

CR Updated Basement Proposals Letter.docx

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For:
Kier Construction
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IG103SD

To whom it may concern,

UPDATED BASEMENT SCHEME, GREENWOOD CENTRE

We write to discuss the change in scheme for the proposed basement at The Greenwood Centre, Greenwood Place, London, NW5 and the effects the alteration to size and depth of excavation to form the basement will have on the impact to surrounding buildings, infrastructure and groundwater in comparison with the previously proposed basement. Pertinently this letter discusses the applicability of the previously submitted Basement Impact Assessment (BIA) in relation the newly proposed scheme.

The originally submitted BIA was based on the development of a *'one to three storey community centre with a single storey basement beneath the north west part of the building. Available plans indicate the finish finished floor level for most of the basement to be around 32.70m OD. Locally a pool and associated balance tank are to be constructed in the basement and these features are indicated to have finished floor level the region of 31.43m OD. The location of these features is illustrated on Drawing 11167/G100'*. The original proposal indicated the basement extending directly adjacent to the boundary with Deane House to the north, Greenwood Place road in the east and in close proximity to Murphy's yard in the west.

The updated basement proposals now include similar proposals from ground floor upwards, however with reduced basement footprint and reduced excavation depth. Current available plans indicate that the basement finished floor level is 33.327m AOD and that the extent of the basement has been moved approximately 5.68m from the edge of Deane House, 13.49m from Murphy's Yard and 10.09m from the southern site boundary which is adjacent to Greenwood Place road and associated infrastructure.

A sketch overlay showing the previous basement scheme and the updated basement scheme is enclosed within this letter.

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Following demolition of the historical Greenwood Centre, the existing surface level was found to be at approximately 35.08m AOD. Assuming a 450mm basement slab, a retained height of existing in-situ soils of 2.203m is proposed within the updated basement scheme.

It is understood that the previously submitted BIA was accepted upon submission to Camden London Borough Council.

With reference to CIRIA document C580 - 'Embedded Retaining Walls', ground movements behind embedded retaining walls are primarily dictated by excavation depth, with the magnitude of ground movements decreasing away from the embedded retaining walls. Consequently it is considered that the excavation of and construction of the newly proposed basement scheme will cause less impact on surrounding buildings, infrastructure and groundwater than the previously proposed scheme.

Notwithstanding the above an updated estimation of ground movements based on the updated scheme has been undertaken with reference to CIRIA C580. This document indicates that the ground movements behind a low support stiffness (cantilevered) retaining wall become negligible at four times the maximum excavation depth. Therefore, based on the maximum excavation height from existing level of 2.20m, ground movements are considered negligible at 8.80m from the edge of the proposed basement. Consequently it is anticipated that the excavation of the proposed basement will have no significant impact on the foundations to Murphy's yard Greenwood Place road and associated infrastructure. Ground movements at the wall of Deane house are estimated to be approximately 1.5mm, however, considering the depth of Deane House foundations (as per encountered within foundation inspection pits) and the conservative nature of estimating ground movements using CIRIA C580 guidance, these estimated movements are also considered negligible.

Consequently it is deemed that the updated basement scheme will have a negligible impact on surrounding buildings and infrastructure and the findings presented within the previously accepted BIA are appropriate, if not overly conservative. Any updated BIA would do little more than to repeat work previously undertaken, and consequently it is recommended that an updated BIA is not required.

Yours sincerely



JOSH CHASTNEY

For and on behalf of **CAMPBELL REITH HILL LLP**

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-Previously Proposed Basement Scheme (with proposed basement scheme overlay)