

# 19-20

ANNUAL ACHIEVEMENTS

MINISTER'S  
STONEMAN  
PROGRAM





## EXECUTIVE SPONSORS

### MESSAGE



In the year which saw us confronted with adapting to Covid-19 in our lives and workplaces, the program barely missed a beat and we looked with interest back at stories of previous contagions in our public institutions, like Spanish Flu and Tuberculosis.

The Minister's Stonework Program has drawn on its deep well of motivated and skilled expertise to deliver a \$14M program of restorative maintenance and remedial repairs to significant state assets, many of which continue their original use – museums, schools, and courthouses. Our conservation approach is very much informed by maintaining continuing use.

Two projects really stood apart this year – the completion of external conservation works to the Keepers House at Gladesville Hospital, the oldest purpose-built asylum in Australia, and the Australian Museum Barnett Wing, part of preparations to host the Tutankhamun Exhibition.

Due to decades of work at these and other extraordinary sites, via longstanding co-funding partnerships, our team has developed strong bonds to place and stories, and to our clients and collaborators who share our enthusiasm. It has been another rewarding year.

**Abbie Galvin**  
NSW Government Architect

**Drew Varnum**  
Executive Director  
NSW Public Works Advisory

*The Barnet wing is a grand neo-classical composition brought to life by intricate and accomplished carvings by renowned stonemason and sculptor Walter McGill*



## CLIENT RELATIONSHIPS

WORKING IN PARTNERSHIP

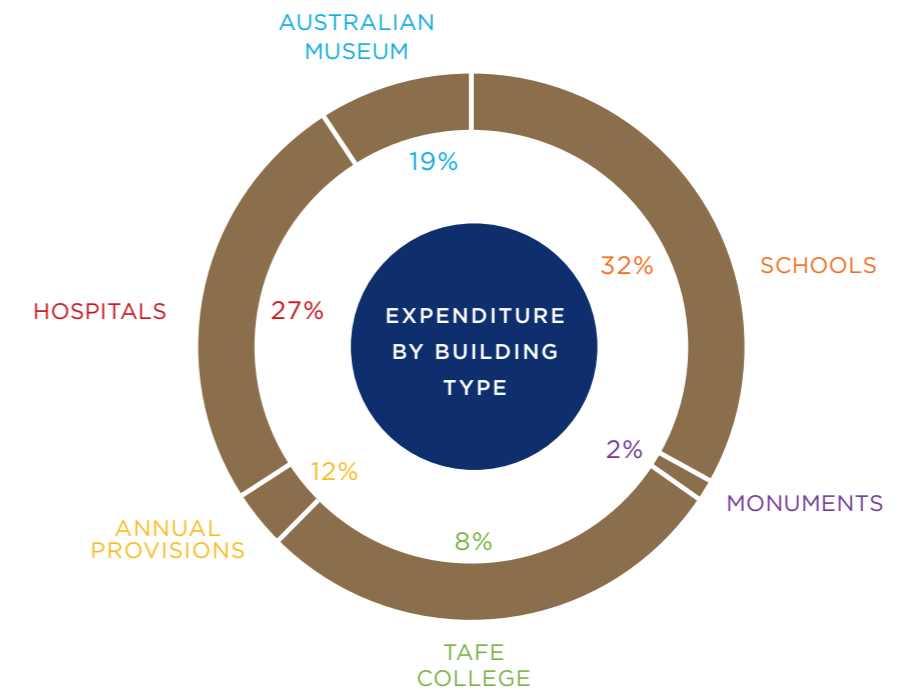


The Minister's Stonework Program coordinates stonework conservation works with state government agencies to improve cost and time efficiencies by also undertaking associated façade repairs. Agencies rely on the reputable advice and ongoing support which the program provides for their assets.

Agency co-contributions in 2019/20 totalled \$6,830,000. The partnership funding agreements provided external building repairs in addition to stonework, such as roofing, rain water goods, timber repairs, painting and seismic stabilisation.

