

Powerhouse Ultimo Revitalisation

Application Number SSD-67588459
Assessment Type State Significant Development
Development Type Museum, Gardens & Zoos
Local Government Areas City of Sydney
Exhibition Start-End Date 03/05/2024 - 30/05/2024
Contact Planner Name Annika Hather

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Good Evening

This submission is a considered collection of concerns, objections and suggestions.

Biodiversity Development Assessment Report is only a forecast. As a forecast there is no evidence that shows where will not be active birds' nests in the trees marked for removal during the week, month, season the trees will be removed. So, a forecast needs to show due diligence and method for the natural likelihood of nesting birds.

Legislation	Pre-Condition
Biodiversity Conservation Act 2016	Section 7.9 (2) of the BC Act requires that an SSD application be accompanied by a Biodiversity Development Assessment Report unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values. The proposed development is subject to a waiver from the requirement to prepare a BDAR in compliance with this pre-condition. This is discussed further at Section 6.12 .

As such, we strongly object to the request to waiver a Biodiversity Development Assessment Report.

No approval under *Environmental Protection and Biodiversity and Conservation Act 1999* (Cth) is required. A Biodiversity Development Assessment Report (BDAR) waiver request will be prepared and submitted prior to the submission of the EIS.

Rather a Biodiversity Development Assessment Report needs to be evolving and not black & white. As Native birds and other urban wildlife may not have built nests at the point in time the consultants visited this site.

Should the trees marked for removal remain till bird 'dating' season (now), then nests will be built in large and small branched trees. In a city with dwindling numbers of large branched trees, Magpies, Currawongs, Kookaburra's, Rainbow Lorikeets and Ravens need large branched trees for large nests to be engineered to be stable and safe, so all remaining Ultimo large trees are highly sort after for these native birds.

Should tree removal be scheduled for mating, egg sitting season, chicks hatching, learning to fly season and arborists remove or do hard pruning of large trees. Active birds' nests should not be removed or the adult birds scared off. One adult bird could be sitting on eggs, while the other adult bird gathers and returns with food. Or feeding young. A full assessment of the trees close to work zones, haulage routes and park land impacted by construction vehicles and storage areas should be carried out with a representative from WIRES. The Pymont WIRES volunteer worker would also complete a thorough examination (dawn and dusk) of all the trees (all sizes) for skeleton and in use birds' nests.

Please note, haulage routes and Native wildlife, Currawongs, Magpies, Ravens and Kookaburra's currently have active and skeleton nests in street trees at several locations along Harris Street. These trees need extra protection, toolbox inductions, documented management plans for extra-large/high construction vehicles being moved in/out for this build. Works may exceed the whole duration of Spring / Summer, bird breeding times.



Raven adults with a juvenile

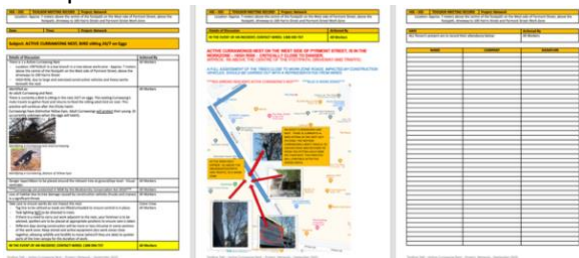


See Google Maps - Current tree line of canopy trees for native wildlife

Biodiversity protection and management are necessary for these publicly identifiable nests and birds. A number of large key tenants in Pymont and their construction companies plus, underground network contracting companies for

over a decade on the Ultimo/Pymont Peninsula have used a customised toolbox talk for these native birds residing in the street trees on this sites Harris Street haulage route.

