

**ABI Equipment Limited was asked to supply specialist piling equipment consisting of an ABI Mobilram TM11/14 complete with VDW 6035 Double Auger Drive for CSP installation by contractor Keller Foundations Ltd for the piling work on a contract at Richmond, West London.**

*The piling works were carried out in October 2013.*



**ABI Equipment Limited**  
Barn Way, Lodge Farm Ind Est  
Northampton, NN5 7UW  
England

Phone: +44 (0) 1604 586960  
Fax: +44 (0) 1604 586961  
Web: [www.abi-eqp.com](http://www.abi-eqp.com)  
Email: [sales@abi-eqp.com](mailto:sales@abi-eqp.com)



Concrete secant piles were installed, primarily in clay soil conditions, around the perimeter of this development to form a basement and swimming pool area. The job required the installation of 318 No x Ø420mm piles to depths between 8 and 12m, with a maximum retained height of 8m.

The ABI 'VDW' system (Vor Der Wand or Front of Wall) offers a low noise, low vibration method of constructing a load bearing retaining wall with practically zero boundary wall clearance.

With the continuous flight auger rotating inside the counter rotating casing (fitted with a cutting shoe) the VDW system drills quickly and very accurately in close proximity to existing structures, often cutting through buried brick walls or old footings in the process.

A typical ABI Mobilram provides a compact yet powerful 'drilling rig' base unit that is easily maneuvered in to tight job sites with its short telescopic leader mast and narrow transport width. The high installed power of the carrier (much higher than a typical drilling rig) delivers sufficient power to drive the two rotaries of the VDW unit at the same time – important in maintaining effective cutting speeds.

Access to the Richmond job site was limited to the use of a nearby railway bridge with a maximum allowable vehicle weight of 44-tonnes. The ABI TM11/14 Mobilram, at 43-tonnes, had to be tracked over the railway bridge then re-loaded on the low loader in order to complete delivery to/from site.

Works were completed on-time with all piles installed to the required depth and accuracy.

Andrew Davison, General Manager Piling at Keller Foundations Ltd, comments “this was a challenging site location with limited access to the area for heavy equipment. The TM11/14 offered us a very compact but powerful piling rig to tackle the work. The articulating leader mast enabled us to reach into tight corners and the full range of leader movements meant we could position the carrier to suit other plant movements on site. All-in all, we were very satisfied with the productivity and performance of the ABI package as we were with the quality of the installed piles”.



Typical Exposed Wall