

# Appendix A

Government Agency and  
Council submissions

# Appendix A

## Agency submissions

A response to submissions made by government agencies and other bodies in response to the public exhibition of the SSDA, is set out below.

Submissions were received by the following government authorities, agencies and bodies:

- City of Sydney Council;
- Transport for NSW (TfNSW);
- Sydney Water;
- Roads and Maritime Services (RMS);
- Office of Environment and Heritage (Planning and Aboriginal Heritage) (OEH);
- Heritage Council of NSW;
- NSW Environment Protection Authority (EPA);
- NSW Department of Industry; and
- Ausgrid.

*It is noted that additional consultation undertaken with government agencies and other bodies has occurred since SSDA lodgement, including consultation with the City of Sydney Council, TfNSW, RMS, OEH, Heritage Council of NSW and Ausgrid, to help further inform the response to submissions and detailed design development. Refer to Chapter 5 of the Response to Submissions for details.*

| Extract from agency submissions   | Response (prepared by Architectus)  |
|---|---|
| <b>City of Sydney Council</b>   |   |
| <p><b>Design</b></p> <p>The current design has missed significant urban design opportunities to place the Gallery within its context and connect to the City through the Domain, and to Woolloomooloo and the Harbour's edge.</p> | <p>The proposed SMP has been developed based on sound design principles and design excellence considerations. The new building is to be located close to the existing AGNSW gallery building so as to benefit from synergies whilst providing sufficient space between the buildings to limit impacts on the existing building's heritage façade. The proposal provides for a series of cascading pavilions down the hillside that appropriately respond to the topography of the site, creating a vibrant civic plaza space between the two gallery buildings at a nexus for pedestrian access, and that will enhance accessibility between the Domain/City and Woolloomooloo.</p>   |
| <p>The proposal lacks clarity in the approach and orientation, with the two separate buildings presenting a confusing arrangement for visitors at arrival. A combined, covered arrival space could help to address this.</p>      | <p>As a result of available funding and through the evolution of the competition winning design in response to stakeholder feedback, the new building is now a stand-alone structure. Whilst there is no longer a physical connection between the buildings, the connection between the new and existing gallery buildings is now realised through improved landscaping and public domain improvements, including the Entry Plaza and Art Garden located over the land bridge.</p> <p>Given the setting and presence of the existing AGNSW, it is considered that distinguishing between the existing gallery and new SMP gallery will be easy for visitors upon arrival.</p> <p>Part of the roadway and car parking in front of the existing gallery will be converted to paved open space to create a grand entry forecourt and gathering space. The location of the pedestrian crossing opposite the existing gallery will be maintained and enhanced as an elevated "wombat" crossing. Upgrades will be made opposite this crossing to the pedestrian threshold at the Domain, removing the steps so that it becomes level access and allows enhanced vistas of the existing art gallery.</p> <p>Wayfinding and identification of facilities will be further assisted by the proposed information desk, located beneath the Entry Plaza where staff will assist people moving between the two buildings.</p> <p>The proposed Entry Plaza will create an additional arrival and entry experience for the anticipated 2 million visitors to the expanded Art Gallery of NSW. The Plaza will serve to welcome and orientate Gallery visitors before they journey inside either the new or existing building. It will also form a civic forecourt to the main entry of the proposed building and is envisioned to become one of Sydney's great public spaces for a variety of community and art activities, inspiring civic and cultural creativity and engagement.</p> <p>The Entry Plaza will be a vibrant and active civic place. It will provide improved public amenity, including seating, landscaped areas and a small café kiosk, as well as visitor information and a ticketing desk, wayfinding and signage, and cloaking facilities.</p> |

| Extract from agency submissions   | Response (prepared by Architectus)  |
|---|---|
| <b>City of Sydney Council</b>   |   |
| <p>A better consideration of the sequences of spaces in approach to, arrival, and navigation throughout the gallery (both existing and new) would be valuable. Art Gallery Road should be holistically considered as part of the sequence of spaces and designed with the forecourt of the Gallery to improve the arrival experience. This would include an improvement for pedestrians in particular, with prioritisation over vehicles in this space, and the relocation of vehicle parking and drop off from the front of the Gallery. Removal of the existing pedestrian crossing from its current location is not supported.</p> | <p>The planning of approach and arrival sequences towards the gallery along Art Gallery Road has been further considered as a holistic strategy between the RBGDT, Transport for NSW, and the AGNSW.</p> <p><u>Pedestrian access</u></p> <p>The proposed development will prioritise pedestrian access to the gallery and provide for enhanced pedestrian links through the site.</p> <p>The existing pedestrian crossing will be retained and improved in its current location, including new paving and access ramps on the Domain side of Art Gallery Road, and a new pedestrian plaza in front of the existing AGNSW steps and entrance. The pedestrian crossing in front of Woolloomooloo Gate will also be retained. An additional pedestrian crossing of Art Gallery Road will be provided in front of the Entry Plaza connecting to 'The Pavilion' café managed by the RBGDT and the Domain beyond.</p> <p>Pedestrian pathways will be widened along Art Gallery Road.</p> <p><u>Parking</u></p> <p>The current parking area in front of AGNSW will be converted into a plaza to accommodate the increased number of visitors. To enable this, the following transportation elements are planned along Art Gallery Road:</p> <ul style="list-style-type: none"> <li>– The bus stop is being relocated to the north-west of the new Gallery building on Art Gallery Road;</li> <li>– Four accessible parking spaces will be provided to the south-west of the existing gallery entrance;</li> <li>– Two taxi parking spaces will be provided to the south-west of the existing gallery entrance; and</li> <li>– The existing 'No Parking' loading zone to the east of the Entrance Pavilion will be retained and used for loading (between 6pm and 10am), drop off (2-minute limit), and coach parking (15-minute limit).</li> </ul> |
| <p>The City considers the roof to be an opportunity to further integrate into the parkland setting and is concerned that the omission of the planted roof terraces will not provide the maximum integration of the new built form into the parkland setting. This represents a significant departure from the original winning competition design.</p>  | <p>The following changes are proposed to further integrate the new gallery into its parkland setting:</p> <ul style="list-style-type: none"> <li>– An increase in the area of green roofs to roof terraces to ensure no net reduction in open space and allow the building to sit more subtly within its parkland setting; and</li> <li>– Addition of soft landscaping to the top of the fuel bunker at Lincoln Crescent to soften the view from the east.</li> </ul>   |

| Extract from agency submissions   | Response (prepared by Architectus)   |
|---|--|
| <b>City of Sydney Council</b>   |  |
| <p><b>Function</b></p> <p>The separation of the new building from the existing building would be problematic for organisation of the collection, special exhibitions and visitation across the whole Gallery. In lieu of a strong philosophical statement about why the buildings should be separated, it is suggested that this should be amended to create better connection between the two. This would greatly improve accessibility and legibility, and enable visitors to navigate the collection more efficiently across both buildings.</p> | <p>Operational matters regarding AGNSW's organisation of the art collection are a matter for the AGNSW who have significant expertise in this area.</p> <p>As detailed at Section 1.10 of the EIS, through evolution of the competition winning design in response to stakeholder feedback, the new building designed by SANAA, is now a stand-alone structure. The connection between the new and existing building is now realised through an Art Garden over the land bridge, which integrates with the proposed landscape design to create a strong visual relationship between the two gallery buildings.</p> <p>The visitation of the two galleries will be managed through various strategies including:</p> <ul style="list-style-type: none"> <li>– Cohesive programming, exhibition design and internal collections planning and artwork rotation across both buildings to ensure an equal spread of historic, contemporary, indigenous and Asian art, and international exhibitions displayed across both buildings;</li> <li>– Guided tours and visitor information printed and online will encompass both buildings at all times;</li> <li>– Landscaping linkages between the principal forecourt and the Entry Plaza will be further refined, detailed and where relevant linked to permanent high-quality wayfinding and signage.</li> </ul> <p>Refer to further methods in the heritage response to submissions prepared by GML at Appendix L.</p> |
| <p>In lieu of being able to provide a direct connection at present, the plan should accommodate the provision of a future link.</p>   | <p>No direct connection between buildings is provided as part of the proposed development. Whilst there may be potential for the provision of a future link, this would be subject to additional funding, careful assessment of impact on the heritage façade of the existing gallery building, design processes and the lodgement and approval of a development application for that purpose.</p>   |
| <p>The plan should consider the practical functioning of the gallery as a whole, providing better accessibility between the buildings, and across Art Gallery Road and from drop off locations, including coach drop-off and disability access from Art Gallery Road.</p>   | <p>Careful assessment has been undertaken of the functioning of the gallery as a whole. Since formal lodgement of the SSDA, further consultation has been undertaken with the RBG&amp;DT and Transport for NSW, and as a result, a number of design amendments have been undertaken, including the provision of parking and loading facilities along Art Gallery Road to address the Gallery's location within a broader cultural precinct. Please refer to the extent of changes within the updated Architectural Plans at Appendix C and Traffic Impact Statement at Appendix N.</p>   |

| Extract from agency submissions   | Response (prepared by Architectus)  |
|---|---|
| <b>City of Sydney Council</b>   |   |
| <b>Pedestrian Access</b>  |   |
| More direct and obvious pedestrian access between Lincoln Crescent and Art Gallery Road should be provided. The proposed pedestrian arrangements create a walking route with turns and circuitous paths as compared to the existing direct route. For pedestrians approaching from Lincoln Crescent, Art Gallery Road would not be visible when reaching the top of the stairs from Lincoln Crescent. The walking route would not be direct or intuitive and would rely on signage. | <p>This item is addressed under the response to submissions.</p> <p>The path from Lincoln Crescent follows the existing path from the outset. The addition of a pedestrian crossing on Lincoln Crescent near the intersection with Cowper Wharf Road, will provide a clear visual path. Signage will also assist. The path will work its way up the hill, meeting the glazed external lift or stairs directly up to the land bridge. There will then be a direct approach to the Entry Plaza. Persons needing accessible path of travel will enter the existing lift at Wharf Terrace Apartments (following existing access process and protocols), travel over the existing pedestrian bridge to the site to the new glazed lift, on to the land bridge, and take an accessible sweeping path to the south of the land bridge to the Entry Plaza.</p> <p>Changes to topography were discouraged as much as possible. The proposed east-west pedestrian through-site link will enhance the existing link across the site, providing improved pathways, experiences, wayfinding and lines of sight, as well as allowing for a complete circuit of the site 24/7.</p> <p>As per the existing gallery, it is envisaged that the vast majority of the visitors to the new building will approach the building from Art Gallery Road with almost none coming from the Wharf Terrace apartments lift. However, the new lift accessing the land bridge will provide disability access to the RBG&amp;D Trust lands, thereby replacing the current ramps and pathways. On the eastern side of Lincoln Crescent the existing lift will continue to provide disability access to the RBG&amp;D.</p> |
| The space (and pedestrian routes) should also be readily perceived as being publicly accessible space.  | The proposed Art Garden will be clearly identifiable as public open space as it is to provide improved access with a large central public lawn for those persons utilising through-site links and visitors to the gallery. This space seeks to improve on existing site circumstances, providing for improved landscaping whilst maintaining a sense of openness through providing unencumbered recreational open space.  |
| The pedestrian counts conducted by ARUP are circular around the site and do not clearly reflect the trajectories on which people are moving. As a result the crossings proposed on Art Gallery Road appear to satisfy the intentions of the Gallery rather than precinct pedestrian movements. New crossings should align with the primary walking paths and destinations.  | Existing crossings (which are to be retained) align directly with the entrance to the existing AGNSW and the Woolloomooloo Gate Entrance to the RBG respectively. The proposed new crossing is to be located at the midpoint of these existing crossings, to align directly with the existing northernmost pedestrian path within the Domain and the proposed Entry Plaza.  |
| <b>Bicycle Parking</b>  |   |
| The proposed visitor bicycle parking location is not suitably located being too closely located to the coach parking and a highly trafficable pedestrian area. It is recommended that visitor bicycle parking spaces be relocated to be easily visible on approach, and be easily accessible without conflict between riders, pedestrians and coach passengers.   | Bicycle parking has been relocated to the eastern side of Art Gallery Road next to Gallery 2. This area is considered most suitable under the circumstances as it remains highly visible for users whilst being an area of less pedestrian traffic. They bicycle parking can be utilised by both users of the Gallery, Botanic Garden and visitors to the broader cultural precinct.  |
| The proposed staff bicycle parking location does not encourage its use and should be reconsidered.  | The new location for bicycle parking has been determined in consultation with RBG&DT and Transport for NSW.   |

