

1.2 Unsolicited proposal

Lodgement of this Response to Submissions and Further Amended Concept Proposal follows the decision of the NSW Government on 18 August 2020 to proceed to Stage 3 of Mirvac's Unsolicited Proposal (USP) bid to revitalise the Harbourside Shopping Centre. The follow reasons were given for justification for progress to Stage 3:

- The proponent's Stage 2 Detailed Proposal was evaluated by a cross-government panel and assessed to satisfy all assessment criteria;
- The proponent's long term leasehold rights place it in a unique position to deliver outcomes valued by Government. The proponent is the only entity that could develop the site and deliver value for money outcomes that align with the NSW Government's aspirations for the Darling Harbour precinct; and
- The proponent has the capability and capacity to deliver the proposal.

Mirvac is the long-term leaseholder of the Harbourside Shopping Centre and is therefore in the unique position to deliver a new and significantly enhanced mixed use precinct and public domain outcome that cannot be readily be delivered by competitors. The USP process is separate to the necessary planning approvals Mirvac is required to secure in order to realise its vision for the Harbourside precinct.

2.0 Key issues and proponent's response

This section of the report provides a response to key issues raised by the Department, other government agencies and organisations, and by members of the public during the exhibition of the SSDA as previously amended in April 2020. This includes the following key issues:

- Built form and urban design;
- Public domain and open space;
- Impact on views;
- Overshadowing;
- Traffic and parking;
- Heritage;
- Land use;
- Strategic planning; and
- · Wind impacts.

A response to each of the individual issues raised by the Department and other government agencies is provided in **Appendix A**, members of the public and organisations in **Appendix B**, and 50 Murray Street in **Appendix C**. An overview of the parties who made submissions, and their key issues/matters for consideration, is provided below. Any supplementary environmental assessment that may be required is detailed in **Section 5.0**.

Government and agencies

The Department provided an overarching letter (as the assessment authority) summarising the key matters to be addressed and additional information to be provided. A detailed item-by-item response to the Department's correspondence is provided at **Appendix A**, with an overview provided below.

Not including the DPIE letter, five (5) submissions were received from other government agencies in response to the submission of the Amended Concept Proposal. Specifically, responses were received from:

- City of Sydney Council;
- Heritage Council of NSW;
- Sydney Trains;
- Sydney Water; and
- Transport for NSW.

The responses generally made a variety of comments or sought further clarification and information on a number of detailed planning matters as detailed throughout this section, **Section 5.0**, and with direct responses to each submission provided at **Appendix A**. The agency submissions also included various recommended conditions of consent for the proposed development.

Members of the public

Ethos Urban analysed the submissions received from the public in response to the April 2020 exhibition of the amended concept proposal. In summary, fifty-seven (57) public submissions were received. This number includes submissions from both public individuals, public organisations and advocacy groups, and surrounding key stakeholders. This includes key stakeholders located within 50 Murray Street, also known as One Darling Harbour.

A detailed response to the issues raised by the public has been provided in the following sections, with direct responses to each issue raised provided at **Appendix B** and **Appendix C**.

Table 1 below provides a summary of the key issues raised by the public (and agencies) during the exhibition period, and a reference to where these issues are discussed in this report.

Topic category	Times raised in government and agency submissions	Times raised in public submissions*	Discussion reference
Primary issues [^]			
Built form and urban design	3	110	Section 2.1
Public domain and open space	3	10	Section 2.2
Impact on views	3	58	Section 2.3
Secondary Issues			
Overshadowing	3	20	Section 2.4
Traffic and parking	3	23	Section 2.5
Heritage (Pyrmont Bridge)	2	33	Section 2.6
Land use	2	27	Section 2.7
Strategic planning	1	13	Section 2.8
Wind impacts	2	2	Section 2.9

Table 1 Submission Topic Summary Table

 ^ As informed by the Department's key issues letter.
 * This column only represents the summary total of all sub-issue totals under the par once. Refer to Appendix B for an accurate numerical breakdown for each sub-issue. sents the summary total of all sub-issue totals under the parent topic category. Therefore, there are instances where a submission has been counted more than

In responding to and addressing the range of matters raised by government agencies and authorities, in addition to the public, the proponent has engaged a range of expert consultants to further refine the amendments that are now proposed to be concept proposal (the 'further amended concept proposal'; outlined at Section 3.0). A considered and detailed response to each submission has been provided in the accompanying documentation (agency submissions at Appendix A, public submissions at Appendix B, and 50 Murray Street submission at Appendix C), with key matters expanded on below or in Section 5.0.

2.1 Built form and urban design

2.1.1 Issue

The Department provided its comments following the completion of a number of workshops with Mirvac, the outcome of which included proposed further refinements to the built form of the podium and tower. With the refinements overall considered to be positive, the Department's remaining built form key issue related to the tower height and its consistency with the existing and future character along with the potential visual bulk caused by the width of the tower.

Commentary on the relocation of the residential tower to the centre of the site under the previous RtS response package was generally very favourable as being a significant improvement, and supported by the Department, the Independent Urban Design Review, the City of Sydney and some surrounding residents. The City of Sydney also expressed the sentiment that the podium height should be lowered with an increased setback at the north of the site to improve sightlines to the existing stairs adjacent to Pyrmont Bridge along with concerns the tower envelope footprint is excessive.

A significant number of submissions from the general public and community groups expressed views that the height and/or bulk of the residential tower, and/or the podium component is excessive. This included perceptions that the height of the development is excessive for a site by the waterfront, and that it is not commensurate with the surrounding built form and/or 'open' nature of Darling Harbour. A key themes raised by residents, mainly within 50 Murray Street, is that the height of the podium should be consistent with the height of the existing building.

2.1.2 Proponent's response

Podium

As part of a series of design refinements made as part of the further amended concept proposal, the height and bulk of the northern part of the podium has been significantly reduced by one-three storeys, from RL 25m to part RL 17.6m and part RL 13.75m. The rooftop of this section of the podium will instead comprise a new public space, 'Guardian Square', for the benefit of the community. This reduction in height is expected to further significantly improve views from surrounding sensitive receivers, in particular 50 Murray Street, as well as further improve the development's integration and setting with the State Heritage listed Pyrmont Bridge. The revised podium height is now level with Pyrmont Bridge, providing level and easy access to the new 1,500sqm 'Guardian Square' and supporting the establishment of a new gateway into Darling Harbour.



Further Amended Concept Proposal (October 2020)



Figure 6 Proposed refinements and improvements to the podium



Figure 7 Podium's improved relationship with Pyrmont Bridge and consistency with Maritime Museum

The proposal represents the next evolution in the development of the site and responds to a significantly different context to what the original Harbourside Shopping Centre did back in the late 1980s when it was first proposed. The Draft Pyrmont Place Strategy (addressed further below) also recognises that it's time for sites such Harbourside to undergo significant renewal to unlock the next wave of jobs and investment.

Extract from the Draft Pyrmont Place Strategy:

'Some of these sites last underwent significant redevelopment 30-40 years ago, which means they now represent a significant opportunity to unlock the next wave of jobs and investment in a way that recognises Pyrmont's character and place while also delivering public benefits to improve and enhance the peninsula.'

Cities by their nature evolve, the site where 50 Murray Street is located was once for example a low scale goods shed associated with the former Darling Harbour Railway Goods Yard prior to its eventual renewal and redevelopment into a large 17+ storey residential apartment building. The time has come though where the existing building has reached the end of its life and requires renewal in order to meet modern standards and respond to the \$15 billion wave of investment and renewal that has and continues to occur across Darling Harbour.

The position and premise that a benchmark for redeveloping the site is to put back in its place a building of the same height is considered unreasonable. A more reasonable benchmark to consider is the height of more recent adjacent podium buildings that have a similar relationship to the waterfront, e.g. ICC and Sofitel. While of a similar age to the existing Harbourside Shopping Centre, the Maritime Museum also provides some additional insight and relevance in establishing an appropriate height for the podium.



Figure 8 Image demonstrating the podium achieves a coherent visual relationship with existing built forms along the waterfront to south



Figure 9 Image demonstrating the podium achieves a coherent visual relationship with existing built forms along the waterfront to north



Figure 10 Artist impression illustrating the podium's low scale height and positive response to its existing built form character along the waterfront

The height of the podium and the quantum of floor space to be accommodated also responds to a number of key strategic drivers. The nature of the site and indicative location for the proposed office space enables large campus sized commercial floor plates that are favoured by large multinational tech, finance and professional services companies. This offering will be able to take advantage of the site's location and context within the Innovation Corridor and more broadly the core Harbour CBD. The strength of the Harbour CBD relies heavily on the concentration of financial services industries and associated knowledge intensive industries and the proposal is therefore in full alignment with strategic planning objectives to make the Harbour CBD stronger and more competitive. This proposed employment generating floorspace to be accommodated within the podium also responds to the need to increase and maximise economic activity associated with the planned new Sydney Metro West station slated for Pyrmont. This investment in rapid public transport will have a catalytic effect on the Pyrmont Peninsula and challenges any premise that strategic sites like Harbourside should remain and not evolve.

Tower Height

There are no planning controls that apply to the site related to built form. A first principles approach to the project has accordingly informed the design. To ensure the development complements and enhances the area Mirvac has completed over 3.5 years of extensive stakeholder consultation to develop its vision for the site. This has included consulting and collaborating with the landowner, adjoining landowners, residents, action groups, authorities and agencies.

The height of the residential tower at its original height (RL166.35), first revised height (RL153.75) and now second revised height (RL166.95) is considered to have remained acceptable from a built form and urban design perspective.

First and foremost, the tower forms a coherent relationship with its immediate existing context, i.e. the Sofitel Hotel (which as a height of RL133.55). The stronger urban design position is one where the towers relate but are not the same. It establishes a similar strategy as the eastern edge of Cockle Bay, with tower height increasing from the south. The desirable distinction in character between the eastern and western skyline of Cockle Bay can be maintained if the development of the western side of Cockle Bay is based upon on a reduced number of well proportioned, slender towers which are well spaced apart. A slender residential tower will best ensure the intent of well proportioned, well spaced towers can be achieved, with the opportunity for an iconic tower design.

The recent \$15 billion wave of investment and renewal that has occurred across Darling Harbour also establishes an existing character of both low-medium scale podium buildings along with taller towers of heights commensurate with that proposed (Cockle Bay: RL183, the Ribbon: RL93.5, Darling Square: RL138.83, and Four Points/Hyatt Regency: RL93.6).



Figure 11 Existing character of renewal projects across Darling Harbour

Consideration of environmental impacts (primarily overshadowing) also support the proposed approach to the tower envelope, with impacts to public space and neighbours less with the taller and smaller tower footprint. To mitigate against view impacts, the tower adopts an elongated plan, with the narrow facade oriented to the east and west, with wider facades to the north and south.

Furthermore, the proposed height of the tower is consistent with the recently released draft Pyrmont Peninsula Place Strategy which identifies the Harbourside shopping centre as a key site with a maximum height level of RL 170 metres, which is higher than the RL 166.95m proposed for the site. Other key sites identified within the Draft Strategy establish heights ranging from RL186 for the Star, RL156 for Blackwattle Bay, and RL243 for UTS.



Figure 12 Draft Pyrmont Place Strategy – Key Sites Capable of Strategic change

The Strategy reflects the NSW Government's vision to revitalise and transform Pyrmont and western parts of Darling Harbour (including the Harbourside site) into a jobs hub and economic driver of Sydney, recognising that Pyrmont and the Western Harbour precinct is a gateway to Sydney's Global CBD. As an identified key site under the Draft Strategy, Harbourside is recognised as a place capable of accommodating strategic change along with delivering significant additional public benefits.

Although it is acknowledged that the height of the proposed residential tower has increased from RL 153.75 to RL 166.95, which generally aligns with the height of the tower under the original concept proposal (RL 166.35), such an increase is considered to be commensurate with the relevant strategic planning policy and future desired character of the area.

The future context therefore of the western side of Cockle Bay and more broadly the Pyrmont peninsula will be one of well-spaced tall towers interspersed with low-medium scale development. The future built form character will on the one hand recognise the importance of the peninsula and its contribution to the Innovation Corridor and gateway to the CBD while also recognising and balancing the special characteristics of the area from a heritage and residential neighbourhood perspective.



Figure 13 Consistency of tower height with existing and future context



Figure 14 Draft Pyrmont Place Strategy's approach to built form across the peninsula – taller building clusters interspersed with lower scale development

Tower Form

The tower envelope minimises impacts on the public realm and neighbours, with the narrow facade oriented to the east and west, with wider facades to the north and south. Whilst ensuring opportunities for daylight, outlook, view sharing, ventilation and privacy, the proposed envelope also allows for opportunities for varied built forms to reduce the perceived building bulk during the design excellence process. Fjmt have developed a range of potential tower forms that may be able to be accommodated within the 'loose fit' tower envelope which demonstrate alternative approaches to breaking down the visual bulk of the building.



Figure 15 Proposed indicative tower design (left image) and alternative designs that could be explored through the design competition process

In order to ensure the final design of the tower reduces the bulk and scale of the northern and southern elevations, it is proposed for a condition to be imposed similar to that enforced for the Cockle Bay approval, where a maximum 80% control will be applied to which the final tower design can utilise within the approved envelope. Additional supporting controls are also included within the updated Design Guidelines to support this design outcome (refer to **Appendix I**).

Proposed condition wording:

Future Development Application(s) shall demonstrate consistency with the following built form controls:

Built Form Control	Maximum Control
Maximum volumetric tower envelope utilisation^	80%

^ the maximum volumetric tower envelope utilised relates to that overall proportion of the approved tower envelope utilised by the Gross Building Area of the detailed design.

The City's comments that the tower footprint is excessive for a residential development also appear to contradict its own planning controls, with Sydney DCP 2012 establishing that residential floorplates up to 1,000sqm (GFA) are acceptable. The proposed indicative design accommodates a maximum tower floorplate of some 948sqm (GFA). This size also aligns with the Sofitel hotel floor plate, giving further evidence to the acceptability of proposal. The maximum horizontal dimension of the building envelope parallel to the Darling Drive street frontage is also less than DCP control of 40m (at 29.6m), demonstrating further the suitability of the tower form.

The indicative design of the residential tower has also demonstrated a suitable level of consistency with SEPP 65 and the ADG, refer to Architectural Design Report at **Appendix D** for further details.





2.2 Public domain and open space

2.2.1 Issue

The DPIE's key issues letter requests clarifications on a range of detailed matters associated with the proposed public domain concept. The main critical item raised by the Department relates to demonstrating that the lowered northern podium is capable of delivering a sufficient area of quality (in terms of being functional and useable) public open space.

Submissions from the public included comments around there being an insufficient amount of open space being provided, along with reduced width of the promenade being inappropriate.

The City of Sydney submission provides comments on a number of detailed public domain and landscaping matters. The submission supports the provision of green roofs but recommends more substantial planting is provided and that part of the green roof should be made publicly accessible. The City acknowledge the proposal provides for a more consistent waterfront foreshore, but considered the width should be wider to enable a range of different spaces that can accommodate different programs.

2.2.2 Proponent's response

A breakdown of proposed public domain and accessible open spaces is provided in the updated Public Domain Design Report prepared by Aspect Studios at **Appendix H**. The proposed development will significantly improve the quantity and quality of available publicly accessible open space at the site and surrounding the site. A minimum total area of 8,200sqm of publicly accessible open space will be provided/upgraded across and adjoining the site.



Figure 17 Public Domain Overview

More specifically within this 8,200sqm public domain area, there is a commitment to deliver:

Guardian Square (1,500sqm)



A widened and upgraded waterfront promenade (4,800sqm)

Existing Harbourside Waterfront



Bunn Street Bridge



Event Steps



Ribbon Stairs (benchmark precedent images)



Central through-site link



Upgrade of existing northern pedestrian bridge



New paving to entry to Pyrmont Bridge



Activation of the public realm directly around Harbourside



In terms of the suitability of the proposed new area of public open space atop the lowered northern podium (i.e. 'Guardia Square'), Aspect have undertaken a detailed study of this new space and conclude that:

- it is a generously scaled space and comparable to other successful and highly valued Sydney squares;
- with its level access and openness that it will allow 24-hour access for pedestrian to move freely between the Harbour foreshore and Pyrmont Bridge;
- it is of a generous size to support a variety of intimate and open spaces for the public to relax, dine and socialise alongside the spectacular waterside setting;
- its northern orientation drenches the square in sunlight, making it an appealing space throughout the entire year and supporting a diverse range of endemic plant life to flourish;
- its size and soil depths will enable new tree planting that provides canopy coverage and shade for the public to pause amongst a garden setting;
- its relationship and interface with the adjoining podium building enable an activated edge and opportunities for people to drink, lunch or have dinner while enjoying the sunny location overlooking the harbour;
- its raised position above the water enables opportunities for expansive outlook across Darling Harbour and also enable unique new opportunities for views to and a greater appreciation of Pyrmont Bridge; and
- its size, prominence in the public realm and easy level access creates opportunities for day or night temporary events such as pop up cinemas, market stalls or performances.



