

## PHASE ONE DESK STUDY REPORT

1-4 Church Close, Sproughton

Church Close Properties Limited

February 2023

Project no: 62146



## Document Review Sheet: -

Document	<i>Camilla Watson</i>
prepared by: -	on behalf of Richard Jackson Ltd
Date: -	17 /02 / 2023
Document	Joe Gooch
checked by: -	on behalf of Richard Jackson Ltd
Date: -	21 / 02 / 2023
Document	Joe Gooch
Approved by: -	on behalf of Richard Jackson Ltd
Date: -	21 / 02 / 2023

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#### **Revision Status**

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Title:	PHASE ONE DESK STUDY REPORT
Project:	1-4 Church Close, Sproughton
Client:	Church Close Properties Limited
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## Contents:-

1. Int	roductio	n	1
2. Lin	nitations		1
3. Pro	oposed D	evelopment	1
4. Sit	e Locatio	n and Description	1
5. De	sk Study	Findings	3
5.1	. Site His	story	
5.2	. Geolog	y & Geological Hazards	6
5.3	. Hydrold	bgy & Hydrogeology	6
5.4	. Backgro	ound Soil Chemistry	7
5.5	. Industr	ial Activities	
5.6	. Pollutio	n	9
5.7	. Mining,	Ground Workings & Natural Cavities	9
5.8	. Waste	& Landfill	9
5.9	. Enviror	mentally Sensitive Areas	10
6. Ris	sk Assess	ment	10
6.1	. Regulat	tory Regime	
6.2	. Potentia	al Sources of Contamination	
	6.2.1.	On-Site	11
	6.2.2.	Off-Site	
	6.2.3.	Summary	
6.3	. Potentia	al Receptors of Contamination	12
6.4	. Prelimi	nary Conceptual Model & Risk Assessment	
7. Co	nclusions	s & Recommendations	

## Appendix

- Appendix A: Figures & Drawings
- Appendix B: Site Photographs
- Appendix C: Desk Study Information

### 1. Introduction

Richard Jackson Ltd received an instruction to prepare a Phase One Desk Study Report for the proposed redevelopment of 1-4 Church Close, Church Lane, Sproughton, Suffolk, IP8 3BA.

This report has been prepared using historical Ordnance Survey maps and environmental and geological data provided by Groundsure Ltd. This information was supplemented by a site walkover undertaken on 21<sup>st</sup> February 2023.

The purpose of this report is to document the history and environmental setting of the site and surrounding area and to identify potential sources and receptors of contamination.

A brief assessment has also been made of the key geotechnical concerns at this site.

#### 2. Limitations

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#### 3. Proposed Development

The proposed redevelopment is to comprise 4no. residential plots with associated gardens and driveways. A single new plot is proposed in the south of the site, with the remaining 3no. plots comprising conversion and/or extension of the current Grade II listed buildings and associated outbuildings on-site.

A proposed redevelopment plan by Nicholas Jacob Architects is presented in Appendix A.

### 4. Site Location and Description

The site is located at 1-4 Church Close, Church Lane, Sproughton, Suffolk, IP8 3BA. The approximate Ordnance Survey grid reference for the centre of the site was TM 124 450. A site location plan is presented as Figure 1 in Appendix A. Photographs taken at the time of site walkover are presented in Appendix B.

The site covers an area of approximately 0.5 hectares. At the time of the walkover survey the site formed residential properties 1-4 Church Close, which were located in the centre of the site. These central residential buildings comprised a two-storey brick structure with a pitched roof. A single storey brick outbuilding was located to the west, along with a small glass greenhouse structure and area used for planting.

Access was gained in the norther western corner of the site via a gravel surfaced driveway leading off Lower Street. Two wooded access gates were also present along the site's eastern boundary. One in the north-eastern corner and another located centrally on the eastern boundary adjacent to the residential property.

A single-story brick outbuilding was present adjacent to the site's northern boundary. This outbuilding was noted to be used for storage and contained waste/building materials and household items such as furniture, a number of old fridge/freezer and push bikes.

A soft landscaped area containing 3no. approximately 30m high Hornbeam Trees was present between the residential property and the outbuilding on the northern boundary, surrounding by the gravel access driveway. At the time of the site walkover this soft landscaped area was being used for the storage of general waste/building materials, assumed to be associated with the refurbishment of the on-site properties.

Overhead electrical and telecoms cables were noted in the north of the site running between the outbuilding on the northern boundary and the central residential property.

To the south of the residential property, an undeveloped soft landscaped garden area was present, which was noted to undulate slightly. This was noted to be covered by overgrown grass and contained a number of mature trees and shrubs, including a Horse Chestnut of approximately 20-25m in height and mature Yew and Hornbeams.

Hedgerows were present along the southern boundary and south western boundary, with wooden fencing present along the south eastern boundary of the garden area. A brick and flint wall comprised the north-eastern boundary of the site, with wooden fencing running along the north western boundary.

The site was noted to slope gently down, from the southern boundary to the northern boundary.

The surrounding area to the south and west predominantly comprises residential properties and garden areas. All Saints Church and graveyard were located to the east beyond Church Lane, with a community shop/commercial property located to the north beyond Lower Street.

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## 5. Desk Study Findings

The desk study has been compiled using historic Ordnance Survey maps and aerial photographs dating back to 1880, together with environmental and geological data provided by Groundsure Ltd. This information is presented in Appendix C.

## 5.1. Site History

Table 1 provides a summary of the history of the site and surrounding area. Generally, the potentially contaminative industrial land uses mentioned have been limited to those within 500m of the site boundary.

Ordnance Survey Map Date(s)	Scale(s)	On Site History	Surrounding Area History
1880 – 1881	1:2,500 & 1:10,560	The site comprised a central structure with approximate maximum dimensions of 35m north to south by 15m east to west, labelled as a rectory, with outbuildings present on the western wall and along the northern boundary. The majority of the south and northeast of the site was noted to be undeveloped with non- coniferous & deciduous trees shown on mapping.	<ul> <li>The surrounding area to the immediate north and east comprised access roads to residential dwellings and commercial properties, with nearby tree-lined fields to the south and west.</li> <li>Features of note included: <ul> <li>All Saints Church with an associated graveyard approximately 10m east of site;</li> <li>Numerous small orchards in the surrounding area, the closest of which was located approximately 15m west of the site;</li> <li>The River Gipping trending northwest to southeast with associated bridges, locks, and tributaries approximately 60m northeast of the site;</li> <li>A circular feature, possibly a tank located approximately 80m northwest of the site;</li> <li>Zno. sluice/lock located on the River Gipping and adjacent to a corn mill located 40m northeast of the site;</li> <li>A gravel pit approximately 150m to the northwest of the site;</li> <li>A boat house with an associated waterway trending northeast to southwest, located approximately 170m east of the site;</li> <li>The site;</li> <li>Fish Pond located approximately 250m southwest of the site.</li> </ul> </li> </ul>

Table 1: Summary of site history

Title:
Project:
Client:
Project No.:

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Ordnance Survey Map Date(s)	Scale(s)	On Site History	Surrounding Area History
1902 – 1904	1:2,500 & 1:10,560	The site appeared unchanged.	<ul> <li>Features of note included:</li> <li>The gravel pit to the northwest of the site was no longer labelled, possibly infilled;</li> <li>New allotments were shown approximately 145m to the southeast of the site;</li> <li>The orchards in the surrounding areas were no longer shown;</li> <li>The boat house to the east of the site was no longer shown;</li> <li>An unspecified tank was located approximately 495m south of site.</li> </ul>
1926 – 1927	1:2,500 & 1:10,560	The site appeared unchanged.	<ul> <li>Features of note included:</li> <li>Church Hall constructed approximately 90m to the west of the site;</li> <li>The 2no. wells previously recorded west of site were no longer shown;</li> <li>New orchards and associated structures were shown in the surrounding area, the closest of which was approximately 95m southwest of the site;</li> <li>New allotment gardens approximately 180m west of site, and 255m southwest of site;</li> <li>An archaeological urn and settlement discovery shown approximately 300m southwest of the site;</li> <li>A gravel pit approximately 435m southeast of the site.</li> </ul>
1938	1:10,560	The site appeared unchanged.	<ul> <li>Features of note included:</li> <li>Development of access roads and structures to within approximately 190m southeast of the site.</li> </ul>
1953 – 1954	1:10,560	The site appeared unchanged.	<ul> <li>Features of note included:</li> <li>Overhead services approximately 120m to the northeast of the site, oriented southeast to northwest;</li> <li>A police station approximately 140m northwest of the site;</li> <li>A cemetery approximately 275m southeast of the site;</li> <li>Residential dwellings developed along Broomfield Road to within 235m southeast of the site.</li> </ul>
1965 – 1967	1:2,500	The site appeared unchanged.	Features of note included:

Ordnance Survey Map Date(s)	Scale(s)	On Site History	Surrounding Area History	
			<ul> <li>An electricity substation located approximately 35m west of the site, and another approximately 170m southeast of the site;</li> <li>A sheet metal works approximately 100m west of the site;</li> <li>A builder's yard located approximately 165m southwest of the site;</li> <li>A depot on the River Gipping, approximately 70m northeast of site in the location of the former corn mill;</li> <li>The smithy located to the west of the site was no longer shown;</li> <li>Fish Pond to the south of the site no longer shown, possibly infilled;</li> <li>Extensive residential dwelling and access road development to the southeast, south, and southwest of the site, up to the southern and western site boundaries.</li> </ul>	
1970	1:10,560	The site appeared unchanged.	<ul> <li>Features of note included:</li> <li>The tank recorded to the south of the site was no longer shown;</li> <li>The gravel pit to the southeast of the site was no longer shown, possibly infilled.</li> </ul>	
1973 – 1979	1:2,500 & 1:10,000	The central structure was labelled 1-4, with Church Close shown on-site.	<ul> <li>Features of note included:</li> <li>Further residential development to the south of the site;</li> <li>A rectory approximately 110m southeast of the site.</li> </ul>	
1987	1:2,500 & 1:10,000	The site appeared unchanged.	<ul> <li>Features of note included:</li> <li>Initial development of the A14 and associated junctions approximately 470m east of the site, with associated embankments and drains;</li> <li>A pumping station 500m to the southeast of the site.</li> </ul>	
1994	1:2,500	The site appeared unchanged.	The surrounding area appeared relatively unchanged.	
2001	1:10,000	The site appeared unchanged.	The surrounding area appeared relatively unchanged.	
2023	1:10,000	The site appeared unchanged.	<ul><li>Features of note included:</li><li>Residential dwellings and access road development to the south of the site.</li></ul>	

### 5.2. Geology & Geological Hazards

The British Geological Survey (BGS) 1:50,000 scale online mapping of the area indicates that the site is underlain by superficial River Terrace Deposits (RTD), with a bedrock formation of the undifferentiated Thanet Formation and Lambeth Group and the Newhaven Chalk Formation along the eastern boundary of the site.

The adjacent surrounding area is underlain by superficial Lowestoft Formation Sand and Gravel approximately 30m to the west of the site, and superficial Alluvium approximately 30m to the north of the site. A bedrock of Thames Group is recorded approximately 95m to the southwest of the site.

Table 2, provide a summary of the risk of natural hazards occurring on-site. A moderate risk of shrinking or swelling of clays is recorded to the immediate southwest of the site.

Potential Hazard	On-Site Risk
Shrinking or Swelling of Clay	Negligible
Landslides	Very Low
Ground Dissolution	Very Low
Compressible Ground	Negligible
Collapsible Rocks	Very Low
Running Sand	Very Low

Table 2: Summary of Natural Hazards

The UK Health Security Agency (UKHSA) mapping of potential radon levels (2022) indicates the site to be within an area where less than 1% of the homes are at or above the Radon Action Level as defined by NHBC, and therefore radon protection measures will not be required.

### 5.3. Hydrology & Hydrogeology

The underlying superficial River Terrace Deposits and bedrock Thanet Formation and Lambeth Group are classified as a Secondary (A) Aquifers. The underlying Newhaven Chalk Group in the east is classified as a Principal Aquifer.

The Environment Agency defines Principal Aquifers as layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

Secondary (A) aquifers are 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. There is recorded to be a high groundwater vulnerability across the site, associated with the underlying Secondary (A) Aquifers.

The site is located within a Source Protection Zone 3 (SPZ) – Total Catchment.

There are 2no. surface water abstraction licences listed within 500m of the site, each relating to an Anglian Water pumping station approximately 500m to the southeast of the site.

There are no groundwater abstraction licences or potable abstraction licences listed within 500m of the site.

There are 4no. surface water features recorded within 250m of the site, relating to the River Gipping and its tributaries. The River Gipping is located approximately 60m north of the site, oriented northwest to southeast, and flows to the southeast.

The site is not located within an area listed to be at risk from river or coastal flooding when taking into account the flood defences. The closest at-risk area is located approximately 20m northeast of the site, designated as an Environment Agency Zone 3, where the annual probability of flooding from rivers 1% or more and from the sea is 0.5% or more.

The highest risk of surface water flooding on-site is recorded in the southern area of the site, to be at risk of flooding at a depth of 0.1m - 0.3m with a reoccurrence rate of 1 in 30 years.

There is a moderate risk of groundwater flooding on-site, with a high risk approximately 20m northeast of the site.

### **5.4.** Background Soil Chemistry

The British Geological Survey (BGS) produces data and estimated background soil chemistry for a number of common elements, which reflect the average natural soil conditions of the area. It should be appreciated that this data is not specific to the site and reflects the average conditions of the area.

Table 3 provides a summary of the soil chemistry values for the site and for comparative purposes provides the 'Suitable 4 Use Levels' (S4ULs) published by Land Quality Management (LQM) Ltd and the Chartered Institute of Environmental Health (CIEH), for a residential land use with plant uptake as reference criteria. In the absence of an S4UL for Lead, the 'Category 4 Screening Values (C4SL), derived by DEFRA in 2014 has been adopted.

Element BGS Estimated Background Soil Chemistry Concentration (mg/kg)		Screening Value (mg/kg)	
Arsenic	15	37	
Cadmium	1.8	11	
Chromium	40 - 90	910	
Nickel	15 – 30	180	
Lead	100	200	

Table 3: Soil Chemistry
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#### 5.5. Industrial Activities

There is 1no. record of active or recent potentially contaminative industrial land use within 250m of the site, relating to a gas governor approximately 60m northwest of the site.

There are 3no. entries of active or recent energy features within 250m of the site, the closest of which relates to an electricity substation approximately 35m west of the site. Other entries relate to an electricity pylon approximately 120m north of the site, and an electricity substation approximately 170m southeast of the site.

There are 17no. entries of potentially contaminative historical industrial land uses within 500m of the site, the closest of which relates to a graveyard adjacent to the east of the site associated with All Saints Church. Other entries relate to a historical corn mill approximately 40m to the north, sheet metal works approximately 95m to the west, a police station approximately 140m to the northwest and a gravel pit approximately 150m to the northwest. Refuse heaps, the closest of which was approximately 160m to the northwest and a boat house approximately 170m to the east of the site are also recorded. Other entries relate to cemeteries and burial grounds, a sand pit, cuttings, an unspecified tank, and a pumping station.

There are 9no. entries of historical energy features within 500m of the site, each relating to electricity substations, the closest of which was approximately 35m west of the site.

There are 2no. records of historical tanks within 500m of the site, the closest of which was an unspecified tank approximately 55m to the northwest of the site. The other entry was also relating to an unspecified tank approximately 500m south of the site.

There are no records of current, recent, or historical petrol stations, or historical garages within 500m of the site.

There are 3no. licenced discharge consents listed within 500m of the site, the 2no. closest of which refer to a historical treated sewage discharge consent approximately 104m southeast of the site. The other entry relates

a historical emergency miscellaneous discharge consent approximately 405m southeast of the site.

There are no COMAH sites, Hazardous Substation Consents, Licensed Industrial Activities (IPC), Radioactive Substance Authorisations, List 1 or List 2 Dangerous Substances Inventory Sites located within 500m of the site.

### 5.6. Pollution

There are 4no. Environment Agency (EA) recorded pollution incidents listed within 500m of the site. The closest entry refers to an incident in 2018 at a location approximately 205m north of the site. The incident involved an unspecified pollutant and was recorded to have a major (Category 1) impact to water, and no impact (Category 4) to land and air.

Other recorded incidents related to pesticides and biocides and agricultural materials and waste in 2014, both approximately 415m east of the site, recorded to have a significant (Category 2) impact to water, and no impact (Category 4) to land and air.

A further incident was recorded in 2015 involving pesticides and biocides approximately 470m to the east of the site, recorded to have a major (Category 1) impact to water, and no impact (Category 4) to land and air.

### **5.7.** Mining, Ground Workings & Natural Cavities

There are 7no. records of surface ground workings within 250m of the site, the closest of which relates to the graveyard adjacent to the eastern site boundary. Other entries relate to a water body approximately 45m northeast of the site, associated with the sluice/lock on the River Gipping, a gravel pit approximately 150m northwest of the site, a refuse heap 160m northwest of the site and Fish Pond approximately 250m south of the site.

There are 2no. entries of BritPits within 500m of the site, the closest of which is 170m northwest of the site, relating to an inactive sand and gravel pit or quarry. The other entry relates to an inactive sand and gravel pit or quarry located approximately 435m southeast of the site.

There is an active mineral planning permission approximately 300m southeast of the site, relating to a sand and gravel. Sporadic underground mining of chalk is recorded in the surrounding area, with 5no. records of historical chalk mining within 500m of the site.

There are no natural cavities, mining cavities, or underground workings recorded within 500m of the site.

#### 5.8. Waste & Landfill

There is a single entry of a historical waste site within 500m of the site, relating to a refuse pit approximately 410m southeast of the site.

There are no records of active, recent, or historical landfill, or waste exemptions within 500m of the site.

#### 5.9. Environmentally Sensitive Areas

No Sites of Special Scientific Interest (SSSI), Environmentally Sensitive Areas (ESAs), Local or National Nature Reserves or Country Parks are listed within 250m of the site.

The on-site structures (1-4 Church Close, Church Lane, Sproughton, Suffolk, IP8 3BA) are recorded as Grade II listed buildings.

#### 6. Risk Assessment

#### 6.1. Regulatory Regime

Contaminated Land is defined under Section 78A (2) of the Environmental Protection Act 1990, Part IIA.

The most recent revision to this legislation, 'The Contaminated Land (England) (Amendment) Regulations 2012 and the Contaminated Land Statutory Guidance for England 2012. Part IIA defines contaminated land as follows:

"Any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on, or under the land that:

- a) Significant harm is being caused, or there is significant possibility of such harm being caused, or
- b) Significant Pollution of controlled waters is being or is likely to be caused."

Part IIA was introduced to England on 1<sup>st</sup> April 2000 and provides a riskbased approach to the identification and remediation of land where contamination poses an unacceptable risk to the environment or human health. Part IIA of the Act introduces the concept of "pollutant linkages". This is that in order for land to be considered to be contaminated, there must be a contaminant or pollutant source, an exposure pathway by which that contaminant reaches a receptor and the receptor or target itself. If one or more of the elements is missing the land cannot be determined to be contaminated.

Guidance on how the statutory guidance detailed in the Act was to be delivered was detailed in CLR11, 'Model Procedures for the Management of Contamination' (2004). The principles outlined in CLR11 are applied to decisions relating to planning applications.

In addition to the above, the National Planning Policy Framework (NPPF) encourages a positive and proactive approach to secure developments which improve an area socially, economically and environmentally. Consideration should be given to the NPPF during the development of a proposed scheme.

For planning purposes, the NPPF requires that the assessment of risk arising from contamination and the remediation requirements should be considered on the basis of the current environmental setting and land uses, as well as its proposed new use. The NPPF states that planning policies and decisions should ensure a site is suitable for its new end use and that subject to remediation, as a minimum, the land should not be capable of being determined as Contaminated land under Part 2A.

## 6.2. Potential Sources of Contamination

## 6.2.1. On-Site

Since the beginning of the historical map review (1880), the site comprised a central structure, formerly a rectory, with outbuildings to the west and along the northern boundary. The remaining southern and northeastern areas comprised undeveloped land with trees. There appears to have been very little change on-site since this time until present day, with the former rectory building shown to comprise 4no. residential properties from the mid-1900s.

At the time of the site-walkover, household/building materials were being stored in the northern outbuilding. In addition, materials associated with the on-going renovations works were being stored in the soft landscaping area to the north of the residential buildings.

The above land uses are not considered likely to constitute potential sources of contamination.

### 6.2.2. Off-Site

A depot to the northeast of the site, together with the unspecified historical tank located approximately 80m northwest of the site may be considered as potential source of soil and groundwater contamination.

A church and associated graveyard have been present adjacent to the eastern boundary throughout the historical period examined. These land uses together with an infilled gravel pit and fish pond and a 1930s refuse heap may be considered as potential sources of ground gas contamination. Given the remote and historic nature of these features it is considered unlikely that significant volumes of ground gas would accumulate and migrate to impact the subject site.

Historical industrial land uses have been identified in the wider surrounding area including a smithy, sheet metals works and builders yard. These land uses may be considered as potential sources of contamination, however, given their remote nature it is considered unlikely that associated contamination will have migrated to affect the subject site.

The off-site electricity sub-station may also be considered as a potential source of poly-chlorinated biphenyl (PCB) contamination. PCB are typically of very low mobility under normal geochemical conditions, and it is therefore, considered unlikely that associated contamination will have migrated to affect the subject site.

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## 6.2.3. Summary

Potential sources of contamination therefore include:

On-Site:

• None-Identified

Off-site:

- Depot
- Unspecified Historical Tank

Potential contaminants therefore include:

- Heavy Metals
- Polycyclic aromatic hydrocarbons (PAH)
- Total Petroleum Hydrocarbons (TPH)

## 6.3. Potential Receptors of Contamination

Humans, including residential end users of the site, construction site workers and the general public may be considered as receptors of contamination through ingestion, inhalation, of through dermal contact.

The site lies within a Source Protection Zone 3 (SPZ), controlled waters including the underlying Principal and Secondary (A) Aquifers, the River Gipping and associated tributaries, may also be considered as potential receptors of contamination through leaching and migration of contaminants in the soils.

Structures and drainage services are considered as potential receptors of contamination through direct contact with contaminated soils.

Flora is also considered as a potential receptor of contamination through uptake of contamination through the roots.

### 6.4. Preliminary Conceptual Model & Risk Assessment

From the preceding sections, plausible potential pollutant linkages may be proposed for the site and level of risk assigned. A preliminary qualitative risk assessment has been undertaken, which considers the magnitude of the potential consequence (severity) of the risk occurring, the magnitude of the probability (likelihood) of the risk occurring and provides an overall risk classification.

Table 4 details the relationship between probability, consequence and risk used in the assessment and is based on guidance given in CIRIA Report C552 'Contaminated Land Risk Assessment. A Guide to Good Practice' 2001.

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			Consec	quence	
		Severe	Medium	Mild	Minor
~	High likelihood	Very high risk	High risk	Moderate risk	Moderate/ low risk
bility	Likely	High risk	Moderate risk	Moderate/ low risk	Low risk
Probabi	Low likelihood	Moderate risk	Moderate/ low risk	Low risk	Very low risk
۵.	Unlikely	Moderate/ low risk	Low risk	Very low risk	Very low risk

Table 4: Relationship	between probability	, consequence and risk
rabio ni nolationomp	bounder probability	

This risk assessment is based on the findings from the desk-based research. Table 5 provides a preliminary conceptual model and risk assessment.



## Table 5: Preliminary Conceptual Model

Contaminants	Source	Pathway	Receptor	Consequence of risk being realised	Probability of risk being realised	Risk Classification
		Direct Contact, Ingestion, Inhalation	Residential End Users, Construction Site Workers, Site Neighbours	Medium	Unlikely	Low
Heavy Metals, PAH & TPH	Depot, Historical Tank <i>(off-site)</i>	Leaching / Migration	Controlled Waters (Principal & Secondary (A) Aquifers (SPZ 3), River Gipping)	Medium	Unlikely	Low
		Direct Contact	Structures & Services	Mild	Unlikely	Very Low
		Uptake through Roots	Flora	Mild	Unlikely	Very Low

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#### 7. Conclusions & Recommendations

Since the beginning of the historical map review (1880), the site has comprised a rectory with outbuildings in the west and north. By the mid-1900s the central property became segregated into 4no. dwellings, with associated driveways and access via Church Close.

The surrounding area was shown to comprise residential and commercial properties associated with the village of Sproughton. The River Gipping and its tributaries were recorded to the.

A historical depot and unspecified tank in the surrounding area were identified as a potential source of contamination to the site.

A low to very low risk of contamination was considered to be presented to the identified sensitive receptors at the site which included residential end users of the site, the underlying Principal and Secondary (A) Aquifers (SPZ 3) and nearby River Gipping, flora and water supply services.

The anticipated prevailing geology of River Terrace Deposits (RTD) is considered likely to be suitable for the adoption of conventional spread foundations.

The RTD are also typically considered appropriate for the adoption of infiltration drainage. If infiltration drainage is to be adopted, soakage tests should be carried out to allow for an infiltration rate for the encountered soils to be established.

It is recommended that intrusive ground investigations are undertaken at the site to confirm the prevailing ground conditions. In-situ and geotechnical laboratory testing should be undertaken to confirm the above assumptions. It would be prudent to undertake limited chemical analyses of recovered soil samples as part of these works to confirm the contamination status of the site.

