



# SUNRISE DAM GOLD RECOVERY ENHANCEMENT

## SCOPE OF WORK

GR Engineering were appointed by AngloGold Ashanti Australia Limited to perform modifications to the existing Sunrise Dam process plant to increase gold recovery.

The upgrade included a flotation circuit, ultrafine grinding circuit (UFG), reagent storage and distribution, air and water services.

The project required the existing screened cyclone overflow to be redirected into a new flotation circuit producing concentrate up to a rate of 400,000 t/a for subsequent UFG. The UFG product was then transferred to the existing leach circuit, where it was then combined with the flotation tails stream for leaching, adsorption, elution and tailings deposition utilising the existing circuit.

The new flotation and UFG processing facility included:

- Six 200 m<sup>3</sup> tank flotation cells producing rougher and scavenger concentrates;
- Concentrate thickening in a 16 m diameter high-rate thickener;
- Grinding in an open circuit regrind mill (3.5 MW) producing a product particle size of P<sub>80</sub> of 10 µm;
- Transfer of the regrind mill product to the existing leach feed circuit;
- Transfer of flotation tails to existing leach and adsorption circuit.

GR Engineering commenced the EPC design and construction of the Gold Recovery Enhancement Project in late June 2017, with Practical Completion achieved in May 2018, ahead of the original scheduled completion date of June 2018.

**Commodity:** Gold

**Region:** Australia

**Location:** 55 km south of Laverton in the Goldfields region of Western Australia

**Project Type:** Brownfields, lump sum contract, EPC

**Client:** AngloGold Ashanti Australia Limited (ASX: AGG)

**Award Date:** June 2017

**Completion Date:** May 2018

**Project Manager:** Peter Parsons

**Process Manager:** Bill Gosling