

Project Case Study: Paddington Town Hall – Remedial Repairs & Restoration, Roof Upgrade, Mechanical Upgrade & Clock Tower Works

CLIENT: City of Sydney Council



Paddington Town Hall was built in 1891 and is situated prominently on Oxford Street on land adjacent to Victoria Barracks. The Town Hall is heritage listed on the state heritage register and has significant cultural, historical, social and architectural significance to the local community.

SCOPE OF WORK

The outline of the scope of works included:

- Provision of safe access & protection to the Paddington Hall and public
- Continuous establishment of OHS & Environmental barriers
- Re-Roof Chauvel Cinema 1 & 2, Stapleton Hall ,
- Raise roof pitch over Chauvel Cinema 1
- Up Grade Mechanical Services.
- Provide Walkways and safe access for on-going maintenance
- Desalination works to facade
- Preparation & painting works of facade and internal roof parapets.
- Mechanical Services provide raised platforms.
- Roof Plumbing, Hydraulics
- Repair Slate Roof
- Waterproofing works
- Plumbing Works to water harvesting and storm water.
- Clean out ceilings
- Render repair works
- Carpentry Works to External Roof Areas, Gables, etc.
- Clock Work Tower facade works & strengthening of tower

- Painting of all external facade
- Internal Works on southern end wall of Chauvel Cinema 1
- Site disestablishment & project handover

CONSTRAINTS

Paddington Town Hall is located on a high profile, busy part of Oxford Street with heavy pedestrian and road traffic. Many residences are close by and needed to be undisturbed by the work.

Inside the Town Hall building is the public library, a radio station, a film production company and two cinemas that all needed to remain operational.

All work was to be completed while the building and its community services remained open to the public.



METHOD

Scaffolding the Town Hall and Clock Tower

The desalination, rendering and painting works required safe access. The adjacent pavements and public building access ways required protection from the work happening overhead. A Class B hoarding was used to protect the pavements and allow the Town Hall entrances to remain unobstructed. Scaffolding was erected around Oxford St and Oatley Road to allow access to the walls of the building and to the clock tower.

Desalination and rendering work

Salt content of walls was reduced to tolerable levels by applying a cocoon poultice to the affected regions. The cocoon poultice was applied in 2 coats and tested after each application; specialist heritage renderers applied a high-quality finish to the areas that required repair. This enabled a flawless surface for the application of the new painting finish.



Air conditioning and Mechanical Works

5 new Mechanical units were installed to the rooftop of Paddington Town hall with the new units being mounted onto a new structural steel platform. The new and old units were lifted from Victoria barracks, Murphy's had to install temporary air to still service the active building. New AC duct was also installed to the roof top of Paddington Town Hall.

Height Safety Roof Access System Installation

Height safety access system designed and fitted to allow maintenance of roof assets. Walkways were installed on the roof of the Town Hall using steel platform components including safety handrails. The complete height safety system was designed, fitted & installed by Murphy's employees. A restriction Murphy's had to overcome with the installation of the height safety was keeping as much of the system out of the view from street level to keep the heritage visual façade undisturbed from the street.

Painting

All Town Hall walls including clock tower were repainted using the specified colours to restore the heritage fabric to its former lustre. Difficult areas to gain access to or set up scaffolding were painted by abseilers. Paint waste and scrapings were cleaned up daily so as to not affect the surrounding environment and clutter the job site.



Crane Lifts

Lifting work in the project was safely performed by 80T cranes working from Oatley Road and Victoria Barracks depending where materials were needed. For these lifts Murphy's employed qualified traffic controllers to assist with pedestrian and traffic flow to the area. In one case due to the size of the lift Murphy's opted to perform the crane lift at night time to ensure as least disruption as possible.

Restoration of Clock Works and Features

Restoration of the clock face, hands & mechanical features were done by qualified Heritage clock restoration contractors employed by Murphy's. They cleaned the clock face glass, repaired rust to the clock faces frame and installed a new clock mechanism to restore the clock tower. Once the repair work was finished they painted the clock face to repair it to its heritage identity.



Metal Re-roofing

Metal roofs to cinemas one and two and office/caretakers roofs were restored using Colorbond steel roof sheets, flashings and cappings. One of the major constraints to re-roofing the Paddington Town Hall was the operational status of the working cinemas. Murphys worked around this issue by having an allocation of 2 hrs a day to re-roof the cinemas, other times were arranged to re-roof the cinemas, with consultation of cinema management and Councils Project Manager.

Hydraulic System Works

Installation of new box guttering was completed to all roofs that had been reinstated with new roof sheets. This too came with the complications of the cinemas still being operational and Murphy's applied their tact of 2 hrs a day with the box guttering as well.

Lead Work and Slate repairs

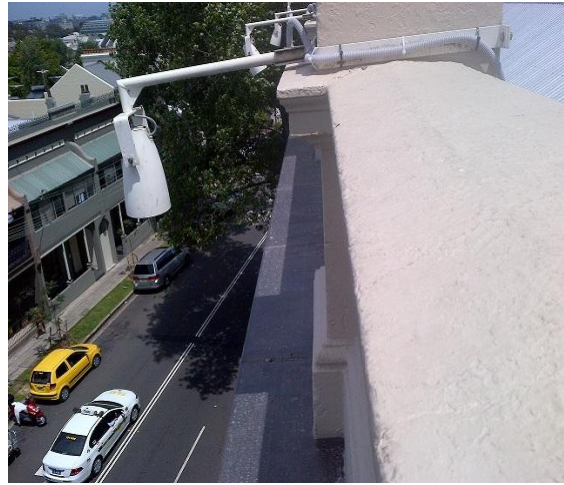
Replacement of selected slates of the roof to Stapleton Hall was carried out by trade qualified slaters with heritage building experience. Heritage lead workers installed lead flashings to the roof of hall to keep the heritage look of the slate roof. Lead works was also installed to the clock tower and pediments on Oatley St & Oxford St.



SAFETY MANAGEMENT

A Project Specific Safety Management Plan was created for the works based on a risk assessment of the project methodology. All site activities with a significant risk were executed after a Safe Work Method Statement was developed and reviewed by Murphy's, the relevant contractor and the City of Sydney.

The site was inspected weekly and audited regularly during the programmed work.



NOISE MANAGEMENT

An accredited acoustic engineer was consulted and a Construction Noise Management Plan (CNMP) developed and followed. The scope of works was analysed and noise levels of activities assessed. Noise controls included timing of works, regular maintenance of plant, tools and equipment. Selection of delivery routes to site and selection of work methods, tools and equipment.

PROTECTION OF THE ENVIRONMENT

Murphy's project team created an Environmental Management Plan and implemented the controls including the management of waste and control of sediment and erosion. Waste Management Plan devised to segregate waste types for recycling or appropriate disposal.

QUALITY MANAGEMENT

Inspection and Test Plans were created for each aspect of the scope of works as required. The project engineers inspected key milestones during the work to ensure workmanship requirements were met. These hold points were managed within the framework of Murphy's ISO 9001 accredited Quality Management System.

Examples of hold points included:-

- Desalination – salt testing of walls and paint preparation
- Hydraulic system, guttering downpipes and drainage
- Air conditioning / mechanical
- Painting and rendering work
- Clock works

- Air conditioning work

Benefits offered to Client during Project Works;

- Building occupants including cinemas, the public library, the film production company and radio station remained open and undisturbed by the works
- Weekly project meetings with customer for excellent communication and progress updates
- Noise management procedures implemented so nearby residents undisturbed by works
- Works carried out with minimal environmental disruption to Paddington Town Hall occupants
- Security of building maintained during the works