Figure 18 Expansive and unique views across Darling Harbour, Pyrmont Bridge and the CD skyline will be created for the general public

There is also added benefits to the public and NSW Government with Mirvac to retain management responsibilities over the space. Mirvac's South Eveleigh project provides a key precedent for how such arrangement leads to a successful outcome.

In considering the quality of this new open space, regard also needs to be had to the totality of the public domain proposal and benefits. A full appreciation of the proposal demonstrates that excellence in public open space outcomes will be achieved as a result of the project – ensuring the foundation premise for supporting the redevelopment of the site under the Draft Pyrmont Place Strategy is realised.





Public benefits, including those detailed above are to be secured through a combination of implementing the future development consent, a Voluntary Planning Agreement (affordable housing only) and the final agreement reached between Mirvac and the NSW Government as part of the Unsolicited Proposal process.

There will be an overall increase in the waterfront promenade land as a result of the proposed development (by setting the built form back from the waterfront). The proposal provides for a 20 wide waterfront promenade for the southern and central sections, with the northern section achieving 14m. The increase in the overall area of waterfront land (calculated at 474sqm) is achieved trough Mirvac setting its envelope/built form back from the waterfront and is considered to be a significant amount in the context of the project, and the value of the land. The relinquishing of some 474sqm of its existing leasehold for the public good in terms of delivering an overall widened and more expansive waterfront promenade will provide improved connectivity and integration and an overall superior waterfront experience. Mirvac will not only enable the widening of the waterfront promenade but will also fund and deliver a full upgrade and embellishment of this important space. Mirvac, drawing on its significant experience in delivering and curating successful and vibrant spaces and guided by its design team, propose for the waterfront promenade to support pedestrian movement while at the same time support activation that makes the most of the site's exceptional waterfront location. The design approach established by Aspect for the promenade involves two distinct characters/functions, with the northern and southern ends providing an activated edge to the main pedestrian pathway of the promenade while the central portion and its relationship to the event steps provides for a more open space that can support more varied activities and event programs.

When considering both the formal waterfront promenade extent and the design response within the site boundaries (such as the event steps), the proposal is considered to suitably accommodate all expected activities to occur throughout the year. The design response has also been informed through close consultation and engagement with Place Management NSW, the owner and manager of Darling Harbour, who largely dictated the waterfront promenade width.



Figure 20 Waterfront Promenade Functions and Characteristics

Finally, Council's comments around wanting to promote and improve biodiversity and tree canopy across the rooftop spaces are noted and generally agreed in principle. The current design maximises the green roof opportunity within the strict building envelope constraints. The proposal has been revised in order to provide a more extensive and diverse mix of local native plant species. Refer to Landscape Design Report for further information on the species used for improving biodiversity and habitat value of the green roof. An appropriate soil volume will be provided for small shrubs, grasses and ground covers to establish and thrive in this highly visible location. No trees are proposed due to the need to balance impacts on sight lines and views from buildings behind.

2.3 Impact on views

2.3.1 Issue

The DPIE's key issues letter has provided commentary on lowering the height and increasing the setbacks of the northern podium to improve its relationship with the Pyrmont Bridge, providing opportunity for additional open space on the podium roof, and reducing view impacts on 50 Murray Street. The letter requested that additional view analysis of view impacts on 50 Murray Street and the Novotel be provided, including identification of levels and units at 50 Murray Street where water views and views to the Pyrmont Bridge would be affected.

Commentary on the relocation of the residential tower to the centre of the site under the previous RtS response package was acknowledged as an improvement in terms of public and private views by the Department, the Independent Urban Design Review, the City of Sydney and some surrounding residents.

A significant number of submissions from the general public, adjoining landowners and community groups also noted the proposed development's impact on views, most notably the impact on views from 50 Murray Street, Novotel and the Sofitel, and view impacts on the skyline of the area in general. The key concerns raised from 50 Murray Street with the proposal related to the height of the northern podium.

2.3.2 Proponent's response

A supplementary Visual and View Impact Analysis of the amended Concept Proposal has been undertaken and is attached at **Appendix E**. The updated Visual and View Impact Analysis reinforces previous conclusions reached that the proposal will result in acceptable view impacts from both the public domain and from surrounding buildings. The release of the Draft Pyrmont Place Strategy and the identification of Harbourside as a key site capable of accommodating strategic change reinforces the acceptability of the proposal, including in terms of any impacts on views.

In response to issues raised by the DPIE, the Independent Urban Design Review, the City of Sydney and 50 Murray Street, the height of the northern podium has been reduced by one-three storeys, from RL 25m to part RL 17.6m and part RL 13.75m. In its place, the rooftop of the northern podium will become a new additional public open space, 'Guardian Square' that is directly accessible from Union Street and integrates well with the heritage fabric of the Pyrmont Bridge without overpowering it, being similar in height (further discussed in **Section 2.6** below).



Figure 21 Guardian Square (highlighted in red)

50 Murray Street

Ensuring that the view impacts of the proposed development on 50 Murray Street (One Darling Harbour) are minimised has been a significant priority throughout the design process of the proposed development. Evidence of the exhaustive steps and substantive improvements Mirvac have made along the planning process in order to minimise view impacts to 50 Murray Street is clearly evident in the series of diagrams below (refer to page 24 of the Supplementary Architectural Design Report at **Appendix D** also). Mirvac have reached a point now where the tower has been moved as far south as possible and the northern podium has been lowered as much as possible.



Figure 22 Proposal evolution to respond to feedback and submissions from 50 Murray Street

Significantly, under the further amended concept proposal, additional design refinements have now been made that further reduce view impacts of the Harbourside redevelopment on 50 Murray Street. The northern part of the podium has now been reduced by one-three storeys, from RL 25m to part RL 17.6m and part RL 13.75m. This is in addition to the relocation of the residential tower to the centre of the site as part of a suite of changes made under the previous RtS package, with the tower having a slender floorplate that minimises view loss and promotes view sharing to 50 Murray Street and all surrounding buildings.

The below images, which have been prepared purely for illustration purposes and have not been relied upon in the assessment of view impacts within the Visual and View impact Analysis included at **Appendix E**, provide an indication of the degree of improved views experienced from some select apartments within 50 Murray Street between the amended concept proposal and the further amended concept proposal. Improvements to views include more expansive views to higher value features such as Cockle Bay and Pyrmont Bridge.



Apartment 201

Figure 23 Illustration of 50 Murray Street view improvements

The updated Visual and View Impact Analysis includes a comprehensive assessment from each affected apartment with an easterly and north-easterly orientation, which totals 104 apartments. In summary the Visual and View Impact Analysis finds there will only be 4 apartments that will experience severe view impacts (limited to the Level 2 apartments only). There will be no apartments that experience any devastating view impacts. The remaining 100 apartments affected will have view impact ratings ranging from negligible to moderate. This level of impact is considered reasonable for the reasons detailed within the revised Visual and View Impact Analysis.



Figure 24 Summary of View impacts to 50 Murray Street

Further integration of those apartments rated to experience 'severe' view impacts reveals a clearer picture around the reasonableness of the view Impact (refer to **Figure 25** below). In this regard:

Existing Views

- The apartments are low in elevation, with half of the existing view composed of the Darling Drive roadway and existing Harbourside Shopping Centre and the remaining view predominantly comprising the CBD skyline (including Centrepoint Tower) and sky views.
- Only very minor glimpses and nearly imperceivable views of water and Pyrmont Bridge are currently
 experienced and accordingly in terms of the view composition play a more secondary element to the more
 expansive and dominant CBD skyline.

Proposed Views

- The apartments will continue to retain expansive and dominant views towards the CBD skyline (including Centrepoint Tower).
- The apartments will continue to experience excellent outlook and expansive sky views;
- The existing dominant roofscape of the tired Harbourside Shopping Centre Building will be replaced with a new building of high design quality.



Apartment 204



Apartment 203



Apartment 202



Apartment 201

Figure 25 50 Murray Street – worst affected apartments

The interruption of existing private views that are currently unimpeded by any development is inevitable in the context of an urban renewal project and is not unreasonable having regard to the highly urbanised global CBD environment of Sydney within which the land is situated and the evolving future character of the Pyrmont Peninsula. Notwithstanding, the proposed development has accommodated view sharing between and above buildings, and has sought to retain a reasonable level of water, Pyrmont Bridge, and CBD skyline views by the positioning of the building footprints and configuration of the public domain spaces and connections through the site.

Furthermore, the proposal (including podium and tower elements) is considered to continue to provide for a good 'outlook' – despite there being a change in 'view', which is consistent with current planning objectives, strategies, principles and development controls for the CBD which recognise that outlook, as distinct from views, is the appropriate measure of residential amenity within a global CBD context. Outlook is retained from all affected apartments with an appropriate distance separation and with space / daylight provided.

Adjacent Hotels

It is noted that as a general rule impacts to private views from Hotels are valued less than impacts to private views from residential buildings.

The interruption of existing private views from hotel rooms that are currently unimpeded by any development is inevitable in the context of an urban renewal project and is not unreasonable having regard to the highly urbanised global CBD environment of Sydney within which the land is situated and the evolving future character of the Pyrmont Peninsula. Notwithstanding, the proposed development has accommodated view sharing between and above buildings, and has sought to retain a reasonable level of water, Pyrmont Bridge, and CBD skyline views by the positioning of the building footprints and configuration of the public domain spaces and connections through the site.

A further factor to consider in supporting the conclusion that the change in views from surrounding buildings in reasonable is the fact that foreground views will be immeasurably improved as a result of the proposal. The existing Harbourside Shopping Centre presents as a dominant, bland, tired and unattractive building. Mirvac plan to undertake a design competition for the project which will deliver a future building of the highest standard of architectural, urban and landscape design. Landscaping is expected to be a key feature used across the podium rooftop, providing a soft and green outlook for hotel rooms.

The proposal will also deliver significant benefits to the surrounding area, including hotels, through features such as significantly improved retail offerings, improved connectivity and accessibility to the waterfront and CBD more broadly, and significantly improved and new areas of open space in which to visit and appreciate one of Sydney's most valued and celebrated natural resources (Sydney Harbour).

Public Domain Views

The conclusions previously reached in relation to impacts from key views and vistas from the public domain remain largely unchanged. The amended concept proposal does result in improvements to views of and from Pyrmont Bridge, with the updated Visual and View Impact Analysis finding the overall impact to be 'low' (compared with 'low-medium' with the amended concept proposal).





2.4 Overshadowing

2.4.1 Issue

The DPIE's key issues letter notes that overshadowing impacts potentially may arise from the proposed development, and requests that an updated solar analysis of private residential properties to the west and southwest be provided with assessment against the Apartment Design Guide (ADG) minimum solar access guidelines. The letter also requested detailed overshadowing analysis of the Darling Harbour foreshore/promenade at 15-minute intervals. The City of Sydney submission also requested a 15-minute interval overshadowing analysis to gauge overshadowing impacts onto the foreshore, especially during lunchtime hours.

A number of public submissions also expressed concern at potential overshadowing impacts, especially towards the harbour promenade. A few also requested additional detail on overshadowing towards Pyrmont Street and Bunn Street to the south-west of the site.

2.4.2 Proponent's response

Public Domain

Overshadowing analysis of the proposed development on the public domain at 15-minute intervals has been provided in the Supplementary Architectural Design Report prepared by FJMT at **Appendix D**. These overshadowing diagrams confirm that under the further amended concept proposal, the public domain located to the east and south of the site and more broadly within Darling Harbour will continue to be provided with direct sunlight throughout the morning period on June 21 (the winter solstice) before shadow resulting from the proposed tower occurs after midday. It is noted that there are still vast areas of accessible sunlight available in the Darling Harbour public domain notwithstanding the proposed development, including during the key lunchtime period of 12:00pm to 1:00pm.

A comparison between the shadow diagrams prepared in support of the amended concept proposal and the further amended concept proposal demonstrate improved solar access to the northern end of the waterfront promenade – directly attributed to the reduced podium height.



Figure 27 Proposed improvements to waterfront promenade solar access

Overshadowing of the waterfront promenade during the afternoon period on the winter solstice would be expected with any reasonable built form outcome on the site, given the proximity of the promenade on the eastern side of the building form. The proposal also offsets additional overshadowing to the public domain, including through the creation of a new northern Guardian Square, with an area of 1,500sqm and accessible 24/7, that will have solar access across the entire day for all periods of the year.



Figure 28 Creation of Guardian Square will provide a new 1,500sqm activated public plaza that receives solar access throughout the whole year

As noted within the City of Sydney's Draft Central Sydney Planning Strategy, the public domain around the Darling Harbour waterfront is heavily used through-out the day by workers as well as visitors and provides a relief from the density of the city. So, while focussing on the lunchtime period is important, regard should be had to impacts experienced across the whole day.

The overshadowing expected to result from the tower envelope is restricted to a small proportion of the overall Darling Harbour public domain and is limited to the western and southern side of the public domain. A significant area of waterfront public domain within and surrounding the site is still within direct sunlight between 1:00pm and 3:00pm on the winter solstice.

Although it is acknowledged that under the development as further amended, there have been an increases to the height of the residential tower to RL 166.95m, any additional overshadowing will not be significant owing to the slender and fast-moving nature of any shadows, and would generally be consistent with the development as originally exhibited (2016).

The proposed height of the tower is commensurate with that of the recently released draft Pyrmont Peninsula Place Strategy which identifies the Harbourside shopping centre as a key site with a maximum height level of RL 170 metres, which is higher than the RL 166.95m proposed for the site. The basis under the Draft Strategy for supporting development of such scale is the expectation that impacts will be balanced against the significant public benefits to be delivered by the project. Crucially also at this height there are no additional shadows cast on Tumblalong Park, with the limit of shadows only extending to the Western Distributor.

Further, the Concept Proposal represents a maximum building envelope for the future podium and tower development. The detailed designs of the building will be contained within the proposed maximum envelope, with opportunities to further minimise overshadowing impacts to be considered during the next detailed design phase.
Surrounding Residential Development

A detailed solar analysis of private residential properties to the west and southwest has been undertaken by fimt as detailed within the Supplementary Architectural Design Report at Appendix D.

The analysis confirms that shadow impacts on adjacent residential properties are limited, including to that of 50 Murray Street. It is noted that the original submission for a tower toward the northern end of the site included some shadow impacts to 50 Murray Street, however with the tower relocated to the centre of the site (and consequently being located to the south of 50 Murray Street) these impacts have been completed removed.

fimt have undertaken a detailed sun eye view analysis of the potentially most affected residential building, being the Goldsbrough Apartments. The outcome from this analysis reveals that additional shadows created are limited to a 1-2 hour period between 9am and 11am on June 21 and that affected apartments continue to receive well in excess of ADG guidance.



June 21 - 9am

Sun eye view analysis of Goldsbrough Apartments Figure 29

2.5 Traffic and parking

2.5.1 Issue

The Department's key issues letter requests further justification on the proposed car parking rate and its alignment with strategic policy directions to encourage active transportation and reduce reliance on private vehicles in the area. The City of Sydney submission also notes that the proposed 306 car parking spaces is considered to be excessive, and does not promote sustainable transportation. There were a number of public submissions that also raised concern with parking numbers, albeit there was conflicting points of view around too many spaces and not enough being provided.

The Department's letter also raised detailed matters covering bicycle parking provision, pedestrian capacity of the new Bunn Street bridge and a comparison of vehicle trips between existing and proposed during peak periods.

The City of Sydney submission overall claimed the Traffic and Transport Report to be deficient, raising concerns with vehicle queuing to Darling Drive, inadequate servicing arrangements, unsatisfactory consideration of traffic generation impacts, inadequate consideration of bicycle infrastructure and facilities, and insufficient detail to determine whether pedestrian links will have adequate capacity and amenity.

The Transport for NSW submission does not raise any issues or concerns, with a number conditions recommended be imposed.

