



# **Phase I Geoenvironmental Assessment**

Land West of B1417

Hartford End

Essex CM3 1JX

Stockplace Investments Ltd c/o SPD Studio

2268 R01: Issue 1

September 2023



**Title** Phase I Geoenvironmental Assessment, Land West of B1417, Hartford End

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**File reference** 2268

**Report number** R01: Issue 1

**Date** 7<sup>th</sup> September 2023

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## EXECUTIVE SUMMARY

EXECUTIVE SUMMARY	
<b>Project Details and Proposed Development</b>	Green Earth Management Company (GEMCO) Ltd were commissioned by SPD Studio on behalf of Stockplace Investments Ltd (the Client) to undertake a Phase I Geoenvironmental Assessment at a Land west of the B1417, Hartford End, which was proposed for a residential development comprising fifty (50no) dwellings.
<b>Site Location</b>	To the west of the B1417, Hartford End, Essex CM3 1JX, British National Grid reference 568707, 217594.
<b>Site Walkover Description</b>	The Site comprised a roughly square parcel with an area of c.2.4Ha, which comprised an agricultural field entirely laid to softstanding/wheat crop. A small area of green waste was noted on the east boundary. The site was surrounded by further agricultural fields plus some small residential areas to the north and south.
<b>Site History</b>	No significant development has been observed at the Site since the earliest available maps dated 1876, and it is therefore considered greenfield. The surrounding area has seen some minor developments to the north and south, of which the development to the south was of a former brewery. The development works appear to have used a small portion of the south of the Site for trafficking excess spoil to a neighbouring field.
<b>Published Geology, Hydrogeology and Hydrogeology</b>	<p><b>Superficial:</b> None.</p> <p><b>Bedrock:</b> London Clay Formation (Unproductive Stratum).</p> <ul style="list-style-type: none"> <li>• The Site is not within a SPZ;</li> <li>• No surface waters are identified on-site (River Chelmer c.110m south); and</li> <li>• The Site is within a Flood Zone 1 (low risk).</li> </ul>
<b>Environmental Searches</b>	<ul style="list-style-type: none"> <li>• No significant permits, pollution incidents or registers have been identified;</li> <li>• No mining or landfill sites were identified within the surrounding area;</li> <li>• The Site and surrounding areas are within surface and groundwater NVZs; and</li> <li>• The Site is in an area with naturally elevated levels of Chromium and Nickel.</li> </ul>
<b>Preliminary Conceptual Site Model (CSM) and Risk Assessment Conclusions</b>	<p><b>On/Off-Site:</b> Agricultural Activities (PPL A), Construction &amp; Demolition Activities (PPL B); and</p> <p><b>Off-Site:</b> Former Brewery (PPL C).</p> <p>Risks are generally Low/Very Low, based primarily on the likelihood of encountering significant contamination, which based on the site history.</p>
<b>Recommendations</b>	<p>On the basis of the findings of Phase I Geoenvironmental Assessment it is considered that the Site would likely be suitable for the proposed residential end use, subject to the following recommendations (see Section 5.3):</p> <ul style="list-style-type: none"> <li>• An intrusive ground investigation will likely be required to appraise the ground conditions for geotechnical reasons, and some small-scale contamination testing of the soil is recommended to be included in the scope;</li> <li>• It would also be prudent for the investigation to include gas &amp; groundwater monitoring to assess the gas risk should a potential source be discovered; and</li> <li>• Contamination may otherwise be dealt with on an as-discovered basis. A Discovery Strategy should be implemented during development works in this regard.</li> </ul>
<p><i>This Executive Summary only provides a summary of the Site data and its assessment. It does not provide a definitive environmental analysis and is for guidance purposes only. It is recommended that the reader reviews the reporting its entirety and any material referenced therein.</i></p>	



## ACRONYMS AND ABBREVIATIONS

Acronym / Abbreviation	Definition
ACM/pACM	Asbestos Containing Material or Potential Asbestos Containing Material
ADE	Average Daily Exposure
ASPT	Average Score Per Taxon
BOD	Biochemical Oxygen Demand
BGS	British Geological Survey
BH	Borehole
BS	British Standard
BTEX	Benzene, Toluene, Ethyl Benzene and Xylenes
CAT	Cable Avoidance Tool
CIRIA	Construction Industry Research and Information Association
CLEA	Contaminated Land Exposure Assessment
CLR	Contaminated Land Research Reports
Defra	Department of the Environment, Food and Rural Affairs (Formerly the DoE and DETR)
DETR	Department of the Environment, Transport and the Regions (Formerly DoE, now Defra)
DO	Dissolved Oxygen
DoE	Department of the Environment (Then DETR and later Defra)
DQRA	Detailed Quantitative Risk Assessment (Tier 2)
EA	Environment Agency
EPH	Extractable Petroleum Hydrocarbons
EQI	Environmental Quality Index
EQS	Environmental Quality Standards
FID	Flame Ionisation Detector
GAC	Generic Assessment Criteria
GC	Gas Chromatography
GEMCO	Green Earth Management Co Ltd
GQA	General Quality Assessment
GQRA	Generic Quantitative Risk Assessment (Tier 1)
ha	Hectare
HCV	Health Criteria Value
HHRA	Human Health Risk Assessment
ICRCL	Interdepartmental Committee on the Redevelopment of Contaminated Land
ID	Index Dose
LEL	Lower Explosive Limit
LOD	Limit Of Detection
m	Metres
mAOD	Metres Above Ordnance Datum
mbgl	Metres Below Ground Level
MCERTS	Monitoring Certification Scheme
MDI	Mean Daily Intake
MTBE	Methyl Tertiary Butyl Ether
NGR	National Grid Reference
NHBC	National House Building Council
NRA	National Rivers Authority (Now the Environment Agency)

Acronym / Abbreviation	Definition
PACM	Potentially Asbestos Containing Material
PAH	Polyaromatic Hydrocarbon (A.K.A. Polynuclear Aromatic Hydrocarbon)
pH	A measure of the acidity or basicity of an aqueous solution. defined as the negative logarithm of the concentration of hydrogen ions in a substance
PID	Photo Ionisation Detector
PPE	Personal Protective Equipment
RBCA	Risk-Based Contamination Assessment
RMS	Remediation Method Statement
RQO	River Quality Objective
S4UL	Suitable For Use Level
SGV	Soil Guideline Value
SNIFFER	Scotland And Northern Ireland Forum for Environmental Research
SPT	Standard Penetration Test
SSTL	Site-Specific Target Level
SVOC	Semi Volatile Organic Compounds
QRA	Quantitative Risk Assessment
TDI	Tolerable Daily Intake
TDSI	Tolerable Daily Soil Intake
TP	Trial Pit
TPH	Total Petroleum Hydrocarbon
TPHCWG	Total Petroleum Hydrocarbon Criteria Working Group
TOX	CLR 9 Toxicological Reports
UKAS	United Kingdom Accreditation Service
USEPA	United States Environmental Protection Agency
UXB	Unexploded Bomb
VOC (TVOC)	Volatile Organic Compounds (Total VOC)
WHO	World Health Organisation
WQS	Water Quality Standards
WS	Window Sample

## 1. INTRODUCTION

### 1.1. Project Details and Development Proposal

Green Earth Management Company (GEMCO) Ltd were commissioned by SPD Studio on behalf of Stockplace Investments Ltd (the Client) to undertake a Phase I Geoenvironmental Assessment at a land parcel to the west of the B1417, Hartford End (the Site, Figure 1).

The Phase I Geoenvironmental Assessment (the Report/the Assessment) was required to assess the suitability of the Site for a proposed residential development comprising fifty (50no.) dwellings with gardens and associated infrastructure, as shown at Figure 2, and support the Clients planning application.

### 1.2. Objectives and Scope of Work

The objectives of this Geoenvironmental Assessment were to:

- Review the environmental setting of the Site and surrounding area in order to determine any potentially significant pollutant linkages relative to any sensitive receptors identified;
- Prepare a preliminary Conceptual Site Model (pCSM);
- Undertake an assessment of the potential risks to human health and the environment posed by the Site in its current state;
- Undertake all works in accordance with relevant statutory and local guidance as appropriate; and
- Produce a report for the Client, providing recommendations for further works if necessary.

The scope of work for the Geoenvironmental Assessment has included the following:

- A desk-based review of available information obtained from the Envirocheck report (R.1; included in Appendix 3), and other available sources of information;
- A site walkover survey;
- A Preliminary Risk Assessment (PRA) of contamination risks to human health and the environment; and provision of a preliminary Conceptual Site Model (pCSM), detailing potential pollutant linkages; and
- A summary of any recommended additional work based on the findings of the Assessment.

### 1.3. Methodology

The methodology of assessment applied in the production of this report is in accordance with the current industry standards and supplementary guidance as appropriate, including CLR 11/LCRM 2023, Model Procedures produced by DEFRA and the Environment Agency (EA, R.2), British Standard Code of Practice for Site Investigations BS5930:2015+A1:2020 (R.3), British Standard Code of Practice for Investigation of Potentially Contaminated Sites BS10175:2011+A2:2017 (R.4) and BS21365:2020 Conceptual Site Models for Potentially Contaminated Sites (R.5).

For the purposes of this report the word ‘contamination’ relates to the statutory definition of contaminated land under the Environmental Protection Act 1990 (R.6), unless otherwise stated.

A list of references used in the production of the report is included in Section 6.

#### **1.4. Terms of Reference**

This Phase I Geoenvironmental report desk study (herein referred to as “the Report” or “the Assessment”), has been prepared for Stockplace Investments Ltd (herein referred to as “the Client”), for the purposes agreed and in general accordance with the terms and conditions set out in proposal reference ‘2268 230725 GEMCO SPD Quote’ dated 25<sup>th</sup> July 2023 and the Agreement between Green Earth Management Co Ltd (the “Consultant”) and the Client.

Instruction to proceed was granted by email instruction on 7<sup>th</sup> August 2023.

#### **1.5. Report Limitations and Conditions**

For the work, reliance has been placed on publicly and privately available data from the sources identified; the sources are not exhaustive, and further information relevant to the Site may be available from other sources. When using the information, it has been assumed it is correct. No attempt has been made to verify the information.

In addition to the above, GEMCO note that when investigating or developing land, it is important to recognise that sub-surface conditions may vary spatially and over time. Therefore, GEMCO cannot guarantee that conditions other than those discussed in the report do not occur elsewhere on the Site.

New information, revised practices, or changes in legislation may necessitate the re-interpretation of the report, completely or in part.

Further detail regarding report conditions is included as Appendix 1.



## 2. SITE DETAILS

### 2.1. Site Setting

The Site was located to the west of the B1417, in the village of Hartford End, near Felsted, Essex, CM3 1JX, centred approximately on British National Grid (BNG) reference 568707, 217594, as shown at Figure 1.

#### 2.1.1. Site Description

GEMCO undertook a Site Walkover survey on 14<sup>th</sup> August 2023 to inspect the Site and immediate surroundings. A selection of photographs taken during the visit are presented at Appendix 2 (locations on Figure 3), and the layout as encountered at the time of the walkover is shown at Figure 3.

At the time of the walkover, the Site comprised an agricultural field c.2.4Ha in area. The field was almost entirely agricultural with a wheat crop, apart from a small section of rough grass in the northeast.

The Site was bounded by ditches to the west north and east, with additional fencing and hedgerows demarking the site boundary to the north, and east and south, respectively. Shingle was also noted along the southern boundary.

No structures, significant features, or scarring were present or identified during the walkover. Overhead powerlines were noted along the southeast boundary of the Site.

No significant contamination was identified during the walkover, and the crops and flora appeared to be in good health. A green waste/compost pile and garden materials (bricks, matting, wood) were noted to the east of the Site on the boundary between the field and a residential dwelling.

#### 2.1.2. Surrounding Area

The Site was located in a semi-rural area in Hartford End and c.3km south of Felsted. The immediate surrounding area was primarily agricultural, with residential properties neighbouring to the immediate north and south (new development, propane tanks noted). The wider area was primarily agricultural land.

#### 2.1.3. Topography

On-Site topography was gently sloping from c.49mAOD in the northeast to c.43mAOD in the southwest (elevations from topographic drawing, Figure 3). There was no significant relief or sudden elevation change, however a short steep slope was noted along the south boundary with the neighbouring residential development, which appeared to be 1-2m lower in than the Site. The slope steepened from west to east.

