CASE STUDY
RESTRICTED ACCESS PILING, CALDER & HEBBLE NAVIGATION WAREHOUSE

Project: Retail, leisure and office development
Location: Wakefield
Client: Quarmby Construction

Project Overview
Situated directly on the River Calder is a Grade II listed grain store warehouse.
The development of this site includes leisure and retail outlets as well as commercial office space. We were contracted to install extensive load bearing piles for the re-development of the original building.

The head room throughout the site was tightly restricted at only 2.5m and because of the nature of the building the main concern for the piling works was vibration and the damage it could cause to the listed structure.
Initially the decision was taken to plan the project using Sectional Flight Augered (SFA) piles. As we discussed the piling design with the main contractor we quickly realised that we needed a different solution. William Anelay (the main contractors) had an issue with removal of spoil from the site.

Result
We worked with the needs of the building and the main contractors to devise a developed programme. The new design used a pre-augered system to a depth below the original foundations, into which we then installed steel cased driven piles to a depth suitable for the designed loads.

In order to ensure our client was confident with the new plan we installed a test pile which gave a good result and we monitored the vibration on site for a week. These additional works were carried out within the original project costs.

The programme was originally six weeks long but was completed in only four. Our costs to the client didn't increase after the change of piling design, in fact they reduced due to the more cost effective nature of the pile used
and reduced spoil from the site.

Technical information
We installed 101 No 220mm piles, 167 No 273mm piles and 12 No 323mm piles suitable for loads from 150kN up to 412kN, totalling 280mm. The depths varied from 4m to 6m.
Rig used: Mobidrop

Call us on 0845 630 8993
www.van-elle.co.uk