2.5.2 Proponent's response

An updated Traffic and Transport Impact Assessment (TTIA) has been prepared by Arcadis and is attached to this RtS package at Appendix F. A direct response to all traffic and loading issues raised in agency submissions has been summarised in Table 2 of the TTIA.

As a general comment, it is considered that the level of information provided to date and included within this revised assessment is appropriate having regard to the concept nature of the proposal. A large majority of the comments from the City of Sydney will be able to be further resolved through the detailed design phase.

The proposed parking rates align with the rates that apply to other land nearby which have similar levels of public transport accessibility to the Harbourside site. The approach to adopt equivalent ('Category B') City of Sydney LEP parking rates is considered to be fair and reasonable. The City of Sydney are known as leaders in terms of promoting and reducing developments reliance on private vehicles. It is noted that the City in its submission on the original Concept Proposal for Darling Square recommended that the rates outlined in Sydney LEP 2012 should be adopted.

When applying the equivalent LEP parking rates to the proposed apartment mix within the indicative design scheme Arcadis confirm there would be a maximum of 285 spaces to be provided and allocated for the residential apartments (with the balance of allowable spaces up to 306 allocated for car share and visitors). This figure equates to 0.79 spaces per dwelling. Arcadis has undertaken additional analysis of existing car ownership in order to provide additional validity to the proposed parking rate. The results of which confirm that for the surrounding areas of Pyrmont, Ultimo, and Sydney, that approx. 90%, 87% and 71% respectively of dwellings with higher annual incomes (being equivalent to the expected owner/tenant profile of dwellings at Harbourside), own one or more motor vehicles. This reveals that there is a strong reliance on most dwellings within the surrounding areas having at least one car for their transport needs.

Overall, the right balance is considered to be achieved with the proposed parking rates that acknowledges the site has access to good public transport, but also reflects market demands and the existing level of car ownership within the locality.



Figure 30 Sydney LEP 2012 Parking Categories Map (Harbourside in red)

A comparison between existing and proposed vehicle trips to and from the site during peak periods has been provided in the updated TTIA. The modelling indicates that there is an overall reduction in the number of traffic generated trips when comparing the proposed redevelopment to existing site conditions (refer to Table below for numerical comparison).

Land use	AM peak – Trips in	AM peak – trips out	PM peak – trips in	PM peak – trips out
Existing Harbourside Shopping Centre				
Retail	275	183	458	458
Commercial	5	2	2	5
Total	280	185	460	463
Proposed redevelopment				
Residential	14	41	26	17
Retail	119	79	198	198
Commercial	132	44	37	111
Total	264 (-36)	164 (-21)	260 (-200)	326 (-137)

Table 2	Comparison between existing and proposed peak hour vehicular trips
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In response to concerns raised by Council, the lift hoists have been removed from the basement loading dock. Egress from this loading dock will now be via the basement access ramp, with larger vehicles using the turning plate at the top of the basement access ramp to then egress via the existing loading dock laneway onto Darling Drive. A drop-off facility is provided with the entrance located at the base of the Darling Drive southbound down ramp and egress via the roadway located between the Sofitel Hotel and the proposed development. Figures are contained within the revised Traffic and Transport Report (**Appendix F**) outlining these locations, along with swept path figures.

The proposed servicing and loading approach outlined within the indicative design has been informed by Mirvac's operational requirements and is considered acceptable. The final approach and justification will be included as part of the future Stage 2 DA.

The new Bunn Street bridge will ensure local residents, visitors and workers enjoy upgraded access and connectivity to Darling Harbour and by extension the Sydney CBD. Modelling has been undertaken by Urbis (**Appendix G**) in relation to this proposed new pedestrian bridge, confirming it will achieve a Level of Service A (free circulation) in 2056. The proposed pedestrian network will link up with the existing pedestrian network and the initiatives developed under the SICEEP development mainly consisting of the main waterfront promenade which will be increased in width by 474sqm. This will include widening the southern and northern ends. This widened promenade will provide sufficient capacity to cater for peak pedestrian demand anticipated during events at the precinct. The width of the waterfront promenade has also been informed by landowner, Place Management NSW, who have overall responsibility for Darling Harbour.

The proponent finds the conditions recommended by the TfNSW submission to generally be acceptable, and generally agrees to their implementation.

2.6 Heritage

2.6.1 Issue

The Department provided its comments following the completion of a number of workshops with Mirvac, the outcome of which included proposed further refinements to the built form of the podium and tower. The Department acknowledged in its key issues letter that the changes resulted in an improvement of the proposal's relationship to Pyrmont Bridge.

Heritage NSW while not raising concerns, seeks for the final design to be sympathetic in its aspect and final form to Pyrmont Bridge.

The perceived excessive bulk of the northern podium with regards to the Pyrmont Bridge is noted in the City of Sydney submission, and that a larger setback to the Bridge should be implemented. The height of the original northern podium at RL 24m was considered to be intrusive to the RL 11.5 height of the Bridge.

A number of public submissions also raise the perceived excessive proximity of the built form to Pyrmont Bridge, and/or adverse impacts to the heritage significance of the bridge as a result of the proposed development.

Proponent's response

As confirmed in the updated Heritage Report prepared by Curio Projects and appended to this RtS submission at **Appendix J**, additional refinements under the further amended concept design have now significantly improved the relationship of the proposed development with the Pyrmont Bridge. The height and bulk of the northern part of the podium has been significantly reduced by one-three storeys, from RL 25m to part RL 17.6m and part RL 13.75m, to be roughly the same height as that of the bridge. This ensures that the development does not in any way tower over the Bridge or hinder the heritage interpretation of the Bridge. Furthermore, the new Guardian Square open space atop the northern podium along with the widened waterfront promenade will enable additional viewing angles to Pyrmont Bridge, allowing for more comprehensive appreciation of the Heritage item.



Figure 31 View from the waterfront demonstrating consistency in height between the northern podium and Pyrmont Bridge



Figure 32 View of the amended building envelope from Pyrmont Bridge

It should also be noted that previous amendments to the concept design relocated the residential tower to the centre of the site, removing any visual relationship between the new tower and the bridge through a generous 135 metre separation distance.

Furthermore, the Heritage Impact Statement confirms that the proposed complementary public domain improvements, including the new paving to Pyrmont Bridge, will ensure that a positive visual impact is established between the new building envelope and the bridge.

The need to ensure the future detailed design appropriately respects and sympathetically responds to Pyrmont Bridge will be a key design objective for the competitive design brief and which future competitors will need to address. Opportunities for heritage interpretation and public art will also be a key component of the future public domain.

2.7 Land use

2.7.1 Issue

The DPIE's key issues letter requests clarification on how the proposed residential tower will not prejudice the 24hour operation of the site and wider precinct, and/or special events at Darling Harbour. This includes with regards to potential light and noise, and noise mitigation strategies and measures to be implemented. A number of public submissions also raise concern as to the potential of the residential tower to hinder night-time tourism and entertainment uses at Darling Harbour.

It is noted that the City of Sydney submission, as well as a number of general public submissions, oppose the provision of residential floorspace as part of the proposed development. This includes perceived incompatibility of residential to historic and ongoing land uses at Darling Harbour, the 'private' nature of the residential floorspace being inconsistent with the nature of Sydney Harbour as a public resource, and that residential uses at the site are not required for the City of Sydney to meet its housing targets. Notwithstanding this, the submission also asks for clarification on the percentage of the proposed 357 apartments to be dedicated as affordable housing.

2.7.2 Proponent's response

Residential uses are permitted under the principal environmental planning instrument applying to the development, i.e. Darling Harbour Development Plan No. 1. As a permitted use, the proposed residential land use supports the objects of Plan.

The provision of housing at the site is expected to provide a diversity of housing, and crucially improve the variety and availability of housing in close proximity to public transport and a 10-minute walk away from the Sydney CBD. The boost to housing supply is just one of the many compelling reasons for why residential is considered to be appropriate.

There is no change proposed to the tenure of the subject land, with the NSW Government retaining ownership. Mirvac's existing long-term leasehold arrangement will remain in place. This arrangement is consistent with other urban renewal projects approved and delivered over the past 10 years that have contributed to the revitalisation and transformation of Darling Harbour. Without private investment, the significant public benefits that have been delivered right across the precinct would never have materialised.

The NSW Government has identified the need to establish a new vision and strategic placed based plan for the Pyrmont Peninsula, including parts of Darling Harbour (such as the Harbourside Site). This has culminated in the release of the Draft Pyrmont Peninsula Place Strategy. The Strategy represents the next detailed planning layer in supporting the achievement of Council's LSPS, the Eastern City District Plan and the Greater Sydney Region Plan. Of significance is the Draft Strategy's overarching objective to revitalise and transform this key inner-city precinct into a jobs hub and economic driver of Sydney. The premise for this vision is the recognition that Pyrmont and the Western Harbour precinct is a gateway to the CBD. Key to the realisation of this vision and objective is the redevelopment of key strategic sites, with the Harbourside Site identified as one of 4 key sites. In line with the strategy, employment floor space is prioritised as part of the Concept Proposal (with 52% of floorspace allocated to non-residential, i.e. retail and commercial). The Draft Strategy also supports residential development for the Tumbalong Park Sub-precinct (in which the Harbourside site is located), subject to not compromising the areas tourism, entertainment and commercial functions. The Draft Strategy identifies the potential for the Tumbalong Park Sub-precinct to support development that could provide up to 2,055 more people.

To enhance Sydney's global competitiveness requires attracting global talent, with the delivery of high-quality housing within the Harbour CBD a key factor. The proposed delivery of around 357 dwellings on the doorstep of the Harbour CBD and within the Innovation Corridor will be provide a significant boost to supply. There are a limited number of sites which have such locational advantages at the Harbourside site and therefore it provides an ideal opportunity to further diversify the city fabric.

Residential land uses have been a common feature throughout Darling Harbour, as evident most recently within Darling Square (where the same planning controls apply). The plan below highlights in red those existing residential developments across Darling Harbour that have been approved (under the same planning controls that apply to the proposal) and developed.



Figure 33 Residential development (areas highlighted in red) is a common feature across Darling Harbour

The residential component will guarantee that the redevelopment supports a truly mixed-use precinct, which is a key tenet of the Draft Central Sydney Planning Strategy. The proposed residential use in a tower located above retail and commercial office space provides both functionality and connectivity as it is in close proximity to services, transport nodes, employment and optimises the distribution of people and goods in and out of space. The residential component will add vibrancy by injecting local residents into Darling Harbour and ensure that Darling Harbour supports Sydney as a 24-hour global city (i.e. residents of the new tower are expected to bring in additional patronage to nearby retail, tourist and entertainment premises). The mix of land uses also complements the \$15 billion of surrounding investment and development, further contributing to a whole of precinct and place-based approach, while also supporting the business case for a potential metro station at Pyrmont.

The residential use will not undermine the functionality or experience of Darling Harbour as a tourism and entertainment precinct. Residential Buildings are located in close proximity. 50 Murray Street, which is subject to the same planning controls as Harbourside, is a residential tower located some 50m away from the proposed tower.

Design measures will be implemented in the detailed development stage to ensure there would be no adverse impact from both the commercial/retail components of the proposal to future residents along with consideration of the broader entertainment and tourism activities that take place across Darling Harbour. The location of the new apartments would also be obvious to prospective buyers and thereby would only attract those who wish to live in close proximity to one of Australia's premier entertainment districts, and the unique lifestyle and convenience it offers. Other factors and strategies to be developed as part of the detailed design phase include:

- Siting and layout of the apartments: the primary orientation of the building towards the north ensures that majority of the apartments will be oriented away from the major noise sources (Darling Harbour, City West Link, Tumbalong Park, SICCEEP);
- Vertical separation: the lowest residential floor in the illustrative scheme is set at RL27.90 i.e.: 24.4m above the waterfront public domain and set back approximately 14m from the podium. This vertical separation assists with minimising amenity impacts for tower residents during Darling Harbour events;
- · Semi-enclosed balconies to mitigate noise; and
- Design of façade elements (glass thickness and acoustic rating of glazing assembly etc).



Figure 34 Indicative design podium section showing vertical and horizontal separation between residential and Darling Harbour

Noise-related issues are addressed specifically in the addendum Acoustic Letter prepared by Renzo Tonin & Associates and appended to this RtS response at **Appendix K**. The Letter confirms that noise levels within the proposed residential apartments from typical noise impacts meet relevant requirements as stipulated within *Development Near Rail Corridors and Busy Roads* and the City of Sydney DCP. For special events noise, it is not reasonable to set internal noise goals, and sales contracts for apartments could include an acknowledgement by a purchaser that the apartment is located in an entertainment precinct, that the building has incorporated acoustic treatment to provide some mitigation against special event noise and precluding the occupant from complaining about precinct special event noise.

The proposal does not involve the formal provision of "affordable housing", nor is there any legislative basis for it to be provided. A monetary contribution (informed by the Council's existing affordable housing regime that applies to the adjacent Pyrmont Peninsula) towards the provision of affordable housing 'off-site' is proposed. As noted in the recent submission by City West Housing (CWH) on the Draft Pyrmont Place Strategy, their strong preference is to receive monetary contributions from developers which they can then pool together and deliver standalone affordable housing development. CWH note a number of advantages and benefits of receiving funds as opposed to the dedication of apartments within provide developments. The generous proposed monetary contribution being proposed as part of the Concept Proposal and outlined within the Public Benefit Offer has been informed by the City's existing affordable housing regime that applies to the adjacent Pyrmont area. Overall and when considering the totality of public benefits to be delivered the proposed affordable housing contribution is considered to be reasonable and acceptable.

2.8 Strategic planning

2.8.1 Issue

The DPIE's key issues letter requests clarification on how the proposed development is consistent with the vision, directions, opportunities for public benefits and specific considerations for Harbourside as set out in the draft Pyrmont Peninsula Place Strategy dated July 2020.

A number of public submissions stated that it was premature to progress with the development of the site and it should be postponed until the Draft Place Strategy is finalised.

The City of Sydney Council also raised concerns around alignment and consistency with relevant regional, district and local strategic plans.

2.8.2 Proponent's response

The NSW Government has identified the need to establish a new vision and strategic placed based plan for the Pyrmont Peninsula, including parts of Darling Harbour (such as the Harbourside Site). This has culminated in the release of the Draft Pyrmont Peninsula Place Strategy. The Strategy represents the next detailed planning layer in supporting the achievement of Council's LSPS, the Eastern City District Plan and the Greater Sydney Region Plan. Of significance is the Draft Strategy's overarching objective to revitalise and transform this key inner-city precinct into a jobs hub and economic driver of Sydney. The premise for this vision is the recognition that Pyrmont and the Western Harbour precinct is a gateway to the CBD.

Table 3 below provides a summary of the concept proposal's consistency with the 10 Directions set out within the Draft Strategy and which will guide future growth and change. It is clearly evident that the proposed development enjoys a very high level of consistency with these Directions.

Initial Direction	Consistency
1. Development that complements or enhances the area	The existing Harbourside Shopping Centre is located within the Darling Harbour Precinct, which has undergone recent transformation and repositioning on the world stage as a key destination for events, entertainment and tourism. Key projects underway or delivered over the last 10 years include the Ribbon, ICC Sydney, ICC Hotel (Sofitel), Four Points by Sheraton (Hyatt Regency), Darling Quarter, and Darling Square. The renewal of Harbourside will effectively complete the revitalisation of Darling Harbour. The built form of the proposal has been rigorously analysed over an extensive period of time (3.5 years) with the input of a significant number and diverse range of stakeholders including the landowner, adjoining landowners, local residents, action groups, authorities and agencies.
	Significant amendments were made to the original Concept Proposal, to positively respond to the feedback received. Key amendments included relocating the residential tower from the north to the centre and widest part of the site to maximise view sharing for adjoining residents and buildings, along with further iterations to the podium envelope to reduce bulk, massing and overshadowing, and improving public domain offering through addition of central through site link.
	Further amendments and improvements are now being proposed within the further amended concept proposal in order to reduce impacts to views from 50 Murray Street, provide a significantly improved public open space offering through the creation of Guardian Square and improve an improved backdrop and relation to Pyrmont Bridge.
	The final proposal provides a coherent and complementary relationship with the surrounding built form and its transitional context on the core CBD fringe.
2. Jobs and industries of the future	Mirvac has identified an opportunity to invest in the transformation of the existing tired and outdated Harbourside asset and deliver a world class mixed use precinct that continues to provide retail and food and beverage offerings for visitors and locals as well as commercial office space and residential dwellings. Not only will there be a substantial boost in jobs resulting from the proposal (EY estimated the previous amended concept proposal would deliver 2,100 construction job years and 4,400 additional long term jobs per annum), but more importantly there will be higher order jobs associated with the commercial office component. The nature of the site and indicative location for the office space enables large campus sized commercial floor plates that are favoured by large multi-national tech, finance and professional services companies. This offering will be able to take strategic advantage of the site's location and context within the Innovation Corridor (close proximity to leading universities including UTS & USYD) and more broadly the Harbour CBD core.
3. Centres for residents, workers and visitors	 The proposal will directly support this direction through reinvigorating a tired and outdated centre and deliver a great place for everyone to enjoy through: upgrading and improving open space and public domain, including creating of a new significant area of public open space level with and directly accessible from Pyrmont Bridge;
×.	 opening up and improving east-west connections, providing greater opportunities and permeability to the waterfront and CBD;
25	 active and vibrant ground plane with a human scale;
	 a range and mix of uses to support a safe and active 24 hour precinct;
	- protecting and celebrating the rich heritage and cultural values of the precinct; and
	 a commitment to deliver the highest standard of architectural, urban and landscape design.
	Greater vibrancy will also draw visitors – which will further enhance the local economy and in turn create further opportunities to maximise the potential for the Peninsula.
4. A unified planning framework	The planning rules established at Darling Harbour have been in place since the 1980's and have been central to the continued evolution and success of Darling Harbour. It is considered that the existing planning framework and controls applying exclusively to Darling Harbour and more specifically the Harbourside Shopping Centre site are appropriate and effective in achieving the NSW Government's strategic vision and objectives for this distinct precinct.

