TRITECH GROUND ENGINEERING
A E YATES GROUP

CASE STUDY

WIDNES
CHESHIRE

A Housing Project Utilising both Driven Piling and Vibro Stone Column Techniques

PROCESS
PRECAST CONCRETE DRIVEN PILING & VIBRO STONE COLUMNS

DURATION
9 WEEKS (OVER MULTIPLE VISITS)

VALUE
£220,000

As a result of our ability to offer multiple foundation solutions we often undertake projects requiring both driven piling and vibro stone columns.

On this mid-sized housing project, 243 houses in total, the plots were split between requiring vibro stone columns ground improvement, and precast driven piling.

So far we have undertaken our first visits of both solutions. For the areas requiring a vibro stone column solution we had to undertake pre-boring in some areas to get through some high strength made ground. After that it was plain sailing to install the stone columns as a cost effective solution to improve the ground.

On the driven piling plots there were mixed ground conditions. Due to the historic uses of the site some areas of made ground, the term given to any unnatural ground strata that haven't had time to 'bed-in', were up to 6m. In order to achieve the neccesary bearing strata for the houses we needed to drive piles beyond this. In some areas below the made ground there was also layers of peat, an added challenge! In true Tritech Ground Engineering fashion we managed to drive all piles to bearing capacity, in some cases to around 18m.

We utilised all hours we could on site and because of the clients programme we even got to see our driven piling and vibro stone column rigs on site together. We also carried out the necessary tests for the guarantee body, dynamic load tests for the driven piling plots and plate and dummy footing tests for the vibro stone column plots.

We can't wait to get back on site for the next phase of works!