

Project Overview

SPEEDECK collaborated with a regional Main Contractor to design and construct the foundations for the Climping Care Home at Baird's Farm.

Using our Geo-Structural expertise and efficient CFA Piling techniques, we reduced pile numbers by 25%. The cornerstone of this project was an Adaptive Slab Design, which optimised the scheme to facilitate uninterrupted workflows.

Consequently, substantial programme and financial efficiencies were realised, culminating in the slab's central portion handover within a 5-week window.

The comprehensive scope of the project, encompassing the implementation of under-slab drainage systems, was executed and finalised in 9 weeks for this 64-bed dementia care home.



SPEEDECK
FOUNDATIONS LIMITED

Bairds Farm Climping

CLIENT TYPE	Care Home Provider
LOCATION	Bairds Farm, Crookthorne Lane, Climping
NO. OF UNITS	1 unit, Care Home





Design Engineering

Optimised Piling Strategy: By reevaluating the foundation design, we secured a 25% reduction in pile numbers from the initial engineer's scheme, demonstrating our ability to enhance efficiency and meet the project's distinct demands.

Foundation and Simplification through Low-profile Raft: The innovative use of a low-profile raft yielded multiple advantages, including the abolition of traditional foundational elements like pile mats, ground beams, and substructure brickwork. Substantial financial savings were also realised by avoiding the costly de-watering processes due to elevated water levels.

Reinforced Raft Innovation: Our strategic choice of a reinforced concrete raft, combined with an overslab gas membrane, tackled the specific challenges introduced by Characteristic Situation 2 (CS2) gas levels, which can be considered a moderate risk to human health. Due to this, we eliminated the need for under-slab ventilation with our reinforced concrete raft, ensuring a smoother construction programme.

Time and cost saving process

Swift Approval Process: We processed and submitted the GAs (general arrangement drawings) within a week of obtaining the design specifics.

Strategic Cost Management: We achieved significant cost reductions by presenting a robust case for omitting heave precautions beneath the slab.

Adaptive Slab Design: Our forward-thinking approach led to the design of a central section of the slab tailored specifically for crawler crane operations. This innovation enabled uninterrupted work schedules, consolidating what could have been multiple phases into one fluid operation. It resulted in considerable program and preliminary financial savings for our client, accomplished in just nine weeks.

Installing waterproof concrete, further strengthened by a comprehensive materials guarantee, ensures durability and peace of mind. The central portion of the slab was promptly handed over within five weeks, enabling seamless crane operations and keeping the project on track.

