

CASE STUDY

GEB Sidings Upgrade

LOCATION: Sunshine, Victoria
CLIENT: V/Line
DATE: June 2024 - December 2024



Overview

Global Rail Australia Pty Limited has completed a multi-disciplinary railway infrastructure upgrade of GEB Sidings in Sunshine, VIC for regional railway operator V/Line as main contractor. These significant upgrade works form part of the Government's transformation of Victoria's rail network, improving reliability, adding more services and enhancing facilities for regional passengers.

The circa \$2.8m fully managed project scope included turnkey civil engineering, electrical and track construction scopes of work, and

was completed by Global Rail Australia's in-house multi-faceted teams on time, without incident and to the very highest quality standard, all within the rail corridor.

All supply and implementation works were fully managed by Global Rail Australia in accordance with V/Line design requirements and their stringent railway standards.

Project Scope

Site set-up and project management:

- ① Provision of dedicated site management, worksite and security protection
- ① Program management and periodic updates to meet the contract requirements.
- ① Obtaining the necessary permits to work.
- ① Providing relevant methodology, risk and planning documentation for the works.
- ① Securing the site and setting up the site compound including accommodation and supplies.
- ① Provision and maintenance of all environmental controls including careful vegetation removal.
- ① Provision and construction of safe site access and logistics management.
- ① Receipt, unloading and inspection of all materials on site.
- ① Records management and handover documentation.

Civil Engineering (Supply and Installation):

- ① 60m x 1200 diameter RCP main drainage and 1500 x 1500 x 2000mm deep drainage pits with Class D galvanised steel grated lids.
- ① 250m Stormpro main drainage, ranging from 300mm to 575mm.
- ① 350m x 150mm AGI pipe to remove and surface water from under the track.
- ① 1 No 375 x 225mm concrete box culvert including wingwalls with headwalls
- ① 250m of M2 VicRoads spec concrete channel kerb.
- ① Reinstatement of formation of culvert approaches, embankments including rectification works
- ① Supply and installation of rock beaching.
- ① 1500m² of 3% cement treated crushed rock pavement.
- ① New fabricated handrailing.
- ① Cleaning of the site and reinstatement of any pathways/access roads or infrastructure.
- ① Disposal of all redundant material (where possible, redundant

materials were recycled).

- ① 1500m² of asphalt pavements, including 4 hi-rail access pads and 650m of line marking.
- ① 350m of new handrail along driver walkways.

Electrical (Supply and Installation):

- ① 800m Combined Service Routes throughout the site to supply power to new lighting.
- ① 27 No light poles with pile foundations using a 40t crane, which included providing a lift study and lift plan to use a crane in a live rail corridor.
- ① New energy efficient LED light fittings for new light poles and existing poles.
- ① 11 No existing light poles taken down and disposed.
- ① A 415v Main Distribution Board was installed
- ① 2 No Distribution Boards to house the power supply equipment.
- ① A new 3-phase power supply was connected to the site to accommodate for future rail equipment
- ① A new metering panel
- ① All electrical equipment was tested and commissioned.

Track Construction (Supply and Installation including the provision of approved road rail vehicles:

Track removal, renewal and formation reinstatement including welding and tensing in accordance with Track Construction Standard - (NIPR-2630, Rv1), Use and Laying of Rail - (NIST-2650, Rv3), Use of Ballast - (NIST- 2654, Rv2), Earthworks and Drainage - (NIST-2659, Rv4):

- ① 350m of rail, sleepers and ballast removal including disposal.
- ① Track formation proof rolled, and compaction tested.
- ① 450m of new ballast, sleepers and track.
- ① Track was tamped by a production tamper.
- ① Weld installation and testing by qualified Ultrasonic weld tester.
- ① Provision of all track handback and welding certification in accordance with NIFO 2650.5 and Section 3.11.

About us

Global Rail Australia Pty Ltd is part of the Global Infrastructure Group and is a leading Australian provider of design, construct and commission services for clients across a wide range of engineering and infrastructure industries including Mainline, Metro and Light Rail Systems and Utilities, whilst also offering general contracting and building services in the commercial and industrial sectors.

The company operates as a main contractor across a number of disciplines, which include civil and structural engineering incorporating maintenance and renewal, building, mechanical, electrical and power and track construction.

Offering either sector specific services or a fully managed turnkey solution across a range of activities including project management, construction and civil engineering design, Global Rail Australia specialise in the installation, testing and commissioning of critical infrastructure.

Global Rail Australia's in house expertise and flexible management approach, based on decades of engineering and delivering solutions has resulted in us delivering a range of projects for a variety of clients in both the public and private sectors, including rail network operators through to major infrastructure organisations.