



100-year durability underpins Australia's largest regional infrastructure project

Lying beneath Stage 4 of Australia's largest regional infrastructure project is a stormwater solution that will deliver more than 100 years of strength and durability.

The Woolgoolga to Ballina (W2B) project involves the duplication of 155 kilometres of the Pacific Highway to a four-lane divided road in New South Wales. When complete, the \$4.3 billion upgrade will improve travel reliability through better flood immunity, reduce crash rates by an estimated 27 per cent, and provide more readily-available alternative routes and 170 new bridges.

Stage 4 of the project is the \$100 million upgrade of a 13 kilometre section of the Pacific Highway between Tyndale and Maclean. A vital phase in the larger project, it is being constructed by BGC Contracting and consists of stormwater drainage works as well as bulk earthworks, road and pavement construction, bridge construction and finishing works.

Vital to the project's success are 10 kilometres of steel reinforced precast concrete pipes manufactured by National Precast member, Reinforced Concrete Pipes Australia (RCPA).

LONGEVITY WITH PRECAST

According to RCPA's Account Manager, Graham Alexander, opting for a precast solution assures long-term strength and durability.

"There is a proven history of performance from steel reinforced concrete pipes, achieving a 100-year design life," Mr Alexander details.

The precaster is supplying more than 5,000 tonnes of pipes ranging from DN375mm to DN1800mm in size. All pipes feature rubber ring joints and approximately half have additional concrete cover to meet marine exposure requirements.



The Australian Pipe Company

Precaster

Reinforced Concrete Pipes Australia

Location

NSW

Client

BCG Contracting

Principal Contractor

Laing O'Rourke & Parsons Brinkerhoff

Engineer

GHD

www.nationalprecast.com.au



MANUFACTURING EFFICIENCIES

The pipes are manufactured with dense, high-quality concrete and are vertically cast in RCPA's bi-directional machines.

"This pipe manufacturing technology is multiple times faster than traditional methods and offers the customer a more cost-effective product which can be virtually made to order," Mr Alexander explains.

"This minimises lead times for contractors, who often experience design changes based on site conditions as construction progresses."

LOGISTICS KEY TO PROGRAM

With a geographical distance of almost 250 kilometres between the precaster's Queensland manufacturing site and the project location in New South Wales, it's not only the speed of manufacturing that is important in a project such as this. Getting the logistics right is critical to ensuring a smooth, on time delivery of the precast elements.

"RCPA's careful management of transport demands has meant that the client has not experienced any significant delays with pipe supply," Mr Alexander says.

The Woolgoolga to Ballina project is being delivered in partnership with the New South Wales Government. The project team has been carrying out earthworks between Tyndale and Maclean since mid-2016. Major works will continue for approximately 22 months, weather permitting.



Visit www.rcpa.com.au for more information and advice on your next project.