# A PHASE I DESK STUDY TO SUPPORT A PLANNING APPLICATION FOR THE RESIDENTIAL DEVELOPMENT OF:

# HOME FARM, WEST STREET, WALSHAM LE WILLOWS, SUFFOLK, IP31 3AP



CLIENT: Gemma Smith

AGENT: Tim Gudgeon

REFERENCE: RCER/23.137/Phasel

DATE: 19 May 2023

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#### 1. INTRODUCTON

A F Howland Associates Limited was instructed by Gemma Smith (the "Client") to carry out a Phase I Contamination Assessment to support a residential development at Home Farm, West Street, Walsham Le Willows, Suffolk, IP31 3AP (Drawing 23.137/PhaseI/01).

The proposed development will include the construction of residential properties in the east of the site with private gardens and water supply pipes.

This report presents pertinent background information, including environmental and historical data, and gives details of a walkover survey undertaken to confirm the current condition of the site and the surrounding area. The information is used to develop a preliminary risk assessment and conceptual model using the "source-pathway-receptor" principle, and provides a qualitative assessment of land contamination risks.

The report has been carried out in general accordance with accepted best practice and methodologies (BSI, 2017; EA, 2020; DCLG, 2013) and was prepared for the sole and exclusive use of the Client and its advisors. Other parties using the contained information do so at their own risk and any duty of care to those parties is specifically excluded subject to copyright as detailed below.

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### 2. SITE LOCATION

The site is located in the hamlet of West Street in Suffolk, approximately 1.7 km west of Walsham le Willows and 3.2 km south of Stanton. It is located at National Grid reference 598622, 270858 and at an approximate elevation of 45 m above Ordnance Datum (aOD).

#### GEOLOGY

The regional geology of the area as mapped by the British Geological Survey (BGS, 2023) includes bedrock of the Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation and Culver Chalk Formation (chalk) with crag deposits (sand) found overlying the Chalk to the north and south of the site. Superficial deposits comprise the Lowestoft Formation (diamiction – typically a sandy gravelly clay with subordinate lenses of sand).

#### 4. HYDROLOGY AND HYDROGEOLOGY

The Chalk and Crag deposits are designated principal aquifer status, and the superficial deposits of the Lowestoft Formation diamicton are designated secondary (undifferentiated) aquifer status. The site is not within any source protection zones, drinking water protected areas, or drinking water safeguard zone for groundwater or surface water.

Hydrogeological mapping for southern East Anglia (NERC, 1981) suggests that the potentiometric surface of the groundwater within the Chalk is likely to be at approximately 35 m depth.

The environmental database report indicates that there are ten groundwater abstraction licences within 2 km of the site, these are all historical. The closest was 667 m north east of the site which was used for general farming and domestic uses. There are no surface water or potable abstraction licences located within 2 km of the site.

A number of surface water features are located within 250 m of the site. The closest are a drainage ditch located 10 m south west of the site and two ponds adjacent to the site, one to the north and one in the south. Stowlangtoft stream is located approximately 140 m to the east of the site.

#### 5. HAZARDOUS GASES

The environmental database report indicates that the site is within an area where less than 1% of the properties have a radon level above the action level. Therefore, specific protection from radon gas is not required.

Another source of potentially hazardous gases can be from landfill sites, other waste treatment facilities and uncontrolled backfill of voids such as mineral extraction pits. However, the environmental database report indicates that there are no historical, active or recent landfill sites on or surrounding the site. There are also no infilled pits or other features identified either on the site or in the surrounding area.

#### 6. HISTORICAL INFORMATION

A review of historical maps and aerial images has been undertaken. A summary of the findings is presented below and the historical maps are appended.

### 6.1 Historical Maps

The earliest available mapping edition, dated 1883, surveyed the site to be in the hamlet of West Street. The site was occupied by two buildings in the east of the site area and is located north of *West House*. In the surrounding area there were a number of fields, residential dwellings and a few ponds. A stream is located approximately 140 m to the east of the site. There are no changes on the site until the 1978 edition which no longer identifies one of the buildings in the centre of the site. The 2010 edition shows the barn building in the east of the site.

### 6.2 Aerial Images

Aerial images<sup>1</sup> for the site area are available from 1999 to 2021. The 1999 image shows the site in its present day layout, with buildings, a residential property and a barn type building which cover most of the site area. Other areas of the site are vegetated with a few areas of hardstanding. Residential properties and fields are located adjacent to the site. The 2015 image shows a small barn to the south of the house. There were no other significant changes to the site over subsequent aerial images up to and including that of 2021.

<sup>&</sup>lt;sup>1</sup> Google Earth [accessed 15 May 2023]



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#### 7. WALKOVER SURVEY

A walkover survey was carried out on 16 May 2023 to enable identification of the current land use and other details not otherwise available from the archival information. The salient features are shown on Drawing 23.137/Phasel/02 in Appendix D.

The walkover survey found the site to comprise a roughly rectangular plot located to the east of West Street. The site lay within residential and agricultural surroundings. Residential properties were located to the north, west and south west of the site. Fields were found to the east. The site was bound by a wire fence to the east and a wooden fence with a few trees and shrubs to the north, south and west.

The site was surfaced with grass, a gravel track and driveway for the residential property and concrete hardstanding. The area of concrete hardstanding was located in the east on the site of the barn. The site and surrounding area was flat and level. The boundaries of the site were partially vegetated with shrubs and long grasses.

A thatched residential property was located in the west of the site area. This property has been present on the site since at least the late 1800s. A small barn building, which was built on site by 2015, was constructed of brick and timber. Both these buildings were surrounded by grass with an area of gravel driveway between them. Two manhole covers were located between the house and large barn.

The large barn in the east of the site was built from brick, metal and possible asbestos cement board, this had an open barn to one side. Concrete hardstanding was located beneath and surrounding the barn. Beneath the side awning was a fuel tank and chemical store, these were located on concrete and brick bases. The barn was empty with storage of general materials and some farm equipment found under the open barn. An electricity connection point and water pipe and tap were attached to the west side of the barn.

### 8. DISCUSSION OF ENVIRONMENTAL ISSUES

The proposed development will include the construction of residential properties in the east of the site with private gardens and water supply pipes.

The site is underlain by principal and secondary (undifferentiated) aquifers. There are no active groundwater or surface water abstractions within a 2.0 km radius of the site. The



nearest surface water courses are a drainage ditch located 10 m to the south west and two ponds located adjacent to the site to the north and south.

A review of historical information indicates that the site has been occupied by a residential property since the late 1880s with additional barn type buildings located on the site since the late 1990s. The walkover survey recorded three buildings to be present on the site, the house was identified on the 1883 mapping edition, the large barn on the 1999 aerial image and the smaller barn on the 2015 image. A fuel tank is located on the side of the large barn.

No significant potential sources of contamination have been identified but localised contamination could have arisen from past agricultural use of the site, various stages of construction and the storage and use of fuels.

There are no current off-site potential sources of contamination that are likely to have significantly impacted the site. No significant sources of ground gas have been identified on site or within the surrounding area. The site is not within an area where specific protection from radon gas is required.

#### 9. PRELIMINARY RISK ASSESSMENT AND CONCEPTUAL MODEL

Following a review of the archival information and the walkover survey a preliminary conceptual model was devised to determine the risk to appropriate receptors from any potential contamination hazards. This collates the evidence gained and establishes the potential linkages that may exist under the principle of "source-pathway-receptor" and is presented in Table 1 below.

A risk category is determined for the potential linkages and an assessment made of risk and the significance of that risk from professional judgement. Risk assessment classification is included in Appendix E. Where appropriate, further work is recommended to fully quantify any potential risk.

The generic risks posed to construction workers are included as part of this assessment to identify the potential impact upon construction and design proposals. It should be noted that an assessment of risk to construction workers suggests that only contamination of acute toxicity might represent an unacceptable risk to the health of construction workers but which should be managed through health and safety procedures.



Source of Contamination	Pathway	Receptor	Probability and Reasoning	Consequence and Reasoning	Risk Classification
	Direct contact,	Human end- users	<b>Low likelihood</b> – The historical use of the site as a farm may have introduced localised contamination	<b>Medium</b> – Human end-users and garden areas proposed	Low/Moderate Risk
	inhalation, ingestion	Construction workers	into the near surface soil that could impact end- users of the development.	<b>Mild</b> – Short term exposure but can be controlled by use of PPE and suitable hygiene practices	Low Risk
Potentially contaminated soils from	ninated and migration from Groundwater Unlikely – Significant mobile or leachable contamination is not anticipated. The site is		<b>Medium</b> – Principal aquifer and secondary (undifferentiated) aquifers underlie the site.	Low Risk	
historical and recent use	of leachate / mobile contaminants	Surface water	underlain by low permeability diamicton, which is likely to prevent the migration of contamination.	<b>Medium</b> – Surface water courses are sensitive ecosystems which can be adversely impacted by contaminants.	Low Risk
	Direct Contact	Water supply pipes	<b>Low likelihood</b> – Localised contamination that could permeate water supply pipes may be present	<b>Medium</b> – Human receptors	Low/Moderate Risk
	Direct contact	Buried concrete	Unlikely – Contamination that could be aggressive to buried concrete is unlikely be present	<b>Medium</b> – Robust receptor	Low Risk
Potentially infilled land on	Gas migration	Human end- users	Unlikely – No evidence of significant infilled ground	<b>Severe</b> - Acute risk to potential end users	Low Risk <sup>1</sup>
and off site	and accumulation	Structures	on site or in the surrounding area	·	Low Risk <sup>1</sup>
Radon Gas	in structures	Human end- users	Unlikely – Site outside of a radon affected area	Medium - Chronic risk to human end users	Low Risk

Notes: <sup>1</sup> a low risk has been determined based on the probability and consequence however, based on the lack of a ground gas source the risk is likely to be low or negligible.

Table 1 – Preliminary Conceptual Site Model and Risk Assessment



#### 10. SUMMARY AND RECOMMENDATIONS

- 1. A Phase I Desk Study and Contamination Assessment was carried out to support the residential development of Home Farm, West Street, Walsham Le Willows, Suffolk, IP31 3AP. The proposed development will include the construction of residential properties in the east of the site with gardens and water supply pipes.
- 2. The site is anticipated to be underlain by bedrock of the Chalk overlain by superficial deposits of the Lowestoft Formation (diamiction).
- 3. The Chalk is designated a principal aquifer status, and the Lowestoft Formation is designated secondary (undifferentiated) aquifer status. There are no active groundwater, surface water or potable water abstractions within a 2 km radius of the site. There are a number of surface water features with 250 m of the site, mainly drainage ditches and ponds. A stream was located 140 m to the east.
- 4. The site has historically been occupied by a residential property and barn buildings. Recent use of the site is for residential use and for use for farm storage and there is an area of fuel storage.
- 5. There is considered to be a low likelihood for the historical use of the site to have impacted the soil but isolated contamination may exist and a low to moderate risk to human end-users is concluded.
- 6. Given the short term exposure and the ability to introduce control measures such as protective equipment and hygiene precautions, a low risk has been identified to any construction workers who may have direct contact with, the inhalation of, or ingestion of potentially contaminated soils during development.
- 7. Given that the site is anticipated to be underlain by low permeability diamicton, groundwater and surface water are considered to be at low risk from the migration or percolation of mobile or leachable contamination.
- 8. There is considered a low likelihood for any organic contaminants to be present that could permeate water supply pipes but there could be isolated pockets and a low to moderate risk is identified.
- 9. There is a low risk to buildings and services from aggressive ground conditions that may pose a risk to buried concrete.
- 10. No viable sources of ground gas have been identified and the site is not within an area where radon protection measures are required.



11. In order to confirm the absence of significant or site-wide contamination that could impact the identified receptors, a limited intrusive investigation and quantitative risk assessment is recommended. This should include coverage of the proposed construction area of the site, whilst targeting any proposed garden areas and the route of water supply pipes.

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A F HOWLAND ASSOCIATES 19 May 2023

#### **APPENDIX A: REFERENCES**

BRITISH GEOLOGICAL SURVEY (BGS). 2023. British Geological Survey OpenGeoscience Website. Geology of Britain Viewer. www.bgs.ac.uk/opengeoscience

BRITISH STANDARDS INSTITUTION (BSI). 2017. BS 10175:2011+A2:2017. Code of practice for investigation of potentially contaminated Sites. British Standards Institution. London.

DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG). 2013. The Building Regulations - England - Approved Document C: Site preparation and resistance to contaminants and moisture, 2004 and incorporating 2010 and 2013 amendments.

ENVIRONMENT AGENCY (EA). 2020. Land Contamination Risk Management (LCRM). Accessed at: https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm. Environment Agency, Bristol.

NATIONAL ENVIRONMENTAL RESEARCH COUNCIL (NERC). 1981. Hydrogeological Map of Southern East Anglia. 1:125 000 Scale. NERC, London.

## **APPENDIX B: ENVIRONMENTAL DATABASE REPORT**

Enviro+Geo Insight Report (report reference GS-ZM7-OBA-2JG-NB8)





# HOME FARM, WEST STREET, WALSHAM LE WILLOWS, IP31 3AP

## **Order Details**

Date: 11/05/2023

Your ref: RCER\_23-137

Our Ref: GS-ZM7-OBA-2JG-NB8

## **Site Details**

Location: 598616 270852

Area: 0.58 ha

**Authority:** Mid Suffolk District Council *↗* 



**Summary of findings** 

**Aerial image** <u>p. 2</u> >

p. 8 >

OS MasterMap site plan

groundsure.com/insightuserguide ↗ p.13 >



# **Summary of findings**

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
<u>14</u> >	<u>1.1</u> >	<u>Historical industrial land uses</u> >	0	0	0	7	-
<u>15</u> >	<u>1.2</u> >	<u>Historical tanks</u> >	0	0	0	0	-
<u>15</u> >	<u>1.3</u> >	<u>Historical energy features</u> >	0	0	0	0	-
<u>15</u> >	<u>1.4</u> >	<u>Historical petrol stations</u> >	0	0	0	0	-
<u>16</u> >	<u>1.5</u> >	<u>Historical garages</u> >	0	0	0	1	-
<u>16</u> >	<u>1.6</u> >	Historical military land >	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
<u>17</u> >	<u>2.1</u> >	<u>Historical industrial land uses</u> >	0	0	0	8	-
<u>18</u> >	<u>2.2</u> >	<u>Historical tanks</u> >	0	0	0	0	-
<u>18</u> >	<u>2.3</u> >	<u>Historical energy features</u> >	0	0	0	0	-
<u>18</u> >	<u>2.4</u> >	<u>Historical petrol stations</u> >	0	0	0	0	-
<u>19</u> >	<u>2.5</u> >	<u>Historical garages</u> >	0	0	0	1	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
- 0 -	Section	waste and fandini	Offsite	0 30111	30-230111	230-300111	300-2000111
<u>20</u> >	3.1 >	Active or recent landfill >	0	0	0	0	-
							-
<u>20</u> >	<u>3.1</u> >	Active or recent landfill >	0	0	0	0	
20 > 20 >	3.1 > 3.2 >	Active or recent landfill >  Historical landfill (BGS records) >	0	0	0	0	
20 > 20 > 20 > 21 >	3.1 > 3.2 > 3.3 >	Active or recent landfill >  Historical landfill (BGS records) >  Historical landfill (LA/mapping records) >	0 0	0 0	0 0	0 0	
20 > 20 > 21 > 21 >	3.1 > 3.2 > 3.3 > 3.4 >	Active or recent landfill >  Historical landfill (BGS records) >  Historical landfill (LA/mapping records) >  Historical landfill (EA/NRW records) >	0 0 0	0 0 0	0 0 0	0 0 0	
20 > 20 > 21 > 21 > 21 >	3.1 > 3.2 > 3.3 > 3.4 > 3.5 >	Active or recent landfill >  Historical landfill (BGS records) >  Historical landfill (LA/mapping records) >  Historical landfill (EA/NRW records) >  Historical waste sites >	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	
20 > 20 > 21 > 21 > 21 > 21 > 21 >	3.1 > 3.2 > 3.3 > 3.4 > 3.5 > 3.6 >	Active or recent landfill >  Historical landfill (BGS records) >  Historical landfill (LA/mapping records) >  Historical landfill (EA/NRW records) >  Historical waste sites >  Licensed waste sites >	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	500-2000m
20 > 20 > 21 > 21 > 21 > 21 > 21 > 21 > 21 > 21	3.1 > 3.2 > 3.3 > 3.4 > 3.5 > 3.6 > 3.7 >	Active or recent landfill >  Historical landfill (BGS records) >  Historical landfill (LA/mapping records) >  Historical landfill (EA/NRW records) >  Historical waste sites >  Licensed waste sites >  Waste exemptions >	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	- - - -
20 > 20 > 21 > 21 > 21 > 21 > 21 > 21 > 21 > 21	3.1 > 3.2 > 3.3 > 3.4 > 3.5 > 3.6 > 3.7 > Section	Active or recent landfill >  Historical landfill (BGS records) >  Historical landfill (LA/mapping records) >  Historical landfill (EA/NRW records) >  Historical waste sites >  Licensed waste sites >  Waste exemptions >  Current industrial land use >	0 0 0 0 0 3	0 0 0 0 0 5	0 0 0 0 0 0	0 0 0 0 0	- - - -
20 > 20 > 21 > 21 > 21 > 21 > 21 > 21 > 21 > 21	3.1 > 3.2 > 3.3 > 3.4 > 3.5 > 3.6 > 3.7 > Section 4.1 >	Active or recent landfill >  Historical landfill (BGS records) >  Historical landfill (LA/mapping records) >  Historical landfill (EA/NRW records) >  Historical waste sites >  Licensed waste sites >  Waste exemptions >  Current industrial land use >  Recent industrial land uses >	0 0 0 0 0 3 On site	0 0 0 0 0 5 0-50m	0 0 0 0 0 0 0 50-250m	0 0 0 0 0 0 250-500m	- - - -
20 > 20 > 21 > 21 > 21 > 21 > 21 > 21 > 21 > 22 > 22	3.1 > 3.2 > 3.3 > 3.4 > 3.5 > 3.6 > 3.7 > Section 4.1 > 4.2 >	Active or recent landfill > Historical landfill (BGS records) > Historical landfill (LA/mapping records) > Historical landfill (EA/NRW records) > Historical waste sites > Licensed waste sites > Waste exemptions > Current industrial land use > Recent industrial land uses > Current or recent petrol stations >	0 0 0 0 0 3 On site	0 0 0 0 0 5 0-50m	0 0 0 0 0 0 50-250m	0 0 0 0 0 0 250-500m	- - - -



with any questions at: Date: 11 May 2023



<u>24</u> >	<u>4.6</u> >	Control of Major Accident Hazards (COMAH) >	0	0	0	0	-
<u>24</u> >	<u>4.7</u> >	Regulated explosive sites >	0	0	0	0	-
<u>24</u> >	<u>4.8</u> >	<u>Hazardous substance storage/usage</u> >	0	0	0	0	-
<u>24</u> >	<u>4.9</u> >	<u>Historical licensed industrial activities (IPC)</u> >	0	0	0	0	-
<u>24</u> >	<u>4.10</u> >	<u>Licensed industrial activities (Part A(1))</u> >	0	0	0	0	-
<u>25</u> >	<u>4.11</u> >	<u>Licensed pollutant release (Part A(2)/B)</u> >	0	0	0	0	-
<u>25</u> >	<u>4.12</u> >	Radioactive Substance Authorisations >	0	0	0	0	-
<u>25</u> >	<u>4.13</u> >	<u>Licensed Discharges to controlled waters</u> >	0	0	0	0	-
<u>25</u> >	<u>4.14</u> >	Pollutant release to surface waters (Red List) >	0	0	0	0	-
<u>25</u> >	<u>4.15</u> >	Pollutant release to public sewer >	0	0	0	0	-
<u>26</u> >	<u>4.16</u> >	<u>List 1 Dangerous Substances</u> >	0	0	0	0	-
<u>26</u> >	<u>4.17</u> >	<u>List 2 Dangerous Substances</u> >	0	0	0	0	-
<u>26</u> >	<u>4.18</u> >	Pollution Incidents (EA/NRW) >	0	0	0	0	-
<u>26</u> >	<u>4.19</u> >	Pollution inventory substances >	0	0	0	0	-
<u>26</u> >	<u>4.20</u> >	<u>Pollution inventory waste transfers</u> >	0	0	0	0	-
<pre>26 &gt; 27 &gt;</pre>	<u>4.20</u> > <u>4.21</u> >	<u>Pollution inventory waste transfers</u> > <u>Pollution inventory radioactive waste</u> >	0	0	0	0	-
							- - 500-2000m
<u>27</u> >	4.21 >	Pollution inventory radioactive waste >	On site	0	0 50-250m	0	- 500-2000m
<u>27</u> >	<u>4.21</u> >	Pollution inventory radioactive waste >  Hydrogeology >	On site	0 0-50m	0 50-250m	0	- 500-2000m
27 > Page 28 >	4.21 > Section 5.1 >	Pollution inventory radioactive waste >  Hydrogeology >  Superficial aquifer >	On site Identified (	0 0-50m within 500m	0 50-250m	0	- 500-2000m
27 > Page 28 > 30 >	4.21 > Section 5.1 > 5.2 >	Pollution inventory radioactive waste >  Hydrogeology >  Superficial aquifer >  Bedrock aquifer >	On site Identified (	0 0-50m within 500m within 500m	0 50-250m	0	- 500-2000m
27 > Page 28 > 30 > 31 >	4.21 > Section 5.1 > 5.2 > 5.3 >	Pollution inventory radioactive waste >  Hydrogeology >  Superficial aquifer >  Bedrock aquifer >  Groundwater vulnerability >	On site Identified ( Identified (	0 0-50m within 500m within 50m) within 0m)	0 50-250m	0	- 500-2000m
27 > Page  28 > 30 > 31 > 32 >	4.21 > Section 5.1 > 5.2 > 5.3 > 5.4 >	Pollution inventory radioactive waste >  Hydrogeology >  Superficial aquifer >  Bedrock aquifer >  Groundwater vulnerability >  Groundwater vulnerability - soluble rock risk >	On site Identified ( Identified ( Identified (	0 0-50m within 500m within 50m) within 0m)	0 50-250m	0	500-2000m
27 > Page  28 > 30 > 31 > 32 > 32 >	4.21 > Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 >	Pollution inventory radioactive waste >  Hydrogeology >  Superficial aquifer >  Bedrock aquifer >  Groundwater vulnerability >  Groundwater vulnerability- soluble rock risk >  Groundwater vulnerability- local information >	On site Identified ( Identified ( Identified ( Identified ( None (with	0 0-50m within 500m within 50m) within 0m) in 0m)	0 50-250m )	0 250-500m	
27 > Page  28 > 30 > 31 > 32 > 32 > 33 >	4.21 > Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 > 5.6 >	Pollution inventory radioactive waste >  Hydrogeology >  Superficial aquifer >  Bedrock aquifer >  Groundwater vulnerability >  Groundwater vulnerability- soluble rock risk >  Groundwater vulnerability- local information >  Groundwater abstractions >	On site Identified ( Identified ( Identified ( Identified ( None (with	0 0-50m within 500m within 500m within 50m) within 0m)	0 50-250m )	0 250-500m	10
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27 > Page  28 > 30 > 31 > 32 > 32 > 33 > 36 >	4.21 > Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 > 5.6 > 5.7 > 5.8 >	Pollution inventory radioactive waste >  Hydrogeology >  Superficial aquifer >  Bedrock aquifer >  Groundwater vulnerability >  Groundwater vulnerability- soluble rock risk >  Groundwater vulnerability- local information >  Groundwater abstractions >  Surface water abstractions >  Potable abstractions >	On site  Identified ( Identified ( Identified ( Identified ( Identified ( On site	0 0-50m within 500m within 500m within 50m) within 0m) 0 0 0	0 50-250m ) ) 0 0	0 250-500m 0 0	10 0
27 > Page  28 > 30 > 31 > 32 > 32 > 33 > 36 > 36 > 36 >	4.21 > Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 > 5.6 > 5.7 > 5.8 > 5.9 >	Pollution inventory radioactive waste >  Hydrogeology >  Superficial aquifer >  Bedrock aquifer >  Groundwater vulnerability >  Groundwater vulnerability- soluble rock risk >  Groundwater vulnerability- local information >  Groundwater abstractions >  Surface water abstractions >  Potable abstractions >  Source Protection Zones >	On site  Identified ( Identified ( Identified ( Identified ( Identified ( On site	0 0-50m within 500m within 500m within 50m) within 0m) 0 0 0	0 50-250m ) ) 0 0 0	0 250-500m 0 0	10 0
27 > Page  28 > 30 > 31 > 32 > 32 > 36 > 36 > 36 > 36 >	4.21 > Section 5.1 > 5.2 > 5.3 > 5.4 > 5.5 > 5.6 > 5.7 > 5.8 > 5.9 > 5.10 >	Pollution inventory radioactive waste >  Hydrogeology >  Superficial aquifer >  Bedrock aquifer >  Groundwater vulnerability >  Groundwater vulnerability- soluble rock risk >  Groundwater vulnerability- local information >  Groundwater abstractions >  Surface water abstractions >  Potable abstractions >  Source Protection Zones (confined aquifer) >	On site  Identified ( Identified ( Identified ( Identified ( One (with or	0 0-50m within 500m within 500m within 50m) within 0m) 0 0 0 0	0 50-250m ) ) )	0 250-500m 0 0 0	10 0 0 -





