

Soil Nailing, Slope Stabilisation

Location: Northumberland

Client: Northumberland County Council



Project Overview

An area of instability of 40 metres was effecting the B6278 north of Derwent Bridge. The narrow B road exhibited tension cracks which were becoming more marked over time. The restricted access meant that a range of plant had to be deployed to successfully deliver the scheme. Pennine's extensive in house plant inventory was able to accommodate these demands.

A soil nailing scheme was determined to be the most effective solution to arrest the deterioration of the slope. A major environmental consideration in the construction programme was the proximity of the River Derwent to the work area. Ancillary work involved tree felling and clearance, slope facing, landscaping.

Pennine installed a series of test nails in order to allow the designer to fully develop the final proposal.

Result

141 nails to installed to depths of up to 9metres. OPC grout flush.

Suitability testing performed to British Standards Over 200 tonnes of specialist mix grout injected at multi levels and entry points to stabilise ground.

Technical Information

Drilling equipment – Various feed beams

Materials – Ishebeck

Other – 25T and 8T excavators, grout plant, bog mats