

Steel Piling Group | Case Study

Maritime | Highway | Rail | Buildings | Sustainability | Specialist Work

Thames Tideway Tunnel

Carnwath Road Riverside, Fulham



Dawson Construction Plant Ltd supplied the BAM Nuttall-Morgan Sindall-Balfour Beatty joint venture in 2017, with a 4 cylinder Push Pull system for silent and vibrationless installation of 15m long AZ42-700N sheet Piles on a 200m line due to the noise and vibration constraints in the residential area. The piles were penetrated 10m, 3-4m through the river terrace gravels and the remainder in to London clay.

The Push Pull system can operate mounted to a piling rig, or freely suspended from a crane line. On this project with access via floating equipment the choice was made to operate crane suspended to aid reach and limit barge movements.

Panels of piles were pitched in to Dawson supplied 15m guide frames, using Dawson remote release shackles and sheet pile threader systems to eliminate working at height and increase productivity. From there the piles were part driven with a variable moment vibratory driver, with on shore monitoring to indicate when vibration limits were being approached from where the Push Pull would take over.





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Technical Specifications

The Push Pull pressed the piles in panels of 4 singles, pressing one pile at a time in strokes of up to 700mm whilst reacting off the remaining three piles.

The client's design specified a staggered pile top, which can be seen in the photos - a request the Push Pull could easily accommodate.





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