<u>38</u> >	<u>6.2</u> >	Surface water features >	0	1	2	_	_
<u>38</u> >	<u>6.3</u> >	WFD Surface water body catchments >	1	-	-	-	_
<u>39</u> >	<u>6.4</u> >	WFD Surface water bodies >	0	0	1	-	_
<u>39</u> >	<u>6.5</u> >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
<u>40</u> >	<u>7.1</u> >	Risk of flooding from rivers and the sea >	None (with	in 50m)			
<u>40</u> >	<u>7.2</u> >	<u>Historical Flood Events</u> >	0	0	0	-	-
<u>40</u> >	<u>7.3</u> >	Flood Defences >	0	0	0	-	-
<u>41</u> >	<u>7.4</u> >	Areas Benefiting from Flood Defences >	0	0	0	-	-
<u>41</u> >	<u>7.5</u> >	Flood Storage Areas >	0	0	0	-	-
<u>42</u> >	<u>7.6</u> >	Flood Zone 2 >	None (with	in 50m)			
<u>42</u> >	<u>7.7</u> >	Flood Zone 3 >	None (with	in 50m)			
Page	Section	Surface water flooding >					
<u>43</u> >	<u>8.1</u> >	Surface water flooding >	1 in 30 yea	r, Greater tha	an 1.0m (wit	hin 50m)	
Page	Section	Groundwater flooding >					
Page <u>45</u> >	Section <b>9.1</b> >	Groundwater flooding >  Groundwater flooding >	Low (within	n 50m)			
			Low (within	n 50m) 0-50m	50-250m	250-500m	500-2000m
<u>45</u> >	<u>9.1</u> >	Groundwater flooding >			50-250m	250-500m	500-2000m
<u>45</u> >	<u>9.1</u> >	Groundwater flooding >  Environmental designations >	On site	0-50m			
45 > Page 46 >	9.1 > Section 10.1 >	Groundwater flooding >  Environmental designations >  Sites of Special Scientific Interest (SSSI) >	On site	0-50m	0	0	4
45 > Page 46 > 47 >	9.1 > Section 10.1 > 10.2 >	Groundwater flooding >  Environmental designations >  Sites of Special Scientific Interest (SSSI) >  Conserved wetland sites (Ramsar sites) >	On site  0	0-50m 0	0	0	4
45 > Page 46 > 47 >	9.1 > Section  10.1 > 10.2 > 10.3 >	Groundwater flooding >  Environmental designations >  Sites of Special Scientific Interest (SSSI) >  Conserved wetland sites (Ramsar sites) >  Special Areas of Conservation (SAC) >	On site  0 0 0	0-50m 0 0	0 0	0 0	<b>4</b> 0 0
45 > Page 46 > 47 > 47 >	9.1 > Section  10.1 > 10.2 > 10.3 > 10.4 >	Groundwater flooding >  Environmental designations >  Sites of Special Scientific Interest (SSSI) >  Conserved wetland sites (Ramsar sites) >  Special Areas of Conservation (SAC) >  Special Protection Areas (SPA) >	On site  0  0  0  0	0-50m 0 0	0 0 0	0 0 0	4 0 0
45 > Page 46 > 47 > 47 > 47 > 48 >	9.1 > Section  10.1 > 10.2 > 10.3 > 10.4 > 10.5 >	Groundwater flooding >  Environmental designations >  Sites of Special Scientific Interest (SSSI) >  Conserved wetland sites (Ramsar sites) >  Special Areas of Conservation (SAC) >  Special Protection Areas (SPA) >  National Nature Reserves (NNR) >	On site  0 0 0 0 0	0-50m 0 0 0	0 0 0 0 0	0 0 0 0 0	4 0 0 0
45 > Page 46 > 47 > 47 > 47 > 48 >	9.1 > Section  10.1 > 10.2 > 10.3 > 10.4 > 10.5 >	Groundwater flooding >  Environmental designations >  Sites of Special Scientific Interest (SSSI) >  Conserved wetland sites (Ramsar sites) >  Special Areas of Conservation (SAC) >  Special Protection Areas (SPA) >  National Nature Reserves (NNR) >  Local Nature Reserves (LNR) >	On site  0 0 0 0 0 0 0	0-50m 0 0 0 0	0 0 0 0 0	0 0 0 0 0	4 0 0 0 0
45 > Page 46 > 47 > 47 > 47 > 48 > 48 >	9.1 > Section  10.1 > 10.2 > 10.3 > 10.4 > 10.5 > 10.6 > 10.7 >	Groundwater flooding >  Environmental designations >  Sites of Special Scientific Interest (SSSI) >  Conserved wetland sites (Ramsar sites) >  Special Areas of Conservation (SAC) >  Special Protection Areas (SPA) >  National Nature Reserves (NNR) >  Local Nature Reserves (LNR) >  Designated Ancient Woodland >	On site  0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	4 0 0 0 0 0 0 5
45 > Page 46 > 47 > 47 > 47 > 48 > 48 > 48 > 49 >	9.1 > Section  10.1 > 10.2 > 10.3 > 10.4 > 10.5 > 10.6 > 10.7 > 10.8 >	Groundwater flooding >  Environmental designations >  Sites of Special Scientific Interest (SSSI) >  Conserved wetland sites (Ramsar sites) >  Special Areas of Conservation (SAC) >  Special Protection Areas (SPA) >  National Nature Reserves (NNR) >  Local Nature Reserves (LNR) >  Designated Ancient Woodland >  Biosphere Reserves >	On site  0 0 0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	4 0 0 0 0 0 5
45 > Page 46 > 47 > 47 > 47 > 48 > 48 > 48 > 49 >	9.1 > Section  10.1 > 10.2 > 10.3 > 10.4 > 10.5 > 10.6 > 10.7 > 10.8 > 10.9 >	Groundwater flooding >  Environmental designations >  Sites of Special Scientific Interest (SSSI) >  Conserved wetland sites (Ramsar sites) >  Special Areas of Conservation (SAC) >  Special Protection Areas (SPA) >  National Nature Reserves (NNR) >  Local Nature Reserves (LNR) >  Designated Ancient Woodland >  Biosphere Reserves >  Forest Parks >	On site  0 0 0 0 0 0 0 0 0 0 0	0-50m  0  0  0  0  0  0  0  0  0  0	0 0 0 0 0 0	0 0 0 0 0 0	4 0 0 0 0 0 5 0
45 > Page 46 > 47 > 47 > 48 > 48 > 48 > 49 > 49 >	9.1 > Section  10.1 > 10.2 > 10.3 > 10.4 > 10.5 > 10.6 > 10.7 > 10.8 > 10.9 >	Groundwater flooding >  Environmental designations >  Sites of Special Scientific Interest (SSSI) >  Conserved wetland sites (Ramsar sites) >  Special Areas of Conservation (SAC) >  Special Protection Areas (SPA) >  National Nature Reserves (NNR) >  Local Nature Reserves (LNR) >  Designated Ancient Woodland >  Biosphere Reserves >  Forest Parks >  Marine Conservation Zones >	On site  0 0 0 0 0 0 0 0 0 0 0 0	0-50m  0  0  0  0  0  0  0  0  0  0  0			4 0 0 0 0 0 5 0





<u>50</u> >	<u>10.13</u> >	Possible Special Areas of Conservation (pSAC) >	0	0	0	0	0
<u>50</u> >	<u>10.14</u> >	Potential Special Protection Areas (pSPA) >	0	0	0	0	0
<u>50</u> >	<u>10.15</u> >	Nitrate Sensitive Areas >	0	0	0	0	0
<u>50</u> >	<u>10.16</u> >	Nitrate Vulnerable Zones >	1	0	0	0	1
<u>52</u> >	<u>10.17</u> >	SSSI Impact Risk Zones >	1	-	-	-	-
<u>53</u> >	<u>10.18</u> >	SSSI Units >	0	0	0	0	4
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
<u>55</u> >	<u>11.1</u> >	World Heritage Sites >	0	0	0	-	-
<u>56</u> >	<u>11.2</u> >	Area of Outstanding Natural Beauty >	0	0	0	-	-
<u>56</u> >	<u>11.3</u> >	National Parks >	0	0	0	-	-
<u>56</u> >	<u>11.4</u> >	<u>Listed Buildings</u> >	1	2	3	-	-
<u>57</u> >	<u>11.5</u> >	Conservation Areas >	0	0	0	-	-
<u>57</u> >	<u>11.6</u> >	<u>Scheduled Ancient Monuments</u> >	0	0	0	-	-
<u>57</u> >	<u>11.7</u> >	Registered Parks and Gardens >	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
<u>58</u> >	<u>12.1</u> >	<u>Agricultural Land Classification</u> >	Grade 3 (wi	ithin 250m)			
<u>59</u> >	<u>12.2</u> >	Open Access Land >	0	0	0	-	-
<u>59</u> >	<u>12.3</u> >	<u>Tree Felling Licences</u> >	0	0	2	-	-
<u>59</u> >	<u>12.4</u> >	Environmental Stewardship Schemes >	0	0	2	-	-
<u>60</u> >	<u>12.5</u> >	Countryside Stewardship Schemes >	0	0	3	-	-
Page	Section	<u>Habitat designations</u> >	On site	0-50m	50-250m	250-500m	500-2000m
<u>61</u> >	<u>13.1</u> >	Priority Habitat Inventory >	0	0	10	-	-
<u>62</u> >	<u>13.2</u> >	<u>Habitat Networks</u> >	0	0	0	-	-
<u>62</u> >	<u>13.3</u> >	Open Mosaic Habitat >	0	0	0	-	-
<u>62</u> >	<u>13.4</u> >	<u>Limestone Pavement Orders</u> >	0	0	0	-	-
Page	Section	<u>Geology 1:10,000 scale</u> >	On site	0-50m	50-250m	250-500m	500-2000m
<u>63</u> >	<u>14.1</u> >	10k Availability >	Identified (	within 500m	)		
<u>64</u> >	<u>14.2</u> >	Artificial and made ground (10k) >	0	0	0	0	-
<u>65</u> >	<u>14.3</u> >	Superficial geology (10k) >	0	0	0	0	-





<u>65</u> >	<u>14.4</u> >	Landslip (10k) >	0	0	0	0	-
<u>66</u> >	<u>14.5</u> >	Bedrock geology (10k) >	0	0	0	0	-
<u>66</u> >	<u>14.6</u> >	Bedrock faults and other linear features (10k) >	0	0	0	0	-
Page	Section	<u>Geology 1:50,000 scale</u> >	On site	0-50m	50-250m	250-500m	500-2000m
<u>67</u> >	<u>15.1</u> >	50k Availability >	Identified (	within 500m	)		
<u>68</u> >	<u>15.2</u> >	Artificial and made ground (50k) >	0	0	0	0	-
<u>68</u> >	<u>15.3</u> >	Artificial ground permeability (50k) >	0	0	-	-	-
<u>69</u> >	<u>15.4</u> >	Superficial geology (50k) >	1	1	6	1	-
<u>70</u> >	<u>15.5</u> >	Superficial permeability (50k) >	Identified (	within 50m)			
<u>70</u> >	<u>15.6</u> >	<u>Landslip (50k)</u> >	0	0	0	0	-
<u>71</u> >	<u>15.7</u> >	<u>Landslip permeability (50k)</u> >	None (with	in 50m)			
<u>72</u> >	<u>15.8</u> >	Bedrock geology (50k) >	1	1	1	0	-
<u>73</u> >	<u>15.9</u> >	Bedrock permeability (50k) >	Identified (	within 50m)			
<u>73</u> >	<u>15.10</u> >	Bedrock faults and other linear features (50k) >	0	0	0	0	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
<u>74</u> >	<u>16.1</u> >	BGS Boreholes >	0	0	0	-	-
Page	Section	Natural ground subsidence >					
<u>75</u> >	<u>17.1</u> >	Shrink swell clays >	Low (within	50m)			
<u>76</u> >	<u>17.2</u> >	Running sands >	Very low (w	vithin 50m)			
<u>77</u> >	<u>17.3</u> >	Compressible deposits >	Negligible (	within 50m)			
<u>78</u> >	<u>17.4</u> >	Collapsible deposits >	Very low (w	vithin 50m)			
<u>79</u> >	<u>17.5</u> >	<u>Landslides</u> >	Very low (w	vithin 50m)			
<u>80</u> >	<u>17.6</u> >	Ground dissolution of soluble rocks >	Low (withir	50m)			
<u>80</u> >	17.6 > Section	<u>Mining, ground workings and natural cavities</u> >	Low (within	0-50m)	50-250m	250-500m	500-2000m
		Mining, ground workings and natural cavities		·	50-250m	<b>250-500</b> m	500-2000m
Page	Section	Mining, ground workings and natural cavities >	On site	0-50m			500-2000m -
Page <u>82</u> >	Section <u>18.1</u> >	Mining, ground workings and natural cavities > Natural cavities >	On site	0-50m	0	0	500-2000m - -
Page <u>82</u> > <u>83</u> >	Section  18.1 >  18.2 >	Mining, ground workings and natural cavities >  Natural cavities >  BritPits >	On site  0	0-50m 0	0	0	500-2000m - - -





<u>84</u> >	<u>18.6</u> >	Non-coal mining >	1	0	0	0	0
<u>84</u> >	<u>18.7</u> >	Mining cavities >	0	0	0	0	0
<u>84</u> >	<u>18.8</u> >	JPB mining areas >	None (with	in 0m)			
<u>84</u> >	<u>18.9</u> >	Coal mining >	None (with	in 0m)			
<u>85</u> >	<u>18.10</u> >	Brine areas >	None (with	in 0m)			
<u>85</u> >	<u>18.11</u> >	Gypsum areas >	None (with	in 0m)			
<u>85</u> >	<u>18.12</u> >	Tin mining >	None (with	in 0m)			
<u>85</u> >	<u>18.13</u> >	Clay mining >	None (with	in 0m)			
Page	Section	Radon >					
<u>86</u> >	<u>19.1</u> >	Radon >	Less than 1	% (within 0r	n)		
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
<u>88</u> >	<u>20.1</u> >	BGS Estimated Background Soil Chemistry >	1	2	-	-	-
<u>88</u> >	<u>20.2</u> >	BGS Estimated Urban Soil Chemistry >	0	0	-	-	-
<u>88</u> >	<u>20.3</u> >	BGS Measured Urban Soil Chemistry >	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
<u>89</u> >	<u>21.1</u> >	<u>Underground railways (London)</u> >	0	0	0	-	-
<u>89</u> >	<u>21.2</u> >	<u>Underground railways (Non-London)</u> >	0	0	0	-	-
<u>89</u> >	<u>21.3</u> >	Railway tunnels >	0	0	0	-	-
<u>89</u> >	<u>21.4</u> >	<u>Historical railway and tunnel features</u> >	0	0	0	-	-
<u>89</u> >	<u>21.5</u> >	Royal Mail tunnels >	0	0	0	-	-
<u>90</u> >	<u>21.6</u> >	<u>Historical railways</u> >	0	0	0	-	-
<u>90</u> >	<u>21.7</u> >	Railways >	0	0	0	-	-
<u>90</u> >	<u>21.8</u> >	Crossrail 1 >	0	0	0	0	-
<u>90</u> >	<u>21.9</u> >	<u>Crossrail 2</u> >	0	0	0	0	-
<u>90</u> >	<u>21.10</u> >	<u>HS2</u> >	0	0	0	0	-





# **Recent aerial photograph**

**Groundsure** 



Capture Date: 02/06/2021

Site Area: 0.58ha





# Recent site history - 2018 aerial photograph



Capture Date: 05/05/2018

Site Area: 0.58ha





# Recent site history - 2014 aerial photograph



Capture Date: 18/05/2014

Site Area: 0.58ha





# Recent site history - 2008 aerial photograph



Capture Date: 25/07/2008

Site Area: 0.58ha





# Recent site history - 1999 aerial photograph



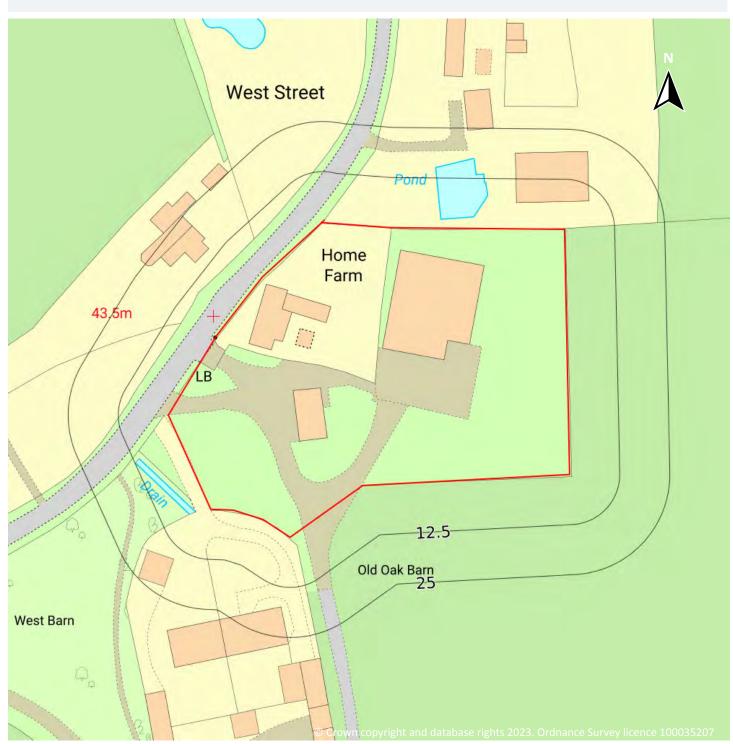
Capture Date: 25/06/1999

Site Area: 0.58ha





# OS MasterMap site plan

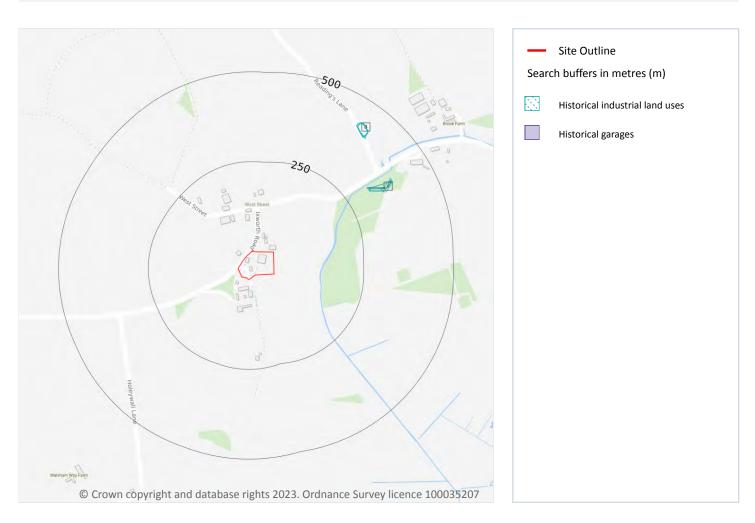


Site Area: 0.58ha





# 1 Past land use



### 1.1 Historical industrial land uses

### Records within 500m 7

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on page 14 >

ID	Location	Land use	Dates present	Group ID
А	316m NE	Unspecified Ground Workings	1982	2060700





ID	Location	Land use	Dates present	Group ID
А	317m NE	Unspecified Pit	1883	2091402
А	317m NE	Unspecified Pit	1950	2111601
В	405m NE	Unspecified Pit	1905	2080783
В	406m NE	Unspecified Pit	1950	2110816
В	407m NE	Unspecified Pit	1982	2067402
В	407m NE	Unspecified Pit	1950	2069346

This data is sourced from Ordnance Survey / Groundsure.

### 1.2 Historical tanks

Records within 500m 0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

## 1.3 Historical energy features

Records within 500m 0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

## 1.4 Historical petrol stations

Records within 500m

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.





This data is sourced from Ordnance Survey / Groundsure.

## 1.5 Historical garages

Records within 500m

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on page 14 >

ID	Location	Land use	Dates present	Group ID
А	316m NE	Garage	1975	69407

This data is sourced from Ordnance Survey / Groundsure.

## 1.6 Historical military land

Records within 500m 0

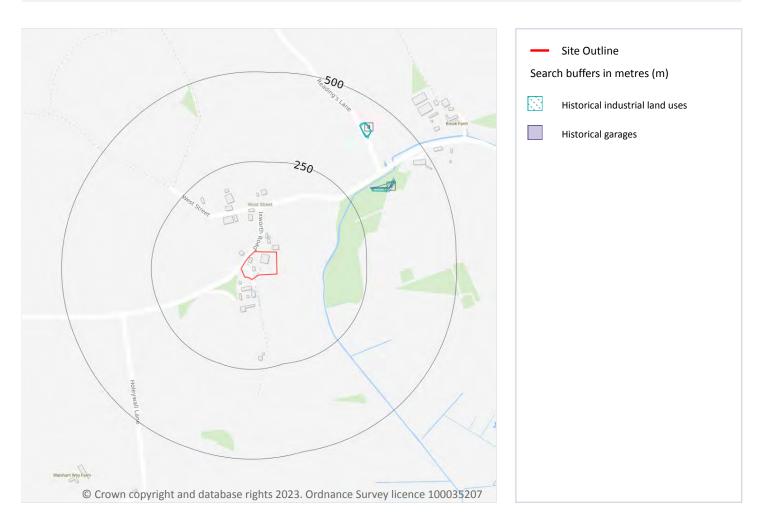
Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.