This collaboration was further enhanced by the 'do and charge' non-profit approach to Program management and heritage direction provided by NSW Public Works, and construction delivery provided by Heritage Stoneworks. These strategic partnerships have resulted in cost and time efficiencies for government.

## CO-FUNDING AGREEMENTS



Partnership funding agreements were in place with 5 state government agencies in 2019/20, working on 12 sites that included 15 safety audits and conservation projects.

Due to the extent of catch-up maintenance required, rolling stonework maintenance programs over several years have been established with NSW Department of Health and Department of Education to efficiently and effectively facilitate forecasting for planned and staged projects on significant operational sites such as busy public hospitals and schools

## CONDITION AUDIT PROGRAM

### PRIORITY ON PUBLIC SAFETY

Managing public safety is a priority for the Minister's Stonework Program. The annual condition audit program enables inspections of external facades to assess the condition of the stonework and remove the immediate risk of falling stone, often located over playgrounds, entrances and public spaces. At the same time the diagnosing and scoping of repairs is undertaken for prioritising, costing and programming for delivery.

The condition audit program is fully funded by the Minister's Stonework Program and precedes repairs. The condition audits are carried out by an experienced multidisciplinary team which consists of heritage specialists, stonemasons and structural engineers. The condition of the facades is assessed from an elevated work platform or crane and loose and potentially dangerous stone is removed during the inspections, where possible. It is important to note that stone removed during a condition audit is a temporary safety measure only. The rate of stone deterioration will continue to increase, and follow-up repairs are essential in managing the risk of falling stone.

Condition audits & forward planning documentation undertaken this financial year:

- Maitland East Public School
- Leichhardt Public School Building B
- Tempe Public School
- Fort Street High School
- Tighes Hill Public School
- Kerry Packer Education Centre, RPA Hospital
- Gladesville Hospital Building 30
- Gladesville Hospital Building 28 chimneys
- Former Darlinghurst Police Station
- Ultimo TAFE Building C
- Art Gallery of NSW
- Callan Park Main (Balmain Road) Gates
- Kirkbride South (Male) Gates
- Kirkbride Building 13



*Top left image: Building B Leichhardt Public School condition audit. 35kgs of loose stone was removed during the inspection.*

*Bottom left image: Former Darlinghurst Police Station. 100kgs of loose stone was removed during the inspection.*

*Top right image: Loose, cracked stonework being removed during an inspection.*

*Bottom right image: A stonemason carefully removes a section of cracked stonework from a gable coping.*

*Completed conservation  
works to gable*





2019/20 SNAPSHOT

THE YEAR IN NUMBERS

FORWARD PLANNING -  
Condition assessments &  
scoped drawings completed for  
upcoming projects

16  
SITES

REPLACEMENT STONE  
Used (Raw quarry block)

108  
CUBIC METERS

\$13,985,607  
BUDGET  
\$7,021,712 TREASURY  
\$6,830,000 AGENCY CONTRIBUTION

13  
CONSTRUCTION  
PROJECTS

15  
CONDITION  
AUDITS

NSW CONDITION  
AUDITS  
Condition Audits  
state-wide managing  
public safety risks.

- 4 Schools
- 7 Hospitals
- 1 TAFE
- 1 Monument

Left page image: Leichhardt Public School, Building B, repairs to the spire, to prevent water ingress.





*Sandstone removed during  
conservation works*



A selection of the Program's co-funded projects delivered in 2019/2020 are featured on the following pages.

**EDUCATION | EXPENDITURE \$4,490,109**

Gardeners Road Public School - Stage 1 & 2

Greta Public School

Yudi Gunyi (Green Square) Public School - Stage 1

**TAFE NSW | EXPENDITURE \$1,077,050**

Newcastle TAFE Hunter Street Campus

**HEALTH | EXPENDITURE \$3,815,5665**

Gladesville Hospital – Building 38

Royal Prince Alfred Hospital – Albert Pavilion

Ryde Hospital - Denistone House

Sydney Hospital – North Block

**AUSTRALIAN MUSEUM TRUST | EXPENDITURE \$2,659,948**

College Street Facades

Sandstone Fence



## GARDENERS ROAD PUBLIC SCHOOL - STAGE 2



Building A at **Gardeners Road Public School** is a large two storey Federation Free style building featuring face brickwork, decorative sandstone banding and window sills, roughcast chimneys, gables and parapets with a concrete tiled roof.

