From: Helen Stone
Sent: 08 September 2023 12:08
To: David Fowler
Cc: Planning; Kathy Doyle; Jim Monahan
Subject: Discrepancy in materials on Camden Planning Portal for One Museum Street planning application.

Dear Mr Fowler,

I am writing to query a discrepancy between documents recently uploaded on the Camden planning portal for Planning Application ref. 22023/2510/P.

I gather you have drawn to my colleagues' attention the Campbell Reith report on the Basement Impact Assessment Audit dated September 2023. This document contains a description of the bored piling on the site which seems to be based on a 2021 report, (mentioned in the list of reference documents in the report) and significantly differs from the drawing and description of the piling in the 2023 Basement Impact Assessment and Structural Impact Assessment report by Heyne Tillett Steet of June 2023 also on the planning portal.
The former describes 24 settlement reducing piles, (plus 15 anti-heave), whereas the latter describes and shows on plan 44 settlement reducing piles (plus 15 anti-heave piles).

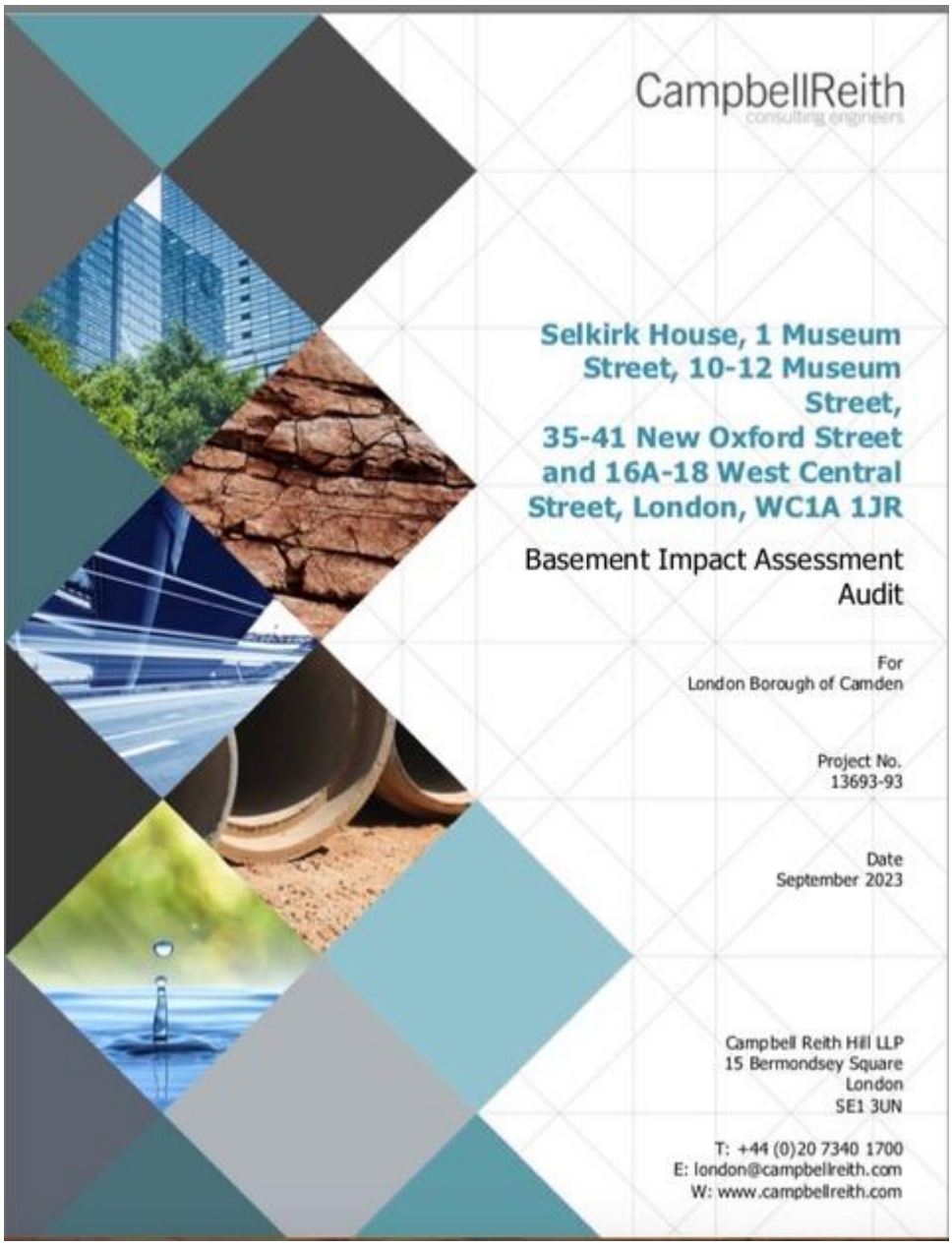
Whilst the discrepancy may not change Campbell Reith's findings, I would suggest that materials should be consistent and based on latest design information.

I have relied on the 2023 Basement Impact Assessment & Structural Impact Assessment in making objections and observations about the inordinate amount of concrete needed for the new build design versus the retrofit option. I would not wish these to be based on incorrect information.

From past experience, I would consider it unlikely that the number of piles has been reduced, and therefore I would expect that the latest design includes 44 settlement reducing piles, but I shall await your confirmation.

Will you please clarify at your earliest convenience which information is correct?

