



VIA GELLIA, DERBYSHIRE, UNITED KINGDOM

Slope Stability

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Project Via Gellia, Derbyshire
Location Matlock, Derbyshire
Country United Kingdom

Year of installation 2017

Customer Derbyshire County Council
Engineering AECOM Chesterfield Office
Contractor CAN Geotechnical

Initial situation During routine maintenance of the rock slope it was noted that a large block was very close to failure. AECOM undertook the geological mapping and survey.

Description AECOM designed a DELTAX[®] drape to 90 % of the slope to control the weathering and failure of the rock slope. The large block is a different issue and SPIDER[®] S3-130 was specified to hold the large block in place. The site was cleared of vegetation, any large trees were treated with eco plugs to kill off the growth of the stump.

Using DTH (down the hole hammer) drilling methods working from top down 3 metres deep GEWI 25 bar was installed. The upper 3 rows of bolts were installed with resin grout, the lower rows were grouted with OPC water mix.

The SPIDER[®] S3-130 mesh was installed first and secured at all edges with 14 mm wire rope and P33 system spike plates.

Once all the bolts had been installed the DELTAX[®] G80/2 mesh was installed from top down over the full site including over the top of the SPIDER[®] S3-130 mesh. This was profiled in place with P33 system spike plates.

12 mm boundary rope was installed and tensioned to the rockface on all edges. This 12 mm rope was secured to the DELTAX[®] G80/2 mesh with T2 compression claws.

The road was reopened to public use just 11 days after closure. A total of 946 m² of DELTAX[®] G80/2 and 235 m² of SPIDER[®] S3-130 were installed with 44 number 3 meters long GEWI 25 bars.

Protected object Road, Mine / Quarry

Corrosion protection GEOBRUGG SUPERCOATING, GEOBRUGG ULTRACOATING

Stabilized area 946 m²

Maximum slope height 15 m

Slope inclination 70 ° - 85 °

Exposition North

For questions please contact our Geobrugg specialist at your side

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