Culvert Replacement

Date: Dec 2023 to Mar 2024 Principal: TasRail Project Value: \$1.0M

TASK

Across the network, TasRail identified a number of culverts (>75 locations) which had or were close to failing. Proactive works to replace a subset of these culverts was awarded to Shaw for sections of the South (Lowdina, Campania and Colebrook) and West lines (Spreyton, Kimberley and Exton). Works included the removal of the existing culvert and replacement with Principal Supplied units along with the placement of new headwalls and associated drainage improvement works. As a result of Shaw's proficiency in these works, additional locations were issued as variation works by TasRail within the original programme.

CHALLENGES

Replacement of culverts required the closure of the track to achieve the necessary access. Time pressure for the project team is developed as the train window is finite and delays in installation have the potential to stop trains - a condition that is not acceptable. The project team worked efficiently and productively to ensure that the culvert was installed within the train window and returning the track to a position where the trains could pass. To improve the likelihood of not affecting train operations, some of the works were conducted on the weekend. Again, this may be standard operating procedure, however, works on the weekend prevent other redundancies like suppliers being available during normal business hours to manage emergency requirements. The project team, therefore, needed to ensure that all eventualities were considered and planned for such that weekend works were not impacted.

The Lowdina and Colebrook sites were known to be potentially contaminated with the Chilean Needle Grass - a noxious weed with a statewide management plan. Shaw's successful completion of the Lowdina Realignment for TasRail allowed it to continue its successful Chilean Needle Grass management strategy to prevent the spread of the weed within the rail corridor and beyond.

OUTCOMES

Shaw was able to complete the works across the multiple sites without generating train delays or otherwise negatively impacting stakeholders. The time critical nature of the works necessitated excellent cooperation of Shaw with the TasRail Project Manager and Clerk of Works.





