Chelmer
Consultancy Services
'Groundbreaking Services'

David
DVM Architects
4A Murray Street
London, NW1 9RE

15th July 2015

Dear Sirs/Madam,

Re: 57 Cotleigh Road, NW6 2NN

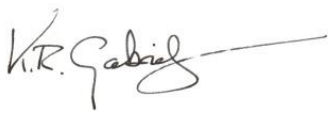
Para 4.7
We are not in a contractual position to state what will or will not be done during the detailed design, so that will have to be answered by the appointed structural engineer and/or the client. For their guidance, they should be careful not to commit to the unrealistic and un-necessary requests previously being made by Campbell Reith. It would be reasonable to suggest that as the predicted displacements are so small that no further analyses are considered to be necessary.

Settlement of underpinning panels
Campbell Reith have repeated their request for consideration to be included of the settlement of individual underpinning panels under higher more concentrated temporary loads, or a statement of our opinion on this matter. I thought our previous response was reasonably comprehensive, and it remains valid. We consider that making allowance for such additional, temporary loads whilst the adjacent underpinning panels are being excavated would be pointless for this project because the settlement would be almost entirely elastic so would largely be recovered as soon as the temporary loading was removed (as long as the bearing capacity had not been exceeded). The predicted settlements at the end of the underpinning stage (Stage 2) varied between 0.4mm and 1.5mm; the additional loads will, at most, be half of that currently allowed for, and most of the resultant settlement will be recovered as soon as the temporary load is removed. So we are considering a theoretical small proportion of 0.2-0.8mm, of movements in the ground not in the structure. Thus, I confirm that these movements are considered unlikely to have any identifiable impact on the superstructure of either No.57 or the adjoining No.55.

As previously, I would suggest that a sense of proportion is required; the key to minimizing damage to the adjoining properties will be to ensure that the work is designed and constructed by competent teams in accordance with industry best practice. Undertaking extensive analyses of deflections which, theoretically, are likely to be less than 0.1-0.5mm will not protect the adjoining properties/owners from damage which might arise if the design is fundamentally flawed or the quality of workmanship is poor.

Horizontal ground movements
Campbell Reith are correct, in that we have taken the maximum horizontal strain (which is related to the depth of excavation) for a hypothetical internal transverse wall in No.55 Cotleigh Road, and applied the same strain value to analysis of the front wall as a worst case scenario. It is indeed likely that there will be edge effects which will reduce the horizontal deflection at the front (and rear) end of the basement. So, we can confirm that the value given in the Addendum is the maximum predicted horizontal displacement (elongation) which is applicable to any internal transverse wall in No.55.

Keith Gabriel



UK Registered Ground Engineering Adviser