The sandstone sills were in poor condition due to deferment of necessary repairs. Dangerous stone as previously removed to mitigate risk of falls during a condition audit; however, this accelerates the rate of decay requiring durable repairs within 2 years of removing delaminated stone. Vegetation growing in the joints and subsequent weather exposure had resulted in movement to the chimney capping stones resulting in a safety hazard.

Stage 2 works focussed on the eastern elevations of the building and included rebuilding a section of parapet roof, strengthening window arches, stone sill replacement, painting of timber joinery and installation of bird proofing. Minor repairs were carried out to prolong the life of the existing concrete tile roof with the roof plumbing wholly replaced with larger profile gutters and downpipes to increase capacity to manage heavier and more frequent rain events as a result of climate change.

Agency | **Department of Education**  
 Location | **827 Botany Road, Rosebery**  
 2019/20 Expenditure | **\$1,673,183**  
 Replacement Stone Source | **Grocon**



**Top image:** Gardeners Road Public School  
**Lower image:** Completed conservation works to window awning



## GRETA PUBLIC SCHOOL



**Greta Public School** opened in 1875 and was originally located in a traditional timber schoolhouse. The early schoolhouse was demolished to make way for the larger and more substantial Building A, constructed in 1875, to the design of prominent Hunter Architect John Wiltshire Pender. Additions to Building A were designed in 1921 by the NSW Schools Architect RMS Wells.

Building A is a single storey brick and stone building with a prominent gable front. A deep verandah shades the link structure. Two gabled small vestibules allow protection from linking the elements while accessing the 2 main school rooms.

The Littlewood sandstone used in the conservation was sourced from nearby North Rothbury.

Conservation works included cleaning and decontamination of roof spaces, repairs to corroding arch bars and rendered hood moulding, synthetic repairs to stone windowsills, stone indents and replacement to windowsills, chimney breast, ashlar, plinth course and chimney caps, masonry cleaning, repointing and desalination, timber repairs and repainting. Strengthening of window heads and chimneys was completed to improve structural integrity. Lead weatherings were installed to the chimney caps to protect against water ingress.

Agency | **Department of Education**  
 Location | **2 Wyndham St, Greta (Hunter Region)**  
 2019/20 Expenditure | **\$621,291**  
 Replacement Stone Source | **Ravensfield**



**Top image:** Greta Public School  
**Lower image:** Completed window repairs



## YUDI GUNYI SCHOOL - STAGE 1



**Yudi Gunyi school**, formerly known as Green Square School and Waterloo Public School was constructed in c1884-1885 to the design of Government Architect William Kemp with extensions by Richard Wells between 1926 and 1929.

Building A is a two-storey building constructed in the Victorian Free Classical style. The building features a symmetrical façade and is constructed of brick with a sandstone base as well as decorative sandstone sills, string courses, entrance and bell tower.

There was physical evidence of earlier brickwork finishes, in particular tuckpointing and raddling. After consultation and advice from a specialist heritage bricklayer, a decision was made to reinstate original finishes above and below the windows to give an indication of how the building originally looked.

The strengthening of the bell tower was undertaken to improve its structural integrity and ensure this vulnerable element was able to withstand potential seismic activity.

Agency | Department of Education

Location | 237 Botany Road, Waterloo

2019/20 Expenditure | \$1,994,521

Replacement Stone Source | Harris Street



**Top image:** Decorative stonework to main entrance prior to the commencement of conservation works

**Lower image:** Reinstated tuckpointing and raddling to window arches

**Left page image:** Inspection by members of the project team of the under side of an external staircase at Yudi Gunyi School.



## NEWCASTLE TAFE HUNTER STREET CAMPUS



The **Newcastle Technical College** site is of state significance for its association with key phases in Newcastle's and NSW's political and social history.