Table 3 Assessment against Draft Pyrmont Place Strategy 10 Directions

Initial Direction	Consistency	
5. A tapestry of greener public spaces and experiences	The proposal will significantly enhance this direction through provision of a contemporary, high quality public domain (total 8,200sqm), and an improved water's edge experience, through components such as green roofs and public open space. The widened and upgraded waterfront promenade will also provide an inspiring meeting place that fosters innovation and creativity and will promote connectivity and pedestrian linkages to, and through, the precinct, particularly with the support of the Bunn Street bridge connection ensuring the residents and workers of Pyrmont and Ultimo enjoy an upgraded access and connectivity to Darling Harbour.	
6. Creativity, culture and heritage	The vibrancy of Pyrmont and its diverse cultural and heritage connections will be celebrated as part of proposed renewal of the Harbourside Shopping Centre site. This is to be achieved through a range of measures, with the future Heritage Interpretation Plan to be developed to play a key role. The new and upgraded areas of public domain will provide key opportunities for heritage interpretation in this regard. One of the key initiatives is to increase the curtilage of the redeveloped building from Pyrmont bridge to showcase the heritage significance of the bridge. This is now even more strongly supported through the reduction in the height of the northern podium align with the height of the bridge. Opening up the site and providing increased publicly accessible spaces also provides opportunities to experience the setting and connections to Country.	
7. Making it easier to move around	The proposal will significantly improve precinct connectivity and walkability through the following initiatives:	
E.	 A widened waterfront promenade totalling 4,800m². This will include widened the promenade to 20m at the southern end and central section and increase width to 14m at the northern end. This increase width is more commensurate with the adjacent promenade at the ICC 	
	 A new pedestrian through-site link connecting the waterfront with the new Bunn Street pedestrian bridge. This improves the site's permeability and makes it more porous for pedestrians. 	
	 The new Bunn Street bridge link. This new bridge link will provide a greatly improved public connection from Bunn Street Pyrmont, and connect Darling Harbour through to Pyrmont and the wider western precinct including the Fish Markets and the Bays Precinct 	
	 The new Ribbon Stairs will provide a more legible and generous pedestrian connection between Pyrmont bridge and the waterfront. 	
	 Retention of the existing pedestrian bridge at the northern end of the site. This allows Pyrmont residents to cross without having to contemplate traffic lights or traffic. 	
8. Building now for a sustainable future	Harbourside will be a brand new world-class development that incorporates sustainable design practices and leading edge technology. In addition, a sustainable outcome will be achieved by 'greening' as many spaces as possible, including the proposed 'greening' of the podium roof and creation of Guardian Square.	
9. Great homes that can suit the needs of more people	To enhance Sydney's global competitiveness requires attracting global talent, with the delivery of high-quality housing within the Harbour CBD a key factor. Mirvac's Harbourside proposal will deliver around 357 dwellings (subject to final yield mix and planning approvals) on the doorstep of the Harbour CBD and within the Innovation Corridor and will provide a significant boost to housing supply in the precinct. There are a limited number of sites which have such locational advantages as the Harbourside site and therefore it provides an ideal opportunity to further intensify and diversify the city's fabric. The housing to be delivered is in the 'right location', aligned with recent and future infrastructure investment, close to jobs, within walking distance to essential services and with easy access to an extensive network of public open space. The proposal will also directly support the provision of affordable housing, with a monetary contribution of \$5.2 million to be provided for this express purpose.	

Initial Direction	Consistency
10. A collaborative voice	Mirvac has completed extensive consultation over a period of 3.5 years to collectively develop a vision for the redevelopment of Harbourside. This extensive consultation has resulted in support for the redevelopment and many positive amendments being made to the project through the planning assessment process.
(D-1	Mirvac is committed to continuing to collaborate with stakeholders to ensure the best outcomes are realised.

Key to the realisation of the NSW Government's vision and objectives for the transformation of Pyrmont is the redevelopment of key strategic sites, with the Harbourside Site identified as one of four key catalyst sites under the Draft Strategy.



Figure 35 Catalyst sites identified under the Draft Pyrmont Place Strategy

The concept proposal also exhibits a high level of consistency with the "additional public benefit opportunities" and "special considerations" identified explicitly for the Harbourside Key Site on page 79 of the Strategy. An assessment against these special opportunities and considerations is provided in **Table 4** below.

Table 4 Assessment against site-specific opportunities and considerations in the Pyrmont Strategy

Opportunity / consideration		
Opportunities for additional public benefits		
Deliver excellence in public open space outcomes by providing publicly accessible open space on rooftop areas and indoor space in podiums that could include indoor recreation infrastructure, viewing platforms, meeting rooms, or other space to support the Innovation Corridor.	The proposed development significantly improves the availability of public open space at the site, including through that of a widened waterfront boulevard, 'The Event stgeps' to provide seating for large events, the 'Ribbon Stairs' connecting Pyrmont Bridge with the waterfront and the new 'Guardian Square' atop the northern podium rooftop.	
Improve and enhance east-west connections from Harris Street to the waterfront through large sites.	The proposed redevelopment will significantly improve east-west connections at the site, through the new through-site link which links to the new Bunn Street pedestrian bridge over Darling Drive.	
Improve and enhance the events and gathering capacity of the public domain in the Tumbalong Park sub-precinct as a global tourism destination.	The proposed development will improve the events and gathering capacity of the site. More specifically, Guardian Square, the widened waterfront promenade, and The Event Steps all provide a variety of spaces for the local community to use for recreation, events or cultural uses.	
Deliver safe, activated and inviting streetscape interface on all boundaries, including proposed 'back of house' or service areas on Darling Drive that promote east-west connectivity from Harris Street to the waterfront.	The further amended concept proposal includes a range of key moves to ensure an appropriate streetscape interface is achieved for all boundaries. This includes upgrades to surrounding public domain areas, through-site links between the waterfront and Darling Drive, locating entry and lobby areas off Darling Drive, and maximising active frontages.	
Deliver an appropriate built form outcome to Pyrmont Bridge.	The further amended concept proposal, especially through the reduction in height of the northern podium, integrates well with the heritage-listed Pyrmont Bridge, leading to a higher quality urban outcome than current conditions at the site. The scale and proportion of the podium create a clear separation, both physically and visually, between the Pyrmont Bridge and the redevelopment. The new Guardian Square open space atop the northern podium along with the widened waterfront promenade will enable additional viewing angles to Pyrmont Bridge, allowing for more comprehensive appreciation of the Heritage item.	
Special considerations		
Protect solar access to the harbour foreshore public domain.	The proposed development will protect solar access to the harbour foreshore public domain throughout the entire morning period at the winter solstice. Additional shadows cast during the afternoon period are considered acceptable and would be expected with any reasonable redevelopment of the site. The proposal offsets additional overshadowing to the public domain, including through the creation of a new northern Guardian Square that will have solar access across the entire day for all periods of the year. Importantly, a significant area of the overall waterfront public domain surrounding Darling Harbour will retain solar access.	
Prioritisation of the delivery of employment, entertainment and tourism floorspace.	The proposal prioritises commercial/retail land uses, with some 52% of the total amount of GFA allocated to these land uses.	
	The Draft Strategy also supports residential development for the Tumbalong Park Sub-precinct (in which the Harbourside site is located), subject to not compromising the areas tourism, entertainment and commercial functions.	
Tower below RL 170.	The height of the residential tower under the further amended concept proposal at RL 166.95 is below the RL 170 limit for the site as identified within the Strategy.	

Finally, while noting the more recent strategic planning context for Pyrmont, including the Harbourside site, there has been and there is in place significant guidance around the NSW Government's vision, aspirations and objectives for Darling Harbour and which have been used and relied upon to inform the \$15 billion transformation renewal of Darling Harbour to date. Therefore, even though there is strong alignment between the proposal and the Draft Pyrmont Place Strategy, there is considered to exist sufficient grounds and a strong strategic policy basis to support the development. Darling Harbour has since the 1980s been carved out and afforded special planning provisions (Darling Harbour Development Plan) to ensure its critical tourist, entertainment and commercial contribution to NSW and Australia is protected and that its continued evolution and success assured. This state significant planning framework does not establish any detailed planning controls nor require the preparation or adoption of any overarching master plan in which to inform or assess development against.

2.9 Wind impacts

2.9.1 Issue

The DPIE's key issues letter requests that an updated wind assessment be provided, including a wind tunnel assessment and detailed computer modelling, clearly demonstrating the wind impacts of the proposal and likely mitigation measures. The City of Sydney submission also notes that the Wind Assessment Report submitted with the previous RtS is insufficient and should contain detailed wind tunnel testing, rather than deferring to a future detailed design stage application. Specifically, wind impacts to the public domain must be identified and quantified.

A small number of public submissions also express concern at a perceived lack of consideration towards wind impacts.

2.9.2 Proponent's response

An updated Wind Assessment has been prepared by Cermak Peterka Petersen (CPP) and is attached to this RtS response at **Appendix L**. In response to comments from the Department and Council, Mirvac commissioned CPP to complete a wind tunnel test.

The wind tunnel assessment was undertaken based on the previous amended concept proposal, however CPP have confirmed (refer Addendum letter included at **Appendix L**) that there is no change to the pedestrian wind environment as a result of the further amendments now proposed (i.e. reduction in height of the northern podium in order to accommodate the new Guardian Square and increase in tower height to RL166.95).

The wind tunnel assessment incudes an assessment of the existing development, proposed envelope and indicative design. CPP find that the wind environment at ground level near the development site under the proposed envelope and indicative design configurations is generally suitable for pedestrian standing and walking and mostly similar to conditions at the existing Harbourside Shopping Centre, particularly along the waterfront promenade.

A number of upper level locations (e.g. southern podium accessible rooftops) were found to be exposed to strong wind conditions, however these spaces are now no longer proposed (i.e. replaced with the new Guardian Square).

Overall, CPP confirm that the envelope for both the podium and tower results in acceptable wind conditions and that further wind tunnel testing of the future detailed design is recommended, including testing of any mitigation measures required.

3.0 Further amended concept proposal

Since public exhibition of the proposal for a second time from 2 April to 29 April 2020, further amendments and improvements have been made to the proposed development to comprehensively respond to issues and comments raised by agencies and members of the public, along with adjustments made to strengthen and enhance the design and planning merit of the proposal.

The following section outlines the design evolution of the further amended concept proposal. It also presents an updated description (where relevant) of the modified development for which approval is sought. The proposed changes are shown in the Supplementary Architectural Design Report prepared by FJMT at **Appendix D**.

3.1 Design evolution

The below section outlines the design history of the proposed development, from the initial conception stage to the further amended concept proposal today.

3.1.1 Envelope evolution prior to lodgement





Time	Concept proposal
 December 2016 - Original SSDA Concept Proposal Following consultation with 50 Murray Street a refined SSDA Envelope was lodged. The residential tower had a height of RL166.35 and was setback 50m from Pyrmont Bridge. The podium was modified, ranging the height from RL 15.5 in the south to RL 30.5 in the north. The podium as lowered in the north by 4m. The northern bridge link over Darling Drive was reinstated. 	TOP RL 166.350

3.1.2 Amended concept proposal (April 2020)

Following receipt of the original submissions made during the public exhibition of the EIS, the proponent held a number of design meetings with Professor Peter Webber (independent urban design advisor) and the Department to help shape the amendments that were proposed to the Concept Proposal.

The workshop meetings were held on the following dates:

- 19 January 2018;
- 6 April 2018;
- 7 May 2018; and
- 4 June 2018.

The team tested the amended concept proposal, with refinements and revisions made to the development envelope to address the opportunities and constraints of the site and respond to public and agency submissions. In summary, the following refinements were made:

- Move the residential tower to the centre of site, out of the way of 50 Murray Street;
- Drop the height of the tower envelope from RL166.35 to RL153.75m;
- Further refinement of the podium envelope particularly around The Event steps;
- Splay the base of residential tower to further open up views from 50 Murray Street;
- · Set the tower back further from the waterfront; and
- In relation to the public domain, open up the northern end of the site.

The design history of the amended concept proposal is summarised in **Table 6** below. The amended concept proposal was exhibited between 2 April to 29 April 2020.

Table 6 Envelope evolution – amended concept proposal (April 2020)

Time

Concept proposal

April 2018

Relocate the tower to the centre of the site

- The tower element of the Concept Proposal was relocated from the north of the site to the centre of the site (the widest part of the site) to maximise view sharing to permeant residents. Tower restricted from being able to be located any further south.
- The new location provided an increased setback from the heritage listed Pyrmont Bridge, improved relationship to the waterfront and ICC Hotel, helped to minimise view impacts from 50 Murray Street, together with reducing overshadowing impacts on the public domain and improved solar amenity to the northern end of the retail centre.

May 2018

Reduce the height

- The height of the tower was reduced from RL166.35 to RL153.75.
- A portion of the podium height at its northern extent has been partly reduced from 30.5 RL to RL 25, improving view sharing to 50 Murray Street.
- As part of the relocation of the tower and refinement of the podium, the stepped form of the lower tower element has now been removed to again improve views from adjacent buildings from the west.









• Following feedback from the Department, the podium

June 2018

envelope was further refined to reduce its bulk when viewed from the Waterfront.

- The podium was trimmed with consideration of views from 50 Murray Street. Further refinements were made to the envelope to further reduce its bulk in response to subsequent advice from the Department.
- The portion of envelope to the north of line AB was removed to improve the views from the southernmost apartment at 50 Murray Street.

April 2020

Amended concept proposal

Refine the podium envelope

• Amended land uses with envelope to better respond to stakeholder feedback and better alignment with strategic planning objectives.

3.1.3 Further amended concept proposal (October 2020)

Following receipt of agency submissions made during the second round of the exhibition of the EIS, as amended, from 2 April to 29 April 2020, the proponent has now made further amendments to the design of the concept proposal. The primary objectives for these changes was improve the relationship of the podium to Pyrmont Bridge, creating a better quality and more accessible rooftop open space (ensuring consistency with the draft Pyrmont Peninsula Place Strategy) and further reducing visual impacts, especially from 50 Murray Street (One Darling Harbour).

A further number of design meetings with Professor Peter Webber (independent urban design advisor) and the Department were held to help shape the further amendments that are now proposed.

The workshop meetings were held on the following dates:

- 26 June 2020;
- 7 July 2020;
- 15 July 2020;
- 28 July 2020; and
- 16 September 2020.

The design history of the further amended concept proposal is summarised in Table 7 below.

