

STUART GUY CONSULTING

Report number 17-02-01

Date 3rd March 2017

Environmental Risk Assessment of Land adjacent to

355 High Road, Whaplode, Spalding, PE12 6TG

Non - technical Summary

The site (about 1.8 ha) is located in a mainly rural setting with only a few residential properties nearby. The area is flat and level with the site having stubble from cereal crops on it from last year. The plan is to construct 33 dwellings on the site around an existing detached house. The Sitecheck Data report identified one historical source of potential contamination that could impact on the site, but that was some distance from the site and it had been redeveloped. An historical haulage business was further away and made ground with unknown materials was also noted, but that was even further from the site and was a wooded grassed area near to the church. The site visit confirmed that no sources of potential contamination were on or near the site that could impact on the site.

The ground under the site is largely impermeable and the nearest surface water is a ditch some flowing along two sides of the site. The top soil was sticky silty clayey sand which would allow little lateral migration of any substances.

There were no credible sources of potential contamination that could impact on this site and therefore, the risk of harm to the occupiers of the site and to the environment was acceptable.

No further investigation is necessary on this site.

Stage One Environmental Desk Study of Land adjacent to

355 High Road, Whaplode, Spalding, PE12 6TG

Planning Application No. H23-0508-16

1. Scope of the Risk Assessment

1.1 Under instructions from Peter Pitt of D Brown Building Contractors Limited, Seas End, Moulton Loosegate, PE12 6JX, I have prepared this risk assessment based on the following:

A Sitecheck Data Report dated 28th February 2017, reference SCD_115933665_1_1

A visit to the site on 1st March 2017

1.2 The purpose of this report is to assess whether this site, or potential contaminants from adjacent sites, could present a significant risk of harm to the occupiers of the site or to the environment.

2 Sitecheck Data Report + Google Satellite Image

2.1 The Sitecheck Data report searches features that are recorded on maps or in trade directories of the surrounding area and points to features that may be of concern. As with all automated systems, this tends to identify many features that are not relevant and therefore interpretation of the results is required.

2.2 The Google satellite image shows fields to the west and south and low density housing to the north and east.

2.3 Under current land use for the site, nothing is noted.

2.4 Under current land use for the surrounding area, two discharge consents held by Anglian Water are at about 240 m to the east and at about 240 m to the south and a trade discharge is marked at about 250 m to the north.

2.5 Under historical land use for the site, nothing is noted.

2.6 Under historical land use for the surrounding area, tanks are marked at about 230 m to the north west, a factory or works is noted at about 100 m to the east, a road haulage business is marked at about 210 m to the south east and unknown filled ground (such as pond or stream) is marked at about 210 m to the east and at about 220 m to the south east.

2.7 Groundwater vulnerability is classified as non aquifer with negligibly permeable formations and soil leaching potential is not classified. The nearest surface water feature is ditch flowing along the southern and western boundaries.

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2.8 Radon above the action level is estimated to affect less than 1 % of homes and no radon protection measures are recommended.

2.9 In summary, the site is in a rural area with residential buildings on two sides and fields to the other two sides, groundwater vulnerability is classified as non aquifer and the nearest surface water feature is ditch that flows along two boundaries.

3 Site Visit on 1st March 2017

3.1 The site was visited when the weather was dry and sunny. The whole area is flat and level and house number 355 is located in the middle of the site adjacent to High Road (photos 1 & 2). The planned development is to construct 33 houses on the 1.8 ha site around the existing number 355. The fields have stubble on them from cereal crops grown in the previous year (photo 3) and the soil appears to be silty slightly clayey sand. The ditches along the southern and western boundary have been maintained and the water in the bottom is clear (photos 4 & 5). A pile of bushes/saplings that appeared to have originated from the High Road boundary and some clean wood and chipboard panels were on site between the western boundary and garden fence of number 355 (photo 6).

3.2 The site of the historical factory or works now has large modern buildings on it and the site of the road haulage business and the unknown filled ground appears to be a wooded and grassed area near to the church. The fields between this site and the historical factory and road haulage business are flat and the soil appears to be largely impermeable. An agricultural farm machinery business is located on the other side of High Road some 400 m from the site, but this does not present any risk of contamination.

4. Conceptual Model

4.1 The site (~ 1.8 ha) comprises a field that has been under cultivation with the stubble from cereal crops being present from last year. The whole area is flat and the soil in the field is largely impermeable. No evidence was found for tipping of waste on the site. The historical factory or works has been redeveloped as large commercial units, probably for processing of agricultural products. No sources of potential contamination were identified on or near to the site.

4.2 The ground is level and flat, the ground under the site is largely impermeable, as is the top soil, and the nearest surface water features are the ditches that flow along the southern and western boundaries.

4.3 The suggested model of 'source, pathway, target' in which all three components have to be present will be considered for this site. In this context, the source will be a potential contaminant, the receptor will be human or environmental and the pathway will be some process whereby mass transfer from source to receptor occurs.

4.4 Possible pollutant linkages:

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Contaminant	Pathway	Receptor
No identified sources of potential contamination that can impact on the development	Not applicable	Occupiers of the site Groundwater & aquifer

5 Conclusions and Recommendations

5.1 No sources of potential contamination were identified on site or near to it.

5.2 No further site investigation is necessary.

6 Summary

6.1 The development is to construct 33 new homes on the site which has been used for agricultural purposes. The setting for the development is mainly rural with only a few houses near to it. The Sitecheck Data report identified three historical sources of potential contamination that could impact on the site, but the site visit found the area to be level and flat, the soil was largely impermeable and the nearest potential source had been re-developed. The other two sources were a long way from the site and very unlikely to have any impact on the site. The visit confirmed that no sources of potential contamination were present on, or near, to the site.

6.2 No further site investigation is necessary on this site.

6.3 Those workers whose main job it is to grade sites or excavate significant quantities of soil could be subject to cumulative exposure to various substances on many sites and they should wear overalls and gloves, even if the soils do not present a significant risk to the health of the workforce. For example, the presence of water contaminated with Weil's disease is a small probability and working on many sites increases the risk of infection to a worker. Localised contamination from small amounts of chemicals that could have been discarded is an unlikely event, but if heavily discoloured or highly odorous materials are encountered, then appropriate advice should be sought.

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Photo 1 Western side of site with house number 355 in middle of site



Photo 2 Eastern side of site looking towards road, number 355 on left



Photo3 Field looking from southeast corner of the site



Photo 4 Ditch on southern boundary looking to west



Photo 5 Ditch on western boundary looking to High Road



Photo 6 Bushes/saplings from road boundary and scrapped clean wood