# 2 Past land use - un-grouped



### 2.1 Historical industrial land uses

Records within 500m 8

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on page 17 >

ID	Location	Land Use	Date	Group ID
А	316m NE	Unspecified Ground Workings	1982	2060700
А	317m NE	Unspecified Pit	1950	2111601
Α	317m NE	Unspecified Pit	1883	2091402





ID	Location	Land Use	Date	Group ID
В	405m NE	Unspecified Pit	1905	2080783
В	405m NE	Unspecified Pit	1905	2080783
В	406m NE	Unspecified Pit	1950	2110816
В	407m NE	Unspecified Pit	1982	2067402
В	407m NE	Unspecified Pit	1950	2069346

This data is sourced from Ordnance Survey / Groundsure.

### 2.2 Historical tanks

Records within 500m 0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

## 2.3 Historical energy features

Records within 500m 0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

## 2.4 Historical petrol stations

Records within 500m 0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.





1

# 2.5 Historical garages

Records within 500m

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on page 17 >

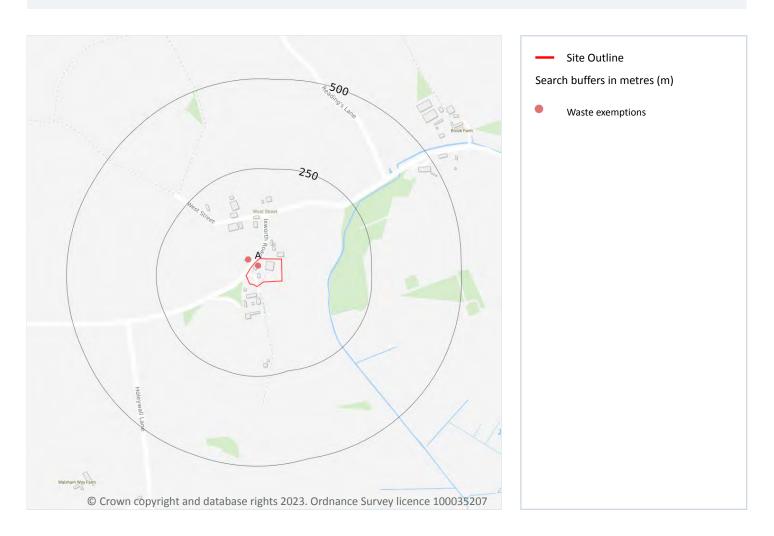
ID	Location	Land Use	Date	Group ID
А	316m NE	Garage	1975	69407

This data is sourced from Ordnance Survey / Groundsure.





# 3 Waste and landfill



## 3.1 Active or recent landfill

Records within 500m 0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

## 3.2 Historical landfill (BGS records)

Records within 500m 0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.





## 3.3 Historical landfill (LA/mapping records)

Records within 500m 0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

## 3.4 Historical landfill (EA/NRW records)

Records within 500m 0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

#### 3.5 Historical waste sites

Records within 500m

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

#### 3.6 Licensed waste sites

Records within 500m 0

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

## 3.7 Waste exemptions

Records within 500m 8

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on page 20 >





ID	Location	Site	Reference	Category	Sub- Category	Description
Α	On site	HOME FARM, WEST STREET, WALSHAM-LE- WILLOWS, BURY ST. EDMUNDS, IP31 3AP	WEX129883	Disposing of waste exemption	On a farm	Burning waste in the open
A	On site	HOME FARM, WEST STREET, WALSHAM-LE- WILLOWS, BURY ST. EDMUNDS, IP31 3AP	WEX129883	Storing waste exemption	On a farm	Storage of waste in secure containers
Α	On site	HOME FARM, WEST STREET, WALSHAM-LE- WILLOWS, BURY ST. EDMUNDS, IP31 3AP	WEX129883	Storing waste exemption	On a farm	Storage of waste in a secure place
А	21m NW	Home Farm West Street BURY ST. EDMUNDS Suffolk IP31 3AP	EPR/UF0933H C/A001	Disposing of waste exemption	Agricultur al Waste Only	Deposit of waste from dredging of inland waters
А	21m NW	Home Farm West Street BURY ST. EDMUNDS Suffolk IP31 3AP	EPR/UF0933H C/A001	Disposing of waste exemption	Agricultur al Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
А	21m NW	Home Farm West Street BURY ST. EDMUNDS Suffolk IP31 3AP	EPR/UF0933H C/A001	Disposing of waste exemption	Agricultur al Waste Only	Burning waste in the open
А	21m NW	Home Farm West Street BURY ST. EDMUNDS Suffolk IP31 3AP	EPR/UF0933H C/A001	Treating waste exemption	Agricultur al Waste Only	Preparatory treatments (baling, sorting, shredding etc)
А	21m NW	Home Farm West Street BURY ST. EDMUNDS Suffolk IP31 3AP	EPR/UF0933H C/A001	Treating waste exemption	Agricultur al Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

This data is sourced from the Environment Agency and Natural Resources Wales.





# **4 Current industrial land use**

### 4.1 Recent industrial land uses

Records within 250m 0

Current potentially contaminative industrial sites.

This data is sourced from Ordnance Survey.

## 4.2 Current or recent petrol stations

Records within 500m 0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

## 4.3 Electricity cables

Records within 500m 0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

## 4.4 Gas pipelines

Records within 500m 0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

### 4.5 Sites determined as Contaminated Land

Records within 500m

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.





## 4.6 Control of Major Accident Hazards (COMAH)

Records within 500m 0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

## 4.7 Regulated explosive sites

Records within 500m 0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

## 4.8 Hazardous substance storage/usage

Records within 500m

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

## 4.9 Historical licensed industrial activities (IPC)

Records within 500m 0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

### 4.10 Licensed industrial activities (Part A(1))

Records within 500m 0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.





## 4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m 0

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from Local Authority records.

#### 4.12 Radioactive Substance Authorisations

Records within 500m 0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

## 4.13 Licensed Discharges to controlled waters

Records within 500m 0

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

#### 4.14 Pollutant release to surface waters (Red List)

Records within 500m 0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

#### 4.15 Pollutant release to public sewer

Records within 500m 0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.





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### 4.16 List 1 Dangerous Substances

Records within 500m 0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

### **4.17 List 2 Dangerous Substances**

Records within 500m

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

## 4.18 Pollution Incidents (EA/NRW)

Records within 500m 0

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

This data is sourced from the Environment Agency and Natural Resources Wales.

### 4.19 Pollution inventory substances

Records within 500m 0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

## 4.20 Pollution inventory waste transfers

Records within 500m 0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.





## **4.21** Pollution inventory radioactive waste

Records within 500m 0

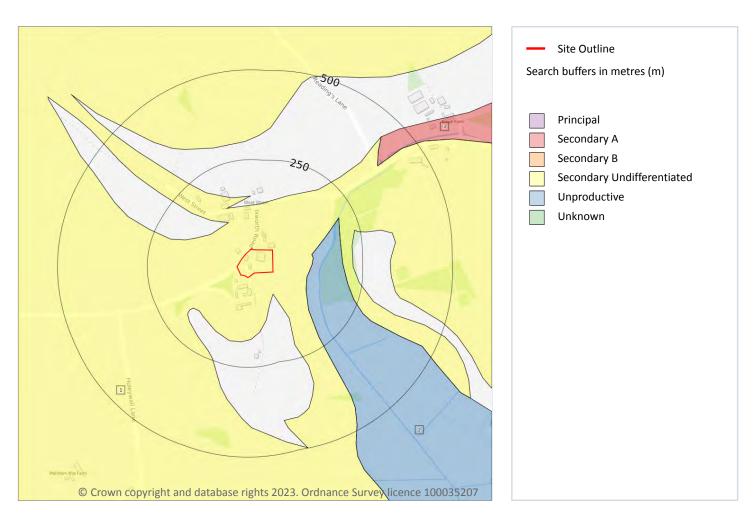
The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.





# **5 Hydrogeology - Superficial aquifer**



## **5.1** Superficial aquifer

Records within 500m

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 28 >

	ID	Location	Designation	Description		
1		On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type		
	2 95m E Unprodu		Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow		





### HOME FARM, WEST STREET, WALSHAM LE WILLOWS, IP31 3AP

Ref: GS-ZM7-OBA-2JG-NB8 Your ref: RCER\_23-137 Grid ref: 598616 270852

ID	Location	Designation	Description
3	375m NE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.





# **Bedrock aquifer**



## **5.2** Bedrock aquifer

Records within 500m

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on page 30 >

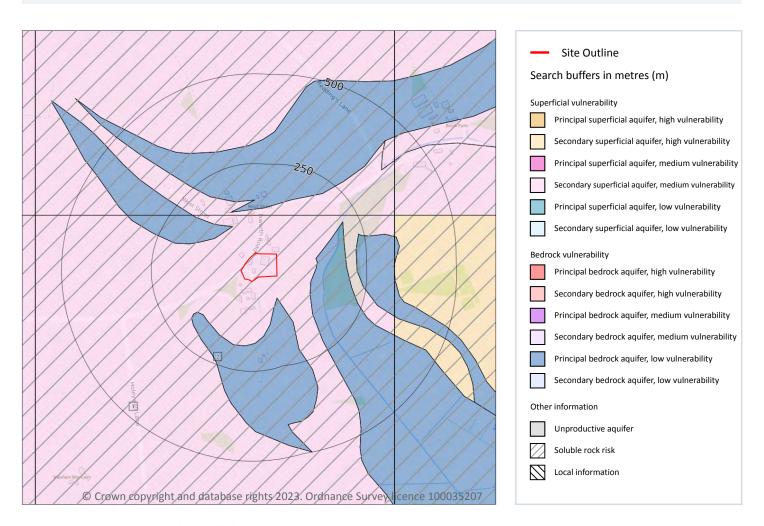
ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.





# **Groundwater vulnerability**



## **5.3 Groundwater vulnerability**

Records within 50m 1

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium Intermediate between high and low vulnerability.
- Low Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on page 31 >





ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

## 5.4 Groundwater vulnerability- soluble rock risk

Records on site 1

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
2	Very significant soluble rocks are likely to be present with a high possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, especially in adverse conditions such as concentrated surface or subsurface water flow.	1.0%

This data is sourced from the British Geological Survey and the Environment Agency.

## 5.5 Groundwater vulnerability- local information

Records on site

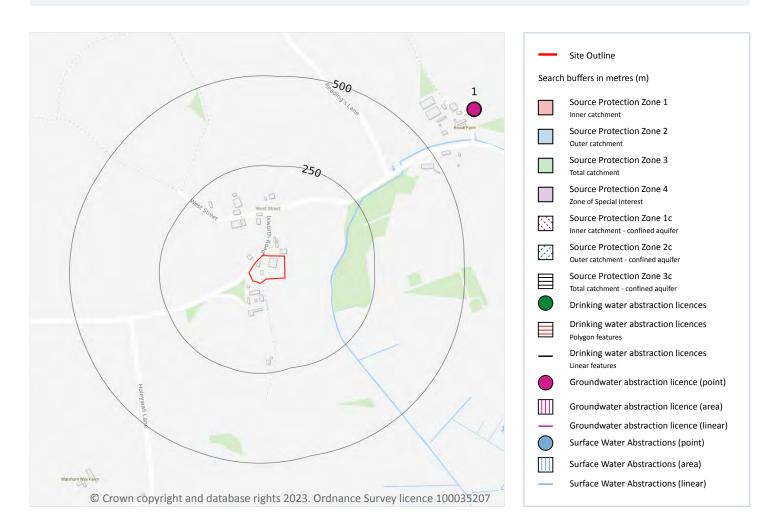
This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on <a href="mailto:enquiries@environment-agency.gov.uk">enquiries@environment-agency.gov.uk</a>.

This data is sourced from the British Geological Survey and the Environment Agency.





## **Abstractions and Source Protection Zones**



#### 5.6 Groundwater abstractions

Records within 2000m 10

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on page 33 >





ID	Location	Details	
1	667m NE	Status: Historical Licence No: 6/33/41/*G/0116 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL 1 AT BROOK FARM Data Type: Point Name: MARTINEAU Easting: 599200 Northing: 271300	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/07/1970 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1970 Version End Date: -
-	833m N	Status: Historical Licence No: 6/33/41/*G/0072 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE AT POTASH FARM Data Type: Point Name: HOLDEN Easting: 598400 Northing: 271700	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/07/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1966 Version End Date: -
-	1073m E	Status: Historical Licence No: 6/33/41/*G/0116 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL 3 AT INDUSTRIAL HOME Data Type: Point Name: MARTINEAU Easting: 599700 Northing: 271200	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/07/1970 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1970 Version End Date: -
-	1126m N	Status: Historical Licence No: 6/33/41/*G/0070 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHLE AT WRENSHALL FARM Data Type: Point Name: RUDDERHAM Easting: 598400 Northing: 272000	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/07/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1966 Version End Date: -
-	1147m E	Status: Historical Licence No: 6/33/41/*G/0116 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL 2 AT CHURCH FARM Data Type: Point Name: MARTINEAU Easting: 599800 Northing: 271100	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/07/1970 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1970 Version End Date: -





ID	Location	Details	
-	1428m S	Status: Historical Licence No: 6/33/41/*G/0016 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE AT BROOK FARM Data Type: Point Name: W G JACOBS LTD Easting: 598800 Northing: 269400	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1966 Version End Date: -
-	1573m W	Status: Historical Licence No: 6/33/41/*G/0089 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 Data Type: Point Name: CARLISLE Easting: 597000 Northing: 270800	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/03/1968 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1991 Version End Date: -
-	1877m N	Status: Historical Licence No: 6/33/41/*G/0046 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE AT UPTHORPE Data Type: Point Name: COOPER Easting: 598100 Northing: 272700	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/07/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1966 Version End Date: -
-	1931m NW	Status: Historical Licence No: 6/33/41/*G/0128 Details: Transfer Between Sources (Pre Water Act 2003) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WORK NO.22 BORE AT STANTON Data Type: Point Name: ENVIRONMENT AGENCY Easting: 597570 Northing: 272520	Annual Volume (m³): - Max Daily Volume (m³): 55000 Original Application No: - Original Start Date: 25/07/1977 Expiry Date: - Issue No: 100 Version Start Date: 01/01/2003 Version End Date: -
-	1982m NE	Status: Historical Licence No: 6/33/42/*G/0074 Details: Transfer Between Sources (Pre Water Act 2003) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WORK NO.25,BORE AT WATTISFIELD Data Type: Point Name: ENVIRONMENT AGENCY Easting: 599830 Northing: 272500	Annual Volume (m³): 1499600 Max Daily Volume (m³): 62400 Original Application No: - Original Start Date: 25/07/1977 Expiry Date: - Issue No: 100 Version Start Date: 21/11/1990 Version End Date: -





This data is sourced from the Environment Agency and Natural Resources Wales.

#### 5.7 Surface water abstractions

Records within 2000m 0

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

#### 5.8 Potable abstractions

Records within 2000m

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

#### **5.9 Source Protection Zones**

Records within 500m

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

#### **5.10 Source Protection Zones (confined aquifer)**

Records within 500m 0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

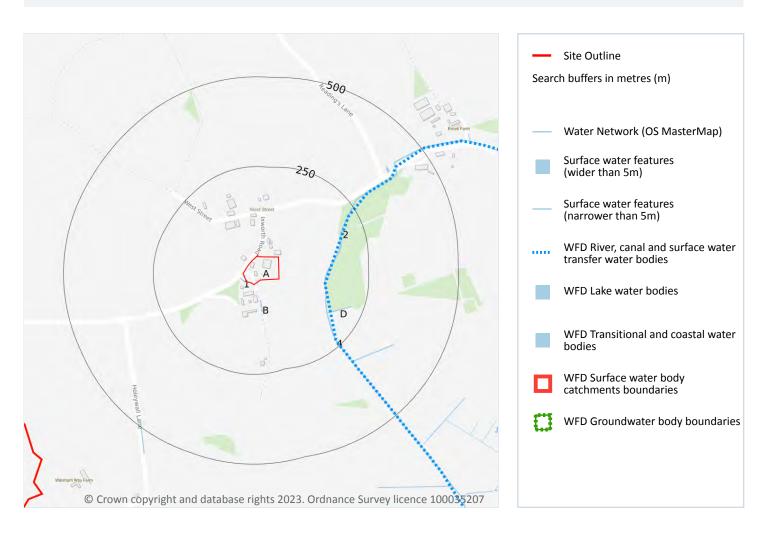


Date: 11 May 2023

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# **6 Hydrology**



## **6.1 Water Network (OS MasterMap)**

Records within 250m 5

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on page 37 >

IE	)	Location	Type of water feature	Ground level	Permanence	Name
1		4m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-





ID	Location	Type of water feature	Ground level	Permanence	Name
В	48m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
2	128m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	163m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	163m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

#### **6.2 Surface water features**

Records within 250m 3

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on page 37 >

This data is sourced from the Ordnance Survey.

#### **6.3 WFD Surface water body catchments**

Records on site 1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on page 37 >

^	On site	River	catchment  Stowlangtoft Stream	GB105033043340	Little Ouse and Thet	catchment  Cam and Ely Ouse
ID	Location	Туре	Water body	Water body ID	Operational catchment	Management

This data is sourced from the Environment Agency and Natural Resources Wales.



01273 257 755



#### 6.4 WFD Surface water bodies

Records identified 1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on page 37 >

ID	Location	Туре	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
3	129m E	River	Stowlangtoft Stream	GB105033043340 ↗	Moderate	Fail	Moderate	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

#### 6.5 WFD Groundwater bodies

Records on site 1

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on page 37 >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
Α	On site	Cam and Ely Ouse	<u>GB40501G400500</u> ⊅	Poor	Poor	Poor	2019

This data is sourced from the Environment Agency and Natural Resources Wales.





# 7 River and coastal flooding

## 7.1 Risk of flooding from rivers and the sea

Records within 50m 0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

#### 7.2 Historical Flood Events

Records within 250m 0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

#### 7.3 Flood Defences

Records within 250m 0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.





#### 7.4 Areas Benefiting from Flood Defences

Records within 250m 0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

## 7.5 Flood Storage Areas

Records within 250m 0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.





# **River and coastal flooding - Flood Zones**

#### 7.6 Flood Zone 2

Records within 50m 0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

#### 7.7 Flood Zone 3

Records within 50m

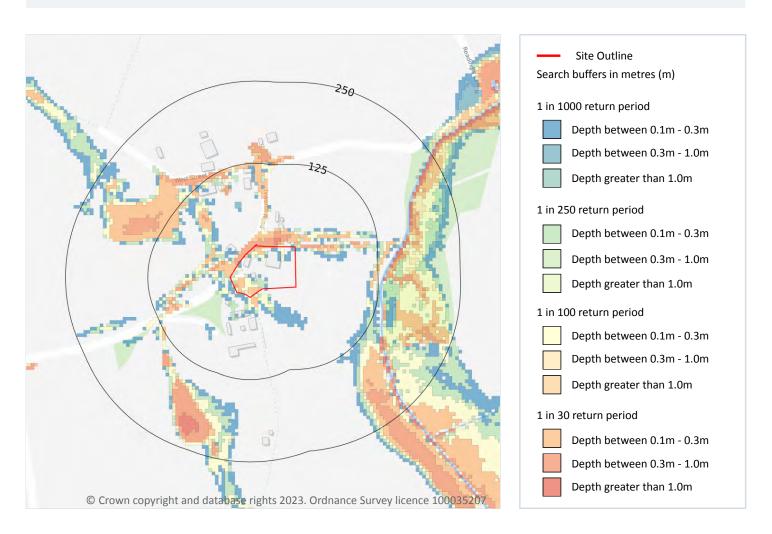
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.





# 8 Surface water flooding



## 8.1 Surface water flooding

Highest risk on site 1 in 30 year, 0.3m - 1.0m

#### Highest risk within 50m

#### 1 in 30 year, Greater than 1.0m

Date: 11 May 2023

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on page 43 >

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.





The table below shows the maximum flood depths for a range of return periods for the site.

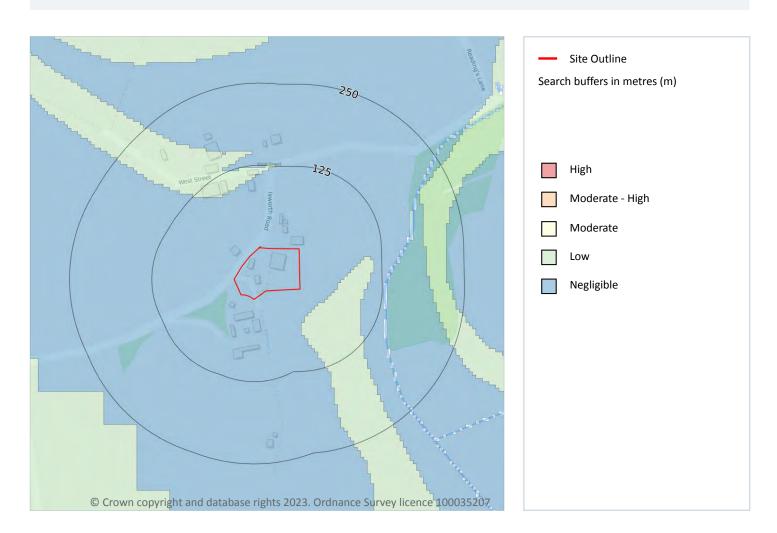
Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.





# 9 Groundwater flooding



## 9.1 Groundwater flooding

Highest risk on site

Negligible

Highest risk within 50m

Low

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

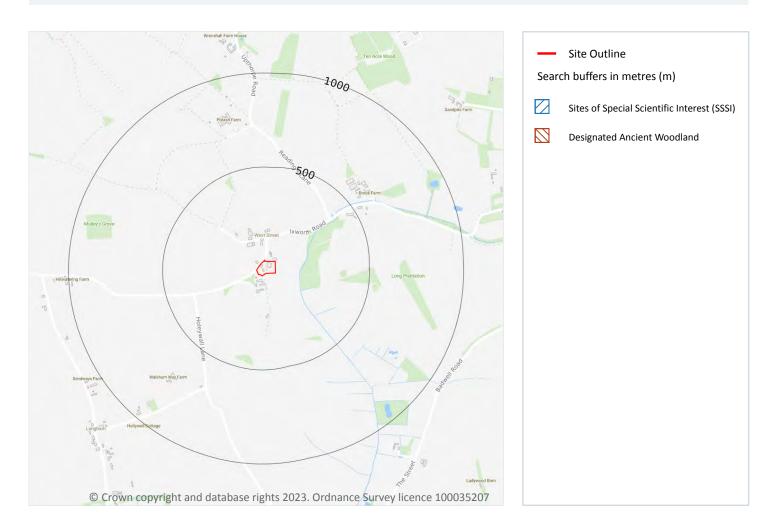
Features are displayed on the Groundwater flooding map on page 45 >

This data is sourced from Ambiental Risk Analytics.





# **10 Environmental designations**



## 10.1 Sites of Special Scientific Interest (SSSI)

#### Records within 2000m 4

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were renotified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on page 46 >

ID	Location	Name	Data source
-	1669m W	Stanton Woods	Natural England





ID	Location	Name	Data source
-	1770m NW	Stanton Woods	Natural England
-	1868m NW	Stanton Woods	Natural England
-	1941m W	Stanton Woods	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

### **10.2 Conserved wetland sites (Ramsar sites)**

Records within 2000m 0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

#### 10.3 Special Areas of Conservation (SAC)

Records within 2000m 0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

## 10.4 Special Protection Areas (SPA)

Records within 2000m 0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.





#### 10.5 National Nature Reserves (NNR)

Records within 2000m 0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

### 10.6 Local Nature Reserves (LNR)

Records within 2000m 0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

## 10.7 Designated Ancient Woodland

Records within 2000m 5

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on page 46 >

ID	Location	Name	Woodland Type
-	1669m W	Unknown	Ancient & Semi-Natural Woodland
-	1770m NW	Unknown	Ancient & Semi-Natural Woodland
-	1865m SW	Stowlangtoft Thicks	Ancient & Semi-Natural Woodland
_	1941m W	Wyken Wood	Ancient & Semi-Natural Woodland
-	1975m W	Wyken Wood	Ancient Replanted Woodland

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.





