

Appendix C – C30 Powerhouse Museum

Powerhouse Museum, Ultimo, Sydney

Address	500 Harris Street, Ultimo DP 781732, DP 6313345, DP 770031
Architect/Designer for the original power station buildings	NSW Railway Commissioners
Designed/Completed	1897/1899
Architect for the Powerhouse Museum	NSW Government Architect (J.W. Thompson) – Project Architect: Lionel Glendenning
Designed/Completed	1986/1988
History & Description	<p>The site was initially used as a power station for Sydney's electric tram network and as a tram depot. The site was selected for one of Sydney's Bicentenary Projects, as the new site for an expanded Museum of Applied Arts & Sciences (MAAS) that had been located further south along Harris Street in its original permanent building, the Technological Museum at Sydney Technical College.</p> <p>The first stage of the project was the repair and adaptive re-use of the tram shed of the former tram depot as the conservation workshops and temporary exhibition space for the museum.</p> <p>The brick buildings of the power station had already been emptied of their generating equipment and they were in a seriously dilapidated state of repair. The boiler hall was refurbished as a gallery for the Museum's large exhibits such as aircraft and space craft, the volume of the space being sufficient for a number of the exhibits to be suspended from the roof structure. The smaller turbine hall was reconfigured as more intimate galleries.</p> <p>A new building with two parallel barrel-vaults was constructed between the brick buildings and Harris Street, with a colonnade along part of the street frontage screening the west face of the building and the entry plaza to the museum (the screen has since been removed and the colonnade truncated). Below the dramatic vaults of the new building were located the entrance and introductory galleries. Beneath the entrance level are exhibition spaces, collection storage rooms, theatres and smaller exhibition rooms. The taller barrel-vault accommodates the gallery with the Boulton & Watt steam engine and the first train to run in Australia. Adjacent is the vertical circulation ramp connecting the levels of the museum.</p> <p>The design of the barrel-vaulted roofs of the museum is in the lineage of the first V&A museum building in London which was an arched roof cast iron building.</p> <p>The museum is the location of Australia's (and one of the world's) oldest industrial artefacts, the functioning Boulton & Watt Steam Engine (1785).</p> <p>The conversion of the former powerhouse into a world-class museum was one of the first such</p>



View of new wing from the north-west 2021
(Photo: Robertson & Hindmarsh Pty Ltd, May 2021)



Entry court showing revised entry location (under tall barrel vault), deleted entry screen and truncated colonnade (Photo: Sheridan Burke, 2020)



Harris Street colonnade
Photo: Robertson & Hindmarsh Pty Ltd, May 2021)

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projects in the world and its fame spread internationally.

The museum was awarded the Sulman Award in 1988. The jury citation indicated the quality of the design:

"A great popular success which appears to owe as much to the building and its exhibitry [sic] design as to the contents themselves. Four old power-station buildings of varied character are joined by the insertion of stepped floors surmounted by two vaulted halls, one glazed and one covered-over. A colonnade, corner plaza and rear courtyard complete the ensemble. The internal arrangement cleverly exploits the fall of the site and the floors of the halls, to provide a sequence of overlapping views. Across the stepping down of the volumes runs a long ramp system, passing tall exhibits at various levels.

"The old buildings are in the functional tradition, most apt for the historical technology of many of the exhibits. This character is enhanced by much of the new detailing which is very direct and, in the new sections is a successful adaptation of high tech. A variety of long and high, low and wide, dark and light spaces admirably serves the great range of exhibits. Much of the immediate success and impact of the museum is due to the design of the exhibitry [sic], the collaborators deserving commendation in this award.

"Externally the great brick halls of the old buildings have an enormous presence in important views from Darling Harbour and the city, matching in scale the wool stores and warehouses of the district. The new buildings have a much lighter construction in glass and metal, some of it brightly coloured and the new forms are large, bold and simple. They succeed in establishing an extra identity and a consistency of character out of their contrast of form and weight. From the main approaches in Ultimo, the new buildings are positive and assert a striking presence in form and colour, a welcome point of emphasis in the otherwise busy industrial traffic." (*Architecture Bulletin*, July 1988, p.6)

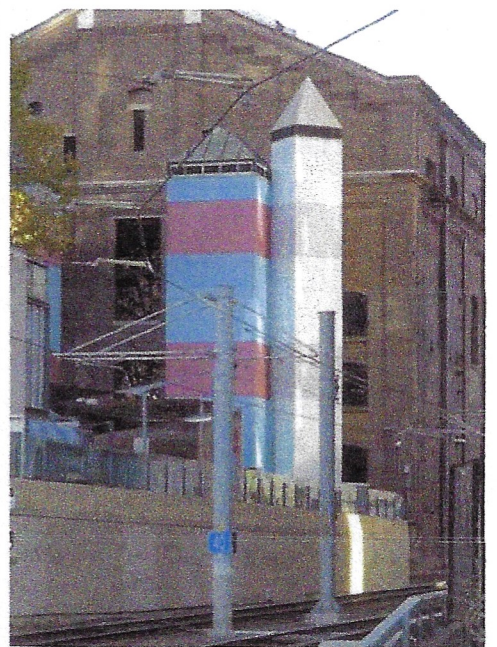
"Architecturally it is interesting because of the skill in converting the old building, because of the fun created with the new building and because of the flexibility and quality of its display spaces. Perhaps the most impressive aspect of the design is in the way it handles space. The forecourt provides a sense of excitement and expectation, giving a most appropriate welcome to a building with varied and exciting interiors.