It should be appreciated that as part of the planning process it is a requirement for the Local Planning Authority (LPA) to be satisfied that there is sufficient information about the condition of the land and its impacts and if required, viable remedial options.

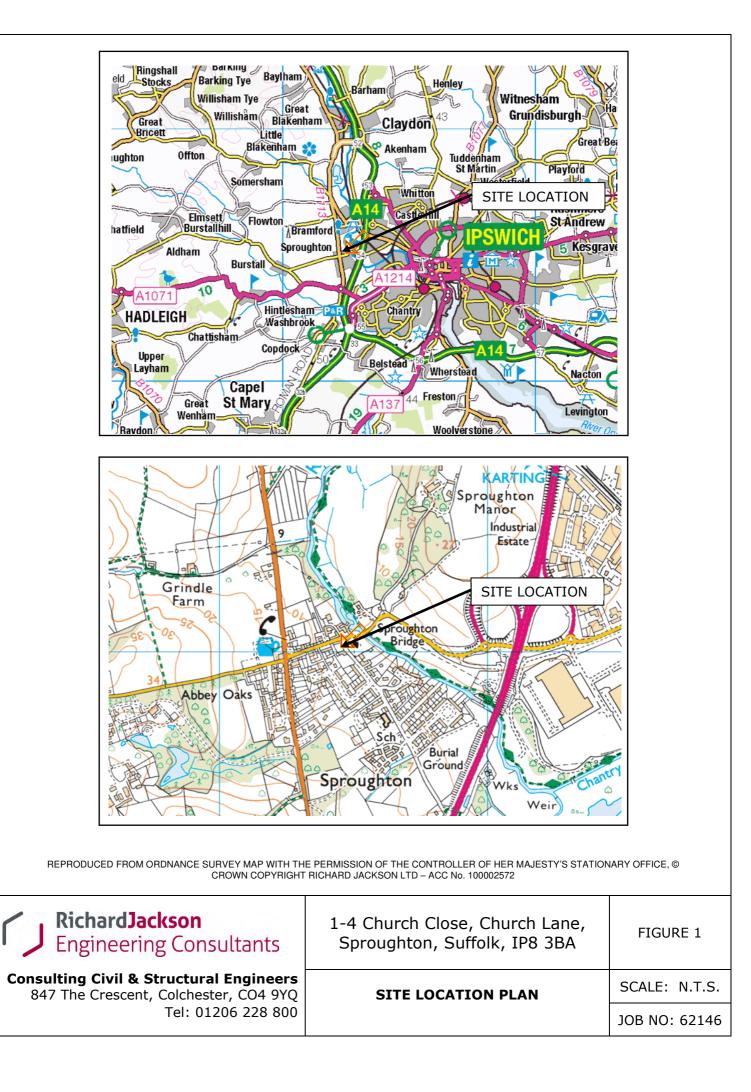
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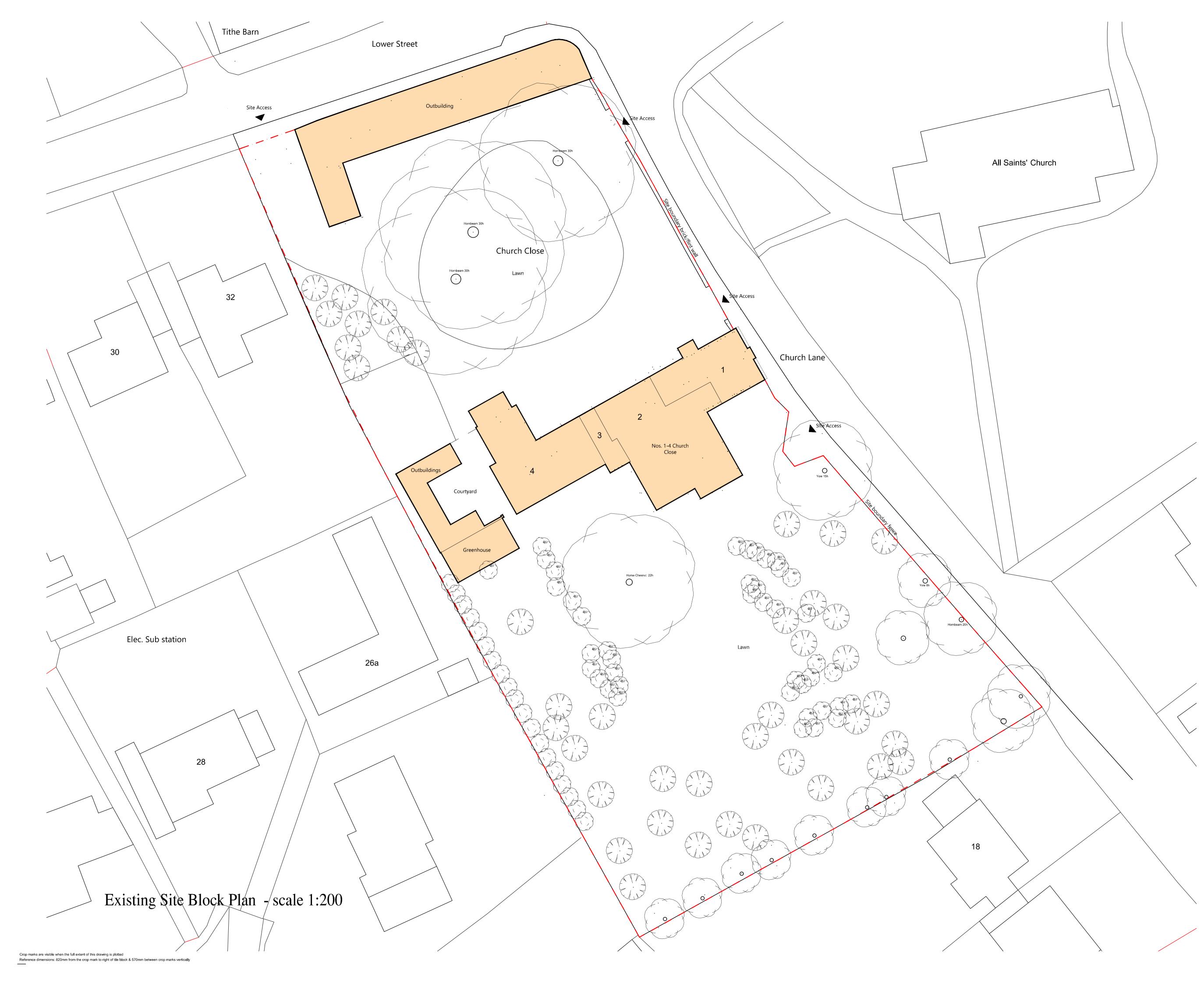
February 2023 Page 15

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### Appendix A

Figures & Drawings





DRAWING DISCEALIMERS AND COMENFORMATION

IF IN DOUBT ABOUT ANY INFORMATION CONTAINED IN THIS DRAWING ASK. DO NOT SCALE. CHECK ALL DIMENSIONS ON SITE AND REPORT DISCREPANCIES.

CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015 DESIGNERS HAZARD INFORMATION FOR CONSTRUCTION

- If you do not fully understand the risks involved during the construction of the items indicated on this drawing ask your manager, health & safety advisor or a member of the design team before proceeding.
- Scaffold protection to be provided during roof works with internal fall protection.
   Any manual handling risks to be identified and design team notified in advance of
- Any manual handling risks to be identified and design team notified in advance of commencement of works.
   The contractor should be aware that there may be buried or covered services such as electric, gas or BT not identified on drawings.
- The contractor should be aware of the general condition and stability of building fabric- particularly during demolition and alteration work.
- When working with lime products which are corrosive to skin and eyes. suitable protection is required.

THIS INFORMATION MUST BE CHECKED ON SITE AND ANY RISKS IDENTIFIED BY OTHER PARTIES REPORTED TO THE PRINCIPAL DESIGNER.

10

0 2 4 6 8 SCALE BAR 1:200

(metres)



PL1	15.09.22	PLANNING	SJ	SS
Rev.	Date	Details	Drawn	Checked
Ν	ich	olas Jacob Archi	ite	cts
	Archi	tecture • Conservation • Inte	riors	
	1 NJAR W 3 22115	s 5 Whenry Quay, Ipswich, IP4 1AS Is to oak 0		
		PLANNING		
Client/	Project:			
Car	dinal I	_oft (Mill) Ltd		
1-4	Churo	ch Close, Church Lane, Sprought	on IP	8 3BE
Drawin	ng title:			
Evic	tina S	Site Block Plan		

Project number:		Drawing number	:	Revision;
21106		001		PL1
Scale: 1:200	@A1	Drawn By: SJ	Checked By:	Date: March 2022



DRAWING DISCEALIMERS AND COMENFORMATION

IF IN DOUBT ABOUT ANY INFORMATION CONTAINED IN THIS DRAWING ASK. DO NOT SCALE. CHECK ALL DIMENSIONS ON SITE AND REPORT DISCREPANCIES.

CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015 DESIGNERS HAZARD INFORMATION FOR CONSTRUCTION

- If you do not fully understand the risks involved during the construction of the items indicated on this drawing ask your manager, health & safety advisor or a member of the design team before proceeding.
- Scaffold protection to be provided during roof works with internal fall protection.
   Any manual handling risks to be identified and design team notified in advance of
- Any manual handling risks to be identified and design team notified in advance of commencement of works.
   The contractor should be aware that there may be buried or covered services such as electric, gas or BT not identified on drawings.
- The contractor should be aware of the general condition and stability of building fabric- particularly during demolition and alteration work.
- When working with lime products which are corrosive to skin and eyes. suitable protection is required.

THIS INFORMATION MUST BE CHECKED ON SITE AND ANY RISKS IDENTIFIED BY OTHER PARTIES REPORTED TO THE PRINCIPAL DESIGNER.

10

0 2 4 6 8 SCALE BAR 1:200

(metres)



PL1 15.09.22 PLANNING	SJ SS
Rev. Date Details	Drawn Checked
Nicholas Jacc Architecture • Conse	b Architects
The Christles 5 Whenry Quay, ipswid State (Stuarcute IS work 01473 221150 Issued for:	sh. IP4 1AS
PLAN	NING
Client/Project:	
Cardinal Loft (Mill) Ltd	
1-4 Church Close, Church	Lane, Sproughton IP8 3B

Drawing title: Proposed Site Block Plan

Project number:		Drawing numbe	r:	Revision;
21106		002		PL1
Scale: 1:200	@A1	Drawn By: SJ	Checked By: SS	Date: March 2022



#### Appendix B

Site Photographs



Photo 1: View of access in the north-western corner leading off Lower Street.



Photo 2: Outbuilding located along northern boundary of the site.

Title: Project: Client: Project No.:





Photo 3: Material storage in outbuilding in the north of the site.



Photo 4: Material storage in soft landscaped area in the north of the site.

Title: Project: Client: Project No.:





Photo 5: View looking south towards residential properties.



Photo 6: Mature Hornbeam trees in the north of the site.

Title: Project: Client: Project No.:





Photo 7: Looking south across garden area in the south of the site.



Photo 8: Trees and hedgerows along the southern boundary.

Title: Project: Client: Project No.:





Photo 9: Looking north across soft landscaped areas in the south of the site.



Photo 10: Access gate on the eastern boundary, leading off Church.

Title: Project: Client: Project No.:



### Appendix C

Desk Study Information

Title: Project: Client: Project No.:





## 1-4 CHURCH CLOSE, CHURCH LANE, SPROUGHTON, IP8 3BA

## **Order Details**

 Date:
 16/02/2023

 Your ref:
 62146

 Our Ref:
 GS-9362372

## **Site Details**

Location:612462 244983Area:0.49 haAuthority:Babergh District Council



Summary of findings	p. 2	Aerial image	p. 8
OS MasterMap site plan	p.13	groundsure.com/insightuserguide	

Contact us with any questions at: info@groundsure.com 01273 257 755



# **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>	Historical industrial land uses	1	3	6	7	-
<u>15</u>	<u>1.2</u>	Historical tanks	0	0	1	1	-
<u>16</u>	<u>1.3</u>	Historical energy features	0	3	3	3	-
16	1.4	Historical petrol stations	0	0	0	0	-
17	1.5	Historical garages	0	0	0	0	-
17	1.6	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>18</u>	<u>2.1</u>	Historical industrial land uses	1	4	8	12	-
<u>19</u>	<u>2.2</u>	Historical tanks	0	0	1	1	-
<u>20</u>	<u>2.3</u>	Historical energy features	0	4	4	4	-
21	2.4	Historical petrol stations	0	0	0	0	-
21	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
22	3.1	Active or recent landfill	0	0	0	0	-
22	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.2 3.3	Historical landfill (BGS records) Historical landfill (LA/mapping records)	0	0	0	0 0	-
							-
23	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
23 23	3.3 3.4	Historical landfill (LA/mapping records) Historical landfill (EA/NRW records)	0	0 0	0	0	-
23 23 <u>23</u>	3.3 3.4 <u>3.5</u>	Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) <u>Historical waste sites</u>	0 0 0	0 0 0	0 0 0	0 0 1	-
23 23 <b>23</b> 23	3.3 3.4 <u>3.5</u> 3.6	Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) <u>Historical waste sites</u> Licensed waste sites	0 0 0	0 0 0	0 0 0	0 0 1 0	- - - - - 500-2000m
23 23 <b>23</b> 23 23 24	3.3 3.4 <u>3.5</u> 3.6 3.7	Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) <u>Historical waste sites</u> Licensed waste sites Waste exemptions	0 0 0 0 0 0	0 0 0 0	0 0 0 0 0 0	0 0 1 0 0	- - - - 500-2000m
23 23 <b>23</b> 23 23 24 Page	<ul> <li>3.3</li> <li>3.4</li> <li><b>3.5</b></li> <li>3.6</li> <li>3.7</li> <li>Section</li> </ul>	Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) <u>Historical waste sites</u> Licensed waste sites Waste exemptions Current industrial land use	0 0 0 0 0 0 0	0 0 0 0 0 0-50m	0 0 0 0 0 50-250m	0 0 1 0 0	- - - - - 500-2000m
23 23 23 23 23 24 Page 25	<ul> <li>3.3</li> <li>3.4</li> <li><b>3.5</b></li> <li>3.6</li> <li>3.7</li> <li>Section</li> <li><b>4.1</b></li> </ul>	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 0 0 0 0 0 0	0 0 0 0 0 0-50m	0 0 0 0 0 50-250m	0 0 1 0 0 250-500m	- - - - - - 500-2000m
23 23 23 23 24 <b>Page</b> 25	<ul> <li>3.3</li> <li>3.4</li> <li><b>3.5</b></li> <li>3.6</li> <li>3.7</li> <li>Section</li> <li><b>4.1</b></li> <li>4.2</li> </ul>	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 0 0 0 0 0	0 0 0 0 0-50m 1 0	0 0 0 0 0 50-250m 3 0	0 0 1 0 0 250-500m - 0	- - - - - - 500-2000m







1-4 CHURCH CLOSE, CHURCH LANE, SPROUGHTON, IP8 3BA

27	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
27	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
27	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
28	4.12	Radioactive Substance Authorisations	0	0	0	0	-
<u>28</u>	<u>4.13</u>	Licensed Discharges to controlled waters	0	0	2	1	-
28	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
29	4.15	Pollutant release to public sewer	0	0	0	0	-
29	4.16	List 1 Dangerous Substances	0	0	0	0	-
29	4.17	List 2 Dangerous Substances	0	0	0	0	-
<u>29</u>	<u>4.18</u>	Pollution Incidents (EA/NRW)	0	0	1	3	-
30	4.19	Pollution inventory substances	0	0	0	0	-
30	4.20	Pollution inventory waste transfers	0	0	0	0	-
	4.9.4		0	0	0	0	
30	4.21	Pollution inventory radioactive waste	0	0	0	0	-
30 Page	4.21 Section	Hydrogeology	0 On site	0-50m	50-250m	250-500m	- 500-2000m
			On site		50-250m		- 500-2000m
Page	Section	Hydrogeology	On site	0-50m	50-250m		- 500-2000m
Page <u>31</u>	Section	Hydrogeology Superficial aquifer	On site Identified ( Identified (	<sup>0-50m</sup> within 500m	50-250m		- 500-2000m
Page <u>31</u> <u>33</u>	Section 5.1 5.2	Hydrogeology Superficial aquifer Bedrock aquifer	On site Identified ( Identified (	<sup>0-50m</sup> within 500m within 500m within 50m)	50-250m		- 500-2000m
Page 31 33 35	Section 5.1 5.2 5.3	Hydrogeology Superficial aquifer Bedrock aquifer Groundwater vulnerability	On site Identified ( Identified ( Identified (	0-50m within 500m within 500m within 50m) within 0m)	50-250m		- 500-2000m
Page 31 33 35 36	Section 5.1 5.2 5.3 5.4	Hydrogeology Superficial aquifer Bedrock aquifer Groundwater vulnerability Groundwater vulnerability- soluble rock risk	On site Identified ( Identified ( Identified ( Identified (	0-50m within 500m within 500m within 50m) within 0m)	50-250m		500-2000m
Page         31         33         35         36         37	Section 5.1 5.2 5.3 5.4 5.5	Hydrogeology Superficial aquifer Bedrock aquifer Groundwater vulnerability Groundwater vulnerability- soluble rock risk Groundwater vulnerability- local information	On site Identified ( Identified ( Identified ( Identified ( None (with	0-50m within 500m within 500m within 50m) within 0m) in 0m)	50-250m )	250-500m	
Page <u>31</u> <u>33</u> <u>35</u> <u>36</u> 37 <u>38</u>	Section 5.1 5.2 5.3 5.4 5.5 5.6	HydrogeologySuperficial aquiferBedrock aquiferGroundwater vulnerabilityGroundwater vulnerability- soluble rock riskGroundwater vulnerability- local informationGroundwater abstractions	On site Identified ( Identified ( Identified ( Identified ( None (with 0	0-50m within 500m within 500m within 50m) within 0m) in 0m)	50-250m ) )	<b>250-500m</b>	15
Page <u>31</u> <u>33</u> <u>35</u> <u>36</u> 37 <u>38</u> <u>42</u>	Section 5.1 5.2 5.3 5.4 5.5 5.6 5.6 5.7	HydrogeologySuperficial aquiferBedrock aquiferGroundwater vulnerabilityGroundwater vulnerability- soluble rock riskGroundwater vulnerability- local informationGroundwater abstractionsSurface water abstractions	On site Identified ( Identified ( Identified ( Identified ( None (with 0 0	0-50m within 500m within 500m within 50m) within 0m) in 0m) 0 0	50-250m ) ) 0 0	250-500m 0 2	15 6
Page         31         33         35         36         37         38         42         44	Section 5.1 5.2 5.3 5.4 5.5 5.6 5.6 5.7 5.8	HydrogeologySuperficial aquiferBedrock aquiferGroundwater vulnerabilityGroundwater vulnerability- soluble rock riskGroundwater vulnerability- local informationGroundwater abstractionsSurface water abstractionsPotable abstractions	On site Identified ( Identified ( Identified ( Identified ( None (with 0 0 0 0	0-50m within 500m within 500m within 50m) within 0m) in 0m) 0 0 0	50-250m ) ) 0 0 0 0	250-500m 0 2 0	15 6
Page 31 33 35 36 37 38 42 44 44	Section 5.1 5.2 5.3 5.4 5.5 5.6 5.6 5.8 5.8 5.9	HydrogeologySuperficial aquiferBedrock aquiferGroundwater vulnerabilityGroundwater vulnerability- soluble rock riskGroundwater vulnerability- local informationGroundwater abstractionsSurface water abstractionsPotable abstractionsSource Protection Zones	On site Identified (* Identified (* Identified (* Identified (* None (with 0 0 0 1	0-50m within 500m within 500m within 50m) within 0m) 0 0 0 1	50-250m ) ) 0 0 0 0 2	250-500m 0 2 0 0	15 6



1-4 CHURCH CLOSE, CHURCH LANE, SPROUGHTON, IP8 3BA

<u>47</u>	<u>6.2</u>	Surface water features	0	0	4	_	-
<u>47</u>	<u>6.3</u>	WFD Surface water body catchments	1	-	-	-	-
<u>48</u>	<u>6.4</u>	WFD Surface water bodies	0	0	1	-	-
<u>48</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>49</u>	<u>7.1</u>	Risk of flooding from rivers and the sea	High (withi	n 50m)			
50	7.2	Historical Flood Events	0	0	0	-	-
50	7.3	Flood Defences	0	0	0	-	-
<u>50</u>	<u>7.4</u>	Areas Benefiting from Flood Defences	0	0	1	-	-
51	7.5	Flood Storage Areas	0	0	0	-	-
<u>52</u>	<u>7.6</u>	Flood Zone 2	Identified (	within 50m)			
<u>53</u>	<u>7.7</u>	Flood Zone 3	Identified (	within 50m)			
Page	Section	Surface water flooding					
<u>54</u>	<u>8.1</u>	Surface water flooding	1 in 30 yea	r, Greater tha	an 1.0m (witl	hin 50m)	
Page	Section	Groundwater flooding					
<u>56</u>	<u>9.1</u>	Groundwater flooding	High (withi	n 50m)			
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
57	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
57 58	10.1 10.2	Sites of Special Scientific Interest (SSSI) Conserved wetland sites (Ramsar sites)	0	0	0	0	0
58	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
58 58	10.2 10.3	Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC)	0 0	0 0	0 0	0 0	0 0
58 58 58	10.2 10.3 10.4	Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA)	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
58 58 58 58	10.2 10.3 10.4 10.5	Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR)	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
58 58 58 58 <b>59</b>	10.2 10.3 10.4 10.5 <b>10.6</b>	Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR)	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 1
58 58 58 <b>59</b> <b>59</b>	10.2 10.3 10.4 10.5 <u>10.6</u> 10.7	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	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 1 5
58 58 58 <b>59</b> <b>59</b> 59	10.2 10.3 10.4 10.5 <b>10.6</b> <b>10.7</b> 10.8	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	0 0 0 0 0 0		0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 1 5 0
58 58 58 <b>59</b> 59 59	10.2 10.3 10.4 10.5 <b>10.6</b> <b>10.7</b> 10.8 10.9	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					0 0 0 1 5 0 0





1-4 CHURCH CLOSE, CHURCH LANE, SPROUGHTON, IP8 3BA

60	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
61	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
61	10.15	Nitrate Sensitive Areas	0	0	0	0	0
<u>61</u>	<u>10.16</u>	Nitrate Vulnerable Zones	2	0	0	0	7
<u>63</u>	<u>10.17</u>	SSSI Impact Risk Zones	1	-	-	-	-
64	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
65	11.1	World Heritage Sites	0	0	0	-	-
66	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
66	11.3	National Parks	0	0	0	-	-
<u>66</u>	<u>11.4</u>	Listed Buildings	1	4	6	-	-
67	11.5	Conservation Areas	0	0	0	-	-
67	11.6	Scheduled Ancient Monuments	0	0	0	-	-
67	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
_							
<u>69</u>	<u>12.1</u>	Agricultural Land Classification	Grade 3 (w	ithin 250m)			
	<u>12.1</u> 12.2	Agricultural Land Classification Open Access Land	Grade 3 (w 0	ithin 250m) 0	0	_	-
<u>69</u>					0	-	-
<u>69</u> 70	12.2	Open Access Land	0	0		-	-
<u>69</u> 70 70	12.2 12.3	Open Access Land Tree Felling Licences	0	0	0	-	
<b>69</b> 70 70 70	12.2 12.3 12.4	Open Access Land Tree Felling Licences Environmental Stewardship Schemes	0 0	0 0 0	0 0	- - - 250-500m	- - - 500-2000m
69 70 70 70 70 70	12.2 12.3 12.4 12.5	Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes	0 0 0	0 0 0	0 0 0	- - - 250-500m	- - - 500-2000m
<ul> <li>69</li> <li>70</li> </ul>	12.2 12.3 12.4 12.5 Section	Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations	0 0 0 0 On site	0 0 0 0 0-50m	0 0 0 50-250m	- - - 250-500m -	- - - 500-2000m -
<ul> <li>69</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>Page</li> <li>71</li> </ul>	12.2 12.3 12.4 12.5 Section 13.1	Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations <u>Priority Habitat Inventory</u>	0 0 0 0 <b>On site</b> 0	0 0 0 0 0-50m 3	0 0 0 50-250m 4	- - - 250-500m - -	- - - 500-2000m - -
<ul> <li>69</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>71</li> <li>72</li> </ul>	12.2 12.3 12.4 12.5 Section 13.1 13.2	Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations Priority Habitat Inventory Habitat Networks	0 0 0 0 0 0 0 0	0 0 0 0 0-50m 3 0	0 0 0 50-250m 4 0	- - - 250-500m - -	- - - 500-2000m - - - -
<ul> <li>69</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>71</li> <li>72</li> <li>72</li> <li>72</li> <li>72</li> </ul>	12.2 12.3 12.4 12.5 <b>Section</b> <b>13.1</b> 13.2 13.3	Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations Priority Habitat Inventory Habitat Networks Open Mosaic Habitat	0 0 0 0 0 0 0 0	0 0 0 0 0-50m 3 0 0	0 0 0 50-250m 4 0 0	- - - 250-500m - - - - - - - - - - -	- - - 500-2000m - - - - - - - - - - - -
<ul> <li>69</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>72</li> <li>74</li> &lt;</ul>	12.2 12.3 12.4 12.5 <b>Section</b> <b>13.1</b> 13.2 13.3 13.4	Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes Habitat designations Priority Habitat Inventory Habitat Networks Open Mosaic Habitat Limestone Pavement Orders	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0-50m 3 0 0 0	0 0 50-250m 4 0 0 0 0 50-250m	-	
<ul> <li>69</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>70</li> <li>72</li> <li>74</li> &lt;</ul>	12.2 12.3 12.4 12.5 Section 13.2 13.3 13.4 Section	Open Access LandTree Felling LicencesEnvironmental Stewardship SchemesCountryside Stewardship SchemesHabitat designationsPriority Habitat InventoryHabitat NetworksOpen Mosaic HabitatLimestone Pavement OrdersGeology 1:10,000 scale	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0-50m 0 0 0 0	0 0 50-250m 4 0 0 0 0 50-250m	-	