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| <b>City of Sydney Council</b>  |  |
| <p><b>Sustainability</b></p> <p>The environmental performance of the building should be maximised and targets set as part of the design rather than just noting undefined aspirations for consideration in the project.</p>  | <p>Building sustainability and environmental performance have been maximised as part of the overall building design, as reflected by the target for a 5-star Green Rating with the Green Building Council of Australia. Please refer to an overview of design considerations to achieve this target contained within the ESD report at Appendix AB of the EIS and the ESD Statement at Appendix J.</p>   |
| <p><b>Ecologically Sustainable Development (ESD)</b></p> <p><u>Heating and Cooling and Thermal Envelope Performance</u></p> <p>The proposal indicates that over 50% of the heat load that needs to be combatted (by air conditioning) is derived from heat ingress through the roof area, but also that over 50% of the annual anticipated energy use in the building is for space heating.</p> <p>This City seeks confirmation that this is what the modelling is signalling and that every effort has been made within design constraints, to limit summer heat gain within the new building spaces, and likewise full attention has been given to achieve highly efficient space heating solutions for winter months.</p> | <p>The proposal indicates that Sydney Modern is on track to have an annual energy use intensity (EUI) that is less than half that of the current heritage AGNSW building, and below the average EUI of the Gallery's BIZOT peer group of museum facilities (see graph titled "Sydney Modern Project: Energy Benchmarking"). The project is actively considering additional energy use reduction measures that will further reduce annual energy use, especially HVAC energy use. It is noted that the photovoltaic array will be amalgamated and increased in area to span the entirety of the Entry Pavilion (a total of 1,538m<sup>2</sup>).</p> <p>These design alternatives were not included in this submission because the preferred options had not been confirmed at the time of submittal. Refer to the full response at ESD Statement prepared by WSP at Appendix J.</p>   |
| <p><u>Photovoltaics</u></p> <p>Calculations suggest the 250 kWp proposal could deliver 4.6% of the electrical energy demand of the building. This is not insignificant, in the building context, but note that a larger system could readily be accommodated on the new roof area. Has a larger system been modelled for payback, energy savings and carbon abatement?</p>   | <p>It is noted that the City of Sydney has a strong commitment to renewable energy generation particularly through on-site generation and support for maximising the solar energy opportunity on the site. The ESD Statement prepared by WSP provides the following response:</p> <p><i>"The Sydney Modern project has taken a holistic sustainability approach to considering rooftop photovoltaic systems. Consideration for rooftop POV systems include:</i></p> <ul style="list-style-type: none"> <li><i>– Rooftop real estate – competing demands for the use of roof top space for outdoor sculpture and other art installation areas, green roof space, publicly accessible roof top urban space including café outdoor seating areas, and photovoltaic systems.</i></li> <li><i>– Whole of life energy and greenhouse gas benefits of installation of such systems</i></li> <li><i>– Other parameters, including structural lift from wind loading on rack mounted systems, visual implications for an iconic civic building, photovoltaic glass, building integrated photovoltaic systems</i></li> </ul> <p><i>Whilst Sydney Modern project acknowledges that a large rack mounted photovoltaic system will provide the best energy and greenhouse gas emission outcome, the project has considered other aspects and implications of the technology and have taken a balanced approach when assessing photovoltaics."</i></p> |

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| <b>City of Sydney Council</b>   |   |
| <p><u>Energy Efficiency Opportunities</u></p> <p>The ESD report states that “many further energy efficiency measures (EEMs) have been loosely or actively considered for the SMP. The analysis work to date has identified several EEMs that have a high potential to significantly reduce energy use or increase thermal comfort and the stability of internal conditions”.</p> <p>The City urges that all shading and glazing solutions that optimise the thermal performance of the envelope absolutely be taken up, not just “identified/considered”. This building needs to show commitment to the resilience needs of Sydney in 2030, 2050 and beyond when Sydney will be hotter in summer, and experience both more extreme heat events and extended heatwave conditions. It is prudent to design the city’s high profile public buildings to meet well known, CSIRO modelled future conditions.</p> | <p>The ESD Statement prepared by WSP provides:</p> <p><i>“Energy efficiency has been embedded within the Sydney Modern project, through a high-performance shading, glazing and a high performance thermal envelope. These elements improve energy efficiency of the design, as well as aid the stability of the internal conditions for the project. In particular, the façade’s ability to maintain internal thermal stability during extreme heat events has been studied and has influenced the design and specification of the entire building envelope. These initiatives and performance levels are considered under both a “Test Reference Year” weather condition, which is a typical year of weather free from extreme events and is best practice for dynamic energy modelling, and a recent year with extreme heat that compares to CSIRO modelled future conditions.</i></p> <p><i>Climate resilience of the project is considered under the Resilience – Climate Change section.”</i></p> |
| <p><u>Water and Stormwater</u></p> <p>The City Support’s the water efficiency, rainwater harvesting, water reuse and stormwater cleansing commitments in the ESD Strategy. The City recommend re-use of stormwater for toilet flushing as well as for cooling tower make-up. The proponent should clarify what is being proposed in the cooling system, cooling towers, harbour heat rejection or both. If harbour heat rejection is proposed then modelling is required to assess potential ecological and harbour temperature impacts of such a solution.</p>   | <p>As detailed at length throughout the EIS, a seawater heat exchange system is proposed to provide cooling to the proposed building, which utilises and extends into Woolloomooloo Bay. This provides a more sustainable, less energy intensive, and less visually intrusive option of cooling the building in comparison to traditional cooling towers. Therefore, no cooling towers are proposed nor required for the proposed development. A Marine Impact Assessment was also prepared to determine impacts on marine ecology of the seawater heat exchange system.</p> <p>Refer to updated Sea Water Heat Exchange Report at Appendix H and sea water heat exchange drawings as part of the architectural package at Appendix C, and Appendix R (Marine Impact Assessment) of the EIS for a detailed assessment of potential environmental impacts and mitigation measures associated with this seawater heat exchange system.</p>  |
| <p><u>Resilience – Climate Change</u></p> <p>The inclusion of a detailed climate adaptation plan is recognised and endorsed, but it recommended this not be deferred to a later stage of the proposal – the planning and design work around resilience and climate change should be a priority in the design of the proposal.</p>   | <p>Climate change and environmental resilience are a priority of the SMP, as detailed within Section 6.17 and Appendix AB (ESD Report) of the EIS, and the ESD Statement prepared by WSP at Appendix J.</p> <p>The ESD Statement provides:</p> <p><i>“The Sydney Modern Project team agree; resilience and climate change should be a priority in the design of the proposal. Note that many resilience measures have already been incorporated in the project, including: building entry thresholds well above recommended future flood inundation levels, locating all critical electrical and mechanical services in mezzanines well above recommended future flood levels, high performance facades to increase internal thermal stability, and additional internal insulated gallery doors to increase thermal stability in case of power loss.”</i></p>   |



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| <b>City of Sydney Council</b>  |   |
| <b>Remediation</b><br><p>The Section B site audit statement should refer to the relevant version of the remediation action plan (RAP). The audit statement refers to a RAP dated 14 November 2016 which is not submitted. A RAP dated 25 September 2017 is included in the application documentation.</p>  | <p>This requirement is noted and can be included as a condition of consent.</p>   |
| <b>Traffic and Transport</b><br><p>Vehicle access to the proposed entry point will require the central median in Lincoln Crescent to be reduced in length and removal of two car parking spaces opposite. The proposal also involves extending the footpath and installing a new pedestrian crossing near Cowper Wharf Rd by removing four car parking spaces on the western side. These changes would need separate Local Pedestrian, Cycling and Traffic Calming Committee endorsement.</p>                    | <p>This item is noted. Section 4.42(1)(f) of the Environmental Planning and Assessment Act 1979 (EP&amp;A Act) provides that an authorisation under Section 138 of the Roads Act 1993 cannot be refused if it is necessary for carrying out State significant development that is authorised by a development consent under Division 4.7 of the EP&amp;A Act and is to be substantially consistent with the consent.</p>  |
| <u>Loading and Unloading</u><br><p>All deliveries, loading, unloading and servicing associated with the site (including café, retail, galleries, functions, catering, workshops / educational, waste management, etc) should be required to be carried out wholly within the site at all times.</p> <p>All vehicles should be required to enter and depart the site travelling in a forward direction (i.e. no reversing movements are to be conducted in the public domain).</p>                                | <p>The existing loading dock servicing the AGNSW is accessed off Art Gallery Road and will be retained. A new dedicated loading dock is proposed as part of the expansion to provide service access for deliveries of art, and for general goods and waste for the various functions of the new building. The new loading dock will be accessed from Lincoln Crescent within the new building, and can operate independently of the existing dock servicing the AGNSW (accessed off Art Gallery Road). The new loading dock will minimise any increase in vehicular movements associated with the existing loading dock, thus limiting any increase in potential pedestrian and loading vehicle conflict along Art Gallery Road. Both loading docks provide access for the loading of two HRV vehicles (being 12.5 metres long) via a secure entry point. All vehicle movements (including reversing) will be managed within the secure perimeter of the loading dock.</p>  |
| <b>Contributions</b><br><p>To justify the request for an exemption for contributions under the Central Sydney Contributions Plan (section 61 contributions), a cost summary report distinguishing between costs attributable to each of the different aspect of the development requesting to be exempted from contributions should be included with justification provided for each component. This should be provided to the City for further consideration prior to any determination of the application.</p> | <p>As noted at Section 4.3 of the EIS, the Central Sydney Development Contributions Plan 2013 (Contributions Plan) applies to development in Central Sydney that requires consent, has a development cost over \$200,000 and is not exempt development. The Contributions Plan therefore applies to the proposed development unless it is specifically exempted.</p> <p>The Contributions Plan provides for a Levy calculated at 1 per cent of the development cost. In the case of the proposed development, which has a CIV of \$275,387,633.00 (Refer Appendix L of the EIS), this equates to a levy fee of \$2,753,876.33. Note that GST is not applicable to Section 61 Development Contributions.</p> <p>Section 2.2(c) of the Plan allows for works that may be exempted from the Levy upon written application to the City of Sydney. This was provided for under Section 4.3 of the EIS and it is requested that the following elements of the proposed works be exempt from the levy, with further detail to support this request provided below.</p> |

| Extract from agency submissions |  | Response (prepared by Architectus) |   |
|---------------------------------|--|------------------------------------|---|
| City of Sydney Council          |  |                                    |   |
|                                 | Scope of Works                                       | Cost                               | Reason for Exemption  |
|                                 | Gallery 8 / Lower Level 4<br>(Fuel Bunker Gallery)   | \$16,717,436                       | <p>The use of this disused naval Fuel Bunker as gallery space is a key aspect of the proposed development, as it will provide for the sensitive adaptive reuse of this important heritage item. The proposed use of this Fuel Bunker as gallery space is an optimal respectful outcome which will preserve this significant asset for the enjoyment of the people of Sydney and NSW into perpetuity.</p> <p>The proposed development does not seek to alter this space, other than to provide for physical access and services to support the use of this Fuel Bunker as active gallery space. There are significant public benefits in the adaptive use of this valuable heritage space, which will be free to access for all visitors to the gallery, which is consistent with Cl.2.2 of the Contributions Plan.</p> <p>As such, these works should be exempt from any development contributions.</p> |
|                                 | Energy Saving Measures – Rooftop Photovoltaic Panels | \$1,090,000                        | <p>The proposed development provides for 1,538m<sup>2</sup> of rooftop photovoltaic panels which are provided as an energy saving measure and contribute to the overall energy efficiency (and associated green star rating) of the building, which is consistent with Cl.2.2 of the Contributions Plan.</p> <p>As such, these works should be exempt from any development contributions.</p>   |
|                                 | Water Saving Measures – Rainwater Reuse              | \$6,170,696                        | <p>The proposed development provides for Rainwater Reuse infrastructure which is provided as a water saving measure and will contribute to the overall energy efficiency (and associated green star rating) of the building, which is consistent with Cl.2.2 of the Contributions Plan.</p> <p>As such, these works should be exempt from any development contributions.</p>  |
|                                 | Green Roofs – Rooftop Gardens                        | \$2,586,503                        | <p>The proposed development proposes 1,761m<sup>2</sup> of rooftop gardens which are provided as an energy saving measure and contribute to the overall energy efficiency (and associated green star rating) of the building, which is consistent with Cl.2.2 of the Contributions Plan.</p> <p>As such, these works should be exempt from any development contributions.</p>   |
|                                 | Through Site Links – Hillside lift & Pathways        | \$2,514,256                        | <p>The through-site link from the Domain to Woolloomooloo will be maintained and enhanced, along with installation of a new public external hillside lift for universal access. This lift will be publicly accessible at all times and will result in improved accessibility over existing site circumstances which are convoluted and of a considerable distance.</p> <p>There will be significant public benefits in these public domain upgrades and provision of the new publicly accessible hillside lift, which is consistent with Cl.2.2 of the Contributions Plan.</p> <p>As such, these works should be exempt from any development contributions.</p>   |

