The Conservation and Adaptive Re-use of the Sydney Mint

Robert Griffin, Supervising Curator of The Mint, Macquarie Street, Sydney

SUMMARY: The buildings of the Royal Mint, Sydney have a remarkable history of use and adaptation over almost 200 hundred years. Located in the most important civic precinct of Sydney, they have served as assistant surgeons’ residence, military hospital, dispensary and infirmary for the poor, Royal Mint, public service offices, law courts, and museum. With each of these uses, the Mint has played a significant role in the social history of Sydney. The Historic Houses Trust of New South Wales (HHT) is the new occupant of these most important buildings. The HHT, a statutory authority within the New South Wales Ministry for the Arts, has recently completed an extensive conservation and redevelopment programme to establish its new head office at the Mint. In giving a new use to the site, the aim of the HHT has been to reveal as much as possible of the surviving structures, while preserving the evidence of their alterations and additions. This approach is intended to emphasize the changing use and adaptation of the Mint buildings, Australia’s oldest public offices, over 200 hundred years. In undertaking this project the aim of the HHT has been to realize the best in conservation theory and practice with the best in contemporary architecture.

1. INTRODUCTION

The Mint consists of two structures – the Mint offices and the coining factory buildings. The Mint offices on Macquarie Street has been a major element in the streetscape of Sydney for almost 200 years, while the coining factory, hidden from view, is less well known. Both these buildings are associated with major events in the history of New South Wales and are of exceptional heritage significance.

The Mint Offices was constructed between 1811-1816 as the south wing of Governor Macquarie’s General Hospital, better known as the Rum Hospital as it was built by private contractors in exchange for a monopoly on the importation of rum. The south wing was the assistant surgeons’ residence and today is one of the earliest surviving buildings in central Sydney. It is also the earliest example of classical architectural detailing in Australia and contains much evidence of colonial building techniques from the convict period.

The Coining Factory, which will be the focus of this paper, represents a major event in the social, economic and political history of New South Wales – the discovery of gold. Built in 1854-55 in response to the gold rush, the buildings were constructed using prefabricated components and the buildings retain much evidence of minting processes and machinery. Rare as an industrial complex from the colonial period, the Coining Factory survives as an extraordinary example of mid-Victorian British technology.

These buildings are also unique in Australia for their continuity of use and adaptation, from the early 19th century to the present day. The Mint offices served as assistant surgeons’ residence from 1816 and, in the 1820s, as a military hospital. The building was converted to a dispensary and infirmary for the poor of Sydney in the 1840s and then became military staff offices. In 1854 Joseph Trickett, newly arrived in Sydney to choose a site for the Mint and supervise its construction, suggested this site to the colonial government. The former hospital wing would become the Mint offices with the coining factory buildings constructed on the largely vacant, level land at the rear.

2. THE ROYAL MINT SYDNEY 1855-1926

Following the discovery of gold in New South Wales in 1851, large quantities of unrefined gold began to circulate in the colony. To control this black market and maintain the economy the colonial government suggested to the British Secretary of State that a mint be established in Sydney. After some debate, and similar requests from both South Australia and Victoria, approval was given in 1853 for the first overseas branch of the Royal Mint to be established in Sydney.

Captain Edward W. Ward, Royal Engineers, was appointed Deputy Master (Deputy to the Master of the Royal Mint) and was responsible for the initial design of the buildings. Two years before, Ward had been a senior official for the Great Exhibition of 1851 and drawing on his experience of the prefabrication of the Crystal Palace, he commissioned a similar cast iron structure from The Horsey Family Company, Iron Founders. This firm, with John Walker and John Cook, ‘Patent Corrugated & Galvanised Iron Roof, Portable Building Maker and General Contractor’ also supplied wrought and cast iron roof trusses, roofing materials, cast iron window sashes and frames, cast iron flooring plates and a 16,000 gallon water tank.

The entire building, except for the sandstone walling, was prefabricated in England. Firebricks, roof slates and timber flooring were supplied by Charles Kirk & Thomas Parry of Woolwich, while F McNeill & Co provided four cases of patent asphalted felt roofing. The use of these prefabricated components, in different
combinations, is remarkable; their survival in the Mint buildings today, after 150 years, is extraordinary.

