Table 4: Subterranean (ground water) screening

Question		Answer	Evidence/Comment
1	Is the site located directly above an aquifer?	Yes	The site is underlain by 4.30 to 4.40m of generally granular Lynch Hill Gravel Member which is classified as a Secondary A Aquifer.
1a	Will the proposed basement extend beneath the water table surface?	No	Although a general groundwater table has been identified on site at a level of approximately 18.50mAOD, the proposed development is envisaged to only extend to a maximum level of 18.69mAOD. As such the proposed basement is unlikely to extend beneath the water table surface. However, ongoing monitoring would be required to establish both the full range of conditions and any trends in groundwater levels.
2	Is the site within 100m of a watercourse, well (used/disused) or potential spring line?	No	There are no ponds, streams or drainage ditches on or adjacent to the site. The nearest identified surface watercourse to the site is the River Thames located approximately 870m to the south of the site. The environmental database report (GroundSure report, 4th April 2017) notes the presence of two culverts, one running north-west to south-east approximately 300m to the west and one running north-east to south-west approximately 245m to the east.
3	Is the site within the catchment of the pond chains on Hampstead Heath?	No	See location plan.
4	Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	No	There is no change from the existing hardstanding covering compared with that of the proposed.
5	As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soakaways and/or SUDS)?	No	See response to Question 4, above. There are no SUDS/soakaway schemes proposed for the site that would increase discharge to the ground.
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 (not just the pond chains on	No	Although a general groundwater table has been identified on site at a level of approximately 18.50mAOD, the proposed development is envisaged to only extend to a maximum level of 18.69mAOD. As such the proposed basement will not extend beneath the water table surface. However,

Question		Answer	Evidence/Comment
	Hampstead Heath) or spring line?		ongoing monitoring would be required to establish both the full range of conditions and any trends in groundwater levels.

Table 5: Surface flow and flooding screening

Question		Answer	Evidence/Comment
1	Is the site within the catchment of the pond chains on Hampstead Heath?	No	See location plan.
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?	No	See response to Question 4, Table 3 (Subterranean (ground water) screening)
3	Will the proposed basement development result in a change in the proportion of hard surfaced / paved external areas?	No	See response to Question 4, Table 3 (Subterranean (ground water) screening)
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?	No	The proposed basement construction is envisaged to terminate prior to reaching the underlying groundwater table leaving a freeboard of some. 0.20m. However, this is expected to be along the southern edge of the raft only.
5	Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	No	Control measures employed at the site should comply with CIRIA Report 532 'Control of Water Pollution from Construction Sites' and Environment Agency pollution prevention guidelines, principally PPG6 'Working at Construction and Demolition Sites' and should be included at the detailed design stage.
6	Is the site in an area known to be at risk from surface water flooding, or is it at risk from flooding, for example because the proposed basement is below the static water level of a nearby surface water feature?	No	Reference to the EA floodplain maps, North London Strategic Flood Assessment and The London Borough of Camden flood risk management strategy shows that the site does not lie within any known flood zones. The site, nor any streets within the area are on Camden's own list of streets at risk of surface water flooding and does not lie in an area of known

Question		Answer	Evidence/Comment
			flooding from sewer surcharge (Figure 15 of the ARUP report). The Thames Water flooding history enquiry (see Appendix F) indicated that there have been no incidents of flooding in the requested area as a result of surcharging public sewers. In addition, TW indicated that the risk from surface water flooding resulting from a 1 in 1000 year rainfall event.

Table 6: Land Stability Screening

Question		Answer	Evidence/Comment
1	Does the existing site include slopes, natural or manmade, greater than 7°?	No	
2	Will the proposed re-profiling of landscaping at the site change slopes at the property boundary to more than 7°?	No	
3	Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7°?	No	
4	Is the site within a wider hillside setting in which the general slope is greater than 7°?	No	
5	Is the London Clay the shallowest stratum at the site?	No	The site is underlain by 4.30 to 4.40m of generally granular Lynch Hill Gravel Member.
6	Will any tree/s 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?	No	
7	Is there a history of seasonal shrink-swell subsidence in the local area, and/or evidence of such effects at the site?	No	There is no immediate or direct evidence of seasonal shrink-swell effects on site.
8	Is the site within 100m of a watercourse or a potential	No	See response to Question 2, Table 3 (Subterranean (ground water)

Question		Answer	Evidence/Comment
	spring line?		screening)
9	Is the site within an area of previously worked ground?	No	A natural ground stability hazard dataset supplied by the BGS and historical and geological mapping (included in the previous RSK desk study and site investigation report) reveal that there are no recorded hazards associated with previously worked ground, landfilling or compressible and collapsible ground at the site that could lead to stability issues. The site investigations undertaken at the site confirm these ground conditions. Although between 0.35m and 0.91m of Made Ground have been recorded from the site, these soils appear to comprise reworked materials associated with previous development of the land and are not considered to present a risk with regard to land stability.
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 underlain by 4.30 to 4.40m of generally granular Lynch Hill Gravel Member which is classified as a Secondary A Aquifer. As such, the site does lie within an aquifer. The proposed development is envisaged to comprise a reduction in site levels to some 19.97mAOD (base of raft), locally deepened at the edges to a maximum of 18.60mAOD to match adjacent building footings. At present the groundwater levels beneath the site have been measured at some 18.50mAOD and therefore it is unlikely that dewatering will be required. It should, however, be noted that groundwater levels might fluctuate for a number of reasons including seasonal variations. Ongoing monitoring would be required to establish both the full range of conditions and any trends in groundwater levels.
11	Is the site within 50m of the Hampstead Heath ponds?	No	
12	Is the site within 5m of a highway or pedestrian right of way?	Yes	See Section 5 (Scoping)
13	Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	No	It is understood that the structures surrounding the site, which form part of the High Holborn Estate, are largely founded on shallow spread foundations. The proposed development is understood to comprise the

Question		Answer	Evidence/Comment
			construction of raft across the new building footprint, locally thickened at the edges to match the adjacent building footings. In this instance, the eastern and southern edges will require thickening to match adjacent foundation levels of 18.69, and 19.10m AOD, respectively. However, the building to the north will require some form of underpinning to match the proposed basement excavation level of 19.97m AOD (understood to be in the region of 300mm underpinning). Therefore there is unlikely to be any significant increases in the differential depth of foundations relative to neighbouring properties. With regards to structures outside the site boundary, only the nine storey Mid City Place to the west is likely to be within the zone of possible influence. Given the size of this structure it is likely that this building is founded on piles.
14	Is the site over (or within the exclusion zone of) any tunnels?	No	There are no known tunnels, tunnel exclusion zones, or other buried infrastructure directly beneath the site that could be affected by the proposed redevelopment of the site.