



Desk Study Report

Project Name: Danworth Farm

Location: Cuckfield Road, Hurstpierpoint, BN6 9GL

Client: Danworth Farm Limited

Project ID: J16003

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SUMMARY

The site, which extends to approximately 500m² comprises part of a modern agricultural barn. It is proposed to redevelop part of the barn for commercial (office) use.

Geological records indicate the site to be underlain by Weald Clay Formation.

A desk study was carried out and indicates that the site has a history of agricultural use.

An Unexploded Ordnance (UXO) risk assessment was not undertaken as part of these works.

On the basis of a review of the desk study information obtained, and the site walkover, no significant sources of contamination have been identified on or within the vicinity of the site. Therefore, no further work is required with respect to the investigation of potential soil, groundwater or ground gas contamination at the site.

The investigation was conducted and this report has been prepared for the sole internal use and reliance of Danworth Farm Limited and their appointed Engineers. This report shall not be relied upon or transferred to any other parties without the express written authorisation of Southern Testing Laboratories Ltd. If an unauthorised third party comes into possession of this report they rely on it at their peril and the authors owe them no duty of care and skill.

The findings and opinions conveyed via this investigation report are based on information obtained from a variety of sources as detailed within this report, and which Southern Testing Laboratories Ltd. believes are reliable. Nevertheless, Southern Testing Laboratories Ltd. cannot and does not guarantee the authenticity or reliability of the information it has obtained from others.

The recommendations contained in this report are made in respect of the particular context of the investigation as described in the report and may not be appropriate to alternative development schemes. This report should be considered in its entirety and Southern Testing Laboratories Ltd. accepts no responsibility for and excludes liability in respect of any omission or alteration made by others, and any use of the report for any purpose other than that for which it was produced.

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A INTRODUCTION

1 Authority

Our authority for carrying out this work is contained in a completed copy of our Project Order Form, which was returned by Jeremy Ventham on behalf of Danworth Farm Limited.

2 Location

The site is located to the east of Cuckfield Road, approximately 1.8km north of Hurstpierpoint and 2.75km southwest of Burgess Hill. The approximate National Grid Reference of the site is TQ 28544 18266. The site location is indicated on Figure 1 within Appendix A.

3 Proposed Construction

It is proposed to convert part of an agricultural barn to commercial (office) use.

For the purposes of the contamination risk assessment, the proposed development land use is classified as Commercial/Industrial CLEA Model Ref [1] / C4SL Report Ref [2].

The gas sensitivity of the proposed development is rated as Low CIRIA C665 Ref [3].

4 Object

This is a Phase 1 Desk Study and Walkover (risk estimation and evaluation) investigation (Tier 1).

The object of the investigation was to assess the likely nature and extent of soil, groundwater and soil gas contamination on the site.

5 Scope

This report presents our desk study findings and our interpretation of these data.

A UXO risk assessment was not requested within our brief for the investigation.

The Desk Study has been completed with reference to BS 5930 Ref [4] and BS 10175 Ref [5].

The findings and opinions conveyed via this investigation report are based on information obtained from a variety of sources as detailed within this report, and which Southern Testing Laboratories Ltd. believes are reliable. Nevertheless, Southern Testing Laboratories Ltd. cannot and does not guarantee the authenticity or reliability of the information it has obtained from others.

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B DESK STUDY AND WALKOVER SURVEY

6 Desk Study

A desk study has been carried out. Reference has been made to the following information sources.

- Online Geological Maps Ref [6] & Ref [7]
- Historical Ordnance Survey Maps
- Environmental Databases
- BGS Online Historical Borehole Records Ref [8]
- Discussions with Site Owner
- Search on Local Authority Planning Portal for planning history
- UK Radon Ref [9] and BRE Radon Ref [10]

The environmental databases search report compiled for this desk study contains site-specific environmental data drawn from data sets that comprise publicly available information together with data from third parties, some of which is under review. Accordingly, Southern Testing Laboratories Limited does not warrant its accuracy, reliability or completeness.

The full report is included in Appendix C and D, a summary of the salient features is included in the following sections of this report.

6.1 Geology

The British Geological Survey Map No. 318/333 Brighton & Worthing (2006) indicates that the site geology consists of Weald Clay.

6.1.1 Weald Clay Formation

The Weald Clay Formation comprises dark grey thinly-bedded shales and mudstones with subordinate siltstones, sandstones (including the Horsham Stone Member), shelly limestones and clay ironstones. The mudstones weather to yellow and brown clays. Conspicuous bands of red clay also occur, usually in close association with sandstone beds.

The clays have often been worked for various purposes, and the clay ironstone, a low-grade iron ore, was worked from sporadic beds across the Wealden area. The steep sides of the degraded remains of former workings are usually unstable. Other workings have been filled with a variety of materials.

This formation is known to contain pyrite.

6.2 Historical Borehole Records

A search of previous exploratory hole records both from the online British Geological Survey (BGS) database [8] and Southern Testing in-house records, revealed three records within the near vicinity of this site; one from the BGS and two from the STL source.

BH Reference	Final Depth (mbgl)	Distance from site & Direction	Remarks
TQ21NE95	15	765m west	Soft to firm brown mottled grey silty CLAY, becoming firm to stiff from 3.6m, and very stiff from 8m. Very stiff/moderately weak grey fissured SILT and CLAY from 14.5 – 15.1m No mention of groundwater

BH Reference	Final Depth (mbgl)	Distance from site & Direction	Remarks
STL J12059	3.1	1km south	Topsoil to 0.2m Firm to stiff orange-brown fissured silty CLAY to 1.2m Stiff blue-grey mottled orange-brown silty CLAY with occasional siltstone layers to 2.4m Stiff blue-grey mottled orange silty CLAY interbedded with dark grey MUDSTONE to 3.1m Perched water strikes
STL J13460	1.2	1.1km south	Made Ground to 0.5m Stiff mid brown mottled orange-brown slightly flint gravelly sandy silty CLAY with frequent iron staining to 1.2m. No mention of groundwater

6.3 Geological Hazards and Mining Activities

Data from various sources relating to potential geological hazards at the site are summarized below. The Hazard Potentials listed for the BGS data are as presented in the Envirocheck report, derived from various generic BGS sources, **which are not considered as site-specific**. It is important that this information is considered in context of the actual site topography, ground conditions encountered during future investigation, and development proposals.

