From:

Sent: 21 August 2018 10:44

To: Constantinescu, Nora-Andreea

Cc:

Subject: 12797-95: 1 Spencer Rise

Hi Nora

We are preparing the BIA audit for issue. In advance, please find below our queries which will require further information from the applicant's engineers in order to close out the audit.

- 1. Whilst the estimated horizontal ground movements appear reasonable, considering the depth of the proposal / form of construction., the estimated vertical movements appear very low (table presented on page 31 / figure 25) the calculations should be provided for review please.
- 2. In addition to 1), the vertical movements appear to be inconsistent with statements made on page 27, indicating potential settlement of up to 25mm and likely settlement of 0 to <10mm, considering the assessed allowable bearing capacity and the variability of proposed bearing pressures. The assessed settlements that will impact neighbouring structures should be clearly stated and be consistently applied through the ground movement and damage assessments.
- 3. Its noted that a number of the neighbours refer to existing settlement issues and structural damage. The BIA should confirm if existing structural damage has been assessed and whether additional mitigation will be required.
- 4. The GMA should assess impacts to the retaining wall at the rear of the property, the highway to the front of the property, and any underground services / utilities. Its noted that neighbours report drainage and water utilities apparently along the terrace / under the property.
- 5. Its noted that the description of soils are more consistent with Head Deposits than London Clay, that there are are no descriptions of stiffness and that no insitu testing has been undertaken. Review of the ground conditions (and any impacts resulting from this) should be undertaken and a statement of how they intend to confirm geotechnical parameters prior to construction should be made.
- 6. Considering the proposed form of construction (underpinning) and the description of soils presented, longer term monitoring of the standpipes should be considered along with a definitive assessment of whether the water levels observed are indicative of groundwater levels or a response to drainage of surface waters. Whist the temporary works proposals are generally accepted, encountering water during underpinning has a potential stability impact unless effectively managed, and therefore assessment and mitigation proposals should be provided.
- 7. Frequency of proposed movement monitoring survey works is presented as weekly in the construction sequence but as fortnightly on the structural drawings, which should be consistently presented (weekly is considered more appropriate).

Regards

Graham Kite

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