1-4 CHURCH CLOSE, CHURCH LANE, SPROUGHTON, IP8 3BA

77	14.4	Landslip (10k)	0	0	0	0	-			
<u>78</u>	<u>14.5</u>	Bedrock geology (10k)	4	0	2	1	-			
79	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-			
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m			
<u>80</u>	<u>15.1</u>	50k Availability	Identified (within 500m)							
81	15.2	Artificial and made ground (50k)	0	0	0	0	-			
81	15.3	Artificial ground permeability (50k)	0	0	-	-	-			
<u>82</u>	<u>15.4</u>	Superficial geology (50k)	1	2	3	2	-			
<u>83</u>	<u>15.5</u>	Superficial permeability (50k)	Identified (within 50m)							
83	15.6	Landslip (50k)	0	0	0	0	-			
84	15.7	Landslip permeability (50k)	None (within 50m)							
<u>85</u>	<u>15.8</u>	Bedrock geology (50k)	2	0	1	1	-			
<u>86</u>	<u>15.9</u>	Bedrock permeability (50k)	Identified (within 50m)							
86	15.10	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>87</u>	<u>16.1</u>	BGS Boreholes	0	0	1	-	-			
Page	Section	Natural ground subsidence								
<u>88</u>	<u>17.1</u>	Shrink swell clays	Moderate (within 50m)							
<u>90</u>	<u>17.2</u>	Running sands	Low (within 50m)							
<u>92</u>	<u>17.3</u>	Compressible deposits	Moderate (within 50m)							
<u>94</u>	<u>17.4</u>	Collapsible deposits	Very low (within 50m)							
<u>95</u>	<u>17.5</u>	<u>Landslides</u>	Very low (within 50m)							
<u>96</u>	<u>17.6</u>	Ground dissolution of soluble rocks	Very low (within 50m)							
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m			
98	18.1	Natural cavities	0	0	0	0	-			
<u>99</u>	<u>18.2</u>	<u>BritPits</u>	0	0	1	1	-			
<u>99</u>	<u>18.3</u>	Surface ground workings	1	1	5	-	-			
100	18.4	Underground workings	0	0	0	0	0			





1-4 CHURCH CLOSE, CHURCH LANE, SPROUGHTON, IP8 3BA

<u>100</u>	<u>18.6</u>	Non-coal mining	0	2	1	2	2			
101	18.7	Mining cavities	0	0	0	0	0			
102	18.8	JPB mining areas	None (within 0m)							
102	18.9	Coal mining	None (within 0m)							
102	18.10	Brine areas	None (within 0m)							
102	18.11	Gypsum areas	None (within 0m)							
102	18.12	Tin mining	None (within 0m)							
103	18.13	Clay mining	None (within 0m)							
Page	Section	Radon								
<u>104</u>	<u>19.1</u>	Radon	Less than 1% (within 0m)							
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m			
<u>106</u>	<u>20.1</u>	BGS Estimated Background Soil Chemistry	7	6	-	-	-			
107	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-			
107	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-			
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m			
108	21.1	Underground railways (London)	0	0	0	-	-			
108	21.2	Underground railways (Non-London)	0	0	0	-	-			
108	21.3	Railway tunnels	0	0	0	-	-			
108	21.4	Historical railway and tunnel features	0	0	0	-	-			
108	21.5	Royal Mail tunnels	0	0	0	-	-			
109	21.6	Historical railways	0	0	0	-	-			
109	21.7	Railways	0	0	0	-	-			
109	21.8	Crossrail 1	0	0	0	0	-			
109	21.9	Crossrail 2	0	0	0	0	-			
109	21.10	HS2	0	0	0	0	-			







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## **Recent aerial photograph**



Capture Date: 23/08/2019 Site Area: 0.49ha





Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## **Recent site history - 2016 aerial photograph**



Capture Date: 05/05/2016 Site Area: 0.49ha





Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## **Recent site history - 2014 aerial photograph**



Capture Date: 05/05/2014 Site Area: 0.49ha







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## Recent site history - 2013 aerial photograph



Capture Date: 15/07/2013 Site Area: 0.49ha







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## **Recent site history - 1999 aerial photograph**



Capture Date: 25/06/1999 Site Area: 0.49ha

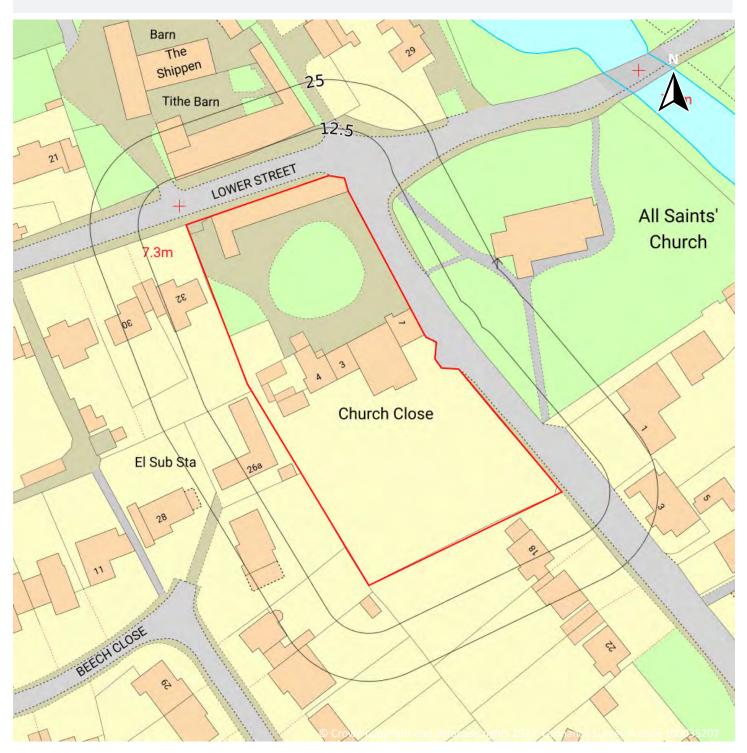






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## OS MasterMap site plan



Site Area: 0.49ha







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## 1 Past land use



## **1.1 Historical industrial land uses**

#### Records within 500m

17

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
1	On site	Grave Yard	1881	2317525







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	Land use	Dates present	Group ID
А	14m N	Corn Mill	1927	2325842
А	39m N	Corn Mill	1881 - 1902	2334845
А	39m N	Corn Mill	1938	2341241
3	94m W	Unspecified Works	1970 - 1973	2335449
4	138m NW	Police Station	1953	2324627
С	151m NW	Gravel Pit	1881	2324201
С	159m NW	Refuse Heap	1927	2341470
С	160m NW	Refuse Heap	1938	2337491
5	170m E	Boat House	1881	2325012
F	416m SE	Cemetery	1954	2317263
G	417m SE	Sand Pit	1938 - 1954	2327617
F	418m SE	Burial Ground	1970 - 1987	2338673
G	420m SE	Refuse Heap	1927	2343445
6	440m E	Cuttings	1987	2318759
Н	495m S	Unspecified Tank	1902 - 1954	2333078
7	497m E	Pumping Station	1987	2323196

This data is sourced from Ordnance Survey / Groundsure.

## **1.2 Historical tanks**

#### **Records within 500m**

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'.

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

ID	Location	Land use	Dates present	Group ID
2	55m NW	Unspecified Tank	1880	415872
Н	499m S	Unspecified Tank	1926	415881







9

This data is sourced from Ordnance Survey / Groundsure.

## **1.3 Historical energy features**

#### **Records within 500m**

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'.

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

ID	Location	Land use	Dates present	Group ID
В	35m W	Electricity Substation	1961	297114
В	35m W	Electricity Substation	1966 - 1987	299831
В	37m W	Electricity Substation	1994	300110
D	166m SE	Electricity Substation	1987	296997
D	169m SE	Electricity Substation	1966 - 1994	297462
D	171m SE	Electricity Substation	1961	297419
Е	373m SW	Electricity Substation	1966 - 1987	297044
Е	373m SW	Electricity Substation	1961	299405
Е	374m SW	Electricity Substation	1994	299097

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

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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'.

This data is sourced from Ordnance Survey / Groundsure.

## **1.6 Historical military land**

#### Records within 500m

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.







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## 2 Past land use - un-grouped



## 2.1 Historical industrial land uses

#### Records within 500m

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 18

ID	Location	Land Use	Date	Group ID
1	On site	Grave Yard	1881	2317525
А	14m N	Corn Mill	1927	2325842
А	39m N	Corn Mill	1938	2341241







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	Land Use	Date	Group ID
А	39m N	Corn Mill	1902	2334845
А	39m N	Corn Mill	1881	2334845
С	94m W	Unspecified Works	1970	2335449
С	94m W	Unspecified Works	1973	2335449
3	138m NW	Police Station	1953	2324627
D	151m NW	Gravel Pit	1881	2324201
D	159m NW	Refuse Heap	1927	2341470
D	159m NW	Refuse Heap	1927	2341470
D	160m NW	Refuse Heap	1938	2337491
4	170m E	Boat House	1881	2325012
G	416m SE	Cemetery	1954	2317263
Н	417m SE	Sand Pit	1954	2327617
Н	418m SE	Sand Pit	1938	2327617
G	418m SE	Burial Ground	1970	2338673
G	418m SE	Burial Ground	1987	2338673
G	418m SE	Burial Ground	1973	2338673
Н	420m SE	Refuse Heap	1927	2343445
Н	420m SE	Refuse Heap	1927	2343445
5	440m E	Cuttings	1987	2318759
Ι	495m S	Unspecified Tank	1954	2333078
6	497m E	Pumping Station	1987	2323196
I	497m S	Unspecified Tank	1927	2333078

This data is sourced from Ordnance Survey / Groundsure.

## **2.2 Historical tanks**

#### **Records within 500m**

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'.



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12

#### Features are displayed on the Past land use - un-grouped map on page 18

ID	Location	Land Use	Date	Group ID
2	55m NW	Unspecified Tank	1880	415872
I	499m S	Unspecified Tank	1926	415881

This data is sourced from Ordnance Survey / Groundsure.

## 2.3 Historical energy features

#### Records within 500m

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'.

Features are displayed on the Past land use - un-grouped map on page 18

ID	Location	Land Use	Date	Group ID
В	35m W	Electricity Substation	1961	297114
В	35m W	Electricity Substation	1987	299831
В	37m W	Electricity Substation	1966	299831
В	37m W	Electricity Substation	1994	300110
Е	166m SE	Electricity Substation	1987	296997
E	169m SE	Electricity Substation	1966	297462
Е	169m SE	Electricity Substation	1994	297462
Е	171m SE	Electricity Substation	1961	297419
F	373m SW	Electricity Substation	1961	299405
F	373m SW	Electricity Substation	1987	297044
F	374m SW	Electricity Substation	1994	299097
F	375m SW	Electricity Substation	1966	297044

This data is sourced from Ordnance Survey / Groundsure.







## 2.4 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. 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.

### **2.5 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'.

This data is sourced from Ordnance Survey / Groundsure.





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Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## **3** Waste and landfill



## 3.1 Active or recent landfill

#### **Records within 500m**

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

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.





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Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## 3.3 Historical landfill (LA/mapping records)

#### **Records within 500m**

#### 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

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 1

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

Features are displayed on the Waste and landfill map on page 22

ID	Location	Address	Further Details	Date
1	412m SE	Site Address: N/A	Type of Site: Refuse Pit Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1926

*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.







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

#### **3.7 Waste exemptions**

#### **Records within 500m**

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.

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

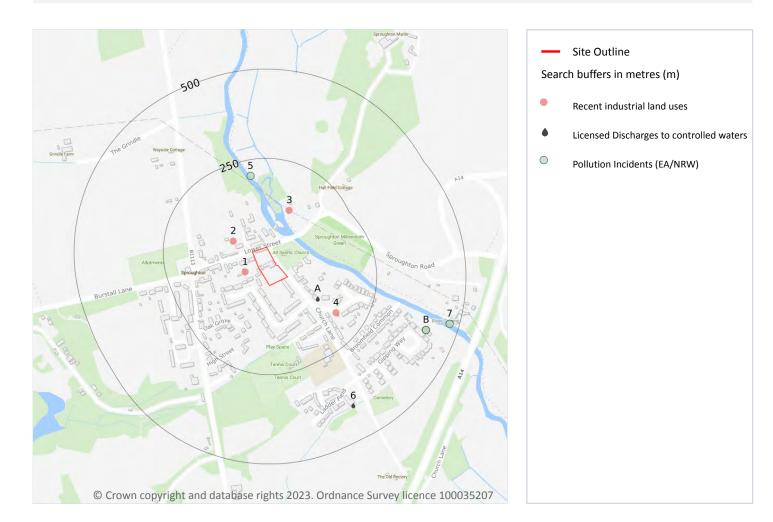






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## 4 Current industrial land use



## 4.1 Recent industrial land uses

#### **Records within 250m**

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on page 25

ID	Location	Company	Address	Activity	Category
1	40m W	Electricity Sub Station	Suffolk, IP8	Electrical Features	Infrastructure and Facilities
2	62m NW	Gas Governor	Suffolk, IP8	Gas Features	Infrastructure and Facilities
3	122m N	Pylon	Suffolk, IP8	Electrical Features	Infrastructure and Facilities







ID	Location	Company	Address	Activity	Category
4	169m SE	Electricity Sub Station	Suffolk, IP8	Electrical Features	Infrastructure and Facilities
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

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

#### 4.5 Sites determined as Contaminated Land

Records within 500m	0
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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

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

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

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**

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.





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## 4.12 Radioactive Substance Authorisations

#### **Records within 500m**

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**

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991. Features are displayed on the Current industrial land use map on **page 25** 

ID	Location	Address	Details	
A	104m SE	KENNIES, SADLERS HOLDINGS LTD, SPROUGHTON ROAD, IPSWICH, SUFFOLK, IP1 5BL	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRENF01603 Permit Version: 2 Receiving Water: Trib River Gipping	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 22/01/1992 Effective Date: 22/01/1992 Revocation Date: 15/07/2003
A	104m SE	SPROUGHTON RD, IPSWICH, SUFFOLK	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRENF01603 Permit Version: 1 Receiving Water: RIVER GIPPING	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 22/08/1989 Effective Date: 22/08/1989 Revocation Date: 21/01/1992
6	405m SE	CHURCH LANE, SPROUGHTON	Effluent Type: MISCELLANEOUS DISCHARGES - EMERGENCY DISCHARGES Permit Number: ASNNF2211 Permit Version: 1 Receiving Water: Trib R Orwell	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 02/01/1990 Effective Date: 02/01/1990 Revocation Date: 04/03/1998

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

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

#### **Records within 500m**

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.



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Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

#### 4.15 Pollutant release to public sewer

#### Records within 500m

#### Discharges of Special Category Effluents to the public sewer.

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

### 4.16 List 1 Dangerous Substances

#### Records within 500m

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

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

#### Features are displayed on the Current industrial land use map on page 25

ID	Location	Details	
5	204m N	Incident Date: 28/07/2018 Incident Identification: 1638282 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 1 (Major) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
В	415m E	Incident Date: 07/11/2014 Incident Identification: 1292810 Pollutant: Organic Chemicals/Products Pollutant Description: Pesticides and Biocides	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)





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Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	Details			
В	Incident Identification: 1292810		Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)		
7	472m E	Incident Date: 24/09/2015 Incident Identification: 1375717 Pollutant: Organic Chemicals/Products Pollutant Description: Pesticides and Biocides	Water Impact: Category 1 (Major) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)		

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

## 4.19 Pollution inventory substances

#### **Records within 500m**

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**

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**

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.





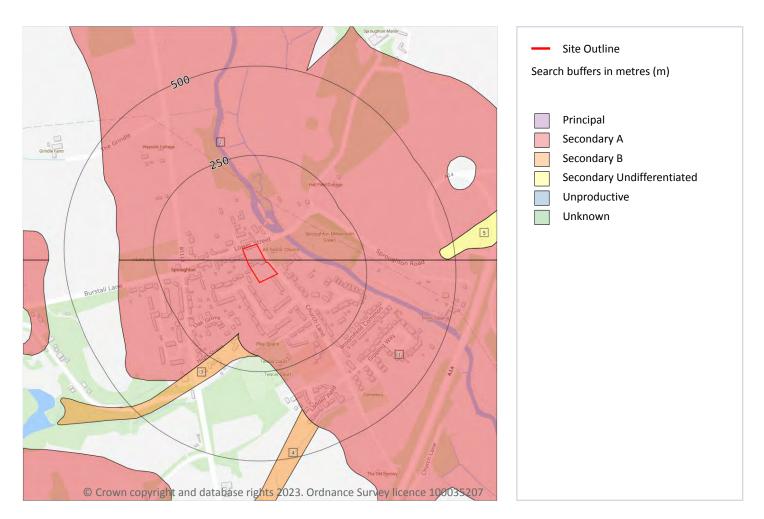
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Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## 5 Hydrogeology - Superficial aquifer



## **5.1 Superficial aquifer**

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 31

ID	Location	Designation	Description
1	On site	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
2	On site	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







ID	Location	Designation	Description
3	154m S	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
4	375m S	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
5	458m E	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

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

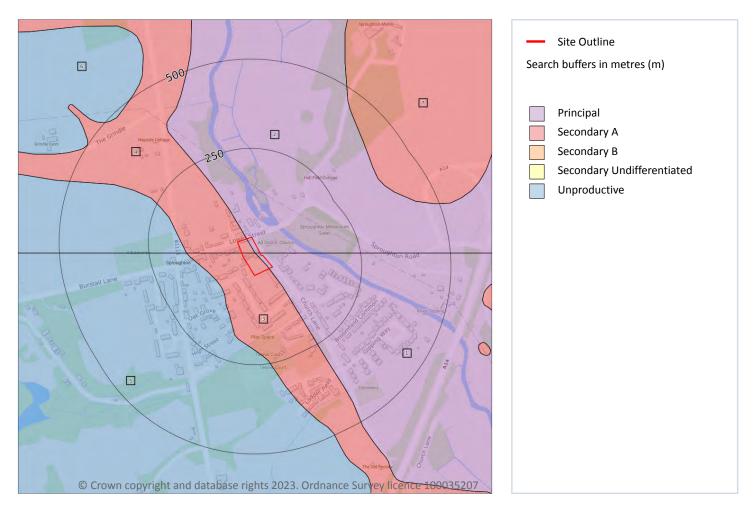






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## **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 33

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
2	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







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	Designation	Description
3	On site	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
4	On site	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
5	96m SW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
6	146m W	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
7	385m 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.

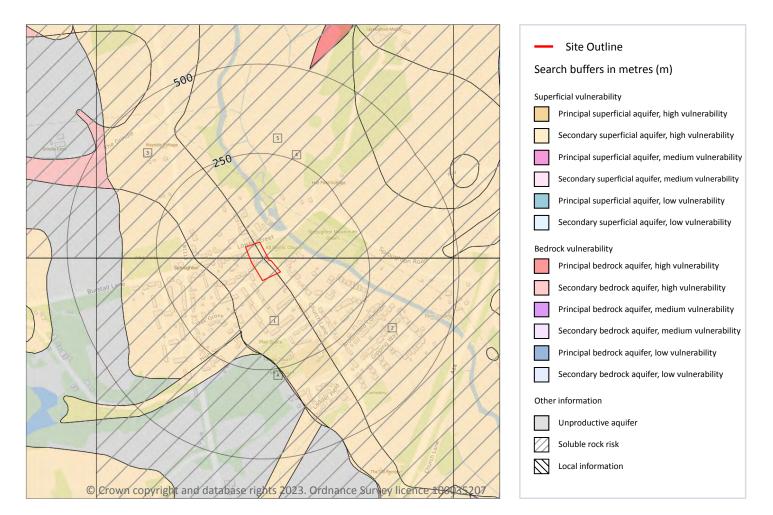






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## **Groundwater vulnerability**



## 5.3 Groundwater vulnerability

#### **Records within 50m**

4

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 35





Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

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

5 Significant soluble rocks are likely to be present. Low possibility of localised 3.0% subsidence or dissolution-related degradation of bedrock occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow.







ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk	
А	Significant soluble rocks are likely to be present. Low possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, but may be possible in adverse conditions such as high 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

0

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 enquiries@environment-agency.gov.uk.

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

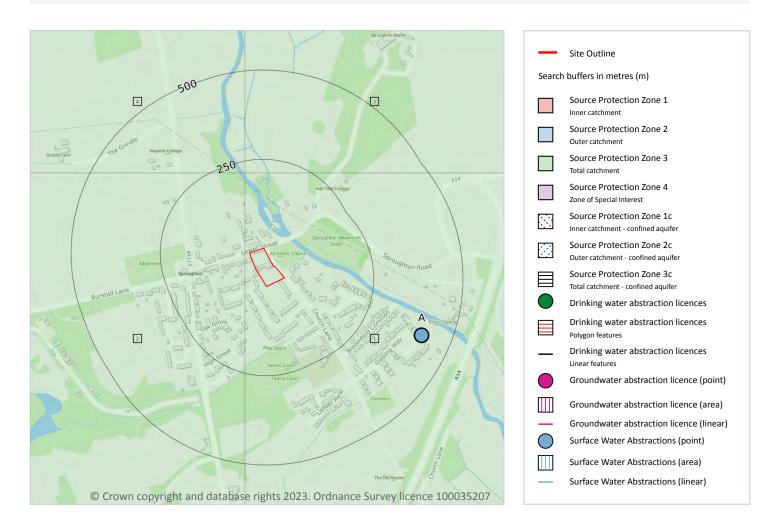






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## **Abstractions and Source Protection Zones**



#### 5.6 Groundwater abstractions

#### **Records within 2000m**

15

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 38







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	Details	
-	961m E	Status: Historical Licence No: 7/35/08/*G/0162 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT SPROUGHTON RD FACTORY Data Type: Point Name: BRITISH SUGAR PLC Easting: 613470 Northing: 245080	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/04/1967 Expiry Date: - Issue No: 101 Version Start Date: 23/05/2000 Version End Date: -
-	961m E	Status: Historical Licence No: 7/35/08/*G/0162 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT SPROUGHTON RD FACTORY Data Type: Point Name: J G IPSWICH LLP Easting: 613470 Northing: 245080	Annual Volume (m <sup>3</sup> ): 60465 Max Daily Volume (m <sup>3</sup> ): 455 Original Application No: - Original Start Date: 27/04/1967 Expiry Date: - Issue No: 102 Version Start Date: 16/09/2010 Version End Date: -
-	991m NW	Status: Historical Licence No: 7/35/08/*G/0200 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CHALK BOREHOLE - BRAMFORD Data Type: Point Name: GODBOLD Easting: 611780 Northing: 245790	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/07/1989 Expiry Date: - Issue No: 100 Version Start Date: 01/08/1989 Version End Date: -
-	1057m E	Status: Historical Licence No: 7/35/08/*G/0171 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT SPROUGHTON RD,IPSWICH Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD Easting: 613530 Northing: 245260	Annual Volume (m <sup>3</sup> ): 27200 Max Daily Volume (m <sup>3</sup> ): 228 Original Application No: - Original Start Date: 01/01/1968 Expiry Date: - Issue No: 102 Version Start Date: 13/08/2012 Version End Date: -
-	1057m E	Status: Active Licence No: 7/35/08/*G/0171 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 AT SPROUGHTON RD, IPSWICH Data Type: Point Name: Hanson Quarry Products Europe Ltd Easting: 613530 Northing: 245260	Annual Volume (m <sup>3</sup> ): 27,200 Max Daily Volume (m <sup>3</sup> ): 228 Original Application No: - Original Start Date: 01/01/1968 Expiry Date: - Issue No: 103 Version Start Date: 11/04/2017 Version End Date: -







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	Details	
-	1153m E	Status: Historical Licence No: 7/35/08/*G/0171 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT SPROUGHTON RD,IPSWICH Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD Easting: 613630 Northing: 245260	Annual Volume (m <sup>3</sup> ): 27200 Max Daily Volume (m <sup>3</sup> ): 228 Original Application No: - Original Start Date: 01/01/1968 Expiry Date: - Issue No: 102 Version Start Date: 13/08/2012 Version End Date: -
-	1153m E	Status: Active Licence No: 7/35/08/*G/0171 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 AT SPROUGHTON RD, IPSWICH Data Type: Point Name: Hanson Quarry Products Europe Ltd Easting: 613630 Northing: 245260	Annual Volume (m <sup>3</sup> ): 27,200 Max Daily Volume (m <sup>3</sup> ): 228 Original Application No: - Original Start Date: 01/01/1968 Expiry Date: - Issue No: 103 Version Start Date: 11/04/2017 Version End Date: -
-	1188m SE	Status: Historical Licence No: 7/35/08/*G/0032 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT RED HOUSE,SPROUGHTON Data Type: Point Name: T BRYCE & SONS Easting: 613140 Northing: 243950	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1974 Version End Date: -
-	1227m S	Status: Historical Licence No: 7/35/08/*G/0016 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT SPRINGVALE,SPROUGHTON Data Type: Point Name: T BRYCE & SONS Easting: 612690 Northing: 243730	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1974 Version End Date: -
-	1342m N	Status: Historical Licence No: 7/35/08/*G/0155 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT NURSERY AT BRAMFORD Data Type: Point Name: BY-PASS NURSERIES LTD Easting: 612980 Northing: 246280	Annual Volume (m <sup>3</sup> ): 3600 Max Daily Volume (m <sup>3</sup> ): 44 Original Application No: - Original Start Date: 01/04/1967 Expiry Date: - Issue No: 101 Version Start Date: 01/11/2002 Version End Date: -







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	Details	
-	1350m W	Status: Historical Licence No: 7/35/08/*G/0153 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT FERRY BARN,SPROUGHTON Data Type: Point Name: FISKE LANDS TRUST Easting: 611070 Northing: 244950	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/04/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1995 Version End Date: -
-	1532m NW	Status: Historical Licence No: 7/35/08/*G/0153 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT FIDGEON'S FM,BRAMFORD Data Type: Point Name: FISKE LANDS TRUST Easting: 611320 Northing: 246100	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/04/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1995 Version End Date: -
-	1656m SE	Status: Historical Licence No: 7/35/08/*G/0085 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT LONDON RD W OF IPSWICH Data Type: Point Name: VAN DER ENDE Easting: 613350 Northing: 243530	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1966 Version End Date: -
-	1711m S	Status: Historical Licence No: 7/35/08/*G/0064 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT POPLAR FM,SPROUGHTON Data Type: Point Name: J WILSON & CO Easting: 612590 Northing: 243230	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1966 Version End Date: -
-	1990m E	Status: Historical Licence No: 7/35/08/*G/0208 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL AT HADLEIGH ROAD INDUSTRIAL ESTATE, IPSWICH Data Type: Point Name: CROWN CIRCUITS LTD Easting: 614500 Northing: 244800	Annual Volume (m <sup>3</sup> ): 7300 Max Daily Volume (m <sup>3</sup> ): 20 Original Application No: - Original Start Date: 01/10/1994 Expiry Date: - Issue No: 103 Version Start Date: 01/10/2002 Version End Date: -







8

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

## 5.7 Surface water abstractions

#### **Records within 2000m**

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.