The surrounding slopes from north to the south towards the River Chelmer (c.0.11km south of the Site).

### 2.2. Geological Setting

British Geological Survey (BGS) records and the Envirocheck report (Appendix 3) indicate that there are no superficial deposits at the Site, and the geology comprises London Clay (Clay, Silt and Sand) bedrock. Various superficial deposits are noted within c.150m of the Site, including Head and Alluvium (to south), Lowestoft Diamicton (to north), Kesgrave sand and gravel (to west) and Glaciofluvial sand and gravel (to east).

There are no BGS borehole records available within similar geology and within 500m of the Site.

### 2.2.1. Geological Hazards and Radon

On-site geological hazards from BGS records (locality shown on 1:50k scale ground stability maps at Appendix 3) are summarised at Table 2.1:

<b>Table 2.1. Geological Hazards.</b>	
<b>Geological Hazard</b>	<b>Hazard Potential</b>
Collapsible Ground	Very Low
Compressible Ground	No Hazard
Ground Dissolution	No Hazard
Ground Stability (Landslides)	Very Low
Running Sand	Very Low
Shrink-Swell Clay	Moderate
© NERC	

With regards to Radon, the Site is in a lower probability radon area. No protective measures are necessary.

### 2.3. Hydrogeological Setting

The London Clay Formation bedrock is an Unproductive Stratum.

The Site is not within a Source Protection Zone (SPZ) or a Drinking Water Protected Area (DWPA), but is within a Drinking Water Safeguard Zone (DWSZ) for surface water.

### 2.4. Hydrological Setting

No surface waters were encountered on-site, however, a ditch (dry at time of walkover) is situated along the west and parts of the north and east boundaries.

The River Chelmer is located c.110m south of the Site and flows in an approximate west to east direction. Several smaller tributaries are shown to branch off of the River Chelmer within a 1km radius of the Site, however, none come to within 100m of the Site boundary.

#### 2.4.1. Flooding

The EA Flood Map for Planning (R.7) and the Envirocheck indicate that the Site is within a low-risk flood area (Flood Zone 1, Appendix 4). The Envirocheck report has identified an area to the northwest of the Site and along the western boundary as having a range of high (30-year return), medium (100-year return) and low (1000-year return) risks of surface water flooding (see EA/NRW Suitability Map in Appendix 3).

No significant risk from groundwater flooding has been identified on-site.

### 2.5. Site History

The Site's history is reviewed to identify the past uses of the Site and surrounding area in order to evaluate any potential historical impact of the Site on the local geology, hydrogeology and hydrology, and whether such features (if present) warrant a more detailed assessment.

A summary of the Site history, derived from review of historical mapping, satellite imagery, and other sources as appropriate is presented in Table 2.2:

**Table 2.2. Summary of Site History.**

Map Date	On/Off-Site	Description and Changes	Potential Contamination Sources
1875 (1:2,500); 1881 (1:10,560)	On-Site	The Site appears to be made up of two (2no.) agricultural fields.	Agricultural Activities.
	Off-Site	To the south is Hartford Brewery, and residential buildings are to the north and northeast. The remaining surrounding area is primarily agricultural fields with sparse dwellings.	Agricultural Activities; Brewery Activities
1897 (1:2,500); 1897-1898 (1:10,560)	On-Site	<i>No significant changes.</i>	<i>No additional sources.</i>
	Off-Site	Residential building constructed along the east boundary of the Site.	Construction & Demolition activities.
1921 (1:2,500); 1923-1924 (1:10,560)	On-Site	<i>No significant changes.</i>	<i>No additional sources.</i>
	Off-Site	<i>No significant changes.</i>	<i>No additional sources.</i>
1947 <sup>1</sup>	On-Site	<i>No significant changes.</i>	<i>No additional sources.</i>
	Off-Site	<i>No significant changes.</i>	<i>No additional sources.</i>
1953 (1:2,500); 1950-1951 (1:10,560); 1955 (1:10,000)	On-Site	<i>No significant changes.</i>	<i>No additional sources.</i>
	Off-Site	Minor development of residential buildings to the north.	Construction & Demolition Activities
1985-1986 (1:2,500); 1979 (1:10,000)	On-Site	Site has been merged into a single large field.	Agricultural Activities.
	Off-Site	Minor residential developments roughly 240m north and 80m to the southeast, plus alterations to buildings at the Brewery to the south.	Construction & Demolition Activities.
1993 (1:2,500); 1999 <sup>1</sup> ; 1999 (1:10,000)	On-Site	A small patch of the south of the site appears to have been cleared or materials spread (potential overspill) possibly to extend the brewery car park.	Construction & Demolition Activities.
	Off-Site	Aerial photo shows a portion of the south of the field (outside the site boundary) which appears to be cleared/material spread as noted above.	Construction & Demolition Activities.
2006 (1:10,000)	On-Site	<i>No significant changes.</i>	<i>No additional sources.</i>
	Off-Site	The brewery site has been extended up to the southwest corner of the Site.	Construction & Demolition Activities.
2017 (Satellite Image)	On-Site	A portion of the south of the Site has been used for trafficking spoil for an adjacent building site.	Construction & Demolition Activities.
	Off-Site	The brewery has been demolished and a residential development has commenced.	Construction & Demolition Activities.
2023 (1:10,000)	On-Site	South of the site has been restored to agricultural.	<i>No additional sources.</i>
	Off-Site	The brewery has been re-developed into residential dwellings.	Construction & Demolition Activities.

<sup>1</sup>Aerial Photograph

### **3. ENVIRONMENTAL SEARCHES**

#### **3.1. Environmental Search Data**

The following sections have been produced following a review of the Landmark Envirocheck environmental database search report (R.1; Appendix 3) with a search buffer of 1km, unless otherwise indicated.

#### **3.2. Environmental Permits, Pollution Incidents and Registers**

There are nineteen (19no.) discharge consents (mostly for sewage) within 500m of the Site, the closest being located 9m to the northwest at a domestic property. The discharge is into a ditch acting as a tributary of the River Chelmer.

Six (6 no) pollution incidents to controlled waters were identified within 500m related to spills of oils/diesel and organic waste. All incidents were category 3 – minor incidents.

No other significant permits, pollution incidents or registers were identified. The above noted entries are considered generally unlikely to affect the Site due to the distance and likely geology (London Clay).

#### **3.3. Mining, Landfilling and Other Waste Sites**

The Site is not in an area likely to be affected by coal mining (no coal mining hazard has been identified) and no mining or landfill sites have been identified by the Envirocheck within 1km of the Site.

#### **3.4. Current Industrial Land Use Data**

There are no active trade directory entries within 500m of the Site.

The closest inactive entry relates to a brewers 74m to the southeast (brewery identified on historical maps). There are no other inactive trade directory entries within 500m.

#### **3.5. Environmentally Sensitive Areas**

The Site and surrounding areas are within Nitrate Vulnerable Zones for surface water (River Chelmer) and groundwater (Sandlings and Chelmsford).

Estimated Soil Chemistry maps (included at Appendix 3) indicate that the Site is in an area with potentially naturally elevated levels of Chromium (60-90mg/kg) and Nickel (15-30 mg/kg).

#### **3.6. Air Quality Management Areas**

Air Quality Management Area (AQMA) maps from Defra (R.8), show the Site is not located within an AQMA.

#### **3.7. Unexploded Ordnance/Bombs (UXO/UXB)**

A preliminary UXO risk map, procured from Zetica UXO Ltd and presented at Appendix 5, indicates the Site is within an area of low risk from UXO.



### **3.8. Local Planning Authority Correspondence and Planning Records**

The Local Planning Authority (LPA), Chelmsford City Council, was contacted in August 2023 regarding any historical contaminated land records which may be relevant to the proposed development.

The report will be updated upon receipt with any pertinent information provided by the LPA.

No significant planning records have been identified.

## 4. PRELIMINARY RISK ASSESSMENT AND CONCEPTUAL SITE MODEL

### 4.1. Introduction

In order to determine if land contamination is present, a tiered Risk Assessment process is adopted to provide a robust approach to the management of risks due to land contamination. The Risk Assessment process can be highly detailed and there are a range of factors that need to be considered in assessing risks. The adoption of a staged approach is in line with current industry legislation and guidance. There are principally three tiers applied as follows:

- Tier 1: Preliminary Risk Assessment (PRA) (generally qualitative);
- Tier 2: Generic Quantitative Risk Assessment (GQRA); and
- Tier 3: Detailed Quantitative Risk Assessment (DQRA).

The purpose of the current work is to undertake a Tier 1 Preliminary Risk Assessment.

Land is considered to be contaminated if significant Plausible Pollutant Linkages (PPL), comprising a source, pathway, and receptor, are present. Source, pathway, and receptor can be defined as follows:

- **Source** (contaminant/pollutant) – “a substance [or range of chemically related substances] which is in or under the land and which has the potential to cause harm or pollution of controlled waters.”
- **Pathway** - One or more routes by which a receptor can be exposed to or affected by a contaminant.
- **Receptor** (target) – humans, living organisms, ecological systems, buildings, controlled waters.

Pollutant linkages are deemed significant if there is a significant potential of significant harm to a sensitive receptor being exposed to a specific contaminant(s) via an identified and active pathway.

### 4.2. Land Use Scenario

For the purposes of the Risk Assessment and production of the CSM, the proposed land use scenario is considered to be residential with plant uptake in accordance with CLR 11/LCRM 2023, Model Procedures produced by DEFRA and the EA (R.2). The current site use is agricultural and considered greenfield.

### 4.3. Potential Contamination Sources

The site was an agricultural field with wheat crop. No structures were present and no evidence of contamination, visible scarring to the terrain, or variance in vegetation growth was identified.

Historically, the Site was an open parcel of assumed agricultural use since the earliest available mapping (1876), and no change is observed from this time to the present day. The site is therefore considered greenfield. Nevertheless, agricultural land can present a small contamination risk sourced from the use of agrichemicals (herbicides and pesticides) and fuels/oils associated with farming equipment, as well as a potential for buried wastes/pits. This is however considered unlikely at this stage.

No significant development has occurred throughout the Site's recorded history until the recent residential development at the former brewery to the south (commenced c.2017), which appeared to use a small portion of the south of the Site for trafficking excess spoil to a neighbouring field. The trafficking route was

restored between 2020-2023. The former brewery is also a noteworthy potential source of contamination. The remaining surrounding area is both presently and historically primarily agricultural land.

The potential contamination sources identified are summarised, along with potential contaminants, in Table 4.1:

<b>Table 4.1. Potential Sources of Contamination.</b>		
<b>Potential Source</b>	<b>Plausible Potential Contaminants</b>	<b>Likelihood</b>
<b>On/Off-Site</b>		
<b>PPL A.</b> Agricultural Activities	Heavy metals, hydrocarbons (incl. TPH/PAHs, fuel, oil and grease); organic and inorganic wastes, agrichemicals (insecticides, herbicides, pesticides), pH.	Low
<b>PPL B.</b> Construction & Demolition Activities	Hydrocarbons (incl. TPH/PAHs, fuel, oil and grease), inorganic compounds, asbestos, ground gas, VOC.	Low
<b>Off-Site</b>		
<b>PPL C.</b> Former Brewery	Hydrocarbons (incl. TPH/PAHs, fuel, oil and grease), organic wastes, asbestos, ground gas, VOC, phenols.	Low

#### 4.4. Potential Migration Pathways and Receptors

The following potential migration pathways have been identified with regard to the site setting, environmental conditions and the current development proposals (outlined at Section 1.1).

1. Direct contact with soils; Ingestion of soil, or soil dust; Inhalation of dust or asbestos fibres;
2. Leaching of contaminants; Infiltration to groundwater; Movement within the groundwater; Runoff to surface waters;
3. Outdoor inhalation of ground gas and/or vapours;
4. Ingress of vapours/gases into buildings; Indoor inhalation of vapours/gases, or explosion;
5. Contact with building material/ services; Leaching of contaminants into service trenches; and
6. Direct contact with soil/uptake by flora and fauna.

The following sensitive receptors have been identified:

- Human Health (Future Site Users, Site Neighbours/General Public and Construction Workers);
- Controlled Waters: Off-Site Surface waters;
- Future Building(s), Building Materials, and Buried Services; and
- Ecological receptors.

