Supplementary Submission No 119a

INQUIRY INTO GOVERNMENT'S MANAGEMENT OF POWERHOUSE MUSEUM AND OTHER MUSEUMS AND CULTURAL PROJECTS IN NEW SOUTH WALES

Name: Mr Andrew Grant

Date Received: 23 September 2020

SUPPLEMENTARY SUBMISSION - HARWOOD BUILDING AND CASTLE HILL FUNCTIONS

In giving evidence at the Upper House Inquiry hearing on 21 August 2020, I described the functions of the Harwood Building as including the following

"…a fully equipped workshop; large object handling and treatment; exhibition preparation, staging and presentation area; temporary exhibition movements; photography studio; conservation laboratories, publicly accessible research library and archives; building maintenance workshops and collection management and other staff accommodation and of course, high quality storage that is, for the record, publicly accessible."

I characterised the Harwood Building as the "mother ship" of operations at Ultimo. In this context, the workshop might be called the Museum's "engine room".

Yesterday I spoke with two of the Museum's former engineering conservators, each with over 20 years' experience in the Harwood Building workshop. They had lavish praise for the workshop and its comprehensive facilities, one describing his former workplace as "a brilliant machine shop", the other describing the facilities as "excellent". Both were extensively involved in working on large objects in the Museum's collection[1], for which the workshop was and is specially equipped, starting with a strengthened concrete suspended slab floor.

The workshop was fitted out with all the equipment required to machine and fabricate metal, wood and plastics and to work with composite materials. This equipment included lathes, milling machines, shapers, radial arm saws, planishing machines, grinders, abrasive blasting bay, every variety of manual and power hand tool, a fully equipped heat treatment bay and a paint spraying booth big enough for a large car. In the late 1980s, a discrete interactive exhibits workshop was developed to maintain the in-house capacity to design, build and test prototypes before placing the operational version on the exhibition floor. In the electronics workshop, technical staff designed audio visual exhibits for exhibitions which were maintained on a daily basis. With such an impressive array of facilities and equipment with skills to match, the Museum soon developed a capacity to be able to build almost anything to support and interpret the collection on display.[2]

One of the most enabling features of the workshop is the 10-tonne monorail hoist that travels the length of the building. It has been used to move many large objects or their components within the building, when the scale, complexity or risks of the task would have otherwise required external contractors, the opportunity for development of in-house skills otherwise lost. Among the many large objects handled and treated in the workshop are Locomotive No. 1 of 1854, the 1885 Fowler ploughing engine, the 1837 Maudslay beam engine, the 1923 Aveling & Porter steam wagon and the 1890s Cobb & co coach.

The workshop became a receiving and staging point for thousands of objects that needed to be inspected and/or treated before being installed in an exhibition in the adjacent Museum or sent out on loan, often as part of a temporary travelling exhibition. The strategic location of the workshop next to the Museum *minimises the risks to the collection and achieves operational efficiencies of object handling*. All the key staff possessing the required knowledge and skills to manage and treat the full

[1] For example, the highly elaborate pediment of the Museum's massive Central Station indicator board was completely recreated by highly skilled staff of the Museum's workshop from historic photographs of the 1930s.
[2] One of the most impressive exhibits built from scratch in the Harwood Building workshop was a mock-up habitation module of the International Space Station that was a copy of the prototype built by Boeing in Alabama. The Chairman of Boeing who saw the Museum's version in the flesh and commented that it was indistinguishable from the Boeing original.

range of objects in the collection, including curators, registrars and conservators, have worked in close association in the Harwood Building since 1995. This crucial relationship of museum, treatment facilities and specialist staff pays huge dividends for the collection, the Museum, its stakeholders and its many audiences.

This operational model of co-location is *essential* to the successful renewal of the Powerhouse Museum in a form that is comparable with its original operational model. Other cultural organisations envy and aspire to the co-location model, such as evidenced in the co-location of Adelaide's South Australian Museum, Art Gallery and Library with their shared conservation facilities (Artlab).

One of the advantages of co-location at Ultimo is that staff, especially those who have responsibilities for the collection, are available to meet stakeholders (sponsors, VIPs, business leaders, public officials, etc.) on site in the Museum and/or in the Harwood Building where the Museum's behind-the-scenes functions can be better appreciated and shown to advantage *as a vital part of a complete museum*. Emphasising the relationship between the Harwood Building and the Museum mirrors and preserves *the other binding relationship between these structures in terms of their significant heritage value*: a former tramway power house juxtaposed with its tram depot, both the first of their types in Sydney.

The Powerhouse Museum at Ultimo, by this or any other name, is destined to surrender what remains of its formerly excellent *reputation for self-sufficiency in exhibition construction and exhibit development and its efficient collection management* if the Harwood Building and its facilities are wastefully abandoned.

Comparison with proposed facilities at Castle Hill Building J

Analysis of the SEARS document for Building J at the Museums Discovery Centre at Castle Hill reveals that none of the facilities in the workshop of the Harwood Building will be replaced. The implications of this are profound for several reasons:

1. Without the facilities in the Harwood Building workshop, *the Museum would lose most of its future capacity to carry out any major conservation or restoration work on the larger objects in its collection*. Only A Store at Castle Hill (built 1978) has any of the facilities boasted by the Harwood Building, and these are very limited in terms of volume, equipment and variety. Loss of the Harwood Building workshop would almost inevitably lead to outsourcing work such as dismantling heavy machinery or machining and fabricating components for engines and vehicles.

2. Loss of capacity to carry out heavy engineering work would inexorably lead to a further loss of in-house skills to carry out this work. There has been an alarming loss of skills and knowledge among Museum staff in engineering conservation work over the past 10-15 years; the plans for J Store at Castle Hill confirm that this trend will gain pace. *I anticipate that within five years the Museum will have completely lost its former reputation for engineering acumen in the preservation of our moveable heritage.* And this, at a time when education and training in Science Technology, Engineering and Maths was never more important.

3. The *risks to large objects will increase* if they have to be moved to external contractors for treatment, as a result of both transport and handling risks and loss of direct control of how work is carried out.[3]

[3] The Museum set up a "contract restoration program" in the early 1980s in which external contractors were employed to carry out work on objects in the collection to a detailed brief written by the Museum. This was done to complete the enormous amount of work on the collections required to meet the deadlines for opening

4. The *operational costs of maintaining the collection in its optimum state will increase* as the Museum becomes more reliant of external parties to provide special engineering and restoration services.

5. With a much reduced capacity to carry out large object work, the Museum would lose its standing in the museum and preservation communities as a competent and experienced authority in this field and as a source of training for volunteers and others in regional museums.

Andrew Grant

Former Senior Curator, Transport, Powerhouse Museum, 1988-2012
Former Curator, Transport and Engineering, Powerhouse Museum, 1980-1988
23 September 2020

the Museum. Despite the precision of the briefs, managing the outcomes of this work proved to be difficult mainly because the contractors' work could not be directly supervised, with frequently compromised results.