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**LIMITED STRUCTURAL INSPECTION REPORT**

**ON BOUNDARY WALL AT**

**OLD FROGNAL COURT  
23 FROGNAL LANE  
HAMPSTEAD  
LONDON  
NW3 7DB**



For: OFC Flats Ltd

Issue No: 1    8<sup>th</sup> April 2015

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<b>REVISION RECORD</b> Report ref:				
<b>Rev</b>	<b>Description</b>	<b>Date</b>	<b>Originator</b>	<b>Reviewed</b>
	Initial Issue	8 <sup>th</sup> April 2015	<i>DPhillips</i>	<i>DPhillips</i>

## 1. BRIEF

structureHaus were appointed by OFC Flats Ltd to provide structural advice, report and detailed design services in support of a planning application to replace a failing boundary wall at the above property. structureHaus inspected the wall on 22<sup>nd</sup> January 2015. At the time of our visit the weather was fine with a temperature of around 7 °C.

## 2. GENERAL DESCRIPTION

The wall comprises a solid London stock brick wall approximately 2.1m high from pavement level and 14m long. To the rear the wall retains approximately 900mm of soil. There are several Chinese privet trees very close to the wall as shown on the Jeneric Design application drawings and photographs.

The wall is generally 340mm (13.5 inches) thick at low level up to around 750mm above the pavement level and 225mm (9 inches) thick above. The step in thickness reveals on the rear (garden) side of the wall. There are 3 intermediate stiffening piers to the rear of the upper 9 inch thick wall, roughly equidistant with two substantial terminating piers at each end of the wall. These measure approximately 550mm square and are capped with pre-cast concrete coping stones. The wall is generally capped with a soldier course of brick on edge. It appears to have been rebuilt substantially from about 600mm above pavement level. The upper parts do not appear to have any significant age to them. The lower 600mm appears to be a darker stock brick possibly as a result of pollution signifying an earlier age. It is therefore evident that

the wall has been substantially rebuilt and/or extended in height from the original. The wall has been variously pointed over the years generally in cement based mortars.

### **3. EVIDENT DEFECTS**

The wall is suffering from a number of structural defects, including;

- Evident overturning/ leaning toward the road. This varies along its length and is worst at the positions nearest the trees and will be due to the retaining situation combined with tree growth.
- Spalling at low level and erosion of mortar joints. This appears due to incorrect pointing mortar specification unsympathetic to the stock bricks.
- Evident significant structural fractures to the wall at the tree positions due to tree growth.

### **4. CONCLUSIONS AND RECOMMENDATIONS**

The wall is suffering from overturning onto the pavement and structural damage primarily due to the tree growth but also the retaining situation. To a less structurally significant extent the wall has been pointed in inappropriate mortars, particularly at low level. It is likely that further tree growth will result in further overturning and structurally significant fracturing of the wall.

Our recommendation is as follows;

- 1) The three Chinese privet trees immediately behind the wall are removed and the remainder of the trees remain.
  
- 2) The retained soil is banked down behind the wall.
  
- 3) The wall is rebuilt to match existing using reclaimed bricks where possible and built in a lime mortar suited to the brick. The low level 'darker' bricks should be rebuilt in the same position to match existing. A panel showing the lower and upper section should be built for approval by the planning department and this should include the coping detail. A new foundation suitable for the ground conditions and adjacent trees will be required.

**RESERVATIONS**

As instructed, we have only carried out a limited survey of the wall and have not inspected the foundations, or miscellaneous outbuildings, nor the rest of the property except issues affecting the wall. In addition, we have not inspected other parts of the structure which are covered, unexposed or inaccessible and are therefore unable to report that any such part of the property is free from defect. As a result, this report does not in any way constitute or can be construed as constituting a representation or warranty, actual or implied, regarding such parts.



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