A FAST, NO-FUSS SOLUTION FOR NEW CROSSINGS

In its continued drive to upgrade and improve road access and improve water flow across its irrigation network in the Griffith region in NSW, Murrumbidgee Irrigation has completed three further replacement road crossings – this time using Rocla's M-Lock® precast concrete bridge system.

The three bridges are identical, 15m long and 10.8m wide, and are within a 2km area. Jody Rudd, Delivery Executive for Murrumbidgee Irrigation, says they were just the right size for a single span, allowing the construction team to work out of the waterway and maintain levels of service during the construction process.

He says they would definitely use Rocla's M-Lock® precast bridge system again. "We predominantly use pipe and box culverts in these situations. This was the first time we have used a 'place and drive over' structure. You place the decks and it's ready to go, there is very little finishing. As far as limited interruption to our levels of service and neighbourhood in terms of closure – it's a much better option."

The crew from Ladex Construction Group (Ladex), tasked with construction, are no strangers to the Rocla M-Lock® precast bridge system, having installed a number of them in recent years. "From go to whoa – knocking down the old bridge, removing electric lines out of the road, completing the civil works to get to the stage of piling and then getting the new bridge installed and the road open is about two weeks," says Jeff Ross, from Ladex. "If everything is there, the bridge itself is up in three days."

"We obviously found them far easier to use and put together whereas with culverts there is a need to divert water," says Jeff. "With the Rocla M-Lock® precast bridge system it's just a matter of drilling either side of the canal, putting pilings down and building the bridge like Meccano. There is no water diversion – the guys and machines didn't even get wet. It's definitely an easier option."

Pile holes bored, piles lifted into place and driven into the ground (minimum 2m). Tested by registered authority to achieve the accepted standard as required by the specifications.

Piles trimmed to exact height required for the headstocks to be placed on top.

Headstocks and end beams placed and rock lining protection of the channel banks undertaken.

Plank placement using two cranes simultaneously lifting the planks into position between the headstocks.

Planks bolted together and all open voids grouted using recommended and approved product. Guard railing and approaches finalised.