

Your Ref:

Our Ref: BC195 RMS / JT

CALA Homes (Chiltern) Limited  
Gemini House, Mercury Park  
Wooburn Green  
Buckinghamshire  
HP10 0HH

**For the attention of Julian Smith**

17<sup>th</sup> March 2022

Dear Julian

**STABLES AND PADDOCK LAND, FEWCOTT ROAD, FRITWELL, OXFORDSHIRE. OX27 7QA  
REMEDIATION STRATEGY**

**1 INTRODUCTION**

The Brownfield Consultancy was instructed by Cala Homes (Chiltern) Ltd prepare a Remediation Strategy prior to the commencement of development at Fewcott Road, Fritwell. The Site was most recently occupied by a Stable Block in the far northeast, a riding arena on the central eastern boundary with the remainder of the site comprising open grass land for equestrian activities. The 'Northern Parcel' to the north and northwest of the Stable Land formerly comprised allotments. Prior to this both sites comprised agricultural land.

The purpose of this document is to provide a formal statement for the proposed construction phase mitigation requirements to facilitate the development following the completion of a geo-environmental investigation by the Brownfield Consultancy Ltd. For information on the Site setting, and full details of intrusive investigations completed at the Site, this Remediation Strategy should be read in conjunction with the previous reports relating to the Site:-

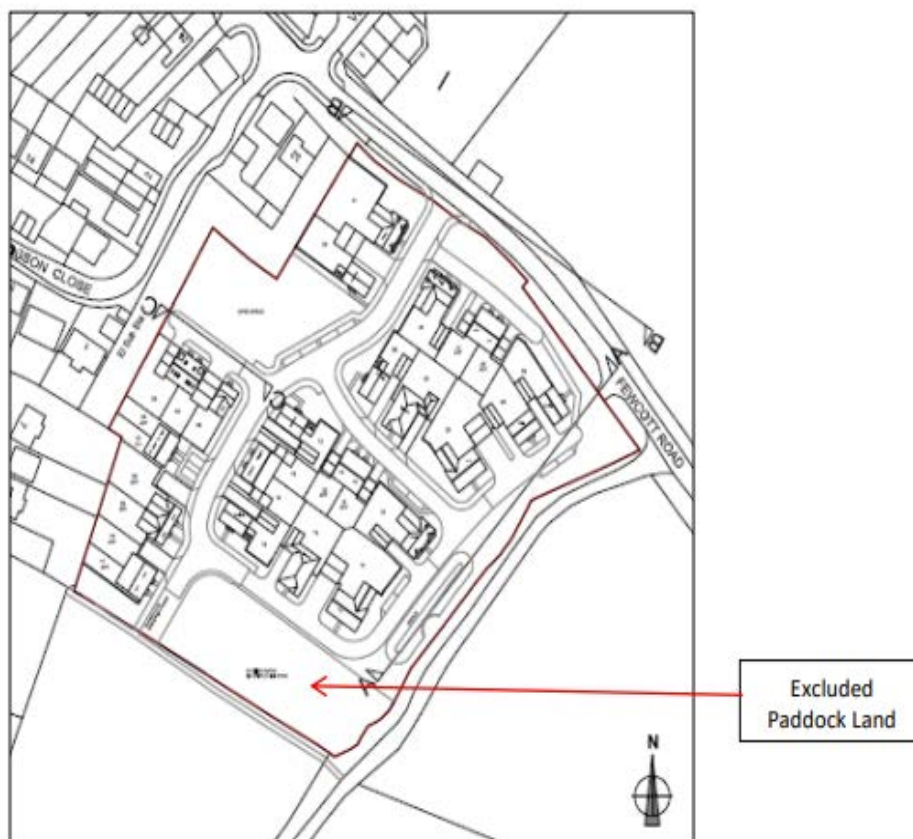
- Phase I and II Site Investigation. Land off Fewcott Road, Fritwell, Oxfordshire. (Ref: BC195 RE001 Rev dated 24<sup>th</sup> November 2021).
- Desk Top Study and Site Investigation Report. Northern Parcel, Fewcott Road, Fritwell, Oxfordshire. (Ref: BC195 RE002 Rev dated 1st November 2021).

