

Fr  
Se  
To  
Cc

**Subject:** Re: 76 Fitzjohns Avenue

Dear Laura,

I recently noticed that the applicant had posted new documents just before Christmas. I am concerned that they seem to assume sign off when:

1. Nobody has addressed my recent concerns, concerns which are supported by a formal report from Michael Eldred; and
2. Despite the fact that now would be the ideal time to test underground water levels, the applicant does not seem to be doing that. Underground water levels must be ascertained before the applicant can prove its works will not harm my property. In order to give an accurate picture of the risk of subsidence, it makes sense to test water levels when there is increased rain activity. December and January have been very wet. I believe testing should therefore be done now.

I believe that Camden is committed to effectively protect its residents, including from the risk of subsidence caused by deep excavation.

I am looking forward to hearing from you.

Thank you in advance.

Best regards,

[Redacted signature]

Fr  
Se  
To  
Cc

**Subject:** 76 Fitzjohns Avenue

Dear Laura,

Please see attached Michael Eldred's report on 76 Fitzjohns Avenue.

Could you possibly redact my name out before publishing.

Thank you in advance.

Merry Christmas.

Kind regards,





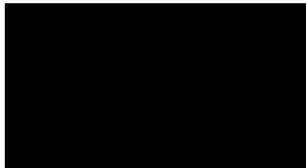
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14th November 2017

Our ref. G1702/17L14/CNP1  
Your ref.



**Planning Application 2017/1047/P – 75 Fitziohns Avenue NW3 5LS**

I refer to your instructions to comment on both the latest documents posted on the Camden planning portal and more specifically on Appendices B&C of the Construction Method Statement. I have dealt separately with the two parts of your requirement.

I have examined the documents by Campbell Reith and the applicant's advisers, which have been posted on the Camden planning portal since publication of my report dated 22nd April. The last of these, which was posted on the portal only yesterday is Campbell Reith's second report. This has presented difficulties in that it either refers to important information which has not been published by Camden or contains seriously misleading statements about the information that has submitted by the applicant.

I cannot say which of these alternatives applies and so, anticipating that you will pass this letter to Camden with your own comments, I have dealt with such information as I have in chronological sequence to enable the tail to be followed.

The documents consulted and on which I comment are, in date order:

Item	Document	Date published	Date posted
1	Campbell Reith audit report version D1 with query tracker	05/05/2017	08/05/2017
2	Initial response to 1 by Jones Lang LaSalle	30/05/2017	31/05/2017
3	Michael Barclay Partnership construction method statement	May 2017	02/10/2017
4	Applicant response to Campbell Reith query tracker	Undated	02/10/2017
5	Campbell Reith audit report version D2.	13/11/2017	13/11/2017

Item 1.

The Campbell Reith tracker listed twelve unsatisfactory items in the original application and requested them to be reconsidered and for satisfactory responses to be provided. Paragraph 5.9 of the discussion giving rise to query No. 4 in the table which follows is surprising. It states:

*A ground movement assessment has been produced that predicts a worst case damage category of 1 (very slight), however no information of the parameters used or detailed output is provided. This information is required so that the ground movement assessment can be checked for its appropriateness.*

What was actually provided in the original CMS is a bland statement that risk of damage would be category 1 or 2, made without justification and with a misleading reference to a non-existent assessment in the GEA geotechnical report. Strictly, assessment can mean a guess, but that is not the meaning placed upon the word in these circumstances, and I consider the Campbell Reith statement to be potentially misleading for a lay reader.

Item 2.

Jones Lang LaSalle, planning advisers, responded with assurances that the items would be dealt with and suggestions that the technical problems be held over as planning conditions to be dealt with after planning consent.

Item 3.

The front cover of the construction method statement identifies it as MBP 7009-May 2017 but the statement text and illustrations are all the same as those in the first edition of the CMS published in February and to which my April report referred.

Item 4.

The document is undated and although the style resembles that of item 2, the origin of this response to the Campbell Reith query tracker is unknown. Thus, the qualification of the author to make the response is also unknown. But since it was posted on the Camden planning portal on the same day as the newly dated CMS it seems that the two documents are at least contemporaries and intended to be mutually relevant.

In fact, ten of the responses to the twelve Campbell Reith queries are either completely wrong and ignore the CMS content, or report situations that do nothing to resolve the queries concerned. In the latter case, the author suggests that lack of resolution should not impede planning consent.