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|---------------------------------|---|
| <b>City of Sydney Council</b>   |   |
|                                 | <p>A cost summary report has been prepared that breaks down the specific items for which exemptions are sought. Please refer to this at Appendix I.</p> <p>The proposal also includes provision for the installation of artwork within the public domain, which are considered to constitute Works in Kind (estimated at \$3,500,000). The exact nature or location is specific to the type of art proposed, however generally includes sculptures, features of installations within the public domain.</p> <p>Subject to review by Council, pursuant to Cl.2.5 of the contributions plan, Works in Kind may be provided as an alternative to monetary and it is requested that these works be exempted from the Levy amount payable.</p> |

| Extract from agency submissions   | Response (prepared by Architectus)   |
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| <b>Transport for NSW</b>  |  |
| <p><b>Art Gallery Road Bus Stop</b></p> <p>The bus stop on the eastern side of Art Gallery Road is proposed to be relocated approximately 100m to the south of the existing location. This will increase the walking distance for bus customers accessing the Art Gallery of NSW.</p> <p>TfNSW requests the bus stop is retained as close as possible to the existing location.</p>   | <p>The northbound bus stop adjacent to the RBG Woolloomooloo gate is to be retained.</p> <p>Through ongoing discussions with the RBG&amp;D and TfNSW, the southbound bus stop has been located to be opposite the existing northbound bus stop to provide good legibility for users as detailed within the amended plans at Appendix C. Weather shelter is available for bus patrons under the entry plaza canopy.</p> <p>It is intended to signpost this zone for loading between 6am and 10am prior to the Art Gallery opening time, and for the bus zone to commence from 10:00am when services commence operation as agreed with TfNSW. This arrangement can be monitored to ensure bus operations are adequately catered for.</p> |
| <p><b>Coach Pick up/ Drop off</b></p> <p>The coach parking is proposed to be relocated from the drop-off loop in front of the Gallery to the western side of Art Gallery Road. A pedestrian crossing has been shown to accommodate people walking between the coach parking and the Art Gallery of NSW. The relocation of the coach pickup/ drop-off requires visitors to cross Art Gallery Road, which does not occur under the existing situation.</p> <p>This may result in significant delays for traffic, in particular bus services, travelling along Art Gallery Road. In addition, the coach parking reduces the available footpath width for pedestrians, at a location where pedestrian volumes are high, particularly in the middle of the day.</p> <p>TfNSW requests that coach parking is relocated within the existing drop-off loop in front of the Gallery to minimise conflicts with general traffic, buses, pedestrians and cyclists.</p> | <p>Changes have been made to the coach drop-off area in consultation with Transport for NSW and RBG&amp;DT since formal lodgement of SSDA. It will now be located in front of the existing gallery building on Art Gallery Road.</p>   |

| Extract from agency submissions   | Response (prepared by Architectus)   |
|---|--|
| <b>Transport for NSW</b>  |  |
| <p><b>Accessible Parking, Public set-down bays and Taxi Rank</b></p> <p>Accessible Parking, public set-down bay and a taxi rank are all proposed to be relocated from the Art Gallery's forecourt area to bays along Art Gallery Road.</p> <p>TfNSW requests that the applicant provide further justification for the relocation of these facilities from the forecourt into Art Gallery Road.</p>  | <p>The current parking area in front of AGNSW will be converted from roadway to open space in a civic paved forecourt to accommodate the increased number of visitors.</p> <p>The locations for accessible parking, public set-down bay and a taxi rank have changed. The new locations have been determined in consultation with Transport for NSW and RBG&amp;DT since formal lodgement of SSDA.</p> <p>The following parking bays will be provided along Art Gallery Road:</p> <ul style="list-style-type: none"> <li>– Four accessible parking spaces will be provided to the south-west of the existing gallery entrance;</li> <li>– Two taxi parking spaces will be provided to the south-west of the existing gallery entrance;</li> <li>– The existing 'No Parking' loading zone to the east of the Entrance Pavilion will be retained and used for loading (between 6pm and 10am), drop off (2-minute limit), and coach parking (15-minute limit); and</li> <li>– The bus stop is being relocated to the north-west of the new Gallery building on Art Gallery Road.</li> </ul> |
| <p><b>Pedestrian Crossings</b></p> <p>The proposal includes the removal of the existing pedestrian crossing which caters for the main pedestrian desire line between the Domain and the entrance to the Art Gallery. In addition, two new pedestrian crossings are proposed to the north and south of the existing pedestrian crossing. Details on how pedestrians will be redirected to the new pedestrian crossings have not been provided.</p> <p>TfNSW requests that the existing crossing be retained and the applicant consult with the Sydney Coordination Office and Roads and Maritime Services in relation to the location of any new pedestrian crossings.</p> | <p>The existing pedestrian crossing will be retained and improved in its current location, including new paving and access ramps on the Domain side of Art Gallery Road, and new paved pedestrian forecourt in front of the existing AGNSW steps and entrance. The pedestrian crossing in front of the RBG Woolloomooloo Gate will also be retained. An additional pedestrian crossing will be added in front of the Entry Plaza connecting to 'The Pavilion' café managed by the RBG and existing pathway crossing the Domain to the city centre beyond.</p> <p>Pedestrian pathways will be widened in front of the gallery along Art Gallery Road.</p>   |
| <p><b>Art Gallery Road 'No Parking'</b></p> <p>The proposed plans do not retain the existing 'No Parking' on the western side of Art Gallery Road, which is used by delivery vehicles accessing the adjacent restaurant within the parking.</p> <p>TfNSW requests that the applicant provides justification for the removal of the 'No Parking' Zone and identify an alternative location for servicing and loading vehicles.</p>   | <p>The existing 'No Parking' loading zone on the western side of Art Gallery Road will be retained and used for loading and deliveries to 'The Pavilion' restaurant managed by the RBG.</p>  |

| Extract from agency submissions   | Response (prepared by Architectus)   |
|---|--|
| <b>Transport for NSW</b>  |  |
| <p data-bbox="129 339 1115 371"><b>Construction Pedestrian and Traffic Management Plan</b></p> <p data-bbox="129 379 1115 499">Several construction projects are likely to occur at the same time as this development within the CBD. The cumulative increase in construction vehicle movements from these projects could have the potential to impact on general traffic and bus operations within the CBD, as well as the safety of pedestrians and cyclists particularly during commuter peak periods.</p> <p data-bbox="129 507 1115 539">TfNSW requests that the applicant be conditioned to the following:</p> <ul data-bbox="129 555 1115 1444" style="list-style-type: none"> <li data-bbox="129 555 1115 643">– Prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with the Sydney Coordination Office within TfNSW. The CPTMP needs to specify, but not to be limited to, the following: <ul data-bbox="163 651 1115 1257" style="list-style-type: none"> <li data-bbox="163 651 1115 683">– Location of the proposed work zone;</li> <li data-bbox="163 691 1115 722">– Haulage routes;</li> <li data-bbox="163 730 1115 762">– Construction vehicle access arrangements;</li> <li data-bbox="163 770 1115 802">– Proposed construction hours;</li> <li data-bbox="163 810 1115 842">– Estimated number of construction vehicle movements;</li> <li data-bbox="163 850 1115 882">– Construction program;</li> <li data-bbox="163 890 1115 922">– Consultation strategy for liaison with surrounding stakeholders;</li> <li data-bbox="163 930 1115 1010">– Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works;</li> <li data-bbox="163 1018 1115 1050">– Cumulative construction impacts of projects including Sydney Light Rail Project.</li> <li data-bbox="163 1058 1115 1137">– Existing CPTMPs for developments within or around the development site should be referenced in the CPTMP to ensure that coordination of work activities are managed to minimise impacts on the road network;</li> <li data-bbox="163 1145 1115 1257">– Proposed mitigation measures. Should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified and included in the CPTMP; and</li> </ul> </li> <li data-bbox="129 1265 1115 1444">– The applicant shall provide the builder's direct contact number to small businesses adjoining or impacted by the construction work and the Transport Management Centre and Sydney Coordination Office within Transport for NSW to resolve issues relating to traffic, freight, servicing and pedestrian access during construction in real time. The applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction.</li> </ul> | <p data-bbox="1137 339 2132 371">The following requirements are noted and can be included as conditions of consent:</p> <ul data-bbox="1137 379 2132 515" style="list-style-type: none"> <li data-bbox="1137 379 2132 451">– Preparation of a Construction Pedestrian and Traffic Management Plan (CPTMP), to address all required items as described, in consultation with Transport for NSW.</li> <li data-bbox="1137 459 2132 515">– Final plan will be provided to the Coordinator General, Sydney Coordination Office for endorsement prior to the commencement of work.</li> </ul> |

| Extract from agency submissions  | Response (prepared by Architectus)  |
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| <b>Transport for NSW</b>   |   |
| <p>– Submit a copy of the final plan to the Coordinator General, Sydney Coordination Office for endorsement, prior to the commencement of any work.</p> <p>TfNSW requests that the applicant consults with the Sydney Coordination Office within TfNSW in relation to the above issues. TfNSW would be pleased to consider any further material forwarded from the applicant.</p>  |   |
| Extract from agency submissions  | Response (prepared by Architectus)  |
| <b>Sydney Water</b>  |   |
| <p>Due to the proximity of the proposed development to Sydney Water assets, we recommend that Council impose the following conditions of consent:</p>  |   |
| <p><u>Building Plan Approval</u></p> <p>The approved plans must be submitted to the Sydney Water Tap in™ online service to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easement, and if further requirements need to be met.</p>  | This requirement is noted and can be included as a condition of consent.                        |
| <p><u>Section 73 Certificate</u></p> <p>A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water.</p>  | This requirement is noted and can be included as a condition of consent.                        |
| Extract from agency submissions  | Response (prepared by Architectus)  |
| <b>Roads &amp; Maritime Services</b>   |   |
| <p>No objection subject to the following conditions:</p>   |   |
| <p>1) An Interface Access Agreement is to be developed and finalised between Roads and Maritime and the developer prior to construction works being undertaken.</p>  | This requirement is noted and it is anticipated this can be included as a condition of consent. |
| <p>2) The developer may be required to enter into a Works Authorisation Deed (WAD) for the above mentioned works. Please note that the WAD will need to be executed prior to Roads and Maritime assessment of the detailed civil design plans.</p>   | This requirement is noted and it is anticipated this can be included as a condition of consent. |
| <p>The Notice of Exhibition notes that Lots 107 and 108 of DP1105308 have been flagged as affected by the development. These lots are currently subject to a lease agreement to AML for purposes of the Eastern Distributor. Furthermore, Roads and Maritime have an existing agreement in place with Royal Botanic Garden and Domain Trust (RBG&amp;DT) to procure a sub-lease between AML and RBG&amp;DT for the top surface of the Art Gallery Land Bridge which is also part of Lots 107 and 108 of DP1105308.</p> | This item is noted.   |

| Extract from agency submissions   | Response (prepared by Architectus)  |
|---|---|
| Office of Environment & Heritage (Heritage Council of NSW)  |   |
| <p><b>Conversion of open space</b></p> <p>At its meeting on 4 May 2016, the Heritage Council raised concern about the conversion of public space to private space and the setting of a precedent.</p> <p>At the meeting on 4 October 2017, the proponent advised the Approvals Committee that the more compact footprint in the revised proposal reduced the public space converted to private space.</p> <p>Despite the reduced building in the revised proposal, the proposed footprint occupies approximately 1 ha of the 29ha of the RBG&amp;D. This represents an appreciable loss of open space in the Domain.</p> <p>Despite the fact that this area of the Domain is currently not intensely used, the proposal will prevent this open area being freely used and accessed by the community in the future. This is part of the heritage significance of the Domain as an early designated landscape for public use (1831).</p> <p><u>Recommendation:</u> At least half of the proposed landscaped roofs should be freely accessible by the community (at least during the day).</p> <p><u>Reason:</u> So that the proposed building with its landscaped roofs are not alienated from the RBG&amp;D but are integrated into the community's use and sense of communal ownership of the Domain.</p> | <p>The proposed site was endorsed in 2014 by the Royal Botanic Garden and Domain Trust for the design competition because it allows for building predominantly over existing built structures, is less utilised than other parts of the Domain, and has the least adverse impact on the heritage significance of the RBG&amp;DT and the existing Art Gallery NSW than it would on other areas of the Domain.</p> <p>The proposed justification for use of open space was provided in the EIS, and is provided within the Response to Submissions report (refer response to Theme 1).</p> <p>There will be four landscaped roofs in the new Sydney Modern building with three publicly accessible roofs. The terraces are proposed to be connected to each other through paths that can be accessed from the different levels of the building. Each terrace is planted with vegetation to bring the landscape closer to the visitors and their experience of the Gallery. Of the gallery's exterior roof space, 1,426m<sup>2</sup> will be landscaped, 1,536m<sup>2</sup> will be occupied by photovoltaic panels, and 2,256m<sup>2</sup> will be publicly accessible by all Gallery visitors, free-of-charge, during Gallery opening hours. The ability to provide more green roofs is limited by the sustainability credentials of the project; rainwater runoff is collected from the roofs to be able to feed the cooling towers on the existing gallery building. Provision of any greater area of green roofs will limit the amount of runoff collected that can be used for cooling purposes.</p> |