Table 7 Envelope evolution – further amended concept proposal (October 2020)

Time	Concept proposal
 June 2020 Reduce envelope around 'Ribbon Stairs' An opportunity to address podium height and relationship to Pyrmont Bridge was identified through to reducing the envelope associated with the Ribbon Stairs 	
 7 July 2020 Reduce northern podium height and create new open space Following feedback from the Department, the podium envelope was further reduced to improve relationship to Pyrmont Bridge and view from 50 Murray Street, with a new area of open space created on the lowered northern podium 	

 Floorspace removed from podium was relocated to residential tower



Time	Concept proposal
 28 July 2020 Reduce northern podium height to align with Pyrmont Bridge Following feedback from the Department, the northern podium envelope was again further reduced in height to match the height of Pyrmont Bridge and in doing so enable the new area of open space to have level access 	
October 2020 Further amended concept proposal • Refinement and finalisation for submission	

In summary, the following additional design refinements were made:

- Further reduction in height of the northern part of the building podium from RL 25m to part RL 17.6m and part RL 13.75m;
- The provision of a new public open space, 'Guardian Square', above the now-reduced northern podium; and
- Increase in height of the residential tower from RL 153.76m to RL 166.95m (offsetting the reduction in commercial floorspace from the podium).



Amended Concept Proposal (April 2020)



Further Amended Concept Proposal (October 2020)



Indicative Design of Further Amended Concept Proposal (October 2020)

Figure 36 Images illustrating key design improvements made as part of further amended concept proposal

3.2 Design principles

In consideration of the submissions received, in preparing the updated scheme under the further amended concept proposal the design review process drew upon the design principles for the project, which are summarised as follows:

- Establish a more regularised setback to the waterfront to enable an enhanced public domain which stiches together with the revitalised public domain to the south;
- Enhance opportunities for views and vistas of the harbour and Pyrmont Bridge;
- Create an appropriate scale and relationship to new and existing surrounding development, in particular the ICC and ICC Hotel to the south and Pyrmont Bridge to the north;
- Create a new public open space at the northern end of the podium that is level with and directly accessible from Pyrmont Bridge;
- Create new and enhanced east-west linkages to improve access from Darling Harbour to Pyrmont and improved access from the Harbourside site to the Pyrmont Bridge, integrating the site into the existing local street and pedestrian networks;
- Provide opportunities for activation, particularly at the ground level along the waterfront public domain to interact with the harbour edge;
- Facilitate the development of a new residential tower above a revitalised retail/commercial podium, allowing for a mixture of compatible uses which complement the wider uses within Darling Harbour and which integrate with existing and new linkages and connections;
- Establish a low-medium scale podium form that is consistent with the prevailing existing character of buildings fronting the waterfront, while supporting view sharing from surrounding buildings and enabling opportunities green roofs;
- Enable a new residential tower to be developed which responds to the surrounding existing and future context of tall buildings and appropriately manages building separation, view sharing and overshadowing considerations;
- Allow for an integrated solution on the Harbourside site through the development of a podium and tower form which presents as a single coherent development;
- Improve public amenities and provide a public domain with social, green infrastructure for human comfort; and
- Retain and celebrate the heritage of the Pyrmont bridge.

The design principles are described in more detail in the Supplementary Architectural Design Report prepared by FJMT at **Appendix D**.

3.3 Overview of proposal (as further amended)

The proposal, as further amended, seeks approval for the following development:

- A concept proposal and building envelope for the redevelopment of the Harbour Shopping Centre, including the following elements:
 - A network of open space areas and links generally as shown within the Public Domain Concept Proposal, to facilitate re-integration of the site into the wider urban context;
 - Building envelopes;
 - Land uses across the site, including non-residential and residential uses;
 - A maximum total Gross Floor Area (GFA) across the Harbourside site of 87,000sqm for mixed use development (45,000sqm non-residential and 42,000sqm residential development);
 - Basement car parking;
 - Car parking rates to be utilised in subsequent detailed (Stage 2) Development Applications;
 - Urban Design and Public Realm Guidelines to guide future development and the public domain; and
 - Strategies for utilities and services provision, drainage and flooding, and ecologically sustainable development.
- Stage 1 early works comprising the demolition of existing site improvements, including the Harbourside Shopping Centre, obsolete monorail infrastructure, and associated tree removal.

3.4 Numerical overview as further amended

Table 8 below provides a comparison between the numerical information relating to the original concept proposal (as originally exhibited between 15 December 2016 and 14 February 2017), the amended concept proposal (March 2020; as exhibited between 2 and 29 April 2020), and the further amended concept proposal for which approval is now sought.

Component	Original concept proposal (December 2016)	Amended concept proposal (March 2020)	Further amended concept proposal
Site area	2.05 hectares	2.05 hectares	2.05 hectares
Public domain improvements	 Widened waterfront boulevard 	Widened waterfront boulevard	Widened waterfront boulevard
	Event Steps	Event Steps	Event Steps
	Ribbon Stairs	Ribbon Stairs	Ribbon Stairs
	 Pyrmont Bridge - New Paving 	Pyrmont Bridge - New Paving	Pyrmont Bridge - New Paving
	 Observation Deck 50 Murray Street bridge upgrade – existing bridge to be maintained and upgraded. Bunn Street pedestrian bridge 	 50 Murray Street bridge upgrade – existing bridge to be maintained and upgraded. Central through site link Bunn Street pedestrian bridge 	 50 Murray Street bridge upgrade – existing bridge to be maintained and upgraded. Central through site link Bunn Street pedestrian bridge + Guardian Square
Total GFA	• 87,000m ²	• 87,000m ²	• 87,000m ²
Non-residential GFA Residential GFA	 52,000m² 35,000m² 	 49,000m² 38,000m² 	 45,000m² 42,000m²
Tower height	• RL166.35m	• RL153.75m	• RL 166.95m

Table 8 Numerical comparison

Component	Original concept proposal (December 2016)	Amended concept proposal (March 2020)	Further amended concept proposal
Height of northern podium	• RL 30.5m	• RL 25m	 RL 17.6m (partial); RL 13.75m (partial)
Setbacks of the tower	 Pyrmont Bridge:50m ICC Hotel: 160m 50 Murray Street: 30m Ibis Hotel: 44m Novotel Hotel: 98m Tower to Podium: 0m to the eastern edge of the podium Tower to Waterfront: 12m 	 Pyrmont Bridge:135m ICC Hotel: 77m 50 Murray Street: 91m Ibis Hotel: 56m Novotel Hotel: 50m Tower to Podium: 12m to the eastern edge of the podium Waterfront: 32m 	 Pyrmont Bridge:135m ICC Hotel: 77m 50 Murray Street: 91m Ibis Hotel: 56m Novotel Hotel: 50m Tower to Podium: 12m to the eastern edge of the podium Waterfront: 32m
Indicative apartments	• 364	• 357	• 357
Indicative car spaces	• 295	• 306	• 306
ESD Targets	 4-Star Green Star Design & As Built v1.1 for residential 4-Star NABERS Energy for Shopping Centres 3-Star NABERS Water for Shopping Centres 	 5-Star Green Star Design & As Built v1.3 for retail; 5-Star Green Star Design & As Built v1.3 for commercial; 4-Star Green Star Design & As Built v1.3 for the residential tower; 4.5-Star NABERS Energy for Shopping Centres; 4-Star NABERS Water for Shopping Centres; 5.5-Star NABERS Energy for Offices; and 3.5-Star NABERS Water for Offices. 	 5-Star Green Star Design & As Built v1.3 for retail; 5-Star Green Star Design & As Built v1.3 for commercial; 5-Star Green Star Design & As Built v1.3 for the residential tower; 4.5-Star NABERS Energy for Shopping Centres; 5.5-Star NABERS Energy for Offices; 3.5-Star NABERS Water for Offices; and 20% water reduction per sqm for retail.

3.5 Overview of key further design amendments

3.5.1 Reduction in height of northern podium

A portion of the podium height at its northern extent has been further reduced from RL 25m to part RL 17.6m and part RL 13.75m. The reduction in height provides for a more sensitive visual relationship between the proposed development and the state heritage listed Pyrmont Bridge, will further improve view sharing with 50 Murray Street, and provides the opportunity for a new public open space ('Guardian Square') to be provided at the top of the northern podium.

3.5.2 Increase in height of the tower

The height of the tower has been increased from RL 153.76m to RL 166.95m. This new height is approximately the same as that of the originally submitted concept proposal, and the height increase was done to offset the loss of podium floorspace as part of the reduction in height as described above, and allow for further consistency with that of the draft *Pyrmont Peninsula Place Strategy*'s directions for Harbourside, which identifies a maximum height limit of RL 170m at the site. The acceptability of the increase in tower height is also supported by the fact there are no material shadow impacts, no operational airspace issues, and that it allows a taller, more slender and more iconic design.

This opportunity for additional height is supported with the provision of additional public benefit through the creation of a new significant public accessible area of open space on the northern podium rooftop.

3.5.3 Provision of new public open space

A new public open space, 'Guardian Square', will be provided at the rooftop of the now-reduced northern podium. The square will be a minimum of 1500sqm in size and integrates well with the heritage fabric of Pyrmont Bridge, being approximately located at the same height allowing for additional interpretation of the heritage item, and integrates with the 50 Murray Street pedestrian bridge. The square will further improve vegetative planting and shading at the site.

The key open space concepts and public benefits as originally proposed are retained under the further amended Concept Proposal.

3.5.4 Reconfigured car parking layout

The overall footprint of the basement has been reduced, but there is proposed to be an additional basement level of parking (increase from 3 levels to 4 levels). The reduced footprint responds to site constraints, ensuring potential impacts to existing stormwater infrastructure are minimised. There is no change to the number of proposed indicative parking spaces, which remains at 306 spaces (though this yield is approximate and based on the 'indicative design' only, being subject to confirmation as part of a future Stage 2 Detailed Design DA). There is no change to the End of Trip (EOT) space allowance, with a spatial allowance being maintained on Basement Level 1 (and also on Commercial Level 1).



Figure 37 Basement envelope plan as proposed under previous RtS package



Figure 38 Basement envelope plan as proposed under further amended concept proposal

Approval of parking rates as outlined within the original EIS continues to be sought as part of the further amended concept proposal:

- For each studio dwelling 0.2 spaces;
- For each one-bedroom dwelling 0.4 spaces;
- For each two-bedroom dwelling 0.8 spaces;
- For each three or more bedroom dwelling 1.1 spaces;
- For each dwelling up to 30 dwellings 0.167 spaces;
- For each dwelling more than 30 and up to 70 dwellings 0.1 spaces; and
- For each dwelling more than 70 dwellings 0.05 spaces.

In this regard, the Sydney LEP 2012 'Category B' continues to be used with regard to determining the appropriate car parking rates for future development.

3.5.5 GFA / Indicative land use mix

The amended proposal retains the same overall 87,000sqm of GFA, however there is a minor adjustment in the split between non-residential and residential. The final proposal now includes:

- Non-residential uses floor space 45,000sqm; and
- Residential uses floor space 42,000sqm.

In response to market demand and the focus of local and regional strategic planning policies, as well as public submissions noting that the previous provision of retail floorspace was excessive, it is proposed for the podium to now include predominantly commercial land uses along with supporting retail. Indicatively, this comprises ~28,000sqm net lettable area of commercial office and ~8,500sqm gross lettable area of retail.

The podium enables large campus sized commercial floor plates that are favoured by large multinational tech, media, finance, and professional services companies.

3.5.6 Number of apartments

No change is proposed to the indicative number of apartments (357), with the minor increase in the tower height resulting in changes to the mix and sizing of apartments. As above, this number is indicative only and subject to confirmation as part of a future Stage 2 DA.

3.5.7 ESD

In response to feedback from the City of Sydney, Mirvac is seeking to further improve its commitment to ESD with the adoption of 5-Star Green Star for the residential component.

Accordingly, Mirvac is targeting 5-Start Green Star ("Australian Excellence") across all land use components of the project, i.e. retail, commercial and residential. Refer to **Appendix T** for revised ESD Statement prepared by Cundall and confirmation of Mirvac's ESD commitments.

3.5.8 Stage 1 early works

Approval is now sought for Stage 1 demolition works (physical works) involving the demolition of existing site improvements, including the Harbourside Shopping Centre, obsolete monorail infrastructure, and associated tree removal down to ground slab level (no ground disturbance) as part of the concept DA approvals process. The proposed demolition works are further described in **Section 4.0** below.

Previously, no physical works were proposed as part of the concept DA and demolition was to be subject to a future Demolition DA following the approval of the concept application. This approach has since been refined, including in response to COVID-19.

3.6 Drawing schedule for approval

Table 9 identifies the drawings that are proposed for approval. The drawings are located at the Architectural Plans prepared by FJMT and attached to this report at **Appendix D and Appendix V**.

Drawing number	Title	Date	
Concept Proposal			
SSDA1-100	Envelope Plan-Podium	8/10/20	
SSDA1-101	Envelope Plan-Tower	8/10/20	
SSDA1-102	Envelope Plan-Basement	8/10/20	
SSDA1-103	Envelope Plan-East Elevation	8/10/20	
SSDA1-104	Envelope Plan-West Elevation	8/10/20	
SSDA1-105	Envelope Cross Sections	8/10/20	
Stage 1 Works			
2101	Site Plan – Demolition	8/10/20	
2102	Aerial Photo & Floor Plans – Demolition	8/10/20	
2103	Elevations - Demolition	8/10/20	

Table 9 Architectural reference schedule

3.7 Consultation

The proponent has undertaken extensive community consultation with stakeholders throughout the development of the concept proposal. The findings of the engagement activities leading up to the lodgement of the original EIS were summarised in the Community Consultation Summary prepared by KJA (refer to Appendix J of the originally submitted EIS). The report provided commentary with respect to:

- The relevant stakeholders and current community context;
- The range of engagement/consultation programs held and the outcomes of these programs; and
- A summary of design mitigation measures in response to issues raised.

Following exhibition of the EIS and review of the submissions received, the proponent met and or consulted with the following agencies:

- NSW Road and Maritime Services;
- The Department of Planning, Industry and Environment;
- Transport for NSW, CBD Coordination team;
- Property NSW;
- Government Architect NSW; and
- City of Sydney Council

Given the number of submissions received from One Darling Harbour – 50 Murray Street, and the previous level of consultation undertaken with them prior to lodgement of the original Concept Proposal, two meetings were held (August 2018 and February 2020) prior to submission of the Amended Concept Proposal with the Executive Committee of One Darling Harbour.

As a result of the items raised during the second round of exhibition between 2 and 29 April 2020, the proponent elected to address concerns raised by further amending the concept proposal, as discussed in **Section 3.0** above. These amendments, including reducing the height of the northern podium and providing a new public open space, 'Guardian Square', aim to comprehensively address the key issues raised by the government agencies and the public. The development of these further amendments were informed by a number of workshops and meetings with the Department and its independent urban design advisor.

As a result, the further amended concept proposal represents a further significant improvement to that concept as proposed under the previous RtS package. The further amended concept proposal will be re-exhibited providing the public and agencies an opportunity to provide any additional feedback.

4.0 Stage 1 early works

Approval is now sought for Stage 1 demolition works (physical works) involving the demolition of existing site improvements, including the Harbourside Shopping Centre, obsolete monorail infrastructure, and associated tree removal down to ground slab level (no ground disturbance) as part of the concept DA approval process. In accordance with Section 4.22(3) of the *Environmental Planning and Assessment Act 1979*, a concept proposal may set out detailed proposals for the first stage of development. Accordingly, demolition is proposed as the first stage of work.

This section provides an overview and assessment of the Stage 1 demolition works only.

4.1 Response to Stage 1 early works SEARS

As Stage 1 demolition works have now been included in the concept approval scope, the Secretary's Environmental Assessment Requirements (SEARs) for SSDA 7874 have been updated to include relevant requirements for these works. A direct response to each of the Stage 1 early works SEARs requirements have been provided in **Table 10** below.

Requirement	Response		
1. Demolition works			
 The EIS shall: identify and provide an assessment of the main noise and vibration generating sources and activities including, where applicable, demolition, site preparation, piling, earthworks, construction, concrete crushing. This should include an assessment of: 	Construction noise impacts, including noise generation sources, noise modelling, and mitigation measures are discussed in the Demolition Acoustic Report prepared by Renzo Tonin & Associates and attached to this RtS response at Appendix X . Further discussion is provided below.		
 background noise at the most affected sensitive receivers within the site, adjacent to the site and in close proximity to the site in accordance with the guidance material provided in EPA's Noise Policy for Industry (NPI) 2017 			
 detailed noise modelling of noise generated as part of the works at sensitive receivers 			
- the need for any respite periods for continuous, noisy works			
- the locations and hours of all noisy equipment			
 measures to minimise and mitigate the potential noise impacts on all surrounding sensitive receivers. 			
 detail the management of stormwater flows, including detail of stormwater and drainage infrastructure to mitigate impacts of flows to and from the site. 	Stormwater flows and stormwater management have been detailed in the Construction & Environmental Management Plan (which includes the Demolition Management Plan) prepared by Mirvac at Appendix S .		
 detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. 	Dust control measures are detailed in the Construction & Environmental Management Plan (which includes the Demolition Management Plan) prepared by Mirvac at Appendix S .		
• identify, quantify and classify the likely waste streams to be generated, including any hazardous materials, and describe the measures to be implemented to reduce, reuse, recycle, where possible and then manage and safely dispose of this waste. Identify useable spoil management initiatives.	Likely waste streams to be generated and relevant waste management measures are detailed in the Construction & Environmental Management Plan (which includes the Demolition Management Plan) at Appendix S . The proposed demolition works is likely to generate 16,500m ³ of debris, 1,050m ³ of metals waste, 1,500m ³ of general waste, and 50m ³ of hazardous waste.		
identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, plant) for the site.	Site servicing arrangements during demolition works are discussed in the Demolition Traffic Management Plan (DTMP) prepared by Arcadis at Appendix W , and the Construction & Environmental Management Plan (which includes the Demolition Management Plan) with a summary provided below.		

