

55 Fitzroy Park, Highgate

Further structural comments on additional documents and information uploaded to the London Borough of Camden planning website during November 2018

- 1) Alan Baxter Ltd (ABA) provided the Fitzroy Park Residents Association (FPRA) and the Superintendent of Hampstead Heath with structural comments, in September 2018, on the documents submitted in support of the planning application to build five houses on the site of 55 Fitzroy Park. In October 2018 we also produced a summary of areas where important information had not been provided, or the information provided was unclear or lacked sufficient detail.
- 2) During November 2018 the applicant has submitted a lengthy response to the list of omissions provided by FPRA and some further information/documents. A Basement Impact Assessment Audit has also been carried out for LB Camden by Campbell Reith (CR) and posted on the planning website. ABA have reviewed these additional documents. Our further comments are set out below.
- 3) The factual site investigation report prepared by Concept in September 2017 has now been provided. This includes borehole logs and test results. Generally these are as expected based upon the interpretation previously provided by LBH Wembley in the 'Hydrological & Hydrogeological Impact Assessment'. However, Concept have wrongly described the superficial head deposits present above the London Clay as Langley Silt on a number of borehole logs and in the Geological ground profile. This is surprising from a specialist site investigation contractor experienced in working in London. The report also confirms that groundwater monitoring was carried out by others, so the important results of this monitoring still have not been provided.
- 4) In response to previous comments on the lack of any information from Coyle Kennedy, the structural engineers for the proposals, a Structural and Civil Engineering Design Statement has been provided, along with one drawing. The statement is very broad and reiterates comments included in the CMP, but generally provides little additional detail. In particular the commentary on the storm and foul water drainage proposals remain vague and it is unclear which existing sewers new connections are to be made to or where. Broad statements such as the "pathway will be constructed in such a way that it will not have any effect on the existing pond" are easy to make, but no details are provided to substantiate this. The statement and drawing P-600 confirm temporary works along Fitzroy Park are proposed only in front of plot 3 and that elsewhere reliance is placed on the existing retaining wall during construction. There are no details of the existing wall or any possible strengthening which may be necessary (given the scale of anticipated HGV movements along this section of Fitzroy Park).
- 5) The applicant's response to the omissions document, which collated various stakeholder concerns, is lengthy and repetitive. Our further comments in relation to the main points that relate to the basement proposals and potential hydrological issues are as follows:

- a) **ii, BIA omissions, a.** The quality/detail of the information provided is such that it is difficult to be sure how deep or extensive the excavations are likely to be. The table suggests excavations up to 2.0m deep in places. The BIA audit refers to excavations up to 2.5m deep. It is not clear whether the table includes only plot areas or areas for the access roads to plots 4 and 5 and the rear of plots 1 to 3, which are likely to significantly increase the excavation areas and volumes.
 - b) **ii, b.i and ii.** The description of the drainage proposals and the schematic drawing of the SUDS proposals are both too vague to be able to assess the hydrological and hydrogeological impacts. Further detail is needed now, not as part of a pre-commencement condition, in order to carry out the assessments which form part of the BIA.
 - c) **ii, b. iii.** We agree with the sentiment expressed in the response regarding the preservation of existing drainage routes and flow paths, but no additional detail is provided to demonstrate that this is the case. Similarly whilst the applicants have acknowledged the need to divert the foul water sewer, no detail (even in the form of a statement) has been provided.
 - d) **ii, b. iv.** There appears to be an acknowledgement here that any proposals to install a pipe below Millfield Lane will need the agreement and consent of the CoL.
 - e) **ii, b.v.** See comments in 4 above on temporary works.
 - f) **ii, b. vi.** See comments in 3 above on geotechnical information.
 - g) **ii, b.vii.** The Groundwater monitoring information is not in the SI report and has still not been provided.
 - h) **ii, b.viii.** The basement excavation to plot 4 will extend below the groundwater level and form a barrier to flows. Elsewhere temporary sheet piling is proposed which will cut off and redirect groundwater flows. It is possible that these changes will not affect 51 or 53 Fitzroy Park, but it is incumbent upon the applicant to assess this in order to confirm that these properties are not affected.
 - i) **ii, b.ix.** See comments in 4 above.
 - j) **ii, b. x.** We understand that there has been some flooding of the hard standing in front of the existing house due to blocked road gulleys in Fitzroy Park. Water samples to confirm the current situation are therefore needed in order to monitor any change in the level of pollution in the lake during the works. Some sampling is therefore required. We have also been advised that the existing sewer under the tennis courts (proposed plots 4 and 5) has flooded in the past and contaminated areas downstream towards the heath.
 - k) **iii, a.** See comments in 4 above.
 - l) **iii, b.** The depth of made ground and superficial deposits is variable, particularly where the historic channel is located. The proposal for cfa piles is reasonable. Further details of the piling proposals will need to be provided.
 - m) **iii, c.** The volume of spoil arising from the cfa piles should be included in the total for calculating the muckaway, along with a bulking factor. The derivation of the figures quoted is unclear and appears to vary between documents previously submitted.
 - n) **xi, c.** The response indicates that there will now only be one reversing manoeuvre during demolition works and none post demolition. This is not what was indicated in the initial submissions but the text in the demolition and site traffic sections of the CMP has been updated. Drawing TR16 in Appendix L of the CMP, updated on 2/11/18, still states that HGVs will need to reverse to site during the demolition phase, because of the constraints of the site. Inconsistencies therefore remain in the documents and further clarification is needed.
- 6) a) Campbell Reith (CR) have now carried out a BIA audit for the London Borough of Camden. This was informed by the latest revisions and the further information submitted by the applicants which included the site investigation report prepared by Concept.
- b) Generally the audit comes to similar conclusions to the ABA report, in particular that there is quite a lot of further information needed to satisfy the requirements of a BIA and that some of the information provided is not clear. We have some specific comments on the audit as follows:

- c) Point 1.7. The foundations to the buildings and plots 4 and 5 appear to be partially embedded within the superficial deposits. Plot 3 is partially embedded in the London Clay and will affect groundwater flows on the site.
- d) Points 1.10., 1.11., 1.12., 1.13. and 1.16. all start with "It is stated that....". This emphasises that the submission relies heavily on unsubstantiated statements and we would expect to see more drawings to back up these statements.
- e) Point 1.16. We consider the road and existing retaining wall to be close enough to the excavations to require ground movement assessment.
- f) Section 3. We are broadly in agreement with CR's comments. It should be noted that even where CR have indicated that some items satisfy the BIA requirements, they have commented that more information or further assessment is needed (e.g. Land Stability Screening, Hydrology screening).
- g) Point 4.5. This refers to Plot 4 next to the pond. This should be Plot 5, as noted in point 4.6.
- h) Point 4.11. CR note that the temporary sheet pile retaining walls are to prevent groundwater ingress into the excavations. They are also required to stabilise the ground and support the road behind. However, CR have noted the need for the retaining structures to be described and their impact assessed.
- i) Points 4.14, 4.15 and 4.16. CR note in 4.14 the inconsistencies in the BIA regarding the limited permeability of the superficial deposits, the presence of a ground water table and reliance on infiltration drainage. In 4.15 they note that clarification of the need for dewatering is required and ground water monitoring data should be provided. We would also point out that the development site owner has previously indicated that the pond is both spring fed and surface water fed (as evidenced by pond water levels and ongoing flows across Millfield Lane during the 1976 and 2018 dry summers). This should be factored into the cumulative impacts of the changes to surface water management which CR consider requires clarification (point 4.16). This should also be considered in the assessment of the impacts of these changes on basements upstream at No 53 and No 51 Fitzroy Park (see 5h and 6h above).
- j) Point 4.18. CR appear to be under the impression that there is a discharge pipe already constructed underneath Millfield Lane. This is not the case and the applicants indicated that they propose to install this. They now acknowledge that they will need the agreement of CoL to do this, which we understand is unlikely to be forthcoming.
- k) Section 5. This sets out in a series of points where additional information and assessments are required. These are also summarised in Appendix 2 (an Audit Query Tracker). Importantly CR note that until the additional information is provided and audited the BIA does not comply with the requirements of CPG Basements.