| Extract from agency submissions  | Response (prepared by Architectus)  |
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| <b>Office of Environment &amp; Heritage (Heritage Council of NSW)</b>  |   |
| <b>Proposed entry to the extension competing with existing gallery entry in the 1902 WL Vernon portico</b>   |   |
| <p>At its meeting on 4 May 2016, the Heritage Council advised that the main entrance should be maintained as the primary entrance to the Gallery.</p>  | <p>The two buildings are distinct, each with its own entrance. The current front entry to the AGNSW main gallery will remain and will be enhanced by converting roadway to paved pedestrian forecourt area, and the existing pedestrian crossing will be maintained and enhanced. The updated proposal has been revised in a number of ways which maintain the 1902 Walter Liberty Vernon portico as an equal primary entrance, including the described improvements to the steps on the western side of Art Gallery Road and the cohesive linking of paved surfacing between the new Entry Plaza and existing principal forecourt.</p>                 |
| <p>Despite proponent's assurances that the existing 1902 entry will be maintained as the main entry, the proposed entry will be much larger and have more extensive ticketing and cloak facilities. It is likely that the new entry will compete with and eventually supersede the 1902 entry.</p> | <p>The heritage statement prepared by GML at Appendix L provides for various strategies to ensure the existing gallery remains current and relevant. For example, there will be cohesive programming, exhibition design and internal collections planning and artwork rotation across both buildings to ensure an equal spread of historic, contemporary, indigenous and Asian art, and international exhibitions will be displayed across both buildings, thus continuing to draw adequate visitation and public participation into all areas of the institution. Refer to other strategies in the supplementary heritage statement at Appendix K.</p> |
| <p>There is no information to confirm the balance of use between the existing galleries and the proposed galleries, so that the balance of permanent and temporary art displays is even between the buildings.</p>   | <p>The architectural drawing set at Appendix C shows the existing and proposed plans. The entry to the existing gallery will be enhanced by converting roadway to open space to create civic paved entry pedestrian forecourt. The civic treatment will be mirrored opposite with regrading of pedestrian threshold to western side of Art Gallery Road to create a level area with widened vistas of the existing gallery building.</p>  |
| <p><u>Recommendation:</u> amendment to proposal or condition of approval:</p>  |   |
| <p>A plan showing both the existing and proposed buildings is to be submitted to the satisfaction of the Heritage Council of NSW or its delegate to confirm the retention of the current front entry as the main entry.</p>  |   |
| <p><u>Reason:</u> To confirm that the heritage significance of the Art Gallery is not diminished as a result of a change in the main entry point.</p>  |   |



| Extract from agency submissions  | Response (prepared by Architectus)   |
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| Office of Environment & Heritage (Heritage Council of NSW)   |  |
| <p><b>Proposed Entry Plaza roof</b></p> <p>At its meeting on 4 May 2016, the Heritage Council advised that the proposed shade structure has a potential to compete with the historic Art Gallery building.</p> <p>At its meeting 4 October 2017, the Approvals Committee felt that the entrance canopy is still massive and wonders if it needs to be that large.</p> <p>The proposed Entry Plaza roof will be highly conspicuous in views along historic Art Gallery Road and will compete with and reduce the historic dominance of the AGNSW's west elevation and its portico. Any adverse visual impact will be exacerbated by the height of the proposed roof, its proximity to Art Gallery Road and its approximately 40m length seen from Art Gallery Road.</p> <p><u>Recommendation:</u> amendment to proposal or condition of approval:</p> <p>Despite the fact that the proposed Entry Plaza roof will be lower than the AGNSW's main cornice, its visibility along Art Gallery Road should be substantially reduced so the new roof does not compete with the existing building and its portico, and is clearly subservient to the existing gallery and the 1902 portico. This may be achieved either:</p> <ul style="list-style-type: none"> <li>– by setting the roof behind the Art Gallery façade; and</li> <li>– by increasing the separation between the proposed entry plaza roof and the Art Gallery.</li> </ul> <p><u>Reason:</u> So that the new roof is still a contemporary addition to the overall composition, functions as an open shaded public area and identifies the entry to the new galleries, but is much less conspicuous and does not visually compete with the significant existing gallery and its portico.</p> | <p>The proposed Entry Plaza is a transparent space which will be the point of orientation for the existing building and the new building. The space will become a focal point of activity, providing the opportunity for Gallery visitors and the broader public to utilise the space and appreciate the Gallery and its surroundings as a whole.</p> <p>Since the exhibition of the SSDA, the Entry Plaza roof has been rotated and set back away from Art Gallery Road to maintain the view from the Herbarium and the RBG Woolloomooloo Gate to the Vernon Facade of the existing building. The increase in setback is proposed to be 1.7 metres to the north west corner of the Entry Plaza, and 4.4 metres to the south west corner of the Entry Plaza, thereby reducing the visibility of the Entry Plaza roof when viewed along Art Gallery Road. In addition, the roof of the Entry Plaza will be reduced in area by the insertion of an 'aperture', to give a total area reduction from 1,535m<sup>2</sup> to 1,390m<sup>2</sup>, yielding 145m<sup>2</sup> less area.</p> <p>The slight rotation of the Entry Plaza southeast results in a greater connection between the old and new buildings, rather than the plaza sitting 'in front' of both buildings in views north and south along Art Gallery Road. This is considered a more cohesive design outcome, preferable to further increasing the separation of the two buildings and Entry Plaza between.</p> <p>The reduction in prominence, siting and size of the Entry Plaza roof reduces the impacts of the new addition on the existing gallery and 1902 portico particularly from the western elevation to Art Gallery Road. The Entry Plaza roofline in the updated proposal dips lower than previously proposed beneath the Vernon façade's main cornice line, retaining an adequate reading of the existing building when viewed from the RBG Woolloomooloo Gate. The slim columns and partially transparent roof material (white fritted glass) provide an inviting open-air space from which the architecture of both buildings can be appreciated from the generous volume beneath the roof.</p> <p>Though sizeable, the Entry Plaza will provide the amenity and accessibility currently limited at the front of the existing building by virtue of its significant classical design that provides only limited shelter from weather within its columned portico. Its primary function, as a meeting place, a place of arrival and a place of rest, planning and preparation demands a size which will cater to a capacity befitting this primary purpose, including the anticipated 200,000 organised school student visits to the expanded Gallery. Planting and considered landscaping of the Entry Plaza will link it to the Phillip precinct of the Domain to the west and draw visitors through to the revitalised land bridge precinct. With the opportunity to display outdoor art, the Entry Plaza will also provide a free, outdoor art experience for all members of the public, irrespective of whether they choose to visit either the existing or new Gallery buildings.</p> <p>An architectural streetscape elevation plan (refer Appendix C) has been prepared showing the view of existing and proposed gallery buildings along Art Gallery Road. It is very clear from the elevation that the scale, form and solid architectural style of the existing gallery building will be the dominate element in the streetscape over the proposed building.</p> |

| Extract from agency submissions   | Response (prepared by Architectus)   |
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| <b>Office of Environment &amp; Heritage (Heritage Council of NSW)</b>   |  |
| <b>Proposed alterations to the existing gallery setback to Art Gallery Road</b>   |  |
| <p>At its meeting 4 October 2017, The Approvals Committee agreed that the curved carriageway in the existing forecourt should be preserved as a reference so significance can be understood.</p>  | <p>Whilst the updated proposal minimises interventions in the front of the existing building and its significant Vernon façade, the removal of part of the low stone walls at their northern most and southernmost ends remains part of the design. The alignment of the wall will be interpreted in the paving using a contrasting style of surface finish determined to be complementary to the warmth of the Vernon façade and cohesive with the landscaped surface proposed in the new scheme.</p> |
| <p>The proposal involves the removal of the low curved sandstone walls that bounded the semi-circular carriageway in front of the 1902 portico. The walls have defined this area since the 1920s. The proposal drawings show that the low walls will be removed and paving will evoke the layout, but there is no information to distinguish the paving and describe their junctions.</p> | <p>The elements of the sandstone from the end of the wall, which will be removed, are to be reused to construct a section of the wall along the carriageway at the opposite end, adjacent to the portico. A widened pedestrian walkway will be provided, and the wall will reinforce the carriageway design and will assist in managing pedestrian flow around the Vernon facade. The newel/end bollards will be restored to the ends/junctions of the earlier design.</p>                             |
| <p><u>Recommendation:</u> amendment to proposal or condition of approval:</p>   |  |
| <p>The footprint of the 1920s low carriageway walls is to be interpreted in the new paving. The sandstone from the low wall is to be salvaged, reused and interpreted within the proposed development.</p>  |  |
| <p><u>Reason:</u> To interpret the layout and materials of the former 1920s low wall that edged the semicircular carriageway.</p>   |  |

| Extract from agency submissions   | Response (prepared by Architectus)   |
|---|--|
| <b>Office of Environment &amp; Heritage (Heritage Council of NSW)</b>   |  |
| <b>Proposed alterations to the existing gallery setback to Art Gallery Road</b>   |  |
| <p>At its meeting 4 October 2017, the Approvals Committee expressed concern over direction of foot traffic and decrease in covered areas (acknowledging larger street-facing canopy on street frontage).</p>  | <p>The updated proposal includes a rationalised landscape scheme for the front of the existing building and its significant Vernon façade. The updated proposal builds on the principles of maintaining the strong axial and ceremonial link to the Gallery through the Domain towards Macquarie Street, preserves the integrity of the curved carriageway and minimises additional clutter and intrusion in the principal forecourt. The revised design retains the Art Gallery Road pedestrian crossing and the key entry pathway from the Domain to the existing Gallery building.</p>  |
| <p>The proposal involves the relocation of the pedestrian crossing from in front of the 1902 portico to a position closer to the new Entry Plaza.</p>   | <p>The centreline of the base of the AGNSW portico stone steps has been used as a reference plane for the treatment of the stone steps across Art Gallery Road. The existing stone steps are proposed to be removed and their location regraded and levelled to be consistent with the principal forecourt and thus strengthen the link through to this space and enhance the approach view from this point. New, lengthened steps would be added running parallel to the path, inviting pedestrian traffic from the grassed areas of the Domain. The 1997 sphinxes framing the existing steps would be retained and relocated within this area so as to still act as entrance pylons.</p> |
| <p>There is no information in the proposal to confirm if the c1950s steps on the west side of the semi-circular carriageway will be retained and how pedestrians will be directed to both the 1902 entry and new entry.</p>                               | <p>These aspects of the revised proposal reinforce the significant, principal axial approach to the Vernon portico from the western side of Art Gallery Road and represent a positive heritage outcome for the existing Gallery building.</p>  |
| <p>The proposal appears to direct pedestrians coming from the Domain to the new entry instead of the existing entry. Any pedestrian control structures may obstruct the view of the 1902 portico from the 1950s steps.</p>                                |  |
| <p><u>Recommendation:</u> amendment to proposal or condition of approval:</p>   |  |
| <p>The c1950s stone steps on the west side of the semi-circular carriageway opposite to the 1902 portico are to be retained.</p>  |  |
| <p>Any pedestrian control structures at the western edge of Art Gallery Road should not impede pedestrians' access to the gallery's existing entry. Any pedestrian control structure is to be visually recessive and lightweight.</p>                     |  |
| <p><u>Reason:</u> So any pedestrian control structures do not favour access to the new gallery instead of the existing entry and do not obstruct the view of the 1902 portico from the 1950s steps on the west side of the semi-circular carriageway.</p> |  |

