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Our Ref: 3412/231204/L1
Your Ref:

4th December 2023

BRP Associates
Structural & Civil Engineers
Unit 2, Bigods Hall
Bigods Lane
Great Dunmow
CM6 3BE

Dear Sir

Re: The Vista, Aldham Road, Hadleigh

This document details the proposed scope of work that will be adopted for the Contaminated Land Site Investigation required at the above site. The scope of work is based on the Landmark Homecheck Environmental report that was submitted to the planning authority as part of the planning application.

Currently the site is occupied by a house, with an attached domestic lock-up garage and a landscaped garden.

Prior to the construction of the existing property, the site was a track that provided access to agricultural land to the north. Residential properties were located to the east. A former pit and brick works were located 200m to the north east. Land to the west was associated with a former ammunition storage facility. The nearest buildings were located approximately 400m to the west.

The report identifies that land to the north is an area of historic landfill. The site was used for the disposal of waste including domestic waste. The suite appears to be operational between 28th September 1982 and 31st December 1984. The licence status is either lapsed/cancelled/defunct/not applicable/surrendered or cancelled.

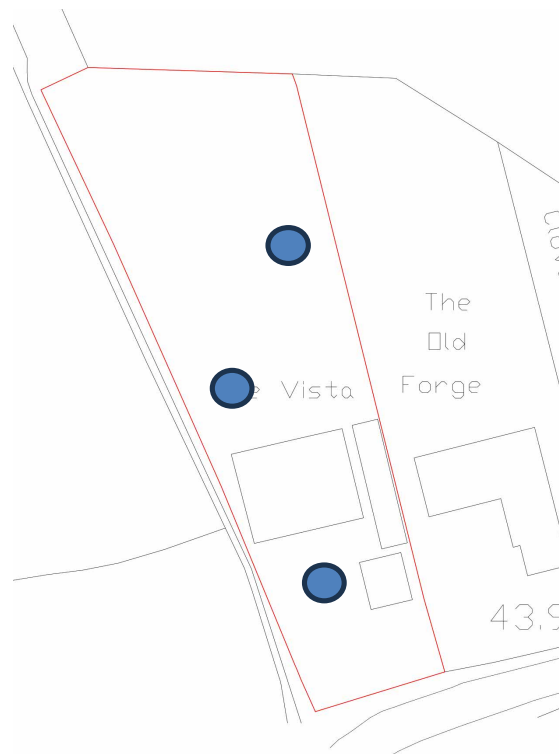
The geological conditions beneath the site consist of superficial deposits of the Lowestoft Formation, overlying the Thames Group. Geological logs for the area indicate the Lowestoft Formation consist of gravelly clay and the Thames Group consist of clay. Geological logs for some of the northern drilled for the Hadleigh by-pass records 5.5m of made ground consisting domestic refuse (tins, paper, plastic brick etc), stiff sandy clay with some gravel and builders refuse (tin, wood, brick and concrete).

A conceptual model is over the page.

Source	Pathway	Receptor	Discussion
General quality of made ground (heavy metals, polycyclic aromatic hydrocarbons, asbestos, cyanide, total petroleum hydrocarbons)	Ingestion of soil and dust Inhalation of dust and fibres Inhalation of vapours	Human health, (future site users, local residents and construction staff)	Impact to the quality of the made/disturbed ground beneath the site may have occurred due to general site activities. Investigation required to assess the general quality
Area of historic landfill located to the north	On-site migration of landfill gas (methane, carbon dioxide and depleted oxygen)	Human health (future site users) Future property.	On-site migration of landfill gas may occur. The landfill is located immediately north of the site. The presence of the argillaceous deposits will act as a barrier to migration.

Proposed Investigation Strategy

The scope of work will consist of the drilling of three boreholes to allow the collection of soil samples and the installation of gas monitoring wells. Two should be located within the rear garden and one located in the front garden. The gas monitoring wells will need to be installed to a depth of between 3m and 4m below ground level. The proposed locations are presented below:



Recovered soil will be described in accordance with BS 5930 Code of Practice for Site Investigation by a Geo-environmental Consultant from Brown 2 Green Associates. From the results of site observations selected samples will be placed in appropriate laboratory prepared sample containers for testing.

To assess the presence of soil gases six gas monitoring visits will be completed. During each visit the levels of methane, carbon dioxide and oxygen will be determined, together with gas flow and atmospheric pressure.

Environmental samples will be submitted to a UKAS/MCERT accredited laboratory for chemical analysis on a 10 working day turnaround. We have included costs for the following analysis.

Analysis	Soil Samples
General metal suite (As, Cd, Cr (total), Pb, Hg, Se, Cu, Ni, Zn)	6
soluble sulphate	3
pH	3
Total cyanide	6
Speciated polycyclic aromatic hydrocarbons	6
Speciated total petroleum hydrocarbons (TPHCWG Suite)	6
BTEX and MTBE	6
Asbestos fibres in soil	6
Organic matter	6
Waste Acceptance Criteria	1

On completion of the laboratory testing, an interpretive report will be prepared. The report will present the following:

- Preliminary risk assessment and initial conceptual model;
- Methodologies used;
- Results of the site investigation including, geological logs, chemical analysis and site testing;
- Tier 1 human health and controlled water risk assessment using CLEA Soil guideline values and other appropriate screening values;
- Discussion of pollution linkages and revised conceptual model; and
- Recommendations for further work and/or potential remediation options.

Should a requirement for remediation be identified a Remediation Method Statement will be prepared. The Remediation Method Statement will provide details of the remediation strategy to be adopted specifications of materials to be used and the requirements for verification.

Yours sincerely
For and on behalf of Brown 2 Green Associates Ltd

Philip Miles
Director