



Wood Wharf Development Phase 2

Deep CFA Piling

📍 Canary Wharf, London

The deepest CFA piles installed in 30 years within the Canary Wharf development

The mixed-use Wood Wharf development at Canary Wharf, will provide up to 3,600 new homes, two million sq ft of office space, 350,000 sq ft of retail space and over nine acres of public spaces, squares and park when completed.

Project Background

Working closely with clients Canary Wharf Contractors, the scope of our piling on this record-breaking project included installing 333 bearing piles with diameters of 750mm and 900mm to depths of 30+ metres. This reduced a large number of the piles from 900mm diameter.

Our Llamada P160 installed all piles to the design depth without the need for Kelly bar extension or supplementary augers to be added.

Client Challenge

While technically challenging, the team was able to safely install CFA piles using the PRAD pile installation and monitoring system to achieve high quality pile records and eliminate pile clashes with underground structures.

We successfully installed 79 piles, not only adjacent to but also in between two live running Jubilee Line tunnels (approx. 20-25m depth to the tunnel crowns), without incident.

Project Solutions

Our value engineered proposal saved four weeks in programme and reduced the environmental impact of the scheme by reducing the amount of spoil to be removed from site by 700m³.

This proposal was taken through to contract stage and implemented on site.

This project was a finalist in Ground Engineering Awards 2021 projects £1-£3m value category.

Canary Wharf Case Study/21

Key Benefits

Pile design: **Optimised pile diameters and deeper piles has resulted in 350 T CO₂e saving**

Efficient delivery: **4-week programme saving was achieved**

Project stats

Client: **Canary Wharf Contractors**

Value: **£2.57M**

Date: **Summer 2021**

Rig/Kit: **Llamada P160 CFA piling rig**