Data Source	Hazard	Hazard Potential to Site	Remarks
BGS	Potential for Collapsible Ground Stability Hazard	Very Low	
	Potential for Compressible Ground Stability Hazard	No Hazard	
	Potential for Ground Dissolution Stability Hazard	No Hazard	
	Potential for Landslide Ground Stability Hazard	Very Low	
	Potential for Running Sand Ground Stability Hazard	No Hazard	
	Potential for Swelling or Shrinkage Clay Ground Stability Hazard	Low	STL assessment is moderate
	Shallow Mining Hazard	Highly Unlikely	
	BGS recorded mineral site	Closest record is 771m south – opencast common clay & shale	
ARUP [Ref [11]]	Mining Instability	No records within 1km of the site.	
CSS [Ref [12]] KURG [Ref [13]]	Underground Openings	No records within 1km of the site.	

6.4 Radon Risk

With reference to the Envirocheck report, UK Radon Ref [9] and BRE Radon Ref [10] guidance: no radon protection is required on this site.

All basements are at increased risk of elevated levels of radon, regardless of geographic location.

Where basements are proposed, the designer should take note of any measures specific to radon protection for basements as detailed in BR211 (2023) and ensure any recommendations are followed.

The UK Health Security Agency and HSE policy and guidance recommends and, in some cases, requires, that the owner and/or occupier of buildings undertake radon monitoring in all occupied and used basement areas.

It is therefore the owner and/or occupier's responsibility to ensure that the above policy and statutory requirements regarding radon monitoring are followed.

6.5 Hydrology and Hydrogeology

Data from the Environment Agency and other information relating to controlled waters is summarised below.

Data		Remarks	Possible Hazard to/from Site (Y/ N)
Aquifer Designation	Superficial Deposits	No superficial deposits mapped on the site.	N
	Bedrock	Weald Clay – Unproductive Strata.	N
Groundwater Vulnerability		Unproductive aquifer.	N
Abstractions	Surface Water	None recorded within 1km of the site.	N
	Groundwater	None recorded within 1km of the site.	N
Source Protection Zones		None recorded within 1km of the site.	N
Surface Watercourses		A pond 64m northwest of the site.	N
Groundwater Flood Risk		The site is not shown within/adjacent to an area mapped as being at risk.	N
Surface Water Flood Risk*		The site is not shown within/adjacent to an area mapped as being at risk.	N
Marine / Fluvial Flood Risk*		The site is not shown within/adjacent to an area mapped as being at risk.	N
Discharge Consents		The closest discharge consent to the site is 57m to the south, and is for the discharge of non-water company (private) sewage to a freshwater stream/river.	N

** These sections are provided for information only, this report does not constitute a formal flood risk assessment and specialist advice should be sought in relation to potential flooding issues.*

The site is mapped as being directly underlain by the Weald Clay bedrock, which is relatively impermeable, and designated as unproductive strata. Therefore, groundwater beneath the site is not considered to be at risk from the migration of any potentially mobile contaminants, either arising on site, or migrating via the groundwater from an off-site source.

The closest surface water feature is a pond 64m to the northwest of the site. Given the nature of the subject site, and its distance from the pond, it is not considered to pose a potential risk to this surface water feature.

Similarly, the discharge consent 57m to the south of the site is not considered to pose a risk to the site, given the impermeable nature of the geology.

Therefore, the risk to ground and surface water from potentially mobile contaminants arising on site, and/or to the site from the migration of contaminated ground or surface water from off-site sources is considered negligible.

6.6 Historical Ordnance Survey Maps

Copy extracts of historical Ordnance Survey plans dating from 1874 to 2024 were obtained and are presented in Appendix D. A summary of the salient features is presented below.

The earliest OS map dated 1874 shows the site as part of a large, open field. With the exception of some changes to the field boundaries, the site remains unchanged up until the mid 1970's.

The 1974/1978 OS map shows the site as part of a large barn. The site then appears unchanged on the mapping to the present day.

The surrounding area is shown as part of Danworth Farm from 1874. At this time, the farm buildings are located around 50m north and 60m northeast of the site. Danworth Farm appears to have undergone extensive redevelopment in the mid 1970's. A number of the buildings associated with Danworth Farm were altered/redeveloped, and several large tanks (possibly silos or water tanks) are shown adjacent to the barn which is the subject of this report. The surrounding area then remains largely unchanged.

6.7 Environmental Databases

Data Source	Distance (m)	Direction	Details	Possible Hazard to Site (Y/N)
Historical Industrial Land Use	52	W	Tanks (1978)	N
	56	NW	Tanks (1978)	N
Current Industrial Land Use	48	NE	Soft furnishings manufacturers (inactive)	N
	51	NE	Car dealers – used (inactive)	N
Current and Historical Landfills	-	-	None recorded within 500m of the site.	N
Potentially Infilled Ground	231	E	Pond, marsh, river, stream etc. (1963)	N
Fuel Sites	-	-	None recorded within 500m of the site.	N
Pollution Incidents	-	-	None recorded within 500m of the site.	N
IPPC/LAPPC Authorisations	-	-	None recorded within 500m of the site.	N
Hazardous Substances Consents	-	-	None recorded within 1km of the site.	N
Sensitive Land Uses	0	-	The site is situated within a nitrate vulnerable zone (surface water)	N

No potential hazards have been identified either on site, or in the surrounding area, from the environmental database.