Tenders for the supply of machinery were called from leading engineering firms – James Watt & Co; Taylor and Allen, Birmingham; Joseph Whitworth & Co, Manchester; George and Sir John Rennie; Maudslay, Son and Field; and D Napier & Son. These firms were ‘to furnish…a design for…the machinery for a Mint to contain two presses and rolling and cutting apparatus, with annealing furnaces, etc…the price…to deliver the whole to Sydney and send a person to superintend its erection there.’ Several firms declined to send a representative to Sydney and were disqualified, with the tender awarded to Taylor and Allen, soon to become Joseph Taylor, Birmingham. Joseph Newton was sent to supervise the assembly of the machinery in Sydney and he was appointed Foreman of Machinery, remaining at the Mint until his death in 1888.

Captain Ward recruited skilled staff, including chemists and assayers, and requested a detachment of Royal Sappers and Miners to be specially trained to assemble the prefabricated building components. Ward instructed the suppliers of the prefabricated components ‘…this roofing is intended for a distant colony, and has to be put up there…It is essential that the men should see it in England, that they may mark the bolts and framing and understand its construction’. The sappers and miners were also to serve as the new mint’s industrial workforce and were trained at the Royal Mint. Finally, Ward supervised the shipping of materials, equipment and personnel to Sydney.

Joseph Trickett was appointed Superintendent of the Coining Factory and Clerk of Works for the new mint. While Ward remained in England to complete arrangements Trickett sailed for Sydney with the first shipment of men and materials. Trickett chose the site, adapted Ward’s plans to the existing hospital building and construction commenced in June 1854 using locally quarried sandstone and the prefabricated components. As a packaged and transported mint it was unique, a formal arrangement of symmetrical buildings around a central secure courtyard, with each of the large industrial spaces lit by skylights.

The Mint commenced operations in May 1855, processing gold from the diggings in New South Wales and Victoria to produce gold sovereigns and half sovereigns. These were to be currency for all the Australian colonies and New Zealand and the coins had a unique design, being marked ‘Sydney Mint Australia’. By the early 1860s these coins were legal tender throughout the British Empire however it was not until 1870 that they were accepted in Britain. From this time the design of the Australian coins becomes identical to that of the British coins, except for a small mintmark – ‘S’ for Sydney.

The establishment of the mint also played an important part in the institutionalization of science in the colony. Under Ward’s leadership the Mint acted as a de facto government analytical laboratory until the 1870s, testing and reporting on a variety of colonial minerals and timbers. In 1867 one of the Mint’s assayers, Francis Bowyer Miller, invented a gold-refining process which was quickly adopted in mints around the world and which is still in use today, in a modified form.

Major upgrading and repairs were carried out to the Mint in the 1870s and the 1890s – buildings were refurbished or extended and some machinery replaced. However from the 1890s there was the going perception of Macquarie Street as the seat of government and the law – not the place for an industrial complex such as the Mint. There were continuing proposals to relocate the Mint and as a result little maintenance or upgrading of the complex was carried out. Other mints were now operating in Melbourne and Perth and the Sydney Mint, with its antiquated machinery and declining profits was considered uneconomic. It was finally closed in December 1926 and its machinery transferred to other mints, auctioned or sold as scrap.

3. GOVERNMENT OFFICES, LAW COURTS AND MUSEUM, 1927-1997

The Mint buildings were immediately given over to use by a range of government departments, on a temporary basis. The expectation was that all the Mint buildings would be demolished to make way for a new government and law courts building. Lack of funds, particularly during the Depression and with the outbreak of World War II, prevented the demolition and as a result more and more departments were moved into the buildings. The large industrial spaces were subdivided into smaller and smaller offices and makeshift timber and fibro buildings constructed around the site. The Ministerial Motor Depot, which provided cars for nearby Parliament House, also moved in, using the buildings on the northern side of the site as garages. When the Depot was relocated in 1965, these buildings were demolished and it was expected that demolition of the remaining buildings would soon follow. However historic buildings began to receive some official recognition and the activists Olive Havard and Annie Wyatt led a campaign that successfully lobbied the State Government for the preservation of the Hyde Park Barracks and the Mint. In 1979 the State Government announced that the Mint would become a museum under the control of the Museum of Applied Arts and Sciences. The coining factory buildings, whose processes gave the site its name, were ignored and continued to be used as temporary courts and offices.

