Ashton Bennett

Campbell Reith Hill LLP,
Friars Bridge Court,
41-45 Blackfriars Road,
London,
SE1 8NZ

For the attention of E Brown and N Simonini

Dear Sirs,

Re: 4 Vane Close, London NW3 5UN

We write in reply to your Audit of the above BIA dated 31st October 2017, your Project Number 12727-07.

Section 4

4.2 Proof of expertise, please see attached CV of Simon Pole.

4.5 To confirm, the BIA does not recommend a suspended slab. The slab will be ground bearing with compressible material underneath to accommodate heave. The potential heave and thickness of required compressible material will be calculated at the detailed design stage.

4.6 As the basement will be situated below 1.0mm bgl there will be little impact of shrink and swell from the clays. However section 6.10 of the SMS states that 'The basement structure will be designed to withstand movement, following the basement excavation., due to immediate heave and long term swelling from the removal of overburden pressure, and due to the high volume change of the natural clays'.

4.7 The garages lie 7.50m distance from the front of the basement at a depth equivalent to 1.50m above basement floor level. Due to the distance of the basement, taking an angle of 45degrees from the basement floor, the basement will not impact on the garage. The foundation loads of the basement will lie beneath the garage foundations and will not impact on the garage foundations.

4.8 There is conflicting evidence in the LBC SWMP and the Environment Agency regarding groundwater levels and because of tis the FRA states a medium risk whereas the BIA states a low risk. The FRA states that provided waterproofing of the basement sump pumping and non return valves are used for drains the risk will reduce to a low risk. These recommendations are incorporated in the BIS Section 14.3.

4.9 The SMS states in Section 7.2 that the existing slab 'should be removed carefully piece by piece and the contractor should use appropriate power tools and method (such as diamond blades and drills and wet cutting) in order to reduce the amount of dust and vibration during the work.

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Where party walls are to be underpinned and existing foundations are supported on the existing slab, then the party walls will be underpinned beneath the existing floor slab.

It is possible that the slab represents an isolated footing from the previous building on the site and the structural engineer should be consulted on excavation to approve any over excavation required and to ensure that the method of construction is appropriate.

4.14 It is stated that a Party Wall Surveyor will be in place who will undertake the structural surveys of adjacent properties. BIA Section 14.7.

4.15 A Detailed Monitoring Strategy is presented in Section 6.13.6 with trigger levels and action for trigger levels.

4.17 The groundwater levels monitored lie beneath the proposed basement floor at 3.42m to 4.87m bgl. These levels represent slight groundwater in the base of the boreholes. In the case of WS1 the ground fell in after drilling and before insertion of the standpipe and the groundwater was just above the new depth of the borehole. In WS2 the water was just above the depth of the borehole of 3.80m at 3.42m bgl.

There are no residual impacts following mitigating measures.

We trust that this letter and attachments will conclude the requirements of Campbell Reith for this project.

Please do not hesitate to call if you have any queries so that we can close this BIA as soon as possible.

Thank You,

Yours faithfully,

Frances A Bennett

For and on behalf of Ashton Bennett Limited

Blomfield Road, London W9 1AH
[redacted]
Director: F A Bennett BSc, CGeol, FGS, FIMMM, C.WEM, MCIWEM, CEnv, AIEMA, MIEnv [redacted]