### **10.8 Biosphere Reserves**

Records within 2000m 0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

#### 10.9 Forest Parks

Records within 2000m 0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

#### **10.10 Marine Conservation Zones**

Records within 2000m 0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

#### 10.11 Green Belt

Records within 2000m 0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

#### **10.12 Proposed Ramsar sites**

Records within 2000m 0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.





## 10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m 0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

#### 10.14 Potential Special Protection Areas (pSPA)

Records within 2000m 0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

#### **10.15 Nitrate Sensitive Areas**

Records within 2000m 0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

#### 10.16 Nitrate Vulnerable Zones

Records within 2000m 2

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Туре	NVZ ID	Status
On site	Ely Ouse and Cut-off channel NVZ	Surface Water	390	Existing





### HOME FARM, WEST STREET, WALSHAM LE WILLOWS, IP31 3AP

**Ref**: GS-ZM7-OBA-2JG-NB8 **Your ref**: RCER\_23-137 **Grid ref**: 598616 270852

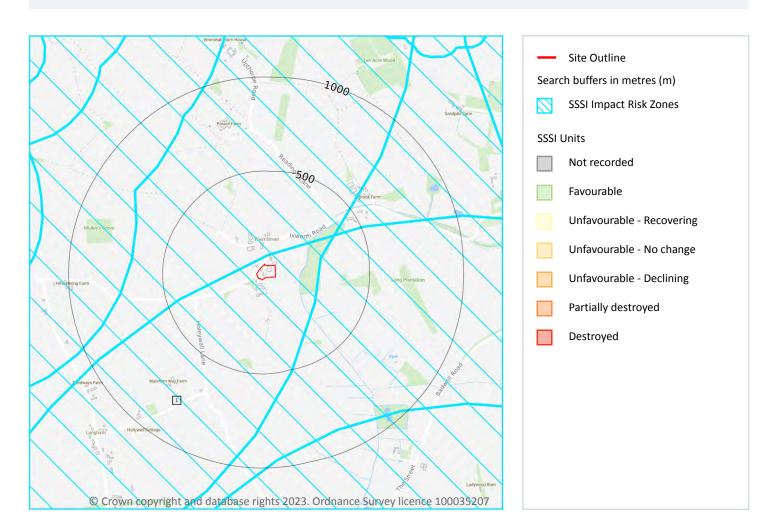
Location	Name	Туре	NVZ ID	Status
640m W	Anglian Chalk	Groundwater	71	Existing

This data is sourced from Natural England and Natural Resources Wales.





# **SSSI Impact Zones and Units**



### 10.17 SSSI Impact Risk Zones

Records on site 1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on page 52 >





ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals.  Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction.  Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t).  Combustion - General combustion processes >20mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.  Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill.  Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.

This data is sourced from Natural England.

#### 10.18 SSSI Units

Records within 2000m

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

Features are displayed on the SSSI Impact Zones and Units map on page 52 >

ID:

Location: 1669m W
SSSI name: Stanton Woods
Unit name: Ash Grove

Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland

Condition: Favourable

Reportable features:

Feature name	Feature condition	Date of assessment
Lowland mixed deciduous woodland	Favourable	09/06/2021

ID: -

Location: 1770m NW
SSSI name: Stanton Woods
Unit name: Shepherd's Grove

Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland

Condition: Unfavourable - No change

Reportable features:



#### HOME FARM, WEST STREET, WALSHAM LE WILLOWS, IP31 3AP

**Ref**: GS-ZM7-OBA-2JG-NB8 **Your ref**: RCER\_23-137 **Grid ref**: 598616 270852

Feature name Feature condition Date of assessment

Lowland mixed deciduous woodland

Unfavourable - No change 08/06/2021

ID:

Location: 1868m NW
SSSI name: Stanton Woods
Unit name: The Grundle

Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland

Condition: Favourable

Reportable features:

Feature nameFeature conditionDate of assessmentLowland mixed deciduous woodlandFavourable08/06/2021

ID:

Location: 1941m W
SSSI name: Stanton Woods
Unit name: Wyken Wood

Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland

Condition: Favourable

Reportable features:

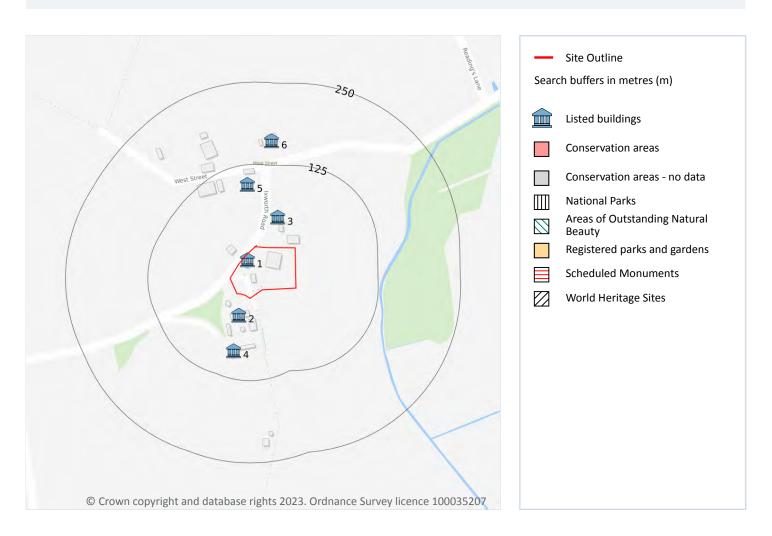
Feature name	Feature condition	Date of assessment
Lowland mixed deciduous woodland	Favourable	09/06/2021

This data is sourced from Natural England and Natural Resources Wales.





# 11 Visual and cultural designations



### 11.1 World Heritage Sites

Records within 250m 0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.





## 11.2 Area of Outstanding Natural Beauty

Records within 250m 0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

#### 11.3 National Parks

Records within 250m 0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

## 11.4 Listed Buildings

Records within 250m 6

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on page 55 >

ID	Location	Name		Reference Number	Listed date
1	On site	Home Farmhouse, Walsham-le-Willows, Mid Suffolk, Suffolk, IP31		1182306	15/11/1954
2	30m SW	Barn Approximately 30 Metres North of West House, Walsham-le-Willows, Mid Suffolk, Suffolk, IP31	II	1334418	29/06/1998
3	46m N	Premises of Mr D J Cobbold, Walsham-le-Willows, Mid Suffolk, Suffolk, IP31	II	1352520	15/07/1988
4	83m S	West House, Walsham-le-Willows, Mid Suffolk, Suffolk, IP31	П	1032196	15/07/1988





ID	D Location Name		Grade	Reference Number	Listed date
5	96m N	West Street Farmhouse, Walsham-le-Willows, Mid Suffolk, Suffolk, IP31	II	1032197	15/07/1988
6	162m N	West Cottage, Walsham-le-Willows, Mid Suffolk, Suffolk, IP31	II	1182321	15/07/1988

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

#### 11.5 Conservation Areas

Records within 250m

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

#### 11.6 Scheduled Ancient Monuments

Records within 250m 0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

## **11.7 Registered Parks and Gardens**

Records within 250m 0

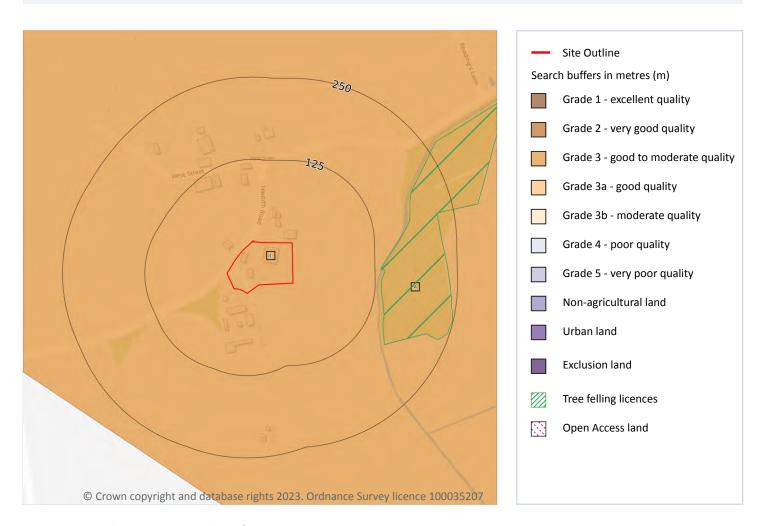
Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.





# 12 Agricultural designations



## **12.1** Agricultural Land Classification

## Records within 250m 1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on page 58 >

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.





#### 12.2 Open Access Land

Records within 250m 0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

#### **12.3 Tree Felling Licences**

Records within 250m 2

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

Features are displayed on the Agricultural designations map on page 58 >

ID	Location	Description	Reference	Application date
Α	134m E	Selective Fell/Thin (Unconditional)	017/143/03-04	08/12/2003
А	134m E	Selective Fell/Thin (Unconditional)	017/238/99-00	06/09/1999

This data is sourced from the Forestry Commission.

### 12.4 Environmental Stewardship Schemes

Records within 250m 2

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

Location	Reference	Scheme	Start Date	End date
127m N	AG00271031	Entry Level plus Higher Level Stewardship	01/11/2008	31/10/2018
138m E	AG00271031	Entry Level plus Higher Level Stewardship	01/11/2008	31/10/2018

This data is sourced from Natural England.





## 12.5 Countryside Stewardship Schemes

Records within 250m 3

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

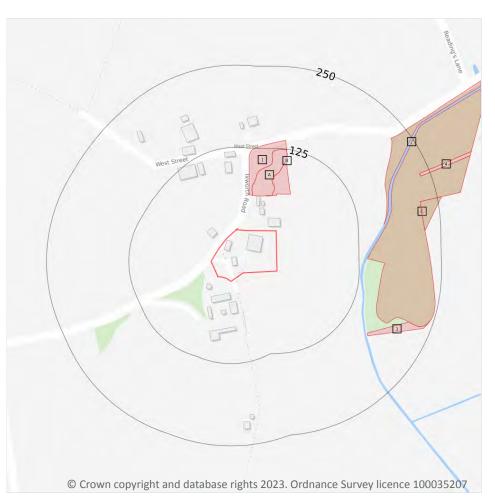
Location	Reference	Scheme	Start Date	End Date
108m W	495402	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022
169m SE	642443	Countryside Stewardship (Middle Tier)	01/01/2019	31/12/2023
186m NE	642443	Countryside Stewardship (Middle Tier)	01/01/2019	31/12/2023

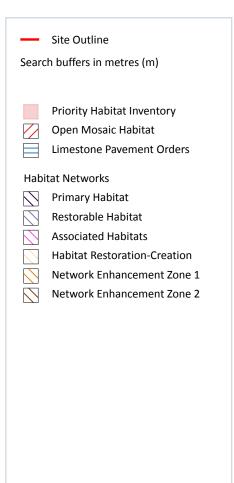
This data is sourced from Natural England.





# 13 Habitat designations





## **13.1 Priority Habitat Inventory**

Records within 250m 10

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on page 61 >

ID	Location	Main Habitat	Other habitats
А	53m N	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
А	53m N	No main habitat but additional habitats present	Additional: TORCH (INV 50%)
1	54m N	No main habitat but additional habitats present	Additional: TORCH (INV 50%)
В	108m NE	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset





ID	Location	Main Habitat	Other habitats
В	116m N	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
С	138m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	164m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	166m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
С	223m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	235m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

#### 13.2 Habitat Networks

Records within 250m 0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

### 13.3 Open Mosaic Habitat

Records within 250m 0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

#### **13.4 Limestone Pavement Orders**

Records within 250m 0

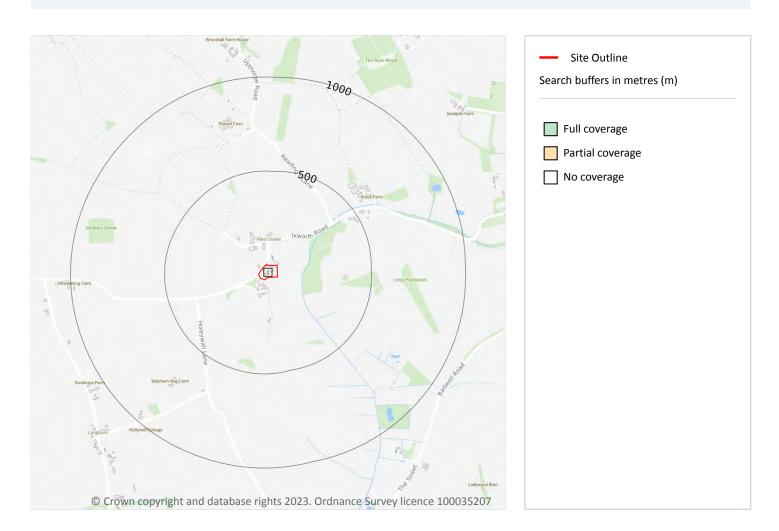
Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.





# 14 Geology 1:10,000 scale - Availability



## 14.1 10k Availability

#### Records within 500m

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on page 63 >

1	On site	No coverage	No coverage	No coverage	No coverage	NoCov
ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.

This data is sourced from the British Geological Survey.





# Geology 1:10,000 scale - Artificial and made ground

## 14.2 Artificial and made ground (10k)

Records within 500m 0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.





## Geology 1:10,000 scale - Superficial

### 14.3 Superficial geology (10k)

Records within 500m 0

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

### 14.4 Landslip (10k)

Records within 500m 0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.





# Geology 1:10,000 scale - Bedrock

### 14.5 Bedrock geology (10k)

Records within 500m 0

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

This data is sourced from the British Geological Survey.

### 14.6 Bedrock faults and other linear features (10k)

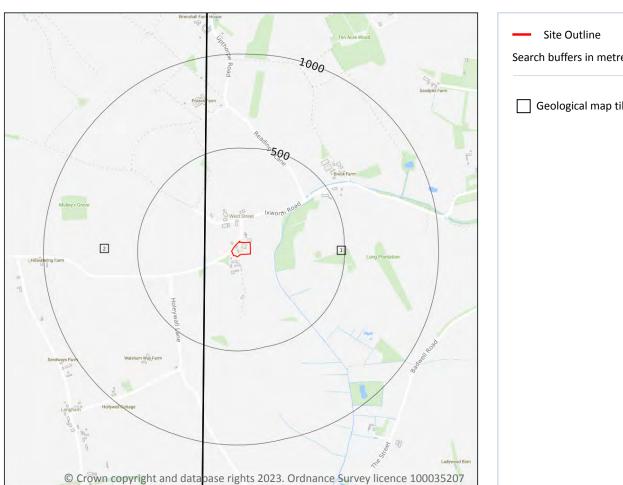
Records within 500m 0

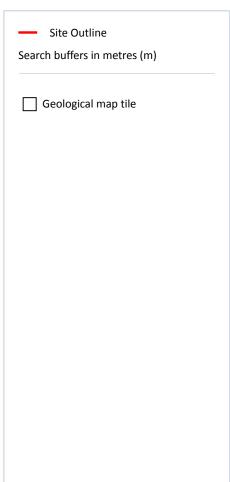
Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.





# 15 Geology 1:50,000 scale - Availability





## 15.1 50k Availability

Records within 500m 2

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on page 67 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	EW190_eye_v4
2	143m W	Full	Full	Full	No coverage	EW189_bury_st_edmunds_v4

This data is sourced from the British Geological Survey.





## Geology 1:50,000 scale - Artificial and made ground

### 15.2 Artificial and made ground (50k)

Records within 500m 0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

### 15.3 Artificial ground permeability (50k)

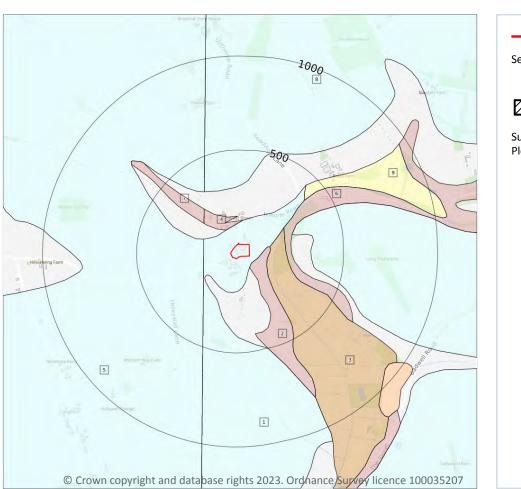
Records within 50m 0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).





# Geology 1:50,000 scale - Superficial



Site Outline
Search buffers in metres (m)

Landslip (50k)
Superficial geology (50k)
Please see table for more details.

## 15.4 Superficial geology (50k)

Records within 500m

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on page 69 >

ID	Location	LEX Code	Description	Rock description
1	On site	LOFT-DMTN	LOWESTOFT FORMATION	DIAMICTON
2	36m SE	HEAD- XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
3	95m E	PEAT-P	PEAT	PEAT





ID	Location	LEX Code	Description	Rock description
4	96m NW	HEAD- XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
5	143m W	LOFT-DMTN	LOWESTOFT FORMATION	DIAMICTON
6	190m E	HEAD- XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
7	207m NW	HEAD- XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
8	235m E	LOFT-DMTN	LOWESTOFT FORMATION	DIAMICTON
9	375m NE	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

## 15.5 Superficial permeability (50k)

Records within 50m 2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Moderate	Low
36m SE	Mixed	High	Very Low

This data is sourced from the British Geological Survey.

## 15.6 Landslip (50k)

Records within 500m 0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.





0

### 15.7 Landslip permeability (50k)

Records within 50m

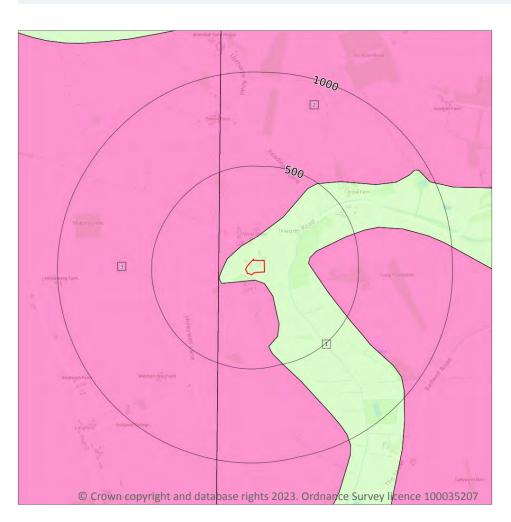
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.





# Geology 1:50,000 scale - Bedrock



Site Outline
Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)

Please see table for more details.

## 15.8 Bedrock geology (50k)

### Records within 500m 3

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on page 72 >

ID	Location	LEX Code	Description	Rock age
1	On site	LCCK-CHLK	LEWES NODULAR CHALK FORMATION, SEAFORD CHALK TURONIAN FORMATION, NEWHAVEN CHALK FORMATION AND CULVER CHALK FORMATION (UNDIFFERENTIATED) - CHALK	
2	30m S	CRAG-S	CRAG GROUP - SAND	-
3	143m W	CRAG-S	CRAG GROUP - SAND	-





This data is sourced from the British Geological Survey.

### 15.9 Bedrock permeability (50k)

Records within 50m 2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Very High	Very High
30m S	Intergranular	High	High

This data is sourced from the British Geological Survey.

## 15.10 Bedrock faults and other linear features (50k)

Records within 500m 0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.





## **16 Boreholes**

#### 16.1 BGS Boreholes

Records within 250m 0

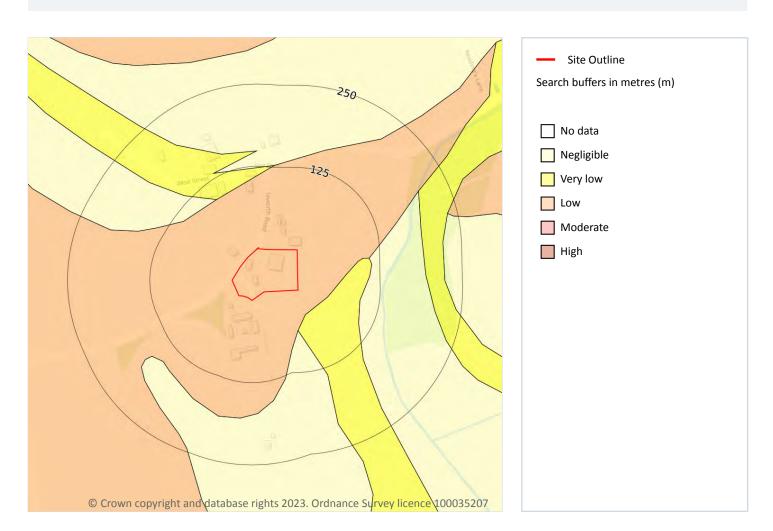
The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

This data is sourced from the British Geological Survey.





# 17 Natural ground subsidence - Shrink swell clays



## 17.1 Shrink swell clays

Records within 50m 2

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

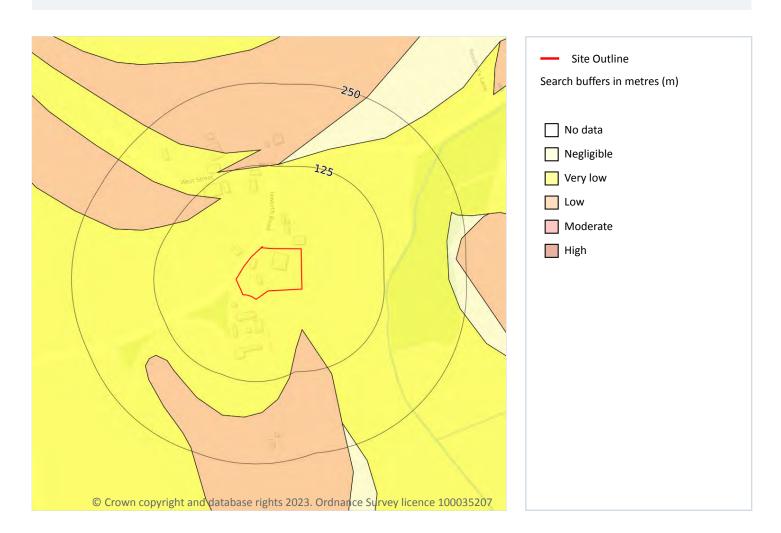
Features are displayed on the Natural ground subsidence - Shrink swell clays map on page 75 >

Location	Hazard rating	Details
On site	Low	Ground conditions predominantly medium plasticity.
36m SE	Very low	Ground conditions predominantly low plasticity.





# Natural ground subsidence - Running sands



### 17.2 Running sands

Records within 50m 1

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

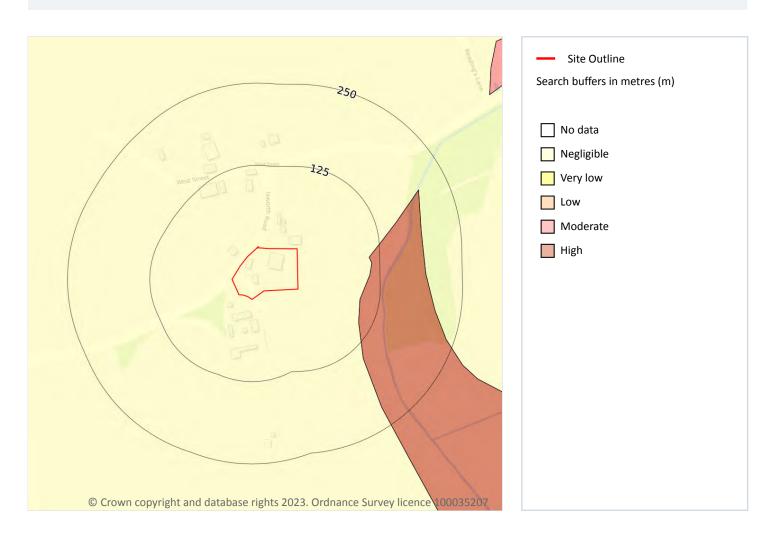
Features are displayed on the Natural ground subsidence - Running sands map on page 76 >

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.