Features are displayed on the Abstractions and Source Protection Zones map on page 38

ID	Location	Details	
A	416m SE	Status: Historical Licence No: 7/35/08/*S/0175 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: R GIPPING INTAKE, SPROUGHTON Data Type: Point Name: ANGLIAN WATER SERVICES LIMITED Easting: 612900 Northing: 244800	Annual Volume (m <sup>3</sup> ): 10,783,000 Max Daily Volume (m <sup>3</sup> ): 136380 Original Application No: - Original Start Date: 01/01/1971 Expiry Date: - Issue No: 101 Version Start Date: 26/01/2009 Version End Date: -
A	416m SE	Status: Active Licence No: 7/35/08/*S/0175 Details: Transfer Between Sources (Pre Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: R GIPPING INTAKE, SPROUGHTON Data Type: Point Name: Anglian Water Services Ltd Easting: 612900 Northing: 244800	Annual Volume (m <sup>3</sup> ): 10,783,000 Max Daily Volume (m <sup>3</sup> ): 136,380 Original Application No: - Original Start Date: 01/01/1971 Expiry Date: - Issue No: 102 Version Start Date: 06/11/2014 Version End Date: -
-	713m N	Status: Historical Licence No: 7/35/08/*S/0184 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: R GIPPING AT BRAMFORD Data Type: Point Name: Wintour Easting: 612513 Northing: 245755	Annual Volume (m <sup>3</sup> ): 25700 Max Daily Volume (m <sup>3</sup> ): 655 Original Application No: - Original Start Date: 01/03/1978 Expiry Date: - Issue No: 102 Version Start Date: 10/09/2015 Version End Date: -







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	Details	
-	716m N	Status: Historical Licence No: 7/35/08/*S/0184 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: R GIPPING E OF RUNCTON FM,BRAM Data Type: Point Name: SYLVESTER & MOCKBEGGARS Easting: 612460 Northing: 245760	Annual Volume (m <sup>3</sup> ): 25700 Max Daily Volume (m <sup>3</sup> ): 655 Original Application No: - Original Start Date: 01/03/1978 Expiry Date: - Issue No: 101 Version Start Date: 18/05/2012 Version End Date: -
-	1202m E	Status: Historical Licence No: 7/35/08/*S/0162 Details: Process water Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: R GIPPING AT SPROUG'N RD FAC'Y Data Type: Point Name: BRITISH SUGAR PLC Easting: 613700 Northing: 244750	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/04/1967 Expiry Date: - Issue No: 101 Version Start Date: 23/05/2000 Version End Date: -
-	1202m E	Status: Historical Licence No: 7/35/08/*S/0162 Details: Process Water Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: R GIPPING AT SPROUGHTON RD FACTORY Data Type: Point Name: J G IPSWICH LLP Easting: 613700 Northing: 244750	Annual Volume (m <sup>3</sup> ): 126380 Max Daily Volume (m <sup>3</sup> ): 795 Original Application No: - Original Start Date: 27/04/1967 Expiry Date: - Issue No: 102 Version Start Date: 12/01/2005 Version End Date: -
-	1685m E	Status: Historical Licence No: 7/35/08/*S/0122 Details: General use relating to Secondary Category (Low Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: R GIPPING AT HADLEIGH RD Data Type: Point Name: NORTH EAST ESSEX BUILDING CO LTD Easting: 614200 Northing: 244900	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1996 Version End Date: -
-	1685m E	Status: Historical Licence No: 7/35/08/*S/0122 Details: Non-Evaporative Cooling Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: R GIPPING AT HADLEIGH RD Data Type: Point Name: NORTH EAST ESSEX BUILDING CO LTD Easting: 614200 Northing: 244900	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1996 Version End Date: -

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**

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on **page 38** 

ID	Location	Туре	Description
1	On site	3	Total catchment
2	13m NW	3	Total catchment
3	212m N	3	Total catchment
4	218m N	3	Total catchment

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

## 5.10 Source Protection Zones (confined aquifer)

F	Records within 500m	0
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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.

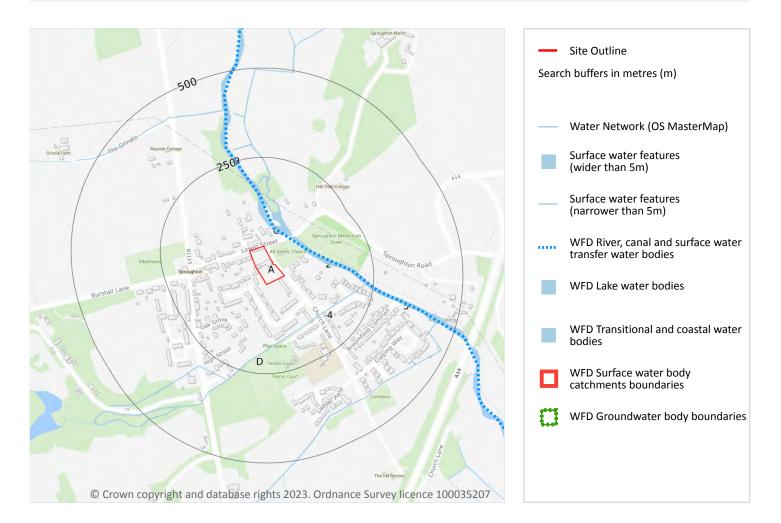






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# 6 Hydrology



## 6.1 Water Network (OS MasterMap)

#### **Records within 250m**

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 45

ID	Location	Type of water feature	Ground level	Permanence	Name
С	59m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	River Gipping







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	Type of water feature	Ground level	Permanence	Name
С	59m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gipping
С	63m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gipping
С	70m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gipping
С	70m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gipping
2	72m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gipping
С	72m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gipping
С	75m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	River Gipping
С	76m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gipping
С	90m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gipping
С	90m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
В	127m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gipping
4	146m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	158m S	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	177m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
В	181m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	232m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Gipping

This data is sourced from the Ordnance Survey.

## **6.2 Surface water features**

Records within 250m	4

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 45

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 45

ID	Location	Туре	Water body catchment	Water body ID	Operational catchment	Management catchment
Α	On site	River	Gipping (d/s Stowmarket)	GB105035046280	Gipping	Suffolk East

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







## 6.4 WFD Surface water bodies

#### **Records identified**

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 45

ID	Location	Туре	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
1	59m N	River	Gipping (d/s Stowmarket)	<u>GB105035046280</u>	Poor	Fail	Poor	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 45

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Waveney and East Suffolk Chalk & Crag	<u>GB40501G400600</u>	Poor	Poor	Poor	2019

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

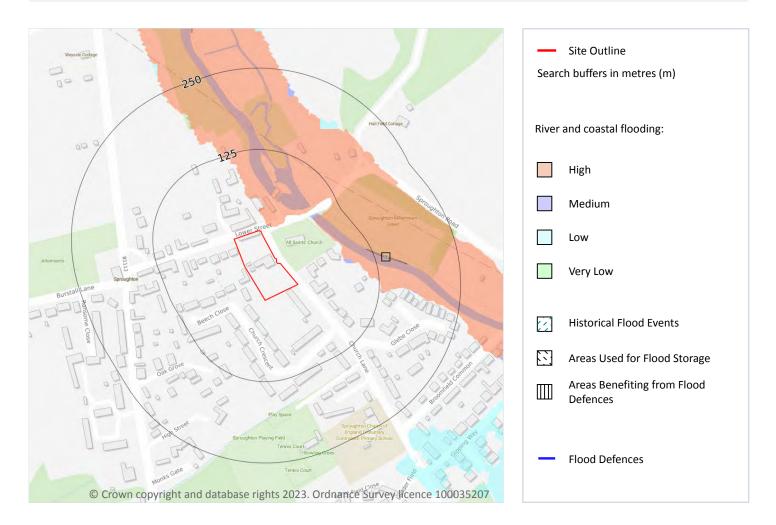






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# 7 River and coastal flooding



## 7.1 Risk of flooding from rivers and the sea

#### **Records within 50m**

2

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). Medium (less than 1 in 30 but greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 0 requal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance), Medium (less than 1 in 200 but 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), Medium (less than 1 in 200 but 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), Medium (less than 1 in 200 but greater than or equal to 1 in 30 chance). Or High (greater than or equal to 1 in 30 chance) or High (greater than or equal to 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on page 49







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

Distance	Flood risk category
On site	N/A
0 - 50m	High

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

## 7.2 Historical Flood Events

#### Records within 250m

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**

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**

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.

Features are displayed on the River and coastal flooding map on page 49

ID	Location	
8	118m E	Area benefiting from flood defences

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





0

0



Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## 7.5 Flood Storage Areas

#### **Records within 250m**

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**

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.

Features are displayed on the River and coastal flooding map on page 49

Location	Туре
On site	Zone 2 - (Fluvial /Tidal Models)

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







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## 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.

Features are displayed on the River and coastal flooding map on page 49

Location	Туре
17m N	Zone 3 - (Fluvial /Tidal Models)

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

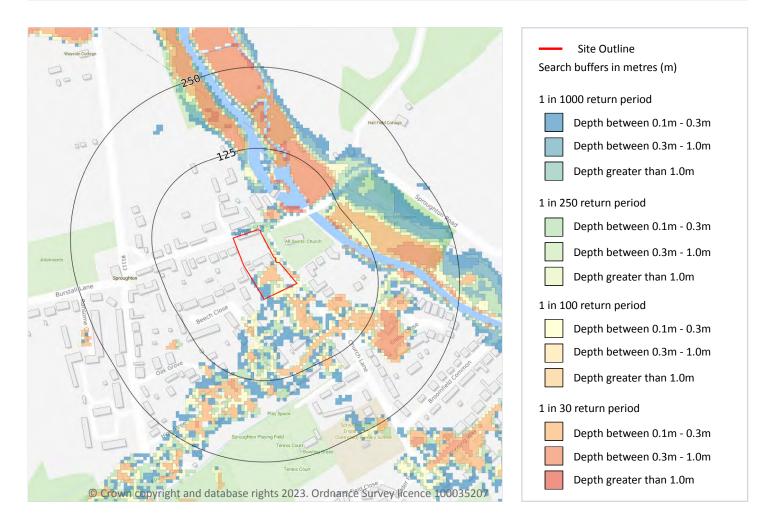






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# 8 Surface water flooding



## 8.1 Surface water flooding

#### **Highest risk on site**

1 in 30 year, 0.1m - 0.3m

### Highest risk within 50m

1 in 30 year, Greater than 1.0m

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 54

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	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.1m and 0.3m

This data is sourced from Ambiental Risk Analytics.







Ref: GS-9362372 **Your ref**: 62146 Grid ref: 612462 244983

# 9 Groundwater flooding



## 9.1 Groundwater flooding

Highest risk on site	Moderate-High
Highest risk within 50m	High

#### Highest risk within 50m

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 56

This data is sourced from Ambiental Risk Analytics.

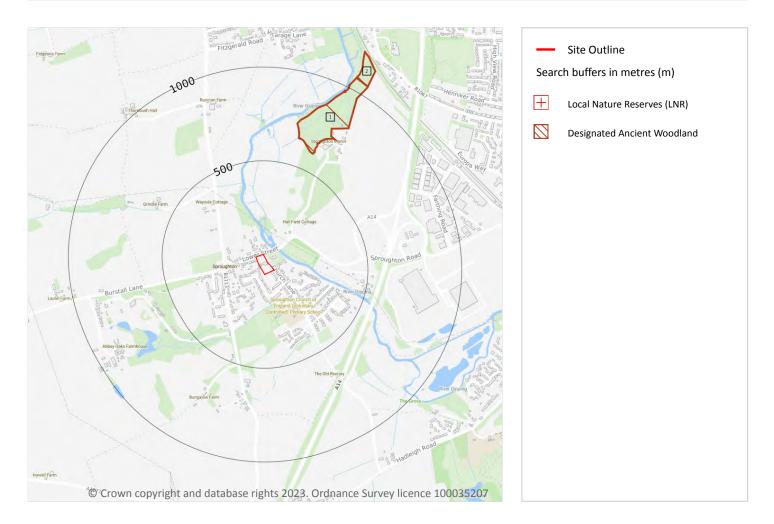






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# **10** Environmental designations



## **10.1 Sites of Special Scientific Interest (SSSI)**

#### Records within 2000m

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.

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







## 10.2 Conserved wetland sites (Ramsar sites)

#### **Records within 2000m**

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

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**

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**

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.





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## **10.6 Local Nature Reserves (LNR)**

# Records within 2000m 1

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.

Features are displayed on the Environmental designations map on page 57

D	Location	Name	Data source
	1438m N	Bramford Meadows	Natural England

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

## **10.7 Designated Ancient Woodland**

Records within 2000m	5
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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 57

ID	Location	Name	Woodland Type
1	599m NE	Hazel Wood	Ancient & Semi-Natural Woodland
2	1055m NE	Hazel Wood	Ancient Replanted Woodland
_	1705m W	Burstall Long Wood	Ancient & Semi-Natural Woodland
_	1878m NW	Millers Wood	Ancient & Semi-Natural Woodland
-	1971m W	Round Wood	Ancient & Semi-Natural Woodland

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

## **10.8 Biosphere Reserves**

#### **Records within 2000m**

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.



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

## **10.9 Forest Parks**

**Records within 2000m** 

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**

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



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

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

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.





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

#### **Records within 2000m**

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

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**

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These 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	River Gipping NVZ	Surface Water	416	Existing
On site	Sandlings and Chelmsford	Groundwater	78	Existing
938m N	River Gipping NVZ	Surface Water	416	Existing
938m N	Sandlings and Chelmsford	Groundwater	78	Existing
1302m SW	Belstead Brook NVZ	Surface Water	410	Existing
1576m E	River Gipping NVZ	Surface Water	416	Existing
1576m E	Sandlings and Chelmsford	Groundwater	78	Existing
1878m NE	River Gipping NVZ	Surface Water	416	Existing



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Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

Location	Name	Туре	NVZ ID	Status
1878m NE	Sandlings and Chelmsford	Groundwater	78	Existing

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

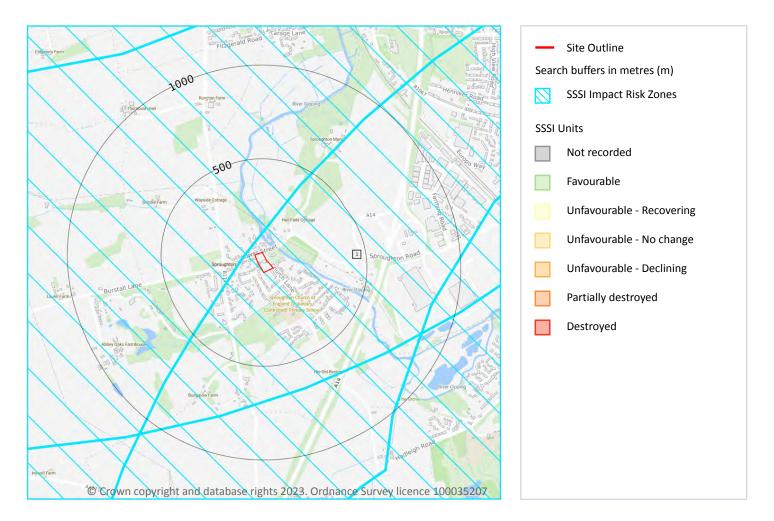






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## **SSSI Impact Zones and Units**



## **10.17 SSSI Impact Risk Zones**

#### **Records on site**

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 63







ID	Location	Type of developments requiring consultation
1	On site	All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures. Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. Minerals, Oil and Gas - Planning applications for quarries: new proposals or extensions, outside or extending outside existing settlements/urban areas affecting greenspace, farmland or semi natural habitats. oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where footprint exceeds 1ha. Residential - Residential development of 50 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). Combustion - General combustion processes >50mw 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. Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream. Notes: Strategic solutions for recreational impacts are in place. please contact your local planning authority as they have the information to advise on specific requirements.

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.

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

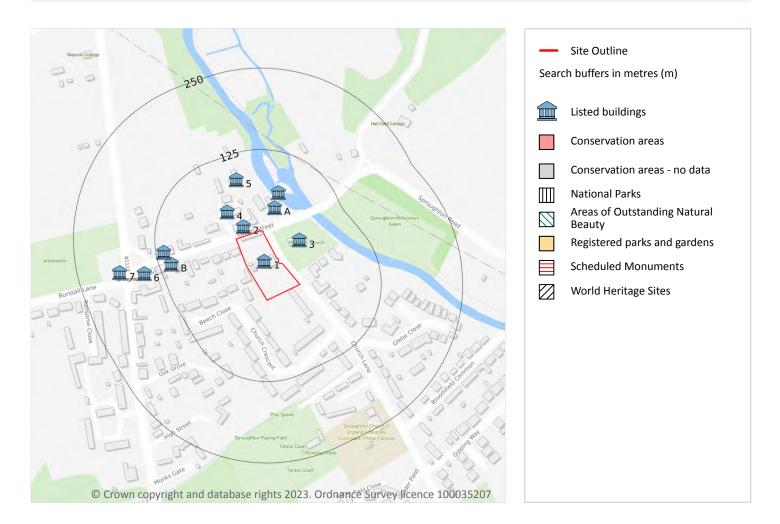






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# **11 Visual and cultural designations**



## **11.1 World Heritage Sites**

#### **Records within 250m**

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.







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## **11.2 Area of Outstanding Natural Beauty**

#### Records within 250m

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

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 wellbeing 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

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.

ID	Location	Name	Grade	Reference Number	Listed date
1	On site	1-4, Church Close, Sproughton, Babergh, Suffolk, IP8	П	1036923	22/02/1955
2	15m NW	Tithe Barn, Sproughton, Babergh, Suffolk, IP8	11	1036926	29/01/1988
А	41m N	Mill House, Sproughton, Babergh, Suffolk, IP8	11	1193955	29/01/1988
3	43m NE	Church of All Saints, Sproughton, Babergh, Suffolk, IP8	*	1285956	22/02/1955
4	44m NW	Barn About 50 Metres South West of Sproughton Hall, Sproughton, Babergh, Suffolk, IP8	11	1351647	22/02/1955

Features are displayed on the Visual and cultural designations map on page 65



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ID	Location	Name	Grade	Reference Number	Listed date
А	64m N	Mill, Sproughton, Babergh, Suffolk, IP8		1036927	29/01/1988
5	87m N	Sproughton Hall, Sproughton, Babergh, Suffolk, IP8		1285915	22/02/1955
В	107m W	Lower House and The Stores, Sproughton, Babergh, Suffolk, IP8	11	1036925	29/01/1988
В	113m W	Walnut Cottage, Sproughton, Babergh, Suffolk, IP8		1193937	29/01/1988
6	151m W	2 and 4, Lower Street, Sproughton, Babergh, Suffolk, IP8		1193924	22/02/1955
7	186m W	The Wild Man, Sproughton, Babergh, Suffolk, IP8		1351646	29/01/1988

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**

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**

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





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Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

#### proposed development on the special character of the landscape.

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







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# **12** Agricultural designations



## **12.1 Agricultural Land Classification**

#### Records within 250m

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 69

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.







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

## 12.2 Open Access Land

#### Records within 250m

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**

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.

This data is sourced from the Forestry Commission.

## **12.4 Environmental Stewardship Schemes**

#### Records within 250m

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.

This data is sourced from Natural England.

## **12.5 Countryside Stewardship Schemes**

#### **Records within 250m**

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.

This data is sourced from Natural England.





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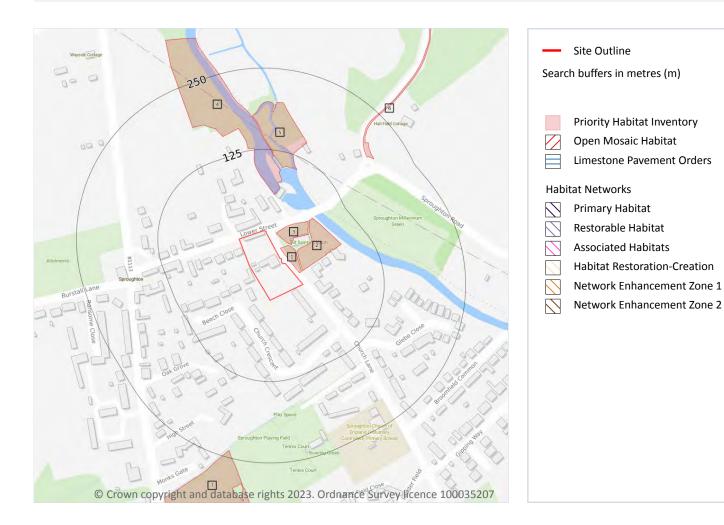
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Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# **13 Habitat designations**



## **13.1 Priority Habitat Inventory**

#### **Records within 250m**

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 71

ID	Location	Main Habitat	Other habitats
1	8m E	Good quality semi-improved grassland	Main habitat: LMEAD (INV > 50%)
2	13m E	Good quality semi-improved grassland	Main habitat: LMEAD (INV > 50%)
3	13m N	Good quality semi-improved grassland	Main habitat: LMEAD (INV > 50%)
4	58m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

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ID	Location	Main Habitat	Other habitats
5	101m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	192m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	239m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

## 13.2 Habitat Networks

#### Records within 250m

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

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**

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.





Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# 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 73

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	TM14NW
2	On site	Full	Full	Full	No coverage	TM14SW

This data is sourced from the British Geological Survey.







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

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



## 14.2 Artificial and made ground (10k)

#### Records within 500m

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.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on page 74

ID	Location	LEX Code	Description	Rock description
1	274m E	WGR-VOID	Worked Ground (Undivided)	Void
2	298m E	WGR-VOID	Worked Ground (Undivided)	Void
3	345m W	WGR-VOID	Worked Ground (Undivided)	Void
4	433m SE	WGR-VOID	Worked Ground (Undivided)	Void







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	LEX Code	Description	Rock description
5	438m NW	WGR-VOID	Worked Ground (Undivided)	Void

This data is sourced from the British Geological Survey.

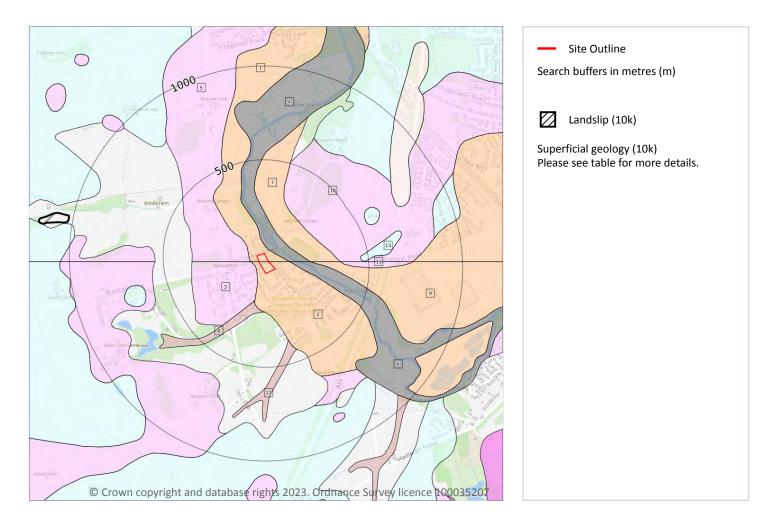






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# Geology 1:10,000 scale - Superficial



## 14.3 Superficial geology (10k)

#### **Records within 500m**

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.

