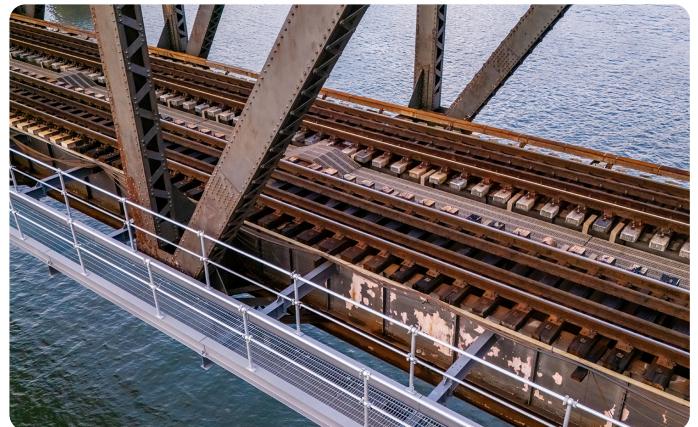




Hawkesbury River Rail Bridge Refurbishment - Walkway Installation

Location:	Hawkesbury River Rail Bridge, NSW
Client:	Sydney Trains
Construction period:	2023 - 2025
Services:	End-to-end design, fabrication, and installation of an 800-metre bridge walkway, delivering a safer and more efficient solution for rail operations and maintenance.
Executing companies:	Rhombberg Sersa Australia



This project involved the end-to-end design, fabrication, and installation of an 800-metre bridge walkway, delivering a safer and more efficient solution for rail operations and maintenance. The new walkway provides a dedicated access path outside the rail danger zone, while also accommodating relocated high-voltage cables beneath the structure.

Working within the constraints of an existing rail bridge required detailed surveying, innovative engineering, and careful coordination to ensure seamless integration with the existing asset while minimising impacts on rail operations. By undertaking installation from the water using custom lifting equipment mounted on barges, the project was delivered without the need for rail possessions, significantly reducing disruption and accelerating delivery.



Read more:

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Project outcomes

- ✓ Improved worker safety through the creation of a dedicated access path outside the rail danger zone.
- ✓ Enabled the safe relocation of high-voltage services beneath the walkway.
- ✓ Eliminated the need for rail possessions during installation, reducing operational disruption.
- ✓ Accelerated project delivery through innovative barge-based installation methods.
- ✓ Enhanced long-term asset durability through galvanised and painted steelwork.
- ✓ Improved bridge inspection and maintenance access with the installation of two new maintenance gantries.
- ✓ Maintained rail operations throughout key stages of the works.
- ✓ Extended the service life and performance of critical bridge infrastructure through structural upgrades and strengthening works.

Project scope

- ✓ End-to-end **design, fabrication, and installation** of an 800-metre bridge walkway.
- ✓ Detailed surveying and engineering design to integrate the walkway

with the existing bridge structure.

- ✓ Design and deployment of **custom lifting equipment**, including a jib and lifting frame mounted on barges.
- ✓ Marine-based installation of walkway components without requiring rail possessions.
- ✓ Fabrication of all steelwork at the **Horsley Park facility**.
- ✓ Galvanising and protective coating of structural steel for long-term durability.
- ✓ Design and installation of **two new maintenance gantries** beneath the bridge.
- ✓ Installation of gantry systems from barges while maintaining live rail operations.
- ✓ Major steel replacement works.
- ✓ Runway beam strengthening.
- ✓ Bridge bearing upgrades.
- ✓ High-voltage cable rerouting and associated infrastructure modifications.
- ✓ Project management and coordination to ensure safe delivery with minimal disruption to rail services.



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