
Grundfos pump provides vital backup water supply to Cambridge, New Zealand

CAMBRIDGE, NEW ZEALAND: The Waipa District Council on New Zealand's North Island chose Grundfos when repair work offered a chance to replace an existing pump system. Installation had to be swift and called for an innovative solution. Now, a single submersible Grundfos pump does the job of two old pumps.

The Situation

Cambridge, New Zealand, has a population of 13,000. The community's main water supply comes from the Karapiro Lake, which is located some distance away from Cambridge. Along the way towards the town, the pipe carrying the water crosses a bridge over the Waikato River adjacent to Cambridge. Recently, a pipeline section over the bridge needed repairing, which meant that it would be necessary to close up the town's primary water supply.

The Grundfos Solution

The decision to temporarily cut off the water supply prompted inspection of other water-related aspects. The back-up water supply for Cambridge comes from the Waikato River, but the two aging pumps in the river pumping station needed replacement. Waipa District Council decided to kill two birds with one stone: to repair the pipeline over the bridge and replace the two river pumps with a new Grundfos variable speed submersible pump powered by a 30 kW motor.

Timing was critical, as the Council naturally wanted the water supply from the Karapiro Lake to be disconnected for as short a period as possible.

TOPIC:

Timing was crucial when two old river pumps were to be replaced by a new Grundfos pump at Cambridge, New Zealand. Grundfos provided a pump solution within the very tight deadline.

LOCATION:

New Zealand

COMPANY:

Grundfos

The need for speedy installation called for an innovative solution. As it was not possible to get a crane into the Waikato pumping station, the new pump was floated on a barge down the river. The barge was anchored below the holding framework, and the old pumps were removed. The new pump was then placed in position, alongside other fixtures such as a screening cage.

Says Brendan Crib of the Waipa District Council: “We were very pleased that Grundfos was able to meet our urgent need for the pump, which was flown in from Australia at very short notice.”

Once installed, the new Grundfos pump provided Cambridge’s water supply via a treatment plant in the town while repairs were carried out on the Karapiro pipeline. The whole process took about eight hours.

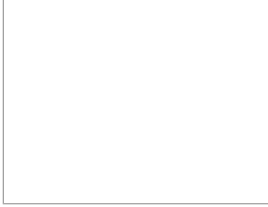
The new pump has since then been joined by a second Grundfos submersible pump on standby.

The Outcome

The Waikato pumping station has performed very well with the new Grundfos pump installed. It provides the top-up water supply to Cambridge at a rate of 58 litres per second during peak periods and at about 30 litres per second at average demand period. The pump is set at a depth of 4.5 metres and features a variable speed drive enabling it to be ramped up and down according to demand.

Brendan Crib says: “The pumping station is working very well. We have had no trouble with it, and the Grundfos pump is certainly more energy-efficient and reliable than the two it replaced.”

Related Products



S PUMP - SUPER VORTEX SINGLE- OR MULTI CHANNEL IMPELLER

Pumping of raw water, unscreened raw sewage, water containing sludge, industrial effluent