# Natural ground subsidence - Compressible deposits



### 17.3 Compressible deposits

Records within 50m 1

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on page 77 >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.





# Natural ground subsidence - Collapsible deposits



## 17.4 Collapsible deposits

Records within 50m 1

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

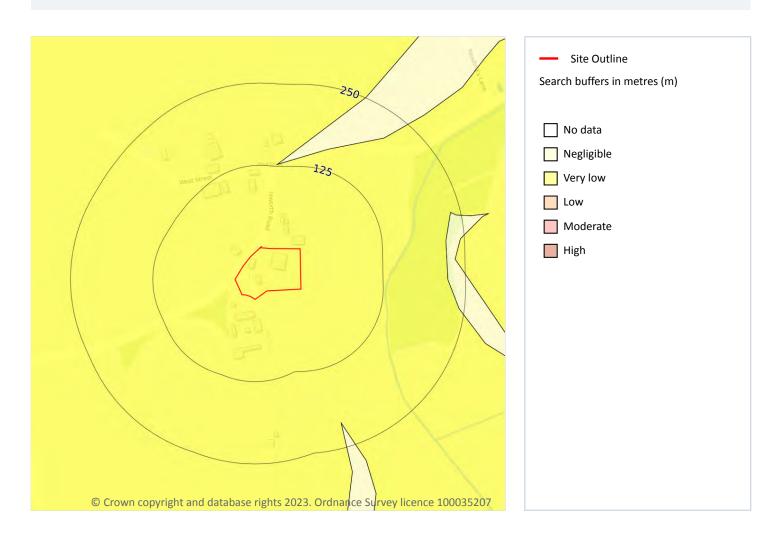
Features are displayed on the Natural ground subsidence - Collapsible deposits map on page 78 >

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.





# **Natural ground subsidence - Landslides**



#### 17.5 Landslides

Records within 50m 1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

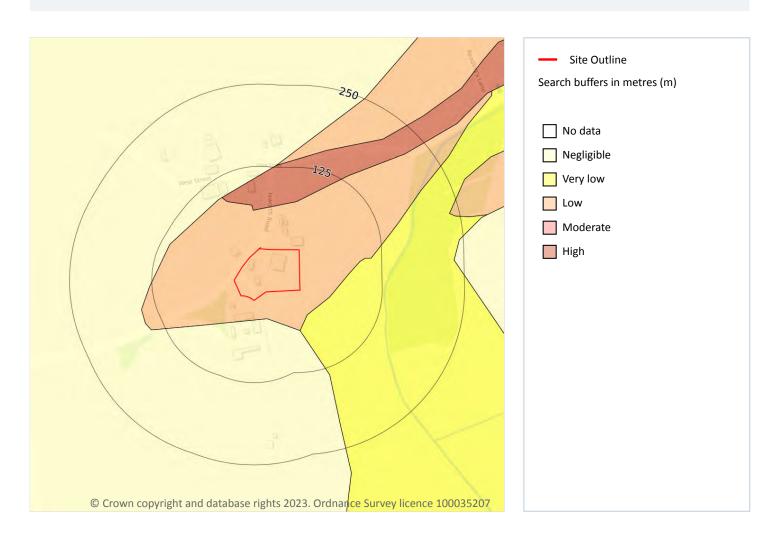
Features are displayed on the Natural ground subsidence - Landslides map on page 79 >

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.





# Natural ground subsidence - Ground dissolution of soluble rocks



### 17.6 Ground dissolution of soluble rocks

Records within 50m 3

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on <a href="mailto:page-80">page-80</a>

Location	Hazard rating	Details
On site	Low	Soluble rocks are present within the ground. Some dissolution features may be present. Potential for difficult ground conditions are at a level where they may be considered, localised subsidence need not be considered except in exceptional circumstances.





### HOME FARM, WEST STREET, WALSHAM LE WILLOWS, IP31 3AP

**Ref**: GS-ZM7-OBA-2JG-NB8 **Your ref**: RCER\_23-137 **Grid ref**: 598616 270852

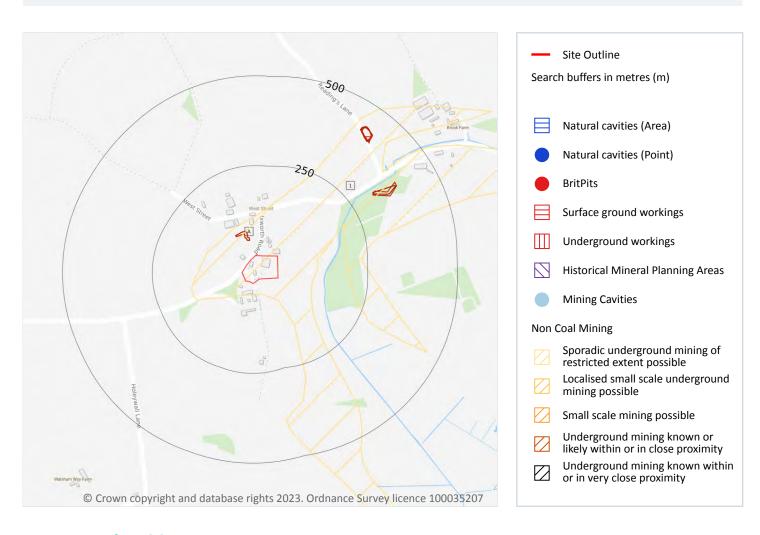
Location	Hazard rating	Details
30m S	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.
36m SE	Very low	Soluble rocks are present within the ground. Few dissolution features are likely to be present. Potential for difficult ground conditions or localised subsidence are at a level where they need not be considered.

This data is sourced from the British Geological Survey.





# 18 Mining, ground workings and natural cavities



### 18.1 Natural cavities

Records within 500m 0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.





#### 18.2 BritPits

Records within 500m 0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

### 18.3 Surface ground workings

Records within 250m 2

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on page 82 >

ID	Location	Land Use	Year of mapping	Mapping scale	
А	45m NW	Ponds	1950	1:10560	
А	45m NW	Ponds	1883	1:10560	

This is data is sourced from Ordnance Survey/Groundsure.

### 18.4 Underground workings

Records within 1000m 0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

#### 18.5 Historical Mineral Planning Areas

Records within 500m

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.





### 18.6 Non-coal mining

Records within 1000m

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

Features are displayed on the Mining, ground workings and natural cavities map on page 82 >

ID	Location	Name	Commodity	Class	Likelihood
1	On site	Not available	Chalk	Α	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

This data is sourced from the British Geological Survey.

### **18.7 Mining cavities**

Records within 1000m 0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

#### 18.8 JPB mining areas

Records on site 0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

### 18.9 Coal mining

Records on site 0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.



Contact us with any questions at: Date: 11 May 2023



#### 18.10 Brine areas

Records on site 0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

### 18.11 Gypsum areas

Records on site 0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

### 18.12 Tin mining

Records on site 0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

### 18.13 Clay mining

Records on site 0

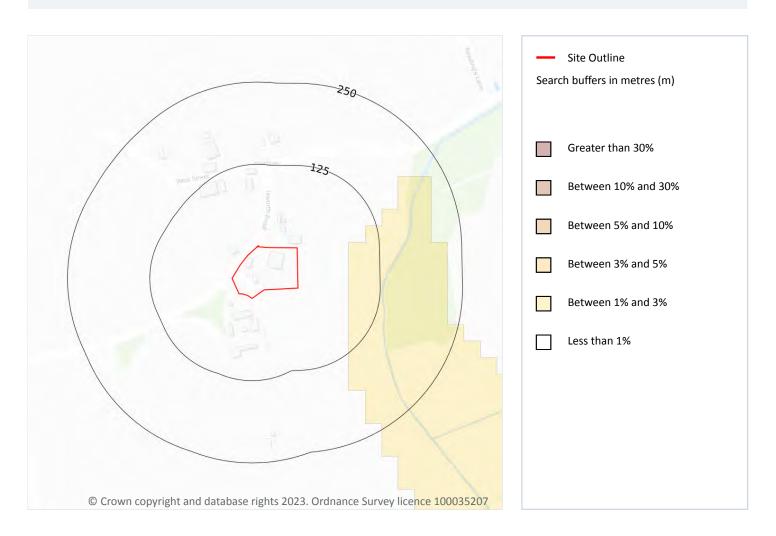
Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).





## 19 Radon



#### **19.1** Radon

#### Records on site 1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on page 86 >

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None





### HOME FARM, WEST STREET, WALSHAM LE WILLOWS, IP31 3AP

**Ref**: GS-ZM7-OBA-2JG-NB8 **Your ref**: RCER\_23-137 **Grid ref**: 598616 270852

This data is sourced from the British Geological Survey and UK Health Security Agency.





## 20 Soil chemistry

### 20.1 BGS Estimated Background Soil Chemistry

Records within 50m 3

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
30m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
36m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg

This data is sourced from the British Geological Survey.

## **20.2 BGS Estimated Urban Soil Chemistry**

Records within 50m 0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

### 20.3 BGS Measured Urban Soil Chemistry

Records within 50m

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km<sup>2</sup>.





## 21 Railway infrastructure and projects

### 21.1 Underground railways (London)

Records within 250m 0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

### 21.2 Underground railways (Non-London)

Records within 250m 0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

### 21.3 Railway tunnels

Records within 250m

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

#### 21.4 Historical railway and tunnel features

Records within 250m 0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

### 21.5 Royal Mail tunnels

Records within 250m 0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.



89



This data is sourced from Groundsure/the Postal Museum.

### **21.6** Historical railways

Records within 250m 0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

### 21.7 Railways

Records within 250m 0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

#### 21.8 Crossrail 1

Records within 500m 0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

#### 21.9 Crossrail 2

Records within 500m 0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

#### 21.10 HS2

Records within 500m 0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.





# **Data providers**

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <a href="https://www.groundsure.com/sources-reference">https://www.groundsure.com/sources-reference</a>.

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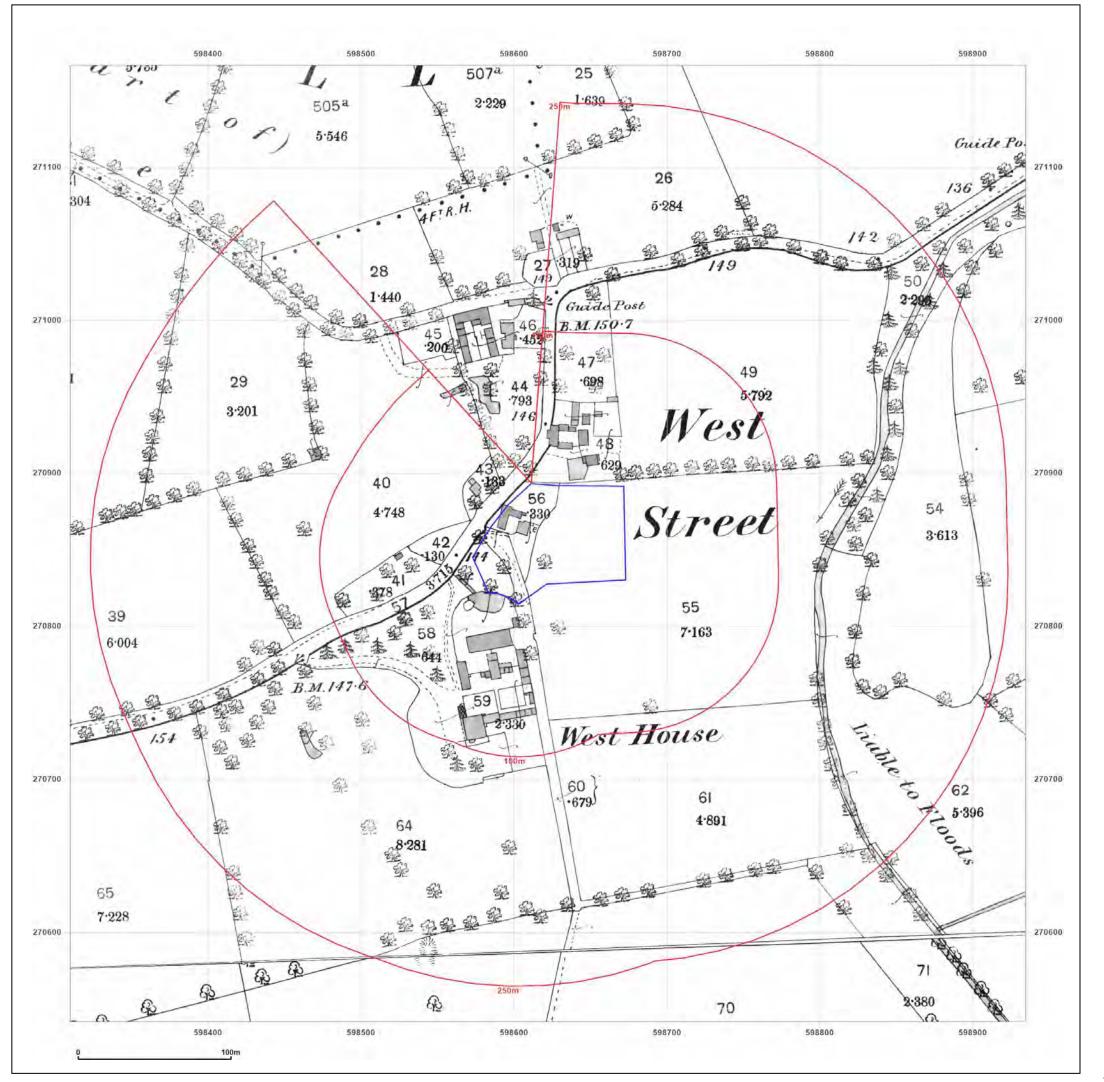
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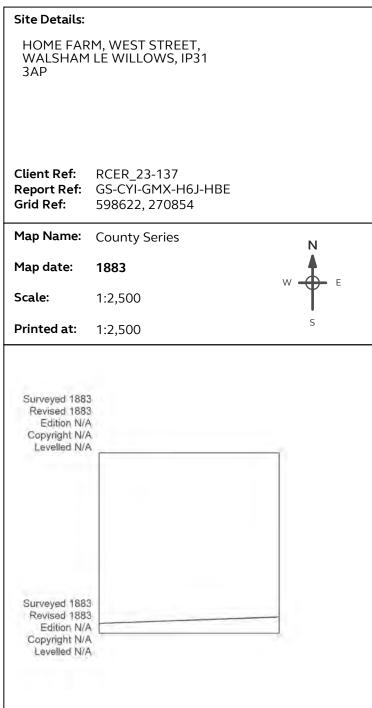
### **APPENDIX C: HISTORICAL MAPS**

Large scale maps (report reference GS-CYI-GMX-H6J-HBE\_largeScale)

Small scale maps (report reference GS-CYI-GMX-H6J-HBE\_smallScale)







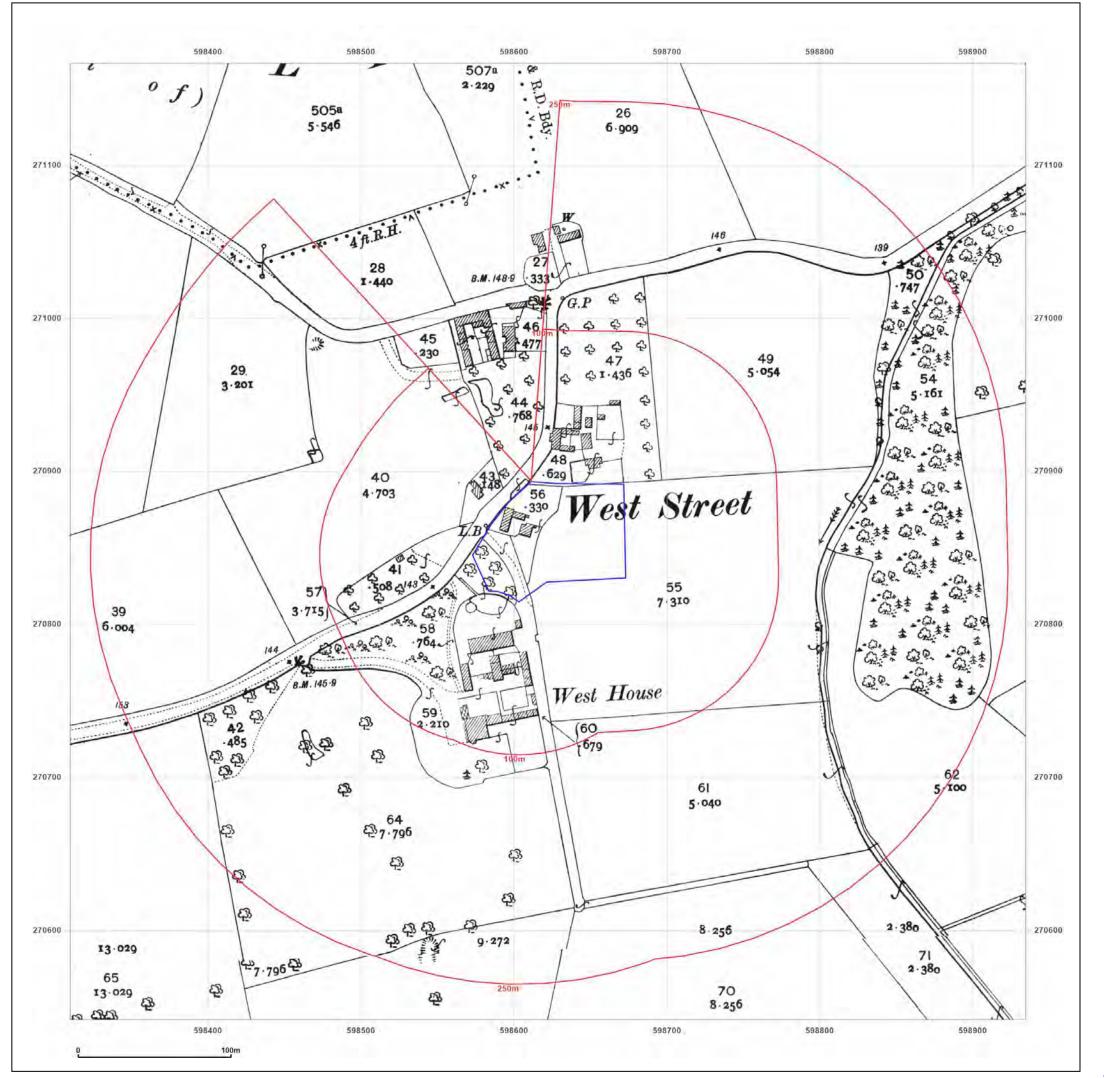


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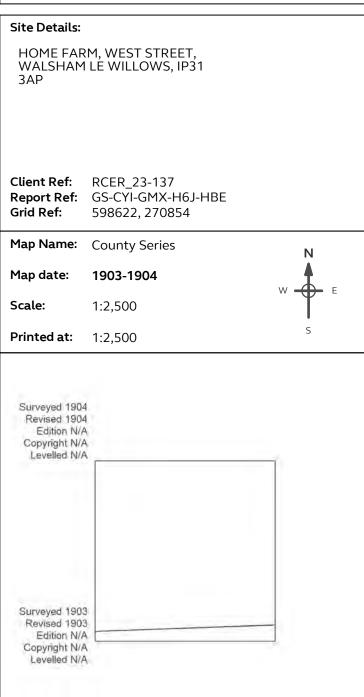
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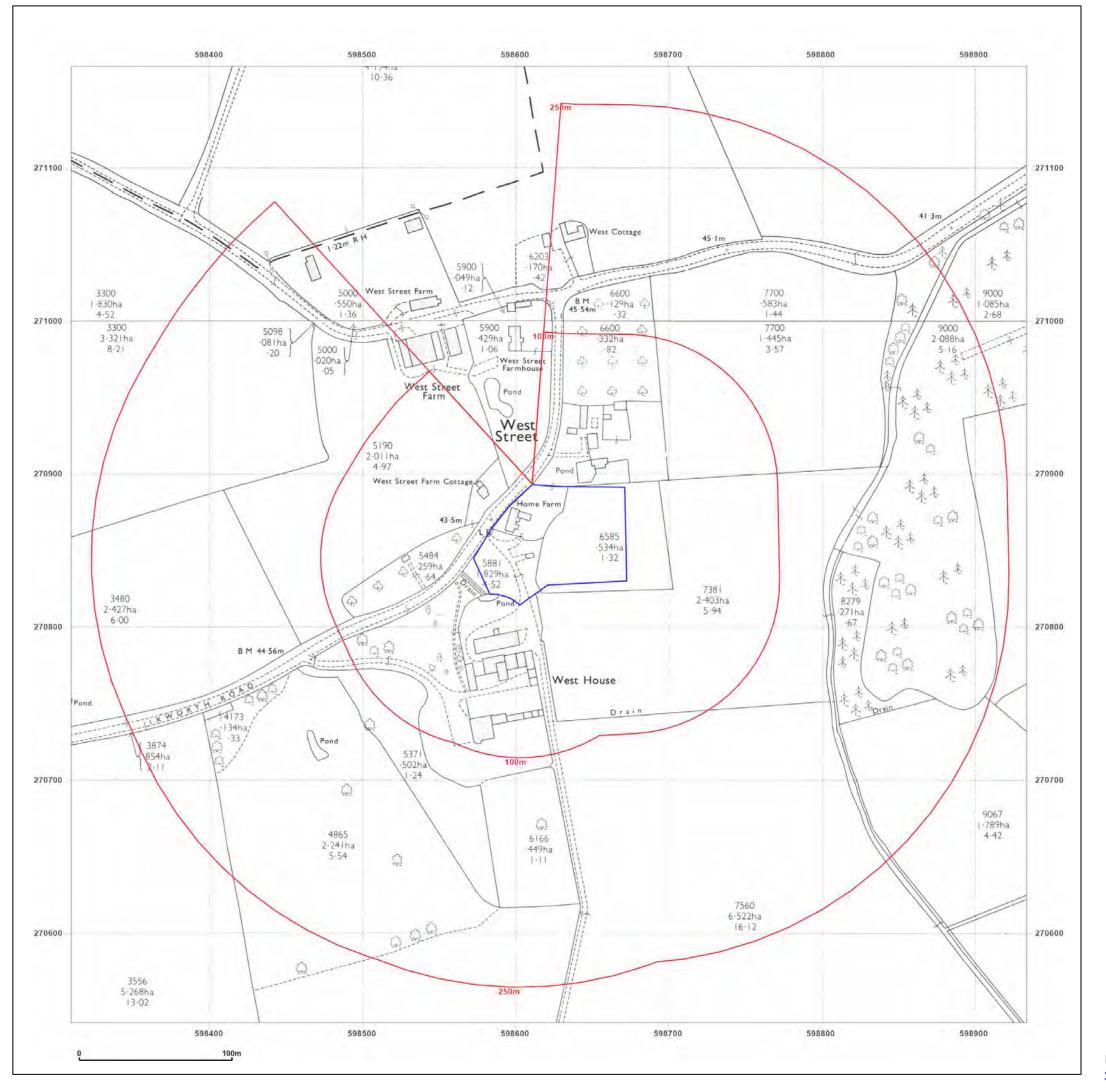


