

Hi Rob

I have now studied the Fluid letter of 14th July 2015 and comment as follows (using the Fluid numbering):

1. The Appendix A of the Basement Impact Assessment ref J12115 by ST Consult dated January 2015 does indeed suggest that there is a 220mm gap between the walls of no.83 and no.85. However, the current proposals as indicated by the Axiom Structures comments are marked up on Cullinan Studios Drawings from February 2015 that do not appear to reflect the detail of the trial pit findings. It does appear from these drawings that there is to be an intention to build the new wall to No. 85 on its existing line, but this should be confirmed by the applicant.
2. The CMS by Axiom Structures is reasonably clear and the drawing on Page 11 suggests that two vertical stages of underpinning will be involved. The text of the CMS (stage 7, page 4) might be adjust to remove the words "at least".
3. Page 9 of the CMS has been annotated by Axiom to show two stage underpinning on the relevant section. The inset "typical section" is taken to relate in effect to the second stage only. This should be confirmed if necessary by the applicant. The underpinning methodology is described in the text of the CMS (stage 7, page 4)
4. I note again that the current proposals as indicated by the Axiom Structures comments are marked up on Cullinan Studios Drawings from February 2015 that are outdated in that they do not appear to reflect the detail of the trial pit findings. Whether or not the applicant intends to cut back the adjacent foundations to No. 83 should be confirmed by the applicant.
5. Whether or not the applicant intends to install compressible material between the existing footing to No. 83 and the new basement wall should be confirmed by the applicant.
6. The GCG movement report was prepared in March and could certainly be reviewed / updated to reflect the latest load calculations. However, given that the assessment was that category 1 "very slight" damage might occur, it is perhaps unlikely that a significant change to an unacceptable category 3 would be possible.
7. Yes. A condition survey of the party wall is likely to in any case form part of the party wall agreement.
8. 600mm below ground level does seems a reasonable design ground water level for structural design purposes. However, it is noted from page 5 of the calculations that $H_e = 2400$ and $H_w = 2400$ are the same, implying a design water at ground level.
9. The Basement Impact on Structural Stability report by Romer states that "*a check will be carried out to ensure there is sufficient self weight in the*

structure to prevent flotation. This will apply particularly to the lightwell structure."

10. It is noted that these early architect's drawings do not reflect the subsequent detail of the structural engineer's CMS and that the required amendment to detail was correctly annotated on the version of the drawing provided later on page 2 of the engineer's calculations.
11. Monitoring details have not yet been provided.
12. The GCG report states that "... Due to the low permeability anticipated for the London Clay, lateral sub-surface flow through the clay is anticipated to be low, and the new basement construction should have no significant impact on groundwater conditions."

While there are accepted to be inconsistencies within the submission these appear to largely have resulted from a lack of updating of architect's drawings to match the details provided by the structural engineer and do not affect my understanding of what is presently intended. However, if there is residual concern regarding these details may I suggest that they could be required as a condition of any planning consent?

As stated in our last BIA review, we do not consider the present submission to be so deficient as to merit rejection. I would say that the key issue arising from this Fluid letter is that the matter of where the new building wall against No. 83 is to be constructed needs to be confirmed by the applicant and, if necessary, that the matter of where the party wall line lies may need to be referred to a legal person.

Best Regards

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