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1 Captain E Ward to Sir John Herschel, Master of the Royal Mint London, 23 May 1853, SRNSW 2/763
2 Captain E Ward to G Butler Esq, Board of Ordnance, 23 September 1853, SRNSW 2/763
In 1982, following an extensive archaeological and restoration programme, the Mint offices building opened as the first museum of Australian decorative arts. Ten years later this museum changed its focus to the theme of gold and silver, with part of the coining factory open to the public. The museum closed in 1997 and the building was transferred to the HHT.

4. CONSERVATION AND ADAPTATION
The HHT’s approach to the Mint was that it should be a cultural site but it should not be a museum. A two stage project was proposed for the re-development of the entire Mint site; the first stage would be redevelopment of the Mint Offices and the second, the conservation and adaptation of the Coining Factory, to provide a new head office for the HHT. This would answer both the long-standing need for the conservation of the coining factory as well as the HHT’s need for a new, larger head office. Since 1985 the HHT’s head office had been located at Lyndhurst, Glebe. At that time the HHT managed three properties with a head office staff of four. In 2001 when the coining factory project commenced the HHT managed 14 properties with a head office staff of approximately 90, with head office units located across several city properties. Re-location to the one site at the Mint would provide greater efficiencies within the organisation and the public would be provided with proper access to the HHT’s important Library & Research Collection. At the same time, the historic coining factory buildings would be conserved and given a viable new use, with public access and interpretation of these significant but neglected buildings.

The first stage of the project, for the Mint offices, was to literally open the building up to the public, to provide for its popular use and to serve as the public face of the Trust.

The building was given a range of uses - a reception/information area, meeting rooms, a café and a Members’ Lounge. The intention of using the building in this way was to draw people into it, to make it an active place that fulfilled a variety of functions and ensured that the building was used, and appreciated. This approach was not to lessen or deny the significance of the building in any way and interpretation of the site was provided. The Trust’s intention was that the building could be visited and enjoyed without the necessity of the full infrastructure and ongoing expense of a museum.

The second stage of the project was the conservation and adaptation of the coining factory buildings to provide accommodation for the Trust’s head office staff, the Library and Research Centre, an auditorium and new areas of public open space.

While the bulk of the head office facilities were to be provided within the adapted and conserved Coining Factory, new buildings were envisaged for the vacant areas of the site. These new buildings were to respect the footprint of the demolished buildings, however not necessarily mirror that footprint. Earlier schemes for the conservation and adaptation of the coining factory had proposed the reconstruction of the demolished buildings on the northern part of the site. The decision by the HHT to construct new buildings on the site was a very deliberate one and was based on the following:

i) that there should be no confusion between the heritage fabric and the new fabric

ii) that reconstruction of the demolished buildings would deny the 20th century history of the place, which was that all the buildings were to be demolished

iii) most importantly, the HHT believed that this project was an opportunity to combine the best of conservation practice with the best of contemporary architecture.

The project would express precisely the nature of the HHT – a heritage organisation that embraces the contemporary. In the adaptation of the Coining Factory, the HHT sought to create a lively and busy precinct that expressed the Trust’s commitment to conservation excellence and to contemporary architecture and programming. This approach was stated in the brief to consultants, setting the scene or ‘mindset’ at the beginning of the project, which was then reinforced and followed through during the project.

The HHT carried out a rigorous selection process for a group of consultants that would undertake this brief and accept the conceptual framework with enthusiasm. The result was a team of experienced practitioners, with Richard Francis-Jones of fjmt Architects as the principal design architect, Clive Lucas Stapleton and Partners as heritage architects and Godden Mackay Logan as archaeologists.

While the consultant selection process and preliminary design work was being undertaken, the HHT commenced a process of documentary analysis and physical investigation of the coining factory. The buildings retained partially demolished fibro structures and the remnants of 1950s and 60s court room and office fit outs. These were documented and a process of carefully peeling back the layers was commenced. Suspended ceilings, wall linings and timber floors were carefully removed, revealing the extraordinary assemblage of 1850s prefabricated cast iron components and evidence of minting processes. This ‘peeling back the layers’ also revealed much evidence of the changing use and adaptation of the buildings over 150 years. At the same time, an archaeological programme was undertaken, which revealed further evidence of minting processes and machinery.

