

Practical Repairs that Work

Getting more value from existing Bridge Assets



Emergency evaluation of damaged bridge for partial usage

Commercial pressures today mean that it is no longer possible to simply fund the replacement of a damaged or under Capacity Bridge, similarly closing it or severely restricting its load causes significant additional costs for diverted traffic. Modern bridge test systems such as the DBTS from Integrity Testing Pty Ltd allow weak elements in a structure to be accurately pinpointed and the development of low cost repair strategies to permanently repair, strengthen or extend the life of the bridge.

Repair of Single Span RC Bridge Damaged by Tree



Bridge after repair

Initial assessment of the damaged bridge by the DBTS system enabled the bridge to be immediately re-opened to single lane traffic thus removing a potential blockage. Detailed examination of the results by Integrity Testing engineers enabled the specification of a “plate –bonding” repair and this was carried out by the Shire bridge crew under Integrity Testing supervision and the bridge was restored to full service within 2 months of the incident.

Strengthening of 11m - span timber bridge



This bridge had been scheduled for replacement but funding had been reallocated.

Initial testing by DBTS identified deterioration in the abutment bed logs and the bearing ends of the log girders. Based on results engineers were able to recommend a simplified repair that substituted driven steel piles and a cross beam for the faulty abutment.

This repair at 1/20th of the estimated replacement cost restored the bridge to an x tonne capacity and extended its life for 5 to 10 years until replacement funding could be allocated.



Part complete repair

Detailed testing with modern test systems coupled with experienced engineers analysis can often provide innovative cost effective solutions that enable a bridges function to be preserved and life extended relieving pressure on scarce funding.