Excavation & Placement

Date: Jul 2021 to Sept 2021 Principal: BMTJV Project Value: \$500k



TASK

Shaw Contracting were contracted to excavate 3B rock material from inside the footprint of Renison's D Dam. This material was identified during the D Dam Stage 2 lift as being suitable for use on the dam wall and close to the current tailings level. Once covered by tailings this material is no longer accessible so had to be removed prior to the level rising. Works undertaken were:

- Sampling to ensure material met environmental requirements
- Designing and operating the pit to ensure personnel and equipment were safe below the level of the tailings
- Pit dewatering
- Maintain and operate the dam roads to deliver the 3B to both D1 and D2 walls

CHALLENGES

- Winter production on the West Coast of Tasmania is always difficult. Rain, snow, sleet and wind were part of normal operations.
- Renison were discharging tailings into D Dam during the project so no interruptions to their normal operations was required.
- The ideal location for the 3B fill was D2 wall. The material was scheduled to be direct placed rather than stockpiling. Direct placement is always cheaper and easier than handling the material multiple times.
 Access to D2 was via D1 so an effective method of wall access was required for articulated trucks.

OUTCOMES

Shaw Contracting completed the project with no interruptions to Renison's tailings discharging. We initiated the downstream raise of D1 wall early to enable reliable access to D2 wall for articulated trucks. The downstream raise provided a solid and effective road for trucks with no damage to D1 wall. We also constructed a ramp down the batter of D2 for access to D2 without the requirement to travel trucks along D2 wall. Again D2 wall was not damaged. For Renison's Stage 3 works the pre-work on both D1 and D2 walls provides early start capacity and reduces the material required whilst at the same time increasing D Dams ultimate capacity.