#### 4.5. Preliminary Conceptual Site Model

The potentially significant pollutant (source-pathway-receptor) linkages (PPL) that are applicable to the Site are summarised in Table 4.2 below:

**Table 4.2. Preliminary Conceptual Site Model.**

Source(s)	Pathway(s)	Receptor(s)	Risk <sup>1</sup>	Justification for Risk / Comment
<b>On/Off-Site</b>				
<b>PPL A</b>  Agricultural Activities  (Heavy metals, hydrocarbons (incl. TPH/PAHs, fuel, oil and grease); organic and inorganic wastes, agrichemicals (insecticides, herbicides, pesticides), pH)	<b>1.</b> Direct contact with soils; Ingestion of soil, or soil dust; Inhalation of dust, or asbestos fibres	<b>a.</b> Future Site Users	<b>PPL A-1-a</b> Low	Potential for residues of agrichemicals etc however the likelihood is considered low. Sampling may be considered prudent if any site investigation is undertaken to confirm.
		<b>b.</b> Site Neighbours/ General Public	<b>PPL A-1-b</b> Low	Limited potential likelihood of significant contamination plus likely limited migration based on published geology (likely cohesive soils).
		<b>c.</b> Construction Workers	<b>PPL A-1-c</b> Very Low	Assuming appropriate PPE and standard working practices.
	<b>2.</b> Leaching of contaminants; Infiltration to and movement within the groundwater; Runoff to surface waters	<b>a.</b> Off-site Surface Waters	<b>PPL A-2-a</b> Low	Limited potential likelihood of significant contamination plus likely limited migration based on published geology (likely cohesive soils).
	<b>3.</b> Outdoor inhalation of ground gas and/or vapours	<b>a.</b> Future Site Users	<b>PPL A-3-a</b> Very Low	Limited potential for significant amounts of gas generating materials with potential to affect human health outdoors.
		<b>b.</b> Site Neighbours/ General Public	<b>PPL A-3-b</b> Very Low	As above, plus migration to neighbours considered unlikely due to likely geology (cohesive soils).
		<b>c.</b> Construction Workers	<b>PPL A-3-c</b> Very Low	Assuming appropriate PPE and standard working practices.
	<b>4.</b> Ingress of vapours/ gases into buildings; Inhalation of vapours/ gases (indoor) or explosion	<b>a.</b> Future Site Users	<b>PPL A-4-a</b> Low	Potential for buried organic wastes and residues with gas generation potential (mainly carbon dioxide and methane), however likelihood is considered low.
		<b>b.</b> Site Neighbours/ General Public	<b>PPL A-4-b</b> Very Low	As above, however migration to neighbours considered unlikely due to likely geology (cohesive soils).
		<b>c.</b> Future Buildings	<b>PPL A-4-c</b> Low	As PPL A-4-a.



**Table 4.2. Preliminary Conceptual Site Model.**

Source(s)	Pathway(s)	Receptor(s)	Risk <sup>1</sup>	Justification for Risk / Comment
		<b>d.</b> Construction Workers	<b>PPL A-4-d</b> Very Low	Assuming appropriate PPE and standard working practices.
	<b>5.</b> Contact with building materials/ services; Leaching into services trenches	<b>a.</b> Buried Services and Building Materials	<b>PPL A-5-a</b> Low	Potential (albeit low) for contamination which could affect buried services. Sampling may be required to assess appropriate material selection for buried services.
	<b>6.</b> Direct contact with soils/ uptake by flora and fauna	<b>a.</b> Ecological Receptors	<b>PPL A-6-a</b> Low	Some potential (low) for residues which could affect plants, however no evidence and consequences are minor.
<b>PPL B</b>  Construction & Demolition Activities  (Hydrocarbons (incl. TPH/PAHs, fuel, oil and grease), inorganic compounds, asbestos, ground gas, VOC)	<b>1.</b> Direct contact with soils; Ingestion of soil, or soil dust; Inhalation of dust, or asbestos fibres	<b>a.</b> Future Site Users	<b>PPL B-1-a</b> Low	Potential for spillages of materials being transported as part of construction works at the brewery development, however it appears only soil was transported. Contamination risk is generally considered to be low, and it is noted that the area is proposed as public open space (figure 2) however sampling of soils may be prudent.
		<b>b.</b> Site Neighbours/ General Public	<b>PPL B-1-b</b> Low	Likelihood of significant contamination is considered low. Unlikely to migrate due to insolubility and cohesive soil.
		<b>c.</b> Construction Workers	<b>PPL B-1-c</b> Very Low	Assuming appropriate PPE and standard working practices.
	<b>2.</b> Leaching of contaminants; Infiltration to and movement within the groundwater; Runoff to surface waters	<b>a.</b> Off-site Surface Waters	<b>PPL B-2-a</b> Low	Likelihood of significant contamination is considered low. Unlikely to migrate due to insolubility and cohesive soil.
	<b>3.</b> Outdoor inhalation of ground gas and/or vapours	<b>a.</b> Future Site Users	<b>PPL B-3-a</b> Very Low	Limited potential for gas generating materials with potential to affect human health outdoors.
		<b>b.</b> Site Neighbours/ General Public	<b>PPL B-3-b</b> Very Low	Limited potential likelihood of significant contamination plus likely limited migration based on published geology.

**Table 4.2. Preliminary Conceptual Site Model.**

Source(s)	Pathway(s)	Receptor(s)	Risk <sup>1</sup>	Justification for Risk / Comment
	4. Ingress of vapours/ gases into buildings; Inhalation of vapours/ gases (indoor) or explosion	c. Construction Workers	PPL B-3-c Very Low	Assuming appropriate PPE and standard working practices.
		a. Future Site Users	PPL B-4-a Low	Limited potential for materials with gas generation potential.
		b. Site Neighbours/ General Public	PPL B-4-b Very Low	As above, however migration to neighbours considered unlikely due to likely geology (cohesive soils).
		c. Future Buildings	PPL B-4-c Very Low	Low likelihood of putrescible/organic materials and limited migration due to superficial cohesive soils.
		d. Construction Workers	PPL B-4-d Very Low	Assuming appropriate PPE and standard working practices.
	5. Contact with building materials/ services; Leaching into services trenches	a. Buried Services	PPL B-5-a Low	Limited potential for contamination at levels likely to affect Buried Services or material selection.
	6. Direct contact with soils/ uptake by flora and fauna	a. Ecological Receptors	PPL B-6-a Low	Some potential for residues which could affect plants, however no evidence and consequences are minor.
<b>Off-Site</b>				
PPL C. Former Brewery  (Hydrocarbons (incl. TPH/PAHs, fuel, oil and grease), organic wastes, asbestos, ground gas, VOC, phenols).	1. Direct contact with soils; Ingestion of soil, or soil dust; Inhalation of dust, or asbestos fibres	a. Future Site Users	PPL C-1-a Low	Potential for organic wastes, however migration risk is considered low based on topography and likely cohesive soils.
		b. Construction Workers	PPL C-1-b Very Low	Assuming appropriate PPE and standard working practices.
	2. Outdoor inhalation of ground gas and/or vapours	a. Future Site Users	PPL C-2-a Low	Limited potential for significant gas generating materials with potential to affect human health outdoors.
		b. Construction Workers	PPL C-2-b Very Low	Assuming appropriate PPE and standard working practices.

**Table 4.2. Preliminary Conceptual Site Model.**

Source(s)	Pathway(s)	Receptor(s)	Risk <sup>1</sup>	Justification for Risk / Comment
	3. Ingress of vapours/ gases into buildings; Inhalation of vapours/ gases (indoor) or explosion	a. Future Site Users	<b>PPL C-3-a</b> Low	Potential for gas generating materials associated with brewery use/wastes, however the risk of significant quantities post-development is considered low, plus limited migration potential due to cohesive soils.
		b. Future Buildings	<b>PPL C-3-b</b> Low	As above.
		c. Construction Workers	<b>PPL C-3-c</b> Very Low	Assuming appropriate PPE and standard working practices.
	4. Contact with building materials/ services; Leaching into services trenches	a. Buried Services	<b>PPL C-4-a</b> Low	Limited potential for contamination at levels likely to affect Buried Services. Unlikely to migrate to the Site.
	5. Direct contact with soils/ uptake by flora and fauna	a. Ecological Receptors	<b>PPL C-5-a</b> Low	Some potential (low) for residues which could affect plants, however no evidence and consequences are minor.

<sup>1</sup>The risk rating given in the table above is based on classification of consequence and the probability of occurrence; further details are described in Appendix 1.

## 5. CONCLUSIONS AND RECOMMENDATIONS

### 5.1. Summary of Site Walkover and Desk Study Information

The Site comprised a roughly square parcel with an area of c.2.4Ha, which comprised an agricultural field entirely laid to softstanding/wheat crop. A small area of green waste was noted on the east boundary. The site was surrounded by further agricultural fields plus some small residential areas to the north and south. The residential development to the south was recent.

No significant development has been observed at the Site since the earliest available maps dated 1876, and it is therefore considered greenfield. The surrounding area has seen some minor developments to the north and south, of which the development to the south was of a former brewery. The development works appear to have used a small portion of the south of the Site for trafficking excess spoil to a neighbouring field.

#### 5.1.1. Geology, Hydrogeology and Hydrology

British Geological Survey (BGS) online records indicate there are no superficial deposits at the Site and that the site is underlain directly by London Clay bedrock. Various superficial strata are however noted within 150m.

The London Clay Formation is an Unproductive Stratum, and the Site is not within an SPZ.

No surface waters were encountered on-site; however, ditches (dry) were noted along the north, east and west boundaries. The River Chelmer was located roughly 110m to the south.

The Site is within a low-risk area from surface water flooding (Flood Zone 1).

#### 5.1.2. Environmental Searches

No significant permits, pollution incidents or registers were identified in relation to the Site, and no areas of mining or landfill have been identified on-site or within the surrounding area.

The Site and surrounding areas are within surface water and groundwater NVZs, as well as being an area with naturally elevated levels of Chromium and Nickel.

### 5.2. Summary of Preliminary Conceptual Site Model and Conclusions

Considering the above-mentioned records and site history, the Risk Assessment and preliminary Conceptual Site Model identified the following potential sources of contamination:

<b>On/Off-Site:</b>	Agricultural Activities ( <i>PPL A</i> ), Construction & Demolition Activities ( <i>PPL B</i> ); and
<b>Off-Site:</b>	Former Brewery ( <i>PPL C</i> ).

Risks from all PPLs are generally considered to be Low primarily on the basis of likelihood of encountering significant contamination following a review of the site history. It may nevertheless be prudent to include some contamination testing as a precautionary measure should any Site Investigation be undertaken.

### **5.3. Recommendations**

On the basis of the findings of Phase I Geoenvironmental Assessment it is considered that the Site would likely be suitable for the proposed residential end use, subject to the following recommendations:

- The risks of encountering significant contamination are generally considered low on the basis of probability following a review of the site history;
- An intrusive ground investigation will most likely be required to appraise the ground conditions at the Site from a geotechnical perspective (foundation design etc, noting moderate risk of shrink-swell, selenite risk to concrete from the London clay, and desiccation risk from crops and trees), and it is recommended that such an investigation includes some small-scale contamination testing of the soil to determine the general contamination conditions, with reference to the potential risks and sources outlined in the preliminary Risk Assessment/CSM. Undertaking the contamination testing during the geotechnical investigation is recommended to reduce overall costs;
- Contamination may otherwise be dealt with on an as-discovered basis (see below);
- It would also be prudent for the investigation to include combined gas & groundwater monitoring installations and monitoring to assess the gas vapour risk to the proposed development should a potential source be discovered; and
- A Discovery Strategy (Section 5.4) should be established for the construction works in order to appropriately manage/contain contamination if it is encountered during the works.

### **5.4. Discovery Strategy**

A Discovery Strategy should be in place during construction works to account for the possibility of further currently unidentified, undiscovered or otherwise unexpected or exceptional contamination. This is considered plausible given the site's agricultural history.

Such a strategy must include a watching brief for any evidence (visual or olfactory) of contamination, maintained throughout the development works. If evidence of unexpected materials is identified work in the vicinity of the suspected contamination should be halted, pending inspection and, if required, further investigation and sampling of any suspect materials by a representative of GEMCO or other qualified environmental consultant at the earliest possible convenience. The Local Planning Authority should also be informed.

Any remediation measures required should be agreed with and implemented to the satisfaction of the Local Planning Authority and Building Warranty Provider.

