

Grenadier House WESTMINSTER



Main Contractor
Carey London Ltd.

Consulting Engineers
Elliot Wood

Solution
120 Bearing Piles
176 Contiguous Wall Piles

Plant Used
Llamade 140-2 CFA Piling Rig

Year
2017

The re-development of the former offices for the Ministry of Justice in Westminster. The development is a multi level residential block with basement structure. A relatively small site with a restricted access (rig unloaded off site and tracked in) and tightly positioned perimeter piles in close proximity to third-party structures and boundary limits.

The site was fully demolished prior to pile commencement with temporary propping required for the removal of significant pre-existing structural remnants. The depth of the piles required a large CFA rig but the dimensions of the site and the desired sequence of pile construction presented additional challenges regarding the placement of the ancillary plant items (Drum and Pump etc.) and laydown areas. The corner piles within the wall were intended to be constructed using a 'Restricted Access Rig' but through collaboration with the Main Contractor were made attainable using the large Rig, offering both time and cost savings.

The piles were founded in predominantly London Clay and the Pile Design (Eurocode) detailed 2# Static Load Tests which successfully verified the works carried out.

Solution

The construction of 120 Bearing piles and tower crane base piles of mixed size (450mm and 500mm diameter) to a maximum depth of 27.75m below PPL and 176 Contiguous Wall Piles of 450mm diameter to a max depth of 15.75m below PPL.

