

South Deep FPT Backfill Project



Scope of Work

The electrical portion of the contract includes the supply and installation of mild steel galvanised cable racking and installation of free issue low voltage power and lighting cabling. The contract will take up about 15 km of LV cabling. Wade Walker is also responsible for the installation, including bus trunking, of a 30-tier MCC manufactured locally and procured by Murray & Roberts on behalf of Gold Fields

Location	Westonaria
Client	Goldfields
Project Type	Electrical & Instrumentation Installation
Value	R 5 483 337.08 Million
Duration	Months
Completion Date	



Project Overall Description

Construction of the largest cemented full plant tailings (FPT) backfill plant in South Africa, at Gold Fields' South Deep gold mine, in Westonaria, Gauteng, is nearing the end of full commissioning, almost 20 years after backfill operations began at the mine in 1993. The FPT plant, due for completion in July, represents the third type of backfilling implemented at the mine over a period of 18 years. Construction firm Murray & Roberts Cementation mine engineering manager **Rob Bradley** says the application of backfilling has been through three stages, owing to the various mining methods which have been used during the development of the mine to date. These advanced mining methods have required the adaption of the backfill type and system to keep pace with production levels and geological structures. "The primary purpose of backfill at South Deep today is to provide regional support for mined-out areas of up to 30 m, to maximise ore extraction, and reduce the underground ventilation and refrigeration requirements. In addition, surface environmental pollution is mitigated by the depositing of tailings underground.