### **5.5. Regulatory Liaison**

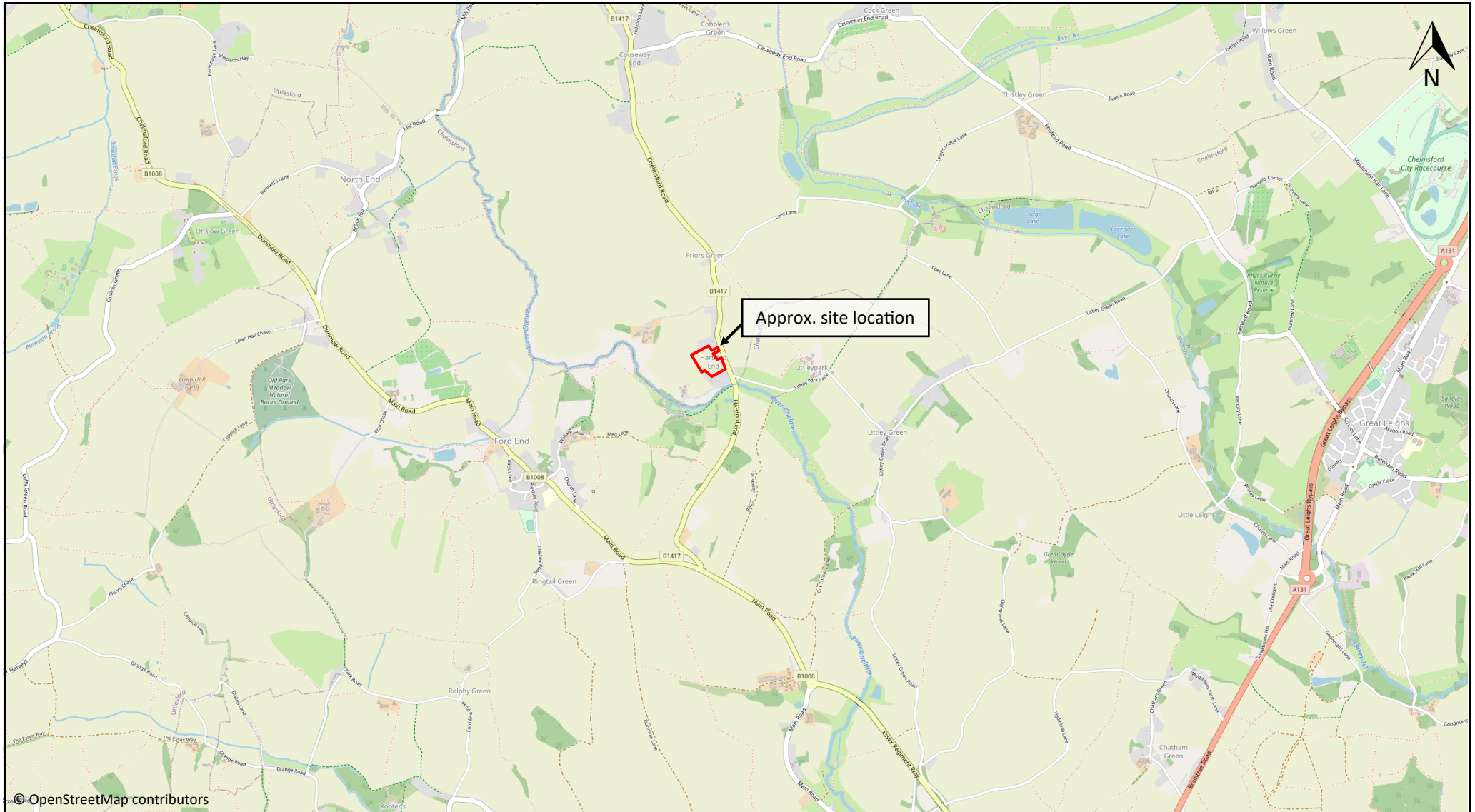
A copy of this report should be forwarded to the Local Planning Authority, Chelmsford City Council, in support of the relevant planning applications.

## 6. REFERENCES




- R.1. Landmark Envirocheck Report. Ref. 315600858\_1\_1, 14<sup>th</sup> August 2023 (included as Appendix 3);
- R.2. Environment Agency (EA), Land Contamination Risk Management (LCRM), Published October 2020, Last updated July 2023;
- R.3. British Standard, Code of Practice for Site Investigations BS5930:2015+A1:2020;
- R.4. British Standard, Code of Practice for Investigation of Potentially Contaminated sites BS10175:2011+A2:2017;
- R.5. British Standards Publication BS EN ISO 21365:2020, Soil Quality - Conceptual Site Models for Potentially Contaminated Sites;
- R.6. Environmental Protection Act 1990: Part IIA, Contaminated Land Statutory Guidance, April 2012;
- R.7. Environment Agency: Flood Map for Planning (2023) <https://flood-map-for-planning.service.gov.uk/>;
- R.8. Department of Environment, Food and Rural Affairs (DEFRA) Air Quality Management Area (AQMA) maps - [REDACTED] .

# Figure 1

## Site Location Plan



© OpenStreetMap contributors

<b>Site:</b>	Land West of The B1417	<b>Date:</b>	Sep 2023	<b>Legend:</b>  Approx. Site Location / Boundary	 REMEDIATION SPECIALISTS Green Earth Management Co Ltd Broomfield Park Coggeshall Road Essex CO6 2JX Tel: 01245 206129 
<b>Address:</b>	Hartford End, Essex	<b>Scale:</b>	Not to Scale		
<b>Post Code:</b>	CM3 1JX	<b>Drawing:</b>	Figure 1		
<b>Grid Ref:</b>	568707, 217594	<b>Drawn by:</b>	SCS		
<b>Title:</b>	Site Location Plan	<b>Checked by:</b>	CU		
<b>Client:</b>	Stockplace Investments Ltd. c/o SPD	<b>Project No:</b>	2268 R01 Issue 1		






## Figure 2

### Proposed Development Plan



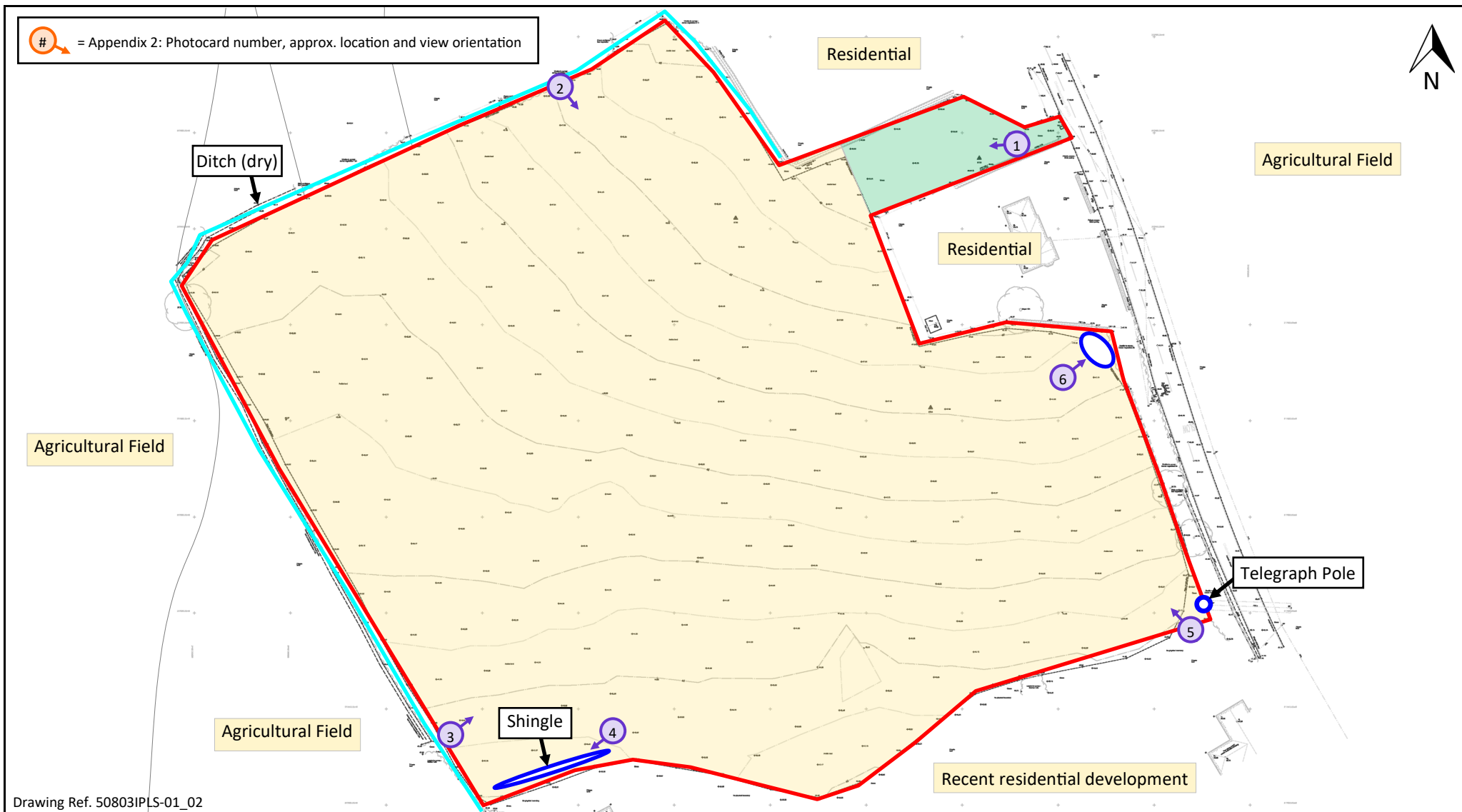


<b>Site:</b> Land West of The B1417	<b>Date:</b> Sep 2023	<b>Legend:</b>	 Approx. Site Location / Boundary	 REMEDICATION SPECIALISTS Green Earth Management Co Ltd Broomfield Park Coggeshall Road Essex CO6 2JX Tel: 01245 206129 
<b>Address:</b> Hartford End, Essex	<b>Scale:</b> Not to Scale			
<b>Post Code:</b> CM3 1JX	<b>Drawing:</b> Figure 2			
<b>Grid Ref:</b> 568707, 217594	<b>Drawn by:</b> SCS			
<b>Title:</b> Proposed Development Plan	<b>Checked by:</b> CU			
<b>Client:</b> Stockplace Investments Ltd. c/o SPD	<b>Project No:</b> 2268 R01 Issue 1			




## **Figure 3**

### **Site Walkover Layout Plan**



Drawing Ref. 50803IPLS-01\_02

<b>Site:</b>	Land West of The B1417	<b>Date:</b>	Sep 2023	<b>Legend:</b> <div><div><div></div><div>Approx. Site Location / Boundary</div></div><div><div></div><div>Rough grass softstanding</div></div><div><div></div><div>Agricultural Crop (Wheat)</div></div><div><div></div><div>Feature</div></div></div>	<div> Green Earth Management Co Ltd Broomfield Park Coggeshall Road Essex CO6 2JX Tel: 01245 206129 <div></div></div>
<b>Address:</b>	Hartford End, Essex	<b>Scale:</b>	Not to Scale		
<b>Post Code:</b>	CM3 1JX	<b>Drawing:</b>	Figure 3		
<b>Grid Ref:</b>	568707, 217594	<b>Drawn by:</b>	SCS		
<b>Title:</b>	Site Walkover Layout Plan	<b>Checked by:</b>	CU		
<b>Client:</b>	Stockplace Investments Ltd. c/o SPD	<b>Project No:</b>	2268 R01 Issue 1		

# Appendix 1

## Report Conditions

## **Geoenvironmental Site Investigation**

This report is produced solely for the benefits of the named Client and no liability is accepted for any reliance placed on it by any other party unless specifically agreed in writing otherwise.

The report refers, within the limitations of the stated, to the condition of the Site at the time of the inspections. No warranty is given as to the possibility of the future changes of the Site.

The report is based on a visual site inspection, reference to accessible referenced historical records, the physical investigation as detailed, information supplied by those parties referenced in the text, and preliminary discussions with local and statutory authorities. Some of the opinions are based on unconfirmed data and information and are presented as the best that can be obtained without further extensive research. The test results available can only be regarded as a limited but likely representative sample assessed against current guidelines. The impact of our assessment on other aspects of the development requires evaluation by other involved parties.

GEMCO takes no responsibility for conditions that have not been revealed by the borings, or which occur below or between the borings. The possibility of the presence of contaminants, perhaps in higher concentrations, elsewhere on site cannot be discounted. Whilst every effort has been made to interpret the conditions between investigation locations, such information is only indicative and liability cannot be accepted for its accuracy.