Features are displayed on the Geology 1:10,000 scale - Superficial map on page 76

ID	Location	LEX Code	Description	Rock description
1	On site	RTDU-XSV	River Terrace Deposits (undifferentiated) - Sand And Gravel	Sand And Gravel
2	On site	RTDU-XSV	River Terrace Deposits (undifferentiated) - Sand And Gravel	Sand And Gravel







ID	Location	LEX Code	Description	Rock description
4	29m N	ALV-CZ	Alluvium - Silty Clay	Clay, Silty
5	42m W	GFDU-XSV	Glaciofluvial Deposits - Sand And Gravel	Sand And Gravel
6	87m E	ALV-CZ	Alluvium - Silty Clay	Clay, Silty
7	119m NE	RTDU-XSV	River Terrace Deposits (undifferentiated) - Sand And Gravel	Sand And Gravel
8	154m S	HEAD- DMTN	Head - Diamicton	Diamicton
9	192m E	RTDU-XSV	River Terrace Deposits (undifferentiated) - Sand And Gravel	Sand And Gravel
10	250m NE	GFDU-XSV	Glaciofluvial Deposits - Sand And Gravel	Sand And Gravel
11	349m E	GFDU-XSV	Glaciofluvial Deposits - Sand And Gravel	Sand And Gravel
12	375m S	HEAD- DMTN	Head - Diamicton	Diamicton
13	459m E	LOFT-DMTN	Lowestoft Formation - Diamicton	Diamicton

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.

This data is sourced from the British Geological Survey.





Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# Geology 1:10,000 scale - Bedrock



## 14.5 Bedrock geology (10k)

#### Records within 500m

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.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on page 78

ID	Location	LEX Code	Description	Rock age
1	On site	TALM-SACL	Thanet Sand Formation And Lambeth Group (undifferentiated) - Sandy Clay	Paleocene Epoch
	o ::		Newhaven Chalk Formation - Chalk	Campanian Age - Santonian Age
2	On site	NCK-CHLK	Newnaven chark formation - chark	Campanian Age - Santonian Age







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	LEX Code	Description	Rock age
4	On site	NCK-CHLK	Newhaven Chalk Formation - Chalk	Campanian Age - Santonian Age
5	96m SW	THAM-SICL	Thames Group - Silty Clay	Eocene Epoch
6	146m W	THAM-SICL	Thames Group - Silty Clay	Eocene Epoch
7	386m NE	TALM-SACL	Thanet Sand Formation And Lambeth Group (undifferentiated) - Sandy Clay	Paleocene Epoch

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.

This data is sourced from the British Geological Survey.

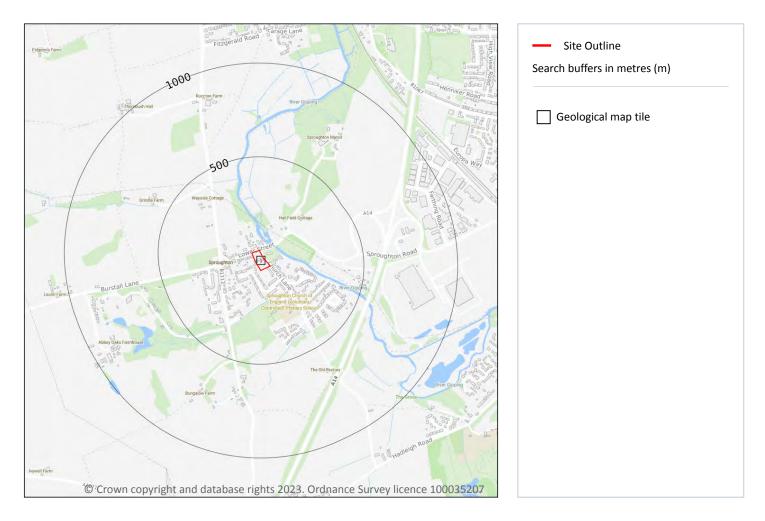






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# 15 Geology 1:50,000 scale - Availability



### 15.1 50k Availability

#### **Records within 500m**

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 80

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW207_ipswich_v4

This data is sourced from the British Geological Survey.







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

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

**Records within 500m** 

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

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).

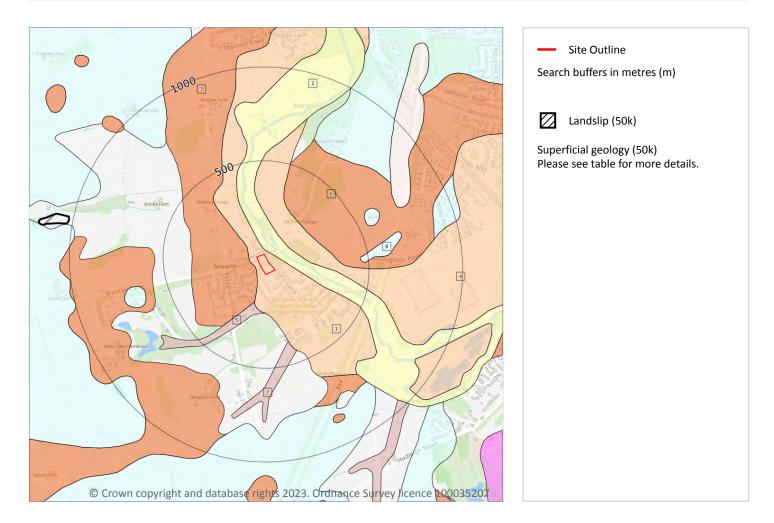






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# Geology 1:50,000 scale - Superficial



## 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 82

ID	Location	LEX Code	Description	Rock description
1	On site	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL
2	23m N	ALV-XCZ	ALLUVIUM	CLAY AND SILT
3	28m W	LOFT-XSV	LOWESTOFT FORMATION	SAND AND GRAVEL
4	122m NE	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL







ID	Location	LEX Code	Description	Rock description
5	154m S	HEAD- DMTN	HEAD	DIAMICTON
6	249m NE	LOFT-XSV	LOWESTOFT FORMATION	SAND AND GRAVEL
7	375m S	HEAD- DMTN	HEAD	DIAMICTON
8	458m E	LOFT-DMTN	LOWESTOFT FORMATION	DIAMICTON

This data is sourced from the British Geological Survey.

## 15.5 Superficial permeability (50k)

|--|

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	Intergranular	Very High	High
On site	Intergranular	Very High	High
23m N	Intergranular	Low	Very Low
28m W	Intergranular	Very High	High
42m W	Intergranular	Very High	High

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	at have

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.

This data is sourced from the British Geological Survey.







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

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### 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).

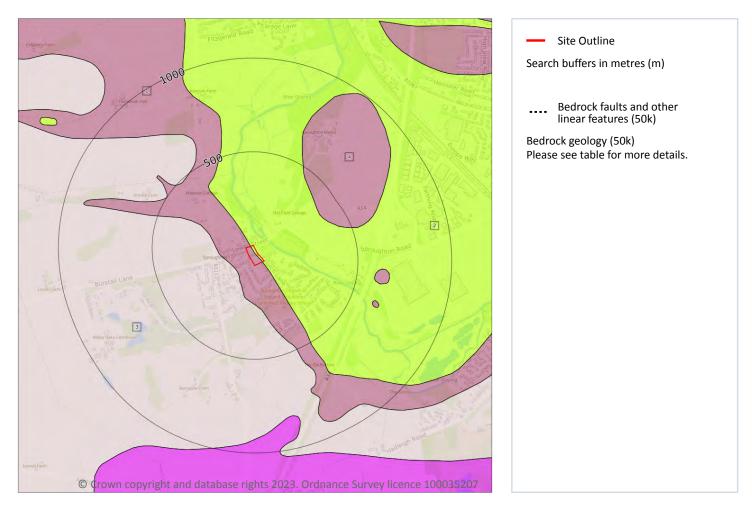






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# Geology 1:50,000 scale - Bedrock



## 15.8 Bedrock geology (50k)

#### Records within 500m

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 85

ID	Location	LEX Code	Description	Rock age
1	On site	TALM-XCZS	THANET FORMATION AND LAMBETH GROUP (UNDIFFERENTIATED) - CLAY, SILT AND SAND	-
2	On site	NCK-CHLK	NEWHAVEN CHALK FORMATION - CHALK	SANTONIAN
3	96m SW	THAM-XCZS	THAMES GROUP - CLAY, SILT AND SAND	-







4

ID	Location	LEX Code	Description	Rock age
4	385m NE	TALM-XCZS	THANET FORMATION AND LAMBETH GROUP (UNDIFFERENTIATED) - CLAY, SILT AND SAND	-

This data is sourced from the British Geological Survey.

## 15.9 Bedrock 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 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
On site	Fracture	Very High	Very High
On site	Mixed	Moderate	Very Low
On site	Mixed	Moderate	Very Low

This data is sourced from the British Geological Survey.

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

Records within 500m 0	
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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.

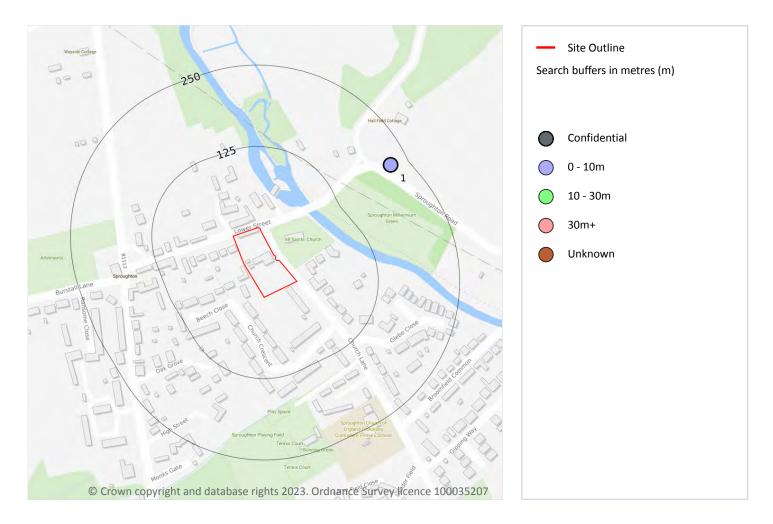






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# **16 Boreholes**



### **16.1 BGS Boreholes**

#### Records within 250m

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.

#### Features are displayed on the Boreholes map on page 87

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	223m NE	612660 245140	NEAR SPROUGHTON MANOR BRAMFORD	9.4	Ν	<u>560943</u>

This data is sourced from the British Geological Survey.







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# 17 Natural ground subsidence - Shrink swell clays



### 17.1 Shrink swell clays

#### Records within 50m

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 88

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
2m S	Moderate	Ground conditions predominantly high plasticity.
23m N	Low	Ground conditions predominantly medium plasticity.











Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# Natural ground subsidence - Running sands



### 17.2 Running sands

#### Records within 50m

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 90

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.







Location	Hazard rating	Details
23m N	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.







# Natural ground subsidence - Compressible deposits



### **17.3 Compressible deposits**

#### **Records within 50m**

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 92

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













Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# Natural ground subsidence - Collapsible deposits



### **17.4 Collapsible deposits**

#### **Records within 50m**

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 94

Location	Hazard rating	Details	
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.	
23m N	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.	

This data is sourced from the British Geological Survey.







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# Natural ground subsidence - Landslides



### **17.5 Landslides**

#### **Records within 50m**

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 95

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.

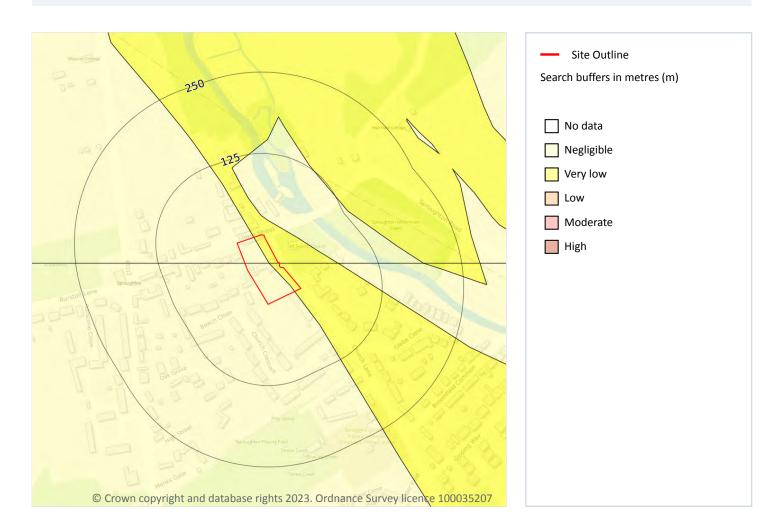
This data is sourced from the British Geological Survey.







# Natural ground subsidence - Ground dissolution of soluble rocks



## 17.6 Ground dissolution of soluble rocks

#### **Records within 50m**

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 page 96

Location	Hazard rating	Details
On site	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.







Location	Hazard rating	Details
On site	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.
23m N	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.

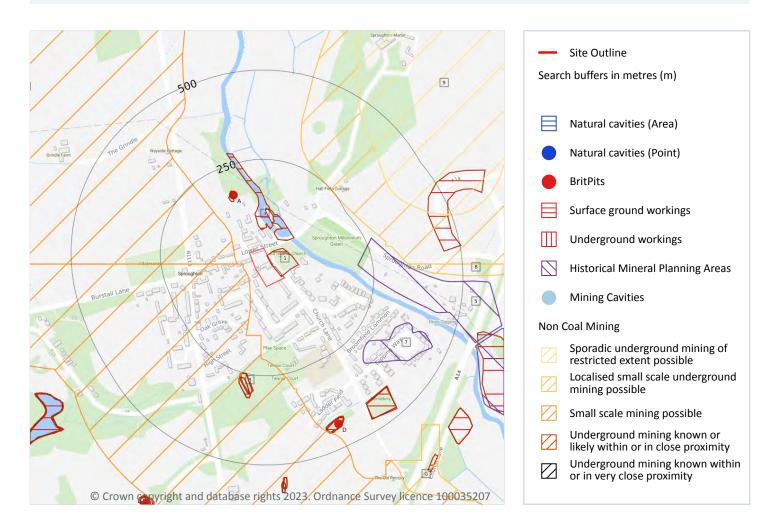






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# 18 Mining, ground workings and natural cavities



### **18.1 Natural cavities**

#### **Records within 500m**

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**

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.

Features are displayed on the Mining, ground workings and natural cavities map on page 98

ID	Location	Details	Description
A	167m NW	Name: Sproughton Hall Gravel Pit Address: Sproughton, IPSWICH, Suffolk Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
D	434m SE	Name: Sproughton Pit Address: Sproughton, IPSWICH, Suffolk Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

## 18.3 Surface ground workings

Records within 250m		7

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 98

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Grave Yard	1881	1:10560
4	46m NE	Water Body	1927	1:10560
А	151m NW	Gravel Pit	1881	1:10560
А	159m NW	Refuse Heap	1927	1:10560
А	159m NW	Refuse Heap	1927	1:10560
А	160m NW	Refuse Heap	1938	1:10560







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

ID	Location	Land Use	Year of mapping	Mapping scale
В	250m S	Fish Pond	1927	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

## **18.4 Underground workings**

Ree	ords within 1000m	0
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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 2	
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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.

Features are displayed on the Mining, ground workings and natural cavities map on page 98

ID	Location	Site Name	Mineral	Туре	Planning Status	Planning Status Date
5	209m E	Sprouhton	Sand and gravel	Surface mineral working	Refused	1968
7	295m SE	Church Lane	Sand and gravel (ballast)	Surface mineral working	Valid	05/12/41

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 98

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ID	Location	Name	Commodity	Class	Likelihood
2	28m W	Not available	Chalk	С	Small scale underground mining may have occurred; mine adits, shafts and tunnels may be present. Potential for localised difficult ground conditions are at a level where they should be considered
3	42m W	Not available	Chalk	С	Small scale underground mining may have occurred; mine adits, shafts and tunnels may be present. Potential for localised difficult ground conditions are at a level where they should be considered
6	249m NE	Not available	Chalk	В	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
8	349m E	Not available	Chalk	В	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
9	385m NE	Not available	Chalk	A	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
G	563m SE	Not available	Chalk	В	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
_	739m N	Not available	Chalk	В	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or 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 s	ubsidence
(crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrance	s and

This data is sourced from Stantec UK Ltd.



workings.





#### **18.8 JPB mining areas**

#### **Records on site**

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**

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

This data is sourced from the Coal Authority.

#### 18.10 Brine areas

#### Records on site

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**

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

### 18.12 Tin mining

#### **Records on site**

#### Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.





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Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

### 18.13 Clay mining

#### **Records on site**

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

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

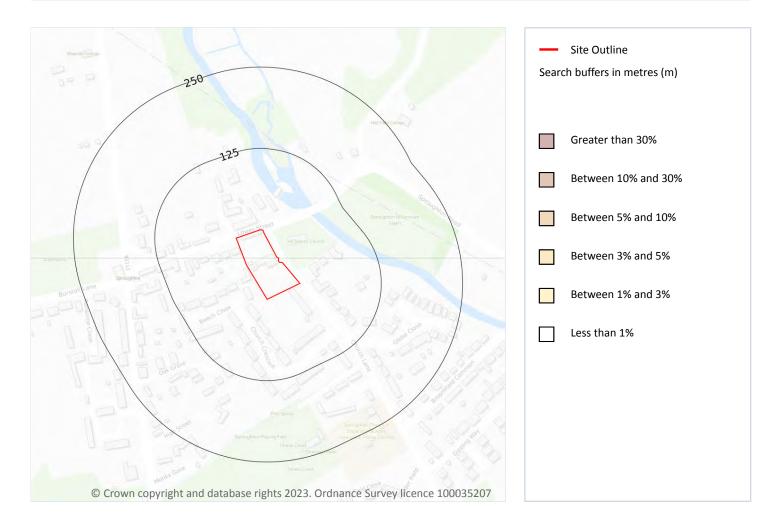






Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# 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 104

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







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

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







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

13

# 20 Soil chemistry

### 20.1 BGS Estimated Background Soil Chemistry

#### **Records within 50m**

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 km<sup>2</sup>. 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 km<sup>2</sup>; 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
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
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
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
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
13m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
13m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
27m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
27m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
31m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
31m E	15 - 25	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg







Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

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This data is sourced from the British Geological Survey.

## 20.2 BGS Estimated Urban Soil Chemistry

#### Records within 50m

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 km<sup>2</sup>).

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**

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

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

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**

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.





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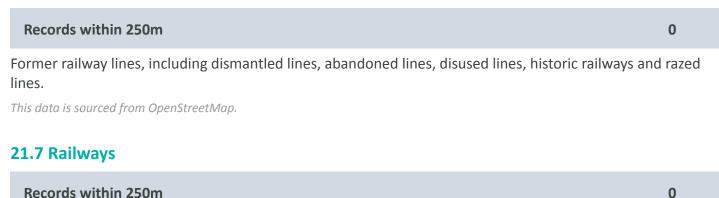
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This data is sourced from Groundsure/the Postal Museum.

### **21.6 Historical railways**



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

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**

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**

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.





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Ref: GS-9362372 Your ref: 62146 Grid ref: 612462 244983

# Data providers

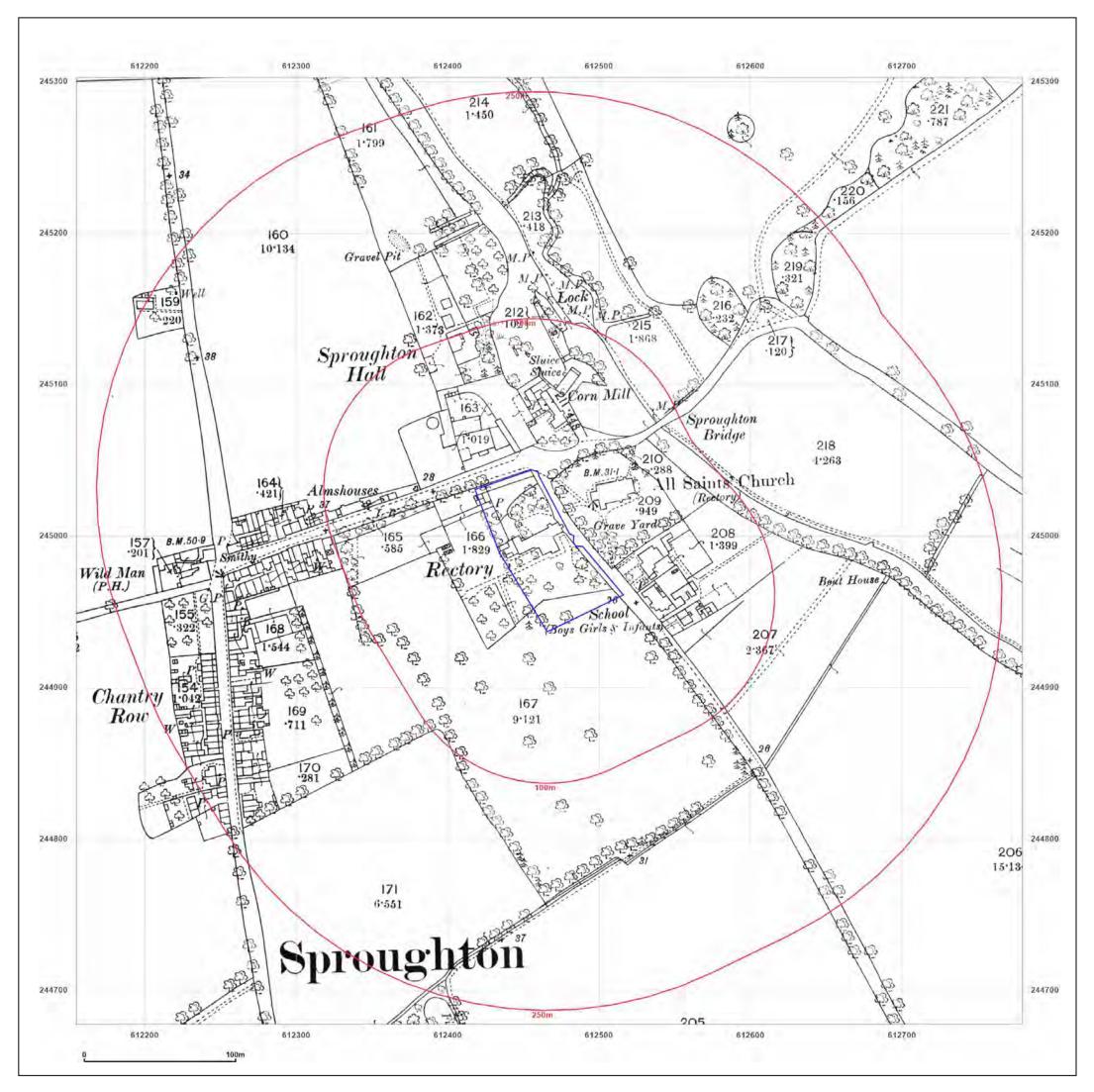
Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <u>https://www.groundsure.com/sources-reference</u>.

# **Terms and conditions**

Groundsure's Terms and Conditions can be accessed at this link: <u>https://www.groundsure.com/terms-and-conditions-jan-2020/</u>.