I provide below relevant screen shots to assist you:



4.16 The scoping assessment for felling of trees identified piling works will take place near tree protection zones. A technical note is provided in Appendix D detailing piling rig consideration and root protection systems for three piles in the southeast corner of Museum Street. It is accepted that the felling of tress will not impact the structural stability of the proposed works due to the presence of granular Made Ground and Lynch Hill gravels, which are not expected to heave or settle significantly due to tree removal, and which should not impact neighbouring properties.

4.17 The Structural Engineering Report (SER) has been carried out by engineering consultants Meinhardt (UK) Ltd. The SER details demolition stage, proposed superstructure, substructure, construction sequence, load paths and monitoring strategy for each part of the development. The SER is further supported by structural drawings detailing the construction methodology. The following substructure proposals are summarised:

- The existing basement under 1 Museum Street will be reused and existing retaining walls are proposed to be re-supported by a series of reinforced concrete piers and waler beams to accommodate the double height in some areas. New foundations in the form of a raft foundation and pad foundations will be built on top of the existing raft foundation.
- At 1 Museum Street, settlement-reducing piles will be utilised comprising 14no. approximately 25m long 900mm-diameter bored piles toed at -7.5mOD along the perimeter of the Post Office tunnel exclusion zone directly beneath the proposed core, and 24no. approximately 20m long 900mm-diameter bored piles toed at -2.5mOD to support other areas of the hybrid raft.
- The basement below the High Holborn block will be backfilled in the permanent condition and temporary props will be provided when the ground floor is removed.
- A new basement is proposed to a depth of c.6.50m bgl in the new Vine Lane development. It will be constructed with 750mm dimeter secant piled wall and toed in at 11.00m bgl within the London Clay Formation. A 600mm thick reinforced concrete raft is proposed. Temporary propping is provided at capping beam level.
- Demolition of 16-18 West Central Street to accommodate construction of a new 6 storey building. The existing basement will be retained, and localised underpinning in the range of 0.90m to 1.30m deep implemented to accommodate the new raft foundation.
- The existing structure on 10-12 Museum Street and New Oxford Street will be largely retained and vaults infilled with foam concrete. Localised underpinning will be undertaken.

Basement Impact & Structural Impact Assessment

Prepared by Heyne Tillett Steet

Submitted on behalf of Lab Selkirk House Ltd

Selkirk House, 166 High Holborn and 1 Museum Street, 10-12 Museum Street, 35-41 New Oxford Street and 16A-18 West Central Street, London, WC1A 1JR

June 2023

Source: [illegible]

Figure 2.4 Ground floor plan of the proposed Museum Street, Vine Lane, High Holborn and West Central Street developments

2.6.7. The following foundation systems will be implemented across the site:

- **Museum Street**: Within the existing basement, new discrete shallow footings at column locations and a new hybrid piled raft foundation system beneath the core will be constructed approximately 2m above the lowest point of the top of the existing raft, with large portions of the existing basement refurbished and reused. Several bearing piles will also be constructed for columns landing outside of the basement to the north and east, and within the basement in the southeast corner.
- **Vine Lane**: A new raft foundation system will be constructed, replacing any existing substructure elements present in that location. The raft will be tied into a new secant wall toed approximately 4m below the proposed formation level.
- **High Holborn**: A new raft foundation system will be constructed on the top of the existing raft. The existing single-storey basement will be backfilled above the new raft to ground level.
- **West Central Street**: The existing basement and foundations will be retained below new columns, with limited basement extensions via underpinning above the anticipated groundwater table and new raft foundations introduced where required.

2.6.8. The Museum Street settlement-reducing pile layout is shown in Figure **2.5** and will comprise 15no. approximately 25-long 900mm-diameter bored piles toed at -7.5mOD along the perimeter of the Post Office tunnel exclusion zone directly beneath the proposed core, and 44no. approximately 20m-long 900mm-diameter bored piles toed at -2.5mOD to support other areas of the hybrid raft.

2.6.9. Specialist contractor Marketo Piling Ltd (Marketo) has been engaged to discuss the constructability of the settlement-reducing piles in restricted headroom conditions prior to demolishing the existing superstructure. Following liaison between the project team and Marketo, it is understood that construction of all settlement-reducing piles is within their capability.

2.6.10. Temporary props / shoring will be installed at ground level, prior to proceeding with bulk excavation works for the proposed Vine Lane basement. Such measures will increase the system stiffness of the retaining walls and reduce the risk of adversely affecting neighbouring structures and third-party assets, due to excessive ground movement.

2.6.11. Temporary propping will also be installed in the existing Selkirk House basement during demolition of the existing basement slabs and construction of new basement walls and slabs.

2.6.12. The petrol tank chamber room, present directly east of the Selkirk House basement underneath the proposed pile cap, will be infilled and sealed as part of the proposed development. Piles installed within the footprint of the chamber will be bored through the concrete chamber roof and base and the fill material.

2.6.13. The Vine Lane basement excavation will be supported by a secant pile wall along the east, north and northwest perimeter. To the southwest, existing deep underpins will be used, and to the south the excavation will tie into the existing Selkirk House basement.

2.6.14. Limited underpinning works are proposed at West Central Street to deepen the existing basement to install the new raft foundations. The underpins will be of the order of 1.0m deep from the underside of the existing footings. Temporary propping will be installed to facilitate the underpinning.

Post Office tunnel and 2m sewer exclusion zone marked in green. Core raft outlined in magenta.
Blue piles: demolition movement control and settlement-reducing piles toed at -7.5mOD.
Red piles: settlement-reducing piles toed at -2.5mOD.

Figure 2.5 Museum Street core raft movement control and settlement-reducing pile layout at B2 level

Yours sincerely.

Helen Stone

Ms H. Stone OBE FREng BSc CEng FICE