

## SOIL NAILING

**Location:** Newcastle

**Client:** Robertsons Construction Limited



### Project Overview

Robertsons won the contract to build a social housing development on a challenging site in Ouseburn, Newcastle. The site was flanked by a railway viaduct, a road flyover and incorporated part of a Roman wall. Pennine was awarded the job of stabilising the steep site retaining slope as part of a temporary works package. The slope characteristics were a combination of sandstone outcrops and loose overburden and work was undertaken in a series of benches.

Pennine used a combination of soil nails and solid bar complete with galvanised meshing and erosion control matting, installing a total of almost 5000 linear metres of nail.

Pennine used its high torque, feed beam mast with a quick hitch working off the hydraulics of a 20 tonne excavator to reach the highest nail locations. It also deployed its TEI mast and KR 802 to work on the project simultaneously.

Pennine undertook the nail testing and procured the design of the scheme from Geotechnical Engineering.

### Result

5000 linear metres of nails/bars

R32-210 hollow bar

Galvanised plates 500x500x20

Erosomat matting

### Technical Information

KR802 crawler rig c/w rotary drilling head

Pennine excavator based feed beam c/w Krupp HB35 drifter

TEI mast