



21b West Heath Road NW3

Structural Stability Report

Brief

This document is the structural stability report carried out for the purpose of planning permission in accordance with The London Borough of Camden requirements. It should be noted that this report outlines and suggests the assumed construction at this stage. It should also be noted that, as is standard for works of this type, the main contractor will be fully responsible for the design and erection of all temporary works.

We propose to use the following headings to demonstrate compliance with the requirements of the London Borough of Camden.

Description of Proposed Basement Works

21b West Heath Road is a semi detached property in sound structural condition with no signs of any significant differential movement. The proposal is to extend the existing basement at 21b West Heath Road in terms of depth. The existing basement is approximately 1m below ground level with the proposal being to lower a further 1.4m. Please refer to drawing 1032-0504 for the existing and proposed layout. The geological maps show the soil conditions to be uniform London clay to a depth of approximately 75m. A geotechnical report will be carried out to confirm this and if necessary the structure will be adapted to suit the findings. Reinforced concrete under pins, acting as retaining walls, are proposed with lateral temporary propping. This will be described in more detail throughout this report.

Supporting the Proposed Loads

The proposal is to underpin the existing walls and where retaining the underpinning will be designed with reinforcement to act as a retaining wall. The loading down the party wall and external wall is not expected to increase significantly from existing. As can be seen on the proposed sketches, sketches SK02 to SK04 enclosed, the width of the new footing is greater than existing and it can be assumed that with a greater depth the safe bearing capacity will be greater than existing. Assuming these assumptions are correct we can therefore confirm that the proposed construction will be sufficient to support the loads assumed.

Structural Integrity of Surrounding Structures and Utilities

We do not expect there to be any utilities, tunnels or infrastructure within the area of influence of the proposed basement works apart from the existing foundations mentioned above and therefore we do not expect any impact regarding the structural integrity to these items.

Slope Instability

The proposal is to construct the underpinning in stages that will be temporarily propped until the final base is constructed and cured. No battering back is proposed. We therefore confirm slope instability will not be initiated due to these works. Please refer to the proposed sketches, sketches SK02 to SK04 enclosed.



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Impact on Drainage and Surface Water

We do not expect there to be any existing drainage within the area of influence of the proposed basement works. With regards to surface water the basement is below the existing house and no water is expected and therefore we do not expect there to be any impact on the existing drainage, surface water, ground water flows or levels.

Geological & Hydrological Concerns

The geological maps identify uniform London clay down to approximately 75m. We do not expect any ground water and therefore we do not expect there to be any geological or hydrological concerns with respect to the proposed basement works.

Details of the Scheme

Please refer to the proposed sketches, sketches SK02 to SK04 enclosed, for details of the scheme including proposed temporary works and method and sequence of works.

Structural Stability of the Existing Buildings

The proposed basement is to be constructed between a party wall and external walls. The existing party wall and external walls will be extended down and will be reinforced and will bear on strata that will provide a safe bearing with a capacity greater of that found at the existing depth. The reinforced walls are designed to resist the lateral earth pressures. The existing building does not show signs of differential movement and these works are not expected to create any significant differential settlement or have a detrimental effect on the structural stability of the adjoining or adjacent buildings.

Impact on Trees

The proposed basement is not within the zone of influence of any significant existing trees.

Temporary Works

Please refer to the proposed sketches, sketches SK02 to SK04 enclosed, for details of the temporary works. These works have been preliminary designed in accordance with the current British Standards. When the contractor is appointed he will be fully responsible for the temporary works including the design and erection.

This report has been produced for the sole use of The London Borough of Camden and for their use only and should not be relied upon by any third party. No responsibility is undertaken to any third party without the prior written consent of Richard Tant Associates.

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