The reports are presented in Appendix A and Appendix B respectively.

This document sets out the measures that will be carried out during the construction phase to mitigate risks as identified by the Site investigations in the context of the proposed end-use of the Site. This report does not provide a verification or completion statement for the works. The standard limitations associated with this assessment are presented in Appendix A and Appendix B.

## 2 PROPOSED DEVELOPMENT

It is proposed to construct 28No. two storey houses with associated access roads, driveways, gardens and landscaped amenity areas excluding the area known as 'paddock land'. The 'Excluded Paddock Land' is a rectangular strip of land along the southern boundary where asbestos impacts were recorded. This is no longer to be redeveloped and will be retained by the current owner as 'Paddock Land'. The proposed layout is presented below:-



This report is considered to address the requirements of Conditions 7, 8 and 9 of Planning Ref: 19/00616/OUT requiring a Remediation Strategy for the proposed landscaped areas, building structure and services, and to cover unexpected contamination finds and waste disposal. The implementation of the works outlined within this Remediation Strategy shall be completed and reported within a separate (Verification) stage of works.

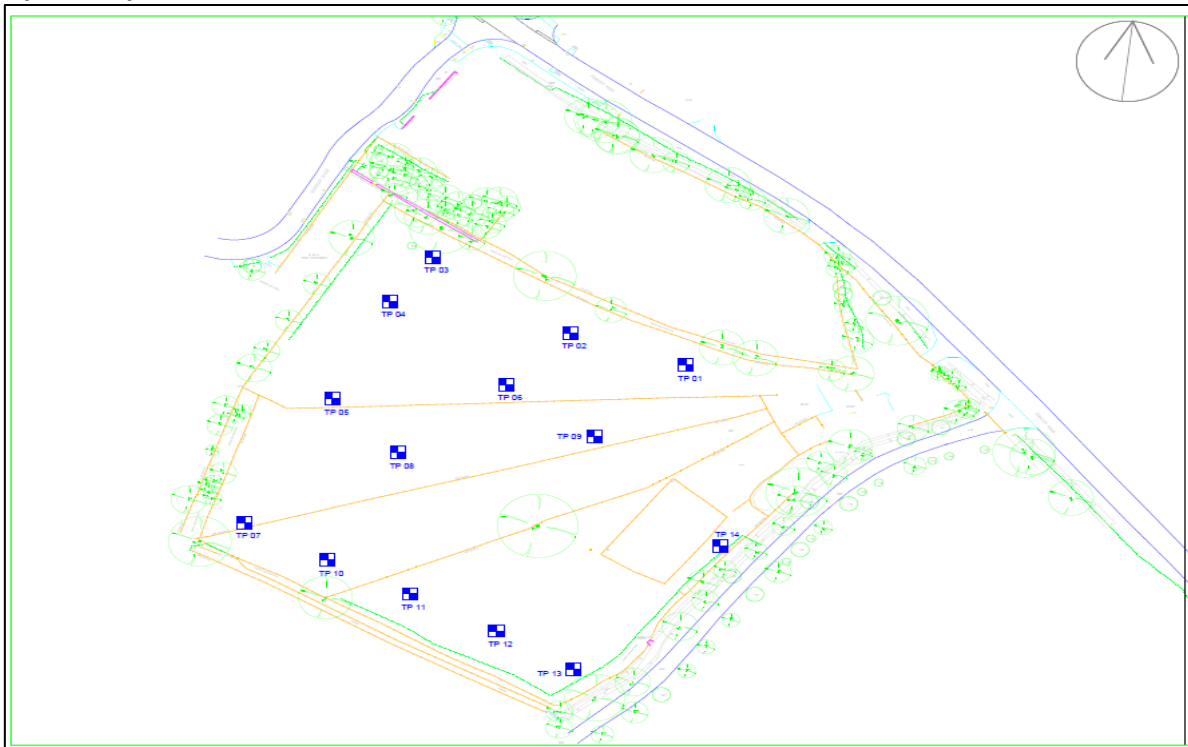
### 3 GEO-ENVIRONMENTAL ASSESSMENT – REPORT REVIEW

The site has been subject to 5No. site investigations by the Brownfield Consultancy. These are listed below, followed by a short summary of the works and the findings.