Table 10 Response to Stage 1 early works SEARs

Requirement	Response		
 identify proposed hours of work and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours 	Hours of work are noted in the Construction & Environmental Management Plan (which includes the Demolition Management Plan) at Appendix S and described in further detail below.		
 address how the proposed demolition will reflect national best practice sustainable principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction measures, energy and water efficient practices and use of renewable energy. 	The proposed demolition works will incorporate sustainable principles including waste reduction, waste sorting and recycling as detailed in the Construction & Environmental Management Plan (which includes the Demolition Management Plan) at Appendix S .		
 identify any short-term impacts of the demolition works on the prescribed airspace for Sydney Airport. 	The proposed demolition works will not impact the prescribed airspace of Sydney Airport given the low scale nature of the current Harbourside Shopping Centre.		
2. Transport and Accessibility			
 The EIS shall: include a Transport Impact Assessment that assesses the transport impacts of Stage 1 works including measures to mitigate any impacts to traffic, public transport, special event transport, pedestrians or cyclists, within the Darling Harbour Precinct, including during special events 	Traffic impacts of the Stage 1 demolition works have been assessed in the Demolition Traffic Management Plan (DTMP) prepared by Arcadis and attached to this RtS response at Appendix W . The DTMP confirms that the proposed demolition works will not impact the performance of surrounding intersections and/or the road network. There will be generally no requirement to block any traffic lanes during the demolition works. Temporary		
	road closures along Darling Drive and associated permits will be required for the demolition works associated with the removal of the two existing pedestrian bridges.		
include a draft Construction Traffic and Pedestrian Management	The Demolition Traffic Management Plan (DTMP) at		
Plan (CTPMP) addressing:	Appendix W directly responds to each of the items raised in this item.		
 the works program and hours of work road safety at key intersections and locations subject to heavy vehicle traffic movements and high pedestrian activity 			
- vehicle size and heavy vehicle routes (including turn paths)			
- access management and traffic control measures			
 on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicles, including measures to reduce construction worker private vehicle trips 			
 any crane locations and road closures o temporary access arrangements for pedestrian and cyclists 			
 a consultation strategy for liaison with surrounding stakeholders prior to and during the works 			
 a plan for timely repair to damaged infrastructure and how these will be managed. 			

4.2 Scope of demolition works

Specifically, consent with regards to demolition is sought for the following works:

- Site establishment
- Demolition and removal of all structures and materials from site down to ground floor slab inclusive of internal fixtures, fittings, furniture, internal finishes and building fabric at the site;
 - Inclusive of the Harbourside Shopping Centre, existing Monorail station, and existing pedestrian bridge over Darling Drive;
- Installation of hoarding and scaffolding;
- Complete site clearing of rubbish, waste and rubble;
- Tree removal;
- · Provision of sediment control measures at the site during demolition; and
- Capping of all redundant services back to site perimeter.

Demolition works will be undertaken in accordance with the Construction & Environmental Management Plan (which includes the Demolition Management Plan) attached to this RtS response at **Appendix S**, and the Demolition Plans prepared by FJMT and attached at **Appendix V**.



Figure 39 Extent of proposed Stage 1 demolition works

4.2.1 Demolition staging

At this stage proposed works are proposed to be split into five indicative stages. Each stage is summarised in **Table 11** below, with the location of each stage annotated in **Figure 40** below.

Subject to securing necessary approvals.

Table 11	Demolition staging and expected duration
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Stage	Activity	Expected duration
1	Strip out and demolition	Months 1 – 6
2	Strip out and demolition	Months 6 – 8
3	Strip out and demolition	Months 6 – 8
4	Link bridge demolition	2 weeks
5	Link bridge demolition	



Figure 40 Proposed staging of demolition works

4.2.2 Demolition methodology

Proposed demolition methods to be utilised for the majority of the existing building structure are as follows:

- Internal demolition and strip out will generally be done using a skidsteer and/or small excavator. The equipment
 items are to be lowered into the top floor via penetration of the roof (which will provide noise shielding during the
 internal demolition stage).
- Demolition of the pedestrian bridge will involve the oxy cutting of steelwork, the usage of a mobile crane (to support the bridge and lower bridge elements that are cut away), and excavators to process bridge elements once lowered to the ground. Demolition of the atrium will also require use of oxy cutting equipment to demolish steel work.
- Demolition of the general external structure will be done using combinations of excavator with bucket, excavator with hammer and concrete pulveriser. The larger structural elements are typically demolished using pulveriser or excavator with hammer. The slab/beam size dictates whether hammer/pulveriser is used, as a pulveriser will be unable to demolish slab elements greater than 300mm.

4.2.3 Hours of work

The demolition works (including site deliveries) are proposed to occur within the following hours of operation:

- Between 7:00am and 6:00pm Mondays-Fridays (inclusive);
- Between 7:00am and 5:00pm Saturdays; and
- No work on Sundays and Public Holidays.

Notwithstanding the above, the demolition of the Darling Drive pedestrian bridge will likely occur at night or over the course of a weekend, as it will require the closure of Darling Drive and the light rail line (subject to securing all necessary approvals).

4.3 Environmental Assessment

The following is our assessment of the environmental effects of the proposed Stage 1 demolition works. The assessment includes only those matters that are relevant to demolition (to ground floor slab level) only.

4.3.1 Darling Harbour Development Plan No 1

The Darling Harbour Development Plan No. 1 (DHDP) is the relevant Environmental Planning Instrument (EPI) that applies to the site. Clause 8 of the DHDP notes that:

The renovation or demolition of a building or work may not be carried out except with a permit being obtained therefor.

Therefore, the proposed demolition works are permissible with consent.

4.3.2 Traffic management

A Demolition Traffic Management Plan (DTMP) has been prepared by Arcadis and is attached to this RtS response at **Appendix W**. The DTMP outlines the requirements for site vehicles access and egress to undertake haulage and delivery activities for demolition.

For the transport of waste resulting from the demolition works, it is anticipated that 12.5m rigid tipper trucks will be used. For the deliveries of site equipment and material, the largest truck to be used is to be a 19.0m articulated vehicle. The stage 1 demolition works will involve approximately 1,480 total truck loads, resulting in on average 20 heavy vehicles entering and exiting the site daily.

The primary access point for the site is situated on the corner of Darling Drive roundabout, with a secondary access point for demolition waste material transport (for 12.5m rigid tipper trucks only) via the existing loading dock. Heavy vehicle routes to and from the site and swept path analysis are detailed in the DTMP, which also confirms that there is to be no adverse impacts on surrounding intersection performance or safety.

There will be no requirement to block any traffic lanes during the demolition works for site vehicle access, for the demolition works associated with the main building development. Temporary road closures along Darling Drive and associated permits will be required for the demolition works associated with the removal of the two existing pedestrian bridges. Site specific Traffic Control Plans will be developed for these works in consultation with the relevant authorities.

Site personnel will be encouraged to use public transport including trains, buses, light rail, and ferries since no site parking will be provided available due to the limited room available.

4.3.3 Acoustic impact

A Demolition Acoustic Report has been prepared by Renzo Tonin & Associates and is attached to this RtS response at **Appendix X**. The report has been prepared having regard to the SEARs, including:

- Identifying the site, proposed works and nearby noise sensitive development.
- Presenting information about ambient noise levels in the vicinity of the site.
- · Identifying relevant acoustic criteria with respect to construction/demolition noise and vibration.
- · Assesses likely noise and vibration impacts from the works.
- Providing advice with respect to noise and vibration mitigation where necessary.

Criteria

Based on a number of historic long-term noise logging results and more recent attended short-term measurements, Renzo Tonin have established background noise levels for key nearby development. The background noise levels established for each noise receiver have then been used to set construction noise goals/criteria, applying City of Sydney requirements.

In terms of vibration, Renzo Tonin adopt both the British Standard (in relation to disturbance to building occupants and structural damage to buildings) and German Standard (in relation to disturbance structural damage to buildings).

Impacts and Mitigation Measures

An assessment of the predicted noise generated during the different demolition stages to each individual receiver have been undertaken by Renzo Tonin with results presented in **Appendix X**. With some exceedance to noise criteria predicated as a result of the proposed works, Renzo Tonin detail a range of site specific noise mitigation measures, including:

- Maintain as much of the building shell as feasible during strip out works (to enable the building shell to provide noise screening to the nearest residents).
- Subject to safety concerns, as much internal demolition as feasible should be conducted prior to removal of the roof.
- Staging of works, with any given noise receiver only impacted by some, not all of the stages.
- Link Bridge demolition in the event that the Pedestrian Bridge must be demolished at night time, this should be limited to the removal/lowering of bridge elements only. The demolition of the bridge elements, once lowered, should be done in the daytime.
- Nearby development should be notified of the proposed works. The notification should outline the anticipated during of the work (including duration of specific stages).
- Use of excavator and concrete pulveriser should be used as much as feasible (to minimise use of hydraulic hammers).
- Adopting respite periods where exceedances of the 75dB(A) "Highly Noise Affected" level, or the 45dB(A) internal noise goal for Hotel guest rooms is anticipated.



Measurement 3 Measurement 4

Figure 41 Key noise receivers surrounding the site

With regard to vibration related impacts, Renzo predict there is generally low structural damage risk to surrounding buildings and structures, with disturbance to building occupants ranging from low – moderate. Mitigation measures identified include:

- Implementation of management procedure to deal with vibration complaints. Each complaint to be investigated
 and where vibration levels are established as exceeding the set limits, appropriate amelioration measures are to
 be put in place to mitigate future occurrences.
- Where vibration is found to be excessive, management measures are to be implemented to ensure vibration compliance is achieved. Management measures may include modification of construction methods such as using smaller equipment, establishment of safe buffer zones and if necessary, time restrictions for the most excessive vibration activities. Time restrictions are to be negotiated with affected receivers.
- Undertaking dilapidation surveys at all receivers within close proximity of the construction site. Notification by
 letterbox drop would be carried out for all buildings in the vicinity of the construction site. These measures are to
 address potential community concerns that perceived vibration may cause damage to property. Notification is to
 be provided to all occupants prior to any works that may cause vibration.
- With respect to works near Pyrmont Bridge, Sofitel Hotel and ICC Sydney:
 - Use of onsite testing (using vibration logger) at the commencement of structural demolition of Stage 2 and 5 in order to determine safe working distances for excavators, hydraulic hammers etc.

- In the event that exceedance of Building Damage acoustic criteria are expected at the required work locations, changes in work method are to be considered. In the event of significant and ongoing exceedances of human comfort criteria are expected, additional respite periods are to be implemented.
- Detailed vibration monitoring procedures.

In summary, Renzo Tonin confirms that, following the adoption of recommended noise and vibration mitigation measures, the demolition works will be managed in a way that avoids potential building damage and mitigates impacts and land users in a reasonable and feasible manner.

4.3.4 Construction management

The proposed demolition works will be undertaken in accordance with the Construction & Environmental Management Plan (which includes the Demolition Management Plan) prepared by Mirvac and attached to this RtS response at **Appendix S**. The Demolition Management Plan details measures to be undertaken at the site including with regards to general safety measures, site servicing, acoustic monitoring, asbestos removal and disposal, hoarding and scaffolding, materials handling and disposal, vehicular access, pedestrian management, stormwater and sediment control, and emergency evacuation.

4.3.5 Site suitability and public interest

The proposed demolition works are suitable for the site and in the public interest. Mirvac have identified an opportunity to bring forward works on site, including due to the effects that COVID-19 is having on the existing Harbourside Shopping Centre.

The inclusion of early demolition works is a common first stage of works included within Concept Proposals for state significant developments, e.g. Cockle Bay Wharf Redevelopment, Redevelopment of Western Sydney Stadium, and Redevelopment of Sydney Football Stadium.

Any potential impacts resulting from the works will be suitably managed through the adoption of all reasonable and appropriate mitigation measures, as detailed within the accompanying Construction & Environmental Management Plan, Demolition Acoustic Report, and Demolition Traffic Management Plan.

5.0 Environmental assessment

This section contains an assessment of the environmental effects of the further amended concept proposal as described in the preceding chapters of this report. Except where addressed in this report, the conclusions of the original EIS and/or previous RTS assessment remain consistent. This section also only deals with environmental assessment issues by exception and where not previously considered and addressed within this RTS.

5.1 Strategic planning policies and statutory context

The strategic and statutory context of the proposed development has somewhat evolved since the Secretary's Environmental Assessment Requirements (SEARs) were issued for the Concept Proposal in August 2016. Notwithstanding this, the SEARs remain valid for the project.

Assessment with the following strategic planning policies was documented in the original EIS prepared by JBA dated November 2016, and the conclusions therein are considered to still be valid with regards to the further amended concept proposal:

- Environmental Planning & Assessment Act 1979 (EP&A Act);
- A Plan for Growing Sydney;
- NSW Long Term Transport Masterplan;
- Sustainable Sydney 2030;
- Sydney Development Control Plan 2012;
- Infrastructure NSW SICEEP Urban Design and Public Realm Guidelines;
- SHFA's Darling Harbour Public Domain Manual 2015;
- Development Near Rail Corridors and Busy Roads

 Interim Guideline;

- Guide to Traffic Generating Developments;
- State Environmental Planning Policy (State & Regional Development) 2011;
- State Environmental Planning Policy Infrastructure 2007;
- State Environmental Planning Policy No. 55 Remediation of Land;
- State Environmental Planning Policy No 65. Design Quality of Residential Apartment Development & Apartment Design Guide;
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005; and
- Darling Harbour Development Plan No. 1.

Subsequently, the Response to Submissions and Amended Concept Proposal Report prepared by Ethos Urban dated 24 March 2020 and submitted with the previous RtS package assessed the proposed development with regards to subsequent strategic planning policies, and the conclusions therein are generally considered to still be applicable to the further amended concept proposal with regards to the following documents:

- Directions for Greater Sydney;
- Greater Sydney Region Plan;
- Future Transport Strategy 2056;
- Greater Sydney Services and Infrastructure Plan;
- Eastern City District Plan;

- City of Sydney Draft Central Sydney Planning Strategy;
- Western Harbour Precinct Planning Framework Review;
- Draft State Environmental Planning Policy (Environment); and
- City of Sydney Local Strategic Planning Statement

As the strategic context for the site continues to evolve, the below sub-sections assess the further amended concept proposal against additional strategic planning policies that have been released following the submission of the previous RtS package in March 2020.
5.1.1 Pyrmont Peninsula Place Strategy

As discussed in greater detail in **Section 2.8** above, the further amended concept proposal exhibits a high degree of consistency with the draft Pyrmont Peninsula Place Strategy. Within the Strategy, the Harbourside Shopping Centre is identified as a key opportunity site for development and uplift, subject to delivering public benefits.

The concept design fundamentally supports the achievement of the "additional public benefit opportunities" identified explicitly for Harbourside on page 79 of the draft Strategy, including:

- A tower below the identified maximum of RL 170m in height;
- Prioritising commercial/retail land uses, with the some 52% of the total amount of GFA allocated to these land uses;
- Excellence in open space outcomes through the delivery of additional accessible public open space;
- Improved east-west connections from Harris Street to the waterfront through new through-site links;
- · A safe, activated and inviting streetscape interface at all boundaries of the site; and
- An appropriate built form outcome to Pyrmont Bridge, including a reduction in height to the northern podium under the further amended concept

5.2 Darling Harbour Framework for Landowners Consideration of State Significant Development

The Darling Harbour Framework for Landowners Consideration of State Significant Development (the Framework) provides the principles and criteria that PNSW utilises to consider providing its landowners consent for SSDAs. A comprehensive assessment of the proposed development against the criterion of the Framework was provided in Table 10 of the Response to Submissions and Amended Concept Proposal report prepared by Ethos Urban dated March 2020, and submitted under the previous RtS package.

