6th November 2017

J000174/MJE

Mr Mark Tucker Ecospace Unit 5a/6a Iliffe Yard 33 John's Mews London SE17 3QA



Unit 5 Quayside Lodge William Morris Way Fulham London SW6 2UZ

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Dear Mr Tucker,

## Re: Proposed Works to Retaining Wall at rear of 22 Downshire Hill

We were engaged to carry out a structural report on the existing brickwork retaining wall at the above address.

In our report dated 21st December 2016, we concluded that the wall had significant movement and generally was in a poor condition and therefore remedial works were required. The options explored are briefly described below.

- 1. Localised repairs It was concluded that localized repairs would not be significant enough to halt the movement in the wall.
- 2. Removing and replacing the wall in small sections This was not viable as any significant work to this wall substantially increases the risk of the wall collapsing due to the releasing of the built-up stress in the wall and soil behind it.
- 3. Kingpost retaining wall system This would involve driving steel columns (piles) into the ground and spacing precast concrete panels between the columns in front of the wall It was found structurally this would not work and also the vibration from these works were likely to exacerbate the movement in the wall which increased the risk of the wall collapsing.
- 4. Traditional reinforced concrete retaining wall This to be carried out in 1.0-meter-wide sections which minimise any interaction with the existing wall and therefore it is the least risky option. We have recommended this option to our client.

If you have any other queries on the above, please contact us.

Yours Sincerely



Mike Egan Green Structural Engineering Ltd



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