



a.

Entrant: Andersal Engineering
Project: Department of Housing – Concrete repairs to high rise buildings in the Sydney basin
Category: \$2.0m and above – Open Category
Background: Program was for 19 weeks. Pre tender estimate for concrete repairs 12,000 litres. Crack repairs along with steel awning repairs over walkways at Maloney Street.
Outcome: A very cost effective concrete repair project completed with very competitive rates. Job completed 20,000 man hours of work without one lost time injury.
ACRA contributors: Sika and Parchem
Other categories entered: 8



b.

Entrant: Buildcorp Asset Solutions
Project: Sheehan's Bridge
Category: Projects up to \$500k – Open Category
Background: Sheehan's Bridge in Gundagai is a 1.2km long reinforced concrete vehicular bridge structure. Due to increased traffic in the area the bridge was duplicated and during the construction work took the opportunity to repair the existing bridge and upgrade the barrier system.
Outcome: Successful and substantially increased the life of the concrete kerb and barriers on the bridge deck.

ACRA contributors: BASF supplied the repair materials.
 Other categories entered: 2 & 3

c.

Entrant: Freyssinet Australia
Project: Reservoirs Earthquake Strengthening
Category: \$2.0 and above – Open category
Background: A structural assessment carried out by KBR showed the reservoirs to be vulnerable to earthquake events. The reservoirs were to be structurally reinforced to meet the Australian Code for a 1 in 2500 year earthquake.
Outcome: We managed to comply with the projects main constraint – not to cut through any existing reinforcement and achieve 100% effective grouting. There were no OH&S incidents and no environmental incidents. End result was commended by Sydney Water's own Heritage Architect.
Other categories entered: 8



d.

Entrant: Hitech Remedial & Construction
Project: Marine Parade, Maroubra Beach
Category: Innovation and Design in Concrete Repair and Protection
Background: 4 story residential block of units in Marine Pde Maroubra. With the building being located directly across from the beach this resulted in severe concrete cancer on the 6 balconies which were beyond conventional concrete repair. Externally, work involved the replacement of all

concrete balconies. Internally, a section of the concrete slab floor was demolished and subsequently replaced with new concrete after new reinforcement was treated with Sika primer 610.

Outcome: Clients gained an increase in property value via strong and long lasting balconies.
ACRA contributors: Parchem and Sika
Other categories entered: 2 & 3



e.

Entrant: Hyder Consulting Pty Ltd
Project: Plantroom Slab
Category: Investigation
Background: The building is a 25 level commercial building in Sydney City that was built in 1989. Hyder initially became involved when spalling concrete was found in the level 25 plant room slab during an annual façade inspection. Consequently, the Building Management requested our advice on the reported damage to the concrete slab. The potential risk from the consequences of the concrete spalling became apparent from this first inspection when Hyder's structural engineer noted that one of the post-tensioning tendons had failed due to corrosion. Failure of a post tensioning tendon in a high load area such as this was of significant concern and as the extent of the problem was unknown and potentially very serious, Hyder recommended and followed through with a multi-stage investigation.
Outcome: The installation of cathodic protection will commence in the near future. The aim has been to provide a long term solution that can be relatively easily maintained. As such, a Design and Construct approach was chosen for the discrete anode system.



f.

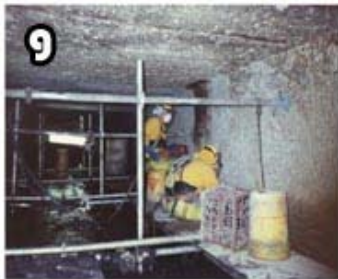
Entrant: Kladis Building Solutions
Project: Casula Powerhouse Art Centre, Liverpool

Category: Projects up to \$500k – Open Category

Background: The building was originally a power station that was built in 1950. The power station would later become a contemporary multi-arts facility. Opened in 1994, the Casula Powehouse embraces a philosophy of both heritage and contemporary design.