From the historical mapping two records of tanks appear to refer to large cylindrical tanks to the north and west of the subject site. Given the size and number of these features, it is considered most likely that they were silos for grain, rather than tanks for the storage of liquids.

6.8 Planning Application History

A search of Mid Sussex District Council's online planning database¹ returned the following applications for Danworth Farm.

Application Number	Application Date	Proposal Details / Comments	Decision
HP/075/99	29/07/1999	Change of use of existing farm buildings to B1 use.	Permission
HP/075/99/AP1	22/02/2000	Amended Plans: Change of use of existing farm buildings to B1 use	Permission
HP/075/99/AP2	23/06/2000	Amended Plans: Change of use of existing farm buildings to B1 use.	Permission
HP/075/99/AP3	01/09/2000	Amended Plans: Change of use of existing farm buildings to B1 use.	Permission
HP/075/99/AP4	22/10/2001	Amended Plans: Change of use of existing farm buildings to B1 use.	Permission
HP/075/99/AP5	24/04/2003	Amended Plans: Change of use of existing farm buildings to B1 use.	Permission
HP/075/99/AP6	05/11/2003	Amended Plans: Change of use of existing farm buildings to B1 use.	Permission
HP/075/99/AP7	10/06/2004	Amended Plans: Change of use of existing farm buildings to B1 use.	Permission
HP/00872/COU	08/03/2012	Change of use of Unit 8 from B1 use (offices) to D1 use (physiotherapy practice).	Permission
DM/17/3777	14/09/2017	Demolition of existing barn building. Construction of new detached building to provide 4No. B1 office units. Conversion of part of existing detached storage barn to create 3No. B1 office units. Associated hard and soft landscaping works, to include provision of additional parking spaces and widening of existing main entrance drive.	Permission
DM/21/4077	24/11/2021	A single agricultural barn of steel portal frame construction.	Prior Notification Not Required
DM/25/0613	10/03/2025	Enlargement of existing unit (Unit 2) within building to north side of barn by expanding into barn to provide meeting room, breakout room and extra office space. Conversion of barn to west side of enlarged space to new unit with doors and windows.	Prior Approval is Granted

None of the above applications relate to the site, or wider area, having a potentially contaminative land use.

6.9 Ground Gas Risk

There are no current or historical landfill sites within 500m of the site.

A potentially backfilled area of ground (water) is listed 231m to the east of the site. From the historical mapping, this appears to be a small pond, which is shown on the 1956 edition OS map, but is not shown on the 1974 edition. Given

¹ <https://pa.midsussex.gov.uk/online-applications/> - accessed 06/06/2025

the size and location of this feature, if it were backfilled (as opposed to naturally drying/silting up), it is likely that it would have been backfilled with soil or inert material, to level the field, rather than with landfill type waste. The small scale of this feature and its distance to the subject site also suggest no significant risk.

Therefore, the risk to the site from the generation and migration of ground gases is considered to be negligible.

6.10 UXO Risk Management

The possibility of unexploded ordnance (UXO) being encountered on a site falls within the category of a potentially significant risk and should be addressed as a legal duty under the Construction (Design and Management) Regulations by the Client as early as possible in a project.

The CIRIA publication C681 Ref [14] has been developed to provide a consistent framework for the management of potential risks posed by UXO during site investigation and groundwork phases of construction. The process adopts a tiered approach, divided into four distinct stages; Preliminary risk assessment, Detailed risk assessment, Risk mitigation and Implementation.

The agreed scope of work did not allow for either a preliminary or detailed UXO risk assessment.

7 Site Walkover Survey

7.1 General Site Description and Boundaries

The site comprises part of a large, modern agricultural barn. The southern half of the barn has previously been converted to office use, with further offices/commercial businesses occupying the units to the immediate north of the barn. The northern half of the barn, to which this report refers, comprise a steel portal frame with lower, outer elevations of concrete block work. The upper elevations are of corrugated metal sheet. The pitched roof is also clad with corrugated metal sheet.

The various units within and surrounding the barn, are used by a variety of businesses, including first aid training, a physiotherapist and a marketing company.

7.2 Topography and Drainage

The site is generally flat and level, in keeping with the surrounding area.

With the exception of gutters and downpipes to the roof, there is no formal drainage apparent on the site.

7.3 Vegetation

There is no vegetation on the site, which is completely covered by the structure of the barn.

7.4 Buildings and Land Use on Site and Nearby

It is understood that it is proposed to create open plan offices, with associated meeting room, kitchen and w/c facilities within the existing structure of the barn. This will be achieved by the use of stud walls, raising the existing floor level and providing a ceiling at first floor level, to aid in insulating the units. A proposed site layout is indicated on Figure 2 within Appendix A.

The area around the barn is largely covered with hardstanding (blacktop and concrete). There are several smaller units/converted former farm buildings to the north of the site which are occupied by a variety of businesses. Two plastic, 1350l fuel storage tanks, with integrated bunds, are situated to the immediate west of the site.

The edge of a corrugated asbestos cement sheet roof to the neighbouring barn is visible on part of the southern elevation of the barn. This material appears to be in good condition, and will not be accessible to site users. It is therefore, not considered to pose a risk. It is also understood that it is to be removed in the future.

The floor to the barn was concrete, and was in good condition, with no significant cracking. An oil/petroleum hydrocarbon fuel leak/spillage was noted beneath a tractor in the west side of the barn. It is understood that the floor level across the barn is to be raised. Therefore, this is not considered to pose a risk to the site.

7.5 Inaccessible Site Areas

All areas of the barn were accessible at the time of the site walkover.