We adamantly support the backing of the NSW Gov, with the City of Sydney to advise the Powerhouse Ultimo Architects and Construction Company (plus sub-contractors) to commit to adopting and implementing ToolBox Talks for known Wildlife in the area. (Toolbox talk specific to this site can be provided). The recent Currawong Toolbox Meeting document for one of the Pymont locations on a current utility provider working on roads around Pymont example:



Site and all workers on site should be educated about urban wildlife, what to do if construction actions or inaction cause bird's nests to be damaged, chicks fallen to the ground, native birds injured, plus meeting the local WIRES representative/s. E.g. Toolbox talk:

Currently there is a vast number of different native birds in Ultimo with less and less large tree, these native birds and their nests need to be protected. The proposed Biodiversity Development Assessment Report waiver would literally have contractors come in at any time of the year and remove large trees without each tree being detailed/assessed for new bird nests being built and importantly active birds' nests in trees with adult birds sitting on eggs, or chicks with an adult in the nest when another adult is gathering food.

There needs to be thorough documentation, planning, management plus funding around large tree removal which respects urban wildlife biodiversity on the Powerhouse Ultimo site.

We strongly support retaining and doing better at protecting all trees that can possibly can be kept on and around the Powerhouse site. Tree canopies on streets and in green spaces (including roof tops) are desperately needed. The Powerhouse Ultimo as a significant piece of land and building needs to pull its weight contribution to long term landscaping with canopy trees on street and stie to mitigate the urban heat island effect, ensure comfort levels on streets, in green spaces (including roof tops). This site needs to not just contribute, but exceed its 'quota' of urban tree canopy cover targets. And importantly be an exemplar of root top green infrastructure.

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identified for removal. These trees are considered to have moderate landscape value but would be difficult to protect and maintain throughout the construction process.

We support the inclusion in all Powerhouse Ultimo green areas to include fresh water features. Connection to Country and First Nations representation, must include, respect and recognise the waterfront land topography with tributaries. Plus, the First Nations use of this land, gathering at fresh water to trade, clean and eat seafood from this area. Simple, artistic and perfect examples to guide the final Level 3 – Rooftop terrace, Level 2 – Public Domain, Level 1 – Internal Courtyard, Ground Level - Public Domain, landscape design, will also achieve providing access to freshwater in the city for wildlife and pollinators, particularly during seasons of extreme temperature fluctuations and increased heat.

The Swellstone water installation located in Fig Lane Park Ultimo. 320-334 Jones Street is meaningful and small in scale. The sculpture draws inspiration from a natural spring that once existed on the Pymont Peninsula, known by the local settled community as Tinkers Well.



<https://www.cityartsydney.com.au/artwork/swellstone/>

Another water feature of small scale for a small area, is located at the Piccolo Me Cafe, entrance of the Royal Botanic Gardens entrance off Macquarie Street. Google map and drop the Moodji (little yellow human Google street view character at) <https://www.rbgsyd.nsw.gov.au/visit/map#/venues/50>



We strongly request a) Design Principles, b) Design response and c) Design excellence standards, for the Powerhouse Ultimo significantly improve on an International and National level. As Currently the three do nothing to prevent bird deaths.

Design principles developed and guidelines for this 'renown' project do not include bird safe design. Rather, proposed materials and façade finishes are clear glazing, not bird safe glazing.

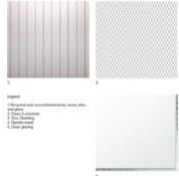


Figure 26. Proposed materials and facade finishes.

The Design Response has through views for birds. Birds cannot recognise daylight reflections and glass does not appear to them to be solid. If it is clear they see it as the image beyond the glass.

The design simplifies and centralises the museum's circulation following the reorientation to the Goods Line Terrace and realignment of the Wran to the Heritage Halls. Through views and entrance at to Harris Street, encourage intuitive way finding. The new courtyard at level 1 connects easily to the mid-level of Macarthur Street, while revealing the full two-story façade of the Switch House, providing light and air to this previously buried edge.

Design Excellence assessment seemingly is not aware of the outcry over bird deaths caused by designing without bird safe glazing.

Table 8 Clause 6.21 Design Excellence assessment

Clause 6.21 Design Excellence

(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,

(b) whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,

Buildings with large amounts of glazing or mirrored facades are understood to be responsible for huge numbers of bird deaths each year globally, with [one billion killed in the US](#) and an estimated [100 million bird collisions in the UK](#).

In 2019 the US House of Representatives [passed a bill to reduce the amount of glass](#) used for federal buildings in a bid to protect birds from death by collision, while earlier this year [a bill was filed in Washington DC](#) calling for the city's new buildings to use bird-friendly glass. Architects can easily prevent billions of bird deaths a year caused by collisions with glazed glazing windows.

