

12141gs-c111012cl-kam

12 October 2011

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Repairs Team
London Borough of Camden
2nd Floor Town Hall Extension
Argyle Street
London WC1H 8NG

Dear Sirs,

1A GLASTONBURY STREET, LONDON NW6: STRUCTURAL ENGINEERS REPORT

We confirm our brief, given in recent correspondence from yourself, to visit the above property, to familiarise ourselves with its current structural condition, and report with recommendations.

As you are aware we prepared a report for the above property in September 2008. This report is an update of the original report (reference 12141gla-c080904) dated 5th September 2008. For back ground information and description please refer to the previous report.

In general the property is in poor structural condition with numerous inherent defects and its lack of maintenance.

1.0 Generally Observation

- 1.1 As identified in the previous report, the brick wall to the rear of the property had partially collapsed in the past. We understand the tree to the rear was removed and the action of the tree roots may have been one of the causes of the failure of this section of wall.
- 1.2 We had access the rear of the garage by the removal of a timber panel. This revealed a small strip of land overgrown with ivy. It was not possible to see the tree stump (see plate 8).
- 1.3 We did note that the rear wall of the garage was bowing inwards and the rubble previously reported between the neighbours brick boundary wall and the garage wall has been removed.
- 1.4 There is a vertical crack between the rear wall and the return wall to the right hand side of the timber panels (see plate 7). The return wall has horizontal fractures to the brickwork (please refer to plate 4)
- 1.5 We note that the vertical crack to the left hand side brick wall is at the junction of the flank wall of the house and the new brick extension of the garage (see plate 5). The brickwork does not appear to be bonded and is a straight joint. This crack appears to be due to differential settlement between the two different foundations.
- 1.6 We note the front brick panel between the two garage doors is leaning outwards (see plate 2).
- 1.7 The brick above the main garage door lintel has cracked due to the undersized timber lintel (see plate 6). The brickwork is not tied to the roof joist and in fact there is a gap between the roof and the brick work (see plate 3). Over time this brick can become unstable and collapse.

2.0 Comments

We would comment on our observations as follows:



- 2.1 From general observation the structural defects identified in our previous inspection still remains and no remedial work has been carried out to date.
- 2.2 The various cracks to the masonry structure are still present. These are clearly historic and there does not appear to be any further "significant" movement since September 2008.
- 2.3 However, we believe additional movement has taken place to the brickwork above the timber lintel bearing over the garage door.
- 2.4 We did check calculations on some of the structural elements such as the roof joists, timber beams and timber lintels and it seems all the members fail to meet current design code.

3.0 Recommendations

- 3.1 Install steel columns on pad foundations to provide additional restraint to the brick wall to the rear. We envisage 3 no. posts which will be tied to the timber roof.
- 3.2 All the timber lintels will need to be upgraded to concrete lintels.
- 3.3 Standard 35 x 5mm mild steel roof straps will need to be installed around the perimeter of the roof to provide restraint to the brickwork.
- 3.4 The central brick pier to the front that is bowing outwards will need to be tied back to the return wall.
- 3.5 General brick stitching will be required incorporating Helifix stainless steel bars.
- 3.6 A structural specification will be required to quantify the repairs in more detail.

Please note that the above recommendation is only a remedial measure. There are inherent defects in this property that cannot be fully resolved by the measures proposed. For example if it is suffering from tree root related subsidence movement then there will be ongoing movement until the soil naturally stabilises. In our view underpinning a defective wall in its current condition or even rebuilding it on new footing does not seem like an economical solution in context to the poor condition of the remaining structure. It could also be unsafe given its condition.

The condition of the structure is such that it probably should be considered for demolition. The above work will enhance the structure but only for a limited time frame.

We recommend that the above works are carried out within 12 months. If not then the condition of the property should be surveyed every 6 months to check for deterioration.

If you require any further assistance at this time, please do not hesitate to call.

Yours sincerely


Kamal Mathi

DISCLAIMERS

1. This report does not constitute a full survey of the premises.
2. Except where specifically indicated in the report, woodwork, brickwork or other parts of the property or its services, which are covered, unexposed, or inaccessible, have not been inspected and this report does not constitute any warranty that any such parts of the property are free from defects.
3. This report is prepared for the use of the person, firm or company to whom it is addressed (and that of any other person, firm or company whose interest was disclosed to us prior to its preparation) and no responsibility is accepted by us to any other party whatsoever for the whole or any part of its contents.
4. We cannot report definitively that subsidence has occurred from a visual inspection alone. Investigations are required to establish the cause of the movement.
5. It is necessary as a result of specific changes in professional indemnity insurance to clarify the scope of our services in respect of asbestos, fungus and mould. For the avoidance of doubt this practice does not accept any liability or responsibility for or in connection with the detection, monitoring, treatment, eradication or removal of these substances either implied or otherwise within the scope of our services. Notwithstanding your legal obligations it is strongly recommended independent professional surveys be carried out on any existing building that is to be the subject of development, refurbishment or alteration works to identify the presence of such substances and give recommendations for treatment and or removal.



Plate 1: Front Elevation



Plate 2: Central brick pier leaning outwards at top



Plate 3: Brick above timber lintel to front not tied to timber roof



Plate 4: Crack to rear brick pier



Plate 5: Vertical crack to left hand side flank wall



Plate 6: Crack to LHS above timber lintel bearing



Plate 7: Vertical crack at junction of rear wall and return wall



Plate 8: Rear external area