7.6 Site Photographs

A series of photographs showing the interior and exterior of the barn is included in Appendix B.

C CONCEPTUAL SITE MODEL

In the context of this report, the conceptual model summarises the potential pollutant linkages identified for the site and forms the basis of the risk assessment for the site. The preliminary model comprises the potential sources of contamination, receptors that could be harmed and exposure pathways identified from the desk study and walkover survey. These potential linkages form the basis upon which the investigation is designed and reported.

7.1 Potential Sources of Contamination

The site has a history of agricultural use and is located within a rural area.

A few potentially contaminative uses have been identified, both on site and in the locality.

Potential Source		Potential Contaminants
Historic Uses of the site	Open field with an agricultural use	Use of pesticides & herbicides (inc. arsenic, cadmium, lead, copper, and zinc).
Current/Most Recent Uses of the site	Agricultural barn	Made Ground from construction of the buildings: variable, may include: Metals, non-metals, polyaromatic hydrocarbons (PAH), petroleum hydrocarbons & asbestos containing materials (ACMs). Possible fuel/oil/lubricant use and storage: petroleum hydrocarbons.
Ground and/or surface water		No potential sources identified on site
Ground Gases/Vapours		No potential sources identified on site
Radon		No potential source. The site is mapped as in an area where <1% of homes are at or above the action level.
Sulphates (aggressive ground)		Mapped as underlain by the Weald Clay, a formation known to contain pyrite.

The site has a history of agricultural use, as an open field and later as a barn for the storage of agricultural equipment and plant. Pesticides and herbicides may have been used on the field. Early pesticides and herbicides were usually heavy metal based, rather than synthetic, as today.

Made Ground/subbase may be present beneath the existing barn. Such material can contain a range of potential contaminants.

There is also a possibility that small amounts of fuels/oils and lubricants may have been used and stored in the barn. This poses a potential risk of localised contamination from leaks and spillages.

Given the geology mapped, the site would not be considered hydrogeologically sensitive. In addition, no significant sources of potentially mobile contamination have been identified on site. Therefore, the site is not considered to pose a risk to groundwater.

No potential on site sources of ground gases or vapours have been identified from the desk study, or previous intrusive investigation works.

7.1.1 Off-Site Sources

No potential off-site sources of contamination have been identified from the desk study and site walkover.

8 Risk Estimation

In order to evaluate the perceived contamination risks at this site, the severity of the risk in terms of the magnitude of the potential consequence of the linkage occurring has been compared with the likelihood of the linkage existing. A risk matrix with explanation of the probability, consequence and risk classification is included within Appendix E.

8.1 Risk Estimation Matrix

The table below summarises the risks for the possible potential pollutant linkages identified. This risk estimation assumes no mitigation has been undertaken.

Source	Pathway	Potential Receptor	Prob	Con	Risk Category	Explanation
On site Sources of Contamination in Table 7.1	Affects Soils: Heavy metals, non-metals, PAHs, asbestos & petroleum hydrocarbons	Inhalation, Ingestion, Dermal Contact & Plant uptake Humans	Construction Workers	<i>Low Likelihood</i>	<i>Mild</i>	Low The entire site will be covered by the existing barn. It is understood that the existing floor is to be retained, and internal levels raised with the addition of a concrete slab. This will break the potential pathway between construction workers and any underlying Made Ground. Asbestos in the form of cement sheeting has been identified within the part of the barn.
			Future Site Workers and Maintenance workers	<i>Unlikely</i>	<i>Mild</i>	Very Low The entire site will be covered by the existing barn. It is understood that the existing floor is to be retained, and internal levels raised with the addition of a concrete slab. This will break the potential pathway between future site workers and maintenance workers and any underlying Made Ground.
			Future Site Uses	<i>Unlikely</i>	<i>Mild</i>	Very Low The entire site is covered by the existing barn. This will break the potential pathway between site users and any underlying Made Ground.
		Run-Off Leaching Direct Contact Controlled Waters	Groundwater: Bedrock – Unproductive Strata Private or Public Drinking water supplies – none recorded	<i>Unlikely</i>	<i>Mild</i>	Very Low There are no groundwater or private abstractions recorded nearby and the superficial deposits are designated low permeable deposits.
			Surface water - None	--	--	<i>n/a</i> There are no surface water courses near enough to site to be considered a risk.
		Direct Contact Property	Infrastructure - Water Supply Pipes	<i>Likely</i>	<i>Minor</i>	Very Low Organic contaminants (PAH & petroleum hydrocarbons) may affect plastic pipes.
			Structures - Substructures/ foundations	<i>Likely</i>	<i>Minor</i>	Very Low The site is underlain by the Weald Clay, which is known to contain Pyrites. However, no below ground works are proposed as part of the development.
Off Site Sources of Contamination	None Identified	N/A	N/A	N/A	N/A	N/A
Very Low		Low	Moderate/ Low		Moderate	High
						Very High

