R8558PWRB/KMS/13

STRUCTURAL ENGINEER'S REPORT REQUIRED FOR PLANNING PURPOSES 2 ST. KATHERINE'S PRECINCT, NW1

11 November 2008

INTRODUCTION

The London Borough of Camden Planning Department have asked for a structural engineer's report for the proposed works covering any potential effects on the Grade II* listed building and all walls and means of enclosure on the site. The proposals are shown on the Architect's (Crawford Partnership) drawings.

ALTERATIONS TO EXISTING HOUSE

At basement level an opening is being formed into the rear extension and another to open up the sitting room. Both will use structural steel "picture frames" redistributing the loads back on to the existing footings.

At ground floor level the mullioned windows in the rear facade are being removed to form a clear opening into the new glazed conservatory. Steelwork will be required to form this opening. The conservatory will have a glass floor supported on steelwork.

BASEMENT EXTENSION ON SOUTH SIDE

It is intended that the basement extension will fill the plan area of the garden except for a lightwell at the rear end against the rear garden wall that faces towards Cumberland terrace.

The footings of the existing garden wall are at about 1m below garden level. The finished floor level of the new basement is about 3.6m below proposed garden level, which is marginally above existing garden level.

The walls will be underpinned with sections of reinforced concrete retaining wall. This will be done in a 4, 2, 5, 3, 1 underpin sequence. The concrete walls will be propped across from side-to-side while the base slab is cast.

The garden walls will also be propped while they are being underpinned.

The existing houses have basements and their footings are at about 3m below garden level. It will be necessary to underpin them where the new deeper basement abuts them. This will be done in traditional mass concrete underpinning.

The slab over the new basement will be insitu reinforced concrete spanning between the concrete retaining walls and columns dividing up the new basement, supporting the substantial garden loads.

Drawing R8558/SK1 attached shows a section through the proposed concrete basement structure.

With a London clay subsoil and given the existing basement of the house, which is not damp there is no reason to believe that the construction of the additional basements will have any significant influence on the water regime in the area.

CONCLUSION

If they are properly constructed, as described here, there is no reason why the proposed works should affect the listed building and surrounding walls deleteriously. Great care will be taken by the Contractor to protect the garden walls at all stages of the construction.

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210a Tufnell Park Road, London N7 OPZ. Telephone 020-7272 0562. Fax 020-7263 40	15 CROSS SECTION AT REAR.	DATE: Nov. 08 .

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Existing Existing garden wall garden wall ISOTH . R.C. planter stabs 300 mm the R.C. slab 111511167116 THE MENTE Minimum 300 Minimum 300 300 × 300 22 the RC and - undersing the RC wall beams at RC columns Underpinning existing wall 8. Sm. crs. 300 RC slab on J So concrete blinding