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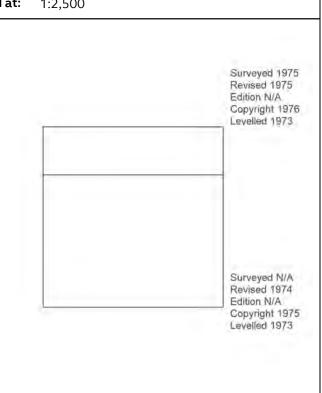
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Map Name: National Grid

Map date: 1975-1976

**Scale:** 1:2,500

**Printed at:** 1:2,500



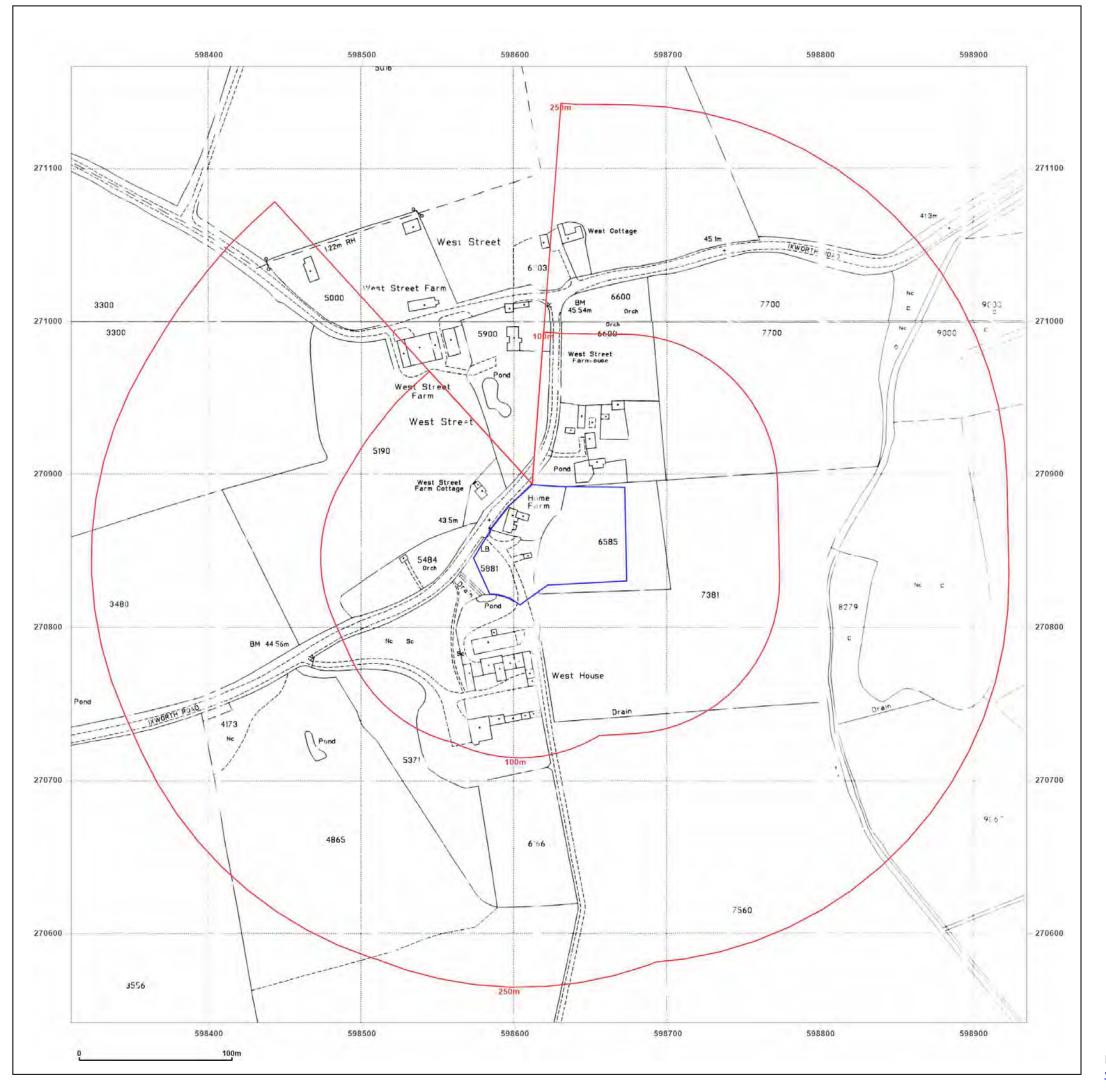


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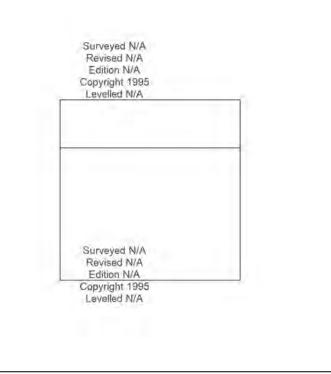
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Report Ref: GS-CYI-GMX-H6J-HBE
Grid Ref: 598622, 270854

Map Name: National Grid

Map date: 1995

**Scale:** 1:2,500

**Printed at:** 1:2,500



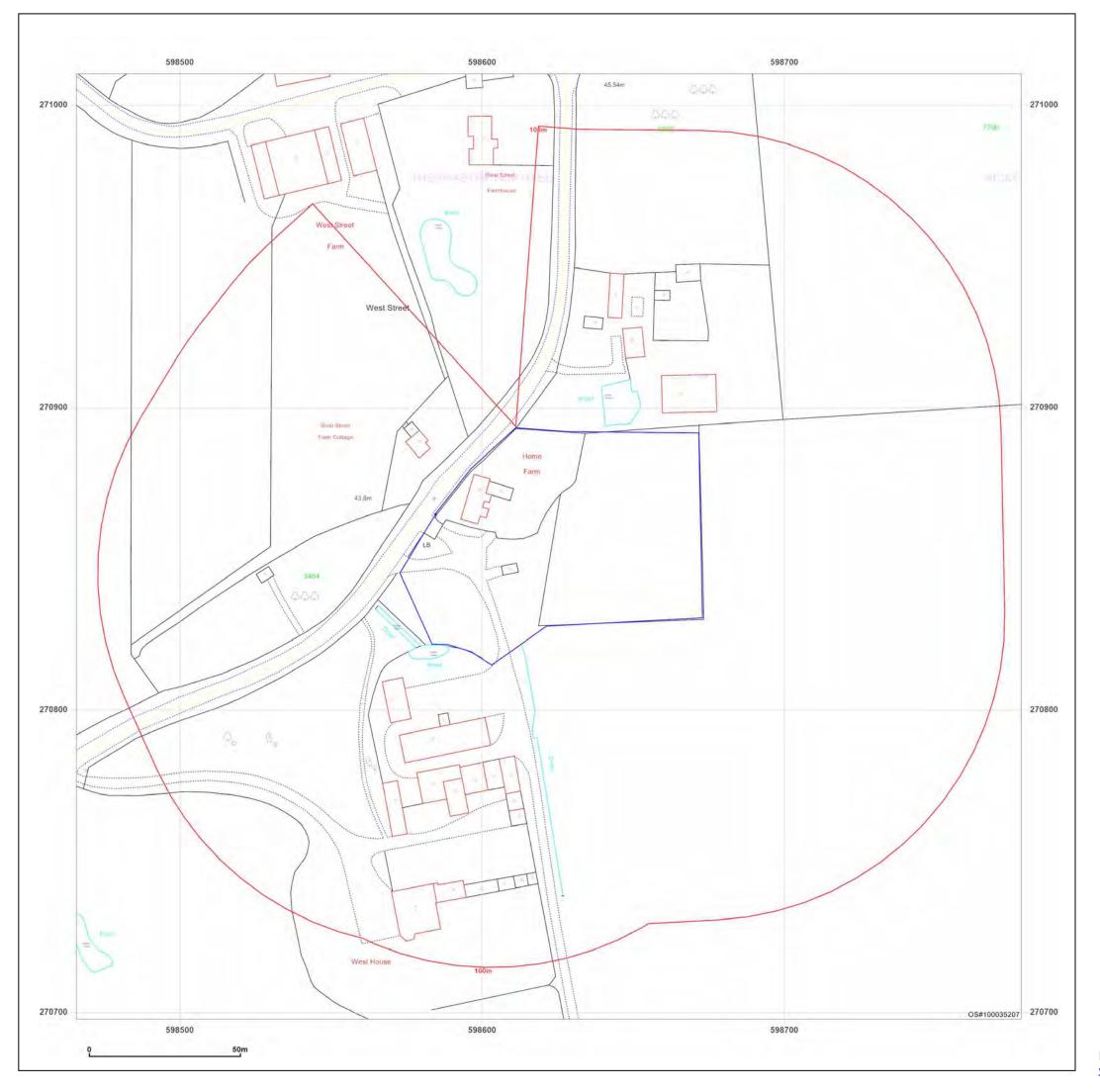


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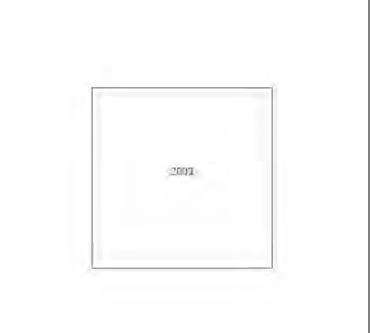
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Report Ref: GS-CYI-GMX-H6J-HBE **Grid Ref:** 598622, 270854

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

**Printed at:** 1:1,250



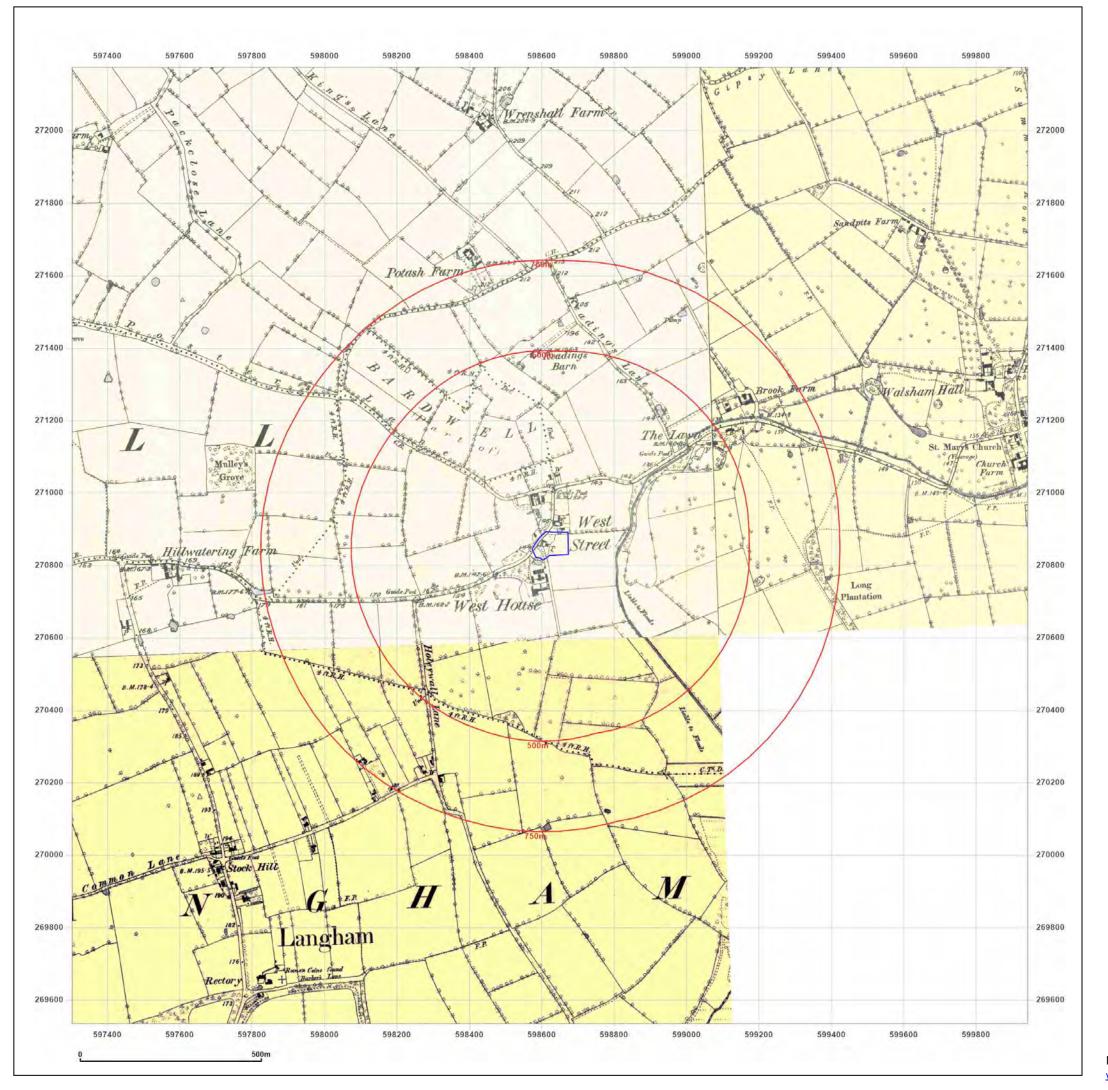


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Grid Ref: 598622, 270854

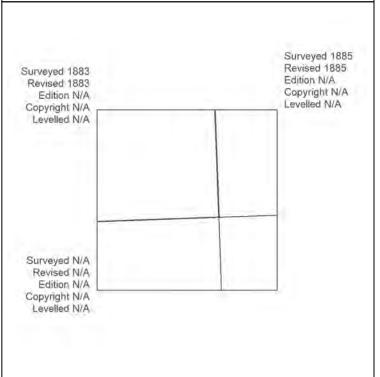
Map Name: County Series

Map date: 1883-1888

1:10,560

**Printed at:** 1:10,560

Scale:



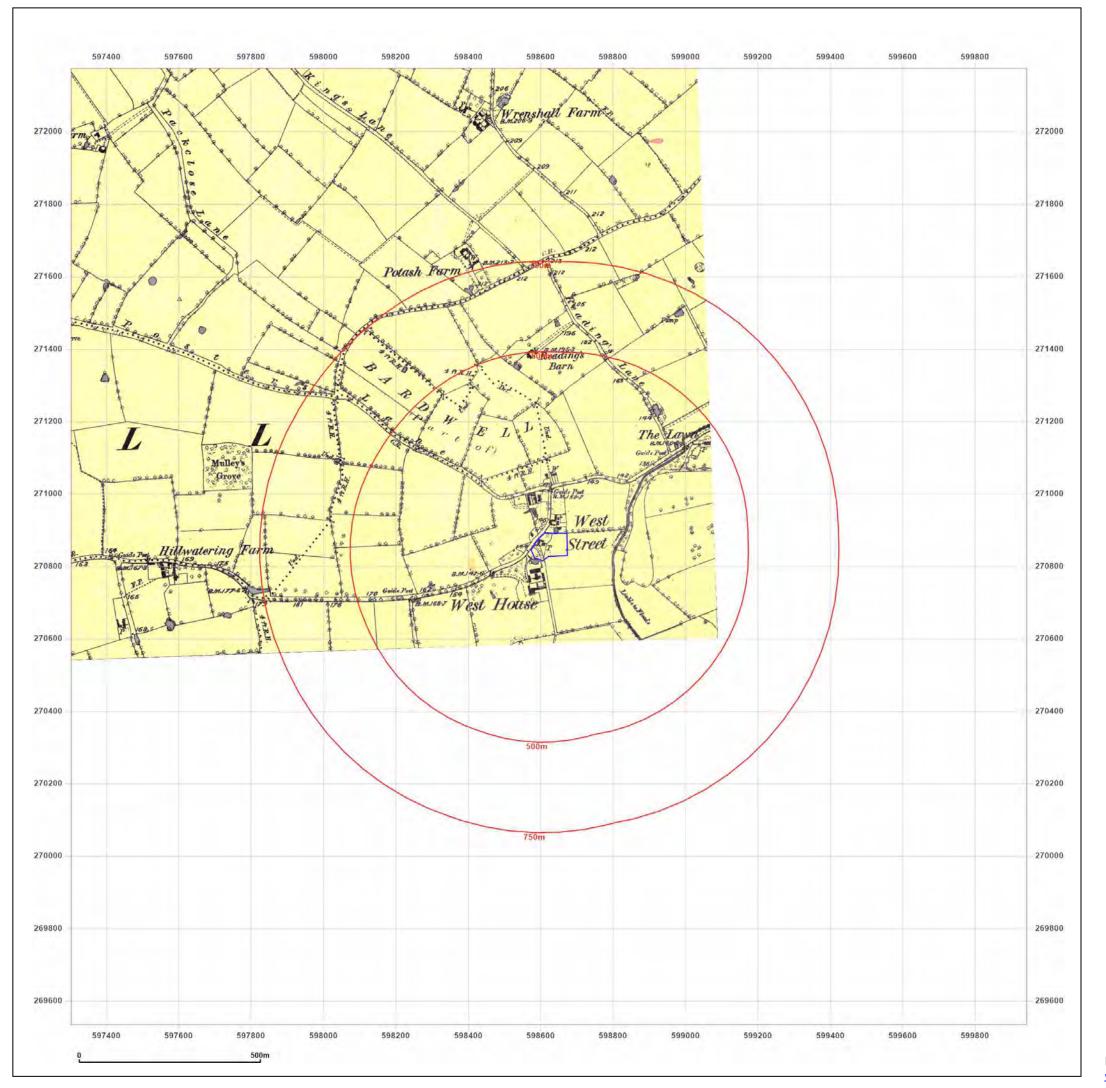


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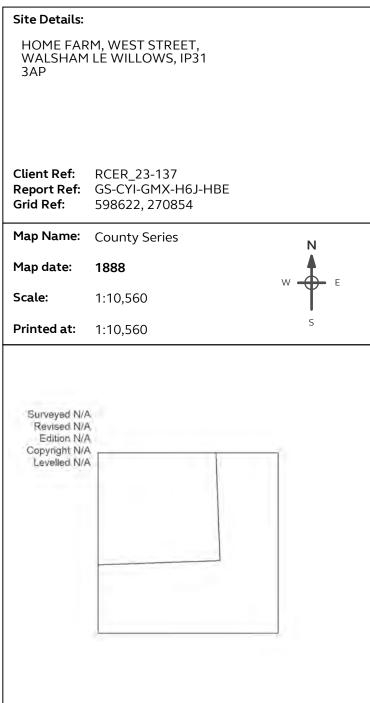
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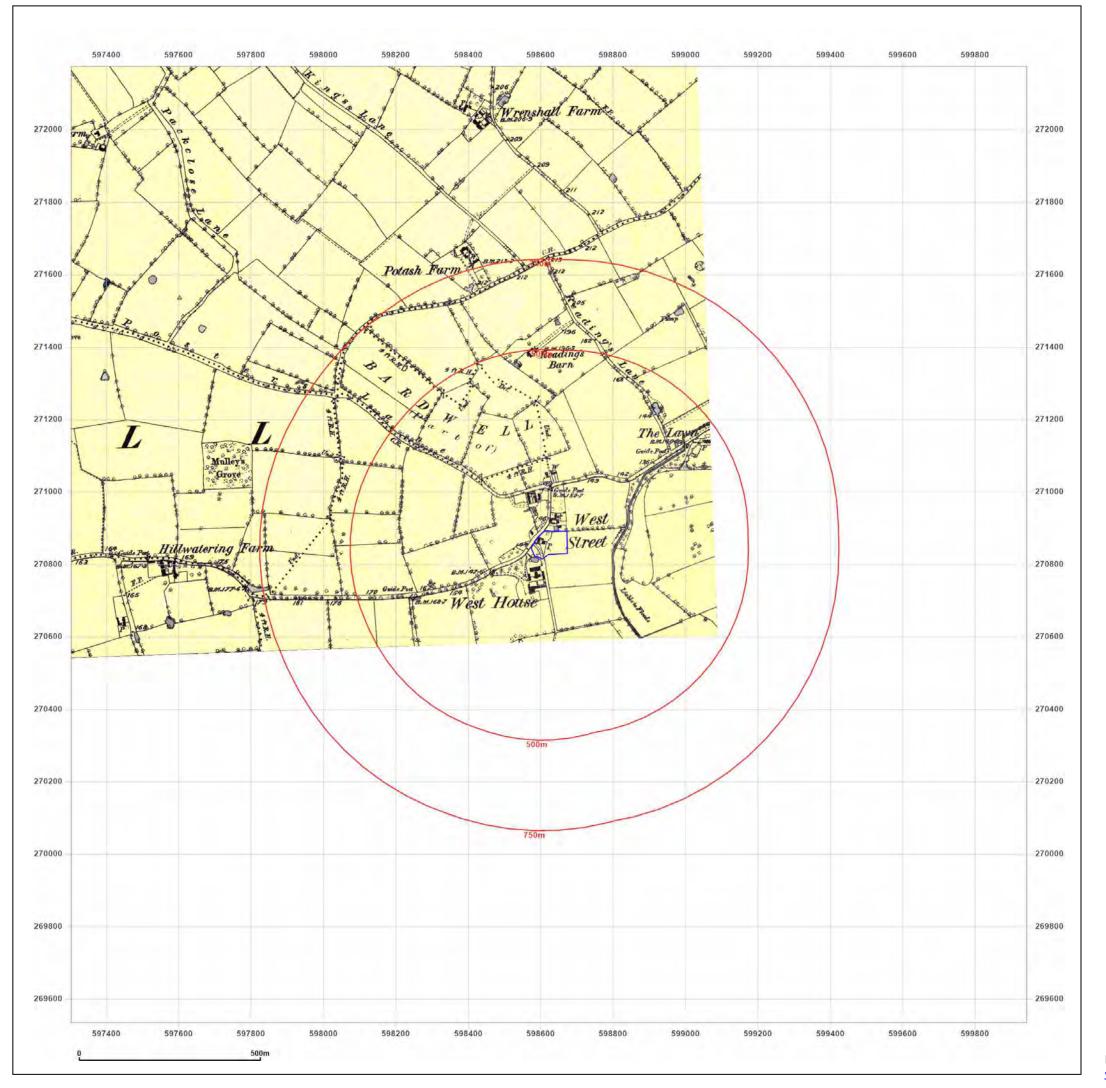