These investigations informed the Conservation and Management Plan and the conservation approach. The Conservation Plan was prepared as an evolving document, a working document. While there were core
points to the Plan, such as all original and early fabric and spaces were of the highest significance, as new areas were opened up the Plan could incorporate new information and new policies as necessary. This meant that there was some ‘rubber’ to the Conservation Plan, so that the project could evolve. As areas were opened up, ideas could be developed and the brief refined as possibilities presented themselves.

The conservation approach developed by the HHT was to reveal as much as possible of the surviving structures; to re-open the large industrial spaces; to re-open original doorways, windows and skylights to return light to the buildings; and, most importantly, to retain the grittiness and texture of these industrial buildings and the evidence of their use and adaptation.

The process of investigation to reveal remaining historic fabric and archaeological elements was completed before detailed design and set-out for foundations and services was commenced. This meant that the site investigation also acted a process of risk reduction, ensuring that there would be no delays during the construction period caused by the discovery of archaeological remains or hazardous materials. Areas of the site were known to contain contaminated soil and so the archaeology was linked to the remediation programme. In a similar manner, the peeling back of layers in the building including the removal of asbestos materials and lead contamminates.

By undertaking these investigations before detailed design and set-out had commenced, the historic building fabric and revealed archaeological elements could then be integrated into the design of the new office spaces. To give two examples, the large rolling mill trench revealed during the archaeology programme was incorporated into the design of the auditorium and main entranceway to the offices while in the engine room revealed layers of the use and adaptation of this space were incorporated into the new function as a reception area.

The design concept developed by Richard Francis-Jones for the new buildings drew on two important aspects of the site – the symmetry of the original buildings and the relationship of the site to Macquarie Street and the Domain. A new ‘pavilion’ structure accommodating the auditorium is located next to the central two storey Superintendent’s Office. The new form is of the same proportions as the existing structure but of contrasting materials. The resultant pair of built forms creates a new line of symmetry along the line of the main entry to the site. On the northern edge of the site a series of glass enclosures provide foyer and service areas for the auditorium. This structure defines the northern edge of the courtyard along the line of the original building and protects the surviving historic boundary wall. At the rear of the site, a new two-storey office building is carefully located between the 1850s engine house and the 1890s coal store. This new building occupies the area of the boiler room, which was demolished when the Mint closed in 1926 and replaced by a series of temporary buildings. The new building ‘floats’ over the archaeological evidence of the boiler footings and underground flues (which have been documented), preserving the evidence in situ. A similar approach has been taken in other areas of the site, with openings left in the concrete floor slabs so that archaeological evidence is visible or accessible.

The integration of historic fabric and archaeology into the new office spaces includes the interpretation of these elements. Interpretation is layered through the site, from a general overview of the history of the place located in the front Mint offices building, to location specific interpretation in the coining factory. The intention is to provide interpretation for the general public – and the Mint’s location on Macquarie Street means that these visitors are a large proportion – as well as those with more specialized knowledge or interest in minting processes and machinery. Similar levels of interpretation are also provided by a small series of brochures or guides to the site.

In providing the new head office for the HHT, historically significant spaces of the site are now accessible to the public, not as a museum but as a cultural site. The Mint buildings may now be enjoyed by all sectors of the community, whether as casual visitor, participant in a public programme or tour, attending a private or corporate function, visiting the HHT’s head office or Library & Research Centre or simply enjoying lunch at the Mint cafe. We hope that all who visit the Mint leave enriched by the experience.

At the recent Royal Australian Institute of Architects (NSW) Awards the new head office of the HHT at the Mint received both the Sulman Award for public architecture and the Greenway Award for conservation. Given that the project aimed to demonstrate the best of conservation theory and practice with the best in contemporary architecture, this was particularly pleasing. To conclude, I quote part of the judges’ comments for the Sulman Award to Francis-Jones Morehen Thorp (fjmt):

*The metamorphosis of the 1850s Mint from a cluster of ruinous and neglected shells to a superb ensemble of restored, adapted and invented forms and spaces is a gift to Sydney. It will surely endure as a special place for its combination of revitalized history, contemporary design, intriguing interiors and inspired urban sequences. The whole ensemble is given cohesion through carefully modulated scale and proportion, juxtapositions of materials, light and shade, old and new, inside and out.*

*A 19th century walled factory has been transformed into a 21st century campus ...."*