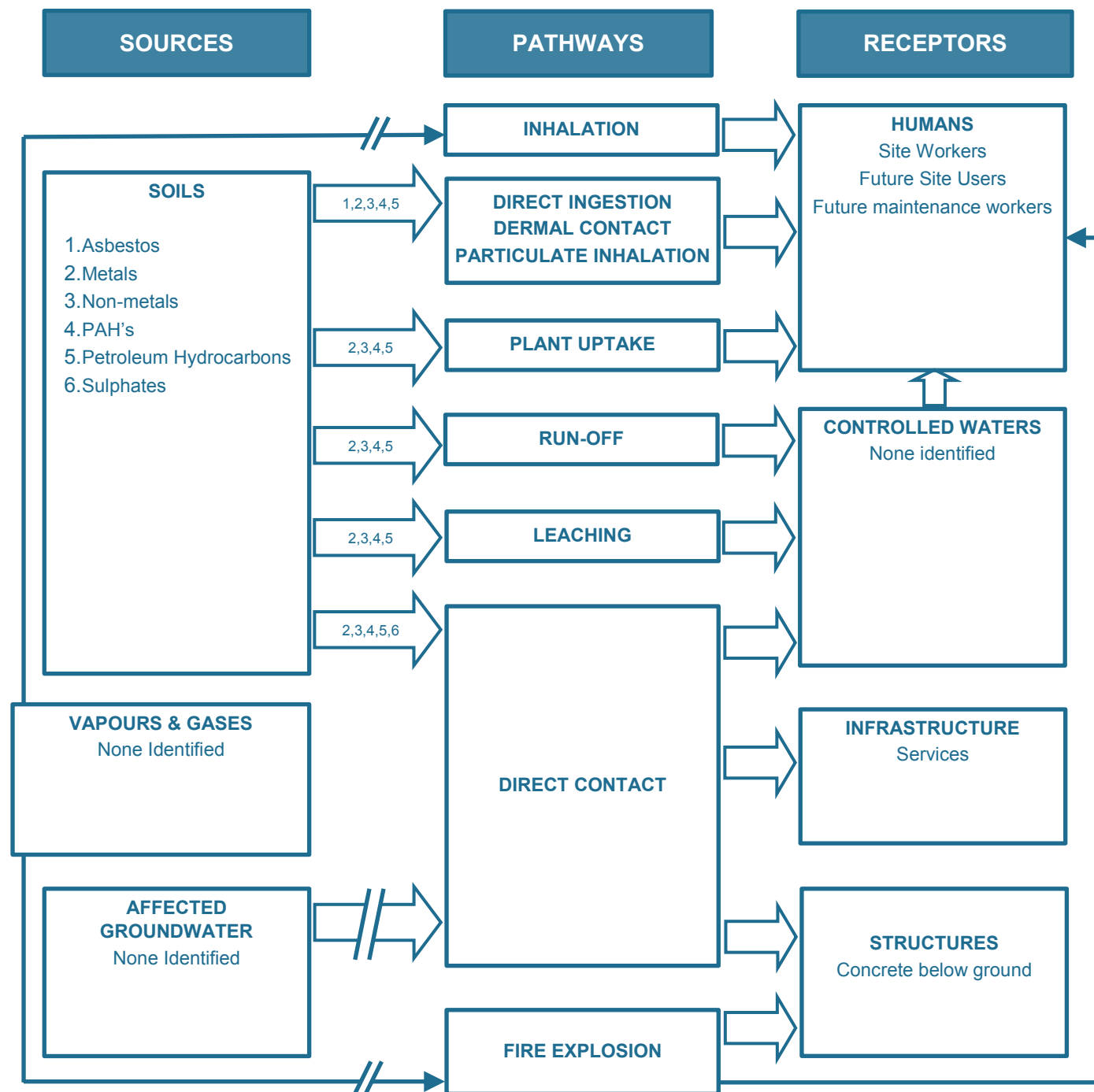
8.2 Preliminary Relevant Pollution Linkages

Those potential sources which have been identified as potential relevant are summarise in the table below:

Sources		Pathway	Receptors	Risk Category
Human Heath	Asbestos	Inhalation of dust.	Construction Workers	Low
Very Low		Low	Moderate/ Low	Moderate
			High	Very High

8.3 Pollutant Linkages and Conceptual Site Model Summary

The following diagram shows the potential pollutant linkages identified for the site and summarises the preliminary conceptual model:



8.4 Risk of Soil Contamination

Given the history, current use, and proposals for the change of use of the site, the risk from soil contamination is considered very low.

There is a low risk to workers from asbestos (identified in one location in the fabric of the building) during works to convert the barn to office use. However, this can be easily mitigated by working carefully in the vicinity of this material to ensure it is not accidentally damaged or disturbed.

8.5 Risk of Groundwater Contamination

No risk to groundwater has been identified at this stage. There are no superficial deposits mapped for the site, and the bedrock deposits are classified as Unproductive Strata. There are no surface water bodies within the vicinity of the site. Therefore, no further assessment is considered necessary, unless any significant mobile contamination is identified on site.

8.6 Risk from Ground Gases

No potential gas risk has also been identified either on site or locally. As such, no further assessment of land gas risk is considered necessary.

9 Conclusions and Recommendations

It is proposed to convert part of an agricultural barn to commercial (office) use. On the basis of a review of the desk study information obtained, and the site walkover, no significant sources of contamination have been identified on or within the vicinity of the site. Therefore, no further work is required with respect to the investigation of potential soil, groundwater or ground gas contamination at the site.