#### 3.1 Fewcott Road, Fritwell – Report on Ground Conditions (Ref: BC195 L001) 29/12/15.

The investigation comprised 14No. mechanically excavated trial pits denoted TP1-TP14 (incl.) to a maximum depth of 2.50m. Their locations are presented on the drawing below:

#### Exploratory Hole Location Plan 2<sup>nd</sup> November 2015.



Made Ground was encountered in TP7 and TP10 – TP14 (incl.) to a maximum depth of 1.80m in TP13. The thickest sequences of Made Ground were encountered along the southern boundary of the site. This area was associated with the line of a foul sewer originating from a housing development to the west and forms the 'Excluded Paddock Land'. Although a contamination investigation was not part of the brief, Made Ground in TP7 and TP10-TP13 (incl.) recorded localised occurrences of ash.

Asbestos containing roof sheeting was identified in TP11 and TP13. A piece of suspected asbestos from TP11 was scheduled to analytical laboratory analysis and the sample was confirmed as chrysotile

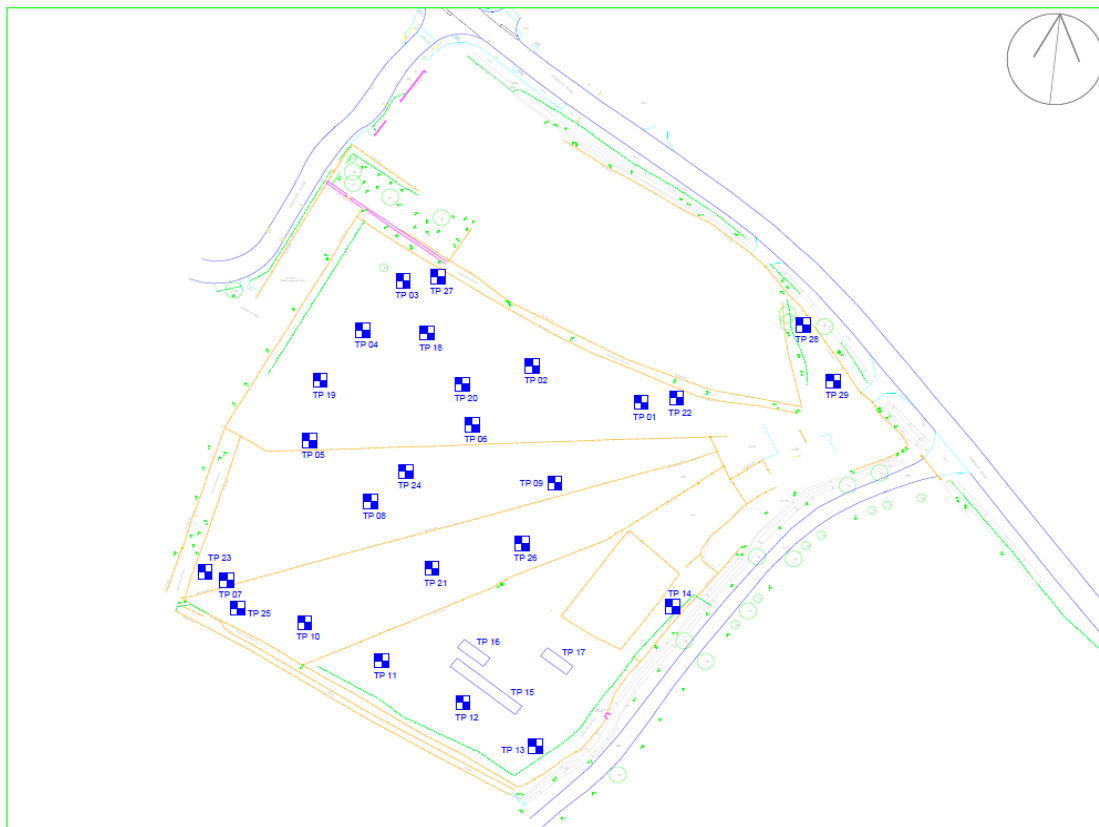
containing roof sheet. At the time of reporting, a more detailed contamination investigation was recommended.

