A disused quarry in Perth was proposed to be developed.

The Geotechnical report stated that the site comprises an open cut quarry with side walls generally sloping between 50° and 75° to heights up to 45m. The base of the quarry is planar with a fall of approximately 4m to the north where the quarry entrance is located. The existing side walls are blocky in nature with numerous small ledges, often supporting small boulders and cobbles. The exposed rock comprises pale grey brown granite gneiss with significant dark grey dolerite intrusions generally striking northward and dipping steeply (55° to 65°) to the east. The rock mass is generally fresh to slightly weathered although localised highly weathered (stained dark orange brown) areas are present close to topsoil/rock interface. Localised recent rockfalls are present in the north-west part of the quarry wall. At the time of the inspection, the quarry walls were generally dry although localised seepage was noted in the south-east corner.

A further geotechnical assessment indicated that, “the risk of injury from naturally occurring rockfall in the majority of the quarry was likely to be tolerable by the site end users. However, some remedial works should be undertaken to further reduce risk”. The recommended remedial actions comprised of scaling of loose rock debris and the installation of rockfall drapery netting on certain parts of the upper quarry face.

**Geofabrics** were approached by the project managers to provide a suggestion for the drapery system. Based on the quarry slope length, angle and irregular strata conditions, the **Steelgrid MO** was selected as the drapery system of choice. Steelgrid MO is a geocomposite comprising of double twisted woven mesh and steel cables incorporated into the mesh twists during the manufacturing process. The inclusion of the cables allows for effective strength transfer to the upper anchors during a rockfall event.
‘Geofabrics supplied’ Rockfall drapery systems are manufactured to the highest international standards. They have been successfully used throughout Australia for more than 40 years from remote Western Australian mine sites to east coast parklands.
Geofabrics provided a ‘turnkey’ solution by putting forward the names of a number of specialised recommended installers for the installation works. The RIX Group, who operate nationally, specialise in civil tunnel contracts, rail construction contracts, specialised drilling, rockbolts, rockfall netting, rock catch fences, soil nails & shaft lining were awarded the installation contract. They have a wealth of knowledge and experience in the installation of Geofabrics supplied Rockfall protection systems.

Their design included the following details: The top anchors comprised of 1m long, 20mm Ø galvanised deformed bars with eye nuts. The bottom and side anchors were 0.5m long. The anchor spacing at the top and bottom was 2m and the diameter of all drilled holes was 52mm. The top horizontal cable was 20mm Ø and the bottom and side cable was 14mm Ø.

For the installation of the 4'400m² of Steelgrid MO, 8-9 days were required for drilling, there was a 4 day crane hire to lift the mesh into place and it took 12 days for running cables and connecting adjacent mesh rolls together due to the irregular rock strata.

The project management team commended Geofabrics and The RIX Group on the outcome of the rockfall protection component of the project.