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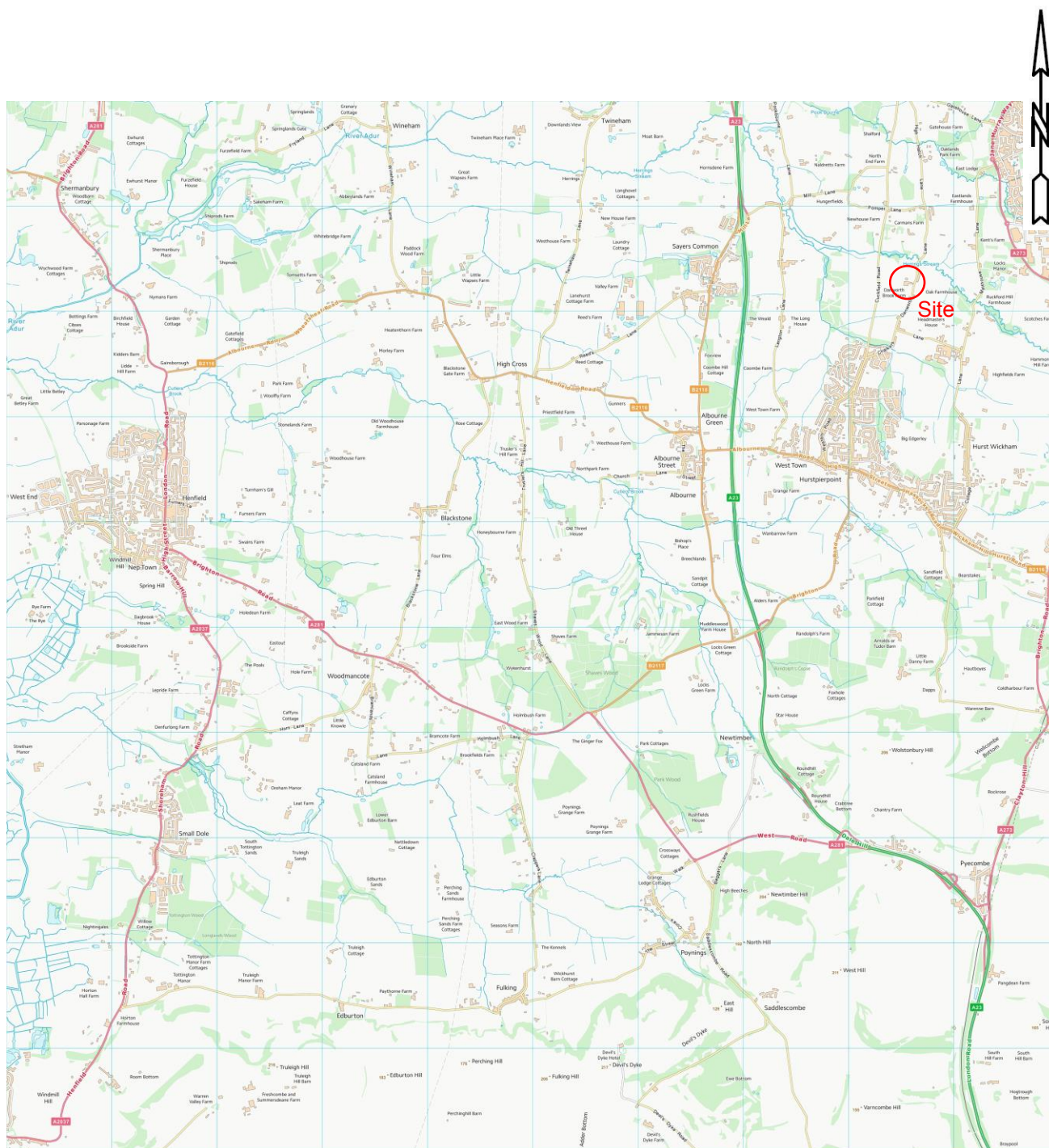
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<http://www.nhbc.co.uk/Builders/ProductsandServices/TechZone/nhbcstandards/>.
- [31] BSI Standards, "BS EN ISO 22282-2:2012 Geotechnical investigation and testing. Geohydraulic testing. Water permeability tests in a borehole using open systems," 2012.

A collage of six images related to geotechnical engineering. Top left: A large white pipe and a colorful soil profile map. Top middle: A close-up of a soil sample in a sieve. Top right: A pressuremeter being used on a soil surface. Bottom left: A worker in a high-visibility suit operating a piece of machinery. Bottom middle: A red truck with 'Southern' on the side, parked next to various equipment and barrels. Bottom right: A person using a tool to work on a soil sample.

APPENDIX A

Site Plans





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Site:	Danworth Farm, Cuckfield Road, Hurstpierpoint, BN6 9GL	Project ID	J16003
Figure 1	Site Location Plan	Date:	09/06/2025

Key to Exploratory Hole Logs, Plans and Sections

Backfill Symbols		Pipe Symbols		Principal Soil Types		Principal Rock Types		Drilling Records	
Arisings		Plain Pipe		Topsoil		Mudstone		Water Strike	
Concrete		Slotted Pipe		Made Ground		Claystone		Depth Water Rose	
Blacktop		Piezometer		Clay		Siltstone		Total Core Recovery (%) [TCR]	
Bentonite		Piezometer Tip		Silt		Sandstone		Solid Core Recovery (%) [SCR]	
Gravel Filter		Filter Tip		Sand		Limestone		Rock Quality Index (%) RQD]	
Sand Filter		Extensometer		Gravel		Chalk		Fracture Index (fractures / m) [FI]	
		Inclinometers		Peat					

All soil and rock descriptions are in general accordance with BS5930 2015, BS EN ISO 14688-1:2002+A1:2013 and BS EN ISO 14689-1:2003. Chalk descriptions are also based on CIRIA C574 and "Logging the Chalk – R.N. Mortimer 2015". The Geology Code is only provided where a positive identification of the sample strata has been made.

Location / Method Identifiers		In-situ Test Location / Method	
BH	Borehole (undefined)	DP	Dynamic Probe
CP	Cable Percussive	CPT	Cone Penetration Test
RC	Rotary Core	CBR	In-situ CBR Test
RO	Rotary Open Hole	DCP	CBR using Dynamic Cone Penetrometer
ODC	Rotary Odex/Symmetrix drilling cased	CBRT	CBR using TRL Probe
CP+RC	Cable Percussive to Rotary Core	PB	Plate Bearing Test
SNC	Sonic	SPT (S)	Standard Penetration Test (Split Barrel Sampler)
CFA	Continuous Flight Auger	SPT (C)	Standard Penetration Test (Solid Cone)
FA	Flight Auger	N	SPT Result
VC	Vibro Core	-/-	Blows/Penetration (mm) after seating drive
WLS+RC	Windowless (Dynamic) Sampler to Rotary Core	-*/-	Total Blows / Penetration (mm)
WLS	Windowless Sampler	()	Extrapolated Value
WS	Window Sampler	PPT	Perth Penetration (In-House Method - Equivalent N Value)
HA	Hand Auger	HP / UCS	Strength from Hand Penetrometer (kN/m ²)
C	Road / Pavement Core	IVN	Strength from Hand Vane ((kN/m ²) P = peak, R = residual
IP	Inspection Pit (Hand Excavation)	PID	Photo Ionisation Detector (ppm)
TP	Trial Pit (Machine Excavated)	MEXE	Mexi-Cone CBR (%)
OP	Observation Pit (Supported Excavation Hand or Machine)		

