



Peter Hildrup
Senior Planner
The Emerson Group
Emerson House, Heyes Lane
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10/08/2022

Dear Peter,

Our Ref: G81211LTR01rev1

ACADEMY BUSINESS PARK, KNOWSLEY – PHASE II REPORT REVIEW

Ensafe Consultants is the trading name of Challen Commercial Investigations Limited (03426833) incorporating the wholly owned subsidiary Ensaf Consultants (ROI) LTD (646123). Ensaf Consultants has been commissioned by the Emerson Group, hereafter referred to as 'the Client', to review the outcomes of a previously completed Phase II Site Investigation (Ensafe report ref 1-CP108866P1R2) and discuss the effects of a change to the proposed development relates to the outcomes of this report.

Ensafe Consultants has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from Ensaf Consultants. A charge may be levied against such approval.

Background

Ensafe were commissioned to undertake a Phase II Site Investigation report at Academy Business Park in Knowsley. The final revision of this is dated 13th July 2020. The proposed development at this time was an expansion of the existing business park, including the construction of assorted business and trade counter units. The ground conditions were found to comprise made ground of varying thickness overlying natural deposits comprising heavily weathered sandstone recovered as gravelly sand.

This report concluded that there were no unacceptable risks to human health, although elevated levels of several PAH (Benzo(b)Fluoranthene, Benzo(a)Pyrene and Dibenzo(a, h) Anthracene) were recorded in one sample from WS112 (0.20mbgl). The potential pathway for these PAH is through soil ingestion/inhalation of dust; WS112 is located within the footprint of a building, which therefore severs this contamination pathway.

The report also concluded that the site soils are unlikely to generate ground gases, due to the limited thickness of made ground and low organic matter concentrations in this stratum. This was reinforced by completing a gas monitoring programme, and the report concludes that no gas protection measures are considered necessary.

Chrysotile asbestos was identified within WS115 at 0.20mbgl and 0.80mbgl, and asbestos cement was detected in WS101 (0.10-0.20mbgl) therefore the report recommends that asbestos control measures be put in place during construction work.

A basic geotechnical assessment was also undertaken.

Proposed changes to development

Based on information and drawings made available to us, it is understood that Unit 6B (a food kiosk, 2,002ft²) from the previous proposed development is to be subdivided into a new semi-detached unit with a slightly increased building footprint, comprising Units 6B(1) and 6B(2). Unit 6B(1) will be a drive-through coffee shop or restaurant and Unit 6B(2) would be a food

kiosk. This building would be 298ft² greater in area than the original Unit 6B, and the drive-through would feature additional road infrastructure.

The key points of these proposed changes are as follows:

- The intended end-use remains commercial.
- The footprint of the building has increased slightly.
- The overall site area remains the same.

Discussion and conclusions

The original Phase II report assumes a commercial end use, and this remains unchanged in the proposed development. Soils were sampled (WS104) within the footprint of Unit 6B, and no elevated levels of potential contaminants were recorded in this sample or in nearby sample locations.

We conclude that the conclusions of the original Phase II Site Investigation Report remain valid. The proposed end use remains commercial, and exceedances of PAH were in a separate area of the site, therefore no further intrusive investigation of the site is required for the purposes of human health risk assessment. The proposed change to the development does not alter the conclusions of the gas risk assessment: the site is characterised under CS1 in accordance with BS8485:2015 and as such no further gas measures are deemed necessary.

We recommend that further DCP testing is carried out due to the increased area of pavement surrounding the proposed drive-through unit (Unit 6B(1)), in order to assess the geotechnical properties of the soils in this area.

Yours Sincerely
For and on behalf of Ensafe Consultants



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Principal Geo-environmental Engineer
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Limitations

1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between Ensafe and the Client as indicated in the introductory paragraphs.
2. For the work, reliance has been placed on publicly available data obtained from the sources identified. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. When using the information it has been assumed it is correct. No attempt has been made to verify the information.
3. This report has been produced in accordance with current UK policy and legislative requirements for land and groundwater contamination which are enforced by the local authority and the Environment Agency. Liabilities associated with land contamination are complex and requires advice from legal professionals.
4. Access considerations, the presence of services and the activities being carried out on the site limited the locations where sampling locations could be installed and the techniques that could be used.
5. In addition to the above Ensafe note that when investigating, or developing, potentially contaminated land it is important to recognise that sub-surface conditions may vary spatially and also with time. The absence of certain ground, ground gas, and contamination or groundwater conditions at the positions tested is not a guarantee that such conditions do not exist anywhere across the site. Due to the presence of existing buildings and structures access could not be obtained to all areas. Additional contamination may be identified following the removal of the buildings or hard standing.
6. Site sensitivity assessments have been made based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.
7. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials this is for indicative purposes only and do not constitute or replace full and proper surveys.
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9. Rather, this investigation has been undertaken to provide a preliminary characterisation of the existing sub-surface geotechnical characteristics and make up and the findings of this study are our best interpretation of the data collected, within the scope of work and agreed budget. New information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.
10. This investigation has been undertaken to reasonably characterise existing sub-surface conditions and the findings of this study are our best interpretation of the data collected, within the scope of work and agreed budget. New information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.