

CASE STUDY

Town Centre Redevelopment Witney, Oxfordshire



Greenpiling

PROJECT OVERVIEW:

Client:	Simons Developments
Sub-contracted to:	Simons Group
Engineer	BWB Consulting
Sector:	Commercial/Residential
Value:	£300k
Description of Works:	Installation of piles to form part of the foundations for a mixed use development



TECHNICAL DETAILS:

Type of Piling System:	Steel Tubular
Soil Conditions:	Made Ground/Clay and Very Dense Sand and Gravel/Weathered Broken Limestone with clay bands
Max Load kN:	Up to 1200kN
Length of piles:	Up to 12m
Type of testing:	Static and 90 No. CAPWAP analysis
No of piles installed:	960 No.
Diameter of piles:	177 and 340mm



Green Piling were subcontracted to undertake the design, supply and installation of approximately 1000 steel tubular piles at Witney, Oxfordshire.

Two of Green Piling's Junttan PM20 piling rigs were used to drive the piles within a 6 week period. The piles are to form part of the foundations for a retail, multi-storey car park and residential development in the town centre.

Due to the location of the new development; near the town's hospital, council offices, library, magistrates court, residential areas and the local police station, noise and vibration had to be taken into account throughout the project. Extensive advanced consultation with the design team and local authorities allayed concerns over the use of driven piles within such a sensitive location. At no time did piling works have to be ceased due to noise or vibration issues.

Steel tubes were offered as the piling system that could not only penetrate the dense and obstructed near surface soils but achieve sufficient penetration into the limestone bedrock interbedded with clay bands to provide high capacities.

