

Our Ref: E22108/SSJ/UL1

Date: 22nd January 2024

BY EMAIL:

Jethro Rawling
East Anglian Civils Ltd
Suite 1
Enterprise Way
Pinchbeck
Lincolnshire
PE11 3YR

For the attention of Jethro Rawling

Dear Jethro,

E22108: UPDATE AND SUMMARY OF ENVIRONMENTAL WORKS AT SITE OFF CHAPELGATE, SUTTON ST. JAMES

It has been recommended that Elemental GI Ltd prepare a summary note for you and your development (Site off Chapelgate, Sutton St. James, hereafter referred to as 'the site') to record the recent works and to plan the next steps. This relates solely to the western phase of development ('piggery area'), as shown on the enclosed 'Cut and Fill Plan' (Drawing E22108/L01).

This letter has been prepared to provide an update / record of the recent works on site and to clarify the next steps to seek sign-off from the Council on a plot-by-plot basis once each plot is 'ready'.

Previous Reports

In preparing this summary letter we have used and reviewed the previous reports for the site. This includes the following:

- Grange GeoConsulting Ltd - Piggery to the South of Chapelgate, Sutton St. James, Spalding, Lincolnshire: Phase 1 Desk Study (Dated July 2017 ref. R17053);
- Grange GeoConsulting Ltd - Piggery to the South of Chapelgate, Sutton St. James, Spalding, Lincolnshire: Phase 2 Intrusive Ground Works Factual Report (Dated July 2017 ref. R17053);
- Lincolnshire County Council - Ground Investigation Report for a Proposed Residential Development off Chapelgate, Sutton St. James (Dated 20th Nov. 2017 ref. G40654/HD/17/MT);
- Grange GeoConsulting Ltd - Piggery to the South of Chapelgate, Sutton St. James, Spalding, Lincolnshire: Phase 1 and 2 Intrusive Ground Investigation Report (Dated April 2018 ref. R17053);
- Geo-Matters Ltd - Phase I and II Geo-Environmental Investigation (Dated June 2021 ref. GML21135/2/0);
- Elemental GI Ltd - Summary Phase II Report Rev. 1 (Dated July 2022 ref. E22108/2S/1); and
- Elemental GI Ltd - Remedial Method Statement Rev. 2 (Dated December 2022 ref. E22108/4/3).

The above referenced documents have not been reproduced herein and should be referred to in full alongside this report, which must not be read in isolation.

Summary of Remedial Recommendations

The site is described in detail in the previous reports, but in summary the following notable conditions are observed:

- No issues relating to ground gas and radon have been identified;
- Previous works encountered made ground across the western phase of development, but reported it to be absent across the eastern area;
- The made ground was reported to generally comprise reworked topsoil or reworked sandy silt including some anthropogenic materials and rare animal remains;
- Natural soils were encountered as sandy clays which were underlain by softer sandy silt / silty sand soils;
- Groundwater was encountered in around half the exploratory holes from depths of between 1.00m and 2.00m below existing ground level (begl).

The conceptual site models developed for the site identified potential pollutant linkages relating to this contamination and to the future site users / structures.

Contamination was recorded in several locations across the western phase of development, comprising exceedances of pathogenic bacteria, polycyclic aromatic hydrocarbons (PAHs) and asbestos.

In summary there is a 'shortfall' across the western areas where materials have been removed from site (hardstanding, made ground etc.) and it was therefore recommended that natural 'clean' soils (topsoil and subsoil) from the site's eastern parcel could be used to reinstate topographical levels as necessary.

A series of measures including validation inspections was recommended within the RMS (Rev. 2) to guide aspects of these works.

January 2024 Site Update

Our Client has provided us with various updates from the site.