### 3.2 Fewcott Road, Fritwell – Desk Top Study and Contaminated Land Assessment (Ref: BC195 L002) 8/4/16.

Supplementary intrusive fieldwork was carried out on 4<sup>th</sup> March 2016 and comprised 15No. mechanically excavated trial pits denoted TP15-TP29 using a JCB 3CX. TP15, TP16 and TP17 comprised of trial trenches excavated in a northwest-southeast orientation in the south of the site.

The locations of the trial pits are presented on the drawing below:-

#### Exploratory Hole Location Plan 4<sup>th</sup> March 2016.



In trial trench TP15, rare fragments of Asbestos roof tile (ACM) were observed. However 3No. tubs of soil matrix were submitted to analysis for asbestos at depths of 0.50m, 0.70m and 0.90m bgl from various lengths along the pit extending in a south-easterly direction. Asbestos fibres were not recorded.

Similarly, in trial trench TP16, rare fragments of ACM were observed yet 3No. tubs of soil matrix did not recorded asbestos at depths of 0.50m, 0.80m and 0.80 - 0.90m bgl from various lengths along the pit extending in a south-easterly direction.

Asbestos was not observed in TP17.

Asbestos was recorded in TP27 as 'Chrysotile - Hard Cement Type Material and Loose Fibres'. TP27 was excavated into a small 1m high stockpile of soil in the north western corner of the site. Numerous pieces of suspected asbestos sheeting were visually confirmed at this location.

TP28 and TP29 were excavated in a small triangular part of the site in the far northern corner, directly west of the site entrance, which was being used as storage for a roofing company. Samples of Made Ground from both pits were submitted to asbestos testing. Asbestos was absent in the sample from TP29. However 'Chrysotile - Hard Cement Type Material' was recorded in TP28 at 0.05m bgl.

It was concluded by the site owner that the deeper sequences of Made Ground in the south of the site were associated with the line of the foul sewer. The owner of the site stated that the source of the asbestos contaminated backfill was due to the construction of the foul sewer which coincided with the construction of the housing estate to the west.

### **3.3 Fewcott Road, Fritwell – Results of Soakaway Testing (Ref: BC195 L003) 21/4/20.**

Soakaway tests were undertaken within five trial pits denoted SA1, SA2, SA3, SA4 and SA6. The results were variable and the report is presented in Appendix A.

### **3.4 Stable Block Investigation**

The Stable Block investigation was undertaken in two phases summarised as follows:-

#### 22<sup>nd</sup> September 2021

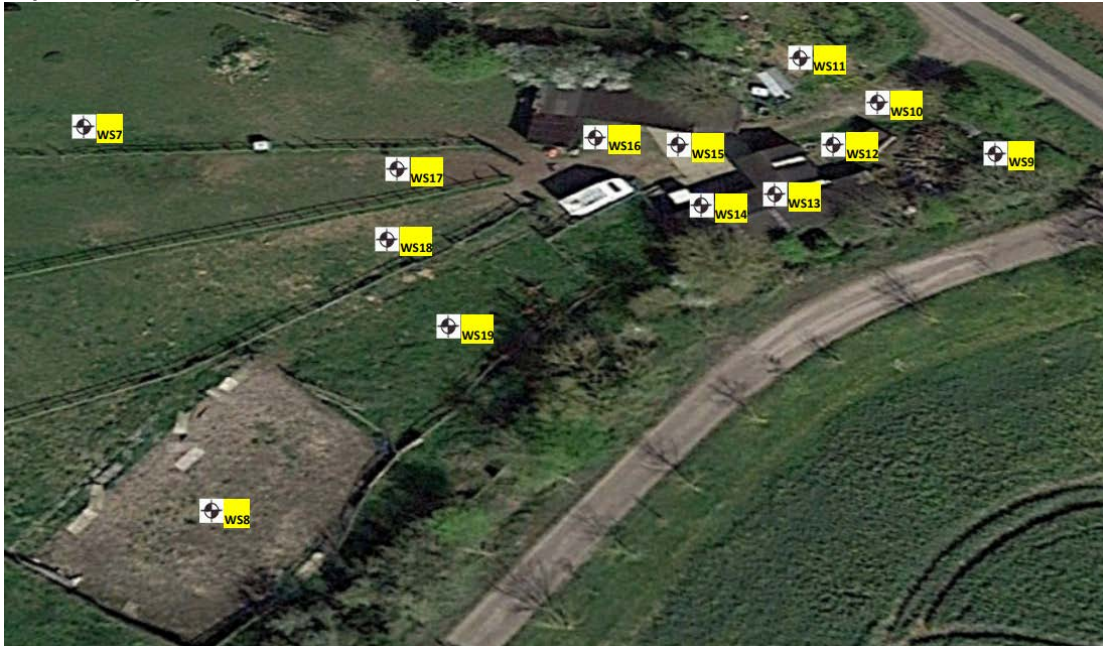
Two dynamic sampling boreholes (WS7 and WS8) to depths of 1.45m with 50mm gas monitoring pipework installations. WS8 was driven into the riding arena where three different units of Made Ground were encountered. Samples from all three units were scheduled to laboratory analysis for metals, hydrocarbons and asbestos.