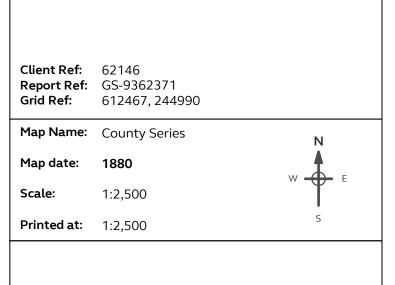


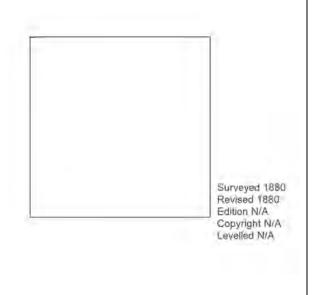






1-4 CHURCH CLOSE, CHURCH LANE, SPROUGHTON, IP8 3BA



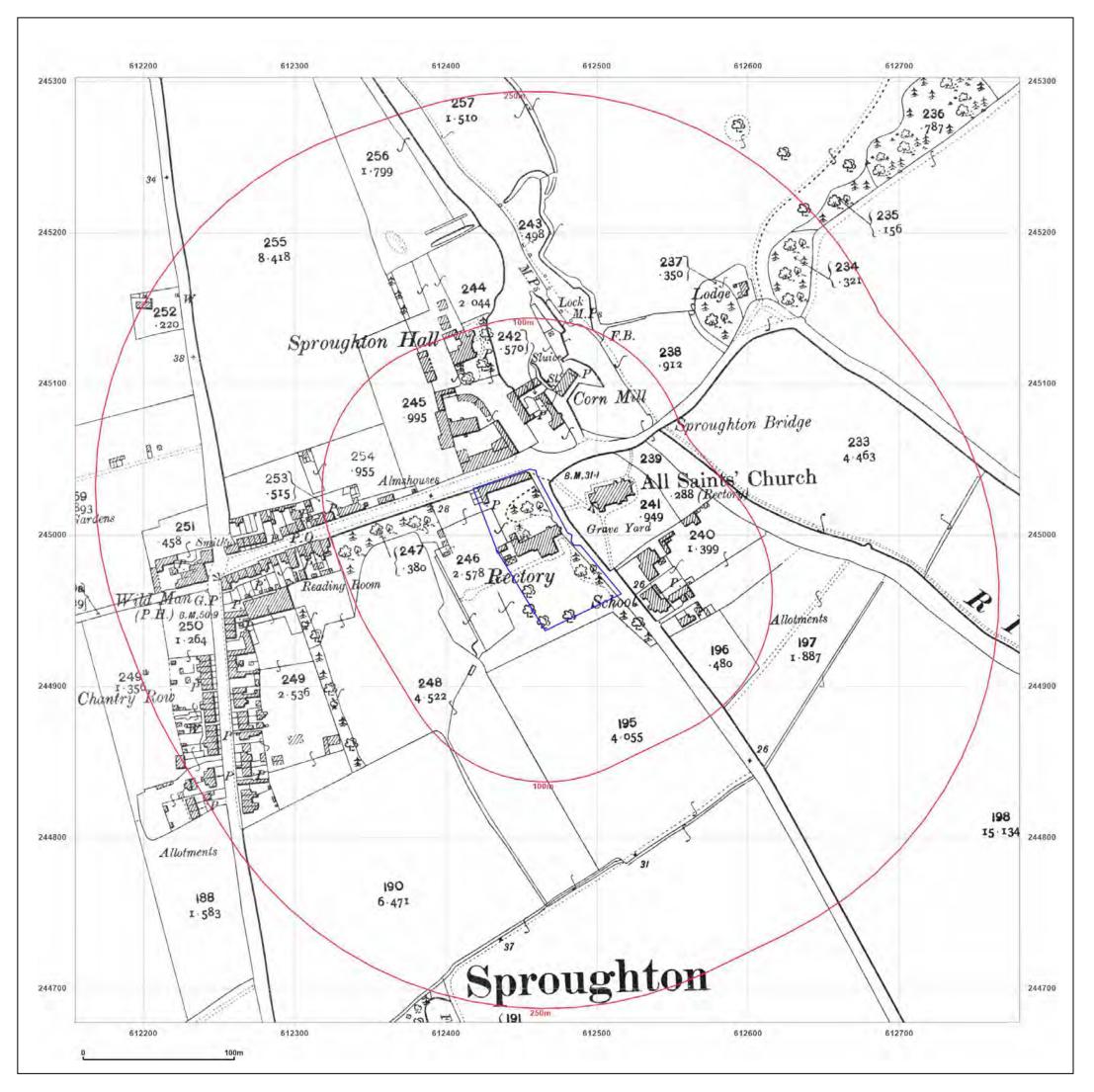




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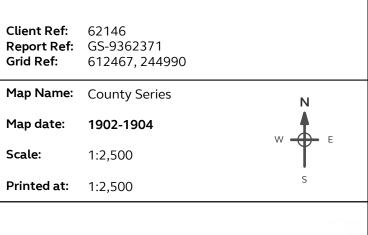
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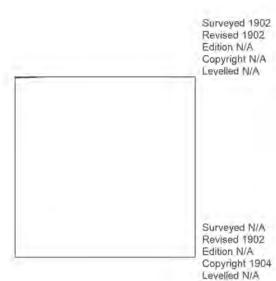
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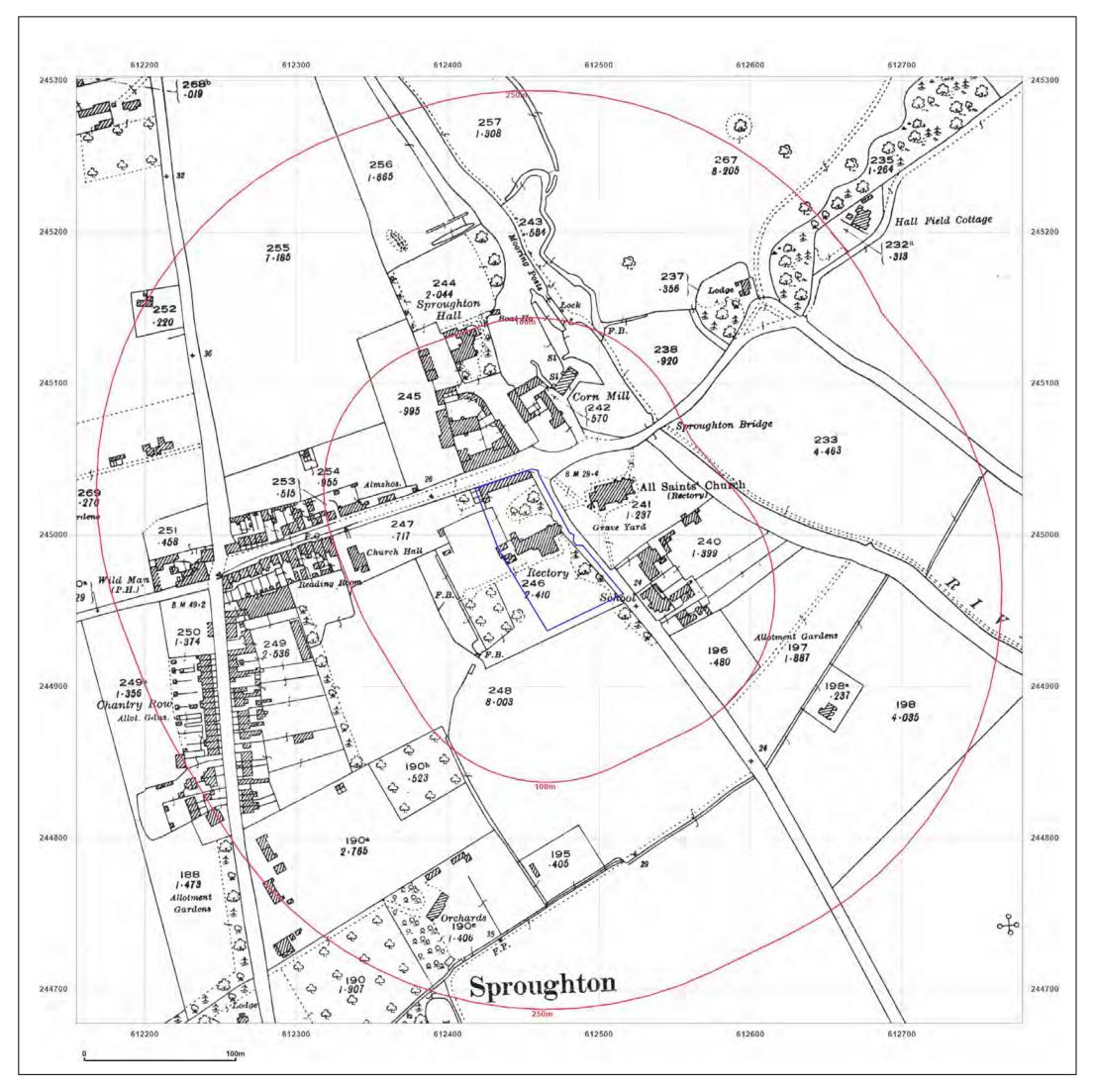




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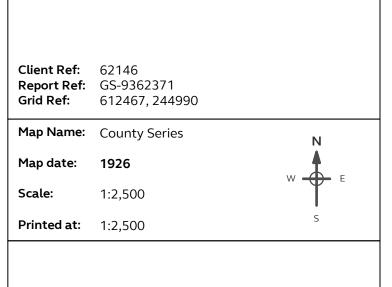
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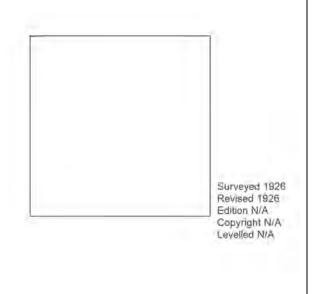
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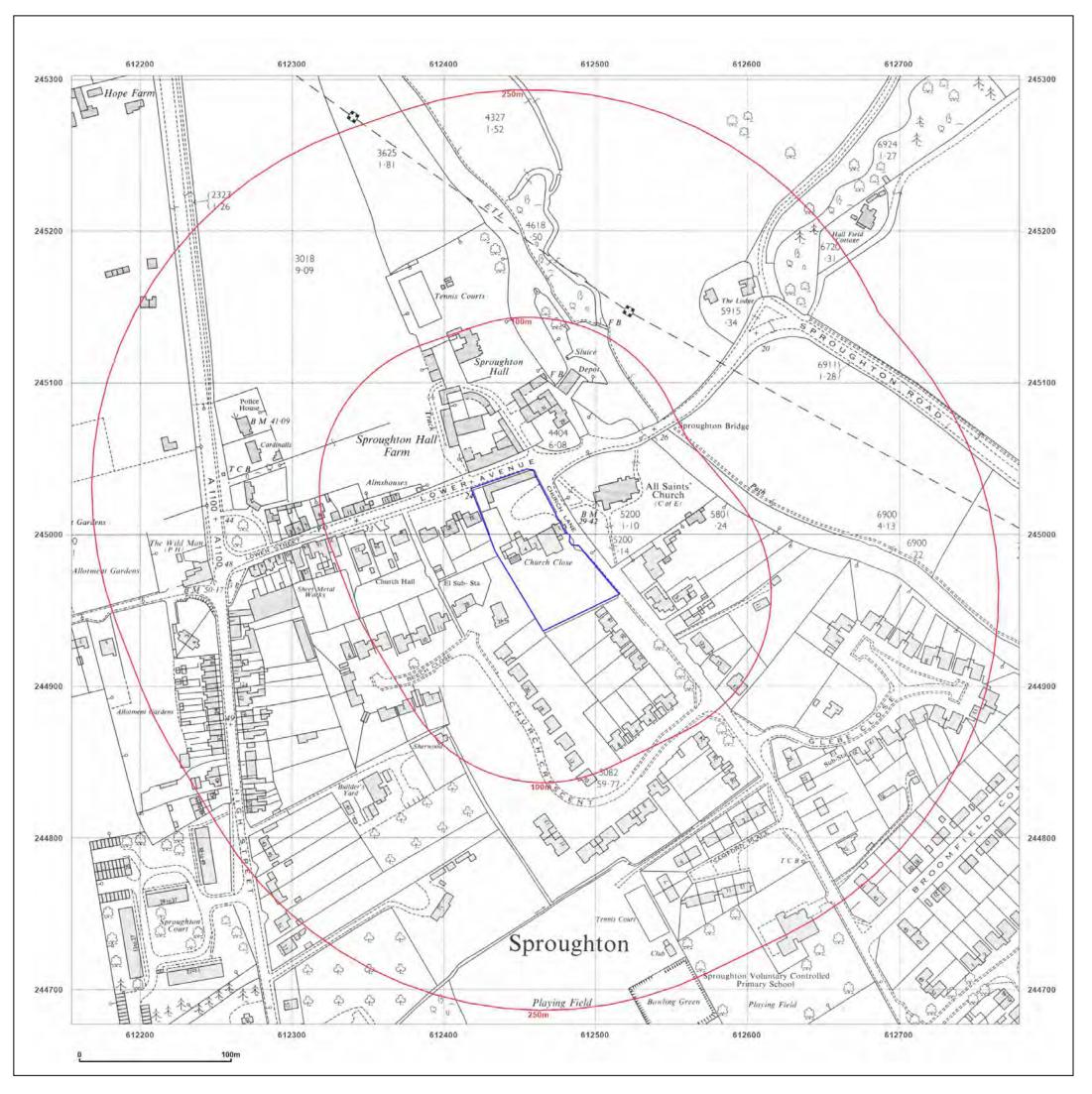




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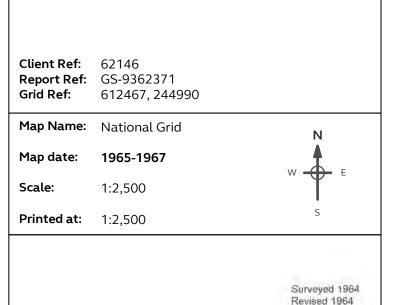
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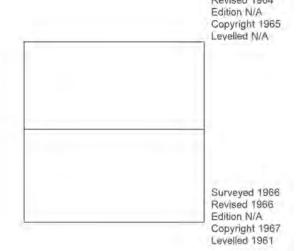
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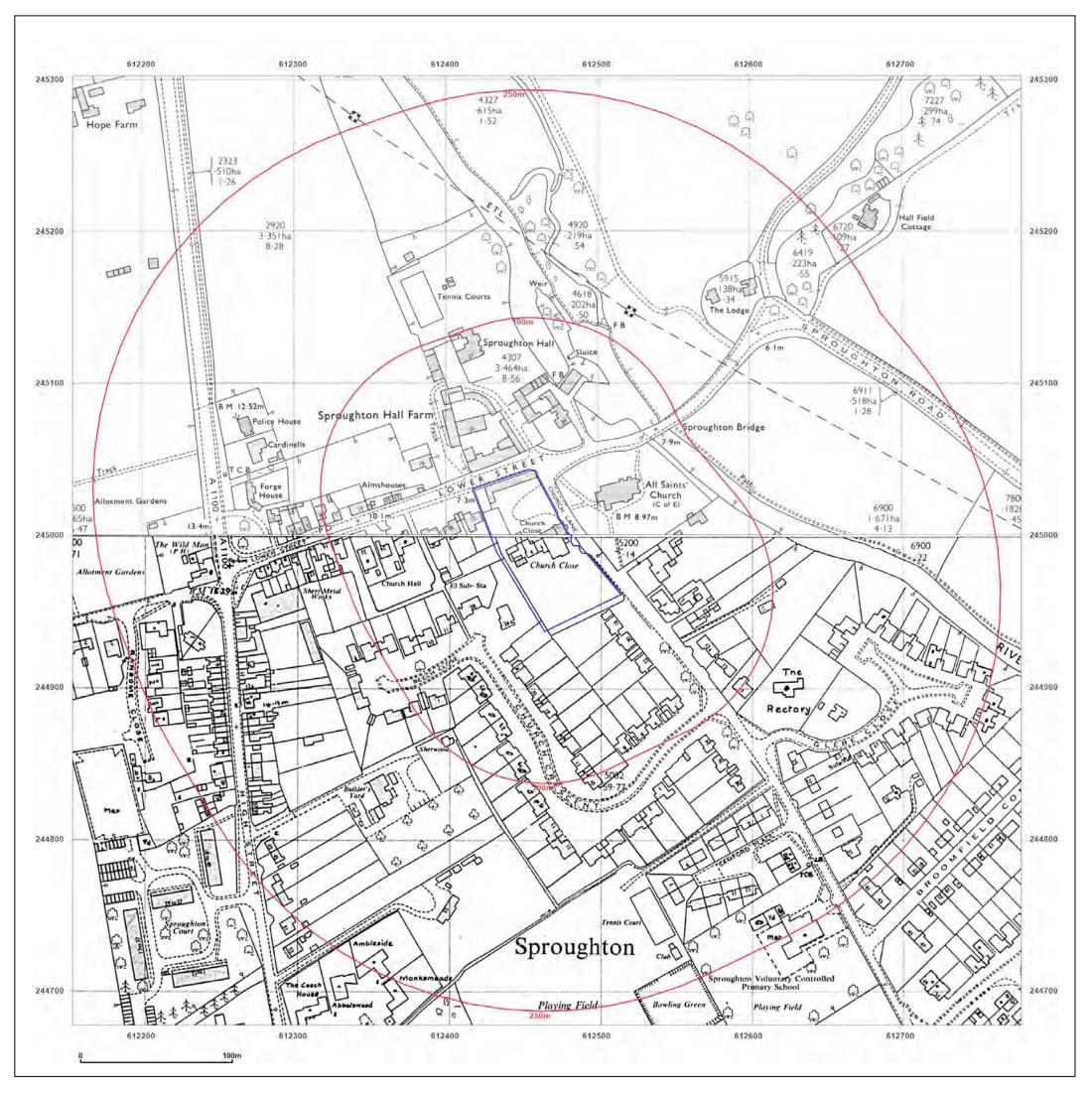




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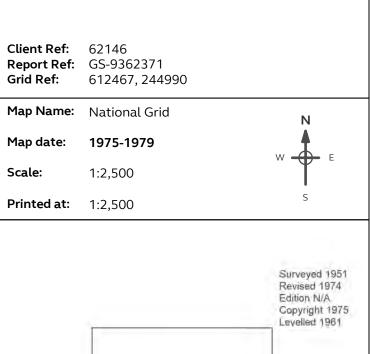
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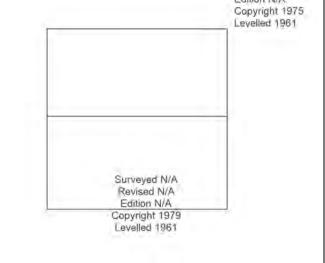
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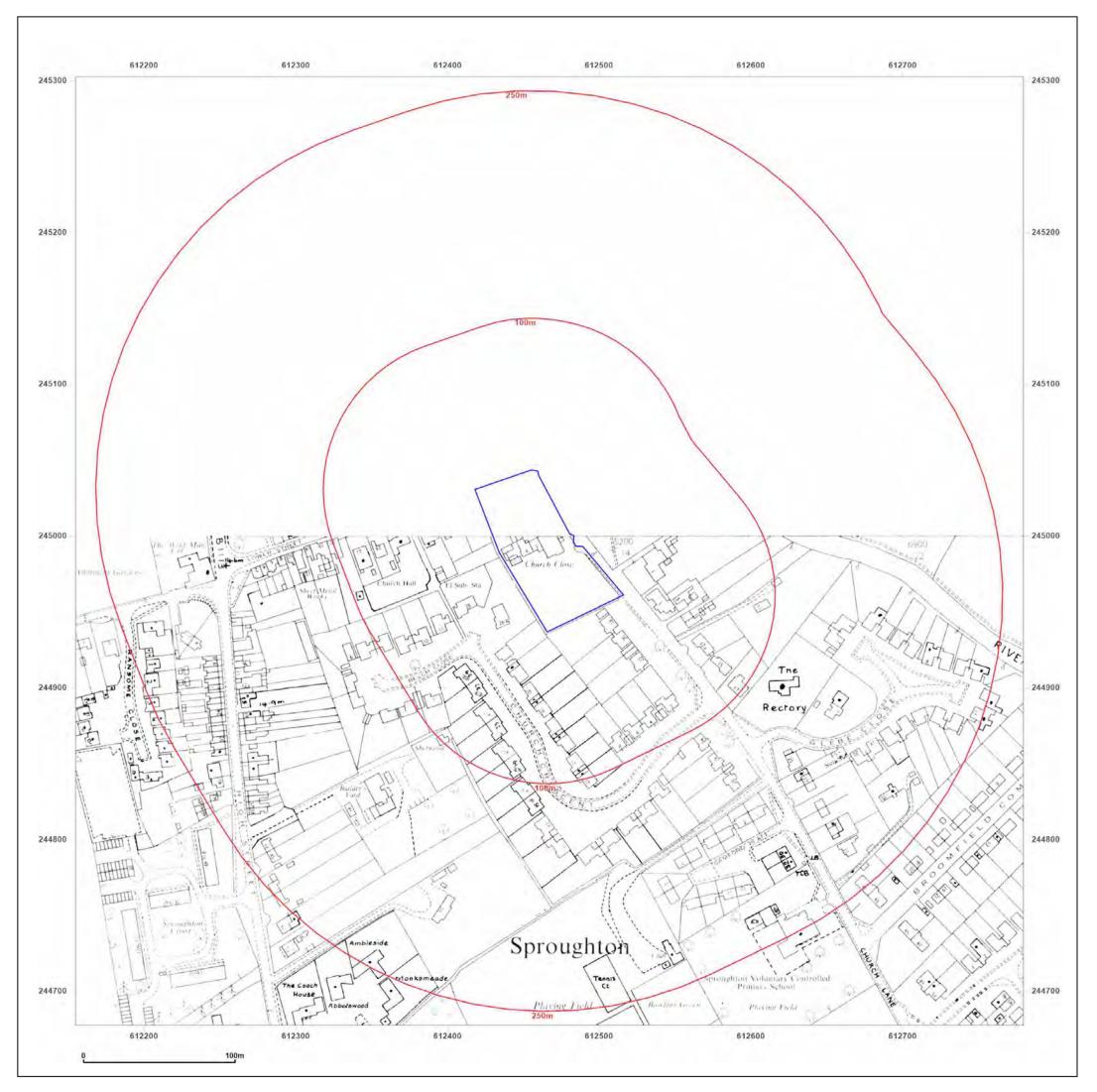




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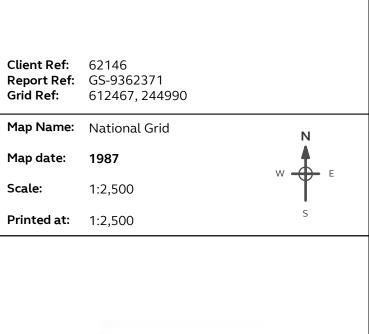
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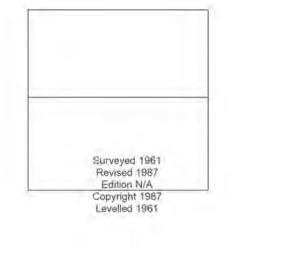
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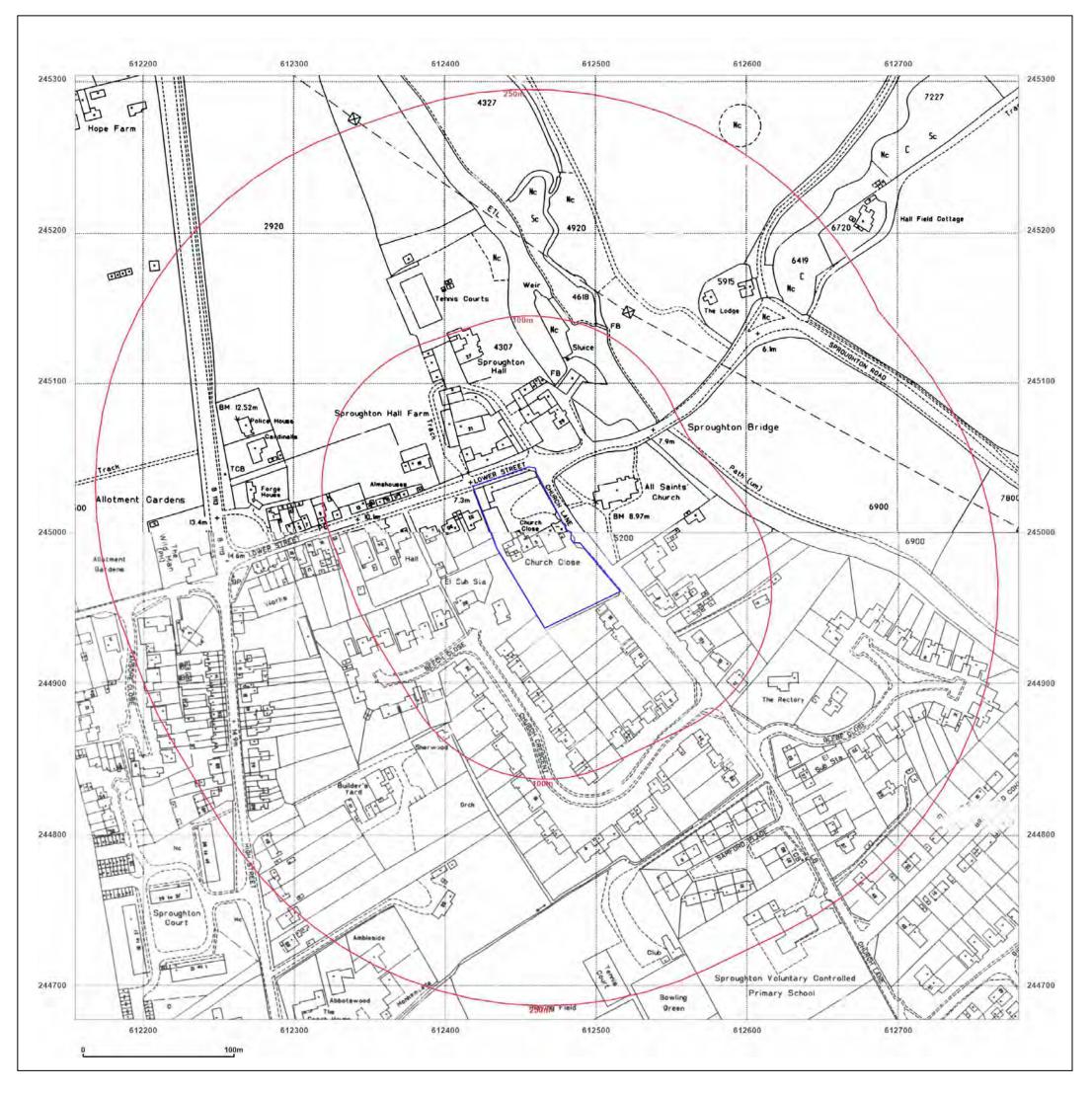




