

CASE STUDY

New Stadium

Rotherham United Football Club



PROJECT OVERVIEW:

Client: Rotherham United Football Club

Sub-contracted to: GMI Construction

Engineer: 3E

Sector: Commercial

Value: £243k

Description of Works: Design, supply and install piles to form part of the foundations for a new football stadium.

TECHNICAL DETAILS:

Type of Piling System: Steel Tubular Piles

Soil Conditions: Made Ground/Soft Clay/
Gravel/Mudstone

Length of piles: Up to 14m

Type of Testing: Dynamic and Static

No. of piles installed: 702 No.

Diameter of piles: 140 and 177mm

Green Piling was subcontracted to undertake the piling works for Rotherham United's new football stadium. We negotiated with our client and the engineer to complete preliminary piling works to establish likely driven lengths prior to commencing the main piling works on site. Ten No. piles were installed and 2 static tests were carried out at preliminary stage.

The site was a large open space; however, the area where the West Stand of the building would be constructed was situated close to the railway line, therefore, we implemented the use of our smaller Viking piling rig to drive the piles in this area. A specific method statement was put in place for these works and vibration monitoring was carried out throughout the installation of these piles. Our Junntan PM20 rig installed the remaining piles on site.

Piles were driven approximately 12-14m; 304 No. 140mm diameter piles and 398 No. 170mm diameter piles were installed supporting working loads of up to 500kN.