The following table reproduces both the queries raised and the applicant responses, and provides my itemised comments.

Item	Campbell Reith: Query	Applicant: Response	Eldreds: Comment on Response
1	An outline works programme is required that should as a minimum provide details of main phases of work with anticipated commencement dates and durations	Addressed in enclosed works programme.	No comment
2	Connection between head of underpinning and ground floor slab to be proved by calculation to demonstrate adequacy for transmitting shear force between underpinning and prop. Or underpinning wall to be designed as an unpropped cantilever.	Addressed in enclosed Construction Method Statement.	Quite wrong: the CMS does not address the issue, which is that the retaining wall and the ground floor slab, which is supposed to support it are not joined and that the design concept relies entirely upon the unproven strength of the brickwork.
3	Design of continuity reinforcement required if propping not provided to each underpinning bay.	Addressed in enclosed Construction Method Statement.	Quite wrong: the CMS does not address the issue; Section 8 of the May CMS is the same as the February version.
4	Details of ground movement assessment are required, such as parameters used in the calculation as discussed in paragraph 4.8.	Addressed in enclosed Construction Method Statement.	Quite wrong: there is no ground movement assessment provided. The construction method states that there is one in the GEA report. But GEA have not made an assessment and state clearly that one is required.
5	Section 7 of the construction method statement requires amendment to be consistent with the rest of the submitted information with regard to geological conditions and damage category.	Addressed in enclosed Construction Method Statement.	Quite wrong: the CMS has not changed since February and does nothing to address the issue.

Item	Campbell Reith: Query	Applicant: Response	Eldreds: Comment on Response
6	Heave analysis or evidence to indicate that heave is negligible is required.	Addressed in enclosed Construction Method Statement.	Quite wrong: the CMS has not changed since February and does nothing to address the issue. See also the comment on item 4 response.
7	Viability of proposed permanent and temporary works methodologies to be confirmed once groundwater regime determined.	Groundwater monitoring underway as per point 11. We welcome this to be conditioned.	Dr. de Freitas' and my April reports, together with the Campbell Reith query make clear the fundamental importance of understanding the deep and shallow groundwater regimes and their impact on the viability of these works.  The response shows a complete lack of understanding of the issue.
8	The Arboricultural report is to consider the impact of creating and use of a slope at the front of the property on retained tree T1, or this proposal is omitted with the construction method statement amended.	The applicant is no longer proposing a slope. Addressed in enclosed Construction Method Statement.	That is quite wrong: the CMS is quite clear at section 8 that a ramp will be required.
9	Movement monitoring values to be linked to values calculated in the ground movement assessment to ensure the calculated Burland damage category is not exceeded.	Addressed in enclosed Construction Method Statement.	See comment upon item 4 above.

Item	Campbell Reith: Query	Applicant: Response	Eldreds: Comment on Response
10	Evidence of correspondence with Network Rail to indicate whether the property is within a Network Rail safeguarding zone is required.	<p>The applicant has already engaged with Network Rail's Asset Protection Anglia team, who has confirmed that the property is situated above the Hampstead Heath Tunnel.</p> <p>The applicant will enter into a Basic Asset Protection Agreement ('BAPA') at the appropriate time to ensure that Network Rail assets are protected.</p> <p>Email confirmation in Appendix 1.</p>	No comment.
11	Further groundwater monitoring is required due to the high groundwater level being recorded on one of the three standpipes that were monitored and the potential impacts for construction and the water environment.	<p>Additional groundwater monitoring has been taking place. Readings took place on 16 August 2017, 21 August 2017 and 4 September 2017. The results are shown in Appendix 2.</p> <p>Three further readings are due to take place on 02 October 2017, 06 November 2017 and 04 December 2017. The applicant will share these results with the Council, and will welcome an appropriate planning condition to secure this.</p>	See comment upon item 7 above.

Item	Campbell Reith: Query	Applicant: Response	Eldreds: Comment on Response
12	Evidence that the area of impermeable area is not increasing is required, given that the lightwells are impermeable. Details of SUDS are required should the impermeable area be increasing	The amount of impermeable area is increasing by 1sqm. A drawing illustrating this is included in Appendix 3.	The response cannot be checked using the coloured illustration provided, which, if green areas are intended to be permeable, shows that the development would cause a very significant loss of permeable surface. An Architect's drawing which gives a clear specification and dimensions for all external surfaces, present and proposed is required.