#### 20<sup>th</sup> October 2021

Eleven dynamic sampling boreholes (WS9 - WS19 incl.) were driven into various locations in the stable block area. WS11 was located in the area to the immediate west of the site entrance, formerly occupied by a roofing company. This hole was additional to the data already collected from TP28 and TP29. WS13 and WS14 were located in the stables where a hard surfacing of concrete was encountered. All holes were terminated at 1.00m, with 0.50m of virgin Oolite being proven at each location.

The locations of the Stable Block exploratory hole locations are denoted on the drawing below:-

### Exploratory Hole Location Plan September and October 2021.



### 3.5 Desk Top Study and Site Investigation – Northern Parcel.

The Northern Parcel was investigated on the 22nd and 23rd of September 2021 and reported on 1<sup>st</sup> November 2021. The works comprised 6No. dynamic windowless sampler boreholes and 12No. trial pits. Contamination risks in soil were not identified. Gas monitoring concluded that properties do not require specialise gas protection measures. The report is included in Appendix B.

## 4 CONTAMINATION INVESTIGATIONS - CONCLUSIONS

The contamination investigations revealed the following:-

- Protective water supply pipework is not required for this development.
- Gas protection measures are not required.
- No potential risk to controlled waters has been identified, given the absence of significant potentially mobile contamination sources and distance to controlled water receptors.
- Widespread or significant contamination of the Site has not been identified, though asbestos and localised, low level PAHs have been identified in the Made Ground below the Stable Block and a small stockpile in the northwest of the site.
- Within the Northern Parcel, contamination risks in soil were not identified. Gas monitoring concluded that properties do not require specialise gas protection measures. Remediation is not required. The report is included in Appendix B.

## 5 REMEDIATION REQUIREMENTS AND METHODOLOGY

Following the Brownfield Consultancy contamination assessments, the following construction phase remediation mitigation measures are considered appropriate:-

1. Pieces of asbestos cement are present in 'backfill', proximal to the sewer which runs in an east-west direction across the south of the site. This is referred to as the 'Excluded Paddock Land'. We understand that this area of the site will not be redeveloped. However the area will need to be secured with fencing so that human entry is not permitted. Once the area has been secured / set out, a number of investigation trial pits are recommended along the boundaries to determine the presence, or otherwise, of asbestos. This will ensure that the land within the development zone is uncontaminated.
2. The small stockpile in the northwest of the site (Exploratory Location TP27) contains asbestos cement and loose fibres. This stockpile should be removed from site and disposed of accordingly. There is approximately 7m<sup>3</sup> of material in this stockpile which will require removal. The removal should be supervised by the Brownfield Consultancy and validation testing of the ground surface will be required following removal.
3. The Stable Block in the far north of the site, which includes the area formerly occupied by a roofing company, contains unacceptable concentrations of hydrocarbons and asbestos. The current layout on Page 1 suggests that this area will be occupied by open space / amenity and thus we would recommend the provision of a clean capping layer comprising of 450mm of certified clean soil underlain by a geotextile.

