

**CASE STUDY**  
**Residential Development**  
**Whitby**



**PROJECT OVERVIEW:**

**Client:** Sanctuary Housing Group  
**Sub-contracted to:** Tolent Construction  
**Engineer:** Brian Clancy Higby Partnership  
**Sector:** Residential  
**Value:** £95k  
**Description of Works:** Design, supply and install piles to form a Contiguous Bored Pile Wall.



**TECHNICAL DETAILS:**

**Type of Piling System:** Continuous Flight Auger (CFA)  
**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 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.