Designed by William Kemp in the Federation Romanesque style, the main TAFE building demonstrates Romanesque arches and the use of polychrome brickwork, carved Sydney sandstone mouldings, finials and copings; patterned terracotta tile panels and gable apexes and ornate brickwork.

The Trades Hall designed by Ernest Yeomans adopts a free interpretation of classical composition and decoration. Its red-brick cement rendered façade is richly moulded and its elaborate pediment is typical of the Federation Anglo-Dutch or Baroque Revival style of architecture which flourished in Australia in the early 1890s. There are relatively few surviving examples of this style in Australia.

The carefully designed conservation works ensures the long-term protection of these historic buildings, while retaining as much as possible of the original building fabric.

Conservation works included replacement of deteriorated sandstone units, including 5 of the unique flora and fauna carvings, installation of protective lead weatherings, stormwater improvements, repairs and repainting of cast-iron downpipes, repainting of the external timber joinery, window repairs, restoration and repointing of masonry mortar joints.

Agency | TAFE NSW

Location | Hunter St, Newcastle West

2019/20 Expenditure | \$1,077,050

Replacement Stone Source | Harris Street



**Top image:** Temporary propping is installed following the removal of the sandstone voussoirs scoped for replacement.

**Lower image:** Decorative carving features Australian flora and fauna



## GLADESVILLE HOSPITAL BUILDING 38



**Building 38**, originally named the Keeper's House, is the central building of the original complex, flanked by the Male and Female wings. The ground level comprised administration and was the formal entrance for patients, originally arriving by boat at Bedlam Bay.

The Ionic columns of the southern entry portico are thought to be the earliest of their kind carved in the colony. The upper levels originally comprised the Keeper's accommodation and that of 6 'superior class' patients. The basement level contains 8 rooms off a central corridor. The north side was originally the rear of the building, however overtime this aspect has grown in prominence, with a number of verandah iterations and internal re-configurations evident in the fabric.

Conservation works were carried out to remediate the structure, this included repair and reconstruction of the internal rotten timber wall plates, lintels and joists at the basement and ground floor levels.

Repairs and investigation of the stormwater trench on the south side were carried out to diagnose the cause of severe water ingress to the basement.

Once the structural works were completed, stone conservation works, verandah repairs and interpretation works on the north façade were undertaken.

Agency | NSW Health

Location | Victoria Road, Gladesville

2019/20 Expenditure | \$644,456

Replacement Stone Source | Appin



**Top images:** Completed conservation works to the North and South entry  
**Lower image:** Ionic capital



## ROYAL PRINCE ALFRED HOSPITAL



The **Victoria and Albert Pavilions** form part of the Royal Prince Alfred Hospital Precinct which is of high historical and architectural significance. These substantial buildings have high streetscape value. The pavilions were constructed to commemorate the royal visit of Prince Alfred in 1868. Each building consists of a projecting bay surmounted by a sandstone pediment bearing a bronze statue of Queen Victoria (southern pavilion) and Prince Albert (northern pavilion). They were designed as mirror-reverse twin pavilions by the NSW Government Architect Walter Liberty Vernon and constructed from 1901-1904.

Commencing at Royal Prince Alfred Hospital in 2006, the Minister's Stonework Program, in partnership with the Sydney Local Health District, has completed repairs to the Victoria Pavilion and Administration Building including stonework conservation, associated façade repairs and significant roof works. These current works are to complete the remaining stages to the Albert Pavilion.

Works for Stages 2 & 3 included cleaning of biological growth from the facade, repairs to windows, window shutters and sandstone repairs to the front fence. The introduction of lead weatherings to prolong the life of the original and new sandstone and repointing of open joints to stop water penetrating the building. General maintenance including painting of windows and cleaning lead light glass was also carried out whilst the scaffold was in place.

