

Okehampton Station Piling

Client: Octavius

Value: Circa £78,000

Duration: 4 weeks

Project Detail

Suttle Projects were instructed by Octavius Infrastructure to carry out a mixture of SFA and CFA piling as part of the Okehampton Interchange Station improvements in Devon. We were chosen because of our extensive knowledge and experience in piling, and this was a great opportunity to use our Comacchio CH450 as well as our Klemm 709.

CFA Piling – North Side

We used our Comacchio CH450 to install a total of 20 piles. This included 4 piles at 600mm diameter with an average depth of 12.7m, and 14 piles at 450mm diameter with an average depth of 12.4m. All piles were cast in situ using concrete pumped through the rig. Each pile incorporated a full-depth reinforcement cage, supplied in two sections, spliced on site, and installed using a 22-tonne excavator to lower the cage to formation level.

SFA Piling – South Side

We used our Klemm 709 to install 7 piles from two separate platforms, required due to the site's embankment. The upper platform supported the installation of 3 piles at 600mm diameter, each to an average depth of 12.7m. The mid platform facilitated 4 piles at 450mm diameter, averaging 12.4m in depth. As with the North Side, all piles were cast in situ with concrete pumped through the rig and reinforced with full-depth cages spliced from two sections and placed using a 22-tonne excavator.

Time Constraints

During the project, a significant time constraint arose on the North Side works. Originally scheduled for day shifts, the programme was revised at short notice, requiring the team to complete the CFA piling during night shifts instead.

This change presented several logistical and operational challenges, including adjustments to labour scheduling, increased coordination with suppliers for out-of-hours concrete deliveries, and additional considerations for lighting, noise control, and site safety. Despite the disruption, the team successfully adapted to the revised working hours, maintaining productivity and ensuring that the works remained on track for completion within the original 4-week period.

Special Conditions, Challenges & Innovations

The project was delivered in a complex working environment, with both railway and high street interface constraints. On the South Side, works were carried out adjacent to the railway line, requiring operatives to hold PTS (Personal Track Safety) certification. A COSS (Controller of Site Safety) was present throughout the works to ensure compliance with railway safety protocols while working behind the Vortok fencing.

One of the key challenges faced was a last-minute change to night shifts for the North Side works. This required rapid rescheduling and coordination to secure overnight concrete deliveries, despite many suppliers not operating during these hours. The team successfully adapted to the revised programme without impacting the overall project duration.

Additionally, an innovative approach was taken on the North Side to improve efficiency. A tailored access and tracking plan were developed to allow the use of the Comacchio rig instead of the Klemm, enabling the works to be completed using CFA (Continuous Flight Auger) piling rather than SFA (Sectional Flight Auger). This change streamlined operations and reduced the need for additional platform setups or equipment, adding value to the overall delivery.

Machinery Used

- Klemm 709
- Comacchio CH450
- 2 X MEWPS

The piling works were carried out over a 4-week period both on budget between both the North Side and the South Side.

Photographs:





All images above show the CFA and SFA piling works being carried out throughout the duration of the project