Outcome: All party's involved were overwhelmed with the works that were carried out at the Casula Powerhouse Art Centre. All expectations and requirements were on schedule.

Other categories: 3



g.

Entrant: Metrocorp Technologies
Project: Northern Suburbs Ocean Outfall Sewer Tunnel

Category: Long Term Performance

Background: A section of the Northern Suburbs Ocean Outfall Sewer running below buildings in the Manly CBD was identified by Sydney Water in 1997 as requiring structural rehabilitation. The tunnel is reinforced with encased steel beams in the roof and the beams were exposed and corroded.

Outcome: The project was completed under budget and the rehabilitation work has stood the

test of time and will provide many more years of service for the principal prior to any further repair work being required.

ACRA Contributors: Sika as major epoxy supplier

Other categories entered: 8 & 9



h.

Entrant: Preservation Technologies

Project: 175 Liverpool Street, Sydney

Category: \$1.0m - \$2.0m Residential/Commercial

Background: The building comprises a large footprint sitting high overlooking Hyde Park. It is a 30 storey - 115m high building bordered on all four sides by streets. In 2006 Hyder Conulsting was engaged to inspect the facade on behalf of the owners. It was noted that a large number of small concrete spalls were occurring across the building, noting the general extent of the works on elevation drawings. This was to part of a future strategy to proceed to a more detailed inspection and repair process. The project was finally tendered in 2008 as a component of a much larger building fit out and refurbishment program, with an overall contract value of \$50m.

Outcome: the large CBD project was delivered to a high standard of workmanship, with no safety issues reported even though we were working at heights on multiple elevations for nearly 12 months.

ACRA Contributors: Hyder Consulting and Parchem Construction Supplies.

Other categories entered: 3 & 6



i.

Entrant: Savcor ART Pty Ltd
Project: Endeavour Bridge Rehabilitation

Category: \$2.0m and above - open category

Background: The bridge spans the Cooks River and connects General Holmes Drive between Mascot and Rockdale NSW. The structure has seen various cycles of maintenance and concrete repair. Due to the marine environment, the structure has exhibited major deterioration as a result of chloride induced corrosion of the steel reinforcement, leading to spalling, cracking and delamination of the concrete. The NSW Roads and Traffic Authority selected several repair options including concrete repair, silane coating and application of impressed current cathodic protection system.

Outcome: The project was delivered on time, with no disruption to RTA, NSW Maritime Authority and Sydney Airport Corporation Operations. In addition no environmental, safety, quality and industrial incidents were noted.

ACRA contributors: GHD and Parchem Construction Products.

Other categories entered: 7 & 8



j.

Entrant: Structural Systems (Remedial) Pty Ltd

Project: Mount Thorley South Rio Tinto Coal Handling and Processing Plant.

Category: Projects up to \$500k - Open Category

Background: Concrete repair and cathodic protection of inlet breaker tank. The project involves concrete repair and supply and installation of ICCP to the reinforced concrete walls of an inlet breaker tank at a coal handling and processing plant. As a result of reinforcement corrosion, extensive spalling and delaminating (drummy) areas were observed on the external concrete cover of the tank.

Outcome: There were no lost time due to injury and the ICCP system was commissioned and currently in operation. The works was completed within the timeframe and budget set out during the tendering stage.



k.

Entrant: Water Infrastructure Group
Project: Northern Suburbs Ocean
Outfall Sewer (NSOOS) .

Category: \$2.0m and above - open
category

Background: Rehabilitation of
Burns Bay and Gore Creek
Aqueducts. Gore Creek Aqueduct is
situated at Gore Creek Reserve, St
Vincent's Rd Riverview. The
NSOOS project comprises the
internal structural rehabilitation and
lining of two of Sydney water's
iconic and federal listed heritage
structures.

Outcome: The project has been
delivered within the project budget.
WI Group were commended for
their overall approach to the project
and especially with our technical
expertise and excellence in
delivering a quality project with the
highest safety, environment and
community standards.

Other categories entered: 3 & 8