The additional design refinements made under the further amended concept proposal are considered to strengthen the proposal's alignment with this Framework, including:

- The reduced podium will further improve the relationship between the concept design and the heritage-listed Pyrmont Bridge over that as existing, preventing any excessive overbearing onto the bridge in line with the Principles of Natural and Cultural Heritage, including to 'Identify, protect and enhance European and Aboriginal heritage including the working harbour, past industrial land use and aboriginal heritage';
- The addition of an additional publicly accessible open space, 'Guardian Square', to the concept design above the now-reduced northern podium rooftop would further improve amenity, vibrancy and sustainability outcomes at the site, in line with the following Principles under Public Domain and Urban Structure:
 - 'Create a spectacular and inviting place for leisure and celebration';
 - 'Increase the amount of green, publicly accessible public domain';
 - 'Provide contemporary, high quality public domain, and an improved water's edge experience'; and
 - 'Provide a diversity of public domain experiences, including sanctuary spaces, that encourage people to linger and dwell'.

5.3 Design Excellence

A revised Design Excellence Strategy has been prepared by Ethos Urban and is attached to this RtS response at **Appendix M**. The refinements to the strategy address comments raised by GANSW on the previous version that accompanied the previous RTS and amended concept proposal. Mirvac remains committed to delivering a world-class mixed-use precinct that achieves the highest standard of architectural, urban and landscape design.

Under the further amended concept proposal, the proponent has continued to elect to carry out an invited single stage competitive design process as the design excellence process associated with the development, with a minimum of three (3) invited competitors/design teams. The design excellence competition will integrate both the tower and the podium and public domain.

5.4 Built form

The acceptability of the proposed built form has been demonstrated extensively throughout this RTS and within the accompanying consultant report and supporting information. This includes its acceptability in terms of its compatibility with the existing character of Darling Harbour and Cockle Bay and the future character of the Pyrmont Peninsula and the Western Harbour precinct, acknowledged as the 'gateway to Sydney's Global CBD'. The comprehensive analysis of the potential environmental impacts resulting from the redevelopment of the site also reveal the impacts are acceptable and able to be managed/mitigated.



Figure 42 Compatibility of the proposal with the existing and future character of the Western Harbour Precinct

A comparison of the proposed envelope against the indicative design reveals that there is sufficient flexibility to take through to the design competition and detailed design phase that will support creativity and innovation along with opportunities for building articulation, and delivery of all the public benefits that Mirvac is committed to.

To provide further confidence that issues raised around the tower's visual bulk are able to be addressed through the detailed design phase, Mirvac proposes a maximum volumetric control be imposed on the detailed design that only 80% of the envelope can be filled with built form.

The Public Domain and Urban Design Guidelines (**Appendix I**) prepared for the project and which the future detailed design will need to demonstrate consistency with also provide further guidance and controls that will ensure an appropriate design is achieved.



Figure 43 Envelope and indicative design overlay revealing sufficient room for articulation and public benefits to be realised



Figure 44 Envelope enables flexibility for creativity and articulation



Figure 45 Artist impression demonstrating the built form's compatibility with surrounding development

5.5 Heritage

An amended Heritage Impact Statement (HIS) has been prepared by Curio Projects and is attached to this RtS response at **Appendix J**. The report notes that under the further amended concept proposal, the development continues to present no adverse physical or visual impact to any identified local or State heritage-listed item. Specifically, with regards to the Pyrmont Bridge, the report summarises that the further refinements provide an extremely generous setback between the bridge and the redevelopment that allows for a complete removal of the visually intrusive elements that currently exists between the Harbourside Shopping Centre and the bridge.

The HIS confirms that the height reduction of the northern podium and creation of 'Guardian Square' reinforces the dialogue between modern and heritage fabrics, and encourages people to occupy the publicly accessible plaza while admiring the Darling Harbour setting and the Pyrmont Bridge historic features; from which the heritage item can be viewed, interpreted and celebrated. The proposed amended proposal has reduced the height of the northern podium to RL 17.6/13.75 (reduction of 1 - 3 storeys from previous scheme), restoring a similar height proportion from the previous relationship between the Goods Line Workshop Shed and the Pyrmont Bridge, in addition to preserving significant view lines from 50 Murray Street.



Figure 46 Pyrmont Bridge in circa 1906

5.6 Visual and view impact

An updated Visual and View Impact Analysis (VVIA) has been prepared by Ethos Urban and is attached to this RtS response at **Appendix E**. The VVIA builds on the two previous versions prepared in support of the original proposal and the amended concept proposal.

In terms of public views, all previously assessed views have again been analysed in relation to the further amended concept proposal. The conclusions largely remain consistent, albeit the is an improvement in the view impacts experienced from Pyrmont Bridge, with the overall visual impact classified as 'Low' (compared with Low-Medium in relation to the previous amended concept proposal).



Figure 47 Evolution of view impacts from Pyrmont Bridge

With respect to private views, the VVIA focusses its assessment on those more immediate adjacent residential and hotel buildings, i.e. 50 Murray Street, Novotel, Ibis and Sofitel. In response to submissions made on behalf of these buildings/owners and as requested by the Department, the VVIA provides additional assessment and analysis from affected apartment/hotel rooms. Notwithstanding the more comprehensive analysis, the outcomes and conclusions remain consistent with that reached in the previous VVIA prepared in support of the amended concept proposal.

In summary and with respect to private views, the VVIA finds:

- There will be impacts to views at 50 Murray Street, with the change in view varying across the building and between apartments. Of the 104 apartments with easterly or north-easterly views over the site, none will experience any devastating view impacts and only 4 apartments will have severe view impacts (limited to level 2 apartments). The remaining 100 apartments affected will have view impact ratings ranging from negligible to moderate.
- Impacts to private views from Hotels are valued less than impacts to private views from residential buildings, accordingly permanent residents views have been prioritised over transient hotel guests.
- The interruption of existing private views that are currently unimpeded by any development is inevitable in the context of an urban renewal project and is not unreasonable having regard to the highly urbanised global CBD environment of Sydney within which the land is situated and the evolving future character of the Pyrmont Peninsula. Notwithstanding, the proposed development has accommodated view sharing between and above buildings, and has sought to retain a reasonable level of water, Pyrmont Bridge, and CBD skyline views by the positioning of the building footprints and configuration of the public domain spaces and connections through the site.
- This overall level of impact is reasonable.

Overall, the VVIA summarises that the further amended concept proposal achieves an appropriate balance between the protection of private views, the protection of public domain views in the delivery of a new world class high quality retail, dining and commercial centre catering for diverse local and tourist markets, and a new iconic residential tower on the foreshore of Darling Harbour. Taking into consideration the project in its totality, the development proposed is considered to be acceptable in terms of visual and view impacts.

5.7 Internal Residential Amenity

The further amended Concept Proposal continues to provide a building envelope which will facilitate future dwellings that achieve a high level of internal amenity and outlook.

As outlined in the Design Report attached at **Appendix D**, the illustrative scheme provides a potential development scenario within the proposed envelope that achieves the nine principles of SEPP 65 and is consistent with the apartment design guide. At this stage of the planning process the project is considered to have adequately demonstrated that a high level of amenity will be achieved.

The indicative design also accommodates an extensive amount of both indoor (2,100sqm) and outdoor (1,100sqm) communal open space. The final area of open space is subject to design excellence and Stage 2 DA.



Figure 48 Residential facilities and communal open space across level 4 (left) and level 5 (right) of the indicative design

5.8 Contamination

An updated Preliminary Site Contamination Assessment (PSCA), updated Preliminary Acid Sulphate Soil Management Plan (ASSMP), and updated Preliminary Remediation Action Plan (RAP), and have been prepared by Coffey and is attached to this RtS response at **Appendix N**, **O and P** respectively. Previous report findings remain unchanged, with Coffey finding the site can be made suitable for the development in accordance with SEPP 55. The updated report The updated reporting acknowledges the increased basement depth, with conformation of no impact.

5.9 Traffic

An updated Traffic and Transport Impact Assessment (TTIA) has been prepared by Arcadis and is attached to this RtS package at **Appendix F**. The Assessment has been prepared based on the amended concept proposal (including refinements to the indicative GFA and land use mix), to respond to the submissions, fulfil the requirements of the SEARs and is in accordance with the NSW Long Term Transport Master Plan and the RMS Guide to Traffic Generating Developments.

As noted above at **Section 2.5**, the proposed development will result in an overall reduction in the number of traffic generated trips when comparing existing conditions to the proposed redevelopment of the site. Discussion on methodology and calculations used is provided in the TTIA.

The TIA confirms that assessment of the four key intersections in the surrounding road network show that the traffic generated by the proposed development would not produce major traffic impacts on most intersections. Of the assessed sites, the Harbour Street/ Pier Street/ Goulburn Street intersection would experience the greatest impact to operational performance in the morning peak hour with an expected 52 seconds of delay (Level of Service D – operating near capacity), compared to existing at 38 seconds delay (Level of Service C - satisfactory).

5.10 Pedestrian movement

An updated Pedestrian Study has been prepared by Urbis and is appended to this RtS response at **Appendix G**. The Study confirms that the development will facilitate a high level of pedestrian circulation (**Figure 49**), including along the foreshore, and linkages to Pyrmont and the CBD. With regards to the new Bunn Street pedestrian bridge specifically, as requested by the DPIE's key issues letter, the Study confirms that the bridge will provide a very high level of pedestrian circulation and amenity until and after 2056 (where Level of Service 'A' is achieved, i.e. 'free circulation').



Figure 49 Overview of pedestrian movement at the site

5.11 Infrastructure and utilities

An updated Utilities Report has been prepared by Arcadis and is appended to this RtS response at **Appendix Q**. Amendments made include an update to the project description, with Arcadis having completed max demand calculations to suit the new density/land mix, and details of further correspondence between the proponent and the relevant agencies. The report confirms that the proposal is capable of being adequately serviced by sewer, potable water, stormwater, electrical, gas, and telecommunications infrastructure.

5.12 Stormwater

An updated Flooding, Stormwater and WSUD Report has been prepared by Arcadis and is appended to this RtS response at **Appendix R**. Amendments made to the reports from that as submitted under the previous RtS are generally minor and relate to updates to the description of the development under the further amended concept proposal, in addition to responses to stormwater-related items in the Sydney Water agency submission.

As noted in the previous RtS package, the Report responds to submissions and is consistent with the original report in that it provides a drainage concept for the site which addresses the flooding and sea level rise risks on the site, identifies initial water sensitive urban design analysis and discusses initiatives proposed to be adopted to achieve pollutant reduction targets.

5.13 Construction management

An updated Construction & Environmental Management Plan (CEMP) has been prepared by Mirvac and is attached to this RtS response at **Appendix S**. The report addresses the construction items relating to the further amended concept proposal and outlines the actions and staging of construction to mitigate concerns of surrounding stakeholders.

This includes detail with regards to the Stage 1 demolition works (refer to **Section 4.0** above) which have been incorporated into the proposed development, through that of a Demolition Management Plan (DMP). The DMP covers relevant aspects of the demolition works including with regards to scope, structural characteristics, methods of demolition, asbestos removal and disposal, hoarding and scaffolding, demolition materials handling and disposal, and the Demolition Traffic Management Plan.

5.14 Acoustic impact

An Addendum Acoustic Letter has been prepared by Renzo Tonin & Associates and is attached to this RtS response at **Appendix K**. The addendum letter should be read in conjunction with the Acoustic Report prepared by Renzo Tonin dated 23 January 2020 and submitted with the previous RtS response (which remains valid for the further amended concept proposal). The addendum letter provides a response to acoustic issues raised by the DPIE Key Issues letter and City of Sydney submission.

Noise impacts arising from the Stage 1 demolition works is discussed separately in the Demolition Acoustic Report at **Appendix X**. A performance pathway according the City of Sydney Performance pathway guideline will be expected to be undertaken to ensure the adequacy of natural ventilation in noisy environments. Potential strategies and solutions are detailed with the Supplementary Architectural Design Report at **Appendix D**, noting that the final design response to this issue will be subject to detailed design and the Stage 2 DA. Addressing the acoustic environment along with ensuring suitable natural ventilation will also be a key component included within the future competitive design brief.

5.15 Environmentally Sustainable Design

An updated Ecologically Sustainable Design Statement has been prepared by Cundall and is attached to this RtS response at **Appendix T**. Amendments made to the report from that as submitted under the previous RtS are generally minor and relate to updates to the description of the development under the further amended concept proposal.

Notably, in response to comments raised in the City of Sydney submission, the proponent has now committed to deliver all parts of the project to a 5 Star Green Star rating. This includes with regards to the retail, commercial and residential components of the development, whereas previously the residential aspect of the development was to have a 4 Star Green Star rating. An adjustment to the water target for the shopping centre/retail component is also proposed, with NABERS no longer being relevant as it is applied on typical shopping centre >15,000sqm. The reduction of potable water still remains a high sustainability priority for Mirvac and accordingly it is proposed to achieve the benchmark of a 20% water reduction target per sqm of Gross Lettable Area Retail (GLARF).

In summary, the project is now committed to achieving the following targets:

- 5-Star Green Star Design & As Built v1.3 for retail;
- 5-Star Green Star Design & As Built v1.3 for commercial;
- 5-Star Green Star Design & As Built v1.3 for the residential tower;
- 4.5-Star NABERS Energy for Shopping Centres;
- 5.5-Star NABERS Energy for Offices;
- 3.5-Star NABERS Water for Offices; and
- 20% water reduction per sqm for retail.

5.16 Airspace

An Assessment of Airspace Approvability Report (Airspace Report) has been prepared by Strategic Airspace and is attached to this RtS response at **Appendix U**. Due to the height increase of the proposed residential tower from RL 153.75 to RL 166.95, the height of the tower is now above the Obstacle Limited Surfaces (OLS) Outer Horizontal Surface limit which is set at RL 156m; this results in the tower requiring 'airspace height' approval under the *Airports (Protection of Airspace) Regulations* (APAR) from the Commonwealth Department of Infrastructure, Transport, Regional Development and Communications (DITRDC) prior to construction.

Similar or greater penetrations of the OLS are quite common, particularly in the nearby Sydney CBD, and are generally considered acceptable. Nevertheless, there is a buffer of almost 77m between the height of the building and the maximum height that would be approved by aviation authorities (the Radar Terrain Clearance Charts (RTCC) limit, at RL 243.84), leaving considerable space for any cranes that would require erection for the construction of the tower.

The report confirms that given the location of the tower in the Sydney CBD, its proximity to the existing tower buildings in the CBD which are taller than that now proposed for this development, and the fact that the maximum height of the planning envelope is well clear of the constraining RTCC surface height, there is no technical reason why an airspace approval for the proposed building should not be granted.

5.17 Public Benefits

The public benefits to be delivered as part of the project includes:

- A minimum total area of 8,200sqm of publicly accessible open space that will be provided/upgraded across and adjoining the site. Within this total area, there is a commitment to deliver:
 - Guardian Square (1,500sqm)
 - A widened and upgraded waterfront promenade (4,800sqm)
 - Bunn Street Bridge (concept, with final details/area subject to competitive design process);
 - Event Steps (concept, with final details/area subject to competitive design process);
 - Ribbon Stairs (concept, with final details/area subject to competitive design process);
 - Central through-site link (concept, with final details/area subject to competitive design process);
 - Upgrade of existing northern pedestrian bridge (concept, with final details/area subject to competitive design process);
 - New paving to entry to Pyrmont Bridge (concept, with final details/area subject to competitive design process and consultation with Heritage Council NSW); and
 - Activation works (establishment of a fund with final works is to be agreed with Place Management NSW during detailed design phases and include items such as specialist lighting, public art, WIFI, AV & PA, lasers & CCTV etc within the immediate area).

The Design Brief that informs the future design excellence process will specify all these concepts need to be incorporated within the final scheme. The final design and areas will be the subject to a future Stage 2 DA.

All public domain works within Mirvac's boundary will be managed by Mirvac, with a commitment to provide for 24/7 public access, including:

- Guardian Square
- Central Through site link
- Event steps
- Ribbon stairs

All public domain works outside Mirvac's boundary will be managed by Place Management NSW including:

- Waterfront promenade
- Bunn St pedestrian bridge
- Northern pedestrian bridge

Details regarding legal arrangements (e.g. easements etc) will be worked through in the next stage (design excellence and stage 2 DA) with the landowner Place Management NSW and associated stakeholders.