"The design of the interior exhibition spaces is exquisite, brilliantly complementing and enriching the architectural spaces while providing a tasteful background for the myriad of exhibits.

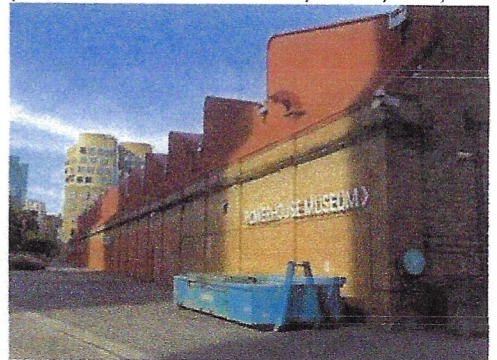
"The Sydney Powerhouse is exuberant, brash, exhibitionist and, above all, fun. Old and new blends well, but wisely the temptation to copy the



Rear approach to the Museum from the public walkway. Harwood Building (former tram depot) on left (Photo: Robertson & Hindmarsh Pty Ltd, May 2021)

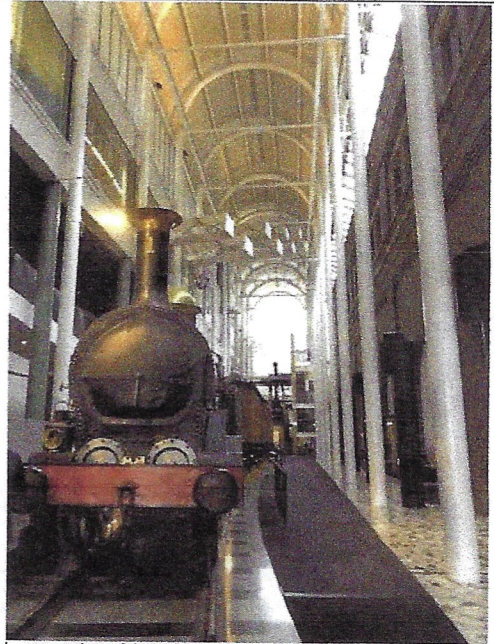




Elements at the rear of the Museum that still retain the original Post-Modern colour scheme (Photo: Robertson & Hindmarsh Pty Ltd, May 2021)



Harwood Building (former tram depot) on left (Photo: Robertson & Hindmarsh Pty Ltd, May 2021)

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	<p>old structure has properly been resisted.” (<i>Architecture Australia</i>, Awards issue, 1988, p.46)</p> <p>The above jury descriptions capture the excitement that architects and members of the public experienced by the bold, bright, voluminous museum buildings. This was, and is a new experience in museum architecture.</p> <p>The original power station section of the Powerhouse Museum is listed on the State Heritage Register for its significance as a power station. Its museum use does not form part of the significance of the buildings or of the listing. There is potential to expand the existing listing to include the 1988 purpose-designed museum building and the adjacent former tram depot shed which was adaptively re-used as part of the storage and conservation workshops for the museum (as well as serving as the interim museum before the main museum adaptive re-use was opened).</p>	 <p>Locomotive No. 1 under the tallest barrel-vaulted exhibition space. (Photo: Sheridan Burke, 2020)</p>
Preliminary Statement of Significance (in addition to existing LEP & SHR listings for the power station)	<p>The Powerhouse Museum is significant historically as the continuing institution of the MAAS and is architecturally significant for the re-use of existing industrial buildings in one of Sydney's largest and more successful adaptive re-use projects.</p> <p>The Powerhouse Museum is aesthetically significant for the new buildings' relationship to the pre-existing large brick industrial buildings through the creation of a consistency of character whilst employing a contrast of form and weight. The steel and glass vaulted new spaces' use of Post-Modernist forms and colours express the exuberance and confidence of a rejuvenated institution engaging with public as well as expressing the then new trends in public architecture and creating a new experience and standard in museum architecture.</p> <p>The aesthetic significance of the buildings as an important part of the development of architecture in NSW is reinforced and supported by the entire building complex being awarded the RAI NSW Chapter's highest award for public buildings, the Sir John Sulman Medal in 1988, the RAI National President's Award for Recycled Buildings and a finalist for the Sir Zelman Cowen Award.</p> <p>The Boulton & Watt steam engine is of exceptional national historic and technical significance as a rare operating 18th century stationary steam engine.</p>	 <p>Internal circulation access ramp. (Photo: Sheridan Burke, 2020)</p>  <p>Turbine Hall exhibition space. (Photo: Sheridan Burke, 2020)</p>
Existing statutory heritage protections	<p>Sydney LEP Item 2031 (for the entire complex).</p> <p>State Heritage Register (SHR Item 02045): for the electricity power station component. The 1988 wing and the former tram shed are not listed. There is no recognition in the SHR listing of the museum function of the buildings.</p>	
Threats	<p>The institution remains under threat of division between Ultimo, Parramatta and Castle Hill and the diminution of the collection at Ultimo may threaten the retention of the Harris Street wing.</p>	

Architectural Heritage in NSW of the
Last Quarter of the Twentieth Century
13 February 2022

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	The Harwood Building (former tram depot shed) is proposed for sale and excision from the site.	
References	Jennifer Taylor, 1990, <i>Australian Architecture Since 1960</i> , Canberra: RAA National Education Division, pp.237-239 <i>Architecture Australia</i> , Awards Issue 1988, pp.46-51 <i>Architecture Bulletin</i> , July 1988, p.6	