REPORT TITLE: **Asbestos in Soil Technical Note**

REPORT NUMBER: **1964LAN-TN001**

CLIENT NAME: **LandIS**

The technical note is only valid when used in its entirety.

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1.0 Introduction

1.1 Background

1.1.1 VertaseFLI Limited (VFLI) were contracted by LandIS (the client) to undertake preliminary environmental assessment and intrusive site investigation at the Former RAF Base, Walsh Way, Kirton Lindsey, DN21 4HZ (the site).

1.1.2 The works were undertaken to support the planning application for the proposed re-development of the site, comprising 350 residential dwellings with private gardens and separately, a 600m^2 E class use building.

1.1.3 The VFLI report was submitted to the local planning authority as part of the planning application and subsequent to this the Environmental Protection Team (EPT) at North Lincolnshire Council provided comments.

1.1.4 The EPT comment in response to the conclusions and recommendations of the VFLI report reads:

This department disagrees with the above recommendations and requires a further robust intrusive investigation once the buildings have been surveyed for asbestos containing materials and then demolished.

1.1.5 This Technical Note has been produced as a response to this comment.

2.0 Site Investigation Results - Asbestos

2.1 Vertase FLI Site Investigation, November 2023

2.1.1 The geochemical testing carried out as part of the site investigation included asbestos presence/absence and identification. 45 No. samples of soil from a range of depths and lithologies were submitted for asbestos identification testing. None of the samples tested were found to contain asbestos.

2.2 Atkins Site Investigation, April 2014

2.2.1 The Atkins site investigation also included laboratory analysis for asbestos presence/absence and identification. 77 samples of Made Ground from what Atkins termed Residential Area (21 samples) and Commercial Area (56 samples) were analysed. Not all 56 of the samples from the Atkins Commercial Area lie within the current application site, but the majority do.

2.2.2 Of the 77 samples analysed only one recorded the presence of asbestos. The sample was from location CWS22 at 0.2mbgl, in the south east of the site. The laboratory reported the presence of loose chrysotile fibres. Further quantification testing of the sample was not scheduled.

2.3 Context

2.3.1 The Atkins investigation location CWS22 is located to the south east of the site, as shown on Drawing D1964_05. As can be seen on Drawing D1964_05 there are a number of investigation locations in and around CWS22 from both the VFLI and Atkins investigations, with none of these recording the presence of asbestos in soil.

2.3.2 From the volume of testing and the number of investigation locations it is considered that asbestos in soil at the site has been characterised. Notwithstanding this, it is understood that vigilance will need to be maintained during remediation and earthworks.

3.0 Asbestos Survey Results

3.1 Introduction

3.1.1 Subsequent to the site investigation and submission of the Phase II report under planning a comprehensive asbestos refurbishment/ demolition survey has been carried out within the buildings on site.

3.1.2 The survey was carried out by Asbestos Management Consultancy Ltd (AMC) in November and December 2022. The full survey report is attached at Appendix A.

3.2 Survey Results

3.2.1 A summary of the results of the asbestos survey is attached at Appendix A. The survey results show that asbestos containing materials (ACMs) are present in 35 of the 45 buildings surveyed. All 35 buildings where ACM have been identified contained non-notifiable ACM with 16 buildings also containing material identified or assumed to contain notifiable ACMs.

3.2.2 The non-notifiable ACMs identified generally relate to floor tiles, sink pads, gaskets, cement panels and some woven material in electrical equipment. The notifiable ACMs identified are pipe lagging and associated debris and asbestos insulation board (AIB).

3.2.3 The survey shows that although there has been ACM identified and, in some buildings, ACM debris it is bound in its original form or confined to its area of origin i.e a particular room.

4.0 Asbestos Removal and Remediation

4.1 Asbestos Removal

4.1.1 Based on the results of the AMC survey VFLI have approached eight contractors for quotes to carry out the required demolition. Of these eight contractors, three have been shortlisted for the necessary asbestos removal and demolition works. Each of these three contractors are experienced, reputable and have the necessary licenses in place to carry out the works.

4.1.2 The asbestos removal process will be fully supervised by VFLI and carried out under strict accordance with current and relevant legislation. The supervision of the works will ensure that best practice is followed and ensure that contamination of soils surrounding and underlying ACM affected buildings is highly unlikely. On completion the works will be verified to ensure that all ACMs have been removed and there is no residual risk for the proposed future use of the site.

4.2 Asbestos Remediation

4.2.1 As no asbestos was found in soil in the VFLI site investigation and in only one location, CWS22, as part of the Atkins site investigation no specific remediation with regard to asbestos in the ground is proposed. During remediation confirmatory/validation sampling will be undertaken in the area of CWS22 to ensure soils are free from asbestos. If asbestos is identified in any of the confirmatory/validation samples quantification testing of the sample will be carried out to assess the risk to future site users and construction workers and to determine if further action is required.

4.2.2 Throughout the remediation and earthworks all Vertase FLI staff, all of whom are appropriately trained, will remain vigilant and, where necessary, will be supported by a qualified asbestos specialist.

5.0 Conclusions

5.1.1 The findings of the site investigations demonstrate that asbestos is unlikely to be present in the soil beneath the site with the exception of a very isolated area to the south east of the site in the area of the Atkins SI location, CWS22.

5.1.2 The AMC asbestos survey has shown that although ACM are present in a large number of buildings on site they are low risk, present in their original condition or confined to a specific room or floor within an existing building.

5.1.3 Removal works will be carefully controlled by an appropriately qualified and experienced contractor and under the supervision of VertaseFLI. Appropriate oversight from an Asbestos Surveyor and clearance testing will be undertaken before demolition commences. This will ensure there is no risk of transfer of the asbestos within the buildings to the ground.

5.1.4 Based on the findings of both the site investigations and the asbestos survey and provided that the asbestos removal and demolition of buildings is carried out in an appropriate manner there is considered to be a very low risk from asbestos post-demolition on the site.

5.1.5 Should any asbestos be found in the soil beneath the site as remediation and earthworks progress it is considered entirely appropriate to address this under a standard planning condition concerned with unexpected contamination such as that outlined below.

In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken in accordance with the requirements of Part 1 [Site Characteristics], and where remediation is necessary a remediation scheme must be prepared in accordance with the requirements of Part 2 [Submission of Remediation Scheme], which is subject to the approval in writing of the Local Planning Authority. Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the

Local Planning Authority in accordance with Part 3 [Implementation of Approved Remediation Scheme].

Appendix A

Asbestos Survey Report and Summary

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