Groundwater and ground gas readings taken are those pertaining to the period of the investigation only. It should be noted that groundwater levels may be subject to tidal, seasonal and diurnal changes, whilst ground gas emission rates are affected by atmospheric pressure and groundwater levels.

With reference to ground contamination, whilst the findings detailed within this report reflect our best assessment, because there are no exact UK definitions of these matters, being subject to risk analysis, we are unable to give categorical assurances that they will be accepted by authorities or funds without question as such bodies have unpublished, more stringent objectives. The report is prepared and written for the purposed uses stated in the report and should not be used in a different context without reference to GEMCO in time, improved practises or amended legislation may necessitate a re-assessment.

The report is limited to the geotechnical and environmental aspects specifically reported on and is necessarily restricted and no liability is accepted for any other aspect especially concerning gradual or sudden pollution incidents. The opinions expressed cannot be absolute due to the limitations of time and resources imposed by the agreed brief, the nature of the geology and possibility of unrecorded previous use and abuse of the Site and adjacent sites. The report concentrates on the Site as defined in the report and provides an opinion on surrounding sites. If migrating pollution or contamination (past or present) exists, further research will be required before the effects can be better determined.

## Risk Assessment and Risk Rating

<i>Classification of Consequence</i>		
<i>Classification</i>	<i>Definition</i>	<i>Examples</i>
Severe	Short term (acute) risk to human health likely to result in 'significant harm;' as defined by the Environmental Protection Act 1990, Part IIA. Short term risk if pollution (note: Water Resources Act does not contain provision for consideration of the significance of pollution) of sensitive water resource. A short-term risk to a particular ecosystem, or organism forming part of such an ecosystem. (Note: the definition of ecological systems with the DEFRA Contaminated Land Statutory Guidance 2012)	High concentration s of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site to a controlled water. Explosion, causing building collapse (can also equate to short term human health risk if buildings are occupied).
Medium	Chronic damage to human health ('significant harm as defined DEFRA Contaminated Land Statutory Guidance 2012) Pollution of sensitive water resources. A significant change in a particular ecosystem, or organism forming part of such ecosystem. (Note: the definition of ecological systems with the DEFRA Contaminated Land Statutory Guidance 2012)	Concentration of contaminant from the Site exceeds the generic or site-specific assessment criteria. Leaching of contaminants from a site to a principal or secondary aquifer. Death of species within a designated nature reserve.
Mild	Pollution of non-sensitive water resources. Significant damage to buildings, structures, and crops. ('Significant harm' as defined in DEFRA Contaminated Land Statutory Guidance 2012 and EPA 1990 Part IIA. Damage to sensitive buildings/structures or the environment.	Pollution if non-classified groundwater. Damage to building, rendering it unsafe to occupy (e.g., foundation damage resulting in instability).
Minor	Harm, although not necessarily significant harm, which may result in a financial loss or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such a personal protective clothing etc.). Easily repairable effects of damage to buildings/structures	The presence of contaminants at such concentration is that protective equipment is required during the Site works. The loss of plants in landscaping scheme. Discolouration of concrete.

Classification of Probability	
Classification	Definition
High Likelihood	There is a pollution linkage and an event which would either appear very likely in the short term and almost inevitable over the long term, or, there is evidence at the receptor of harm or pollution.
Likely	There is a pollution linkage and all the elements are present in the right place which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely to occur over the long term.
Low Likelihood	There is pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place and is less likely in the shorter term.
Unlikely	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very High Risk	High Risk	Moderate Risk	Moderate/ Low Risk
	Likely	High Risk	Moderate Risk	Moderate/ Low Risk	Low Risk
	Low Likelihood	Moderate Risk	Moderate/ Low Risk	Low Risk	Very Low Risk
	Unlikely	Moderate/ Low Risk	Low Risk	Very Low Risk	Very Low Risk

*Risk classification framework taken from CIRIA C552, Section 6*



# Appendix 2

## Site Photographs



Picture 01



Picture 02



Picture 03



Picture 04



Picture 05



Picture 06



#### Legend

**Pic 01:** View into the site from the entrance in the northeast, facing west.

**Pic 02:** Site overview facing south from the north boundary.

**Pic 03:** Site overview facing northeast from the southwest boundary.

**Pic 04:** Shingle along southwest boundary.

**Pic 05:** View northwest from the southeast boundary.

**Pic 06:** Green waste/compost and bricks encountered along the east boundary.

**Site:**  
Land West of B1417, Hartford End

**Title:**  
Appendix 2 - Site Photographs

**Client:**  
Stockplace Investments c/o SPD

**Date:** Sep 2023

**Project No:** 2268 R01

**Issue:** Issue 1

**Page No:** 1 of 1

**Drawn by:** DM

**Checked by:** CU



Green Earth Management Company Ltd  
Suite 3, Broomfield Park,  
Coggeshall Road,  
Earls Colne,  
Essex CO6 2JX  
Tel: 01245 206 129



# Appendix 3

## Landmark Envirocheck Report

# Envirocheck<sup>®</sup> Report:

## Datasheet

### Order Details:

**Order Number:**

315600858\_1\_1

**Customer Reference:**

2268

**National Grid Reference:**

568710, 217600

**Slice:**

A

**Site Area (Ha):**

2.41

**Search Buffer (m):**

1000

### Site Details:

Land West of B1417

Hartford End

Chelmsford

Essex

CM3 1JX

### Client Details:

Mr C Unsworth

Green Earth Management Ltd

Building 2

Broomfield Park

Coggeshall Road

Earls Colne

Essex

CO6 2JX

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	28
Hazardous Substances	-
Geological	29
Industrial Land Use	32
Sensitive Land Use	34
Data Currency	35
Data Suppliers	41
Useful Contacts	42

## Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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## Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Agency &amp; Hydrological</b>					
BGS Groundwater Flooding Susceptibility	pg 1		Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 2		26	1	6
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 10		Yes		
Pollution Incidents to Controlled Waters	pg 10		5	1	
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 11		1		
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 11		5	9	6 (*21)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 22	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 22	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones	pg 22				1
Extreme Flooding from Rivers or Sea without Defences	pg 22		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 22		Yes	n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 22		10	18	20

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Waste</b>					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage		2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)					
Potentially Infilled Land (Water)					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
<b>Hazardous Substances</b>					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Geological</b>					
BGS 1:625,000 Solid Geology	pg 29	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 29	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 30	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 30		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 31	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 31	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 31	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
<b>Industrial Land Use</b>					
Contemporary Trade Directory Entries	pg 32		1		1
Fuel Station Entries					
Points of Interest - Commercial Services	pg 32				1
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 32		1	2	2
Points of Interest - Public Infrastructure	pg 32			4	1
Points of Interest - Recreational and Environmental					
Gas Pipelines	pg 33				1
Underground Electrical Cables					



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Sensitive Land Use</b>					
Ancient Woodland					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 34	2			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (SE)	60	1	568850 217500
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (S)	167	1	568706 217350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	168	1	568750 217350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (NE)	194	1	568950 217750
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SW (SW)	196	1	568550 217350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	214	1	568706 217300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SW (S)	214	1	568650 217300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	218	1	568750 217300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	222	1	569000 217700
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	240	1	568550 217300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	264	1	568700 217250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (S)	267	1	568706 217250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	290	1	568850 217250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	298	1	568300 217700
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (SW)	308	1	568500 217250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	334	1	568400 217300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SW (E)	347	1	569150 217450
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (SW)	368	1	568400 217250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (SE)	374	1	568950 217200
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12NE (W)	397	1	568200 217700
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	397	1	568500 217150
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	416	1	568300 217300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	432	1	569250 217550
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	433	1	568250 217350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	446	1	568150 217700
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	478	1	568150 217450
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (SE)	486	1	569000 217100
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	495	1	568100 217700
1	<b>Discharge Consents</b> Operator: Green King Plc Property Type: Domestic Property (Single) Location: 1 Brewhouse Cottages Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1ju Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19977 Permit Version: 1 Effective Date: 18th May 2006 Issued Date: 18th May 2006 Revocation Date: 17th December 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of The River Chelme <b>Status:</b> New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	9	2	568618 217657
1	<b>Discharge Consents</b> Operator: Green King Plc Property Type: Domestic Property (Single) Location: Park View Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1jx Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19975 Permit Version: 1 Effective Date: 18th May 2006 Issued Date: 18th May 2006 Revocation Date: 10th December 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of River Chelmer <b>Status:</b> New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	9	2	568618 217657
1	<b>Discharge Consents</b> Operator: Green King Plc Property Type: Domestic Property (Single) Location: Brewhouse Cottage No.2 Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1ju Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19978 Permit Version: 1 Effective Date: 18th May 2006 Issued Date: 18th May 2006 Revocation Date: 10th December 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of The River Chelme <b>Status:</b> New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	9	2	568618 217657

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	<b>Discharge Consents</b> Operator: Green King Plc Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: 2 Park View Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1jx Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19976 Permit Version: 1 Effective Date: 18th May 2006 Issued Date: 18th May 2006 Revocation Date: 10th December 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of River Chelmer <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	9	2	568618 217657
1	<b>Discharge Consents</b> Operator: Green King Plc Property Type: Domestic Property (Single) Location: No.1 New Houses Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1ju Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19979 Permit Version: 1 Effective Date: 18th May 2006 Issued Date: 18th May 2006 Revocation Date: 10th December 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of The River Chelme <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	9	2	568618 217657
1	<b>Discharge Consents</b> Operator: Green King Plc Property Type: Domestic Property (Single) Location: No.2 New Houses Hartford End, Hartford End, Chelmsford, Essex, Cm3 1ju Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19980 Permit Version: 1 Effective Date: 18th May 2006 Issued Date: 18th May 2006 Revocation Date: 10th December 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of River Chelmer <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	9	2	568618 217657
1	<b>Discharge Consents</b> Operator: Green King Plc Property Type: Domestic Property (Single) Location: No.3 New Houses Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1ju Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19981 Permit Version: 1 Effective Date: 18th May 2006 Issued Date: 18th May 2006 Revocation Date: 10th December 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of The River Chelme <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	9	2	568618 217657

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	<b>Discharge Consents</b> Operator: Nicholas Christopher Cheshire & Sarah Day Property Type: Domestic Property (Single) Location: Keepers Cottage Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1jy Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19974 Permit Version: 1 Effective Date: 18th May 2006 Issued Date: 18th May 2006 Revocation Date: 10th December 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of River Chelmer <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	9	2	568618 217657
2	<b>Discharge Consents</b> Operator: Green King Plc Property Type: Domestic Property (Single) Location: 1 Brewhouse Cottages Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1ju Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19977 Permit Version: 2 Effective Date: 18th December 2006 Issued Date: 18th December 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of The River Chelme <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	52	2	568770 217720
2	<b>Discharge Consents</b> Operator: Mr Neil Cox & Kerry Saunders Property Type: Domestic Property (Single) Location: Park View Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1jx Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19975 Permit Version: 2 Effective Date: 11th December 2006 Issued Date: 11th December 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of River Chelmer <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	52	2	568770 217720
2	<b>Discharge Consents</b> Operator: Mrs Kerry Anne Sabine Property Type: Domestic Property (Single) Location: Brewhouse Cottage No.2 Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1ju Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19978 Permit Version: 2 Effective Date: 11th December 2006 Issued Date: 11th December 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of The River Chelme <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	52	2	568770 217720

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	<b>Discharge Consents</b> Operator: Mr Michael & Mrs Kay Thorp Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: 2 Park View Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1jx Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19976 Permit Version: 2 Effective Date: 11th December 2006 Issued Date: 11th December 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of River Chelmer <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	52	2	568770 217720
2	<b>Discharge Consents</b> Operator: Alan Bradbury & Suzanna Hermon Property Type: Domestic Property (Single) Location: No.1 New Houses Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1ju Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19979 Permit Version: 2 Effective Date: 11th December 2006 Issued Date: 11th December 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of The River Chelme <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	52	2	568770 217720
2	<b>Discharge Consents</b> Operator: Mr & Mrs P Welland Property Type: Domestic Property (Single) Location: No.2 New Houses Hartford End, Hartford End, Chelmsford, Essex, Cm3 1ju Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19980 Permit Version: 2 Effective Date: 11th December 2006 Issued Date: 11th December 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of River Chelmer <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	52	2	568770 217720
2	<b>Discharge Consents</b> Operator: Green King Plc Property Type: Domestic Property (Single) Location: No.3 New Houses Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1ju Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19981 Permit Version: 2 Effective Date: 11th December 2006 Issued Date: 11th December 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of The River Chelme <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	52	2	568770 217720