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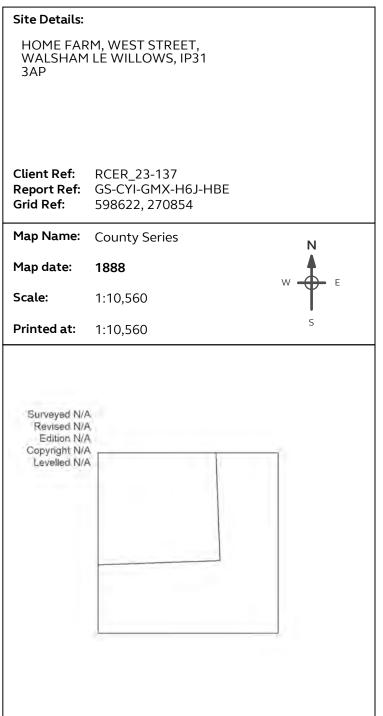
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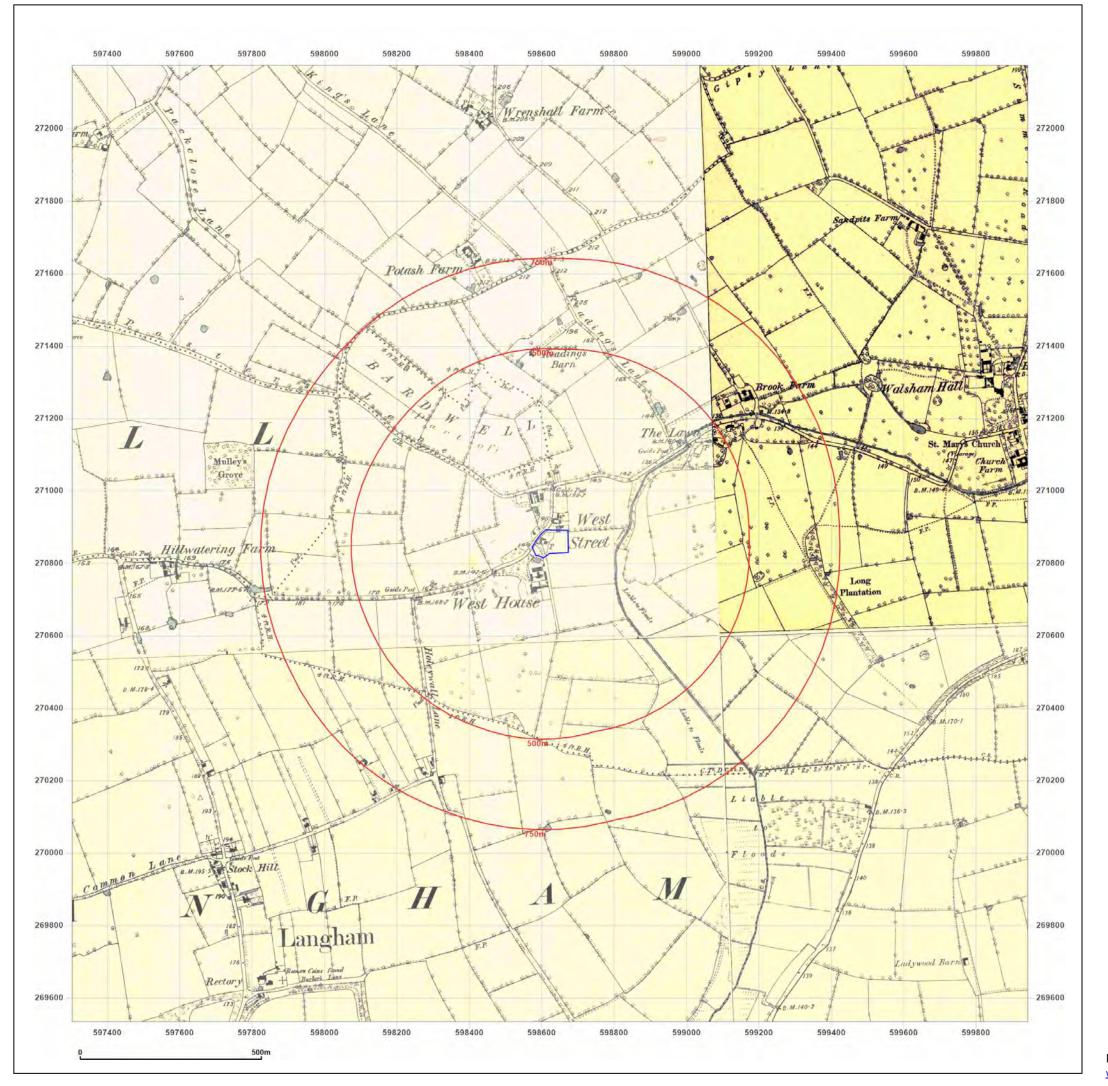


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Client Ref: RCER\_23-137

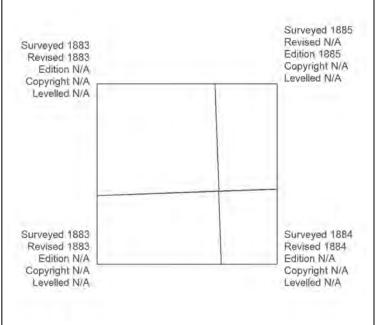
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Map Name: County Series

Map date: 1883-1888

1:10,560

**Printed at:** 1:10,560



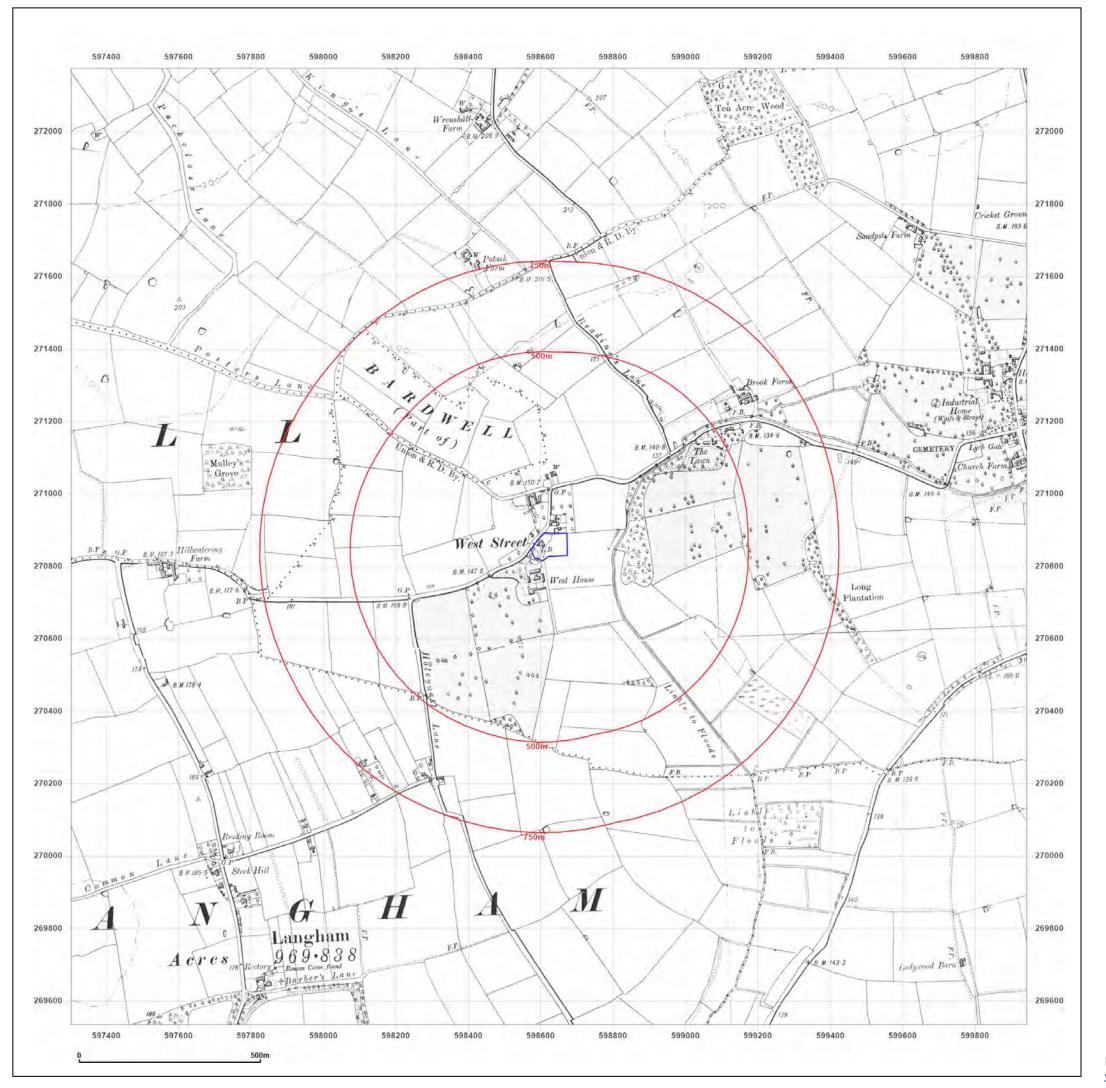


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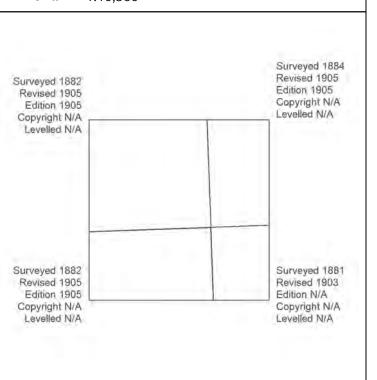
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Map Name: County Series

Map date: 1903-1905

**Scale:** 1:10,560

**Printed at:** 1:10,560



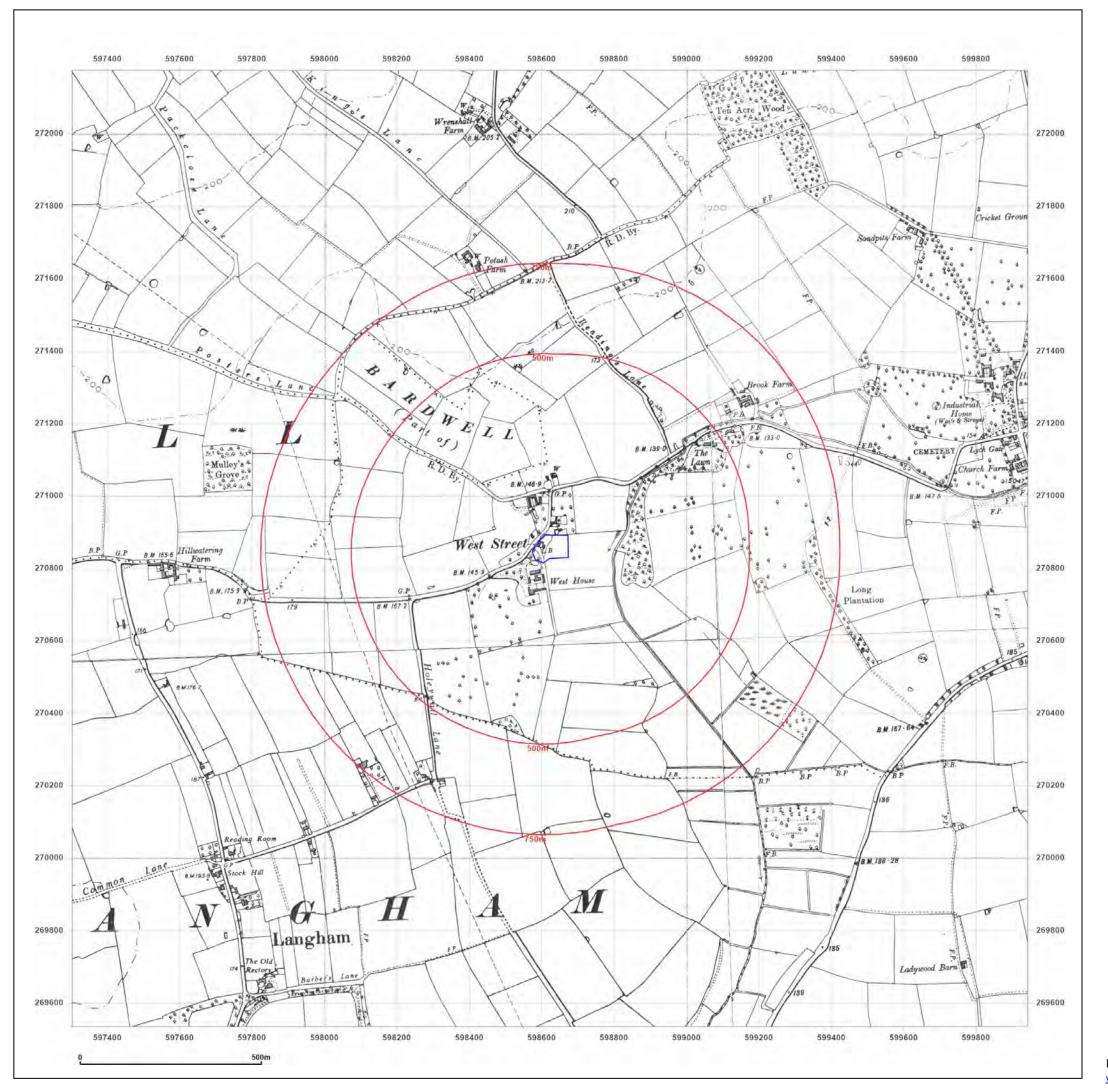


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HOME FARM, WEST STREET, WALSHAM LÉ WILLOWS, IP31

Client Ref:

RCER\_23-137

**Grid Ref:** 

Scale:

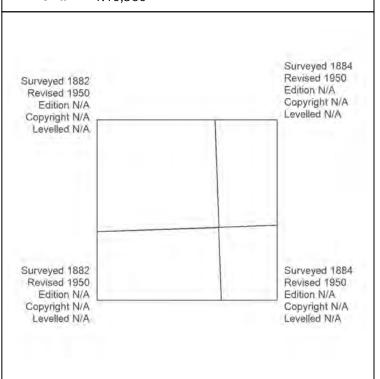
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Map Name: County Series

Map date: 1950

1:10,560

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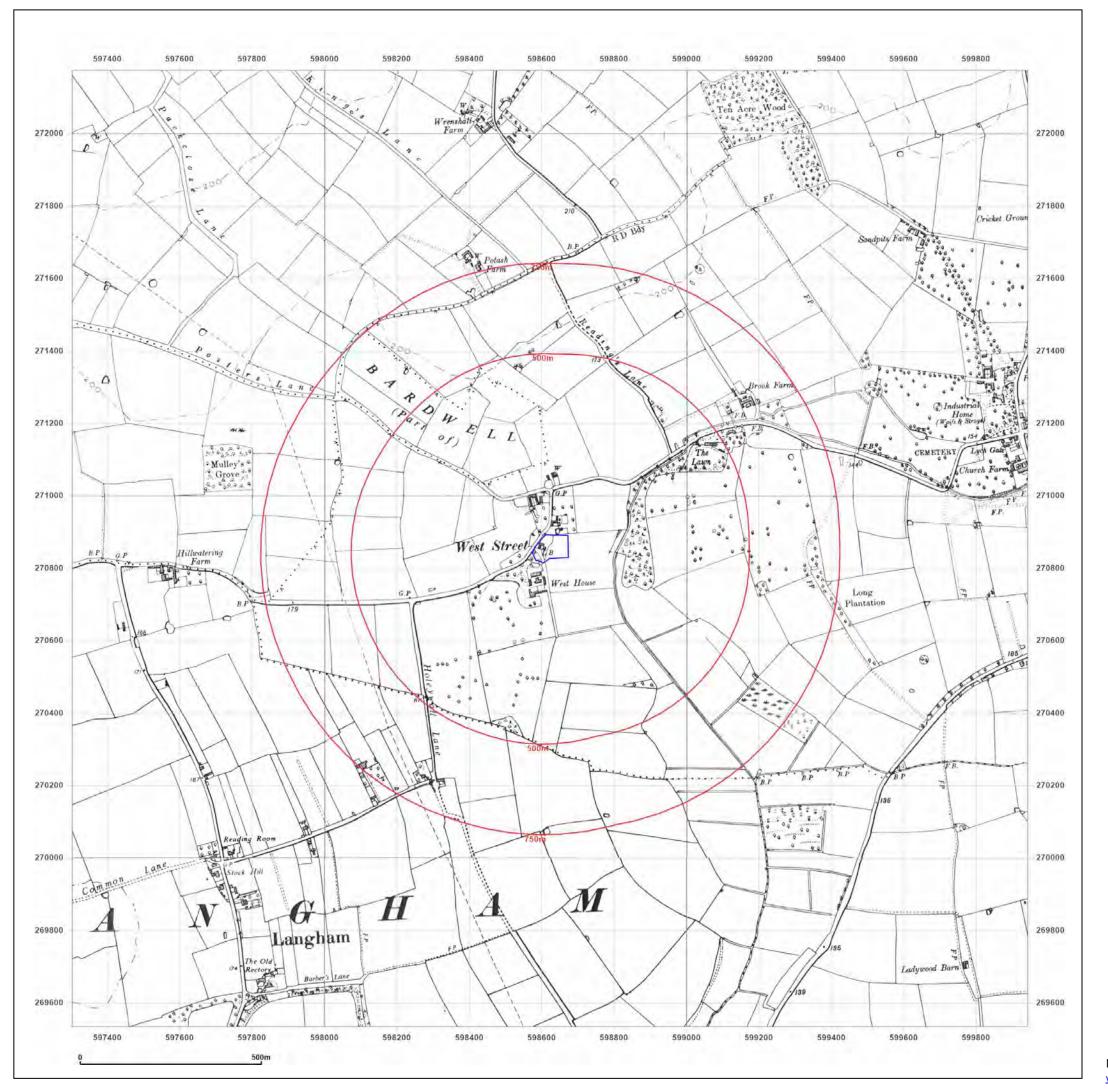


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SAL

Client Ref: RCER\_23-137

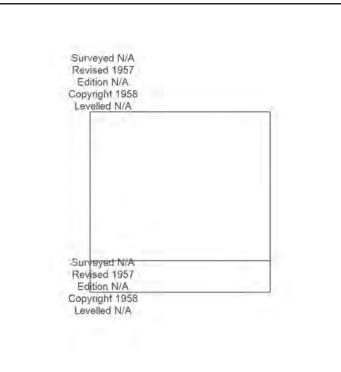
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Map Name: Provisional

Map date: 1958

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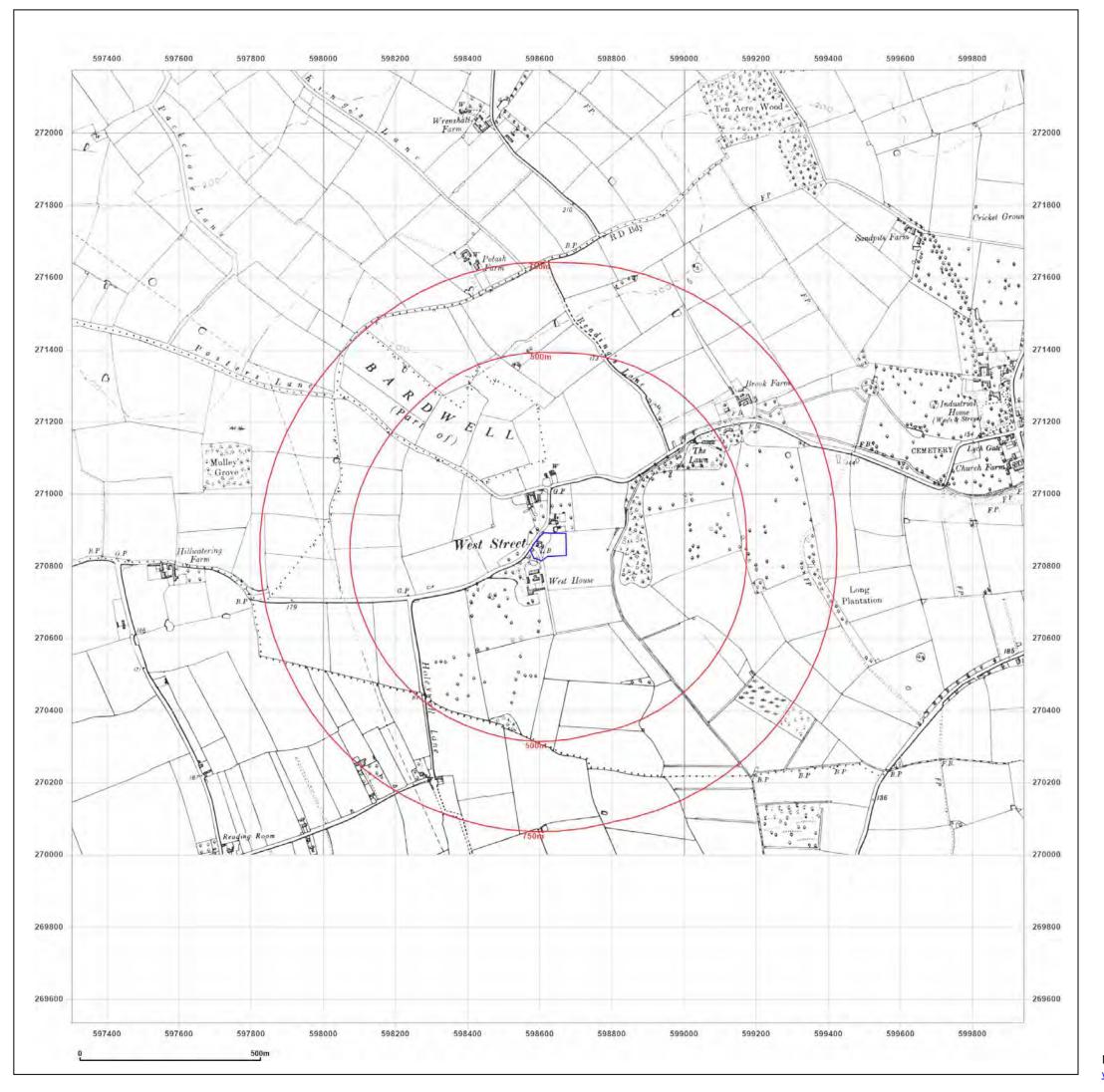


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HOME FARM, WEST STREET, WALSHAM LE WILLOWS, IP31

Client Ref: RCER

RCER\_23-137

**Report Ref:** GS-CYI-GMX-H6J-HBE **Grid Ref:** 598622, 270854

Map Name: Provisional

Map date: 1966

. . . . . . . .