#### Item 5

Campbell Reith's audit report version 2 considers that several items of information provided by the applicant are still unsatisfactory and again recommends that the application be revised and resubmitted.

As is normal, the audit report lists all of the documents obtained from the planning portal and consulted, and it states that following audit report D1 the applicant also submitted a works programme, responses to the query tracker and a Construction Method Statement reference MBP-7009-version 1.13 May 2017. The May 2017 CMS on the planning portal does not however contain any reference to it being version 1.13.

Having consulted these documents Campbell Reith concluded that responses to Nos. 1, 3, 5, 6, 7, 8, 10 and 11 of the query list reproduced in the above table were satisfactory.

I reiterate that but for the date on its cover the May version of the CMS on the Camden planning portal is identical to that of the initial February version. It is also the case that the only GEA report on the portal is that referenced J16214 which is dated February 2017 and was posted on the portal in March. It does not contain a ground movement and building damage assessment.

That being so, I cannot find any justification whatsoever for the Campbell Reith opinion that Nos. 3, 5, 6, 7, 8 and 11 have been satisfactorily resolved.

I recommend that you ask the planning officer to confirm that the documents on the planning website are the current versions. If they are not, I shall be pleased to advise you further, should you require me to do so, when the correct documents are displayed.



I now refer to Appendices B & C of the CMS.

I have already noted, under item 3 and again above, that but for the date on the front cover, the CMS has not changed from the February version that I reviewed in my April report.

Appendices B & C contain, respectively, engineers' drawings of the completed structure and a preliminary calculation intended to demonstrate the safety of a typical section of basement perimeter retaining wall after it is built. This is routine for designers of permanent structural works; they show that the structure will be safe when built and rely on the contractor to get it to that state without mishap. It is important to understand, however, that in cases like this, there are at least three completely different structural design situations to consider.

1. Movement and safety of the partly completed structure (and the ground it is to support) as it is being built;
2. Movement that will have occurred by the time it is complete;
3. Compliance of the completed structure with the safety and durability requirements of the building regulations, which are not concerned with movement or neighbouring damage.

Situations 1 and 2 have critical relevance to the requirements of basement Policy A5 of the Camden Local Plan and its predecessor DP27, but Appendices B & C deal only with situation 3, which has nothing at all to do with the requirements of Policy A5.

Thus, whilst they are an integral part of the CMS the appendices themselves are not material to planning requirements. They do allow a trained eye to consider both the reliability of CMS statements of constructional intent and the suitability of the design in a preliminary way, but that should not be necessary. These are matters at the heart of Policy A5, which an application is required to demonstrate.

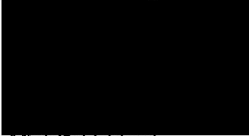
I considered appendices B & C along with the CMS text in my report G1702-RP-01-E1 dated 22/04/17 and the following are the inadequacies I found. Please read the report for context.

- (i). Retaining wall calculations are based upon a wall founded 3.5m below ground but the drawings show the depth to wall footings to be 4.1m. Pressure on a 4.1m deep wall would be approximately 60% greater than on a 3.5m deep wall.
- (ii). The calculations are said to allow for a water table 1.5m below ground i.e. with the error at (i) corrected, 2.6m above the base of the wall. No consideration has been taken of the corresponding hydraulic uplift of 25KN/sq.m, (2500 Kg/sq.m.) this would cause on the underside of the wall and basement.
- (iii). A statement that the basement will be founded on dense gravels, which it would not.

- (iv). A statement that heave due to the excavation would be negligible, which it would not.
- (v). A statement that the basement walls can be constructed without causing damage to the neighbouring structures, which has not been demonstrated.
- (vi). A statement that excavation for the basement wall sections below existing walls can be satisfactorily excavated by machine, which they could not.
- (vii). Section 8 of the CMS relating to construction method suggests that the basement can be constructed without need of extensive temporary support, which is contrary to the recommendations of the BIA and to general experience.
- (viii). Part 2 of the CMS provides sketch illustrations which show an intended sequence of working but do not provide temporary support where it would be needed for stability.

You will see from my comments that the application has not been improved in any way by the applicant's latest submissions posted on the planning portal. In consequence I maintain the opinion expressed by my earlier report: that the application fails by a wide margin to satisfy the Camden planning policy for basements and should not receive consent in its present form.

Yours sincerely



Michael Eldred  
Eldred Geotechnics Ltd