

Client: Westridge Construction / Greenoak HA
Site: Residential Housing Development
Location: Abbey House, Ravenscroft, West Sussex

Project Description

Greenoak HA are one of 2,000 Housing Associations that work in the UK. Their main purpose is to provide affordable homes for people to rent. Many residents come from local authority registers of those who need housing, or are seeking supported retirement housing. This project was the first of two projects to be completed in the village of Storrington, West Sussex and features 12 family houses and 12 flats to rent on a brownfield site previously owned by the local authority.



The piles were designed to be embedded into the top of the very dense gravels as pure end bearing pile. Once piling was completed a specially designed top cap was lined, levelled and bolted to all the piles ready for the timber ring beams.



Geotechnical Ground Conditions

The soils investigation indicated superficial deposits overlaying dense to very dense sand and gravels (Folkestone Beds) at approximately 3.0 m below ground.

Helical Pile Design

GTL designed the helical (screw) piles for various pile cap configurations with pile loads up to 175kN in compression.

GTL carried out a static analysis using end bearing single 450 diameter helical plates to generate the required pile capacity.

All 67 piles were installed in 5 days and the individual top caps installed, lined and levelled within 2 days. Foundations complete in 7 days.