



# Malachy Walsh and Partners Consulting Engineers

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Mr. Ayad Al-Tuhafi  
Ayad Al-Tuhafi Architects  
62 Upper Montagu Street  
London  
W1H 1SW

Our ref: 15600/D3  
14<sup>th</sup> May 2019

Dear Ayad,

## **Re: 1 Ferncroft Avenue – Side Boundary Wall**

As per your instructions we visited the above premise on the 30<sup>th</sup> April 2019 and met your goodselves on site. This with regards to the side brick boundary wall running along Platt's lane. We report as follows.

- 1.0 The main detached house faces Ferncroft Avenue and has a garage at the rear. It is a large detached property, and has a generous rear garden and patio. The boundary wall is set away from the house by at least 2.5m. The strip between the house and the boundary wall in question has a number of trees all along the wall. Some trees are now beginning to over shadow the gable wall and the roof of the main house. The wall itself is around 500mm high and has a timber fence above.
  - 1.1 Far as we are aware the house falls under a conservation area.
  - 1.2 A carport is found at the rear along with a small single storey out building (garage).
- 2.0 A row of trees run along the boundary brick wall. Along with a large tree that may have a TPO on it. This tree is quite close to the wall.
  - 2.1 The wall was noted to be leaning outward. The deflection increases as we move close to the large tree noted above. This together with vertical shear cracks. We believe that it is not long before the wall could reach critical stage leading to collapse.
- 3.0 We suggest the following
  - 3.1 Remove the wall and have it rebuilt in line with its surrounding.
    - Remove row of trees.
    - The large tree we understand needs to be kept.
    - To remove part of the wall, in practice is likely not to work as the wall will not line up i.e new with old.

Director London Office: Mohammed Rafiq BSc, CEng, MStructE, AHU

### DIRECTORS:

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3.2 Regards wall's foundations.

- Traditional strip footing after giving time for soil to come to its natural state. This after the removal of trees.
- Around the large tree to protect its tree roots. Use steel screw piles with concrete reinforced beam above, below the brick wall on this concrete. Vertical expansion joint will be needed to allow for differential movement.

3.3 Wall should be enhanced by brick piers.

We trust that you find the above satisfactory, but should you have any queries please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Mohammed Rafiq', with a horizontal line underneath.

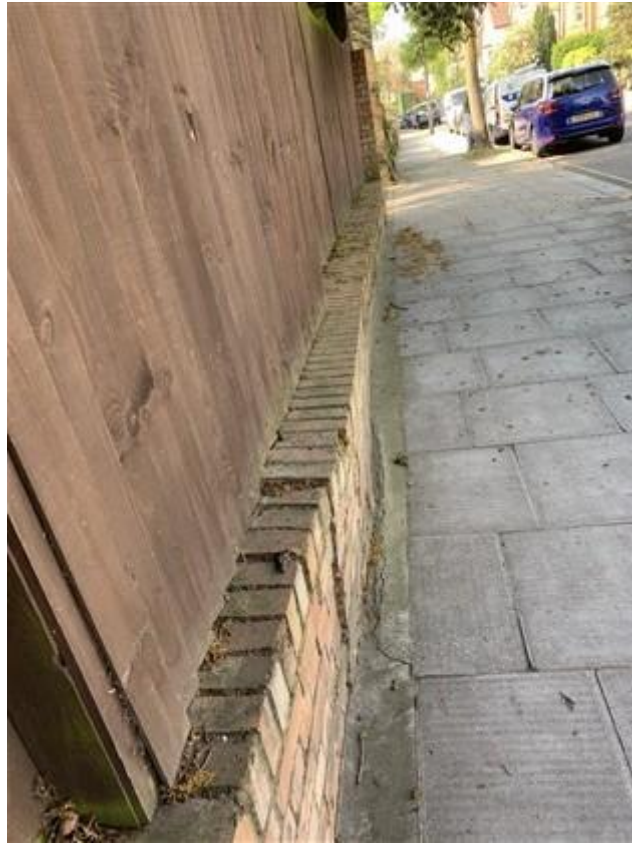
Mohammed Rafiq BSc., CEng., MIStructE  
For  
Malachy Walsh and Partners



Long view (1)



Long view (2)



Long view (3)



Elevation (1)





Elevation (2)



Vertical joint staggered



Note - movement



Note – vertical & horizontal movement



Diagonal cracks (1)



Diagonal cracks (2)