

CASE STUDY

PILING, CAMBRIDGE SCIENCE PARK

Development: New office development

Location: Cambridge Science Park

Client: Marriott Construction (part of the Kier Group)

Project Overview

Mariott originally asked us to quote on a steel cased CFA solution for their office development. The site investigation showed class 5 sulphate ground conditions so we knew we had to re-think the design and specification of the piling.



As the contaminants in the soil would have corroded the concrete in the CFA piles, we value engineered the brief and converted the job into a thick wall steel driven contract. In order to help the client see the benefits and feel secure with the new scheme we carried out three preliminary test piles and dynamically tested 20% of the working piles – all of which was included in the price.

Result

The original CFA piling programme was scheduled for seven weeks, our new piling solution was re-scheduled in at a reduced three weeks, and we completed it in only two. This saved Marriott time and money on the development. The piles were also far more suitable for the ground conditions, giving a better quality for the foundations and the build as a whole.

As part of the design we engineered the pile tops so as to reduce punching shears which allowed the original pile spacings to remain unaltered, saving the client any ground beam or pile cap re-design costs from their engineers

Technical information

We installed 204 No piles to 24m, consisting of 244mm thick wall steel piles with a minimum wall thickness of 13mm.

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