



Rosslyn Management Ltd: planning objections to basement proposal – reference 2014/4206/P supplementary response April 2015

1. Introduction

- 1.1 This report is supplementary to the objector statement submitted in September 2014. Line Planning was instructed to prepare a review of the planning application in respect of 2 Ornan Court, Ornan Road, London NW3 4PT on behalf of Rosslyn Management Ltd and its 32 residents. They live in the adjacent mansion block at Rosslyn Court. The proposal for works is significant and could affect up to 130 immediate residents (in and adjacent to the block) and other residents in the street. Both properties are very significant mansion blocks in size and form striking buildings in the townscape. The previous statement addressed issues of design and effect on gardens. It also commented on the impact of the proposals on the Conservation Area. It referred to development plan policy and the need for a Basement Impact Assessment. In that report Line Planning proposed that the applicant's BIA was inadequate and suggested that the Council should require a further review. The Council requested the applicant to submit a further BIA.
- 1.2 The applicant has submitted a structural engineer's report dated January 2015. This is prepared by Site Analytical Services Ltd (SAS). This appears to replace the report prepared by Martin Redston dated September 2013. Its' title is "Basement Impact Assessment" (BIA). However, this report only addresses certain features of a BIA and does not comprehensively address all impacts. This is because the authors do not appear to have a full set of documents to work on. Until the applicant provides the detail of the structural proposals the full impact of the basement and its effect on the Ornan Court and Rosslyn Court mansion blocks cannot be understood or predicted reliably. From the point of view of determination this is not adequate or satisfactory.

Omissions and steps the applicant is required to complete

- 1.3 There are a number of omissions in the applicant's approach as follows:-
- The applicant should submit a Basement Impact Assessment (BIA) which explains the impact of the proposed development that not only includes the hydrogeological and hydrological findings but an explanation of their implications for the safe design and structure of the proposal.
 - To do this it needs to submit detailed drawings which include sections of the structure that engineers need to approve.
 - It would be preferable to have the full BIA independently verified as the site is in an area of concern regarding slope stability and groundwater flows.

- There is no non-technical summary of the BIA as required by paragraph 6.127 of the proposed Camden Local Plan that has been out for public consultation. Of the partial BIA report produced by SAS there is no non-technical summary for Cllrs and members of the public to read and so it remains a technical document with limited accessibility for most members of the public.
- When all of the material is gathered it then needs to be assessed in its entirety to establish whether the applicant's proposal is able to satisfy development plan compliance.

Site context background information

- 1.4 Ornan Court is bounded on the left by a party wall that separates it from Rosslyn Court, and to the right by Haverstock Hill. At 239 Haverstock Hill to the rear there was a planning permission for a basement level. The objectors believe that much of the spoil for this excavation appears to have been dug out by hand. The objectors think it was then re-filled but do not know the details of the manner in which it was done and whether there is any increased risk of instability at that property. The applicant's consultants have not to the knowledge of the objectors investigated their property or the neighbouring property.
- 1.5 It is believed that the Rosslyn Court Victorian foundations are very shallow and due to the shallow water table Flat 1A, the basement flat, has experienced noticeable damp problems over the years. This is a very small one bed flat on the westerly (far side) of the property which only covers a small percentage of the footprint of the floor plan e.g. 10-15%. It was originally a flat for a porter. This is entirely different from the applicant's proposal to excavate the entire footprint of the building and make it acceptable for two exclusive flats. Basement extensions are popular with some applicants in London but that is generally not for the creation of habitable rooms but for storage or supplementary rooms created for leisure activities. The justification for the extension in terms of meeting development plan policy for a residential extension has not been made out by the applicant.

2.0 The applicant's SAS Report

- 2.1 The report states it is a hydrogeological and hydrological study and impact assessment of the geo-environmental impacts on adjacent structures and the surrounding area. These results are produced exclusively from borehole testing. The report comments on these characteristics but not on the proposal for the structure itself.

Omissions

- 2.2 **Impact on structural stability of the building and neighbouring properties has not been explained.** The report does not address impact of the basement as a whole for the rest of the building and the objectors' mansion building. There is significant information that is outstanding which the applicant is yet to address. A failure to do so leaves the status of the application incomplete.
- 2.3 The information in the report is too oblique.
- 2.4 The applicant's SAS report makes the following assumptions or statements of approach.

- *It is understood that No 239 Haverstock Hill has a full basement and is founded at approximately 3m depth. For the purposes of this report it is assumed that Rosslyn Court is founded 1m below ground level (mbgl).*
- *At 5.4.2: it is considered most likely that a ‘very slight’ level of damage will arise at Rosslyn Court.*

Groundwater

- *It is proposed to excavate to a minimum level of approximately 3.5m below ground level. There is no recognised aquifer at shallow depth below the site, which lies on London Clay, and no groundwater was encountered during the ground investigations in either 2011 or 2014.*

SAS Conclusions and Recommendations

- *From the above, it is concluded that, given good workmanship, the basement to Ornan Court can be constructed without imposing more than very slight damage on the adjoining properties. The development is not likely to disrupt any existing local groundwater flows.*

However the basis on which the statements are made is not explained or justified and without further information could be misleading. This would mean that the conclusion suggesting “*slight damage*” to the objectors’ property is too readily drawn and the rationale for reaching that conclusion is not justified.

4.0 Morgan Tucker - Engineering response - Findings: accuracy of this statement

As in September 2014, the objectors instructed Morgan Tucker (MT) engineers to comment. The SAS Report inserts Table 1 “Summary of Screening Results”. MT identified a number of risks but it was not able to quantify the degree of risk for all aspects due to the lack of information. The engineers noted that this is significantly different to that prepared by Martin Redston in 2013, in a number of respects as follows:-

- 4.1 **Subterranean (Ground water flow)** item 1b. It is now accepted that proposed basement level, 74.8 OD, is at/below ground water level; the BIA states that the difference in level is nominal but this is for the lower bound ground water level of 74.8 OD, however an upper bound ground water level of 76.65 OD is also noted in the BIA. This ambiguity should be rectified as there is considerable difference in the level which indicates there is a real risk of ground water flow levels rising if the development goes ahead which would lead to cumulative drainage impacts.

Explaining the impact of the proposed basement on the structure of Rosslyn Court

- 4.2 A section showing proposed basement and existing levels is required. A key feature of the report is that vital information regarding the exact depth of the proposed basement has been omitted therefore the material about hydrogeological and hydrological and geo-environmental impacts on adjacent structures can only be applied in a very limited way and it is not in sufficient detail to truly show impact on the structural stability of neighbouring properties including Rosslyn Court and amenity.

Other observations on the SAS report

- 4.3 Response to paragraph 6.4 of the BIA: it is recommended that basements of greater than 4m deep would need to consider an elevated ground water level of 1m below ground level. This may be significant in respect to the design of any retaining walls near to neighbouring properties and the horizontal force calculations in respect of underpinning at Rosslyn Court.
- 4.4 The increase in amount of hardstanding is acknowledged. This will increase surface water run-off and could affect garden soils and add to existing road drainage.
- 4.5 The report now accepts that there is a general slope in the wider hill side setting affecting slope stability.
- 4.6 SAS now accept that the development will increase the differential depth of foundations relative to the neighbouring foundations at Rosslyn Court.
- 4.7 It is now accepted that the LUL tunnel is approximately 5m from the development. There is no exchange of correspondence with LUL about the proposal to show the objectors. The close proximity of the Northern line has been considered and the SAS consultants assess that it is unlikely to be adversely affected by the development and the proposed structural design. However the applicant has not presented details of structural solutions to the risks acknowledged within the BIA.
- 4.8 In respect of surface water and flooding the items listed on the report in item 2 show that there will be material changes to the existing route of water flows from the existing route and also changes to the profile of inflows from the surface water (Item 3) and Item 4. The quality of water being received from adjacent properties - all with a possible effect on ground water. A previous flood in 2002 has been acknowledged. In 2014 there was also a real risk of flooding but that risk was not mentioned in the report.
- 4.9 These findings therefore show that further detail needs to be provided in terms of the effects of:-
- i. Increased hardstanding which will require surface water attenuation measures
 - ii. SAS undertook ground water levels in a wetter period from August – November 2014 and permeability tests. Water pumping may still be necessary during construction (subject to the weather) but this can also lead

to settlement. Monitoring would therefore be needed and a proposal should be agreed with the objector's engineers.

- iii. Item 7.6 states that the risk of surface water flooding is reduced as the site is above the level of Ornan Court, however the proposal will make the basement lower than Ornan Road. The report has not properly assessed this risk and in fact a conclusion to the contrary may be the case.
- iv. Existing foundations, particularly those at Rosslyn Court/Ornan Court Party wall have not been investigated to verify the Applied Geotechnical (AGE) calculations within the BIA. SAS are unable to determine the realistic settlement of the wall that is to be underpinned, a short term figure of 2.7mm is stated but this is without knowledge of existing footing and the method and workmanship of the proposed underpinning. The latter is not uncommon so they have stated that an allowance for repairs to the party wall and locally adjacent areas may be required. Long term settlement is estimated to be 1.7mm but again this is without the knowledge of the existing party wall footing. SAS have suggested monitoring, which would need to be addressed in a construction management plan.

5.0 Predicting structural damage to neighbouring property

5.1 Council Guidance CPG4 states that predicted structural damage to neighbouring property can be categorised according to a Burland scale from 'slight' to 'very severe' where water ingress to neighbouring gardens or properties is predicted to be damaging to residential amenity. Depending on the risk any proposed mitigation measures should be described in the BIA report with details of how they reduce and/or alter the impact of the proposed basement on the surrounding environment. The width of cracks in walls and the tensile strain are the major risks.

5.2 The Burland Scale is a form of modelling for calculating effects on buildings from deformities arising from underground development or excavations has not been addressed. To explain this reference is made to a paper from Richard Finno in 1995 from the Geotechnical and Geo-environmental Journal "*Evaluating Damage Potential in Buildings Affected by Excavations*" explaining the principle as follows:-

As new buildings are constructed, the excavations required for basements affect nearby existing buildings, especially those founded on shallow foundations. Often excavation support system design must prevent any damage to adjacent structures or balance the cost of a stiffer support system with the cost of repairing damage to the affected structures. In either case, it is necessary to predict the level of ground movements that will induce damage to a structure. Practically speaking, a designer is attempting to limit/prevent damage to the architectural details of a building, which occurs prior to structural damage.¹

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5.3 Mitigation measures which may be included in the basement development proposals include (but are not limited to):

- Controlled or adequate drainage;
- High permeability corridors;
- Underpinning of neighbouring structures; and
- Setting the basement in from property boundaries.

The mitigation measures have not been addressed as the SAS assessment is only part of a BIA report.

6.0 Further comment on Risk and Omissions

6.1 Guidance for subterranean development has been issued by Arup to the Council which should be followed. The objectors concerns are that the applicant is trying to undertake a complex structural change that will affect the entire footprint of the building. Problems are more likely to arise from inexperienced firms who are unfamiliar with the relevant design principles and techniques. New CDM regulations came into force in April 2015 and the responsibility for meeting these liabilities has now changed. The client (the applicant) is ultimately responsible for health and safety on site and contractor takes responsibility and for the first time these regulations are now apply to apply to domestic household projects. A new notification to the Health& Safety Executive is now required.

7.0 Policy considerations

The NPPF

7.1 The National Planning Policy Framework (NPPF) 10 supports local policies to resist inappropriate development of residential gardens and excludes private gardens from the definition of previously developed land.

The Consolidated London Plan 2015

7.2 The London Plan was consolidated in March 2015. The London Plan also resists reduction in the size of front gardens. Combined with the relevant policies in the Local Plan all these policies seek to protect green spaces and gardens from development pressures in order to prevent over development, especially in close knit residential areas, such as this area of London in Belsize Park. Chapter 3 Policy 3.5 states that boroughs may in their LDFs introduce a presumption against development on back gardens or other private residential gardens where this can be locally justified. The London Plan also has updated policy on the management of flood risk and surface water management in its chapter on Climate Change (5.12 and 5.13). The planning approach that prevails is contrary to development on garden land.

The Emerging Camden Local Plan 2015

7.3 Camden's Local Plan has been consulted upon and now carries more weight in the determination process. The draft Local Plan will be subject to an Examination in Soundness. Councillors are entitled to refer to the draft guidance and apportion some weight to it. The construction phase of the basement plan and its impact on amenity is relevant to the determination.

The Local Plan

7.4 Council Guidance CPG4 on Basements states:-

The Council will only permit basement and underground development that does not:

- cause harm to the built and natural environment and local amenity;
- result in flooding; or
- lead to ground instability.

Policy DP27 Basements and lightwells of Camden's Local Development Framework requires a scheme's impact on local drainage and flooding and on the structural stability of neighbouring properties through its effect on groundwater conditions and ground movement to be considered. This includes impact on structural stability of the building and neighbouring properties (Paragraphs 2.29 to 2.30). Improving flood risk assessment is a material consideration in the planning process in accordance with Camden's policy on flood risk. (See Camden's Flood Risk Strategy). The report shows that there is some ground instability and a risk of flooding.

Conservation Areas

7.5 In order to maintain the character of Camden's conservation areas, the Council will:

- b) only permit development within conservation areas that preserves and enhances the character and appearance of the area;
- e) preserve trees and garden spaces which contribute to the character of a conservation area and which provide a setting for Camden's architectural heritage.

The Council in its determination needs to have regard to the desirability of preserving the conservation area and the setting accorded to the more significant buildings in the conservation area which include these mansion blocks. The Council should not allow the proposed development as it is too significant in size and scale in terms of effect on these mansion blocks. The basement is unsuited to the general layout of the block and relationship to neighbouring buildings.

7.0 Conclusion

7.1 There are a number of risks and omissions that have not been addressed in the applicant's proposal. The hydrogeological and hydrological study is the first stage of a BIA. The structural stability of Rosslyn Court and indeed the building at Ornan Court and neighbouring properties has not been addressed in the second report. The applicant's BIA remains inconclusive and inadequate in so far as these elements are concerned. In addition the structural side of the proposal has not been adequately explained.

Overall the sensitivity of the surrounding buildings affected has not been addressed. This is a concern as ground stability is also unknown at the rear of Ornan Court at 239 Haverstock Hill, a semi-detached house so there could be cumulative effects. There are concerns about the stability of the proposed structure and its impacts on Rosslyn Court, the management of flood risk and water attenuation. These uncertainties create risks in terms of harm to amenity – the full details of which have not been explored by the applicant. At a fundamental level the applicant's proposal is incomplete and should be refused for

The objectors are concerned at the size of the proposed construction and the impact such a large excavation will have on garden land and the party wall. The front garden and proposed development at the front of Ornan Court will be adversely affected contrary to the applicant's assertion. The setting to the mansion block will be reduced. This will cause harm. Development plan policy resists reduction in the size of front gardens and in terms of the scale of the mansion block and the garden any further reduction would damage its setting in the wider conservation area. For all these reasons the objectors invite the Council to refuse the planning application as the proposal for further residential development under this block is unacceptable. It neither relates to the residential development on site or adjacent to it, presents too many unknown risks and will cause harm to the wider environment.

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