Samples / Test Type	
B	Bulk Sample
BLK	Block Sample
C	Core Sample
CBRS	CBR Mould Sample
D	Small Disturbed Sample
ES	Environmental Sample (Soil)
EW	Environmental Sample (Water)
GS	Environmental Sample (Gas)

Samples / Test Type	
SPTLS	Standard Penetration Test Split Barrel Sample
TW	Thin Wall Push In Sample (e.g. Shelby Sampler)
U	Undisturbed Open Drive Sample (blows to take)
UT	Thin Wall Undisturbed Open Drive Sample (blows to take)
W	Water Sample (Geotechnical)
SP	Sample from Stockpile
P	Piston Sample
AMAL	Amalgamated Sample



APPENDIX B

Photographs

B



Plate 1: Western elevation, with access to the barn via the door on the LHS.



Plate 2: The barn is currently used to store farm machinery and equipment.



Plate 3: Interior looking towards the eastern elevation.



Plate 4: Looking southwest across the barn.



Plate 5: The edge of a corrugated asbestos cement sheet roof to the neighbouring barn is visible on part of the southern elevation of the barn.

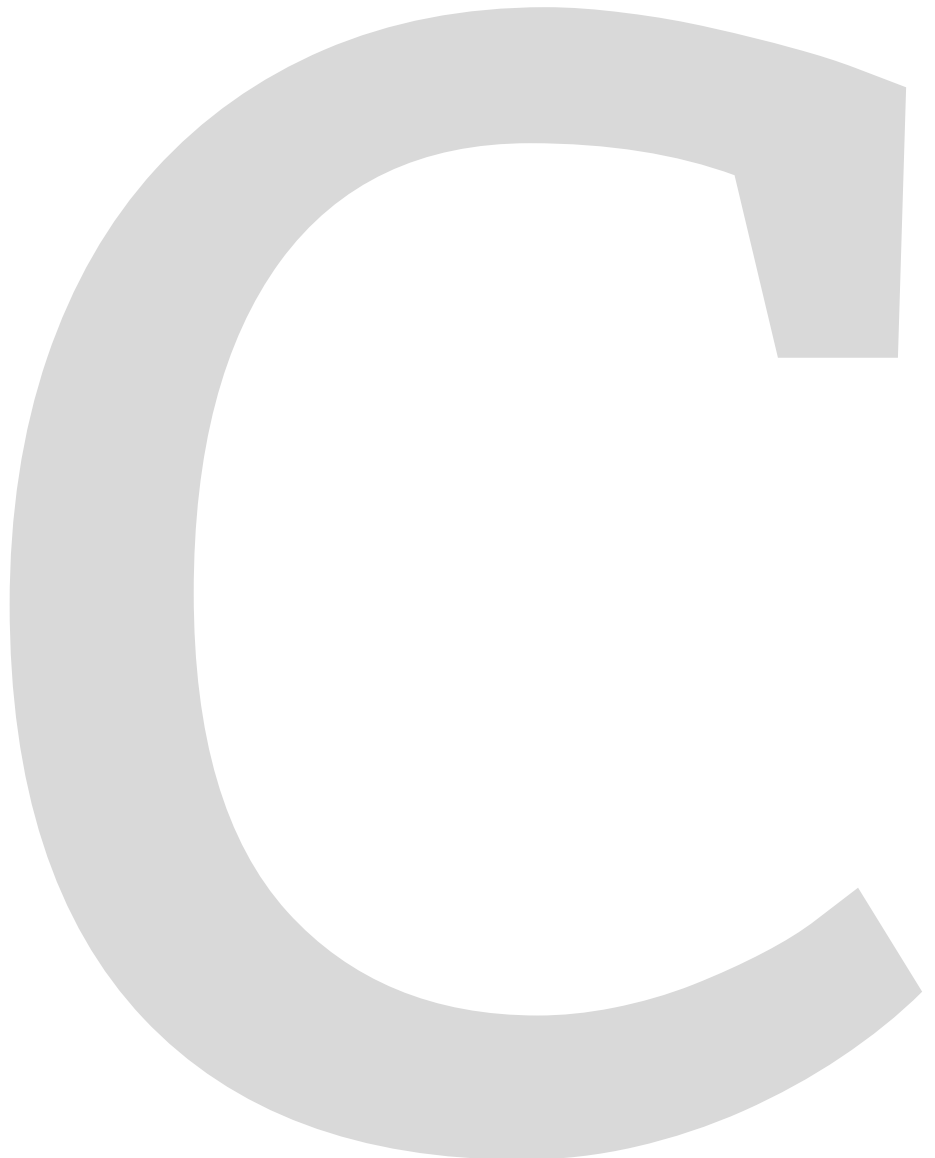


Plate 6: East side of the site.