People are becoming increasingly aware of this issue, and as architects learn, so to can the NSW Government and the Powerhouse Museum Architects learn that it's important to the public, more and more buildings need to be constructed with design elements that help keep birds safe. As such we strongly request setting a positive and educational Powerhouse Museum Revitalization, National exemplar by:

- All Architects specify All buildings with external glazing include regulating bird-safe glass to mitigate buildings' danger to birds
- We ask that the Powerhouse Museums Architects must take into account and attempt to reduce the impact of their designs on the sentient beings around us. "Architects can easily have films, ultraviolet patterns, and other innovative designs added to glass windows."

New York City passed a bird-friendly law requiring all new buildings and building alterations (at least under 23 metres tall, where most fly) be designed so birds can recognise glass. Windows must be "fitted" using applied labels, dots,

stripes and so on. A Zen curtain developed in Brisbane has worked at the University of Queensland. This approach uses an open curtain of ropes strung on the side of buildings. These flutter in the breeze, making patterns and shadows on glass, which birds don't like.

NSW Government and the Powerhouse Museums Architects can make the sites building glazing safer for birds by including architectural elements like awnings, screens, grilles, shutters or external louvers, to deter birds from hitting buildings and dying/being injured. Opaque glass also provides a warning. Birds see ultraviolet light, which humans cannot. Some manufacturers are now developing glass with patterns using a mixed UV wavelength range that alerts birds but has no effect on human sight.

Birds cannot recognise daylight reflections and glass does not appear to them to be solid. If it is clear they see it as the image beyond the glass. They can also be caught in building cul-de-sac courtyards – open spaces with closed ends are traps. At night, the problem is light from buildings, it may disorientate birds. Birds are drawn to lights at night. Glass walls then simply act as targets.

The impact that glazed buildings have on birds made headlines September 2021 when Melissa Breyer from New York City wildlife charity NYC Audobon [collected the corpses of 226 birds](#) killed at the World Trade Center in a single day.

Only March 3 2024, The Sun Herald article 'Outcry over bird deaths at modern glass bridge' is a very sad example of the consequence of shiny glass design choices, which caused a string of bird deaths (Rainbow Lorikeets) in Marrickville Metro shopping centre. And stated 'We are currently in the process of having additional decals installed' and 'A level of visibility for people traveling through the bridge is also needed for safety and security, and so we are working to urgently resolve this issue, while balancing this requirement'.

Birds make cities friendlier as part of the shared environment. We have a responsibility to provide safe flying and security from the effects of human habitation and construction.

Also, we are environmentally and biodiversity concerned that the proposal neglects transparency and documenting its plan for the epic rodent movement which is a hazard and must be identified similarly to 'Waste Management' as likely to be generated during construction. Ultimo, Haymarket and Pyrmont have known long standing rodent issues, another site under construction in the area will bring more rodents to the Public Domain surface. The Community Engagement team met with many locals and their dogs at community events, the area (the Goods line) and other Public Domain areas neighbouring the Powerhouse are massively popular to walk pets. Rodent management Must be correctly accounted for in documentation and actioned by fast kill on site, certainly no baiting which has a disastrous impact of pets on lead and urban wildlife.

Note, we find it disturbing the three residential terraces on Maccarthur Street between Systrum Street and Omnibus Land, photo has been excluded from the 'honesty' of EIS 2.2.7 Surrounding development statement on urban context. Consequently, their private views were not considered in this proposal.

