



## Restricted Access Piling

# Spring Mews Building D, London

### Project Description

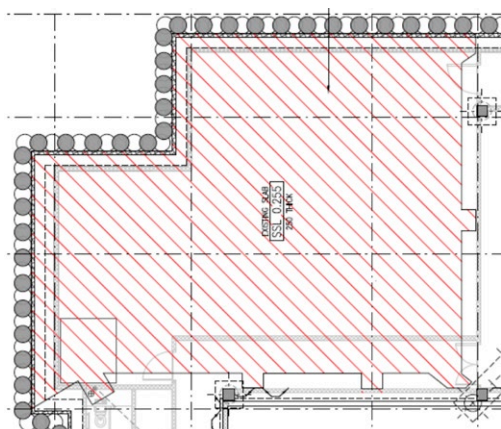
The Client required the design and construction of 39 bearing piles to support a multi-story student accommodation/hotel building located at Spring Mews, London. 35 piles were to be constructed inside an existing secant-piled excavation. The site constraints necessitated the craning of the piling rig from the adjacent road into the excavation.

### Ground Conditions

The upper 4.5 metres of material comprised highly variable made ground. This was underlain by the Kempton Park Gravel member, which extended to a depth of approximately 8.0 metres below ground level. The Kempton Park Gravel member was subsequently underlain by the London Clay formation.

### Solution

The bearing piles within the excavation were designed to diameters of 600mm, with lengths ranging from 22.2 to 24.9 metres below the existing excavated formation level. All the piles were founded into the London Clay formation. The method for the installation of the piles was sectional flight auger (SFA) execution using a Soilmec SM-16. The rig was successfully craned into the excavation, and the execution proceeded with a continuous supply of concrete being pumped from the adjacent road above the excavation. Steel casing was installed through the gravels during the construction of each pile to enable open boring during the extraction and concreting operations.



*Plan view of working area within the excavation*



*Craning operation for lowering the SM-16 rig into the excavation*

### Client

Spring Mews LTD

### Main contractor

Oakdean Construction

### Structural engineer:

Curtins

### Scope of works

- 39 no. 600mm SFA bearing piles

### Plant

- Soilmec SM-16
- Putzmeister 2005 concrete pump

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