

28 February 2022



Our ref: J20182/ML/01  
Planning ref: 2021/4598/P

Widbury Barn  
Widbury Hill  
Ware SG12 7QE

Mr Gennaro D'Alo  
Hampstead Projects  
The Sorting Office  
2A St George's Road  
London  
NW11 0LR

Dear Gennaro

**Re: LIDDELL ROAD PHASE 2, LONDON NW6 2EW**

We have reviewed the comments made by the acting Contaminated Land Officer from the London Borough of Camden and can comment as follows herein. It should be noted that this letter responds to queries of a technical nature and not formatting, and it should be read in conjunction with our revised and updated report (ref: J20182 Rev 1, dated 28<sup>th</sup> February 2022).

Having reviewed the comments to the report submission, we have undertaken a review of our previous report and have revised where necessary to provide further information and clarity, as further discussed below. Firstly it should be said that it would have been reasonable to expect that the reviewer would have been someone who had some previous experience of the planning history and context of the site, or at least where that is not possible, it would have been prudent for them to have been briefed on the history as this would have aided the review. It is also evident that the review has not been carried out with the view of discharging Condition 24 of the planning consent. This, along with other planning context has been added to the report, however for clarity Condition 24 is as follows:

**Condition 24** - At least 28 days before development commences:

(a) A ground investigation shall be carried out to determine the presence of landfill gas. Further investigations to determine the extent of elevated TPH levels in the soil shall be undertaken in the region of Borehole No 10 (of the previous site investigation) and further groundwater investigations shall be undertaken to determine if the source of contamination is within the groundwater or silt sediment. Should the groundwater be found to contain elevated levels of heavy metals, a programme of contamination monitoring shall be carried out to determine the potential source.

(b) The results and a written scheme of remediation measures [if necessary] shall be submitted to and approved by the local planning authority.

(c) The remediation measures shall be implemented strictly in accordance with the approved scheme and a written report detailing the remediation shall be submitted to and approved by the local planning authority prior to occupation.

The above condition specifically relates to further investigation around Borehole No 10 of a previous phase of investigation carried out by GEA. Again planning context would have aided the reviewer. The additional investigation was undertaken in 2015, which was summarised and discussed in our report and therefore it is unknown as to why the reviewer does not specifically refer to the requirement for further investigation around Borehole No 10, in addition to the further gas monitoring carried out specifically for the discharge of Condition 24. Whilst we have undertaken further investigation for

geotechnical and contamination purposes, these should not have been the main focus of the review. This being said, for completeness, some of the other points have been addressed, as discussed below. The condition also does not state a requirement for a separate remediation method statement, only in the context if further remediation is required from the results of the additional investigation around Borehole No 10.

#### *Scope of investigation*

There have been three phases of investigation across the Phase 1 and Phase 2 development sites, and it is possible that it may have escaped the reviewer that the earlier phases of investigation were also carried out on the subject Phase 2 site. Reference should be made to the updated combined site plan showing all exploratory positions. The scope of contamination testing and subsequent monitoring is also considered to be sufficient and provided sufficient coverage across the site. If significant contamination had been encountered then there would have been a requirement for further testing, which in any case was at least in part carried out.

#### *Naturally re-worked*

We are not sure why this term is not understood, and it doesn't specifically pertain to contaminated land matters, but it is a term adopted to suggest some form of natural process(es) whereby the fabric and composition of the soils are altered. Gravel inclusions would not be expected in the upper horizons of the London Clay. Although in general the fabric or matrix of these soils are formed of the London Clay, the gravel has clearly been derived from some form of weathering process. In some cases, others may refer to this as Head Deposits, although this may not fully capture the nature of these soils. We would draw the reviewers attention to most recent addition of Sheet 256 published by the British Geological Survey (BGS) in 2006, which indicates areas of 'Head Propensity' in the area of Hampstead. These deposits are denoted as most likely to be formed of Quaternary Head Deposits as interpreted from digital slope analysis and confirmed by borehole data. These deposits are not mapped and have not been verified by fieldwork. These deposits are noted as having properties similar to that of the London Clay and are shown to occur close to the boundary with the Claygate Member.

#### *Gas monitoring*

The building type adopted for the gas assessment has been amended (Section 4.5 and not Section 4.4.1, which are the assumptions of the generic risk-based guideline values for soil assessment). The number and spacing of the monitoring wells across ALL phases of investigation are considered acceptable and in line with the guidance within Ciria C659. A sufficient number of gas monitoring visits have also been undertaken across several years and phases of investigation to form an assessment of the gas risk. Wells were also placed within the proposed building footprints. When considering the organics in the soil, we are sure the reviewer will be of the view that whilst total organic carbon (TOC) levels within the soil may be high, this does not reflect the amount of carbon available to degrade and produce soil gas. Gas monitoring, provides an assessment of this and therefore it is not known what is meant when it is stated that the results are 'surprisingly low'. Additionally, the standpipes were also monitored using a PID and no levels of vapours were recorded. This, in addition to the assessment of the PAH concentrations, has led to the conclusion that there is not a vapour risk, either from residual hydrocarbons of long chain lengths being present in the soils, or from the PAH concentrations, specifically naphthalene.

#### *Proposed development*

The assessment, conclusions and recommendations made within the report are based on the proposals for which planning permission was granted. Again this is the planning context. There are no basements or undercrofts proposed. Our report clearly states that the report would need to be reviewed should any proposals be amended.

#### *Waste classification*

A hazardous waste would apply to a single sample of made ground tested on the basis of the hydrocarbon concentrations, specifically coal-tar fractions. This is captured in our report.

*Remediation*

As stated previously there is not a requirement of the planning condition for a separate remediation strategy report. The remediation recommended is on the basis of the proposals and follows on from the remediation carried out as part of the Phase 1 Kingsgate School site.

We trust that this provides sufficient additional information for your requirements and satisfies the remaining queries.

Please do not hesitate to contact us if you have any questions or require further clarification.

Yours sincerely  
GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES

Matt Legg

*Encs*