



SPEEDECK
FOUNDATIONS LIMITED



Eastmere Stables, Chichester, West Sussex

CLIENT TYPE	Residential Housing
LOCATION	Chichester, West Sussex
NO. OF UNITS	9 plots

Project Overview

N.J.S Partnerships Ltd appointed SPEEDECK Foundations Ltd to deliver the substructure works for nine new residential dwellings and detached garages at Eastmere Stables, Eastergate Lane, Chichester.

The site presented variable ground conditions with areas of Made Ground, soft Head Deposits and underlying London Clay. The client required a foundation solution that would provide technical robustness and programme certainty while remaining cost-effective across the mixed housing layout. We priced for 1,397m² of structural foundations for 12 x Rafts for 9 Units, 2 x Car Ports & a double garage.

@ solutions@speedeck.uk

 www.speedeck.uk

 01582 361060



Essential Design and Engineering

The site's ground conditions comprised Made Ground and Topsoil overlying Head Deposits, which in turn sit above the London Clay Formation and Lambeth Group.

The upper layers of the Head Deposits were soft sand with intermittent soft clay, making them highly variable and unsuitable for shallow foundations.

Reaching a competent soil layer would require excavation of at least 3 meters, approximately 1.7 meters to clear the Made Ground and a further meter to extend beyond the soft Head Deposits, rendering conventional shallow foundations both uneconomic and potentially prone to total and differential settlement beyond tolerable limits.

To address these challenges, a CFA piled raft solution was implemented. This approach combined reinforced concrete raft slabs, 225 mm and 300 mm thick according to structural loading variations, with 300 mm diameter CFA piles designed to Eurocode and warranty standards.

Pile lengths ranged from 7.0 m to 12.0 m, achieving a maximum safe working load of 280 kN, while the total raft slab area of 1,397 m² created a unified and durable substructure.

The system delivered long-term structural integrity without the need for heave protection, reflecting the non-plastic nature of the soils, and provided an efficient, material-conscious foundation solution that balanced cost, programme, and performance.

Construction Challenges

SPEEDECK completed the piling and raft construction as a single coordinated scope of substructure works with an eight week construction programme. This integrated approach reduced the need for multiple trade interfaces, simplified sequencing for drainage and services, and ensured early release of plots for follow-on construction. Delivery efficiency was further enhanced through offsite reinforcement preparation and standardised detailing, reducing on-site time and variability.