PROJECT
Refurbishment of Timber Bridge 0926 on Fern Road over the Canning River

CLIENT
Main Roads Western Australia (MRWA)

FORTEC CONTACT
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DESCRIPTION
Fortec was engaged by MRWA to conduct remediation works to Fern Road Bridge. The bridge is under the management/ownership of the City of Canning and the council was represented during project meetings.

The following urgent repairs were conducted to increase the safe lifespan of the bridge:

- Excavation of the river bed at the east abutment and placement of suitable rock protection both above and under the water level
- Sulphate soils from the excavations were appropriately removed from site and treated accordingly at an approved facility
- Abutments at the west and east bridge sides had considerable cracks in the concrete, increasing the risk for rapid deterioration. The cracks were identified, measured and treated by crack injection with epoxy
- Due to excessive corrosion, remediation works to the timber piles were carried out by removing and replacing the steel pile bands around the timber piles
- All 60 timber piles were cleaned with a high pressure water wash followed by a detailed mechanical cleaning
- 27 piles with medium damage were wrapped with a Denso 80 system
- The 33 remaining piles had an advanced level of deterioration and were required to be upgraded with a pile jacket system (Joinlox pile jacket) which is completely filled with grout from top to bottom
- The last 3 activities were completed by a certified diving company experienced with treatment applications, under the guidance of Fortec supervision

HIGHLIGHTS
- Works are carried out on bridge while maintaining vehicle and pedestrian access
- No environmental spills or contamination during construction works.