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	<b>Discharge Consents</b> Operator: Nicholas Christopher Cheshire & Sarah Day Property Type: Domestic Property (Single) Location: Keepers Cottage Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1jy Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19974 Permit Version: 2 Effective Date: 11th December 2006 Issued Date: 11th December 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of River Chelmer <b>Status: New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	52	2	568770 217720
3	<b>Discharge Consents</b> Operator: N D & S E Ball Property Type: Domestic Property (Single) Location: Plot 2 Hartford House Felstead Road, Hartford End, Chelmsford, Essex, Cm3 1jy Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Prenf10300 Permit Version: 1 Effective Date: 1st January 1996 Issued Date: 1st January 1996 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary River Chelmer <b>Status: Post National Rivers Authority Legislation where issue date &gt; 31/08/1989</b> Positional Accuracy: Located by supplier to within 10m	A13NE (N)	53	2	568718 217739
3	<b>Discharge Consents</b> Operator: Rob Mackay Property Type: Domestic Property (Single) Location: Hartford House Felstead Road, Hartford End, Chelmsford, Essex, Cm3 1jy Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Prenf10191 Permit Version: 1 Effective Date: 4th December 1995 Issued Date: 4th December 1995 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary River Chelmer <b>Status: Post National Rivers Authority Legislation where issue date &gt; 31/08/1989</b> Positional Accuracy: Located by supplier to within 10m	A13NE (N)	58	2	568744 217728
3	<b>Discharge Consents</b> Operator: Felstead Car Repairs Ltd Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: The Garage Felstead Road, Hartford End, Felstead, Essex, Cm7 5hl Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Prenf04348 Permit Version: 1 Effective Date: 22nd July 1991 Issued Date: 22nd July 1991 Revocation Date: 31st October 1996 Discharge Type: Discharge Of Other Matter-Surface Water Discharge: Freshwater Stream/River Environment: Receiving Water: Not Supplied <b>Status: Post National Rivers Authority Legislation where issue date &gt; 31/08/1989</b> Positional Accuracy: Located by supplier to within 10m	A13NE (N)	62	2	568750 217730



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	<b>Discharge Consents</b> Operator: Green King Plc Property Type: Domestic Property (Single) Location: Hillside Hartford End, Chelmsford, Essex, Cm3 1jy Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19982 Permit Version: 1 Effective Date: 18th May 2006 Issued Date: 18th May 2006 Revocation Date: 26th September 2006 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: A Tributary Of The River Chelmer <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13SW (S)	55	2	568700 217468
5	<b>Discharge Consents</b> Operator: Green King Plc Property Type: Domestic Property (Single) Location: Hillside Hartford End, Chelmsford, Chelmsford, Essex, Cm3 1jy Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19982 Permit Version: 2 Effective Date: 27th September 2006 Issued Date: 27th September 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: A Tributary Of The River Chelmer <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	100	2	568860 217460
5	<b>Discharge Consents</b> Operator: T D Ridley & Sons Ltd Property Type: MAKING OF BEVERAGES/BREWERIES/SOFT DRINKS Location: Hartford End Brewery, Great Waltham, Chelmsford, Essex, Cm3 1jz Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf08701 Permit Version: 1 Effective Date: 13th February 1995 Issued Date: 13th February 1995 Revocation Date: Not Supplied Discharge Type: Trade Discharges - Cooling Water Discharge: Freshwater Stream/River Environment: Receiving Water: River Chelmer <b>Status:</b> <b>Post National Rivers Authority Legislation where issue date &gt; 31/08/1989</b> Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	118	2	568860 217440
5	<b>Discharge Consents</b> Operator: T D Ridley & Sons Ltd Property Type: MAKING OF BEVERAGES/BREWERIES/SOFT DRINKS Location: Hartford End Brewery, Great Waltham, Chelmsford, Essex, Cm3 1jz Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf08700 Permit Version: 1 Effective Date: 13th February 1995 Issued Date: 13th February 1995 Revocation Date: 29th May 2012 Discharge Type: Trade Discharge - Process Water Discharge: Freshwater Stream/River Environment: Receiving Water: River Chelmer <b>Status:</b> <b>Lapsed (under Environment Act 1995, Schedule 23)</b> Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	128	2	568860 217430



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	<b>Discharge Consents</b> Operator: T D Ridley & Sons Ltd Property Type: MAKING OF BEVERAGES/BREWERIES/SOFT DRINKS Location: Hartford End Brewery, Great Waltham, Chelmsford, Essex, Cm3 1jz Authority: Environment Agency, Anglian Region Catchment Area: Catchment 37 Unknown Detail Reference: Prenf11715 Permit Version: 1 Effective Date: 18th June 1999 Issued Date: 16th August 1999 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Of River Chelmer <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	116	2	568800 217420
6	<b>Discharge Consents</b> Operator: Ridley Green Management Co Ltd Property Type: Domestic Property (Multiple) Location: Former Brewery Site, Hartford End, Chelmsford, Essex, Cm3 1jz Authority: Environment Agency, Anglian Region Catchment Area: Not Supplied Reference: Epreb3793en Permit Version: 1 Effective Date: 1st March 2017 Issued Date: 1st March 2017 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Chelmer <b>Status:</b> <b>New issued under EPR 2010</b> Positional Accuracy: Located by supplier to within 10m	A13SE (S)	121	2	568777 217403
7	<b>Discharge Consents</b> Operator: Green King Plc Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Sandhills, Hartford End, Chelmsford, Essex, Cm3 1jy Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf19973 Permit Version: 1 Effective Date: 18th May 2006 Issued Date: 18th May 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of River Chelmer <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A13NE (N)	120	2	568729 217805
8	<b>Discharge Consents</b> Operator: J E Hutley & Sons Property Type: Arable Farming Location: Camsix Farm Hartford End, Chelmsford, Essex, Cm3 1js Authority: Environment Agency, Anglian Region Catchment Area: Catchment 29 Unknown Detail Reference: Gwelf50340 Permit Version: 1 Effective Date: 1st April 1999 Issued Date: 16th May 2000 Revocation Date: Not Supplied Discharge Type: Trade Discharge - Agricultural And Surface Discharge: Onto Land Environment: Receiving Water: Groundwater <b>Status:</b> <b>Deemed Groundwater Regulations Authorisation</b> Positional Accuracy: Located by supplier to within 10m	A12NE (W)	259	2	568340 217700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	<b>Discharge Consents</b> Operator: Mr S A Flack Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Hurstwood Leez Lane, Hartford End, Chelmsford Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Prenf08252 Permit Version: 1 Effective Date: 1st December 1992 Issued Date: 1st December 1992 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib River Chelmer <b>Status:</b> Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m	A18SE (N)	513	2	568730 218200
10	<b>Discharge Consents</b> Operator: L. Bartrupt & Son Ltd Property Type: Domestic Property (Single) Location: Hill Farm Church Lane, Ford End, Chelmsford, Essex, Cm3 1lh Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Npswqd007294 Permit Version: 1 Effective Date: 23rd March 2009 Issued Date: 23rd March 2009 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib Of River Chelmer <b>Status:</b> New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	729	2	567989 217210
11	<b>Discharge Consents</b> Operator: Jeremy Frekman Property Type: Domestic Property (Single) Location: Hill Farm, Ford End Ford End, Chelmsford, Chelmsford, Essex, Cm3 1lh Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf15732 Permit Version: 1 Effective Date: 14th May 2003 Issued Date: 14th May 2003 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib Of The River Chelmer <b>Status:</b> New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	804	2	567920 217180
12	<b>Discharge Consents</b> Operator: Mr & Mrs D Brooke Property Type: Domestic Property (Single) Location: Apple Tree Cottage No.6, Hartford End, Chelmsford, Essex, Cm3 1ld Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Prenf11668 Permit Version: 1 Effective Date: 25th May 1999 Issued Date: 29th September 1999 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Of River Chelmer <b>Status:</b> New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m	A8SW (S)	865	2	568680 216650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	<b>Discharge Consents</b> Operator: Chelmsford Borough Council Property Type: Domestic Property (Multiple) Location: Chapel Cottages 1-3 Littley Green Road, Littley Green, Chelmsford, Essex, Cm1 1je Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf11958 Permit Version: 2 Effective Date: 13th July 2001 Issued Date: 13th July 2001 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Chelmer <b>Status: New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	982	2	569680 217080
13	<b>Discharge Consents</b> Operator: Chelmsford Borough Council Property Type: Domestic Property (Multiple) Location: Chapel Cottages 1-3 Littley Green Road, Littley Green, Chelmsford, Essex, Cm1 1je Authority: Environment Agency, Anglian Region Catchment Area: Upper River Chelmer (Dunmow) Reference: Prenf11958 Permit Version: 1 Effective Date: 20th December 1999 Issued Date: 14th February 2000 Revocation Date: 12th July 2001 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Chelmer <b>Status: New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b> Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	982	2	569680 217080
	<b>Nearest Surface Water Feature</b>	A13SE (S)	68	-	568723 217450
14	<b>Pollution Incidents to Controlled Waters</b> Property Type: Road Location: Chelmsford District Authority: Environment Agency, Anglian Region Pollutant: Oils - Diesel (Including Agricultural) Note: River Chelmer Incident Date: 12th January 1998 Incident Reference: 3629 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SW (S)	121	2	568700 217400
15	<b>Pollution Incidents to Controlled Waters</b> Property Type: Food industry Location: Chelmsford District Authority: Environment Agency, Anglian Region Pollutant: Oils - Gas Oil Note: River Chelmer Incident Date: 8th May 1997 Incident Reference: 3417 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Overfilling During Delivery Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	135	2	568805 217400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	<b>Pollution Incidents to Controlled Waters</b> Property Type: Food industry Location: HARTFORD END Authority: Environment Agency, Anglian Region Pollutant: Oils - Gas Oil Note: River Chelmer Incident Date: 8th May 1997 Incident Reference: 3417 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Overfilling During Delivery Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	140	2	568805 217395
16	<b>Pollution Incidents to Controlled Waters</b> Property Type: Not Given Location: Chelmsford District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Tributary Of River Chelmer Incident Date: 14th April 1993 Incident Reference: 1876 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SW (S)	222	2	568600 217300
16	<b>Pollution Incidents to Controlled Waters</b> Property Type: Food industry Location: Chelmsford District Authority: Environment Agency, Anglian Region Pollutant: Organic Wastes: Other Note: Tributary Of Chelmer Incident Date: 15th March 1995 Incident Reference: 2635 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Low Rate Irrigation System Failure Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SW (S)	227	2	568600 217295
17	<b>Pollution Incidents to Controlled Waters</b> Property Type: Food industry Location: Chelmsford District Authority: Environment Agency, Anglian Region Pollutant: Organic Wastes: Other Suspended Solids Note: Tributary Chelmer Incident Date: 29th July 1998 Incident Reference: 3836 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Poor Operational Practice Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	320	2	568600 217200
	<b>River Quality</b> Name: Chelmer GQA Grade: River Quality B Reach: Stebbing Bk....Howe Street Estimated Distance (km): 6 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A13SW (SW)	38	2	568608 217513
18	<b>Water Abstractions</b> Operator: Hartford End Developments Limited Licence Number: 8/37/35/*G/0070 Permit Version: 102 Location: Catchpit At Hartford End, Felsted Authority: Environment Agency, Anglian Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th September 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A13NW (N)	13	2	568700 217700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	<b>Water Abstractions</b> Operator: T D Ridley & Sons (Brewers) Ltd Licence Number: 8/37/35/*G/0070 Permit Version: 101 Location: Hartford End, Felsted Authority: Environment Agency, Anglian Region Abstraction: Breweries/Wine: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13NW (N)	13	2	568700 217700
19	<b>Water Abstractions</b> Operator: Hartford End Developments Limited Licence Number: 8/37/35/*G/0076 Permit Version: 101 Location: Hartford End Brewery, Felsted. Authority: Environment Agency, Anglian Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 7th October 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	133	2	568800 217400
19	<b>Water Abstractions</b> Operator: T D Ridley & Sons (Brewers) Ltd Licence Number: 8/37/35/*G/0076 Permit Version: 100 Location: Hartford End Brewery, Felsted. Authority: Environment Agency, Anglian Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: E chalk; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st February 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	133	2	568800 217400
19	<b>Water Abstractions</b> Operator: Messrs. P.B. Frost & Sons, Licence Number: 8/37/35/*s/002 Permit Version: Not Supplied Location: River Chelmeriver 1, GREAT WALTHAM Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 9 Yearly Rate (m3): 432000 Details: Status: Perpetuity Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	137	2	568800 217395

