

EXECUTIVE NON TECHNICAL SUMMARY

BASEMENT IMPACT ASSESSMENT STAGE 1 SCREENING

FOR INCLUSION WITH THE PLANNING
APPLICATION FOR PROPOSED ALTERATIONS
TO EXISTING FRONT LIGHTWELL

AT

5A GREVILLE PLACE
LONDON NW6 5JP

REF: 210513 / BIA STAGE 1

REVISION: 0

MAY 2023

BASEMENT IMPACT ASSESSMENT STAGE 1 SCREENING EXECUTIVE NON-TECHNICAL SUMMARY

Fairways Consulting Structural Engineers Ltd have been commissioned to carry out a Basement Impact Assessment (BIA) Stage 1 – Screening Stage, to support a planning application for proposed alterations to the existing front lightwell at 5A Greville Place, London NW6 5JP, for which Fourteen a.m. Ltd are acting as Architects.

The purpose of the BIA Stage 1 - Screening report is to satisfy guidelines raised by Camden Council regarding groundwater flow; land stability; and surface water flow/flooding, as set out in The London Borough of Camden Planning Guidance: Basements document (Jan 2021).

The proposed alterations are for the existing front lightwell to be reduced in level by approx. 1.25m (from existing FFL of 36.08 to FFL of 34.84), to match the existing Lower Ground Floor level of the main house (refer to drawings on pp.8-11). The main house front façade wall will not require any underpinning as the foundations for it are already below the level of the lower ground floor.

The Site Investigations reveal that at the rear, the site is underlain by FILL material, down to 0.30m below the paved ground level, on soft CLAY. This is in agreement with the British Geological Survey Maps, which indicate bedrock geology of London clay, with no superficial deposits. Ground water was not encountered in any of the trial pits.

Subterranean (Ground water) flow (Refer to comments on Flow Chart on Fig 12):

The proposed development is located on London Clay outcrop and not on top of an aquifer. The site is at least 100m away from a watercourse. No groundwater was encountered in any of the trial pits on site. The lower ground level of the house (which is also the formation level of the proposed reduced level alterations to the lightwell) is therefore above the ground water table, thus there is no anticipated impact on ground water flows and levels either during construction or in the future.

Land stability (Refer to comments on Flow Chart on Fig 13):

The house and lightwell are located on a flat site. Underpinning will only be required on three sides of the existing lightwell, and not to the main house front façade wall foundations. Slope instability can only be initiated in the temporary condition via a collapse of inadequately constructed or partially formed underpinning as the lightwell level is being reduced. This is highly unlikely due to the modest depth of excavation required, undelaying ground type (London Clay) and the construction sequence and methodology suggested (refer to Sketch Details for the lightwell).

The impact from the ground movement, as a result of the construction of the proposed reduced level of the lightwell, is not predicted to have any detrimental impact on the main house or neighbouring properties. The damage is predicted to be limited to Category 0 as set out in Table 2.5 of CIRIA report C580. This is classified as 'negligible damage' with approximate maximum crack width of up to 0.1mm (refer to calculations on pp.24-27).

The proposed development will require a Party Wall Agreement and structural details will be designed and detailed to the agreement of all parties where necessary.

Surface water flow and flooding (Refer to comments on Flow Chart on Fig 14):


The proposed development is at low risk from surface water flooding (within Flood Zone 1) and is located away from the flood floor risk zones and critical drainage areas in Camden. The development will not result in change to the proportion of hard surfaced/paved external areas, and is not anticipated to increase the surface water floor risk.

Conclusion

Following the screening assessment against the flow charts set out in the London Borough of Camden Planning Guidance: Basements document (Jan 2021), we conclude that the full BIA is not required for the proposed alterations to the lightwell.

With careful planning, detailed design and sequencing the proposed structural works can be safely carried out without damaging the existing neighbouring properties and infrastructure. All design proposals should be coordinated between the Main Contractor, Engineers and Architects and agreed prior to commencing any works on site.

Document prepared by: VERONIKA TARASOVA MEng (Oxon) CEng MIStructE

Signed:  Date: 19 May 2023