 A monetary contribution towards affordable housing (\$5.2 million). Refer to Public Benefit Offer include at Appendix Y

Public benefits are proposed to be secured through a combination of implementing the Concept Proposal and future Stage 2 development consents, a Voluntary Planning Agreement (affordable housing) and the final agreement (e.g. Agreement for Lease, Project Development Agreement etc) reached between Mirvac and the NSW Government as part of the Unsolicited Proposal process. This approach to securing public benefits is consistent with other projects delivered across Darling Harbor.

5.18 Site suitability and public interest

The proposed development under the further amended concept proposal continues to be suitable for the site and in the public interest, including by virtue of:

- Providing new and improved retail (e.g. food and beverage) offerings that will attract visitors and contribute to their positive experience and appreciation of Darling Harbour;
- Providing significantly improved and enlarged public domain (total of 8,200sqm), ensuring Sydney's most valued natural asset (its waterfront harbour) continues to be enjoyed and celebrated;
- Providing for the widening of the waterfront promenade (with a total area of 4,800sqm, a net increase of 474sqm above existing) and embellishments to provide much improved connectivity and waterfront experience for the public;
- Providing a public plaza and open space (Guardian Square, totally 1,500sqm) adjacent to Pyrmont Bridge, basked in northern sun and providing new public viewing opportunities of the harbour, Pyrmont Bridge and the CBD skyline.
- Providing significantly improved pedestrian connectivity to the waterfront (through provision of a new Central through-site link and new pedestrian bridge) that will allow the broader Pyrmont community, city workers and tourists to more easily and directly enjoy the benefits of Sydney's waterfront and by extension the CBD;
- Supporting the creation of commercial floor space to support the media, arts and tech jobs desired for the Innovation Corridor;
- Delivering much needed jobs (EY estimated the previous amended concept proposal would will deliver 2,100 construction job years and 4,400 additional long term jobs per annum). Long term jobs estimated to increase as a result of the increased proportion of commercial space within the further amended indicative design;
- Activating tourism (EY estimated the previous amended concept proposal will result in a 10% uplift in tourism);

- Supporting additional affordable housing through provision of a monetary contribution;
- Supporting the attraction of global talent through the delivery of high-quality housing on the doorstep of the Harbour CBD and within the Innovation Corridor;
- Enabling the orderly and economic development of the site, involving the replacement of a tired and no longer fit for purpose building with a modern development that will exhibit the highest standard of architecture, urban, and landscape design;
- Completion of the 'cultural ribbon'; and
- Completion of the \$15 billion rejuvenation and transformation of Darling Harbour.

6.0 Mitigation measures

The collective measures required to mitigate the impacts associated with the further amended concept proposal is detailed in **Table 12 and 13** below.

Table 12 Final mitigation measures – Concept Proposal		
Issue	Mitigation measure(s)	
Built form and Urban Design	The future design of the building/s must take into consideration the Public Domain and Urban Design Guidelines prepared by FJMT.	
Public Access	 24/7 public access is to be provided to Mirvac owned and managed spaces, including: Guardian Square Event Steps Ribbon Stairs Central through-site link 	
Design Excellence	The future detailed design will be the subject of a competitive design process in accordance with the Design Excellence Strategy.	
Overshadowing	The detailed design must endeavour to minimise additional overshadowing of the surrounding public domain, specifically the waterfront surrounding Darling Harbour.	
Heritage	The final tower design should seek to provide sensitive design solutions in consideration of the final form and materiality of the tower, in order to ensure that the tower does not detract from views from the east towards, and along the eastern approach to the Pyrmont Bridge.	
	The proposal to improve the spaces in and around the Pyrmont Bridge approach, and possible bridge surface works (i.e. conservation of Pyrmont Bridge) is to be further developed and encouraged as part of more detailed designs. In particular, the proposal to improve the intrusive interface between the existing Harbourside Shopping Complex and Pyrmont Bridge, should be supported on heritage grounds, improving the readability of the bridge from the western foreshore below the bridge, as well as along the eastern approach.	
Aboriginal archaeology	While it is assessed that there is low to nil potential for Aboriginal objects to be present within the study area, nor impacted through the proposed redevelopment, the potential for unexpected relics and/or Aboriginal objects to be discovered will be managed through the instigation of an Unexpected Finds Protocol for Aboriginal Objects for the site during development works (to be developed through the Stage 2 SSDA). This would be managed via the appointment of an overseeing project archaeologist for the site who will ensure that any unexpected finds are managed appropriately in accordance with the Unexpected Finds Protocol, and reported to the statutory authorities in accordance with the provisions of the NSW National Parks and Wildlife Act, as required.	
Historical archaeology	Any future historical archaeological works should be undertaken and supervised by an appropriately qualified archaeological consultant.	
	• Where possible, it would be beneficial to undertake historical archaeological test excavation once Stage 1 Concept Design has been approved and prior to finalisation of the Stage 2 DA in order to inform potential design outcomes, where required. This work, if undertaken, should be undertaken using a qualified State Significant Excavation Director.	
	• A historical Archaeological Research Design (ARD) and Excavation Methodology, prepared in accordance with Heritage Council Guidelines, should be developed for the site as part of any future historical archaeological test excavation program or Stage 2 DA archaeological works proposed.	
	• An Archaeological Impact Statement should be submitted with the Stage 2 DA application.	
	• Should the items be assessed as of local significance then they will be recorded using standard archaeological recording techniques and they will be removed to allow the work to proceed. The final project report for the archaeological work would include information from this recording process.	
Heritage interpretation	A Heritage Interpretation Plan for the subject site should be prepared as part of the Stage 2 DA, in accordance with the relevant heritage guidelines issues by the NSW Heritage Division, to address all heritage elements and values of the site, including built heritage items, historical archaeology and Aboriginal cultural heritage.	
Wind	The recommendations of the Wind Report prepared by Cermak Peterka Petersen (2016) and subsequent supplementary Wind Reports, including wind tunnel testing, are to be considered during the detailed design stage with updated wind tunnel testing to be submitted with the subsequent Stage 2 DA.	

 Table 12
 Final mitigation measures – Concept Proposal

Issue	Mitigation measure(s)
Traffic	The recommendations outlined in the Traffic and Transport Impact Assessment prepared by Arcadis (2016), including subsequent revisions (2020), are to be employed including a Green Travel Plan.
Geotechnical	The recommendations outlined in the Geotechnical Assessment prepared by Coffey Environments Australia Pty Ltd (2016) are to be implemented, including carrying out site specific investigations for the future structures and submitted with the future detailed application(s) for approval. These investigations and subsequent mitigation measures should adequately manage any potential geotechnical risk.
Contamination	The recommendations outlined in the Preliminary Site Contamination Assessment prepared by Coffey (2016) and subsequent revisions (2020) confirm that a detailed investigation of contamination at the site to provide information for development of a site-specific RAP which will direct effective mitigation of contamination risks during construction is required.
	 The key components are: Implement a programme of investigation to characterise ground contamination conditions within the site and assess the need for remediation to manage contamination in the context of the proposed development concept;
	If required, prepare a site-specific RAP to outline the procedures to manage surplus soils and mitigate contamination risks; and
	• Develop a CEMP which outlines the controls required to mitigate potential health and safety, and environmental risks associated with the remediation works.
Ecologically Sustainable Development	The ESD measures outlined in the Ecologically Sustainable Design Statement prepared by Cundall (2020) are to be explored in the Stage 2 detailed design of the building design to maximise the environmental performance and energy efficiency of the building.
Access	The recommendations of the Accessibility Report prepared by MGAC (2016) and supplementary report (2020) are to be incorporated into the detailed design.
	To ensure equal access is provided throughout the proposed development, the detailed design of the proposal will need to ensure compliance with the relevant accessibility provisions of the BCA.
Construction Management	A detailed Construction Management Plan (CMP) will be finalised and agreed to with the RMS/TfNSW prior to the release of the Construction Certificate following the Stage 2 DA.
Acoustic	Renzo Tonin & Associates suggest that the future Stage 2 DA report should seek to identify strategies for noise control and management which may include physical design measures and management measures such as permissible hours of operation for various uses. Noise to the internal areas of the residential tower can be readily mitigated through appropriate design of the detailed building in order to meet relevant Australian Standards.
	The detailed design is to demonstrate an adequate approach to ensuring natural ventilation in noisy environments is achieved.

	Mitigation measure(s)
Demolition Management	A detailed Demolition Management Plan (DMP) is to be prepared by the appointed contractor prior to the commencement of works in accordance with the principles set out in, and addressing all issues covered by, the Demolition Management Plan included within the Construction & Environmental Management Plan prepared by Mirvac (October 2020).
Noise and Vibration	All work on site will only occur between the following hours:7am and 6pm Monday to Friday;
	7am and 5pm Saturday;
	No works on Sundays or public holidays; or
	 unless otherwise approved in writing by the NSW Department of Planning and Environment due to extenuating circumstances (e.g. removal of existing pedestrian bridge over the light rail).
	The detailed DMP is to include a detailed Noise and Vibration Management Plan to ensure that potential noise and vibration activities are managed in accordance with the Demolition Acoustic Report (Renzo Tonin 2020). The DMP is to implement all mitigation measures and comply with a recommendations of the Demolition Acoustic Report (Renzo Tonin 2020) that relate to the Stage 1 Demolition works, including the following site-specific measures:
	Noise
	 Maintain as much of the building shell as feasible during strip out works (to enable the building shell to provide noise screening to the nearest residents). Subject to safety concerns, as much internal demolition as feasible should be conducted prio
	to removal of the roof.
	• Staging of works, with any given noise receiver only impacted by some, not all of the stages.
	 Link Bridge demolition – in the event that the Pedestrian Bridge must be demolished at night time, this should be limited to the removal/lowering of bridge elements only. The demolition o the bridge elements, once lowered, should be done in the daytime.
	 Nearby development should be notified of the proposed works. The notification should outline the anticipated during of the work (including duration of specific stages).
	 Use of excavator and concrete pulveriser should be used as much as feasible (to minimise u of hydraulic hammers).
	 Adopting respite periods where exceedances of the 75dB(A) "Highly Noise Affected" level, or the 45dB(A) internal noise goal for Hotel guest rooms is anticipated.
	Vibration
	• Implementation of management procedure to deal with vibration complaints. Each complaint be investigated and where vibration levels are established as exceeding the set limits, appropriate amelioration measures are to be put in place to mitigate future occurrences.
	 Where vibration is found to be excessive, management measures are to be implemented to ensure vibration compliance is achieved. Management measures may include modification of construction methods such as using smaller equipment, establishment of safe buffer zones and if necessary, time restrictions for the most excessive vibration activities. Time restrictions are to be negotiated with affected receivers.
	 Undertaking dilapidation surveys at all receivers within close proximity of the construction site. Notification by letterbox drop would be carried out for all buildings in the vicinity of the construction site. These measures are to address potential community concerns that perceiv vibration may cause damage to property. Notification is to be provided to all occupants prior t any works that may cause vibration.
	With respect to works near Pyrmont Bridge, Sofitel Hotel and ICC Sydney:
	 Use of onsite testing (using vibration logger) at the commencement of structural demolition of Stage 2 and 5 in order to determine safe working distances for excavators, hydraulic hammers etc.
	— In the event that exceedance of Building Damage acoustic criteria are expected at the required work locations, changes in work method are to be considered. In the event of significant and ongoing exceedances of human comfort criteria are expected, additional respite periods are to be implemented.
	Detailed vibration monitoring procedures.
Trees	Opportunities for the transplanting and reuse of the existing cabbage tree palms along the waterfront promenade will be investigated during the detailed design.

Table 13 Final mitigation measures – Stage 1 Works

Issue	Mitigation measure(s)
Traffic and Accessibility	A detailed Demolition Traffic and Pedestrian Management Plan is to be prepared prior to commencement of works in accordance with the principles and findings included within the Demolition Traffic Management Plan prepared by Arcadis (2020). Consultation is to be undertaken with regulatory authorities or potentially affected stakeholders, such as the Sofitel Hotel and NSW Taxi Council, to ensure that the demolition site access is
	coordinated with the operation of road user groups, associated with the slip lane located between the development site and the Sofitel Hotel.

7.0 Conclusion

In conclusion, following the second exhibition of the proposal in April 2020 and given the nature and range of submissions made from agencies and the public, Mirvac has again reviewed the overall approach and elements of the concept proposal. This has accordingly led to the development of a further amended concept proposal. The significant changes to the design are considered to reduce the environmental impacts and assist in the delivery of a scheme that represents an overall improvement to the scheme that was previously exhibited.

The following further key amendments have been made to the Concept Proposal since its April 2020 public exhibition:

- Further reduction in height of the northern part of the building podium from RL 25m to part RL 17.6m and part RL 13.75m (reduction of 1 – 3 storeys) to maximise view sharing and allow incorporation of a 1,500sqm public open space 'Guardian Square';
- The provision of a new public open space, 'Guardian Square', above the now-reduced northern podium to provide 1,500sqm of 24 hour/7 days a week publicly accessible open space basked in northern sunlight and that allows for views of Darling Harbour, Pyrmont Bridge and the CBD skyline; and
- Increase in height of the residential tower from RL 153.76m to RL 166.95m to offset loss of area in the podium and align with the height identified for this key catalyst site under the Draft Pyrmont Place Strategy. The final GFA has been maintained at a maximum of 87,000sqm.

In addition to the further amendments made to the Concept Proposal, Mirvac is also now including detailed Stage 1 early works, comprising demolition of the existing shopping centre down to ground slab level into the concept approval. Revised SEARs were accordingly issued by the Department on 12 May 2020.

In summary, the further amended concept proposal will facilitate the reconnection of Pyrmont and Darling Harbour through the creation of significant new publicly accessible pedestrian connections through the increased width of the waterfront promenade, central through-site link, the Bunn Street bridge connection and Ribbon Stairs. It will reenergise Darling Harbour, by providing a world-class mixed-use development and will become a dynamic and inclusive place for residents, the wider community, and visitors to enjoy with a diverse number of high quality public spaces and facilities. This includes the delivery of 8,200sqm of public domain including Guardian Square, a widened and upgraded waterfront boulevard, 'The Event Steps' to provide seating for large events, the 'Ribbon Stairs' connecting Pyrmont Bridge with the waterfront, an upgrading of the existing 50 Murray Street pedestrian bridge to integrate with the redevelopment, the provision of a new pedestrian bridge at Bunn Street, and the provision of a new central through-site link.

The proposal is considered to be acceptable for the following reasons:

- The further amended concept proposal is permissible with consent and meets the requirements of the relevant statutory planning controls;
- The proposal as further amended has significantly improved view sharing to 50 Murray Street and heritage relationship with the Pyrmont Bridge through a lowering of the northern podium by one-three storeys;
- The mixture of uses proposed will complement the current and future uses of Darling Harbour, contributing to the revitalisation of the precinct as a lively and world-class destination;
- World-class high-quality retail and entertainment offering catering for local and tourist markets will be delivered on the site through the proposal, contributing to the entertainment and retailing experience of Darling Harbour;
- New high-quality commercial floor space will be offered in the podium, contributing to the availability of
 commercial floor space in Sydney's CBD, and providing a diverse use to the Darling Harbour precinct which is
 complementary and supportive to the vibrancy of the precinct;
- Quality residential apartments with high levels of amenity will be delivered through the proposal, contributing to the provision of housing close to employment opportunities, facilities and services;

- The proposed development will deliver significant public benefits and expanded public open space, including the new 'Guardian Square' under the further amended concept proposal, significantly improving the public amenity and environment of the site over that as existing;
- A new east-west through-site link will be delivered under the proposal which better links Pyrmont and Darling Harbour;
- The proposal as further amended minimises and will not result in adverse environmental impacts on surrounding receivers;
- The proposal is consistent with the principles of ecological sustainable development as defined by Schedule 2(7)(4) of the *Environmental Planning and Assessment Regulation 2000*;
- The proposal exhibits a high level of consistency with the newly released Draft Pyrmont Peninsula Place Strategy;
- The proposal delivers substantial economic benefits, with EY advising (based on previous scheme)
 - \$15 billion contribution to Gross Regional Product of Central Sydney economy over 20 years
 - 2,100 construction jobs;
 - 4,400 additional long term jobs.
- The proposal is suitable for the site and in the public interest.

Given the merits described above, and the significant public benefits that will result from the further amended concept proposal, it is recommended that this application be approved.