Agency | NSW Ministry of Health

Location | Missenden Road, Camperdown

2019/20 Expenditure | \$1,502,861

Replacement Stone Source | Harris Street



**Top image:** Albert Pavilion

**Lower image:** Completed timber windows and shutter conservation works

**Left page image:** Completed repairs to a section of the facade including reinstatement of rainwater heads



## RYDE HOSPITAL DENISTONE HOUSE



Denistone House and Stables (Lodge) are a pair of culturally significant sandstone buildings dating from 1874. The original Denistone house was damaged by bushfires in the summer of 1854-1855. The Denistone House that stands today was built by Richard Rouse Terry who purchased the property in 1872.

The Denistone Estate was subdivided and offered for sale in 1913. 17 acres of the Estate including Denistone House was purchased by the NSW government for use as a convalescent hospital for men.

In 1918, the local community were advocating for a hospital. The community was able to raise half the funds and successfully lobbied government to provide the remaining funding for Denistone House to be transformed into a properly equipped hospital.

Both buildings required intervention to arrest the rate of decay however these works focused only on Denistone House which due to its current operational use, its listed significance and the rate of its decay was considered to be more urgent.

MSP also funded the scoping documentation for demolition of the intrusive additions and the required repairs to the Stables. It is anticipated that works to the stables will be completed under the Minister's Stonework Program in future when funding becomes available.

Agency | NSW Health

Location | Denistone Rd, Eastwood

2019/20 Expenditure | \$525,744

Replacement Stone Source | Appin



**Top image:** Completed conservation works to the Main entry of Denistone House at Ryde Hospital

**Lower image:** Gilding in progress



## SYDNEY HOSPITAL NORTH BLOCK



Sydney Hospital, was constructed in two stages between 1879 and 1894, the designs by architects Thomas Rowe and John Kirkpatrick are of exceptional significance as a very fine representative example of late 19th century hospital design.

The conservation works undertaken at Sydney Hospital this financial year comprised a small section of the south elevation of the North Block.

Focusing on the replacement of deteriorated high-level parapet stone that had reached the end of its functional life. Lead weatherings were introduced to the projecting horizontal elements to prolong the life of the original sandstone, improve water shedding and also to reposition the drip edge further away from significant sandstone facade elements.

The logistics of working on a central CBD site, that is also a working hospital, increases the cost of sandstone replacement and facade works due to the need for Macquarie Street road closures for crane lifts, traffic management and staff working outside of normal construction hours.

Agency | NSW Health

Location | 8 Macquarie Street, Sydney

2019/20 Expenditure | \$1,142,505

Replacement Stone Source | Harris Street



**Top image:** Architectural drawing of works completed

**Lower image:** New lead weatherings installed to the projecting horizontal elements



## AUSTRALIAN MUSEUM



The **Australian Museum** is listed on the State Heritage Register and is Australia's oldest scientific and cultural institution. The site houses the first public museum in Australia and forms an important part of the Macquarie Street, Queens Square and College Street sandstone public precinct. The Barnet Wing in College Street dates from the 1860's.

While conservation works were completed on façade areas of the Australian Museum in the 1990's to early 2000's, the College Street Barnet North and South Wings could not be included during this time due to lack of funds and by 2019 there was concern for the condition of the stone.

A Safety Audit was carried out in 2019 and there was evidence of advanced deterioration to upper overhanging stone elements. Stone mortar joints were eroded and allowing water ingress, leading to further deterioration. Previous stone patches were cracked and failing, timber window joinery was degraded, and the façade was stained with biological growth around defective downpipes.

The objective of the project was to prolong the life of the significant fabric and provide quality long-term repairs (60+ yrs). The conservation approach was to replace 'like for like', record all interventions and retain as much of the original fabric as possible.

*Agency* | Australia Museum Trust

*Location* | 1 William St, Darlinghurst

*2019/20 Expenditure* | \$2,660,000

*Replacement Stone Source* | 1 Alfred St, Circular Quay and Harris St



**Top image:** Australian Museum following completion of conservation works

**Lower image:** View of conservation works to entry stairs

**Right page image:** Removal of a section of defective pointing.



No.1 Alfred Street Circular Quay

*Harvesting stone from  
Circular Quay - 756 cubic  
metres of stone added to the  
Minister's Stonework Program  
Stockpile*





