METCALFE
PLANT HIRE LTD

A66 Sandford Retaining Wall

The original sandstone retaining wall was subsiding and the road was likely to give way.

The first job was to install a haul road to allow access to the site. The road went over wet ground and was benched into the embankment.

The first layer of baskets installed on a sub base foundation, and behind them some of the sacrificed steel piles.

The finished wall with over 4000t of gabion stone. The scaffolding on the front was used to protect operatives from falls from height.

Client: Enterprise Mouchel	Value: £700,000
Location: A66 Sandford nr. Appleby	Duration: 16 Weeks

Project information

The aim of this project was to strengthen a retaining wall on the busy A66 trunk road in Cumbria. The sandstone retaining wall was beginning to subside and the requirement was to put a 4m high gabion basket wall offset by 2m from the existing wall, and backfill the gap with class 1 fill.

Steel sheet piles were used as part of the client's design to protect the embankment during the works. These were installed using a 'silent piling' technique to avoid any vibration. Despite these efforts, the poor ground conditions meant that the embankment slipped slightly, which caused the carriageway to move. On completion of the gabion wall some of the steel piles remained at critical locations.

Limited land acquisition by the client for the scheme made access to the site and working conditions challenging. All work had to be carefully planned to keep access open, and allow for different operations to take place along the length of the works. The haul road covered a lot of very wet ground, and as such was built up in stages using large 'as dug' rock in the bottom, and topped with capping stone and sub-base.

The job also had minor drainage works and extensive fencing, both stock fence and timber post and rail. After the gabion wall was completed MPH were retained to do the repairs to the carriageway above. This included a new combined kerb drainage system, surfacing and safety barriers.