APPENDIX A

SCREENING ASSESSMENT

Subterranean (groundwater) flow screening chart	
1. a) Is the site located directly above an aquifer?	No. The site is located above the 'Unproductive' aquifer of the London Clay Formation.
b) Will the proposed basement extend beneath the water table surface?	Yes. The highest recorded groundwater was at a depth of 3.1 m bgl in BH1, approximately 0.4 m above the proposed basement founding level. Due to the anticipated very low permeability of the London Clay Formation and no topographical relief the proposed basement is not anticipated to have any impact (see Section 4.2).
2. Is the site within 100m of a watercourse, well (used/disused) or potential spring line?	Yes. Only the Regent's Canal is within 100 m of the site and this is anticipated to be lined sufficiently to form a barrier between the site and canal and therefore they will have no impact upon each other (see Section 4.3).
3. Is the site within the catchment of the pond chains on Hampstead Heath?	No. The site is over 2 km from the catchment of the pond chains on Hampstead Heath.
4. Will the proposed basement development result in a change in the proportion of hard surfaced / paved external areas?	Yes. The proposed basement will extend 4 m beyond the area of existing hardstanding in the rear garden. Mitigation option should be implemented to avoid any increase in the discharge of surface water to the mains drainage system.
5. As part of the site drainage, will more surface water (e.g. rainfall and runoff) than at present be discharged to the ground (e.g. via soakaways and/or SUDS)?	No. SuDS must be designed formally to avoid any increase in the discharge of surface water to the mains drainage system (see Section 4.3).
6. Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to, or lower than, the mean water level in any local pond or spring line?	Yes. Only the Regent's Canal which, as detailed in Question 2 above, which will not impact upon the site.

Slope stability screening chart	
1. Does the existing site include slopes, natural or manmade, greater than 7 degrees? (approx. 1 in 8)	No. The site is relatively flat at approximately 33 mOD (see Section 3.2).
2. Will the proposed re-profiling of landscaping at site change slopes at the property boundary to more than 7 degrees? (approx. 1 in 8)	No. Some excavation of ground in the rear garden is planned but no major re-profiling.
3. Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7 degrees? (approx. 1 in 8)	The site neighbours the Regent's Canal at the end of the rear garden, which has a drop of approximately 1 m to water level and then unknown drop to the canal bed. The retaining wall along the canal is anticipated to provide suitable protection against slope instability.
4. Is the site within a wider hillside setting in which the general slope is greater than 7 degrees? (approx. 1 in 8)	No. The surrounding area, except for Regent's Canal, is located at on a flat level at approximately 33 mOD (see Section 3.2)
5. Is the London Clay the shallowest strata at the site?	Yes. The London Clay Formation is encountered immediately beneath the Made Ground.
6. Will any trees be felled as part of the proposed development and/or are any works proposed within any tree protection zones where trees are to be retained?	Yes. Trees of approximately 3 m height are located within the development footprint in the rear garden. An arboricultural report should be completed to deal with the impact in more detail.
7. Is there a history of seasonal shrink-swell subsidence in the local area, and/or evidence of such effects at site?	No evidence of shrink-swell subsidence was noted during the site visit. The Groundsure report indicates a 'moderate' maximum shrink-swell hazard rating.
8. Is the site within 100 m of a watercourse or a potential spring line?	Yes. Only the Regent's Canal is within 100 m of the site and this is anticipated to be lined sufficiently to form a barrier between the site and canal and therefore they will have no impact upon each other (see Section 4.3).
9. Is the site within an area of previously worked ground?	Made Ground was recorded to a maximum depth of 1.8 m. There is no evidence of any previously worked ground.
10. Is the site within an aquifer? If so, will the proposed basement extend beneath the water table such that dewatering may be required during construction?	No. The site is located above the 'Unproductive' aquifer of the London Clay Formation.
11. Is the site within 50 m of the Hampstead Heath Ponds	No. The site is over 2 km from the catchment of the pond chains on Hampstead Heath.
12. Is the site within 5 m of a highway or pedestrian right of way?	Yes. The site fronts directly onto St Marks Crescent and the proposed excavation is approximately 3.5 m from the pedestrian right of way. Ensure adequate temporary and permanent support and use of best practice underpinning.

13. Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	Yes. Neighbouring properties all have lower ground floors, and not basement levels, that are likely to be set on shallow foundations. A Damage Category Assessment has been carried to assess the potential damage to neighbouring properties (see Section 6.0).
14. Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	The Groundsure report indicates the High Speed 2 (HS2) line as running close to the site. Drawing C221-MMD-CV-DPP-010-200500-FPD Rev.P02 by Mott MacDonald, obtained from the Gov.uk website, details the HS2 line as being approximately 32 m away to the northeast and the top of the tunnel 15 m below the proposed founding level of the basement. At this distance the proposed development is not expected to have any impact.

Surface flow and flooding screening chart	
1. Is the site within the catchment of the pond chains on Hampstead Heath?	No. The site is over 2 km from the catchment of the pond chains on Hampstead Heath.
2. As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	Yes. There will be an increase in hardstanding due to the development. Mitigation measures have been proposed (see Section 4.3). The site catchment is limited by boundary walls except for the boundary between the rear garden and the rear garden of No. 1 St Marks Crescent, which is bounded by a wooden fence, where slight undulations in the ground do not create any noticeable favoured surface water flow direction.
3. Will the proposed basement development result in a change in the proportion of hard surfaced / paved external areas?	Yes. See above.
4. Will the proposed basement result in changes to the profile of the inflows (instantaneous and long term) of surface water being received by adjacent properties or downstream watercourses?	Yes. The decrease in permeable area will increase surface inflows, however the limited catchment area (see Question 2 and Section 2.3) would make it unlikely once combined with mitigation measures (see Section 4.3).
5. Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	Unlikely. As above.
6. Is the site in an area identified to have surface water flood risk or is it at risk from flooding, for example because the proposed basement is below the static water level of nearby surface water feature?	No. The site is in an area where flooding from rivers and seas is defined as very unlikely and the risk of surface water flooding as very low. The basement is founded below the groundwater level, and should be fully waterproofed, but this is not considered likely to result in a flood risk.