

Span 3 replacement on the Caval Ridge Haul Road Overpass

Wayne Roberts^{1*}, Alan Voll², Aaron Esplin³, Darren Gallet³, Evan Lo¹, Daniel Pinkney²

1. The Department of Transport and Main Roads' (TMR) Engineering and Technology branch
2. TMR's Program Delivery and Operations branch, Mackay/Whitsunday District
3. BHP Coal Copper Asset Projects

Abstract

The Caval Ridge Mine Haul Road Overpass on the Peak Downs Highway is a four-span super tee girder bridge constructed in 2013 to carry the Peak Downs Highway over an operating mine site.

On Saturday 20 April 2024, span 3 of the overpass suffered a major bridge strike, leading to extensive damage and the closure of the Peak Downs Highway at this location.

Due to the level of damage sustained, the decision was subsequently made to completely replace span 3 with a new span of super tee girders.

This paper will provide an overview of the project, including the construction of a diversion road and the equipment and technology used to monitor the bridge span until it could be safely removed.

The techniques and equipment used to remove the damaged span and the reconstruction process that led to the overpass being opened to traffic about five months after the incident will also be detailed.