APPENDIX C

Phase 1 Desk Study – Historical Mapping



Envirocheck[®] Report:

Historical Data Report Datasheet

Order Details:

Order Number:

378158480_1_1

Customer Reference:

J16003

National Grid Reference:

528540, 118250

Slice:

A

Site Area (Ha):

0.01

Search Buffer (m):

1000

Site Details:

Danworth Farm
Cuckfield Road
HURSTPIERPOINT
BN6 9GL

Client Details:

MR D Spearman
Southern Testing
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

Prepared For:

Danworth Farm Limited

Report Section	Page Number
Summary	-
Historical Building Plans Information	-
Historical Land Use Information	1
Historical Tanks and Energy Facilities	2
Historical Map List	3
Useful Contacts and Further Information	4

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
Historical Building Plans Information					
Areas Cleared Due To Enemy Action					
Above Ground Fuel Tanks (100m)				n/a	n/a
Asbestos (100m)				n/a	n/a
Benzene/Benzole/Naphtha, Naphthalene/Kerosene (100m)				n/a	n/a
Electricity Generation (100m)				n/a	n/a
Electricity Sub-Station (100m)				n/a	n/a
Gas Industry (100m)				n/a	n/a
Gas Storage (100m)				n/a	n/a
Gas Use (100m)				n/a	n/a
Oil Industry (100m)				n/a	n/a
Oil Storage (100m)				n/a	n/a
Oil Use (100m)				n/a	n/a
Paint based Oils (100m)				n/a	n/a
Paraffin (100m)				n/a	n/a
Petrol and Diesel Industry (100m)				n/a	n/a
Petrol and Diesel Storage (100m)				n/a	n/a
Petrol and Diesel Use (100m)				n/a	n/a
Potential Fuel Gas (100m)				n/a	n/a
Potential Fuel Oil (100m)				n/a	n/a
Potential Fuel Use (100m)				n/a	n/a
Potential Petrol and Diesel (100m)				n/a	n/a
Potential Tanks (100m)				n/a	n/a
Potentially Fuel-related Tanks (100m)				n/a	n/a
Underground Fuel Tanks (100m)				n/a	n/a
Historical Land Use Information					
Former Marshes					
Historical Flood Liabilities	pg 1			1	2
Potentially Contaminative Industrial Uses (Past Land Use)	pg 1				7
Potentially Infilled Land (Non-Water)	pg 1				2
Potentially Infilled Land (Water)	pg 1		1		

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
Historical Tanks and Energy Facilities					
Electrical Sub Station Facilities (100m)				n/a	n/a
Electricity Industry Facilities (100m)				n/a	n/a
Gas Industry Facilities (100m)				n/a	n/a
Gas Monitoring Facilities (100m)				n/a	n/a
Miscellaneous Power Facilities (100m)				n/a	n/a
Oil Industry Facilities (100m)				n/a	n/a
Petroleum Storage Facilities (100m)				n/a	n/a
Potential Tanks (100m)				n/a	n/a
Tanks (100m)	pg 2		2	n/a	n/a

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	Historical Flood Liabilities Use: Area liable to flood Date of Mapping: 1899	A13NW (N)	300	1	528451 118539
2	Historical Flood Liabilities Use: Area liable to flood Date of Mapping: 1899	A12NE (NW)	512	1	528107 118521
3	Historical Flood Liabilities Use: Area liable to flood Date of Mapping: 1899	A17SW (NW)	934	1	527688 118629
4	Potentially Contaminative Industrial Uses (Past Land Use) Use: Sewage Date of Mapping: 1879	A7NE (SW)	639	1	528157 117746
5	Potentially Contaminative Industrial Uses (Past Land Use) Use: Sewage Date of Mapping: 1963 - 1993	A12SE (W)	664	1	527880 118236
6	Potentially Contaminative Industrial Uses (Past Land Use) Use: Hospitals Date of Mapping: 1899 - 1963	A8NE (SE)	666	1	528871 117675
7	Potentially Contaminative Industrial Uses (Past Land Use) Use: Quarrying of sand & clay, operation of sand & gravel pits Date of Mapping: 1899	A8SE (S)	772	1	528820 117534
8	Potentially Contaminative Industrial Uses (Past Land Use) Use: Sewage Date of Mapping: 1899 - 1952	A7NE (SW)	774	1	527940 117771
9	Potentially Contaminative Industrial Uses (Past Land Use) Use: Hospitals Date of Mapping: 1993	A9SW (SE)	915	1	529123 117548
10	Potentially Contaminative Industrial Uses (Past Land Use) Use: Quarrying of sand & clay, operation of sand & gravel pits Date of Mapping: 1952	A7SE (SW)	953	1	527994 117477
11	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A8SE (S)	772	1	528820 117534
12	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A7SE (SW)	953	1	527994 117477
13	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1963	A13SE (E)	231	1	528761 118178

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
14	Tanks Scale of Mapping: 1:2,500 Date of Mapping: 1978	A13SW (W)	52	1	528493 118250
14	Tanks Scale of Mapping: 1:2,500 Date of Mapping: 1978	A13NW (NW)	56	1	528508 118297

No Historical Building Plans information available.

The following mapping has been analysed for Historical Land Use Information:

1:10,560	Mapsheet	Published Date
Sussex	038_00	1879
Sussex	039_00	1879
Sussex	038_NE	1899
Sussex	038_SE	1899
Sussex	039_NW	1899
Sussex	039_SW	1899
Sussex	038_NE	1912
Sussex	038_SE	1912
Sussex	039_NW	1912
Sussex	039_SW	1912
Sussex	039_NW	1938
Sussex	039_SW	1950
Sussex	038_NE	1951
Sussex	038_SE	1952
Ordnance Survey Plan	TQ21NE	1963
1:10,000	Mapsheet	Published Date
Ordnance Survey Plan	TQ21NE	1993

The following mapping has been analysed for Historical Tanks and Energy Facilities:

1:2,500	Mapsheet	Published Date
Ordnance Survey Plan	TQ2817	1956
Ordnance Survey Plan	TQ2818	1956
Ordnance Survey Plan	TQ2817	1974
Ordnance Survey Plan	TQ2818	1978