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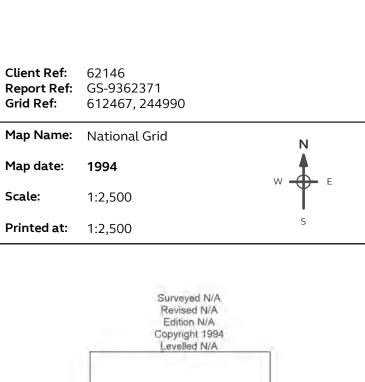
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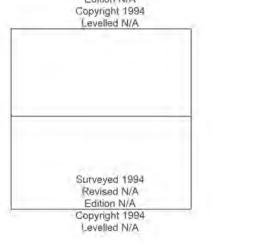
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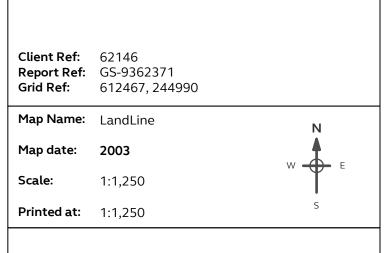
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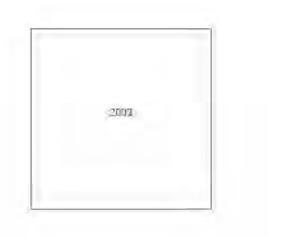
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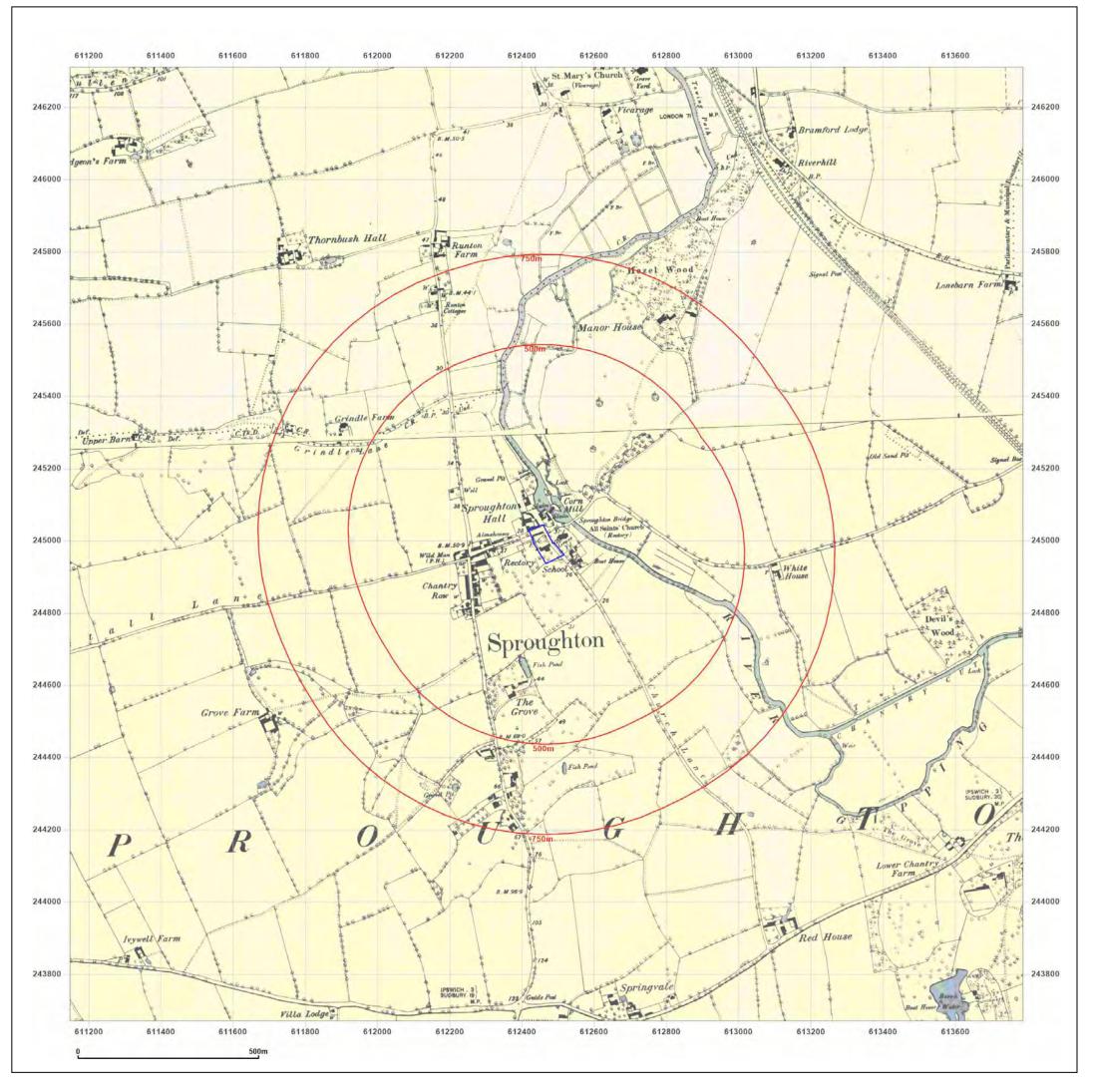




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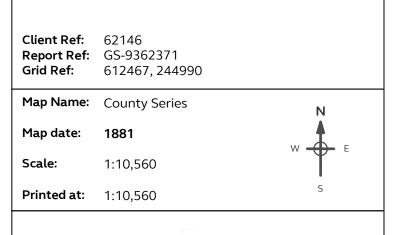
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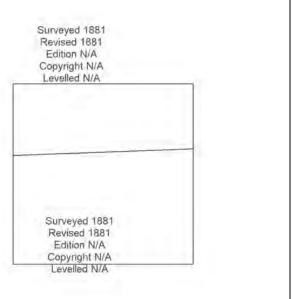
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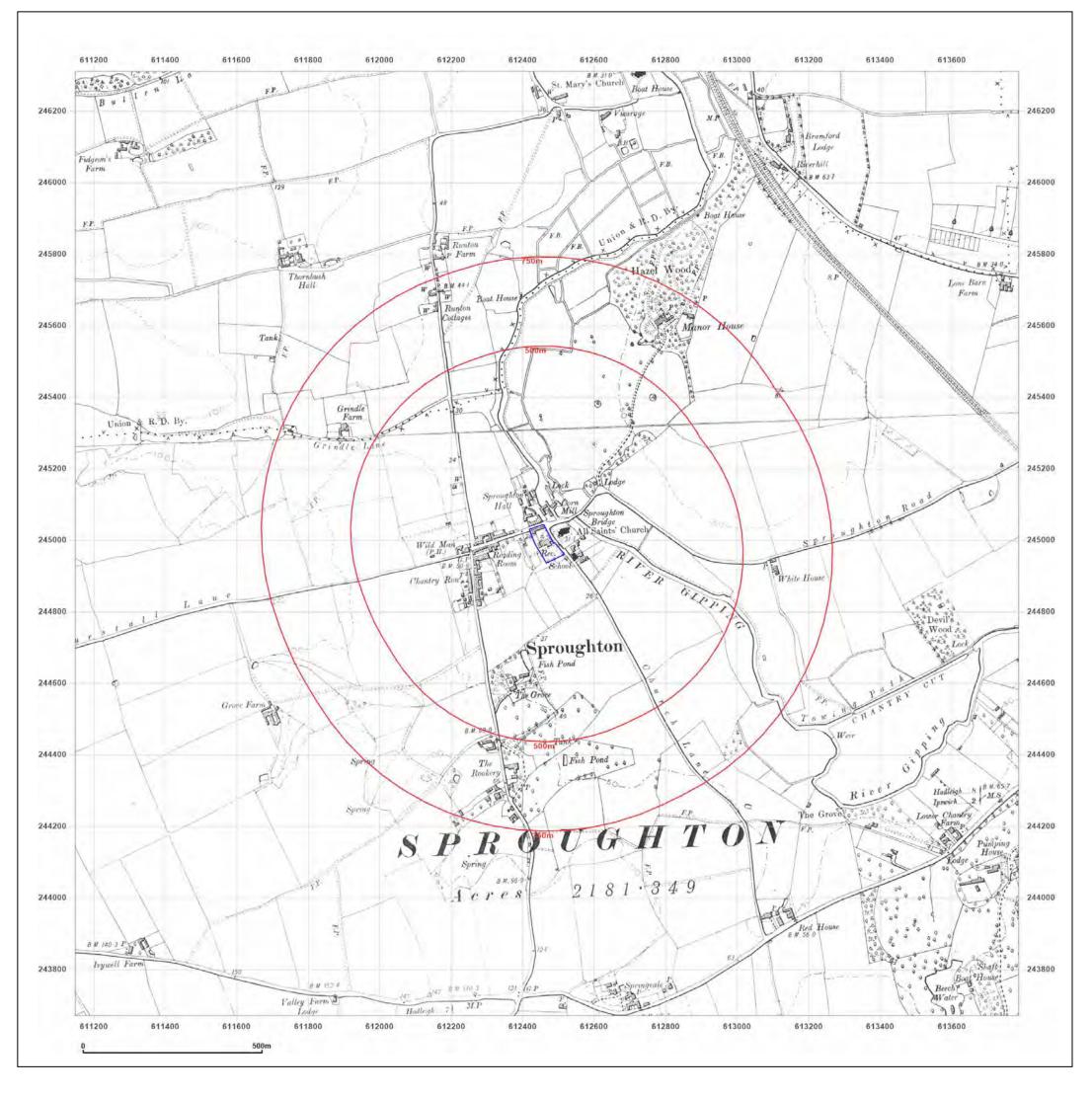




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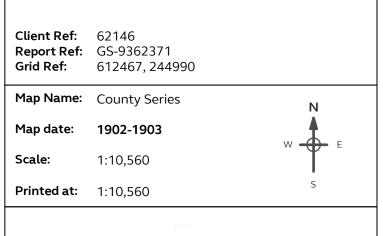
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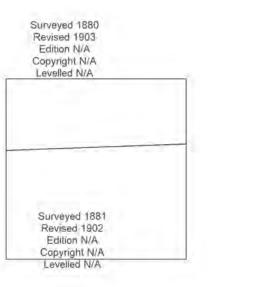
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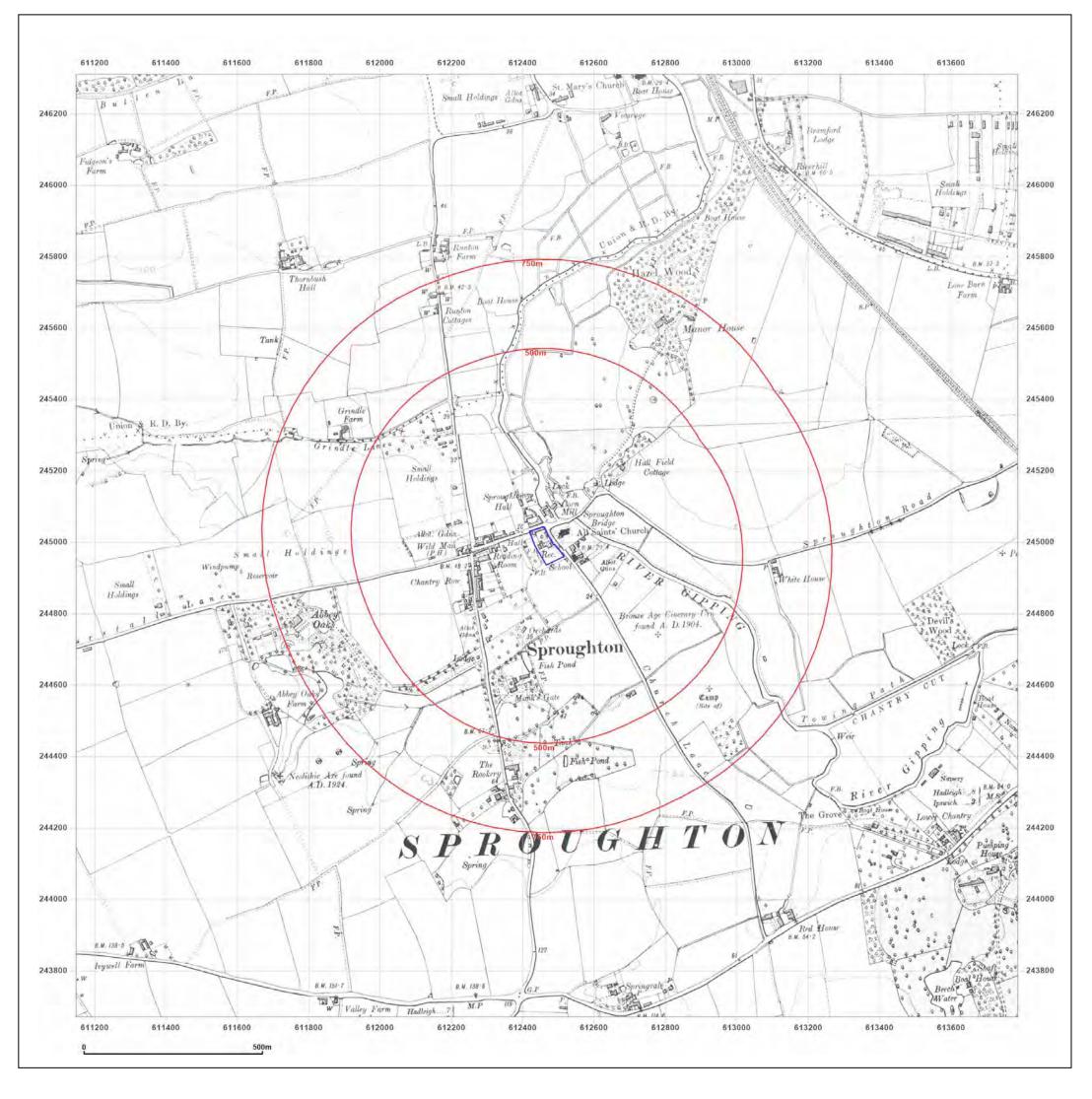




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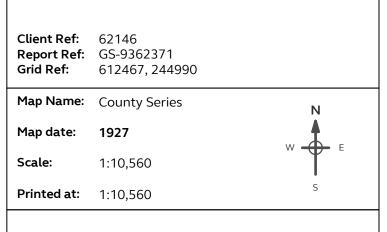
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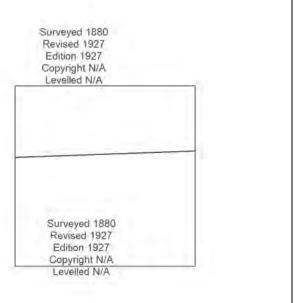
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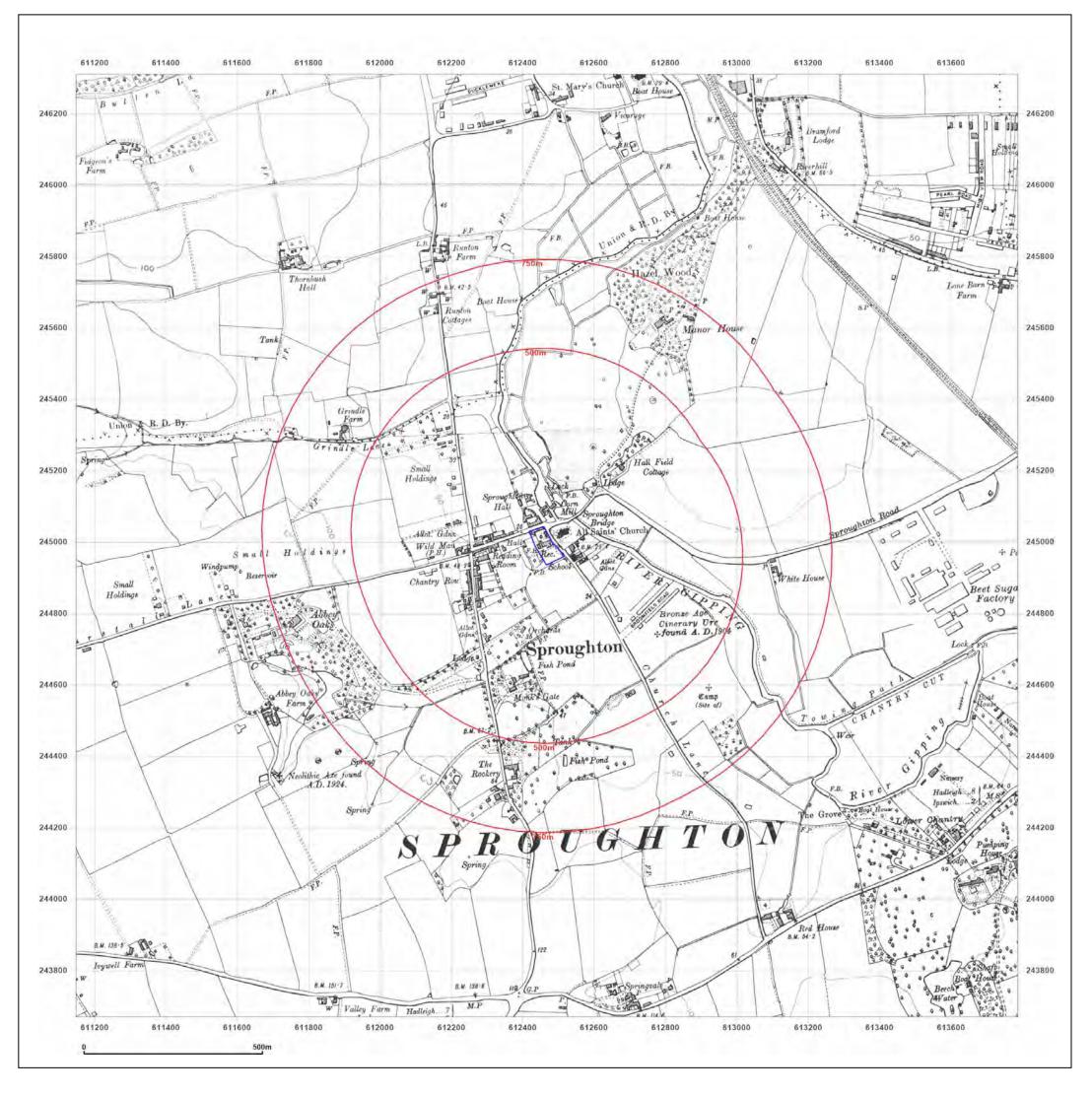




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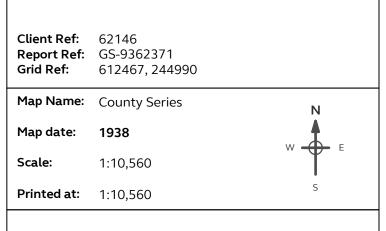
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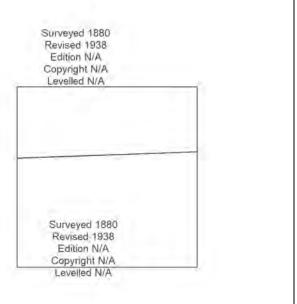
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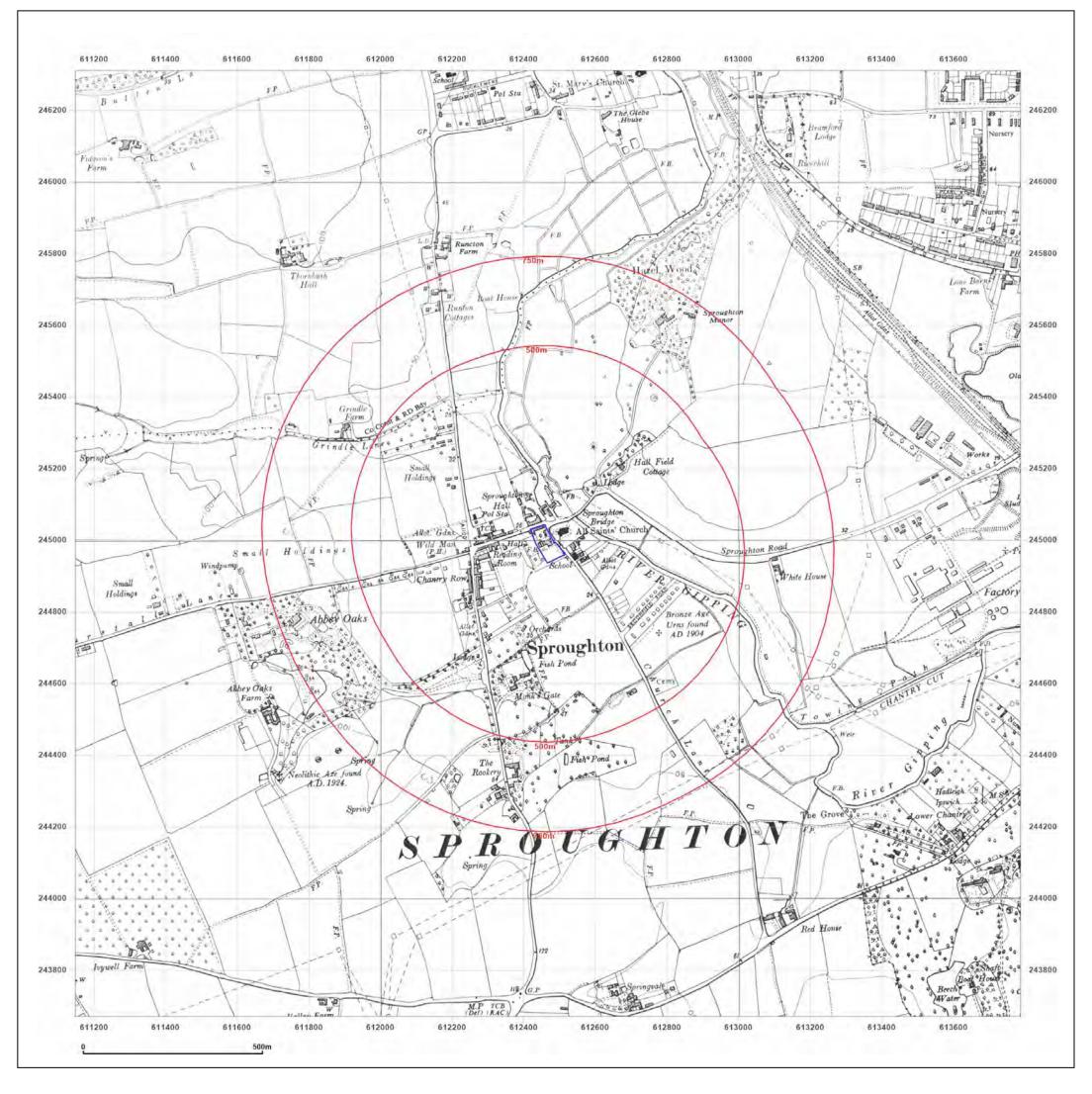




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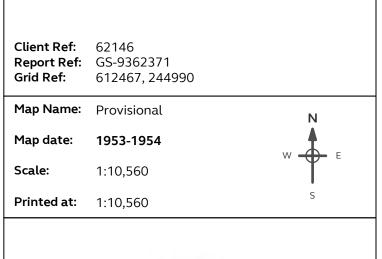
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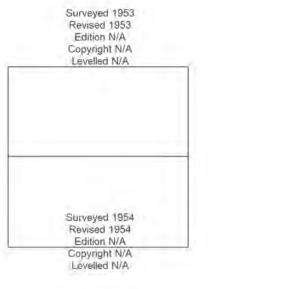
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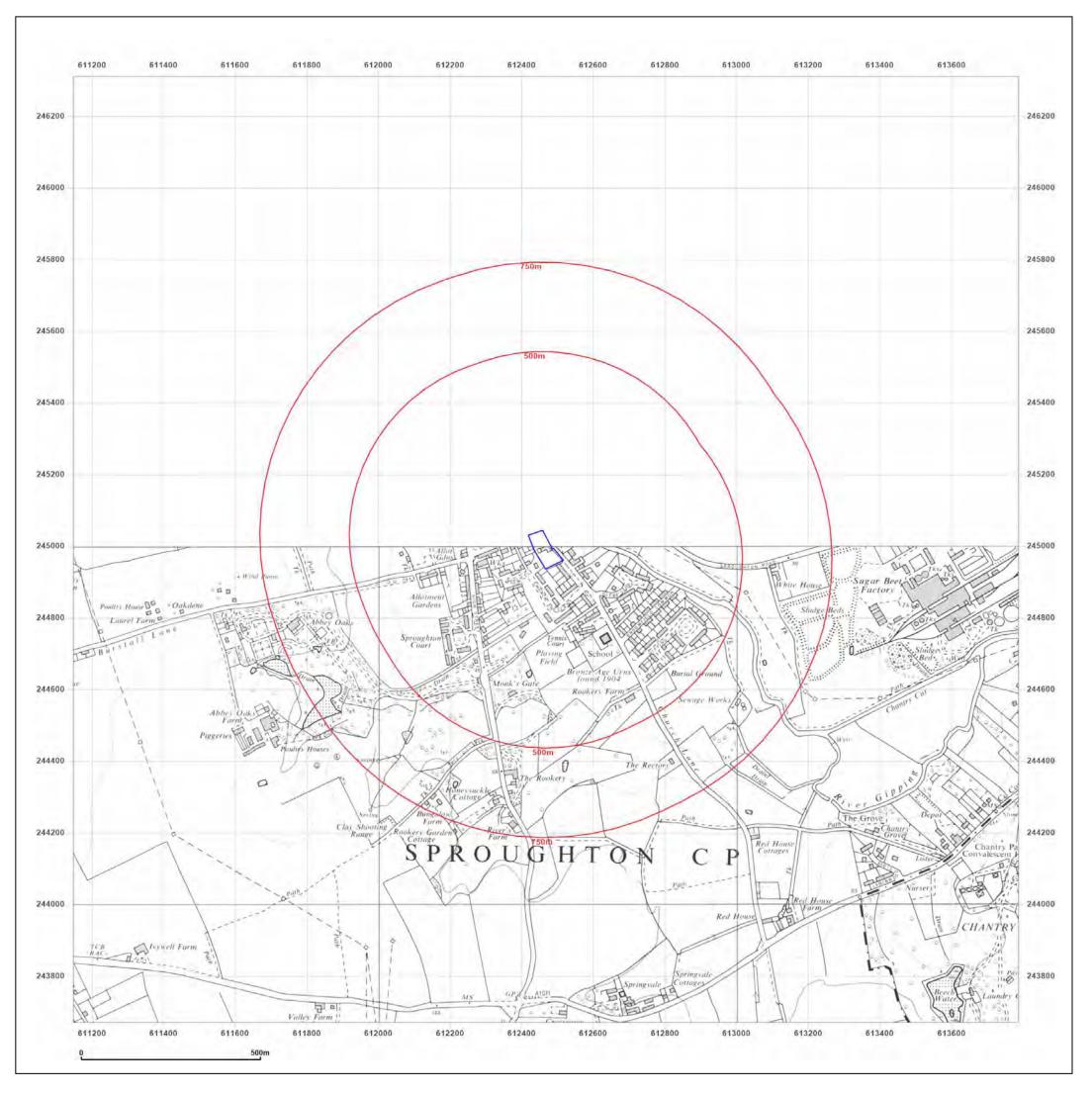




