

Specialist Drilled Piles

EDEN BROWS, ARMATHWAITE



Client
Network Rail

Main Contractor
Story Contracting

Solution
Anti Flotation Tension Piles

Plant Used
Hutte 207 MP
Modified Klemm 709
65 Tonne Liebherr Crawler
Crane
Concrete Pumps

Duration
9 Weeks

Year
2017

A major landslide at Eden Brows, Armathwaite occurred following the storms of winter 2015/16. It was estimated that 500,000 tonnes of earth had slipped down the embankment towards the River Eden causing the collapse and shutdown of the existing railway line.

Van Elle mobilised to site after offering their Elemex solution to Story Contracting. This system was offered because of its relatively low impact on the ground due to its unique airflow system. This was of importance as the area of works had the potential to have land failure a second time

The project involved installing 198 No. 660mm diameter Elemex piles for a contiguous retaining wall at depths between 18-20m and with a tolerance of only 25mm in both plan and verticality (1 in 800 as opposed to the maximum ICE spec of 1 in 200). The piles would also support a reinforced concrete slab for the newly laid railway line.

Van Elle had 2 rigs working simultaneously to meet a very tight programme. In total, 6 piling teams were on site, 4 during the day and 2 at night, as well as a team of 8 welders for the casings. This resulted in the piling works being completed on 20th January 2017, on time and within budget.

"This has been a hugely challenging job, as I saw for myself last year. I am impressed and grateful to the innovative team that led this work and to Story and the other contractors that helped us make it happen. Well done to you all. A great team effort."

Mark Carne, CEO Network Rail

