

## **1.0 The Project**

- The project is for the construction of 141No mixed tenure apartments on behalf of London Borough of Camden (LBC)
- The new build consists of 5No 6 storey and 1No 14 Storey blocks, of concrete frame construction, with a full basement covering the entire development for, parking, cycle storage, plant rooms and refuse storage.
- The site is located in a residential area at the junction of Belsize Rd and Abbey Rd London NW6.
- A long narrow site with a footprint building which covers the entire site, it is bounded to the rear (south) by the Network rail owned main line into Euston and smaller branch lines serving Kilburn and beyond.
- The north elevation fronts onto Belsize Rd and the east to Abbey Rd with an adjoining residential property to the west (181 Belsize Rd).
- The demolition and site clearance has been carried out previously prior to Wates Living Space (WLS) involvement in the project.
- WLS have carried out ground investigations works to determine ground strength, soil make up and determine any contamination issues.
- The piling design has been carried out with regard to these findings.
- There are a number of 3<sup>rd</sup> party agreements/approvals currently being concluded prior to works commencing including
  - a) Party wall agreements with both adjoining neighbours Network Rail and 181 Belsize Rd.
  - b) Basic Asset Protection Agreement (BAPA) with Network Rail.
  - c) Approval in Principle (AIP) with LBC Highways department for working alongside the highway.
  - d) Thames Water build over agreement covering working on and around the main sewer which traverses the site.
  - e) LBC Pre commencement planning conditions

## **2.0 Description of works**

- Installation of 644No 450mm and 600mm diameter piles with a maximum length of up to 25metres.

## **3.0 Piling Rig information**

- Soilmec SF 65 with an operating weight of 49.500kg

#### **4.0 Forming the pile mat/working platform**

##### **4.1 Design**

- Carry out a series of plate bearing tests across the site to determine the bearing capacity of the existing ground.
- The Piling contractor has identified the most suitable piling rig for the operations – Soilmec SF65. (additional information attached)
- The plate bearing test and plant identification has enabled the Temporary Works Engineer to produce a pile mat/working platform design.
- The design includes a concrete bridging structure to be formed at the pile mat/working platform level over the TW sewer that will protect and allow safe access and egress over it.

##### **4.2 Working adjacent to the railway**

- The piling mat design will be submitted to Network Rail for approval prior to works commencing.
- There will be no Network Rail requirement for full time supervision from themselves only visiting at their discretion

##### **4.3 The works**

- Set out and clearly define the TW sewer line and the piling exclusion zone (as identified in the build over agreement) across the site.
- Instruction on working in this area will form part of the pre commencement induction undertaken by all operatives.
- Reduce level dig to this area only and install the designed structure to enable all plant and equipment to safely traverse the sewer. This area will be clearly defined on site with a series of pegs and highlighted on all drawings relevant to the piling works.
- Reduce level dig to the remainder of the piling area and construct the pile mat/working platform to the Temporary works engineers designs.

## **5.0 Piling Works**

### **5.1 Induction**

- All subcontractors and visitors to site will attend a full site induction prior to works commencing.
- The induction will cover all aspects of Safety, Health and Environmental matters associated with the project including the method statements for the operations which involve working around the Thames Water Sewer

and the exclusion zone to ensure all operatives are fully aware of the restrictions in place whilst operating in this area.

### **5.2 Setting out**

- The Project Engineer will set out the pile locations across the site utilising GPS setting out with co-ordinates supplied by the Project Structural Engineer. This allows a further check to ensure there are no piles within the exclusion zone.

### **5.3 Mobilisation and Equipment**

- The piling team will take delivery of all plant, equipment and materials, establish material storage areas and set up the piling rig ready to commence works.
- Following all safety checks to equipment piling works can begin.

### **5.4 Pile installation**

- Install the non-working test piles and anchor piles in agreed locations.
- Commence install of the 644No piles working in the following sequence.
  - a) Crane base piles
  - b) High level piles
  - c) Low level piles working from Block F towards Block A
- Working with the banksman the rig driver will position the rig at the appropriate pile position.
- When aligned and ready the driver will commence installation of the piles.
- On completion of each pile installation the attendant excavator will clean around the pile and dispose of the arising's.
- The piling rig will then be moved around the site to the next pile location with a banksman banking it at all times.

## **6.0 Environmental Considerations**

### **6.1 Oil and Fuel storage**

- All fuels and oils will be stored in minimum quantities on site in lockable bunded containers
- Refuelling of plant will be undertaken with suitable dispensing pumps, funnels and drip trays. Spill kits and absorbent pads will be available on site.

### **6.2 Concrete**

- The concrete trucks will be washed out off site.
- The washing out of the concrete pump, holding drum and hoses will create a certain amount of concrete slurry. This material will be contained within a bunded area and cleared regularly to skips to be taken off site.

### **6.3 Wheelwash**

- A wheelwash will be installed for use by all vehicles leaving the site. Vehicles will be monitored by the site gateman to ensure they are clean prior to entering the public highways
- Road cleaning will be undertaken as and when required.

### **6.4 Noise**

- CFA piling does not produce high levels of noise to the wider area outside the site confines.
- Noise monitoring has been undertaken prior to works commencing to assess the current background noise levels, the piling works will not generally produce levels above the current background levels.
- Regular monitoring will take place during the operations.