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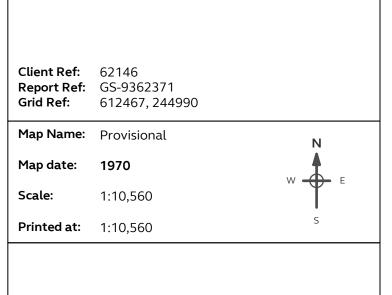
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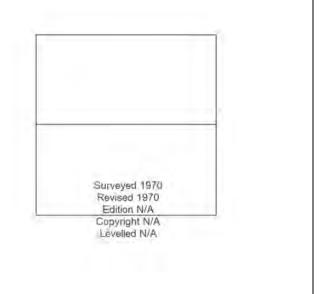
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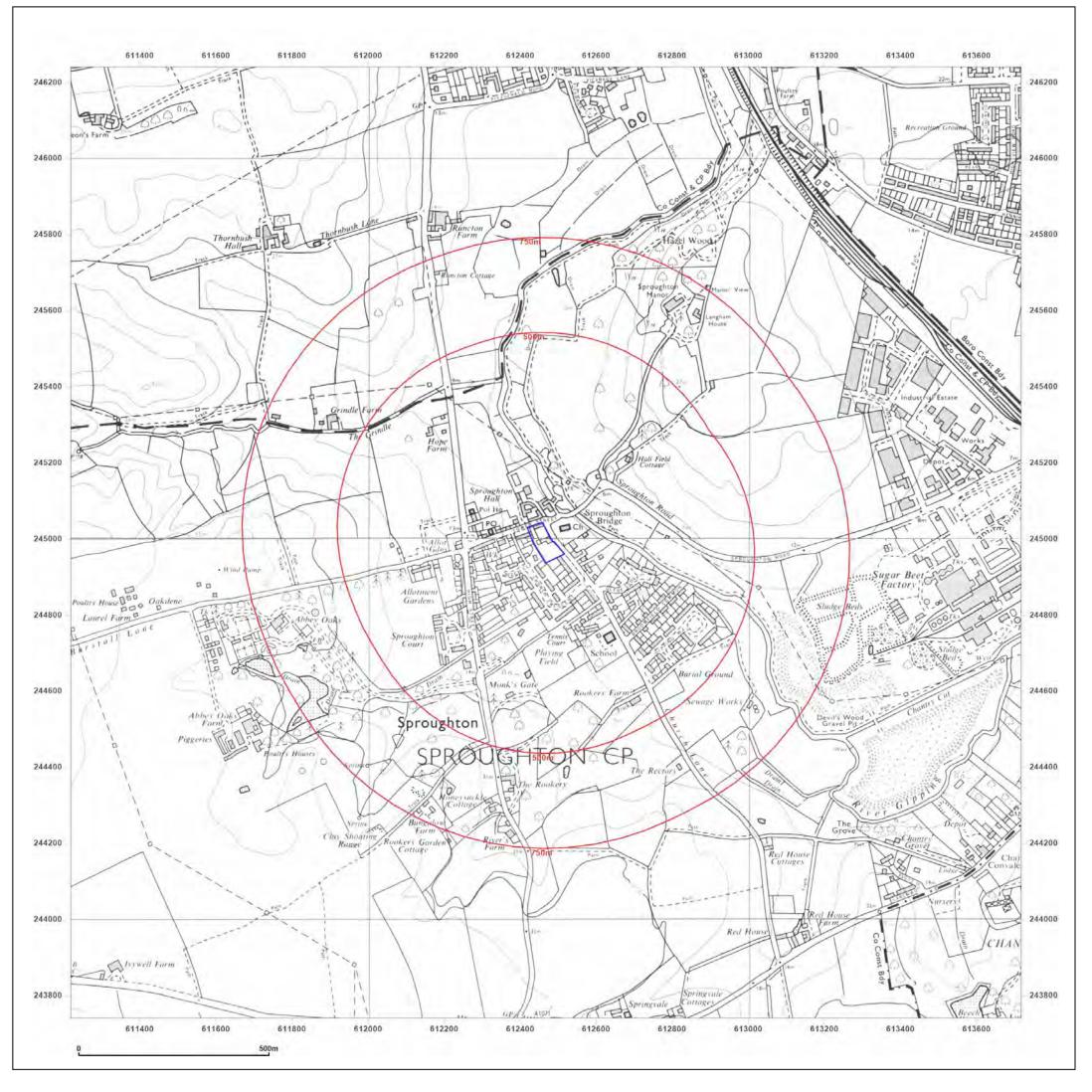




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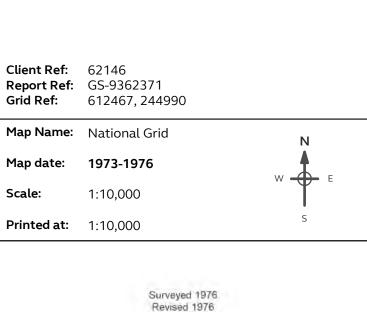
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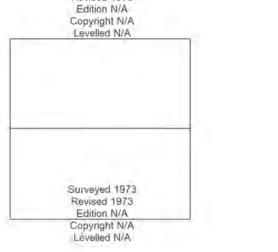
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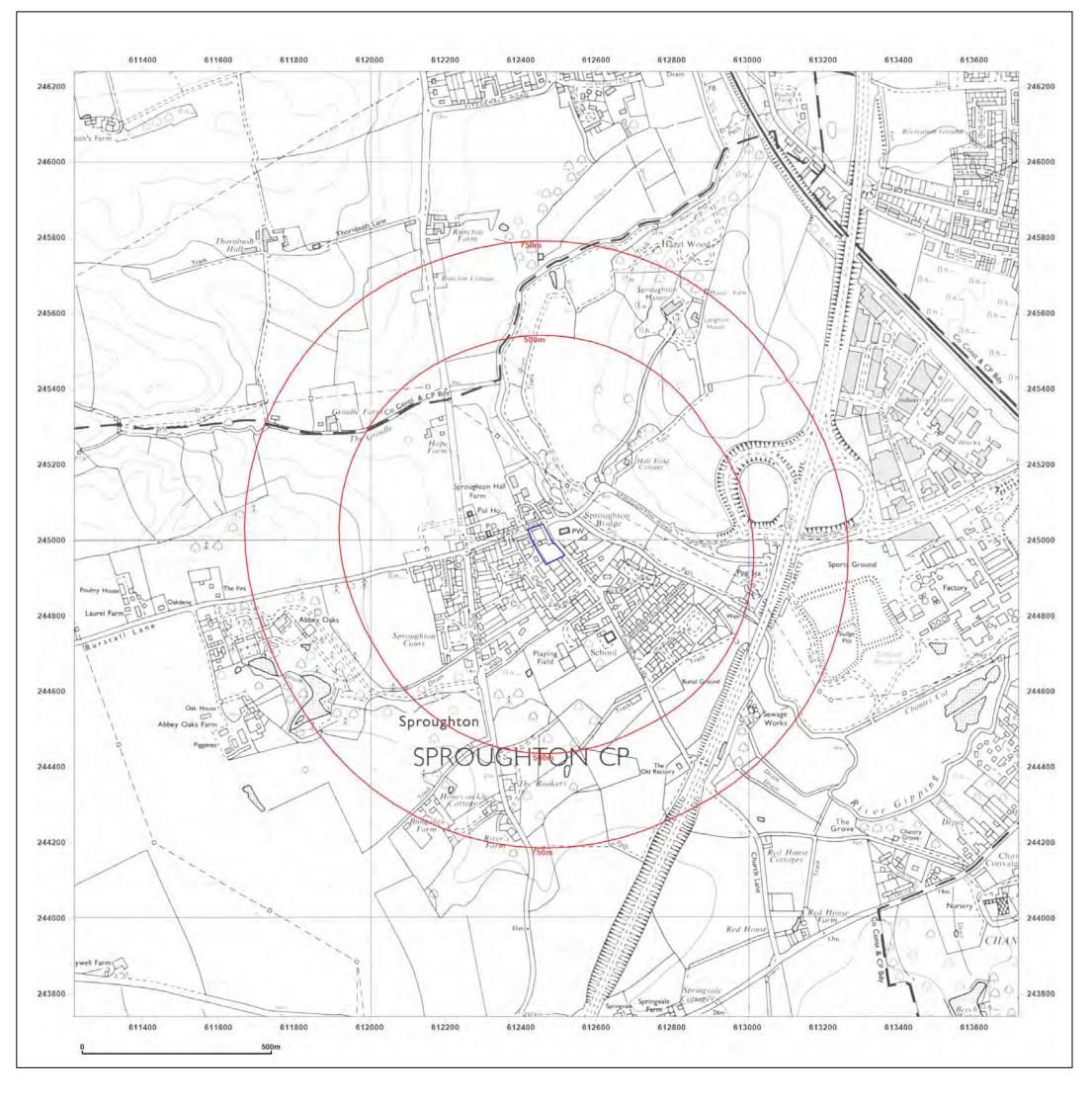




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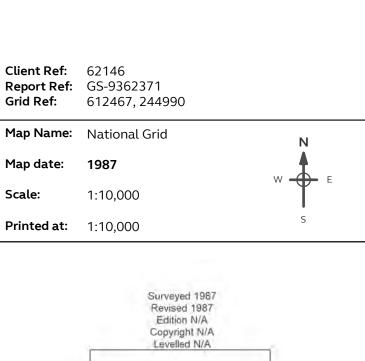
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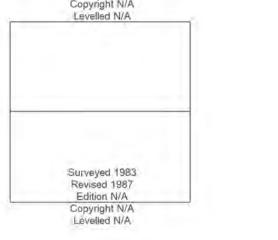
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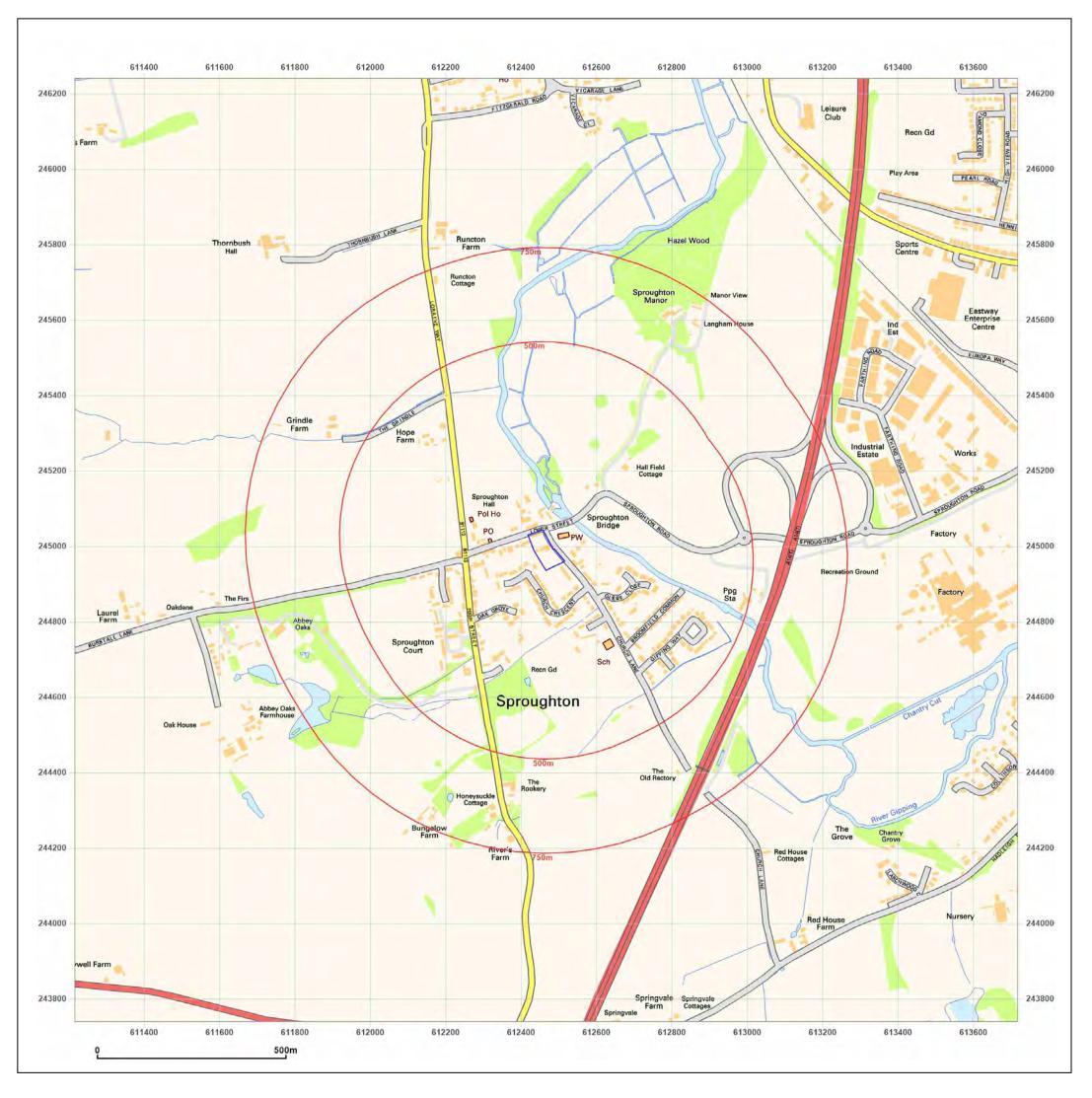




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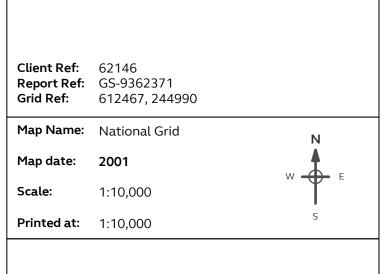
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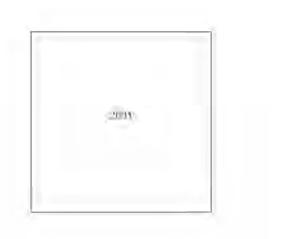
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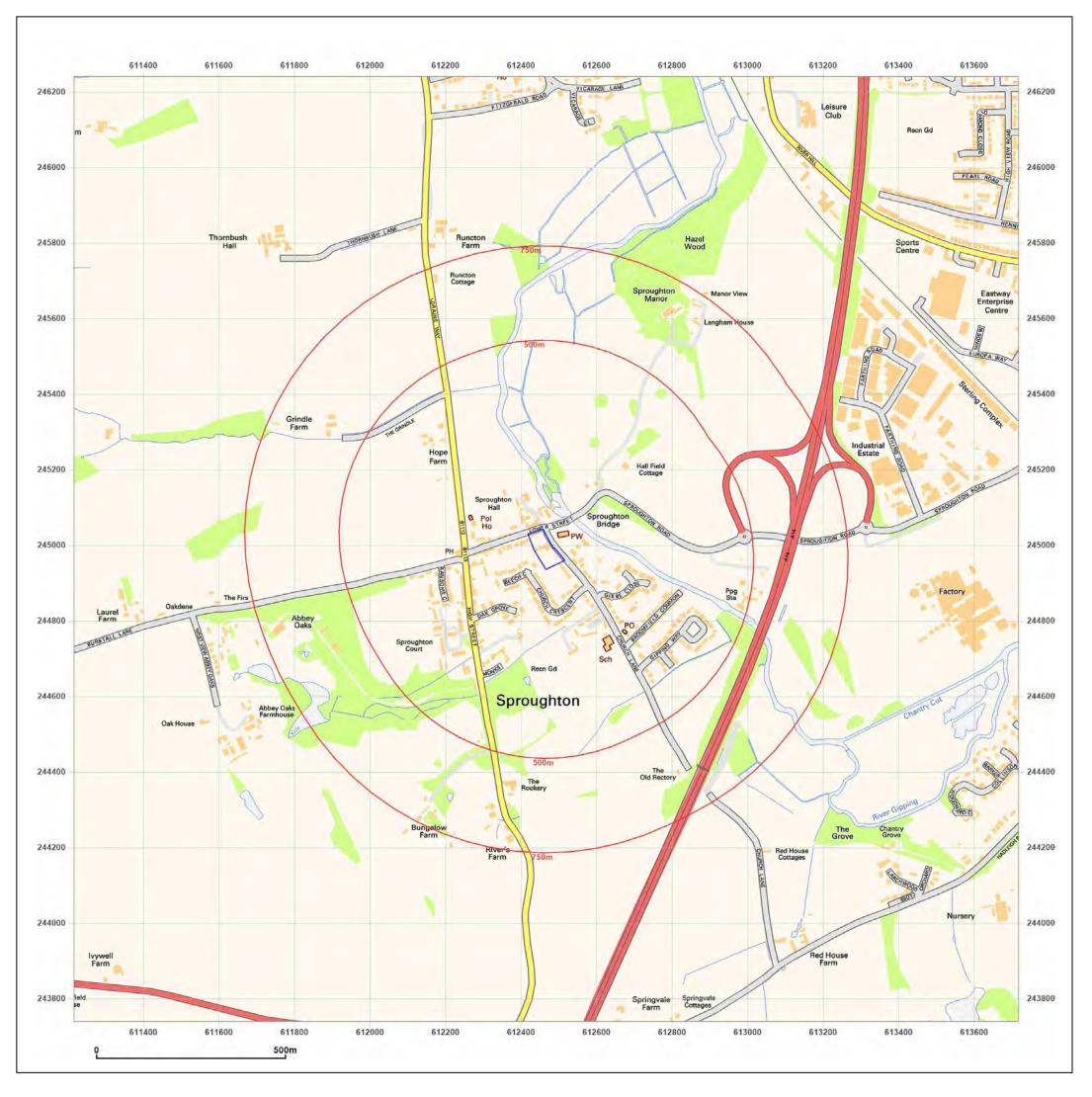




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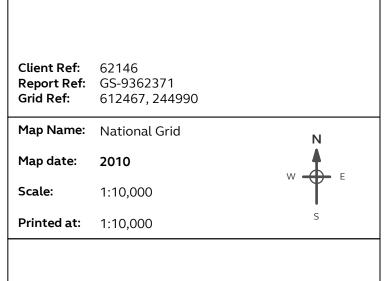
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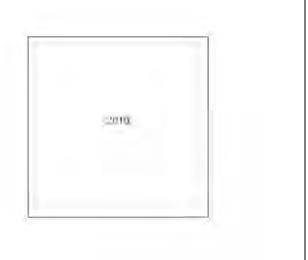
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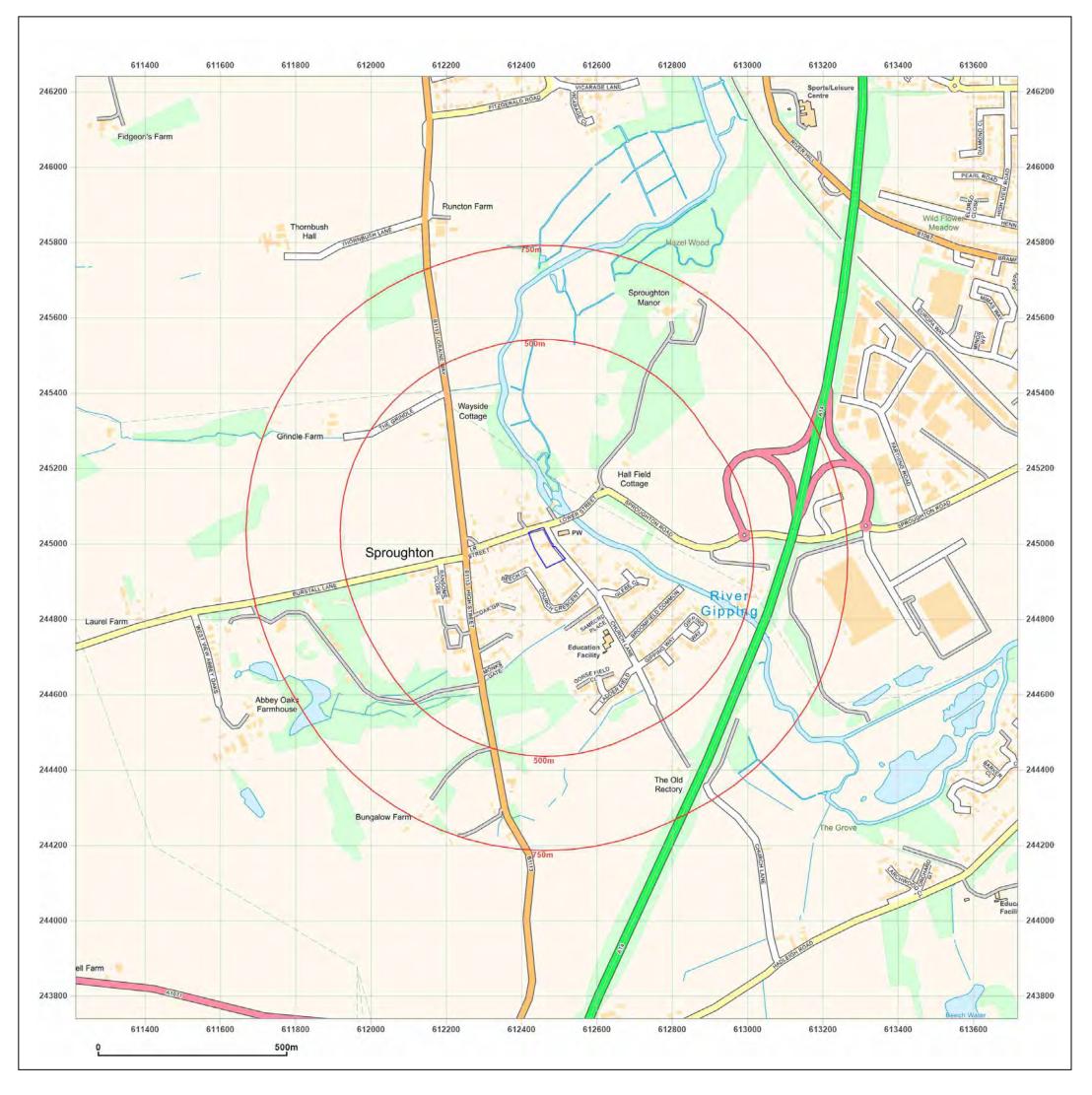




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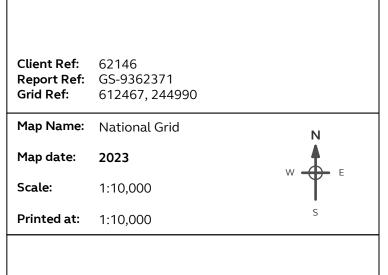
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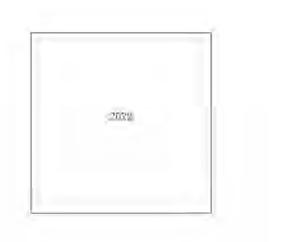
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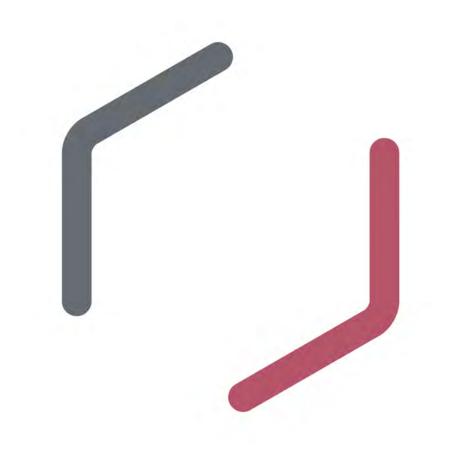




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