

# LOWDINA Rail Realignment

Date: Jan 2023 to Jul 2023

Principal: TasRail

Project Value: \$2.2M

## TASK

Due to a significant slope stability event, TasRail sought to realign over 710m of the southern rail line near Lowdina Rd. The works incorporated the movement of over 17,000m<sup>3</sup> of material within a tight rail corridor. The works also included the augmentation of site stormwater including three twin DN600 stormwater structures under the new and existing rail alignments. All works needed to be completed under live train traffic conditions.

## CHALLENGES

The site presented with poor geotechnical stability comprising slope failure, oversized rock repairs and poor site drainage. Shaw needed to carefully execute earthworks on the site so as to avoid further movement in the slope and the track more generally. Using clever construction methodologies, Shaw was able to minimize the impact of stormwater conditions especially during the wetter winter months when the works were to be completed.

The site was also heavily impacted by the presence of Chilean Needle Grass - a schedule weed species. Shaw applied no go zones, weed burying and decontamination practices across the site to avoid the spread of this weed species. This was particularly important given the agricultural surrounds of the project.

The realignment of the track included the upgrade of three existing culverts, all located in awkward track locations. To maximise train windows these were completed in a series of weekend works. Due to the non-stop nature of these works, an intelligent 30 hour roster was required to manage day and night shifts.

Shaw engaged HayRail for the railway track works and was able to deploy its own internal SpicerRail division to ensure the success of this operation.

## OUTCOMES

Shaw successfully completed the works to meet the strict environmental conditions of the site. Achieving this strict compliance provided the confidence of not only TasRail but also to the local landholder due to the implications of weed spread. The tight turnaround timeframes for achieving track realignment were met despite the pressure applied to the project team.