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	<b>Water Abstractions</b> Operator: R P Wood'S Farm Ltd Licence Number: 8/37/35/*G/0047 Permit Version: 101 Location: Well, Little Pk, Hartford End Authority: Environment Agency, Anglian Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 12th July 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13NE (E)	267	2	569040 217720
20	<b>Water Abstractions</b> Operator: Executors Of R P Wood Licence Number: 8/37/35/*G/0047 Permit Version: 100 Location: Well, Little Pk, Hartford End Authority: Environment Agency, Anglian Region Abstraction: Other Industrial/Commercial/Public Services: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 1967 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13NE (E)	267	2	569040 217720
21	<b>Water Abstractions</b> Operator: MrMr B N Mather Licence Number: 8/37/35/*G/0072 Permit Version: 102 Location: Well, Hartford End, Felsted Authority: Environment Agency, Anglian Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th September 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	462	2	568428 217113
21	<b>Water Abstractions</b> Operator: MrMr B N Mather Licence Number: 8/37/35/*G/0072 Permit Version: 102 Location: Well, Hartford End, Felsted Authority: Environment Agency, Anglian Region Abstraction: Commercial Private Water Undertaking: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th September 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	462	2	568428 217113

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	<b>Water Abstractions</b> Operator: N Ridley Licence Number: 8/37/35/*G/0072 Permit Version: 101 Location: Well, Hartford End, Felsted Authority: Environment Agency, Anglian Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 7th October 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	488	2	568400 217100
21	<b>Water Abstractions</b> Operator: N Ridley Licence Number: 8/37/35/*G/0072 Permit Version: 101 Location: Well, Hartford End, Felsted Authority: Environment Agency, Anglian Region Abstraction: Commercial Private Water Undertaking: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 7th October 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	488	2	568400 217100
21	<b>Water Abstractions</b> Operator: T D Ridley & Sons (Brewers) Ltd Licence Number: 8/37/35/*G/0072 Permit Version: 100 Location: Well, Hartford End, Felsted Authority: Environment Agency, Anglian Region Abstraction: Breweries/Wine: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 2nd June 1986 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	488	2	568400 217100
21	<b>Water Abstractions</b> Operator: T D Ridley & Sons (Brewers) Ltd Licence Number: 8/37/35/*G/0072 Permit Version: 100 Location: Well, Hartford End, Felsted Authority: Environment Agency, Anglian Region Abstraction: Breweries/Wine: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 2nd June 1986 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	488	2	568400 217100



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	<b>Water Abstractions</b> Operator: T.D. Ridley & Sons(Brewers)Ltd Licence Number: 8/37/35/*g/072 Permit Version: Not Supplied Location: Well, Hartford End, FELSTED Authority: Environment Agency, Anglian Region Abstraction: Unspecified Abstraction Type: Not Supplied Source: Well And Borehole Daily Rate (m3): 20 Yearly Rate (m3): 100000 Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	489	2	568405 217095
22	<b>Water Abstractions</b> Operator: T.D.Ridley & Sons (Brewery)Ltd Licence Number: 8/37/35/*g/071 Permit Version: Not Supplied Location: Hartford End, FELSTED Authority: Environment Agency, Anglian Region Abstraction: Private Water Undertaking Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 0 Yearly Rate (m3): 1000 Details: Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (S)	512	2	568605 217005
22	<b>Water Abstractions</b> Operator: T.D.Ridley & Sons (Brewery)Ltd Licence Number: 8/37/35/*g/071 Permit Version: Not Supplied Location: Hartford End, FELSTED Authority: Environment Agency, Anglian Region Abstraction: Unspecified Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 0 Yearly Rate (m3): 1000 Details: Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (S)	513	2	568600 217005
22	<b>Water Abstractions</b> Operator: T.D.Ridley & Sons (Brewery)Ltd Licence Number: 8/37/35/*g/071 Permit Version: Not Supplied Location: Hartford End, FELSTED Authority: Environment Agency, Anglian Region Abstraction: Agriculture (General) Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 0 Yearly Rate (m3): 1000 Details: Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (S)	517	2	568605 217000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	<b>Water Abstractions</b> Operator: T.D.Ridley & Sons (Brewery)Ltd Licence Number: 8/37/35/gs/071 Permit Version: Not Supplied Location: Hartford End, FELSTED Authority: Environment Agency, Anglian Region Abstraction: Private Water Undertaking Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 1 Yearly Rate (m3): 227 Details: Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8NW (S)	518	2	568600 217000
22	<b>Water Abstractions</b> Operator: T.D.Ridley & Sons (Brewery ) Ltd Licence Number: 8/37/35/gs/071 Permit Version: Not Supplied Location: Hartford End, FELSTED Authority: Environment Agency, Anglian Region Abstraction: Unspecified Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 1 Yearly Rate (m3): 227 Details: Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8NW (S)	522	2	568605 216995
22	<b>Water Abstractions</b> Operator: T.D.Ridley & Sons (Brewery) Ltd Licence Number: 8/37/35/gs/071 Permit Version: Not Supplied Location: Hartford End, FELSTED Authority: Environment Agency, Anglian Region Abstraction: Agriculture (General) Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 1 Yearly Rate (m3): 227 Details: Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8NW (S)	523	2	568600 216995
	<b>Water Abstractions</b> Operator: W.B. Hutley Farms Ltd., Licence Number: 8/37/38/*s/032 Permit Version: Not Supplied Location: Pond Park Farm, FELSTED Authority: Environment Agency, Anglian Region Abstraction: Impounding Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 23 Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A23SE (N)	1146	2	569000 218795

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Water Abstractions</b> Operator: J D H Farms Licence Number: 8/37/38/*S/0032 Permit Version: 101 Location: Pond Park Farm, Felsted Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st September 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A23SE (N)	1151	2	569000 218800
	<b>Water Abstractions</b> Operator: W B Hutley Farms Ltd Licence Number: 8/37/38/*S/0032 Permit Version: 100 Location: Pond Park Farm, Felsted Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st June 1977 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A23SE (N)	1151	2	569000 218800
	<b>Water Abstractions</b> Operator: Messrs. P.B. Frost & Sons, Licence Number: 8/37/35/*s/002 Permit Version: Not Supplied Location: River Chelmeriver 2 , GREAT WALTHAM Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 9 Yearly Rate (m3): 432000 Details: Status: Perpetuity Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A9SE (SE)	1155	2	569600 216700
	<b>Water Abstractions</b> Operator: J D H Farms Licence Number: 8/37/38/*S/0032 Permit Version: 101 Location: Pond Park Farm, Felsted Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st September 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A24SW (N)	1213	2	569200 218800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Water Abstractions</b> Operator: W B Hutley Farms Ltd Licence Number: 8/37/38/*S/0032 Permit Version: 100 Location: Pond Park Farm, Felsted Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st June 1977 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A24SW (N)	1213	2	569200 218800
	<b>Water Abstractions</b> Operator: P B Frost & Sons Licence Number: 8/37/35/*S/0002 Permit Version: 102 Location: R Chelmer - Gt Waltham 5 Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Warners Farm Gt Waltham Authorised Start: 01 May Authorised End: 31 August Permit Start Date: 3rd March 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A16NW (NW)	1508	2	567310 218430
	<b>Water Abstractions</b> Operator: P B Frost & Sons Licence Number: 8/37/35/*S/0002 Permit Version: 101 Location: R Chelmer - Gt Waltham 5 Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Warners Farm Gt Waltham Authorised Start: 01 May Authorised End: 31 August Permit Start Date: 2nd August 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A16NW (NW)	1508	2	567310 218430
	<b>Water Abstractions</b> Operator: Lord Rayleigh'S Farms Ltd Licence Number: 8/37/38/*G/0016 Permit Version: 100 Location: Well At Priory Farm, Gt Leighs Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st October 1997 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20NE (NE)	1514	2	570100 218400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Water Abstractions</b> Operator: H.P. Marriage And Sons, Licence Number: 8/37/35/*s/028 Permit Version: Not Supplied Location: Glandfields Farm, FELSTED Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 3 Yearly Rate (m3): 114000 Details: Status: Perpetuity Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A16NW (NW)	1554	2	567300 218500
	<b>Water Abstractions</b> Operator: R & E Mcdowell Licence Number: 8/37/35/*S/0013 Permit Version: 102 Location: Kings Farm, Ford End. Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Kings Farm, Ford End, Chelmsford Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 27th September 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1608	2	567000 217400
	<b>Water Abstractions</b> Operator: Kings Farm (Ford End) Ltd Licence Number: 8/37/35/*S/0013 Permit Version: 101 Location: Kings Farm, Ford End. Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Kings Farm, Ford End, Chelmsford Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 1st April 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1608	2	567000 217400
	<b>Water Abstractions</b> Operator: Kings Farm (Ford End) Ltd Licence Number: 8/37/35/*S/0013 Permit Version: 100 Location: Kings Farm, Ford End. Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 1st May 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1608	2	567000 217400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Water Abstractions</b> Operator: W Seabrook & Sons Ltd Licence Number: 8/37/38/*G/0001 Permit Version: 100 Location: Little Lieghs, Chelmsford Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st November 1993 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A5NE (SE)	1657	2	570100 216500
	<b>Water Abstractions</b> Operator: Lord Rayleigh's Farms Ltd Licence Number: 8/37/38/**/017 Permit Version: Not Supplied Location: River Ter At , GT. LEIGHS Authority: Environment Agency, Anglian Region Abstraction: Impounding Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 455 Yearly Rate (m3): 39300000 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(NE)	1824	2	570400 218495
	<b>Water Abstractions</b> Operator: Lord Rayleigh'S Farms Ltd Licence Number: 8/37/38/*S/0017 Permit Version: 101 Location: River Ter At Gt. Leighs Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(NE)	1826	2	570400 218500
	<b>Water Abstractions</b> Operator: Lord Rayleigh'S Farms Ltd Licence Number: 8/37/38/*S/0017 Permit Version: 101 Location: River Ter At Gt. Leighs Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Transfer Between Sources Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(NE)	1826	2	570400 218500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Water Abstractions</b> Operator: Lord Rayleigh's Farms Ltd Licence Number: 8/37/38/**/017 Permit Version: Not Supplied Location: River Ter At , GREAT LEIGHS Authority: Environment Agency, Anglian Region Abstraction: Recirculating/Compound Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 455 Yearly Rate (m3): 39300000 Details: Status: Perpetuity Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(NE)	1833	2	570405 218505
	<b>Water Abstractions</b> Operator: P B Frost & Sons Licence Number: 8/37/35/*S/0002 Permit Version: 102 Location: Trib Of R. Chelmer Gt. Waltham 3 Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Warners Farm Gt Waltham Authorised Start: 01 May Authorised End: 31 August Permit Start Date: 3rd March 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1918	2	568800 215600
	<b>Water Abstractions</b> Operator: P B Frost & Sons Licence Number: 8/37/35/*S/0002 Permit Version: 101 Location: Trib Of R. Chelmer Gt. Waltham 3 Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Warners Farm Gt Waltham Authorised Start: 01 May Authorised End: 31 August Permit Start Date: 2nd August 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1918	2	568800 215600
	<b>Water Abstractions</b> Operator: P B Frost & Sons Licence Number: 8/37/35/*S/0002 Permit Version: 100 Location: Trib Of R. Chelmer Gt. Waltham Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 May Authorised End: 31 August Permit Start Date: 1st June 1993 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1918	2	568800 215600



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Groundwater Vulnerability Map</b> Combined Unproductive Aquifer (may have productive aquifer beneath) Classification: Combined Unproductive Vulnerability: Unproductive Bedrock Aquifer, No Superficial Aquifer Combined Aquifer: Intermediate Pollutant Speed: Mixed Bedrock Flow: <300 mm/year Dilution: >70% Baseflow Index: <90% Superficial Patchiness: 3-10m Superficial Thickness: Low Superficial Recharge:	A13SE (S)	0	3	568706 217597
	<b>Groundwater Vulnerability - Soluble Rock Risk</b> None				
	<b>Bedrock Aquifer Designations</b> Aquifer Designation: Unproductive Strata	A13SE (S)	0	3	568706 217597
	<b>Superficial Aquifer Designations</b> No Data Available				
23	<b>Source Protection Zones</b> Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A12NW (W)	625	2	567969 217699
	<b>Extreme Flooding from Rivers or Sea without Defences</b> Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (SE)	55	2	568792 217460
	<b>Flooding from Rivers or Sea without Defences</b> Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (SE)	80	2	568772 217440
	<b>Areas Benefiting from Flood Defences</b> None				
	<b>Flood Water Storage Areas</b> None				
	<b>Flood Defences</b> None				
24	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 271.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A13SE (SE)	107	4	568811 217432
25	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 394.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A13SE (E)	111	4	568926 217595
26	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 210.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A13SE (SE)	142	4	568917 217449