Private views

The V&A has considered the established principles for view sharing in accordance with Territory Consulting v. Metropolitan Council (2016) 162 NSW 212, and confirmed the following:

- There are views of residential terraces located at the northern end of the site on Harris Street that are impacted by established medium density residential buildings located to the east of the site. It is noted that, what views are available from these locations, are unlikely to significantly change in scope or depth. These views also do not contain any water, land and water resources or scenic elements or features of the meaning of Territory that would be impacted by the proposed development. The proposed development will not fundamentally alter the composition or composition of views from these locations.
- There is an apartment block located approximately 500m to the south west of the central part of the site at 343-350 Balmain Road, which owing to its scale, height and location, partially obscures views of any other lower parts of buildings within the Sydney CBD skyline to views from this location. The proposed building envelope, somewhat built upon this existing context and obscures parts of the sky and lower parts of buildings in the background of views as detailed in V&A, the apartment block in this location will reduce the ability to see and perceive the skyline and there will be no loss of ability to highly valuable or scenic features (such as Centre Point Tower). The V&A concludes that the proposed development will not fundamentally alter the composition or composition of views. The view line has been assessed as minor (refer to Figure 44 and Figure 45 below).
- There is an apartment block behind Harris Street at 333 Balmain Road which, owing to its scale, also benefits from views of and over the Powerhouse Ultimo site towards the CBD. The V&A concludes the same findings as the above, determining that the proposed development will not fundamentally alter the composition or composition of views from these locations.

Fundamentally, the proposed development does not introduce a new element that is uncharacteristic or discordant in the existing views. The Powerhouse Ultimo redevelopment will contribute to the existing framed built form on this site, which, like its context, comprises buildings of different periods, styles, and scales of development. This is consistent with high quality and visually interesting precinct.

The views discussed above are provided in Figure 20 to Figure 45.

4.3.1 Noise environment

The site is surrounded by a range of commercial, residential, recreational and educational land uses. The V&A assessed the potential for noise from surrounding uses. The identified potential noise sources are those surrounding the site are predominantly contained from surrounding roads, the light rail and other industrial or major road or rail corridors. Figure 46 identifies the surrounding sensitive receivers adjacent to the site.



Figure 46 Sensitive Areas and Urban Context

Showing inconsistency in this proposal, these terrace occupants were documented / respected as in the immediate noise catchment area and identified as sensitive receivers adjacent to the site.

We ask that Powerhouse Ultimo, acknowledges, respects and preserves the Life Between Building. The current gaps between buildings (The Powerhouse and the three terraces), access to sunlight or the sky, immediate vistas of healthy large canopy trees, observing trees in various seasonal changes is healthier than the staleness of the same aging concrete/brick walls and glazing reflection, for a sensitive direct neighbour.

Excellent to see a list of State nearby development projects. There is a significant amount of works happening/ soon to happen across the immediate area. For future documentation work by Ethos Urban, will EIS contractors add critical relevance to the Cumulative impacts list for both Assessors and Community by the inclusion of an extra column in the Table, titled 'Haulage Route'. Where the EIS Cumulative impacts can state clearly 'An assessment of the haulage route for e.g. Harbourside Shopping Centre, overlapped with the haulage route for the Powerhouse Museum is under the relevant EIS Section? Table? Haulage Route A (blue) for Harbourside Shopping Centre Redevelopment...etc. By the inclusion of this column in a EIS description, there will be haulage route transparency. Assessors this EIS does not clearly state if current haulage routes will be used for this build?

Construction vehicle routes

The construction vehicle routes to be utilised during the construction of the development would be selected to restrict vehicle access to the State and Regional road network, not impact residential streets, avoid impacting concurrent construction projects and minimise impacts on the public transport network (see Figure 48 below).

The potential construction vehicle routes include:

- From north to south: Harbour Bridge- Western Distribution- Harris Street.
- From the west: Anzac Bridge- Allen Street- Harris Street.
- From west and south: Parramatta Road- Broadway- Wattle Street- Fig Street- Harris Street.



Figure 48 Construction routes for the site
Source: 3M Consulting

The proposed building façade on Harris Street is to be used, not just viewed, therefore continual shelter on Harris Street needs high amenity, allowing for on mass coach loads of milling people, and foot traffic entering the Powerhouse.

People appear in the images to be sheltered to walk and gather, then as they approach the William Henry cross Harris Street end of the Powerhouse, there is no or very thin shelter. Where is the safety from the road for all ages and abilities?



Figure 39 Modelled view from 537 Harris Street
Source: Virtual Ideas

Considering the vast number of coaches drop off/pick up proposed for Harris Street, this design has all the more convincing reason for the full 75m of the Powerhouse on Harris Street to have appropriate width awning/cover.

