



Greenpiling





Introduction to Green Piling

Green Piling are specialists in the design, supply and installation of all types of piling systems and foundation packages. Covering all of mainland UK, Green Piling offer Steel Tube, Precast Concrete, CFA, Steel H and Mini Piling as well as Contiguous Piled and Steel H Piled Retaining Walls, ensuring that whatever the criteria we can tailor a package to suit our customer's needs.



With a highly experienced team on hand, you can be assured that from beginning to end you will have personal attention every step of the way; with the knowledge that we are committed to bringing efficiency and economy to the project, whether large or small.

About Us

Green Piling was founded in March 2000 by David Green, our company has grown and developed into a professional company with an emphasis on safety, quality and technical expertise.



All our staff hold CSCS cards, we are CHAS accredited, ISO9001:2008 approved, are members of Constructionline and hold a CSCS Certificate of Commitment.

Green Piling have worked on a diverse range of projects in Commercial, Industrial, Public Sector, Civil Engineering and Residential sectors. Working on contracts from £5k to £3m, using state of the art equipment and varying from the straight forward to the more unusual, we have a solution for whatever may be sent our way.

If you need any specialist advice, please contact us and we would be happy to discuss your requirements.

Our Services

Piling

- Steel Tubular
- Pre-cast Concrete
- CFA (Contiguous Flight Auger)
- Steel H
- Mini Piling



Specialist Services

- Contiguous Piled Retaining Walls
- H Pile Retaining Walls
- Foundation packages incorporating pile installation with reinforced concrete ground beams



Our Piling Services

Steel Tubular Piles

Green Piling's steel tubular piles utilise reclaimed steel tube primarily from the oil and gas industries.



Pitched in lengths up to 14m the high strength of the steel section gives the advantage of being suited to aggressive and complex ground conditions containing cobbles and/or boulder obstructions, sloping rock head or contamination. Piles can be continuously driven using a threaded coupler joint, with off cuts used on subsequent piles.

Available in 140-762mm diameter.

Precast Concrete Piles

Manufactured off site in factory controlled conditions, Green Piling use fully reinforced precast concrete piles in single lengths up to 14m. Where soil conditions dictate, piles are jointed using fully interlocking mechanical joints.



Precast concrete piles are suitable for a wide range of ground conditions and are typically more economically advantageous than other piling systems as there is no spoil to dispose of and higher strength concrete allows for a smaller pile in comparison to an equivalent bored pile.

Available in 200/250/300/350mm square.

CFA (Continuous Flight Auger)

CFA piles are suitable for most soil conditions and construction projects and are ideal when piling is required close to existing buildings or in built up areas as this method of piling is virtually vibration free and has low noise levels.



Available in a wide range of sizes from 300mm to 1000mm diameter and can be installed up to depths of 28m.

Steel H Piles

Supplied in a wide range of sizes, Steel H piles can be driven to great depths and can be designed to provide high bending and tensile capacities. Steel H can be supplied with coated surfaces to cater for both ground conditions capable of inducing skin friction and aggressive soils.



Case Study

Tesco, Sheffield



Client: Tesco Plc

Sub-contracted to: Bowmer & Kirkland

Engineer: W.A. Fairhurst

Sector: Commercial

Value: £307k

Soil Conditions: Made Ground/Sand & Gravel/Coal Measure Bedrock

Max Load kN: Up to 1000kN

No. of piles installed: 990 No.

Diameter of piles: 177, 244 and 340mm



Initially the project was tendered as CFA piling due to concerns over noise and vibration. Vibration monitoring was carried out adjacent to an existing masonry retaining wall which proved noise and vibration was not as the client had anticipated and therefore the project was converted to steel tubular piles which proved an environmentally acceptable solution; reducing not only the piling programme and speeding up follow on trades, it also ensured the piling works came in under the clients budget due to savings on muck away and other associated costs of CFA piling.

Green Piling agreed to take on the risk on pile length and obstructions. Pile caps were pre-bored to establish and locate obstructions prior to the main piling works commencing. Two piling rigs were mobilised in order to accelerate the clients programme. The average length of piles installed were 10m with some piles driven up to 21m. In total approximately 9113m of steel tubular piles were driven.





Case Study

Residential Development, Whitby



Client: Sanctuary Housing Group

Sub-contracted to: Tolent Construction

Engineer: Brian Clancy Higby Partnership

Sector: Residential

Value: £95k

Soil Conditions: Made Ground/Gravelly Clay/Rock (Sandstone)

Length of Piles: Up to 11m

No. of piles installed: 110 No.