1:10,560

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Scale:



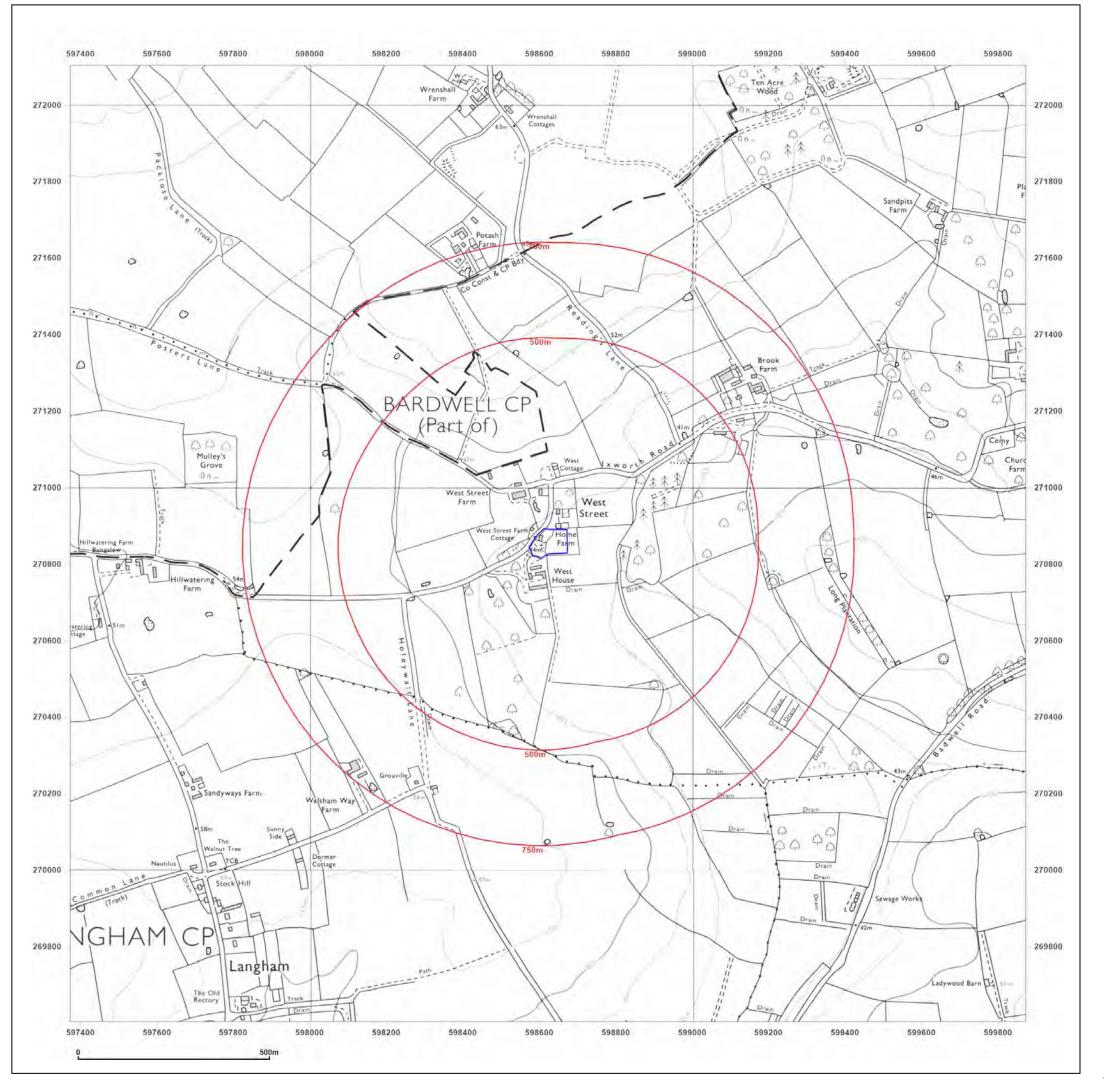


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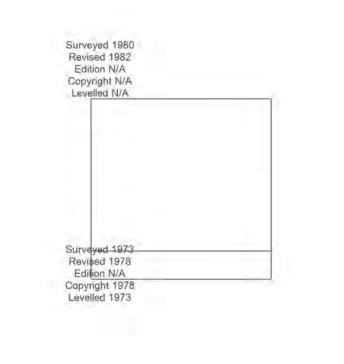
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Report Ref: GS-CYI-GMX-H6J-HBE
Grid Ref: 598622, 270854

Map Name: National Grid

Map date: 1978-1982

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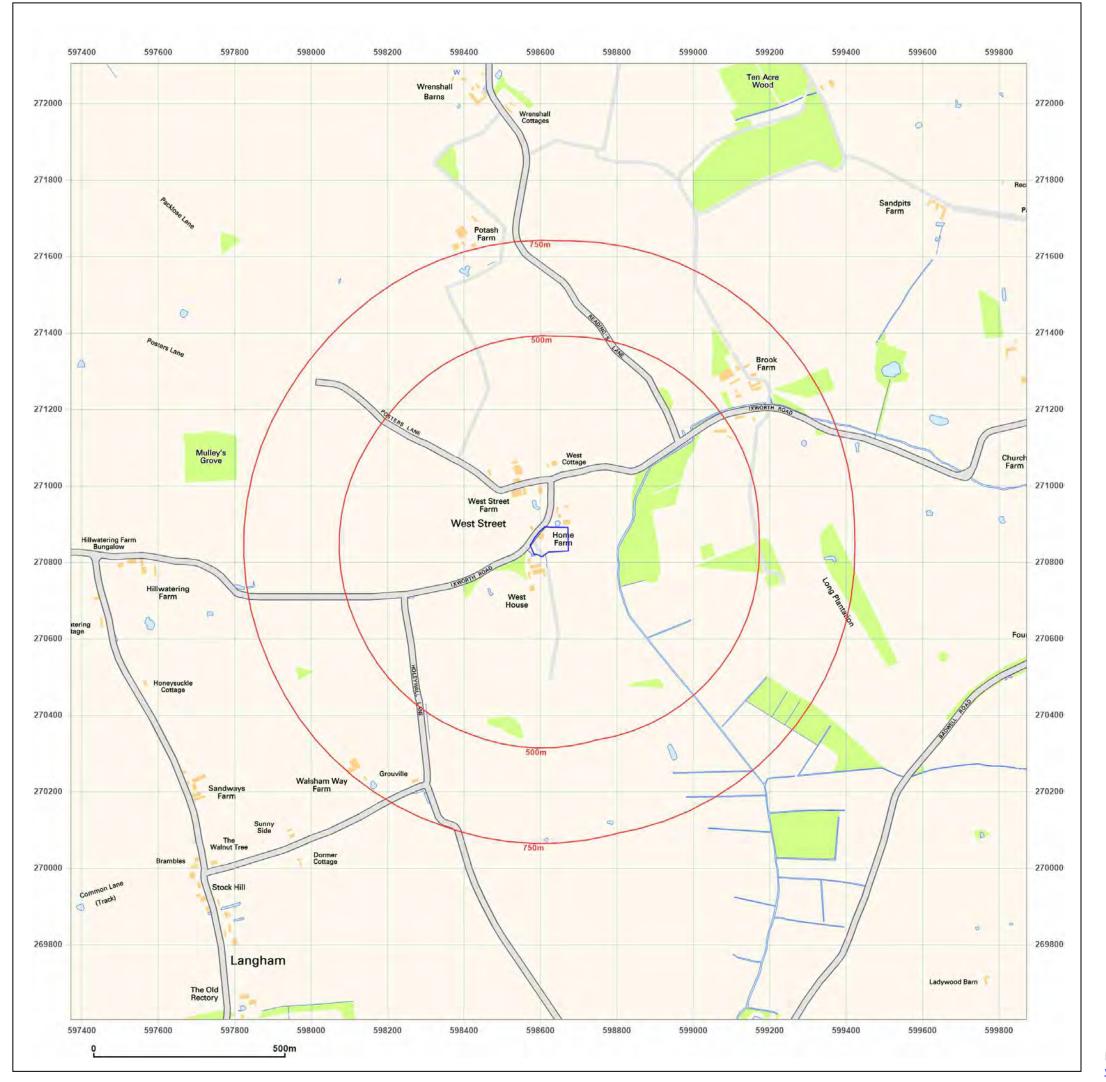


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HOME FARM, WEST STREET, WALSHAM LE WILLOWS, IP31

Client Ref: RCER\_23-137
Report Ref: GS-CYI-GMX-H6J-HBE

**Grid Ref:** 

598622, 270854

Map Name: National Grid

Map date:

Scale:

2001

1:10,000

**Printed at:** 1:10,000



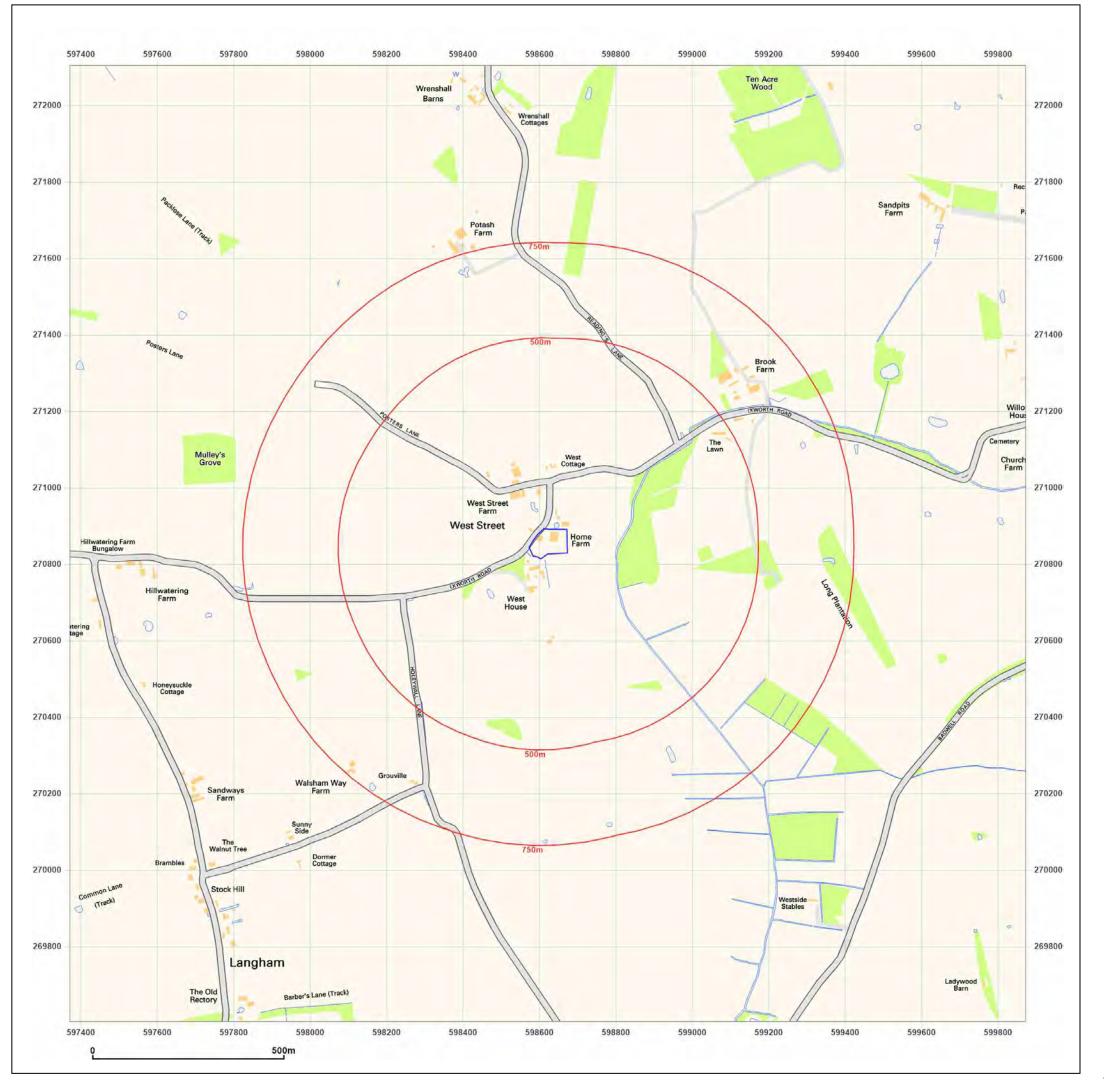


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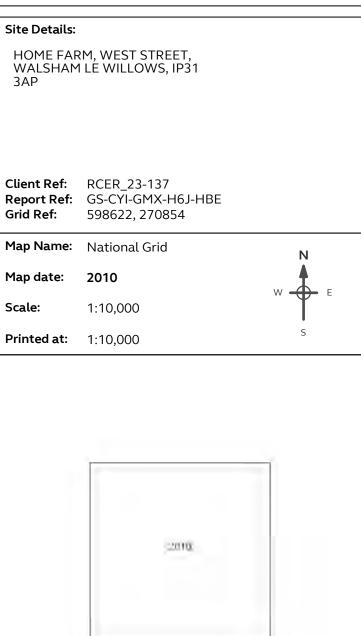
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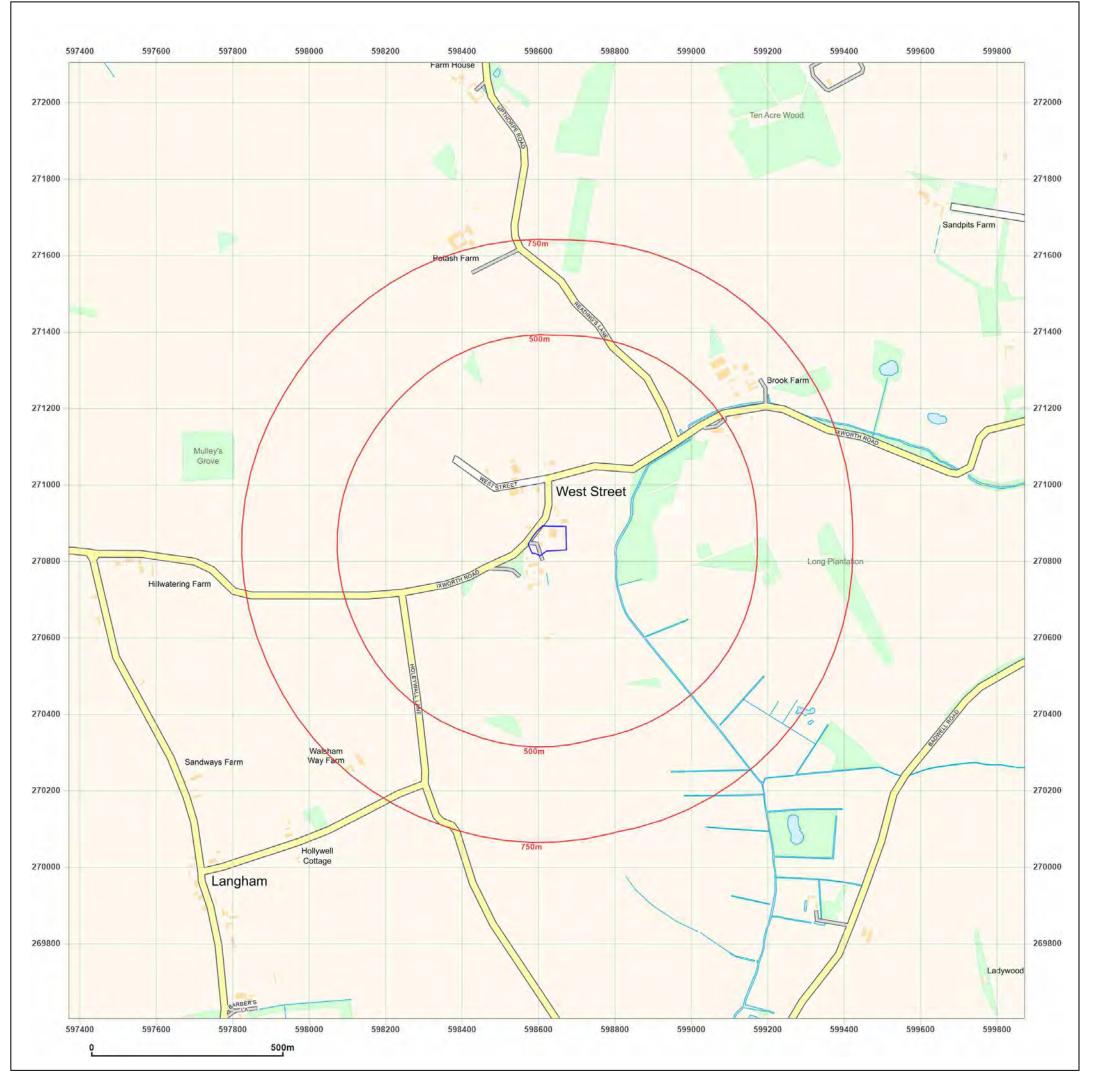


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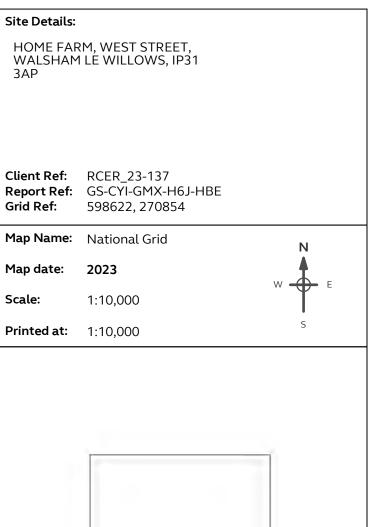
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2009



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## **APPENDIX D: DRAWINGS**

Drawing 23.137/Phasel/01 Site Location Plan

Drawing 23.137/PhaseI/02 Relevant Feature Plan

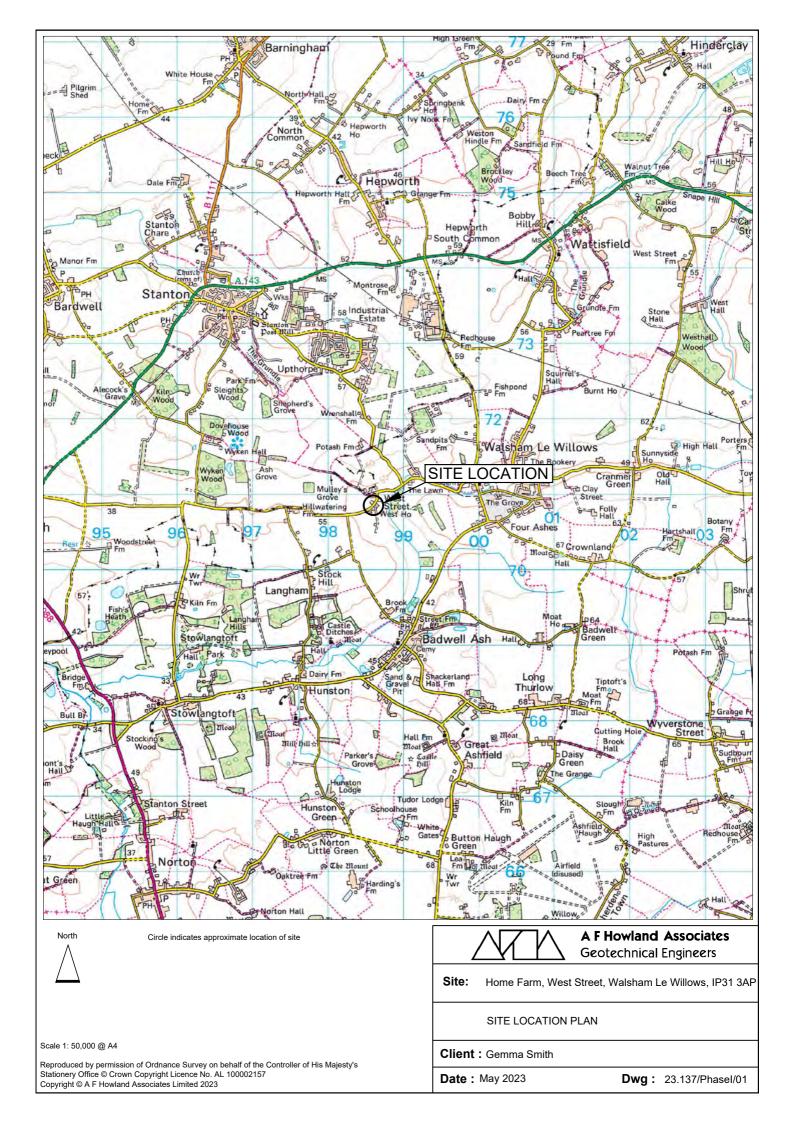


Photo 8

Photo 7

Photo 5

Photo 6

Photo 9

Photo 4

Photo 1 - Overview of the entrance to the site from the road, looking east.



Photo 2 – Overview south boundary looking south east.



Photo 3 - Overview of the site, looking north east



Photo 4 - Overview of the large barn on the site looking

north west.

Photo 5 - Overview of the open barn, looking

Photo 1

Photo 2



Photo 6 - Overview of east side of the site, looking north.

Photo 3

Photo 10



Photo 7 - Overview of the storage area on site with fuel tanks



Photo 8 –Overview of storage area on the site, looking



Photo 9 - Overview of west side of the barn with water tap and electrical wiring in the side of the barn.



Photo 10 - Overview of the barn and concrete area, looking west.



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Client: Gemma Smith Site:

Home Farm, West Street, Walsham Le Willows, Suffolk, IP31 3AP

23.137 Job No.:

Relevant Feature Plan Drawing Title: 23.137/Phasel/02 Drawing No.: May 2023







# **APPENDIX E: RISK ASSESSMENT CLASSIFICATION**

Classification	Definition	Examples	
High Likelihood	There is a pollution linkage and an event which would either appear very likely in the short term and almost inevitable over the long term, or, there is evidence at the receptor of harm or pollution.	Free product visible on surface of sensitive water body or in the soil.  On site or adjacent gassing 'landfill site'.	
Likely	There is a pollution linkage and all the elements are present and in the right place which means that it is probable that an event will occur.  Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.	Potentially contaminative land use i.e. 'Brownfield' site, fuel storage depot, factory, petrol station etc.  Sensitive receptors to be introduced as part of site redevelopment. Potentially infilled land identified on site or off-site with credible migration pathway.	
Low Likelihood	There is a pollution linkage and circumstances are possible under which an event could occur.  However, it is by no means certain that even over a longer period such event would take place, and is less likely in the shorter term.	Potential source of contamination identified i.e. historical land use as allotments or domestic above ground fuel storage tanks, areas of burning garden waste. Possible off-site infilled land.	
Unlikely	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term.	No significant potential sources of contamination identified e.g. 'Greenfield' site. No potential sources of ground gas.	

TABLE E1: CLASSIFICATION OF PROBABILITY

Classification	Definition	Examples	
Severe	Short term (acute) risk to human health. Short term risk of pollution of sensitive water resource. Catastrophic damage to buildings/property. A short term risk to a particular ecosystem.	High concentrations of cyanide on the surface of an informal recreation area.  Major spillage of contaminants from site into controlled water. Credible source of ground gas.	
Medium	Chronic damage to Human Health.  Pollution of sensitive water resources.  A significant change in a particular ecosystem, or organism forming part of such ecosystem.	Concentrations of a contaminant from site exceeds the generic, or site specific assessment criteria.  Leaching of contaminants from a site to a Secondary or Principal aquifer or watercourse.	
Mild	Pollution of non-sensitive water resources.  Significant damage to buildings/structures and crops ("significant harm" as defined in the Circular on Contaminated Land, DETR, 2000). Damage to sensitive buildings/structures or the environment.	Concentrations of a contaminant do not exceed the generic, or site specific assessment criteria.  Leaching of contaminants from a site to an Unproductive Aquifer.  Damage to building rendering it unsafe to occupy (e.g. foundation damage resulting in instability).	
Minor	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as Personal Protective Equipment, etc).	The presence of contaminants at such concentrations that protective equipment is required during site works.  The loss of plants in a landscaping scheme.	

TABLE E2: CLASSIFICATION OF CONSEQUENCE



Classification	Definition				
Very High Risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard or there is evidence that severe harm is occurring.				
	The risk, if realised, is likely to result in a substantial liability.				
	Urgent investigation and remediation will be required.				
High Risk	Harm or chronic damage is likely to arise to a designated receptor from an identified hazard.				
	Investigation is required and remediation is likely to be required to ensure the site is suitable for a proposed use.				
Moderate Risk	It is possible that harm or chronic damage could arise to a designated receptor from an identified hazard. However, it is relatively unlikely that any such harm would be severe. <b>Investigation and remediation are likely to be required</b> to ensure the site is suitable for a proposed use.				
Low/Moderate Risk	It is possible that harm or chronic damage could arise to a designated receptor from an identified hazard. <b>Investigation is likely to be required.</b> However, circumstances are such that investigation may prove the consequence to be mild and the site suitable for use without remediation.				
Low Risk	It is possible that harm could arise to a designated receptor from an identified hazard but it is likely that this harm, if realised, would at worst be mild. <b>Investigation is unlikely to be required.</b>				
Very Low Risk	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe. <b>Investigation is not required.</b>				

TABLE E3: DESCRIPTION OF RISK

		CONSEQUENCE			
		Severe	Medium	Mild	Minor
	High likelihood	Very High	High	Moderate	Low/Moderate
Δ	Likely	High	Moderate	Low/Moderate	Low
PROBABILITY	Low likelihood	Moderate	Low/Moderate	Low	Very Low
_	Unlikely	Low/Moderate	Low	Very Low	Very Low

TABLE E4: DETERMINATION OF RISK



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