Bridge reimagined with precast precision

The new Charleyong Bridge replaces the 1901 single-span timber truss bridge. (Images: National Precast)

The replacement of the historic Charleyong Bridge marks an investment in safer, more efficient infrastructure for regional New South Wales.

Positioned on Main Road 92 over the Mongarlowe River, the new Charleyong Bridge strengthens the transport link between Braidwood and Nowra via Nerriga. The project, delivered under the NSW Government's *Bridges for the Bush* program, replaces the original single-span timber truss bridge built in 1901. After more than a century in service, the old bridge no longer met modern safety or load requirements.

Replacing the past, building the future

Jointly funded with $18 million from the NSW Government and $5 million from the Australian Government, the upgrade was designed to enhance safety, durability and freight efficiency. The bridge offers wider lanes, smoother alignment and the structural capacity to accommodate Higher Mass Limit (HML) vehicles. As part of the works, a kilometre of sealed approach roads was constructed, addressing the region's previous challenges with unsealed surfaces and tight road geometry.

Trusted precast expertise

National Precast member Ozcast was engaged to manufacture and supply 300 linear metres of precast parapets – structural elements that contribute to the bridge's safety and form. The company played a pivotal role in delivering a modern solution that aligned with both the engineering requirements and visual integrity of the bridge. "Ozcast is a good example of the calibre of members we have at National Precast," said CEO Sarah Bachmann.

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By the National Precast Concrete Association Australia (National Precast).

National Precast Concrete Association Australia

Timber from the original bridge was repurposed, preserving heritage and reducing waste.

"Their work on the Charleyong Bridge showcases the benefits of engaging experienced, quality-driven manufacturers – members who add real, lasting value to Australia's built environment."

Production progressed smoothly under factory-controlled conditions, with Ozcast applying its quality assurance processes. However, severe bushfires in the region disrupted delivery schedules and added complexity to the on-site installation process. In response, Ozcast worked with the broader project team, demonstrating flexibility and a problem-solving mindset that helped keep the project on track.

A more sustainable way to build

In addition to modernising infrastructure, the Charleyong Bridge project embraced sustainable practices.

The timber from the original bridge was salvaged, treated and repurposed – preserving part of the region's heritage while reducing waste.

Equally, the use of precast concrete offered environmental and practical advantages.

Manufactured off-site in a controlled environment, precast minimises construction waste, improves resource efficiency and shortens time on site. Fewer truck movements, lower embodied energy and long-term durability all contribute to reduced environmental impact.

"Precast concrete is increasingly recognised as a smart and sustainable construction method. It supports faster delivery, safer worksites and long-term asset resilience – all while contributing to Australia's carbon reduction goals," said Bachmann.

"When government agencies and contractors choose precast manufacturers like Ozcast, they're not only getting precision and reliability, but they're also investing in solutions that reduce environmental and social risks across the project lifecycle."

Delivering value through collaboration

Despite natural setbacks, the Charleyong Bridge was completed to a high standard and now offers a modern, accessible and resilient crossing for all road users. Ozcast's contribution exemplified its reputation for consistency, quality and collaboration – even under pressure.

"It's these kinds of projects that highlight the value of working with National Precast members," said Bachmann. "Our members aren't just manufacturers. They partner with clients to help shape a stronger, smarter and more sustainable built environment."

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Ozcast manufactured and supplied 300 linear metres of precast parapets for the new bridge.