

## METHOD STATEMENT FOR CONTROL OF GROUND WATER

4 Wedderburn Rd, NW3

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## **1.** Description of works.

This method statement comprises the works involved to control the ground water whilst the underpinning is being carried out at 4 Wedderburn Rd.

## 2. Trial pit investigations

Trial pits were excavated on site in 2 different locations as agreed by the structural engineer. Both trial pits were excavated to basement formation level. Trench sheets were installed around all excavated faces and frames installed to ensure the stability of the excavations.

Whilst the excavation was being carried out there was a steady inflow of ground water through the clay. This was a manageable amount of water that was pumped out as the excavation progressed. The trial holes were able to be carried out without risking the stability of the surrounding earth faces and without any noticeable ingress of fines.

## 3. Method of working.

- All operatives carrying out the works will be competent and have the relevant training necessary.
- All operatives will be provided with and wearing the necessary PPE to carry out the works.
- Prior to underpinning taking place, sumps will be excavated towards the middle area of the proposed basement. As each sump location is excavated down to approximately 500mm below basement formation level, trench sheets will be installed to all faces and a temporary frame installed to shore up the excavations. Gaps will be left between the trench sheets to allow any water to ingress.
- A concrete base will be poured to the bottom of each sump pit.
- Sub-pumps with a float switch fitted will be located at the bottom of each sump pit on top of the concrete slab. The pumps will be kept on during the basement construction period while the ingress of water continues.
- The water will be pumped into a holding tank with a tray positioned up off the bottom of the tank. The water will be pumped from the holding tank to the main drain runs. This will allow any fines or debris to be monitored during pumping and ensure only clean water is pumped into the main drain.

- Each underpin section will be excavated as stated in the basement construction method statement.
- Water will be pumped locally in each underpin location as the excavation progresses. The water will be pumped to the holding tank, prior to entering the main drain.
- Once the excavation reaches formation level, a sump pit will be excavated to the end of each underpinning base. Each sump pit will be approximately 500mm below formation level of the underpinning base or as the water flow dictates.
- A shutter will be formed around the sump pit to allow each underpin base to be cast in dry conditions and to stop concrete entering the pump location.
- A layer of concrete blinding will be put down prior to casting each concrete base to ensure a clean, dry environment to fix the reinforcement and lay the concrete.
- The water flow will be constantly monitored and this method statement amended according to conditions on site.
- The project coordinator and structural engineer will be informed of any changes to the method of controlling water, if conditions on site differ from that which is outlined in this method statement.