| Extract from agency submissions  | Response (prepared by Architectus)   |
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| <b>Office of Environment &amp; Heritage (Heritage Council of NSW)</b>  |  |
| <b>Adaptive reuse of the southern half of the former 1940s Navy Fuel Bunker (Fuel Tanks), as a gallery.</b>  | The former fuel bunker (comprised of two tanks), constructed of concrete with pre-cast concrete columns in a regular 4m grid and constructed during World War II during the 1940s, is a significant element on the site. In the updated proposal it performs a dual purpose of providing a new gallery space and new back of house and workshop spaces.  |
| The Heritage Council supports the adaptive reuse of the 1940s Fuel Tanks as a gallery.   | Gallery 8, set within the southern-most tank will be accessed via a spiral staircase on lower level 2, forming a dramatic entrance for visitors to descend and explore the new gallery space. Minimal intervention and a light touch form the approach for the refurbishment and restoration of this space, including provision of services. No change or decrease to the 6.7m ceiling height is proposed and the raw concrete finish of the ceiling is proposed to be retained. |
| The extent and size of new facilities and structures (including additional structural support and bracing for the roof) in the Fuel Tanks has not been provided in the proposal.   | Further engineering and structural advice is required to determine what additional support is required for the new galleries above this space. However, retention of original fabric is a priority and if necessary the original columns would be supplemented with new columns rather than replaced.  |
| <u>Recommendation:</u> amendment to proposal or condition of approval:   | The central wall dividing the tanks is to be retained almost in full, with only one new penetration to access the two spaces and meet fire regulations.  |
| The design of proposed structures in the former 1940s Navy Fuel Bunker (Fuel Tanks) such as new structural supports or bracing for the building above, the ramp, stair and any services, electrical and mechanical, should be lightweight and complement the character of the significant Navy Fuel Bunker (Fuel Tanks). | The approach in the northern bunker will be to retain as much significant fabric and spatial elements as possible while adapting the space to provide back-of-house facilities.  |
| <u>Reason:</u> So that the character of the significant 1940s Navy Fuel Bunker (Fuel Tanks) is not cluttered and its operation and function remains legible.   | Existing southern fuel bunker will be retained, including the tank floor, walls, columns, and roof (transparent protective finishes may be applied).   |

| Extract from agency submissions   | Response (prepared by Architectus)  |
|---|---|
| <b>Office of Environment &amp; Heritage (Heritage Council of NSW)</b>   |   |
| <b>Demolition of the northern half of the former 1940s Navy Fuel Bunker (Fuel Tanks), its Pump House and part of the stepped retaining wall.</b>  | The adaptive reuse of the northern tank and installation of a staff entrance and loading dock to Lincoln Crescent will require the removal of the existing columns within the north tank, partial removal of internal and external walls, and demolition of the associated pump house and substation. |
| The extent of demolition within the Fuel Tanks was not clarified in the proponent's presentations to the Heritage Council on 4 May 2016 and the Approvals Committee on 4 October 2017.  |   |
| The proposed demolition of the all the interior of the northern tank and its Pump House, Pump Room (despite the prior removal of machinery) and amenities building will have a major adverse impact on the integrity of this rare and significant element in the RBG & D and substantially diminish its ability to convey its original size, extent and function. |   |
| The proposed 10m opening in the stepped retaining wall is reasonable as most of the 100m long wall will be retained to illustrate its character and an understanding of its size and scale.   |   |
| <u>Recommendation:</u> amendment to proposal or condition of approval:  |   |
| The proposal should be amended to retain a substantial section of the Fuel Tanks' interior including the roof-top access hatches, concrete columns, the concrete wall dividing the tanks into two, the connecting pipe as well as the Pump House, Pump Room and amenities building.   | Reason: So that most of the rare and significant 1940s Navy Fuel Bunker (Fuel Tanks) is retained and its operation and function remains legible.  |
| The finalised design for both the Fuel Tanks should be submitted to the satisfaction of the Heritage Council of NSW or its delegate prior to the issue of the construction certificate.   |   |
| <u>Reason:</u> So that most of the rare and significant 1940s Navy Fuel Bunker (Fuel Tanks) is retained and its operation and function remains legible.   |   |

| Extract from agency submissions  | Response (prepared by Architectus)   |
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| <b>Office of Environment &amp; Heritage (Heritage Council of NSW)</b>  |  |
| <p><b>The character and setting of the eastern part of the Domain and significant views.</b></p> <p>The character and setting of the eastern part of the Domain and any impact on significant views to and from the RBG&amp;D were not presented in detail to the Heritage Council.</p> <p>The proposal will alter the character of the eastern part of the Domain.</p> <p>Significant views that would be markedly affected include:</p> <ul style="list-style-type: none"> <li>– East from Woolloomooloo Gate; and</li> <li>– North and south along Art Gallery Road.</li> </ul> <p>The proposed Entry Pavilion and Gallery 2 and the PV roof array will block the Woolloomooloo Gate view (Public Viewpoint 11, Visual Impact Assessment) and the Entry Pavilion and Plaza roof will block most of the view to the 1902 portico south along Art Gallery Road Public Viewpoint 12). The Entry Pavilion and Plaza roof will be conspicuous in the view north along the Art Gallery Road, beyond the AGNSW.</p> <p>The application does not confirm the proposed external solid walling, except as polished pre-cast units and there are no proposed colours. It is recommended that the proposed building should be much less conspicuous in all views and its external colours and materials should be subdued and take inspiration from its location on Sydney sandstone.</p> <p><u>Recommendation:</u> amendment to proposal or condition of approval:</p> <p>High reflective surfaces, large areas of unshaded glass and bright white finishes should be avoided. External colours should be subdued and take inspiration from the colours of the locality that is Sydney sandstone.</p> <p><u>Reason:</u> To reduce the impact on the Domain's character, setting and significant views. So that the appearance of this intricately composed building is subdued and sits comfortably into the landscape</p> | <p>The updated proposal includes further details on the exterior finishes of the Sydney Modern building, included in the Architectural Design Report. The approach to the materiality of the new building remains centred on employing high quality finishes, which will stand in contrast with the existing AGNSW building whilst complementing the beauty of the surrounding landscape through the qualities of lightness, transparency and permeability. Reflectivity will be minimised through the considered design of coloured and opaque finishes and provision of glazing as detailed within the Reflectivity Report at Appendix AL of the EIS and at additional reflectivity modelling at Appendix Q.</p> <p>The external finishes of the Sydney Modern building comprise a pared-back palette of warm earth coloured aggregated concrete, reconstituted stone and glass. Both the coloured concrete aggregate and the reconstituted stone reference, take inspiration from and where possible reuse the naturally occurring soil profiles, sandstone cliffs and escarpments and existing bedrock which form the landscape of the Sydney Modern site. Externally and internally, bespoke panels and clear sheltered glass enclosures will softly reflect and facilitate views of the surrounding environment whilst harsh cool tones and bright whites will be minimised.</p> <p>Considered planting at roof and terrace levels will emphasise and lengthen the connections between overlapping pavilions and place the new building sympathetically within the surrounding landscape setting. Warm earth coloured aggregate at roof level will be a predominate feature from within the gallery through the many vistas allowed by the lightness and transparency of clear glass enclosures. Transparent glass wraps around the public areas and opaque stone cladding wraps the gallery volumes. The terraces and contemplative gardens which encircle the pavilions continue and build upon the naturally occurring materials palette and creating intimate garden spaces accessed and enjoyed within the larger architectural experience.</p> <p>The curved glass material chosen for the roof of the Entry Plaza is intended to be soft in appearance, forming rhythmic waves.</p> |

| Extract from agency submissions   | Response (prepared by Architectus)  |
|---|---|
| <b>Office of Environment &amp; Heritage (Heritage Council of NSW)</b>   |   |
| <p><b>Damage due to vibration during construction</b></p> <p>Damage due to vibration during construction was not presented in detail to the Heritage Council.</p> <p><u>Potential heritage impact</u></p> <p>The Geotechnical Report Oct 17 advises that the ground adjacent to the development may experience movement due to stress changes from excavation, footings and construction. This may affect the existing building.</p> <p>Vibration as a risk to the existing building is not addressed in the draft Construction Management Plan which focuses on vibration as noise nuisance.</p> <p><u>Recommendation:</u> amendment to proposal or condition of approval:</p> <p>A heritage specific dilapidation survey and report for significant elements, materials and finishes in the existing gallery building and site (including the forecourt sculptures) is to be prepared prior to commencement of the works. The construction management plan for the development is to identify and include these significant elements, materials and finishes so that they are protected and not damaged during the work.</p> <p>The finalised construction management plan for the development should be submitted to satisfaction of the Heritage Council of NSW or its delegate for review prior to the issue of the construction certificate.</p> <p><u>Reason:</u> To protect significant elements, materials and finishes during the work.</p> | <p>A construction management plan will be prepared for the project, and heritage advice will be provided in the formulation of policies and mitigation measures to prevent damage to the current art gallery building during the construction period.</p> |
| <p><b>Trees and vegetation</b></p> <p>Significant trees and vegetation were not considered in detail by the Heritage Council.</p> <p>The proposal involves the loss of some vegetation along Art Gallery Road, the removal of two significant trees, relocation of one palm.</p> <p><u>Recommendation:</u> amendment to proposal or condition of approval:</p> <p>Significant plants and trees are to be adequately protected during the works from potential damage. Protection systems must ensure historic plants and plants are not damaged or removed.</p> <p><u>Reason:</u> To protect significant plants and trees during the project.</p>   | <p>A tree protection plan will be developed in accordance with the relevant Australian Standards as per the standard SSD condition of consent for this issue. Construction will be carried out in accordance with the tree protection plan.</p>           |

| Extract from agency submissions   | Response (prepared by Architectus)   |
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| <b>Office of Environment &amp; Heritage (Heritage Council of NSW)</b>   |  |
| <p data-bbox="129 347 387 378"><b>Historical archaeology</b></p> <p data-bbox="129 384 936 414">The following conditions should be included in any approval of this proposal:</p> <ol data-bbox="129 427 1108 975" style="list-style-type: none"> <li data-bbox="129 427 1108 518">1. The Applicant shall nominate a suitably qualified and experienced historical archaeologist who must satisfy the Excavation Director Criteria of the Heritage Council of NSW for the proposed activity and significance level.</li> <li data-bbox="129 531 1108 622">2. A suitably qualified and experienced historical archaeologist shall be on site to monitor all sub-surface works associated with excavation within areas of low to moderate archaeological potential.</li> <li data-bbox="129 635 1108 783">3. If any archaeological relics of State significance are uncovered during the excavation, all work shall immediately cease in that area and a written assessment of the nature and significance of the resource, along with a proposal for the treatment of the remains shall be submitted for the approval of the Secretary, Department of Planning and Environment and the delegate of the Heritage Council of NSW.</li> <li data-bbox="129 796 1108 975">4. Aboriginal objects: Should any Aboriginal 'objects' be uncovered by the work, excavation or disturbance of the area is to stop immediately and the Office of Environment &amp; Heritage is to be informed in accordance with Section 89A of the National Parks and Wildlife Act 1974 (as amended). Works affecting Aboriginal 'objects' on the site must not continue until the Office of Environment and Heritage has been informed. Aboriginal 'objects' must be managed in accordance with the National Parks and Wildlife Act 1974.</li> </ol> <p data-bbox="129 987 1108 1070"><u>Reason:</u> To ensure appropriate prior assessment of any unexpected archaeological finds, appropriate additional approvals and actions relevant to the type of find and its level of heritage significance.</p> | <p data-bbox="1137 347 2148 405">The historical archaeological requirements are noted and will be included within the conditions of consent.</p> |



| Extract from agency submissions  | Response (prepared by Architectus)   |
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| Office of Environment & Heritage (Heritage Council of NSW)   |  |
| <p><b>Maritime archaeology</b></p> <p>The proposal involves a new ancillary seawater heat exchange system consisting of outlet and inlet pipes laid through the sea wall and up to 60m into Woolloomooloo Bay. The proposal has the potential to substantially impact maritime heritage sites both above and below water and under the seabed. As with historical archaeology, the maritime archaeological potential in Woolloomooloo Bay and its foreshore as well as the extent of any disturbance was not clarified in the proponent's presentations to the heritage Council on 4 May 2016 and the Approvals Committee on 4 October 2017.</p> <p>The information submitted with the application does not adequately deal with maritime archaeology. There is no search of the NSW Maritime Heritage databases listed in the documents and the site surveys only involved visual surveys from the foreshores and did not include any diver inspections. This is considered to be unsatisfactory. The impact could be substantial as the large inlet and outlet pipes are proposed to run approximately 60m out into the bay. With this, it is recommended that a detailed Maritime Archaeological Assessment, and Research Design and Excavation Methodology be prepared as soon as possible and before the assessment and determination of SSD 6471.</p> <p>The maritime archaeological assessment should be prepared by a suitably qualified and experienced maritime archaeologist. The assessment should identify the archaeological potential and significance of maritime heritage sites including shipwrecks, maritime infrastructure, archaeological items and/or relics (both above and below water) that may be impacted by the proposal.</p> <p>The assessment should also include procedures and management strategies for the unexpected discovery of heritage items and/or relics. Underwater surveys may also need to be undertaken and may require remote sensing and/or diver based investigations. The Maritime archaeological Assessment should be submitted to the satisfaction of the Heritage Council of NSW or its delegate for review prior to the assessment and determination of SSD 6471.</p> <p>Following the receipt of the maritime archaeological assessment, the Heritage Council of NSW may recommend archaeological conditions to manage maritime archaeology. Matters such as (but not limited to) fieldwork methodology, artefact analysis and final reporting may be recommended.</p> | <p>A desktop Maritime Archaeological Assessment has been undertaken by David Nutley of Comber Consultants (see Appendix M). It concluded that the path of the proposed seawater heat exchange pipeline has potential to impact on cultural material dating from the usage of the adjacent foreshores, wharves, bathing pavilions that represent themes of commerce, defence, health services and recreation.</p> <p>The recommendations of the desktop study are as follows:</p> <ul style="list-style-type: none"> <li>– A site inspection, including a dive survey, incorporating video and/or still photography, be undertaken prior to finalisation of the path map of the intake and outflow pipes to assess the seawall and impact of the pipelines where they pass through that wall and to identify the location and potential significance of any potential relics lying on the bed of the bay.</li> <li>– The consultant maritime archaeologist should be contacted once the proposed method has been chosen for laying the pipes to determine the scheduling for a dive inspection of the site prior to the installation of the pipes.</li> <li>– If the pipeline is to be laid in a trench, arrangements should be made for an archaeological diver to inspect the site during the trenching or immediately upon completion of trenching (dependant on the trenching method being adopted) but prior to the installation of the pipes.</li> <li>– If any relics are found during trenching, work must cease in that area and advice sought from the archaeologist.</li> <li>– The AGNSW facilitate appropriate materials conservation for any items recovered as a result of the trenching and the archival documentation, appropriate conservation and storage.</li> </ul> <p>In addition, the Maritime Archaeologist would be invited to advise on the methods and extent of the recommended detailed seabed survey.</p> |

