

Getting quantities right ain't easy but is a 'must'

The penalties for underestimating the quantity of a concrete repair can be huge.

A case given at ACRA's recent *Concrete repair quantities* seminar illustrates the point. The case involved the repair of cooling towers at Yal-lourn power station in Victoria in the late 1990s.

The project was completed without any meaningful investigation with the result that **the patch repair quantities varied by 800 per cent before the project was stopped mid works due to the cost blowout.**

Will clients pay?

The question arises as to **how much investigation we need to do to make accurate estimates of quantity of repairs, thereby avoiding such cost-shocks?**

And if we do what should be done, **what will that cost clients? More to the point, will they pay the price?**

If there is a price barrier to doing what really should be done, perhaps it is incumbent upon the industry to come up with **more innovative ways for consultants to improve their inspection techniques to achieve better accuracy and contain inspection costs.**

Wayward ways

Then again, what happens if the quantities are correct but the specified method of repair is not?

A simple project might not need much investigation to reach a realistic estimate. But **for larger, more complex jobs, more needs to be done up front to assess the structure, specify the remedial strategy and arrive at a realistic budget estimate.**

This stands to save at the project stage by minimising variations and the risk of a blow-out in quantities, in the mid-term by avoiding the



HOW LONG IS A REPAIR REALLY?



failure of repairs or materials, and in

the long-term through repair longevity and reduced maintenance costs.

In trying to answer such questions, the recent "Quantities" seminar had Ian Godson of Ian Godson & Associates speak from the client's perspective, Frederic Blin of Maunsell from the consultant's and Tony Kargiozis of Austress Freyssiner from the contractor's perspective.

Decay within

Ian's presentation included the repair of a single lane reinforced concrete bridge to Swan Island off the coast of Queenscliff in Victoria for which a CP-based concrete repair was specified. **Despite thorough investigation to arrive at the strategy, the concrete repair component of the works blew out because of the delamination from both the outer and the inner matt of reinforcement.**

Clearly, both investigation and repair projects need to be painstakingly assessed, managed and supervised by qualified and experienced consultants and those **repairs done for a realistic cost by experienced specialist contractors.**

Even then, some degree of variation is virtually inevitable—a fact of life that clients should be warned to expect.

Learn more

The *Concrete repair quantities* seminar is being staged in Brisbane in July, as is *The history and future of concrete repair*—see the website for details. ■