Subject to the final development levels a reduced level dig may be required to facilitate the clean cover layer. Any material requiring off-Site disposal will need to be appropriately classified to determine its final treatment/ disposal destination. Alternatively, surplus soil from the Stable Block could be re-used below roads, driveways and structures, provided that the works are carried out by a licensed asbestos contractor and are fully documented.

Construction in the main body of the site, south of the Stable Block, as well as the Northern Parcel, will likely result in a large volume of surplus topsoil and this could be used to construct the capping layer. Attention is drawn to the asbestos contaminated soils within, and proximal to, the 'Excluded Paddock Area'

Should a delivery of clean soil be required to construct the capping layer then the material used for the capping layer will be sourced by the Contractor and documentation submitted on its origin that is acceptable to the Local Planning Authority, the Main Contractor and to The Brownfield Consultancy. The documentation should as a minimum comprise information on the origin of the materials and chemical testing of suitable suite of contaminants. Delivery notes should also be supplied.

4. We understand that the existing foul sewer is being decommissioned and replaced slightly further to the north. The proposed new route is denoted on the Exploratory Hole Location Plan and the drawing entitled Preliminary Drainage Strategy in Appendix A. This will result in

disturbance of asbestos contaminated soil and thus a licensed asbestos contractor will be required to undertake this work.

5. As with any brownfield development, there is a possibility that unknown area(s) of soil or groundwater contamination, including asbestos, may be encountered during excavation works. During groundworks it is the responsibility of the Site Manager to ensure a strict watching brief is maintained. This will consist of a record of any observations of contamination made during the course of development by any member of site staff, contractor or visitor. It is also the responsibility of the Site Manager to inform the Brownfield Consultancy should unexpected contamination be observed.
6. Low levels of contamination have been identified at the Site and as with any Brownfield development there is the potential for further previously unidentified hotspots of contamination to be present at the Site. As such, it is recommended that the Contractor provides appropriate inductions to all groundworkers who are required to perform sub-surface work at the Site in order to ensure they are made aware of the possibility of encountering contamination at the Site. In addition, good standards of personal hygiene should be observed and appropriate levels of PPE and RPE, where applicable, provided and utilised in order to mitigate the potential for direct contact.

## 6 VALIDATION REPORTING

The Validation Report should comprise the following items of verification (as a minimum) to demonstrate that the Remediation Strategy has been complied with:-

1. Details and verification of any Hotspots encountered (Main Contractor);
2. Waste disposal tickets for asbestos contaminated stockpile and any reduced level dig spoil. (Main Contractor);
3. Verification Reporting on the removal of the small stockpile and testing of the ground surface below (Brownfield Consultancy);
4. The findings of the investigations along the boundaries of the 'Excluded Paddock Lane' to determine the presence, or otherwise, of asbestos. (Brownfield Consultancy);
5. Chemical test data (pre-delivery), volumes and frequency for imported topsoil/subsoil (To be supplied by Main Contractor);
6. Photographic evidence of the installation and thickness of the topsoil/subsoil in the Stable Block area (To be supplied by Main Contractor and The Brownfield Consultancy);
7. Chemical analysis results from in-situ validation testing of imported soils / soils recovered from the main body of the site in the Stable Block area (Brownfield Consultancy);
8. Brief report containing the above. (Brownfield Consultancy);



We would recommend that this report is submitted to the Local Planning Authority for their consultation.

We trust the above is sufficient for your purposes. However please do not hesitate to contact me should you have any queries.

Prepared and Approved by



**Jim Twaddle** cGeol  
*Director*

*Appendix A Phase I and II Site Investigation. Land off Fewcott Road, Fritwell, Oxfordshire. (Ref: BC195 RE001 Rev dated 24<sup>th</sup> November 2021).*

*Appendix B Desk Top Study and Site Investigation Report. Northern Parcel, Fewcott Road, Fritwell, Oxfordshire. (Ref: BC195 RE002 Rev dated 1<sup>st</sup> November 2021).*