

CASE STUDY

East Stand Development Leeds United Football Club



PROJECT OVERVIEW:

Client:	Leeds United Football Club
Sub-contracted to:	Caddick Construction Ltd
Engineer:	Halcrow Yolles
Sector:	Commercial
Value:	£145k
Description of Works:	Design, supply and install piles to form a temporary contiguous bored piled wall and foundations for the new extension.

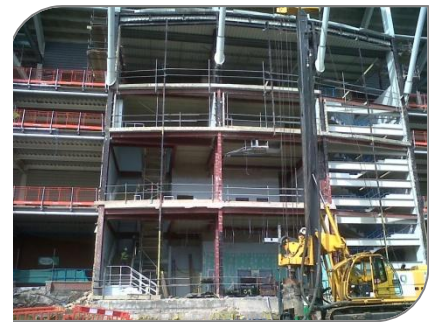


TECHNICAL DETAILS:

Type of Piling System:	Continuous Flight Auger (CFA)
Soil Conditions:	Made Ground/Glacial Clay/Weathered Rock/Mudstone
Length of piles:	Up to 14.5m
Type of Testing:	Integrity
No. of piles installed:	154 No.
Diameter of piles:	450 and 600mm



The retaining wall was to act as a support for the excavation to allow the build of the new East Stand and its foundation bases. The pile diameters for the wall were reduced from the original specification as the wall was to be temporary. The formation level for the new bases were nearly 3m below existing ground level, which was then a further 3m below the level of the adjacent existing structure of the East Stand. The piled wall was installed from a raised platform level; 700mm above existing ground level. The total length of the wall was approximately 35m and consisted of 76 No x 7m deep x 450mm diameter piles.



The bearing piles for the extension were 600mm diameter; 78 No. in total were installed to a depth of up to 14.5m. Some piles refused before the design length was achieved, however this was anticipated at design stage and a refusal criteria was written into the design before work commenced on site. The rig position for installing these piles was to sit between the struts of the main building. Restricted headroom on site meant split augers had to be used.



A restriction on working areas due to the football season and concerts taking place throughout the works meant we worked closely with the client to manage working areas and times to ensure smooth running of the works.