

HLS Structural Engineers Limited 25 Brownfields Welwyn Garden City Hertfordshire AL7 1AN

> Tel: 01707 336017 admin@hls-structural.co.uk www.hls-structural.co.uk

Mr Banks 12 Church Row Hampstead London NW3 6UT

Attn. Mr Banks

Our Ref

20012/MM

Date 28 February 2020

Dear Mr Banks,

Re: The Old Broken wall at 12 Church Row, Hampstead

We visited the above property, at your request, on 14th January 2020, to undertake a structural inspection of the above mentioned retaining wall.

Our inspection was visual only and no opening up works were undertaken.

Descriptions of the wall are as if standing in front of this item.

Survey

The retaining wall is constructed of two leaves of bricks with no cavity, however there is no sign of bonding between the skins with 450x450 mm brick buttresses at approximately 3500 mm centres.

The wall runs along the entire length of the garden retaining 2.5 m. There is a fair amount of vegetation, plants and shrubs in front and on top of the wall with a substantial sized Wisteria plant on top of the collapsed section with its roots exposed.

There are no visible weep holes through the wall or any other visible drainage system to allow the water to exit.





Conclusion

Retaining walls are not typically designed to resist the weight of soil and water. When hydrostatic pressure builds up behind the wall it can be overloaded and fail.

The saturated soil probably from the recent heavy rain, due to the lack of proper drainage system behind the wall, is the most likely cause for the swelling of the ground behind the wall and causing the failure of this retaining wall.

Yours sincerely,

HLS Structural Engineers Ltd

Marjan Majd

