

The Water House, Millfield Lane, London - Responses to CGL Independent Assessment of the Basement impact Assessment 22 July 2014

Job Number 901 Issue 21.10.14

Our responses to the CGL document dated 22 July 2014 are noted below, these reference each paragraph of the comments set out in the fourth column of the CGL spread sheet. The responses should be read in conjunction with the revised information as noted in Appendix A.

- **Paragraph 1;** Access has now been gained to the adjoining site at the Dormers (Number 49 Fitzroy Park) and a more detailed survey has been undertaken this is shown on the Greenhatch Group drawing 14624/01/P dated 08.08.14 attached. SHH architects drawing 633(PL)005 Rev C has been revised and shows the accurate location of the pool and the boundary retaining wall relative to the proposed new building. Section B1-B1 again shows the levels of the pool, wall, spa pool and pool plant house relative to the proposed basement. EHRW drawing 901/SK/023 Rev P1 shows an enlarged section through the same boundary indicating the proposed works. Using the above information RSK have revised their Ground Movement Analysis and this is contained within the attached report Ref 371293-L03 (00).

The revised survey indicates that the pool is 9.1m from the proposed basement, which is greater than the previous dimension of 8.3m. We confirm that the proposed basement depth is shown correctly and note CGL's comments that the pool is therefore outside the '45 degree zone of influence' and that any impact will be minor. We assume this point is therefore closed out?

The RSK report notes that CIRIA 580 covers king post walls and also that they have adopted a conservative approach in regard to the installation of the king posts.

- **Paragraph 2;** We assume that the statement regarding the movement assessment is covered by the above points in paragraph 1?
- **Paragraph 3;** The pool plant house, spa pool and retaining wall are now all picked up on the revised survey. The retaining wall is a maximum of 1.2m high at the corner of the site.

At the closest point the temporary king post retaining wall will be 1.4m from the face of the existing retaining wall. As previously noted this section of the temporary basement retaining wall is to be fully cross propped at high and low level during construction to limit any lateral movement. To account for the proximity of the existing 1.2m high retaining wall it is proposed that the king post centres are reduced to a 1.2m spacing, once installed these will be cross propped at high level and the existing wall fully back propped against the king posts. Construction of the king post wall will then be undertaken sequentially in an underpinning sequence with back propping and back filling as necessary to ensure that no more than 1.2m of the existing wall is undermined at any time. In this way the temporary and permanent retaining walls can be constructed with nominal impact on the existing boundary retaining wall. In the permanent case it is proposed to back fill against the wall, which will stabilise the 'already leaning' wall in the permanent case.

As shown on drawing 901/SK/023, the fin drain is a shallow construction to the base of the made ground, approximately 400mm deep in this area of the site. At a distance of 1.4m from the wall we would not consider this to have any impact on the wall.

The RSK report further considers the other ancillary structures on the site, the spa pool and pool plant house and states that 'the conservatively estimated lateral and vertical movements suggest that the resulting damage will be very small.'

- **Paragraph 4;** Further consideration of the boundary and construction methodology is as noted above.

From the results we consider that the structural stability of the neighbouring properties will be maintained and that the scheme as presented satisfies the requirements of CPG4.

Drainage Comments;

- **Paragraph 1;** Comment noted, a copy of the MicroDrainage calculations have been attached.
- **Paragraph 2 (Points 1-3);** We note the useful comments which are provided for consideration rather than further information required for approval and will recommend that these are incorporated in the detailed design.
- **Paragraph 3;** We note comments and understand from this that the drainage principles are now agreed.

Cumulative Impacts

- We note comments and understand that this is now agreed as satisfactory.

Final comment regarding the Wallace House and 55 Fitzroy Park;

- We understood this was already agreed as resolved following comment received with the original assessment 7.02.14, it stated under the 'Impact Assessment' section Page 2;

'Water House is detached and relatively distant from neighbouring properties, and as such the impact of ground movements on party wall structures is likely to be negligible.'

The assessment then went on to note that the swimming pool to the Dormers is potentially within the zone of influence and concluded;

'In conclusion, it is the view of CGL that the BIA has been undertaken in accordance with the principles of CPG4, however additional impacts may require consideration as set out in our responses below.'

The swimming pool was the only structure noted and this has now been addressed.

Additionally to this, drawn sections have been provided through both boundaries with the original submission, a detailed section was provided for the boundary with 55. The original BIA considers the impact on the Wallace House Page 26 and the boundary to 55 on page 15.

Appendix A Document List

New / Updated Documentation

- RSK Group PLC Letter Report 13 October 2014 'Revised Ground movement analysis in Response to CGL's Comments of 22 July 2014' Ref 371293-L03 (00).
- Engineers Haskins Robinson and Waters 'Updated' summary hydrology drawing number 901/SK/020 P11 and new drawing 901/SK/023 P1
- SHH Pool Plan and Section drawing number 633(PL)005C
- Greenhatch Topographical Survey Boundary Levels drawing 14624/01/P Dated 08.08.14
- SWP Ltd. 'MicroDrainage calculations (Please note the cover sheet is superseded)

Previously Issued Documentation

May 2014

- RSK Group PLC Letter Report 21 May 2014 'Independent Review of Basement Impact Assessment'
- Engineers Haskins Robinson and Waters 'Updated' summary hydrology drawings numbers 901/SK/019 P3, 901/SK/020 P10 (SUPERSEDED), 901/SK/021 P8 and 901/SK/022 P6.
- SWP Ltd. 'Surface Water Drainage' 14.05.14.
- SWP Ltd. Drainage drawings numbers 2391-SKPH 01A, 02D, 03B and 04E.
- SHH Pool Plan and Section drawing number 633(PL)005A (SUPERSEDED)
- Greenhatch Pool Survey 14624/01/P Rev 0 (SUPERSEDED)

January 2013

- RSK Group PLC 'Basement Impact Assessment' January 2013
- Haycock Environmental Consultants Limited 'Updated comments / assessment' 15 February 2013
- Engineers Haskins Robinson and Waters 'Updated' summary hydrology drawings numbers 901/SK/019 P2, 901/SK/020 P9, 901/SK/021 P6 and 901/SK/022 P4. (SUPERSEDED)

August 2011

- RSK Group PLC, 'Geotechnical, Hydrogeological and Geoenvironmental Site Investigation Report' (Reference 241830-01 (00) February 2011).
- Haycock Associates, 'Initial comments and observations on the hydrological impact of the development on local surface and groundwater - Version 3 Updated June 2011. (SUPERSEDED)
- Engineers Haskins Robinson and Waters letter reports / responses to Haycocks Report, 21 February 2011 and 24 May 2011.
- Engineers Haskins Robinson and Waters summary hydrology drawings numbers 901/SK/020 P6, 901/SK/021 P5 and 901/SK/022 P2. (SUPERSEDED)
- SWP Ltd. 'Surface Water Drainage Strategy'. (SUPERSEDED)
- SWP Ltd. Drainage drawings numbers 2391-SKPH 01 to 04. (SUPERSEDED)

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