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13 March 2024

PLANNING STATEMENT

7 REDINGTON GARDENS, LONDON NW3 7RU Planning Application 2023/2530/P

Michael Alexander Limited Consulting Engineers has been appointed by Mr and Mrs R Segal, the Owners of 7 Redington Gardens, London NW3 7RU, to advise on the structural aspects related to the proposed redevelopment of the property.

The proposals are included with the London Borough of Camden Planning Application 2023/2530/P, with particularly reference to the Wolff Architects "Condition & Feasibility Study" dated 22nd January 2024 and the documents prepared by Viro Consult.

A site-specific ground investigation was carried out by Geotechnical and Environmental Associates (GEA); the findings of the exploratory works, geotechnical and laboratory testing are provided in the GEA "*Desk Study and Ground Investigation Report*" (Ref J23249 Rev 0 final version dated 28 November 2023).

The investigation was commissioned to inform the design for the proposed new construction; however, it also included the excavation of trial pits to establish the details of the existing footings to the house (refer to the extract from the GEA Report below). Exploratory works were also carried out to establish the construction of the existing ground floor slab.

The ground conditions comprise Made Ground, over Alluvium over Claygate Member, which is underlain by London Clay.

The GEA Report concludes that, due to the poor nature of the ground and the proximity of the trees, piled foundations shall be required for the long term stability of the structure of the proposed new building; this shall ensure that the building is not affected by the variable and weak ground at the upper levels and by the influence of the trees, which will have a severe and adverse effect on shallow foundations.

The Report also includes recommendations for the use of a fully suspended ground floor slab, over a suitable void, to protect against potential ground movement, in accordance with the National House Building Council (NHBC) guidelines.



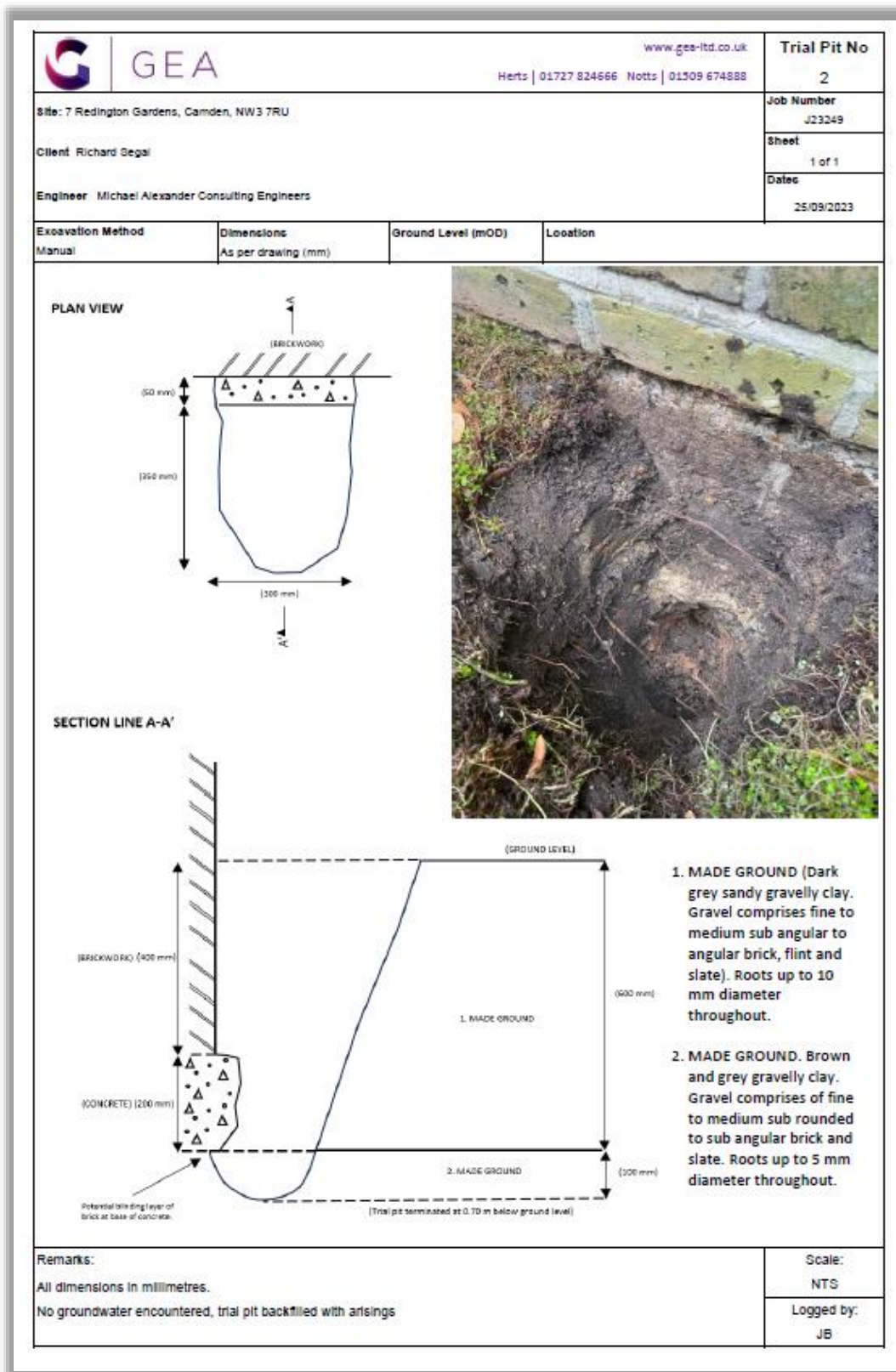
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The existing footings of the existing house are of a traditional shallow construction, with the external brick walls built on mass concrete strip footings, which are founded at a depth of approximately 0.6 metres below the external ground level.

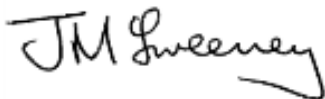
There is evidence of significant settlement of the existing ground floor slab, which is particularly noticeable in the main reception rooms, closest to the trees.

The existing ground floor slab is a nominally reinforced ground bearing concrete slab, on a layer of hardcore overlying the fill, alluvium and clays subsoil; the slab is uninsulated and there is no evidence of a damp-proof membrane under the slab.

The shallow foundations, and defective ground floor slab, will be susceptible to continued movement, due to variations in moisture content of the subsoil; the movement will be exacerbated with the growth of the trees and their high water demand, particularly with increasingly dry summers.

If the building were to be refurbished, remodelled or extended, it would be necessary for the ground floor slab to be removed in its entirety and replaced with a new suspended slab on new deeper foundations; the internal and external loadbearing walls, in the vicinity of the zones of influence of the many trees, would also need to be underpinned to protect against potential future movement.

On the basis of the above issues, which would be associated with retaining the existing building, we recommend an entirely new construction, founded on piled foundations, with a fully suspended ground floor slab, to meet current design standards.



JOHN MCSWEENEY