

Pedestrian Swing Bridge Support Piles

Contract No: C787

Client: Barhale Construction

Location: Northwich, Cheshire

Value: Approximately £223,300.00

Summary: Removal of existing collapsed pedestrian swing bridge and supply and installation of steel tubular piles to support a new pedestrian swing bridge across the river Weaver.

Sheet Piling (UK) Ltd were employed by Barhale Construction Ltd to carry out the piling works for construction of a new pedestrian swing bridge across the river Weaver at Northwich in Cheshire for Cheshire West & Chester Council. The existing bridge, of mainly timber construction, had become unstable and was no longer usable.

The design required the installation of 37 No x 406mm diameter x 16mm wall thickness tubes to be installed and filled with concrete. A 20mm base plate was welded to the bottom of each tube before installation.

The soils consisted of firm to stiff sandy clay and the working load of each pile was 100kN. Access to the site for plant and materials was only possible by floating craft, and a temporary wharf 2 miles upstream was used for loading all plant and materials.

A spud leg piling pontoon, made up of 20 uniflotes, was constructed for carrying the piling plant and a further 6 flote pontoon was made up and used for transporting materials. A 250HP workboat was used to move and position the pontoons.

The piles were pitched using temporary spud piles and gates and a combination of vibratory and hydraulic drop hammers were used to install them to design set.

Concrete was delivered by truck to a nearby rowing club facility and transferred into skips and taken out to the works area by the workboat.

The works were completed on programme in six weeks.

Project Images