Coaches

The proposal seeks to retain the existing coach pick up and drop off facilities located on the eastern side of Harris Street. This area can accommodate up to four coaches at any one time which is consistent with the current and future needs of the Powerhouse Museum. The area is approximately 75 metres long and available for use between 10am and 3pm from Monday to Friday and 9am-5pm on Saturday. Given coaches are allowed to use the space for up to 15 minutes, the zone can cater for a maximum of 16 coaches per hour. The site is also within immediate walking distance of the existing coach layover area on Darling Drive to the south-east.

We strongly support the public bus stop currently on the corner of Harris Street and Macarthur Street be maintained during works and certainly post works. The Peninsula 501 Bus transport route is critical to one of the highest residential density populations in NSW. The 501 bus stops directly in front of the Powerhouse Museum on Harris Street. How will this stop be accommodated during demolition, excavation and construction? This stop is very needed!!



Figure 38 Modelled view from Harris Street
Source: Virtual Ideas



Figure 37 Modelled view from Harris Street and Macarthur Street
Source: Virtual Ideas

We support the NSW Heritage Council listing the Powerhouse complex to include the former power station, and the Harwood building. The plans on exhibition do not include the Harwood Building which provided back-of-house facilities, now proposed to take up valuable space in the other two buildings. It is noteworthy that the Harwood Building has a larger and more functional loading dock, obviating the need for such within the other two components of the Museum.

Thank you for considering our strong concerns and comments. We sincerely hope this Powerhouse Museum, building and gardens will stimulate the minds and increase the health & wellbeing of its visitors, staff, neighbours and Ultimo, Sydney.

Local Resident

References:

- [US House of Representatives passes bill for bird-friendly public buildings](https://www.dezeen.com/2020/07/20/us-house-of-representatives-passes-bill-for-bird-friendly-public-buildings/)
- [Bill for bird-friendly glass buildings proposed for Washington DC](https://www.dezeen.com/2022/04/21/bird-friendly-building-design-bill-washington-dc/)
- [Eight ways to prevent birds flying into buildings with glass facades](https://www.dezeen.com/2022/03/10/bird-friendly-building-techniques/)
- [Glass facades are "the main culprit" for billions of annual bird deaths](https://www.dezeen.com/2022/03/09/glass-collisions-bird-deaths/)
- [Billions of bird deaths due to the "simple indifference" of architects says PETA](https://www.dezeen.com/2022/08/22/building-collision-bird-deaths-peta/)
- [Mass bird deaths in New York City caused by skyscraper collisions](https://www.dezeen.com/2021/09/17/mass-bird-death-new-york-city-skyscraper-collisions/)
- [Windows 'fatal trap for UK birds'](http://news.bbc.co.uk/2/hi/science/nature/3505256.stm)

Questions asked in an Engagement Session were:

Question 1

Buildings with large amounts of glazing or mirrored facades are understood to be responsible for huge numbers of bird deaths each year globally. Architects can easily prevent bird deaths caused by collisions with glazed glazing windows. Will the Powerhouse Architects use films, ultraviolet patterns, including architectural elements like awnings, screens, grilles, shutters or external louvers, to deter birds from hitting buildings and dying/being injured and other innovative designs?

Question 2

Tree removal, Pending the season, will Powerhouse arborists remove or do hard pruning of large trees with Active birds' nests? So can Powerhouse arborists work with WIRES volunteers to complete a thorough examination (dawn and dusk) of all the trees (all sizes) for skeleton and in use birds' nests.

Question 3

It's great you all met people and dogs on Saturday!!! The area is very popular for walking pets. There is also a current seen large population of rodents in Ultimo, and like an iceberg there are more rodents underground and not seen. With the Powerhouse construction this area will disturb a lot of rodents above and below ground levels. For the sake of local pets and urban wildlife that visit the area at all times, Will the Powerhouse Construction Plans / Management and Contractors include, rodents on site are to be handled in a catch and trap manner (fast poison, die inside a container).

Question 4

Will the current contracted firms be on the job now till the end of the Powerhouse or changed again?