



**AARSLEFF**

# Martello Lakes, Kent

## Over 1,000 precast piles installed through complex geology and winter weather

Aarsleff Ground Engineering was engaged by Vistry Homes to deliver the supply and installation of 1,070 precast concrete piles for a new housing development at Martello Lakes. The works commenced on 17th February and were completed by 1st May, with the team working through challenging winter conditions to maintain progress and safety on site.

The piling solution involved 200mm and 250mm square driven precast concrete piles. These were selected to suit the ground conditions and structural requirements of the development. The site is underlain by the Tunbridge Wells Sand Formation, a complex geological unit comprising layered fine to medium sandstones, silty sands, siltstones, and thin mudstones. In some areas, the Grinstead Clay is present between layers. Aarsleff's understanding of this formation enabled the team to apply value engineering principles, optimising pile lengths and installation methods to reduce programme duration and material use.

An additional design consideration was the presence of landfill clay, which introduced negative skin friction values on the piles. This was accounted for in the design to ensure long term performance and stability.

Aarsleff added value by working closely with the client and groundworkers throughout the wet winter months. This collaboration ensured that the sequence of works was maintained, and the overall programme was fulfilled. The site team demonstrated resilience and commitment, adapting to adverse weather while keeping safety and productivity at the forefront.

Jon Goodman, Contracts Engineer praised the team's efforts, noting that they worked relentlessly through challenging conditions to ensure the job was completed safely and on time.

This project showcases Aarsleff's ability to deliver reliable and efficient piling solutions in complex ground conditions, while maintaining strong client relationships and programme discipline.



### Data

1070 no. 200/250 mm sq Driven Precast Piles

### Client

Vistry Homes

### Challenges

Complex ground conditions and winter weather

## Contact

Aarsleff Ground Engineering

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