Diameter of piles: 600mm



Green Piling was subcontracted to undertake the construction of a contiguous piled retaining wall on a new residential development. As the ground dropped away from the road towards the west, the proposed new houses were to be built on a levelled plateau with a reduced ground level; to allow this a contiguous piled wall was constructed to provide support to the existing carriageway.



Prior to commencing works on site, consultation with our client was undertaken to agree the sequence of works as the site was available in two areas (split level). The piling platform was moved up the site as we progressed our works, with works starting from the bottom of the site, working up the hill.

Our team encountered hard drilling into the rock; however pile lengths specified in the design had to be achieved due to the nature of the use for the piles. In order to ensure the lengths were achieved despite the difficulties, BFZ drilling teeth and a pull down winch was used on the piling rig. Debonding foam was required to all piles.

This was a complex design, but the works were completed to the satisfaction of our client, with positive feedback received.



Case Study

East Stand Development

Leeds United Football Club



Client: Leeds United Football Club

Sub-contracted to: Caddick Construction Limited

Engineer: Halcrow Yolles

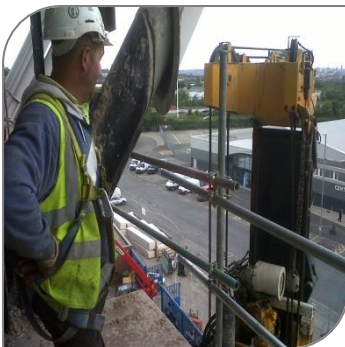
Sector: Commercial

Value: £145k

Soil Conditions: Made Ground/Glacial Clay/Weathered Rock/Mudstone

No. of piles installed: 154 No.

Diameter of piles: 450 and 600mm



Green Piling designed, constructed and installed a retaining wall which 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 CFA piles.



The bearing piles for the extension were 600mm in 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.



Case Study

Chatham Street, Liverpool

Client: University of Liverpool

Sub-contracted to: Ocon Construction

Engineer: White Young Green

Sector: Public Sector/Education

Value: £273k

Soil Conditions: Made Ground/Glacial Drift/Bunter Sandstone

Max Load kN: 850kN Compression
100-250kN Tension
50-75kN Shear

No. of piles installed: 721 No

Diameter of piles: 450mm

Green Piling was sub-contracted to design and install CFA piles for two 6-9 storey blocks for new student accommodation. 320 No. piles were installed for the west block, 393 No. to the east block and 8 No. for the crane base.

In order to accommodate both compression and tension capacities up to 5m long rock sockets into the underlying sandstone were required.

Careful monitoring of the augering process was undertaken using the fully instrumented rigs, to ensure sandstone had been reached and the required sockets achieved.

Specially adapted rock augers with tungsten carbide teeth were used to ensure sockets were achieved, reducing overall auger wear and increasing productivity.

Static load testing was undertaken and confirmed installed piles achieved the required load/settlement performance.

The project, with an approximate overall value of £35m, is due for completion in 2012.





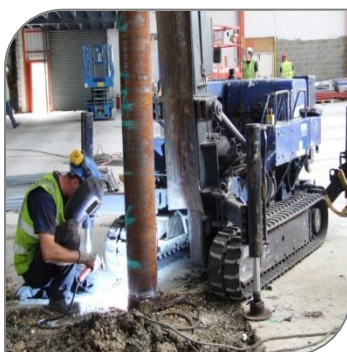
The Range Various Locations

Client: The Range

Sub-contracted to: CDS Group Services

Sector: Commercial

Description of works: Design, construct and install piles to form part of the foundations for a mezzanine within retail units.



Location:	West Thurrock
Piling system:	Mini – Steel Tubes
Diameter of pile:	220mm
Length of pile:	5m
Max kN:	225
No. of piles:	14

Location:	Weston Super Mare
Piling system:	Mini – Steel Tubes
Diameter of pile:	220mm
Length of pile:	17m
Max kN:	225
No of piles:	20
Additional information:	Two rigs required due to tight deadline to store opening day before Christmas 2010.

Location:	Stevenage
Piling system:	Mini – Steel Tubes
Diameter of pile:	220mm
Length of pile:	10m
Max kN:	225
No. of piles:	24
Additional Information:	Due to the near surface clay, pre-boring was required to prevent obstruction.

Location:	Weston Super Mare 2
Piling system:	Pre-cast Concrete
Diameter of pile:	225mm square
Length of pile:	20m
Max kN:	40
No. of piles:	28



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