| Extract from agency submissions   | Response (prepared by Architectus)   |
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| <b>Office of Environment &amp; Heritage (Heritage Council of NSW)</b>   |  |
| <p><b>Interpretation</b></p> <p>Concerning the requirement for an interpretation strategy listed in the SEARs, the strategy included in the heritage impact statement at pp148-156 is considered to be a reasonable outline.</p> <p>However, the strategy should be a stand alone document and include more decisive recommendations for how a suitable range of interpretation media should be included in the project to enhance an understanding of the heritage significance of the Art Gallery and the Gardens and Domain, not just as signage panels and inserts into pavements. The interpretation strategy should also recommend that an Interpretation Plan be prepared listing the proposed media to be included in the development, locations, content and program of implementation. The revised interpretation strategy and interpretation plan should be submitted to the Heritage Council of NSW for review prior to the issue of the construction certificate.</p>  | <p>This can be required as a condition of consent.</p>   |
| Extract from agency submissions   | Response (prepared by Architectus)   |
| <b>Office of Environment &amp; Heritage (Biodiversity, Aboriginal heritage and flooding)</b>  |  |
| <p><b>Biodiversity</b></p> <p>The Terrestrial Biodiversity Impact Assessment does not propose any offsets despite the impact the removal of 141 trees has on the foraging and roosting habitat of seven (7) threatened species, all listed as vulnerable status under the Biodiversity Conservation Act, 2016 with high likelihood of occurrence on the site. This includes the Grey Headed Flying Fox (GHFF, also listed as vulnerable under the Commonwealth Environment Protection and Biodiversity Conservation Act, 1999) and Powerful Owl (both species are local individuals that visit the site regularly when site trees flower/fruit and local colonies of GHFF reside nearby), bats, two migratory birds and the Superb Fruit-Dove. The planting of 265 new trees is not considered an adequate offset. The threatened species impacted are outlined in Table 7.1 of the Terrestrial Biodiversity Impact Assessment report extracted below and Appendix 6 of the Arborist report, shown below identifies the removal of these 141 trees.</p> <p>Further, the report's assessment of significance section Appendix C omits reference to the southern myotis and large-footed myotis and also the migratory Black-faced Monarch and Rufous Fantail (report states that the site is seasonal breeding habitat for migratory birds) and the report is considered deficient in this regard.</p> | <p>WSP prepared a response to this request, which provides a formal biodiversity offset is not required because vegetation does not form part of any native vegetation plant community type.</p> <p>It also includes a Section 5A assessment prepared for the Southern Myotis. The outcome of this assessment is that the action proposed is unlikely to lead to a significant impact on the Southern Myotis or its habitat.</p> <p>The WSP response provides further justification in respect of two EPBC Act listed species, the Black-faced Monarch and Rufous Fantail. It concludes the proposed activity would not significantly affect the migratory species, and that this finding is considered appropriate in the context of EPBC Act Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. Refer to Appendix R for the response.</p> |
| <p><b>Flooding</b></p> <p>OEH considers that the flood planning levels indicated in the report for development on the footprint of the existing building of the Art Gallery are suitable. Furthermore, the expansion of the Art Gallery of NSW is located on land not subject to flooding (above the Probably Maximum Flood), therefore no impact assessment is necessary.</p>  | <p>This item is acknowledged.</p>  |

| Extract from agency submissions   | Response (prepared by Architectus)   |
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| <b>Office of Environment &amp; Heritage (Biodiversity, Aboriginal heritage and flooding)</b>  |  |
| <p><b>Aboriginal Cultural Heritage</b></p> <p>OEH notes that a due diligence Aboriginal heritage assessment was undertaken for the proposal. This is inconsistent with the Secretary's Environmental Assessment Requirements (SEARs) issued 8 June 2016. Due diligence is not a substitute for undertaking an Aboriginal cultural heritage assessment. Due diligence is a legal defence against harm under the National Parks and Wildlife Act 1974 and is inadequate to assess the impacts of the proposed development on the Aboriginal archaeological and cultural heritage values of the subject land. OEH recommends that a full Aboriginal cultural heritage assessment be prepared consistent with the SEARs.</p>  | <p>This item is noted. The requirement to prepare an Aboriginal cultural heritage assessment is acknowledged. The assessment is currently being prepared and will be provided prior to determination of the application.</p> |
| <b>NSW Environment Protection Authority</b>   |  |
| <p>EPA has the following site-specific comments:</p> <ul style="list-style-type: none"> <li>a) The need for a detailed assessment of potential site contamination, including information about groundwater and a detailed assessment of the footprint and surrounds of existing structures following their demolition;</li> <li>b) Construction phase noise and vibration impacts (including recommended standard construction hours and intra-day respite periods for highly intrusive noise generating work) on noise sensitive receivers such as surrounding residences;</li> <li>c) Construction phase dust control and management,</li> <li>d) Construction phase erosion and sediment control and management;</li> <li>e) Water quality impacts and waste disposal issues associated with construction of the proposed seawater abstraction system;</li> <li>f) Operational noise impacts on noise sensitive receivers (especially surrounding residences on adjoining and adjacent holdings) arising from operational activities, including loading dock operation, seawater pump operation, waste collection services, and mechanical services (especially air conditioning plant);</li> <li>g) The need to assess feasible and reasonable noise mitigation and management measures (including time restrictions on the use of loading dock facilities) to minimise operational noise impacts on surrounding residences;</li> <li>h) The need to assess water quality impacts on Woolloomooloo Bay associated with operation of the proposed seawater heat exchange system, including the impact of freshwater flushing and use of a pesticide to remove marine growth;</li> <li>i) Practical opportunities to implement water sensitive urban design principles, including stormwater re-use; and</li> <li>j) Practical opportunities to minimise consumption of energy generated from non-renewable sources and to implement effective energy efficiency measures.</li> </ul> | <p>This item is acknowledged and these items are addressed individually below.</p>   |

| Extract from agency submissions  | Response (prepared by Architectus)  |
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| <b>NSW Environment Protection Authority</b>  |   |
| <b>Construction phase</b>  |   |
| <b>Site contamination</b>  | These requirements are acknowledged and it is anticipated will be included as a condition of consent. |
| <p>EIS Appendix T Preliminary Environmental Study indicates that there was minor PAH contamination in two locations east of the Domain Tunnel (i.e. boreholes BH2 and BH4 which the EIS incorrectly refers to as BH5), including hydrocarbon odours.</p>   |   |
| <p>The EPA understands that a Remediation Action Plan (RAP) has been prepared and was subsequently reviewed by an accredited Site Auditor as being suitable. The RAP notes that the remediation will include excavation and off-site disposal of hydrocarbon impacted fill in the North of the site.</p>   |   |
| <p>The Site Auditor concludes that the site can be made suitable for the proposed use, that is 'commercial/industrial' and 'open space', if the site is remediated in accordance with the RAP (i.e. 'Art Gallery of NSW, Remedial Action Plan, Art Gallery of NSW Expansion - Sydney Modern Project, Art Gallery Road, Sydney, NSW', 14 November 2016, Coffey Geotechnics Pty Ltd.) and subject to compliance with conditions, being that:</p> |   |
| <p>a) groundwater is not abstracted from the site for beneficial use, and</p> <p>b) a Section A site audit statement is prepared at the completion of remediation and validation certifying suitability for the proposed use.</p>  |   |
| <p>The EPA further understands that following demolition of the decommissioned electricity substation, the footprint and immediate surrounds will be the subject of further investigation of site contamination.</p>   |   |
| <p><u>Recommendation</u>: That the proponent be required to implement the recommendations of the Remedial Action Plan as conditioned by the accredited site auditor above.</p>   |   |
| <p>That the proponent be required (following demolition of the de-commissioned fuel bunker and electricity substation) to undertake additional investigation of the footprint and immediate surrounds of the demolished structures with the scope of that investigation detailed in a sampling and analysis quality plan to be provided to the accredited site auditor for review.</p>   |   |
| <p>The proponent be required prior to commencing work to prepare and implement an appropriate procedure for identifying and dealing with unexpected finds of site contamination.</p>   |   |
| <p>The proponent be required to satisfy the requirements of the Protection of the Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 'asbestos wastes'.</p>  |   |
| <p>The proponent be required to consult with Safework NSW concerning the handling of any asbestos waste that may be encountered during the course of the project.</p>  |   |

| Extract from agency submissions  | Response (prepared by Architectus)  |
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| <b>NSW Environment Protection Authority</b>  |   |
| <p><b>Acid sulfate soils</b></p> <p>The EPA anticipates the likelihood that during the course of demolition, bulk earthworks and construction the project is likely to disturb acid sulfate soils, particularly in respect of works associated with installation of the seawater heat exchange system.</p> <p>The EPA understands that an acid sulfate soils assessment is yet to be undertaken.</p> <p><u>Recommendation:</u> The proponent be required to assess and manage any acid sulfate soil (ASS) and potential acid sulfate soil (PASS) in accordance with the 1998 Acid Sulfate Soils Manual published by the NSW Acid Sulfate Soil Management Advisory Committee (ASSMAC).</p> <p>The proponent be required to ensure all acid sulfate soil waste generated during the project is kept separate from all other waste and is assessed, classified and managed in accordance with the “Waste Classification Guidelines Part 4: Acid Sulfate Soils”.</p>   | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><b>Odour management</b></p> <p>Section 3.2 to EIS Appendix AJ Air Quality Assessment indicates that strong hydrocarbon odours were detected during soil sampling of the proposed remediation works area located towards the western end of the development site. The EPA notes that the remediation works area adjoins publicly accessible areas of the Domain and the Royal Botanic Gardens.</p> <p>Appendix J further indicates that:</p> <ul style="list-style-type: none"> <li>a) an estimated 50 truckloads of contaminated soil is proposed to be removed from the remediation area for disposal off site,</li> <li>b) remediation work would be undertaken during standard construction hours,</li> <li>c) excavation and removal would be undertaken over a period of less than one week,</li> <li>d) odour suppressants would be applied during the remediation works, and</li> <li>e) all stockpiles and truckloads of contaminated soil would be covered.</li> </ul> <p>Section 6.1 to EIS Appendix AJ suggests that “due to the short duration of the remediation works, and that the works will occurring during the daytime where thermal mixing provides more favourable dispersion, air quality impacts from the works are considered low risk”.</p> <p>However, section 11.1 EIS Appendix Y Remedial Action Plan proposes that excavation of the remediation area be staged to limit the surface area of exposed odorous material.</p> <p>Appendix J and Appendix Y do not appear to consider potential sulfurous odours arising from the exposure of acid sulfate soils during works associated with installation of the seawater heat exchange system.</p> | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |

