

17 Hinton Road

Client: Blanchard Wells

Value: £185,000

Duration: 11 weeks

Background Information:

The development of 40 new studio apartments at 17 Hinton Road required substantial retaining structures to enable construction on a highly constrained, steeply sloping site in central Bournemouth. With limited access, narrow working areas, and the need to safely retain ground adjacent to the public highway and neighbouring properties, a creative, engineered solution was essential.

Suttle Projects were appointed by Blanchard Wells to design and construct the required retaining walls and tower crane foundations.

Project Detail:

Our package of works consisted of:

- Design and construction of two contiguous piled retaining walls (upper and lower).
- Tower crane bearing piles, designed and installed by our team.
- Early contractor engagement to evaluate multiple retaining wall schemes and identify the most efficient, best-value solution.
- Integration of piling platform requirements, access logistics, temporary works minimisation and client constraints into the design phase.

Our Design Approach:

Our in-house design team completed a full optioneering process, assessing engineering performance, access feasibility, temporary works volumes and overall project value.

- The upper retaining wall was designed to retain ground subject to highway surcharges.
- The lower retaining wall was designed for bearing capacity, resisting axial loads from the proposed superstructure.

To minimise temporary works and cost, the upper wall was installed using a Geax EK40 piling rig, chosen for its compact size and ability to access the site from the top level.

The lower retaining wall and crane base piles were installed using CFA piling with our Casagrande B125, part of our specialist fleet.

Project Challenges & Solutions:

The site's steep slope and narrow access routes posed significant logistical constraints. Through early engagement with the client, we developed safe and cost-effective access and working platform strategies.

We were also able to minimise the temporary works by using the smaller Geax EK40 rig for the upper wall, this meant that temporary works were drastically reduced, delivering a measurable saving for the client.

The retaining walls had to be carefully designed to maintain stability adjacent to public infrastructure; particularly the highway, as well as protecting neighbouring properties during excavation and construction.

Added Value & Innovation:

- **Design Optioneering:** Multiple design and methodology reviews ensured the most efficient, best-value solution was selected.
- **Reduced Temporary Works:** Rig selection and access planning minimised temporary works volumes and reduced programme risk.
- **Fully Integrated Delivery:** In-house design, Suttle Piling expertise, and our own fleet of plant allowed streamlined coordination and responsive decision-making.

Programme & Outcome

Despite site constraints, all works were completed safely, on programme and within budget. The installed retaining structures enabled the development to progress efficiently and provided a robust foundation solution for this constrained urban site.

Photographs:

