

**97A SOUTH HILL PARK  
LONDON NW3**

Report for the proposed Lower Ground Floor extension at 97A South Hill Park, London NW3.

I would confirm that I have a Degree in Civil Engineering (BSc 1975), that I am a Member of the Institution of Civil Engineers (1977) and a Fellow of the Institution of Structural Engineers (1989).

**1.0) INTRODUCTION**

The property is the lower two storey maisonette in a five storey semi-detached residential building. We understand that it was constructed around the middle of the nineteenth century.

The property is in a Conservation Area.

The property is constructed in the traditional manner, namely, comprising suspended timber floors supported off load bearing masonry walls. The roof structure is of cut and loose laid timber rafter construction, and has a slate finish.

The property is located in a residential area, on the western edge of Parliament Hill, Hampstead Heath. The site is generally level.

**2.0) INSTRUCTION**

We have been instructed by Paul Kanareck to prepare a report on the proposed lower ground floor extension, to the rear of the property.

These works are covered under Planning Application No

### 3.0) DESIGN

The scope of work involves carrying out a rear extension, over two floors, comprising extending the existing lower ground floor and main ground floor, together with internal structural alterations and finally re-grading of external garden levels, to improve natural daylight to the lower ground floor level.

There is no proposal to excavate for a new basement.

The existing lower ground floor, extends for the full width and depth of the footprint of the existing property and this existing lower ground floor is not going to be lowered, or further excavated in depth.

It is proposed to excavate to the rear of the property, within the garden area, to a depth of approximately 2.3m and over an area 5.4m long by 4.7m wide, to create two additional bedrooms as the extension to the existing lower ground floor.

It is also proposed to carry out internal alterations, at the ground floor, involving partial removal of load bearing structure at the rear, and the insertion of new steel beams, to support the retained structure above.

This arrangement is all as shown on Architect's drawings XXX, by Martin Evans Architects.

An external area, to the left hand side of the property (when viewed from the front), is to be lowered by 200mm. This area, approx 6m long by 2.2m wide is adjacent to the property. The area of excavation is 13.2m<sup>2</sup> and the total volume of excavation is 2.6m<sup>3</sup>.

The existing bedroom at the rear of the property is already 2 steps below the main lower ground floor level, and this level will be retained and used as the datum for the new rear extension. Thus the plan area of the rear extension will be 25.4m<sup>2</sup> and the volume of excavation will be 58.4m<sup>3</sup>.

No underpinning of the property is envisaged, as the internal floor levels are not being lowered and it is only the external levels which are being lowered to match the existing internal levels. Consequently as the existing foundation levels are adequate for the existing levels, they will still be appropriate and adequate for the new reduced external levels.

It has been alleged that 57.14% of all foundations will have to be underpinned. This is totally erroneous as no internal levels are to be lowered, and thus as previously stated, no underpinning is required.

Additional excavation for landscaping and terracing of the garden will improve natural light to the lower ground floor. Exact volumes of excavation are harder to estimate, as the depth of excavation is not even but reduces to suit existing garden levels.

Assuming a width of excavation of 7m and an overall length of 8m, the resulting area of excavation is 56m<sup>2</sup>. allowing for an average depth of excavation of 1.15m, since this will reduce from 2.3m to nothing, then the total volume of excavation will be 64.4m<sup>3</sup>.

Thus the total volume of excavation will be  $2.6 + 58.4 + 64.4 = 125\text{m}^3$

We would confirm that the proposals include the removal of the rear right hand corner of the property (when viewed from the front). This will enable the new ground floor extension to be properly incorporated into the property and to harmonize the ambient atmosphere.

We have worked with Martin Evans Architects on a very similar scheme at No 101 South Hill Park, NW3, where a similar extent of opening up was carried out.

From a structural aspect this is not particularly difficult, nor unusual. We have been involved with far more technically difficult and onerous schemes.

Appropriate temporary propping would be installed in advance of the demolition works. The propping scheme would be properly designed and detailed by the contractor and then approved by ourselves, before being installed.

This will enable the final structural works to be carried out. These will also be professionally designed and detailed, and submitted to the relevant authorities for Building Regulation approval, prior to being carried out.

To draw comparisons with the works being carried out at No 94 South Hill Park is rather disingenuous to say the least. The work being carried out at No 94 bears no similarity to the work proposed at No 97.

The properties are a substantial distance apart, somewhere in the region of 100m. House numbers might suggest that these properties are close together, but that is not the case.

No 94 is situated on quite a severe slope, downward along the length of the property, such that at the rear the ground level is several metres below the level at the front of the property. There is no ground slope to No 97, and thus slope stability is of little significance.

The work at No 94 involves new basement excavations, which we understand will include a swimming pool, thus further increasing the depth of excavation and volume of spoil to be removed. The works at No 97 do not include any basement excavation. There already exists a lower ground floor, compatible with external levels to the side, and the proposed works merely involve the extension to the rear of this lower ground floor.

Finally we would confirm that the contractors to be used on this project will be contractors competent and experienced in this type of work and in addition they will be selected from a list of contractors with whom we have worked on previous projects and are thus confident in their ability to carry out the works in a professional manner and to a high standard of workmanship and competency.