The following has been recorded:

- C. 40 m³ of contaminated soils have been removed from site by the Client;
- Inert materials (including crushed concrete etc.) has also been removed from the site, derived from the previous extensive areas of hardstanding and the remnant agricultural structures;
- 'Clean' soils from the eastern phase of the development have been used to re-form the levels, including the placement of at least 600mm in all rear gardens and all other areas of soft landscaping;
- Within the next few weeks, the Client shall re-excavate all gardens to a depth of 600mm and shall place a warning membrane across each. A spec. sheet for their chosen membrane is enclosed;
- Gardens shall then be re-filled with 'clean' subsoils from the eastern phase, and shall be finally covered with 'clean' imported topsoil (NB The Client has decided that the remaining site-won topsoil materials from the eastern phase are not likely to be a suitable growing media for turf etc. due to their saturation and other factors);
- We have been supplied with copies of topsoil test certificates (BS3882 tests) which provide an initial indication of the quality of these soils. However, we would reiterate the recommendations contained in section 4.2 of the RMS regarding the selection of imported topsoils and the YALPAG guidance. Further testing is therefore necessary for these soils at this stage, which has been discussed separately and which should be identified to the Council (and warranty providers) once suitable / sufficient testing has been completed.

Forthcoming Steps

Reference must be made to the reports listed on page 1 of this letter (and especially the RMS), but at this stage the following steps should be undertaken as a priority:

- All records relating to the removal of materials and re-placement (as appropriate) should be kept and maintained by the Client. For example, this will include 'tip tickets' and photographic records of works on site;
- The initial topsoil test results (BS3882) show that the soil appears generally suitable as a growing media but further tests are needed (in accordance with the YALPAG guidance) to confirm their environmental suitability. This will need to include a minimum number of tests for a selection of determinands. This should be undertaken in advance of any importation.
- The location of the former slurry pits should be identified on site, and these should be fully removed for off-site disposal. We understand that the contents have already been removed from site. Validation testing around these excavations should not be necessary (subject to Council / warranty provider approval) as they shall be capped regardless. It has been discussed that an engineer should attend the site once these excavations are completed to record the completion of works;
- Once the imported subsoil and topsoil are brought onto the site and placed above the membrane, an engineer should visit the site to record the thickness of these materials and the presence of the membrane in accordance with the RMS **to seek sign-off from the Council on a plot-by-plot basis.**

Yours sincerely,

James Regan
Managing Director

Enc. 'Cut and Fill Plan' (Drawing E22108/L01)
Membrane Spec. Sheet



Scenic Homes Ltd

Proposed 'Cut and Fill' Plan

Jan. 2024

E22108_L01

NOT TO SCALE

JR

Elemental GI Ltd

Alert™

Alert™ Woven Polypropylene Geotextile and Contamination Indicator

Alert™ was developed by Geosynthetics Limited to provide a cost effective and practical way to indicate the break between potentially contaminated ground and imported or site won clean fill. The large roll size combined with industrial leading technical specifications and strength have lead to the vivid orange **Alert™** woven geotextile being the product of choice in the UK.



PROPERTY	TEST METHOD	Value
Colour		Orange
Tensile strength - warp	BS EN ISO 10319	18 kN/m
Tensile strength - weft	BS EN ISO 10319	12 kN/m
Elongation at break - warp	BS EN ISO 10319	28 %
Elongation at break - weft	BS EN ISO 10319	16 %
CBR puncture resistance	BS EN ISO 102236	1840 N
Water flow normal to the plane	BS 6906 Part 3	32 l/m ² /sec
Pore size 90% finer than	BS 6906 Part 2	230 microns
Effects of UV light		The polypropylene used contains a UV inhibitor
Fabric thickness under 2 kN/m ²		0.39 mm
Standard roll width		4.5 m
Standard roll length		100 m
Applications		Brownfield sites Developed land Warning indicator
CE Reference		0338-CPR-5058

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentation. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge becomes available. Since we cannot anticipate all variations in actual end use conditions, Geosynthetics Limited makes no warranties and assumes no liabilities in connection with this information. Nothing in this publication is to be considered as a licence to operate under or a recommendation to infringe any patent right.

DR: 04/V3/22/08/2022

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