| Extract from agency submissions   | Response (prepared by Architectus)  |
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| <p><b>NSW Environment Protection Authority</b></p> <p>Section 7 to EIS Appendix AJ recommends preparation of an Air Quality and Odour Management Plan.</p> <p><u>Recommendation:</u> The proponent be required to ensure that all such measures as may be necessary to minimise and manage any odours arising from excavation, stockpiling and removal of contaminated and acid sulfate soil are implemented, including but not limited to:</p> <ul style="list-style-type: none"> <li>a) staged excavation to limit the surface area of exposed odorous material,</li> <li>b) application of odour suppressants,</li> <li>c) effective covering of stockpiles and truckloads of excavation spoil, and</li> <li>d) expedited removal of odorous material from the development a facility legally able to accept those wastes.</li> </ul> <p>The proponent be required to ensure that any Air Quality and Odour Management Plan prepared for the project includes amongst other things:</p> <ul style="list-style-type: none"> <li>– Proactive and reactive management strategies;</li> <li>– Key Performance indicator(s);</li> <li>– Monitoring method(s);</li> <li>– Location, frequency and duration of monitoring;</li> <li>– Record keeping;</li> <li>– Response mechanisms;</li> <li>– Contingency measures; and</li> <li>– Compliance report.</li> </ul> |   |
| <p><b>Internal air quality</b></p> <p>The EPA understands that part of the de-commissioned fuel bunker is to be retained and converted for re-use and occupation as part of Sydney Modern.</p> <p>Section 6.2 to EIS Appendix AJ Air Quality Assessment indicates that the "... potential for residual petroleum hydrocarbon vapours within the fuel bunker is considered minor".</p> <p><u>Recommendation:</u> The proponent be required to consult with NSW Health concerning appropriate internal air quality:</p> <ul style="list-style-type: none"> <li>a) criteria for habitable use of those spaces previously used as a naval fuel bunker, and</li> <li>b) monitoring to confirm ongoing suitability for habitable of those spaces previously used as a naval fuel bunker.</li> </ul>   | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |

| Extract from agency submissions  | Response (prepared by Architectus)  |
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| <b>NSW Environment Protection Authority</b>  |   |
| <p><b>Noise and vibration</b></p> <p><u>General construction hours</u></p> <p>EIS Appendix U indicates that demolition, site preparation, bulk earthworks, construction and construction-related activities would be undertaken during the recommended standard construction hours. However, EIS section 6.26 indicates that “some works may need to be conducted outside the Gallery’s operating hours so as to minimise impacts on the Gallery ...”. The EPA does not accept that noise impacts, from works being undertaken to expand the Gallery on the ongoing activities of the Gallery, constitute the strong justification required for any departure from the standard construction hours.</p> <p>Section 5.5 to EIS Appendix U under the heading ‘Work Outside of Standard Working Hours’ proposes some work to occur outside standard hours, including delivery of heavy machinery. The EPA does not consider the delivery of heavy machinery outside standard hours to be justified, excepting when Roads and Maritime Services identifies a heavy machinery load as ‘oversize’ and only permits that load to be transported during the early morning (i.e. typically 2.00 am to 5.00 am).</p> <p><u>Recommendation:</u> The proponent be required to ensure that as far as practicable all demolition, site preparation, bulk earthworks, construction and construction-related activities likely to be audible at any noise sensitive receivers (such as surrounding residences) are only undertaken during the standard construction hours, being:</p> <ul style="list-style-type: none"> <li>a) 7.00 am to 6.00 pm Monday to Friday,</li> <li>b) 8.00 am to 1.00 pm Saturday, and</li> <li>c) no work on Sundays or gazetted public holidays.</li> </ul> | <p>This requirement is noted and it is anticipated this will be included as a condition of consent. As far as practicable, all works will be undertaken in accordance within standard construction hours.</p> |
| <p><u>Intra-day respite periods</u></p> <p>The EPA anticipates that those demolition, site preparation, bulk earthworks, construction and construction-related activities generating noise with particularly annoying or intrusive characteristics (such as those identified as particularly annoying in section 4.5 of the Interim Construction Noise Guideline) would be subject to a regime of intra-day respite periods where:</p> <ul style="list-style-type: none"> <li>a) they are only undertaken after 8.00 am;</li> <li>b) they are only undertaken over continuous periods not exceeding 3 hours with at least a 1 hour respite every three hours; and</li> <li>c) ‘continuous’ means any period during which there is less than an uninterrupted 60 minute respite between temporarily halting and recommencing any of the intrusive and annoying work referred to in Interim Construction Noise Guideline section 4.5.</li> </ul> <p>The EPA emphasises that intra-day respite periods are not proposed to apply to those demolition, site preparation, bulk earthworks, construction and construction-related activities that do not generate noise with particularly annoying or intrusive characteristics.</p> <p><u>Recommendation:</u> The proponent be required to schedule intra-day ‘respite periods’ for construction activities identified in section 4.5 of the Interim Construction Noise Guideline as being particularly annoying to noise sensitive receivers, including surrounding residents.</p>   | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p>   |

| Extract from agency submissions   | Response (prepared by Architectus)  |
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| <p><b>NSW Environment Protection Authority</b></p> <p><u>Construction traffic (Lincoln Crescent)</u></p> <p>EIS section 6.26 under the heading ‘construction traffic’ indicates that construction traffic would be primarily along Art Gallery Road. Section 6.26 confusingly goes on to indicate that Lincoln Crescent would be the main access for “... demolition and earthworks...”. The EPA thus anticipates significant noise impacts on residences and other noise sensitive receivers from construction traffic throughout demolition and bulk earthworks phases of the project.</p> <p><u>Recommendation:</u> The proponent be required to undertake a construction traffic noise impact assessment in respect of construction phase (including demolition and bulk earthworks) traffic movements via routes to and from Lincoln Crescent.</p>   | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><u>Idling and queuing construction vehicles</u></p> <p>The EPA is aware from previous major infrastructure projects that community concerns are likely to arise from noise impacts associated with the early arrival and idling of construction vehicles (including concrete agitator trucks) at the development site and in the residential precincts surrounding that site.</p> <p><u>Recommendation:</u> The proponent be required to ensure construction vehicles (including concrete agitator trucks) involved in demolition, site preparation, bulk earthworks, construction and construction-related activities do not arrive at the project site or in surrounding residential precincts outside approved construction hours.</p>  | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><u>Reversing and movement alarms</u></p> <p>The EPA has identified the noise from ‘beeper’ type plant movement alarms to be particularly intrusive and is aware of feasible and reasonable alternatives. Transport for NSW (nee Transport Construction Authority), Barangaroo Delivery Authority/Lend Lease and Leighton Contractors (M2 Upgrade project) have undertaken safety risk assessments of alternatives to the traditional ‘beeper’ alarms. Each determined that adoption of ‘quacker’ type movement/reversing alarms instead of traditional beepers on all plant and vehicles would not only maintain a safe workplace but also deliver improved outcomes of reduced noise impacts on surrounding residents.</p> <p><u>Recommendation:</u> The proponent be required to consider undertaking a safety risk assessment of site preparation, bulk earth works, construction and construction-related activities to determine whether it is practicable to use audible movement alarms of a type that would minimise the noise impact on surrounding noise sensitive receivers, without compromising safety.</p> | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><u>Dust control and management</u></p> <p>The EPA considers dust control and management to be an important air quality issue during demolition, site preparation, bulk earthworks and subsequent construction.</p> <p><u>Recommendation:</u> The proponent be required to:</p> <ul style="list-style-type: none"> <li>a) minimise dust emissions on the site; and</li> <li>b) prevent dust emissions from the site.</li> </ul>   | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |



| Extract from agency submissions  | Response (prepared by Architectus)  |
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| <b>NSW Environment Protection Authority</b>  |   |
| <p><u>Sediment control</u></p> <p>The EPA emphasises the importance of:</p> <ul style="list-style-type: none"> <li>a) not commencing demolition, site preparation, bulk earthworks, construction and construction-related activities until appropriate and effective sediment controls are in place; and</li> <li>b) daily inspection of sediment controls which is fundamental to ensuring timely maintenance and repair of those controls.</li> </ul>  | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><u>Waste control and management (general)</u></p> <p>The EPA further anticipates that, without proper site controls and management, mud and waste may be tracked off the site during the course of the project.</p> <p><u>Recommendation:</u> The proponent be required to ensure that:</p> <ul style="list-style-type: none"> <li>1) all waste generated during the project is assessed, classified and managed in accordance with the “Waste Classification Guidelines Part 1: Classifying Waste” (Department of Environment Climate Change and Water, December 2009) and Addendum 1 thereto;</li> <li>2) the body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to prevent any spill or escape of any dust, waste, or spoil from the vehicle or trailer; and</li> <li>3) mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site, is removed before the vehicle, trailer or motorised plant leaves the premises.</li> </ul> | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><b>Waste control and management (concrete and concrete rinse water)</b></p> <p>The EPA anticipates that during the course of the project concrete deliveries and pumping are likely to generate significant volumes of concrete waste and rinse water. The proponent should ensure that concrete waste and rinse water is not disposed of on the project site and instead that:</p> <ul style="list-style-type: none"> <li>a) waste concrete is either returned in the agitator trucks to the supplier or directed to a dedicated watertight skip protected from the entry of precipitation; and</li> <li>b) concrete rinse water is directed to a dedicated watertight skip protected from the entry of precipitation or a suitable water treatment plant.</li> </ul> <p><u>Recommendation:</u> The proponent be required to ensure that concrete waste and rinse water are:</p> <ul style="list-style-type: none"> <li>a) not disposed of on the development site; and</li> <li>b) prevented from entering waters, including any natural or artificial watercourse.</li> </ul>  | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |

| Extract from agency submissions  | Response (prepared by Architectus)  |
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| <b>NSW Environment Protection Authority</b>  |   |
| <p><b>Noise and vibration impacts</b></p> <p>The EPA anticipates that operation of the proposed facilities may change the nature and intensity of noise impacts on surrounding residences, particularly those in Lincoln Crescent.</p> <p>The proponent should commit to minimising noise impacts on surrounding noise sensitive receivers by:</p> <ul style="list-style-type: none"> <li>– preparing a detailed operational noise impact statement that incorporates feasible and reasonable measures to avoid, minimise and manage noise and incorporating those noise avoidance and minimisation measures at the design stage of the project,</li> <li>– establishing and fostering a good relationship with surrounding residents (including facilitation of the logging of noise complaints and of obtaining an active and timely response to those complaints);</li> <li>– undertaking a noise monitoring program to 'ground truth' noise impact predictions at set periods following commencement of operation of the new facilities;</li> <li>– restricting loading dock, waste collection and grounds maintenance activities to the 'day' period as defined in the NSW Industrial Noise Policy, January 2000;</li> <li>– undertaking a noise monitoring program at various periods after commencement of operation of the each project element to verify that measured noise levels do not exceed levels predicted in the required noise impact statement and acceptable noise levels identified in the NSW Industrial Noise Policy, January 2000.</li> </ul> | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p>   |
| <p><b>Mechanical plant and equipment</b></p> <p>The EPA understands that air conditioning is required to operate 24 hours per day in order to maintain constant climate control conditions suited to the preservation and conservation of exhibited and stored art works.</p> <p>Section 5.2.1 to EIS Appendix U Acoustics Report states that details of plant selections are not yet known. The EPA notes that plant and equipment is likely to include pumps required to abstract seawater for the heat exchange system and that those pumps would most likely be located on a pontoon within Woolloomooloo Bay.</p> <p><u>Recommendation:</u> The proponent be required to:</p> <ol style="list-style-type: none"> <li>provide a comprehensive quantitative assessment of operational noise impacts on surrounding noise sensitive receivers, especially nearby residences;</li> <li>ensure mechanical plant and equipment (including seawater abstraction pumps) installed on the development site does not generate noise that – <ol style="list-style-type: none"> <li>exceeds 5 dBA above the rating background noise level (day, evening and night) measured at the most affected or likely to be most affected nearby residence, and</li> <li>exhibits tonal or other annoying characteristics.</li> </ol> </li> </ol>  | <p>Further to ongoing design development, plant associated with the seawater heat exchange is proposed to be housed in a dedicated plant room, located to the north east of the site. Please refer to details of this plant room within the updated sea water heat exchange report at Appendix H. These acoustic considerations are acknowledged and it is anticipated these will be included as conditions of consent.</p> |

