

Ely School Vinyl Sheet Pile Retaining Wall

Contract No: C713

Client: Thomas Sinden Ltd

Location: Spring Meadow School, Ely, Cambs

Value: Approximately £23,000.00

Summary: Design, supply and installation of interlocking vinyl sheet piles to form a permanent retaining wall to facilitate construction of a new assessment centre building and a new footpath.

Sheet Piling (UK) Ltd were employed by Principal Contractor Thomas Sinden Ltd to design, supply and install a vinyl sheet pile retaining wall to allow excavation into an existing grass bank, for construction of a new assessment centre adjoined to the existing school building.

The maximum overall height to be retained in the permanent condition was 1.7 metres and the design required the use of 5m long SG425 section interlocking vinyl sheet piles manufactured by CMI Ltd.

The soil consisted of approximately 1m of firm sandy clay, overlying 1m of medium dense sandy gravel, overlying firm to stiff sandy clay.

A total of 47 No piles, including 2 No corners, were installed giving an overall wall length of approximately 28 linear metres. A guide frame was set up on steel cruciforms which were driven and extracted using the vibro hammer on the telescopic leader rig.

The interlocking vinyl sheet piles were installed using an ABI telescopic leader rig with 600kN vibro hammer and a patented 'Stabcat Stompper Mandrell'. The pile was clamped into the steel mandrell, which was then locked into a keyway on the gates and driven to level by the vibro hammer.

The flippers holding the pile to the mandrell were then activated and the mandrell removed ready for the next pile.

On completion of the works the heads of the vinyl piles were trimmed to level using an angle grinder and a concrete capping beam cast with a handrail on the top.

Project Images