| Extract from agency submissions  | Response (prepared by Architectus)  |
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| <b>NSW Environment Protection Authority</b>  |   |
| <p data-bbox="123 341 1429 373"><b>Outdoor events and functions – café terrace</b></p> <p data-bbox="123 373 1429 437">The EPA notes the location of café terrace overlooking Lincoln crescent and the ‘Wharf Terrace’ and Finger Wharf residences.</p> <p data-bbox="123 437 1429 549">Section 5.3.1 to EIS Appendix U predicts noise impacts from ‘Outdoor Café’ events attended by up to 500 and recommends that any outdoor events should cease by not later than 10.00 pm and that “... loud/amplified/music/concert would not be acceptable on a regular basis.”</p> <p data-bbox="123 549 1429 708">The EPA notes that outdoor entertainment activities within the meaning of the Protection of the Environment Operations (General) Regulation, involve 200 or more persons and the use of sound amplification equipment as part of the activity. The EPA closely regulates the nature, extent, frequency and impact of such activities held within the Domain and Royal Botanic Gardens to ensure a reasonable acoustic environment. The EPA considers any similar activities at the Sydney Modern café terrace and associated outdoor spaces are akin to outdoor entertainment activities and anticipates</p> <p data-bbox="123 708 1429 772">The EPA notes that the EIS does not appear to include details concerning use of the café terrace and associated outdoor spaces, including:</p> <ul data-bbox="123 772 1429 932" style="list-style-type: none"> <li>– the nature and scale of the various types of events proposed to be held,</li> <li>– the proposed frequency of the various types of events,</li> <li>– the proposed times at which the events would be held and their duration, and</li> <li>– whether those events would involve the use of sound amplification equipment.</li> </ul> <p data-bbox="123 932 1429 1027">EIS Appendix U predicts a noise level at the 10 Lincoln Crescent using the LAeq noise descriptor. The EPA emphasises that the New South Wales Industrial Noise Policy (INP) criteria were designed primarily for industrial noise that might operate continuously throughout a day or night and may not provide appropriate levels for this activity.</p> <p data-bbox="123 1027 1429 1123">The EPA expects the proponent to implement noise mitigation and management measures akin to those implemented for similar activities held in the Domain and Royal Botanic Gardens. Music events in public spaces such as the Domain and Centennial Park are regulated to limits in Prevention Notices.</p> <p data-bbox="123 1123 1429 1248"><u>Recommendation:</u> The proponent be required to undertake background noise monitoring for the purposes of the noise impact assessment in accordance with guidance material provided in the New South Wales Noise Policy for Industry Fact Sheets A and B.</p> | <p data-bbox="1429 341 2132 405">This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |

| Extract from agency submissions  | Response (prepared by Architectus)  |
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| <p><b>NSW Environment Protection Authority</b></p> <p>The proponent be required to undertake a quantitative assessment of predicted noise impacts on noise sensitive receivers (including surrounding residences in the Wharf Terrace and Finger Wharf buildings), of any proposed categories of outdoor entertainment type events to be held at Sydney Modern, including</p> <ul style="list-style-type: none"> <li>a) predicted noise levels using LAeq, and LReq, noise descriptors over a representative 5 minute measurement period and the LMax and LReq experienced during that measurement period;</li> <li>b) marked up orthophotomaps showing the predicted noise level contours for various proposed activities (including sound checks and rehearsals) associated with each category of event; and</li> <li>c) (where the noise from the venue assessed at the sensitive receiver locations exceeds the prevailing background noise level by greater than 5dB) a detailed assessment of all feasible and reasonable noise mitigation and management measures to reduce noise impacts.</li> </ul> <p>The proponent be required not to hold outdoor events/functions involving 200 persons or more and the use of sound amplification equipment as part of the activity until the required detailed noise impact assessment has been undertaken and all feasible and reasonable noise mitigation and management measures have been identified, adopted and implemented.</p> <p>The proponent be required not to hold outdoor events/functions before 10.00 am and after 10.00 pm, especially at the café terrace or other outdoor area overlooking Lincoln Crescent.</p> |   |
| <p><b>Lincoln Crescent loading dock</b></p> <p>EIS section 6.5 under the heading 'Lincoln Crescent' indicates that the loading dock for the Sydney Modern part of the Art Gallery of NSW is proposed to operate off Lincoln Crescent between "... 3.00 am to midnight daily ...".</p> <p>However, the EIS does not appear to include a noise impact assessment concerning the use of the loading dock during the night period, being 10.00 pm to 7.00 am daily (and 10.00 pm to 8.00 am on Sundays and public holidays). Importantly, the EIS omits any assessment of sleep disturbance impacts on nearby residences which impacts include the likely activation of vehicle reversing alarms.</p> <p><u>Recommendation:</u> The proponent be required ensure the Lincoln Crescent loading dock is not in use other than between the hours of 7.30 am to 6.00 pm Monday to Saturday.</p>  | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p>                   |
| <p><b>Waste collection services</b></p> <p>The EPA notes numerous reports of community concern arising from waste collection services undertaken during evening period (i.e. 6.00 pm to 10.00 pm) and night period(i.e. 10.00 pm to 7.00 am Monday to Saturday and 10.00pm to 8.00 am Sundays and public holidays).</p> <p><u>Recommendation:</u> The proponent be required ensure waste collection services are not undertaken outside the hours of 7.30 am to 6.00 pm Monday to Friday.</p>  | <p>This item is acknowledged. Final waste collection hours are to be determined with the commercial waste contractor.</p> |

| Extract from agency submissions  | Response (prepared by Architectus)  |
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| <b>NSW Environment Protection Authority</b>  |   |
| <p><b>Grounds maintenance using powered equipment</b></p> <p>The EPA notes numerous reports of community concern arising from grounds maintenance involving the use of powered equipment (example: leaf blowers, lawn mowers, brush cutters) during early morning and evening periods as well as on weekends and public holidays.</p> <p><u>Recommendation:</u> The proponent be required ensure grounds maintenance involving the use of powered equipment is not undertaken outside the hours of 7.30 am to 6.00 pm Monday to Friday.</p>  | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><b>Waste management</b></p> <p>The proponent should manage waste in accordance with the waste management hierarchy.</p> <p><u>Recommendation:</u> The proponent be required to identify and implement feasible and reasonable opportunities for the reuse and recycling of waste, including food waste.</p>   | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><b>Water quality</b></p> <p>The EPA is concerned that the project may have operational water quality impacts on Sydney Harbour due to groundwater discharges potentially contaminated by:</p> <ul style="list-style-type: none"> <li>i. (hydrocarbons and other chemicals associated with previous use of the development site for naval fuel storage, or</li> <li>ii. intersection of the hydraulic gradient of iron rich Hawkesbury sandstone bedrock.</li> </ul> <p><u>Recommendation:</u> The proponent be required to ensure that groundwater discharged from the development site is not contaminated by hydrocarbons or other chemicals of concern associated with previous use of the site or by iron from local bedrock.</p>   | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><b>Anti-foulant pesticide</b></p> <p>The EIS indicates that the development includes installation and operation of a seawater heat exchange system which will require at least annual treatment with an anti-foulant pesticide to limit the growth of marine organisms.</p> <p>The EPA is aware of at least one other seawater abstraction system in Sydney Harbour that uses a mechanical pigging system to control excessive growth of marine organisms.</p> <p><u>Recommendation:</u> The proponent be required to investigate the feasibility of using a mechanical pigging system as an alternative to the application of chemical anti-foulant for the control of excessive growth of marine organisms in the seawater abstraction system.</p> <p>The proponent be required to ensure that it does not use any marine anti-foulant pesticide in an environmentally unsatisfactory manner, including in a manner such that pesticide pollution is occurring or has occurred as a result of the use of the pesticide.</p> | <p>Noted, this will be investigated.</p>  |

| Extract from agency submissions   | Response (prepared by Architectus)  |
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| <b>NSW Environment Protection Authority</b>   |   |
| <b>Water sensitive urban design and energy conservation and efficiency</b><br>The EPA acknowledges that EIS Appendix AB comprises an environmentally sustainable development report that proposes: <ul style="list-style-type: none"> <li>a) a range of water sensitive urban design measures, including rainwater harvesting and re-use, and water efficient fixtures; and</li> <li>b) a range of measures to maximise energy efficiency and minimise energy consumption, including passive thermal efficiency, energy efficient electrical equipment and installation of photovoltaic transparent roofing.</li> </ul>   | This item is acknowledged.  |
| <b>Extract from agency submissions</b>  | <b>Response (prepared by Architectus)</b>   |
| <b>NSW Department of Industry</b>   |   |
| The proponent should ensure adequate groundwater entitlement is sourced in order to account for the groundwater inflows into the construction excavations, unless any exemption applies.<br><br>Management of groundwater encountered during construction should be incorporated into the construction environmental management plan.<br><br>Any proposed works on waterfront land should be carried out in accordance with the Guidelines for Controlled Activities on Waterfront Lands (2012).<br><br>The proponent should commit to relocating intertidal and subtidal boulders moved for installation of the pipe exchange system back to their original position, or otherwise within the intertidal and subtidal zone in the vicinity. This is to ensure continuity of the hard substrates presence as a habitat to be colonised by aquatic plants and invertebrates.<br><br>The proponent should ensure that erosion and sediment control to be used during construction is designed in consideration of the sloping grades of the waterway and in order to mitigate potential for turbidity related impacts in the bay. | This requirement is noted and will be included in a construction management plan which is anticipated will be required as a condition of consent. |
| <b>Extract from agency submissions</b>  | <b>Response (prepared by Architectus)</b>   |
| <b>Ausgrid</b>  |   |
| <b>Architectural Plans</b><br>Ausgrid requests further information regarding: <ul style="list-style-type: none"> <li>– The exhaust point at the east side of the site adjacent to the zone substation</li> <li>– The sea water heat exchange system running past the Zone substation</li> </ul>   | This request for information is noted and it is anticipated this will be included as a condition of consent.                                      |

| Extract from agency submissions   | Response (prepared by Architectus)  |
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| <b>Ausgrid</b>  |   |
| <p><b>Supply of Electricity</b></p> <p>It is recommended for the nominated electrical consultant/contractor to provide a preliminary enquiry to Ausgrid to obtain advice for the connection of the proposed development to the adjacent electricity network infrastructure. An assessment will be carried out based on the enquiry which may include whether or not:</p> <ul style="list-style-type: none"> <li>– The existing network can support the expected electrical load of the development</li> <li>– A substation may be required on-site, either a pad mount kiosk or chamber style and;</li> <li>– Site conditions or other issues that may impact on the method of supply.</li> </ul>   | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><b>Conduit Installation</b></p> <p>The need for additional electricity conduits in the footway adjacent to the development will be assessed and documented in Ausgrid's Design Information, used to prepare the connection project design.</p>   | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><b>Proximity to Existing Network Assets</b></p> <p><u>Underground Cables</u></p> <p>There are existing underground electricity network assets in Art Gallery Rd, Lincoln Cres and also within the subject property.</p> <p>Special care should also be taken to ensure that driveways and any other construction activities within the footpath area do not interfere with the existing cables in the footpath. Ausgrid cannot guarantee the depth of cables due to the possible changes in ground levels from previous activities after the cables were installed. Hence it is recommended that the developer locate and record the depth of all known underground services prior to any excavation in the area.</p>  | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |
| <p><u>Distribution Substation</u></p> <p>There are existing electricity substation assets at Lincoln Cres in the Eastern Corner of the site (S1393).</p> <p>The substation ventilation openings, including substation duct openings and louvered panels, must be separated from building air intake and exhaust openings, natural ventilation openings and boundaries of adjacent allotments, by separation distances which met the requirements of all relevant authorities, building regulations, BCA and Australian Standards including AS 1668.2: The use of ventilation and air-conditioning in buildings – Mechanical ventilation in buildings.</p> <p>In addition to above, Ausgrid requires the substation ventilation openings, including duct openings and louvered panels, to be separated from building ventilation system air intake and exhaust openings, including those on buildings on adjacent allotments, by not less than 6 metres.</p> <p>Exterior parts of buildings within 3 metres in any direction from substation ventilation openings, including duct openings and louvered panels, must have a fire rating level (FRL) of not less than 180/180/180 where the substation contains oil-filled equipment.</p> <p>The development must comply with both the Reference Levels and the precautionary requirements of the Draft Radiation Protection Standard for Exposure Limits to Electric and Magnetic Fields 0 Hz – 3 kHz (ARPANSA, 2006).</p> <p>Existing Ausgrid easements, leases and/or right of ways must be maintained at all times to ensure 24 hour access. No temporary or permanent alterations to this property tenure can occur without written approval from Ausgrid.</p> | <p>This requirement is noted and it is anticipated this will be included as a condition of consent.</p> |

| Extract from agency submissions   | Response (prepared by Architectus)  |
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| <p><b>Ausgrid</b></p> <p><u>33kV Zone Substation</u></p> <p>There is a major substation facility immediately adjacent to the Eastern side of the subject site.</p> <p>Ausgrid requests that further information is provided regarding the proposed Exhaust System near to the Zone substation to ensure that the exhaust will not impact adversely impact on zone substation.</p> <p>Ausgrid also request further details about the proposed installation of the sea water exchange pipes. These pipes are proposed to cross the South side of the zone substation. There are several Transmission cables which enter the zone substation at this location. These cables may be subjected to derating as a result of any in ground heating sources.</p> | <p>This request for information is noted and it is anticipated this will be included as a condition of consent.</p> |