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
27	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 142.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A13SW (S)	194	4	568698 217320
28	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 147.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A13SW (S)	198	4	568698 217320
29	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 45.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A13SW (SW)	221	4	568556 217318
30	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 54.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 2	A13SW (SW)	223	4	568563 217313
31	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 51.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A13SW (SW)	232	4	568520 217327
32	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 63.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 2	A13SW (SW)	250	4	568472 217346
33	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 1142.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A13SW (SW)	250	4	568472 217346
34	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 69.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A13SW (SW)	260	4	568567 217272
35	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 3.5 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A13SW (S)	263	4	568574 217265

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
36	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 1.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A13SW (S)	263	4	568575 217266
37	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 82.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8NW (S)	267	4	568574 217262
38	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 188.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A13SW (SW)	284	4	568515 217269
39	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 75.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A13SW (SW)	284	4	568515 217269
40	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 717.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A13SW (SW)	299	4	568449 217299
41	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 65.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A14SW (E)	327	4	569126 217439
42	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 247.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A14SW (E)	327	4	569126 217439
43	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 5.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A14SW (SE)	337	4	569108 217378
44	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 4.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A14SW (SE)	343	4	569112 217374

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
45	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 289.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A14SW (SE)	343	4	569112 217374
46	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 268.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A14SW (SE)	345	4	569105 217360
47	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 193.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A14SW (SE)	347	4	569115 217370
48	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 6.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8NE (SE)	471	4	569021 217126
49	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 5.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8NE (SE)	475	4	569018 217120
50	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 23.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8NE (SE)	478	4	569016 217115
51	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 272.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8NE (SE)	499	4	569014 217092
52	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 80.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A9NW (SE)	529	4	569238 217228
53	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 77.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A9NW (SE)	530	4	569236 217225

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
54	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 109.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A9NW (SE)	565	4	569158 217100
55	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 3.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A9NW (SE)	593	4	569256 217151
56	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 2.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A9NW (SE)	595	4	569259 217152
57	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 153.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A9NW (SE)	597	4	569261 217150
58	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 103.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A9NW (SE)	597	4	569261 217150
59	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 4.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8SE (S)	635	4	568880 216898
60	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 190.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8SE (S)	638	4	568877 216895
61	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 159.5 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (W)	644	4	568004 217368
62	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 357.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A9NW (SE)	698	4	569318 217063

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
63	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 429.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A9NW (SE)	698	4	569318 217063
64	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 65.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A7NW (SW)	725	4	567999 217200
65	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 12.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A7NW (SW)	746	4	568004 217150
66	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 30.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A7NW (SW)	746	4	568004 217150
67	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 439.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A11SE (W)	967	4	567629 217538
68	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 39.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A11SE (W)	970	4	567624 217573
69	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 148.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Chelmer Catchment Name: Chelmer Primacy: 1	A11NE (W)	988	4	567603 217613
70	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 138.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A11NE (W)	991	4	567601 217604
71	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 23.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A9SE (SE)	993	4	569430 216769

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Local Authority Landfill Coverage</b> Name: Uttlesford District Council - Has no landfill data to supply		0	5	568706 217597
	<b>Local Authority Landfill Coverage</b> Name: Essex County Council - Has supplied landfill data		0	6	568706 217597
	<b>Local Authority Landfill Coverage</b> Name: Chelmsford Borough Council - Has no landfill data to supply		106	7	568808 217431



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS 1:625,000 Solid Geology</b> Description: Thames Group	A13SE (S)	0	1	568706 217597
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (S)	0	1	568706 217597
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (S)	160	1	568790 217366
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NE (NE)	194	1	568949 217753
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (SE)	197	1	568824 217340
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12NE (W)	260	1	568332 217649
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14SW (E)	418	1	569235 217531

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 40 - 60 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A8NW (S)	567	1	568611 216949
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A12NW (W)	602	1	568000 217748
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A17SW (NW)	695	1	568000 218000
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A9NE (SE)	879	1	569503 217000
	<b>BGS Measured Urban Soil Chemistry</b> No data available				
	<b>BGS Urban Soil Chemistry Averages</b> No data available				
	<b>Coal Mining Affected Areas</b> In an area that might not be affected by coal mining				
	<b>Non Coal Mining Areas of Great Britain</b> No Hazard				
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	160	1	568790 217366
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	197	1	568824 217340
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	160	1	568790 217366

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	197	1	568824 217340
	<b>Potential for Ground Dissolution Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	160	1	568790 217366
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	197	1	568824 217340
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	206	1	568458 217793
	<b>Radon Potential - Radon Affected Areas</b> Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
	<b>Radon Potential - Radon Protection Measures</b> Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
72	<b>Contemporary Trade Directory Entries</b> Name: T D Ridley & Sons Ltd Location: Hartford End Brewery, Mill Lane, Hartford End, Chelmsford, CM3 1JZ Classification: Brewers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	74	-	568781 217458
73	<b>Contemporary Trade Directory Entries</b> Name: Pleshey Forge Ltd Location: Hill Farm, Church Lane, Ford End, Chelmsford, CM3 1LH Classification: Blacksmiths & Forgemasters Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A7NW (SW)	810	-	567946 217122
74	<b>Points of Interest - Commercial Services</b> Name: Rothercroft Ltd Location: Lilac Sky House Hill Farm, Church Lane, Great Waltham, Chelmsford, CM3 1LH Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A7NW (SW)	919	8	567861 217053
75	<b>Points of Interest - Manufacturing and Production</b> Name: Tank Location: CM3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13SE (SE)	68	8	568831 217484
76	<b>Points of Interest - Manufacturing and Production</b> Name: P J Hutley Location: Camsix Chase, Hartford End, Chelmsford, CM3 1JS Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A12NE (W)	342	8	568267 217743
76	<b>Points of Interest - Manufacturing and Production</b> Name: P J Hutley Location: Camsix Chase, Hartford End, Chelmsford, CM3 1JS Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A12NE (W)	342	8	568267 217743
77	<b>Points of Interest - Manufacturing and Production</b> Name: Tank Location: CM3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	590	8	569320 217240
78	<b>Points of Interest - Manufacturing and Production</b> Name: L Bartrup & Son Ltd Location: Hill Farm, Church Lane, Ford End, Chelmsford, CM3 1LH Category: Farming Class Code: Arable Farming Positional Accuracy: Positioned to address or location	A7NW (SW)	958	8	567828 217032
79	<b>Points of Interest - Public Infrastructure</b> Name: Sluice Location: CM3 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	251	8	568472 217344
79	<b>Points of Interest - Public Infrastructure</b> Name: Sluice Location: CM3 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	253	8	568471 217342
79	<b>Points of Interest - Public Infrastructure</b> Name: Weir Location: CM3 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	261	8	568463 217339
79	<b>Points of Interest - Public Infrastructure</b> Name: Weir Location: CM3 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	265	8	568457 217340

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
80	<b>Points of Interest - Public Infrastructure</b> Name: Sewage Pumping Station Location: CM3 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	553	8	569272 217235
81	<b>Gas Pipelines</b> Name: BRAINTREE TO HORNDON Nat Grid: Owned By National Grid Diameter (mm): 900 Building Proximity: Not Supplied Distance (m): Status: Active Pipe Length (m): 43563.14 Pipe Number: Not Supplied	A14SE (E)	775	9	569592 217506

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
82	<b>Nitrate Vulnerable Zones</b> Name: Sandlings And Chelmsford Description: Groundwater Source: Environment Agency, Head Office	A13SE (S)	0	3	568706 217597
83	<b>Nitrate Vulnerable Zones</b> Name: River Chelmer Nvz Description: Surface Water Source: Environment Agency, Head Office	A13SE (S)	0	3	568706 217597



Agency & Hydrological	Version	Update Cycle
<b>Contaminated Land Register Entries and Notices</b> Braintree District Council - Environmental Health Department Environment Agency - Head Office Chelmsford Borough Council - Environmental Health Department Uttlesford District Council - Environmental Health Department	January 2020 June 2020 October 2017 October 2017	Annual Rolling Update Annually Annual Rolling Update Annual Rolling Update
<b>Discharge Consents</b> Environment Agency - Anglian Region Environment Agency - Thames Region	April 2023 April 2023	Quarterly Quarterly
<b>Enforcement and Prohibition Notices</b> Environment Agency - Anglian Region	March 2013	
<b>Integrated Pollution Controls</b> Environment Agency - Anglian Region	January 2009	
<b>Integrated Pollution Prevention And Control</b> Environment Agency - Anglian Region	January 2023	Quarterly
<b>Local Authority Integrated Pollution Prevention And Control</b> Braintree District Council - Environmental Health Department Chelmsford Borough Council - Environmental Health Department Uttlesford District Council - Environmental Health Department	August 2014 October 2014 September 2014	Variable Variable Variable
<b>Local Authority Pollution Prevention and Controls</b> Braintree District Council - Environmental Health Department Chelmsford Borough Council - Environmental Health Department Uttlesford District Council - Environmental Health Department	August 2014 October 2014 September 2014	Not Applicable Not Applicable Annual Rolling Update
<b>Local Authority Pollution Prevention and Control Enforcements</b> Braintree District Council - Environmental Health Department Chelmsford Borough Council - Environmental Health Department Uttlesford District Council - Environmental Health Department	August 2014 October 2014 September 2014	Variable Variable Variable
<b>Nearest Surface Water Feature</b> Ordnance Survey	May 2023	
<b>Pollution Incidents to Controlled Waters</b> Environment Agency - Anglian Region Environment Agency - Thames Region	September 1999 September 1999	
<b>Prosecutions Relating to Authorised Processes</b> Environment Agency - Anglian Region	July 2015	
<b>Prosecutions Relating to Controlled Waters</b> Environment Agency - Anglian Region	March 2013	
<b>Registered Radioactive Substances</b> Environment Agency - Anglian Region Environment Agency - Head Office	June 2016 May 2023	As notified Quarterly
<b>River Quality</b> Environment Agency - Head Office	November 2001	Not Applicable
<b>River Quality Biology Sampling Points</b> Environment Agency - Head Office	April 2012	
<b>River Quality Chemistry Sampling Points</b> Environment Agency - Head Office	April 2012	
<b>Substantiated Pollution Incident Register</b> Environment Agency - Anglian Region - Eastern Area	April 2023	Quarterly
<b>Water Abstractions</b> Environment Agency - Anglian Region Environment Agency - Thames Region	April 2023 April 2023	Quarterly Quarterly
<b>Water Industry Act Referrals</b> Environment Agency - Anglian Region	October 2017	

Agency & Hydrological	Version	Update Cycle
<b>Groundwater Vulnerability Map</b> Environment Agency - Head Office	June 2018	As notified
<b>Bedrock Aquifer Designations</b> Environment Agency - Head Office	January 2018	Annually
<b>Superficial Aquifer Designations</b> Environment Agency - Head Office	January 2018	Annually
<b>Source Protection Zones</b> Environment Agency - Head Office	September 2022	Bi-Annually
<b>Extreme Flooding from Rivers or Sea without Defences</b> Environment Agency - Head Office	February 2023	Quarterly
<b>Flooding from Rivers or Sea without Defences</b> Environment Agency - Head Office	February 2023	Quarterly
<b>Areas Benefiting from Flood Defences</b> Environment Agency - Head Office	February 2023	Quarterly
<b>Flood Water Storage Areas</b> Environment Agency - Head Office	February 2023	Quarterly
<b>Flood Defences</b> Environment Agency - Head Office	August 2022	Quarterly
<b>OS Water Network Lines</b> Ordnance Survey	April 2023	Quarterly
<b>Surface Water 1 in 30 year Flood Extent</b> Environment Agency - Head Office	May 2018	Annually
<b>Surface Water 1 in 100 year Flood Extent</b> Environment Agency - Head Office	May 2018	Annually
<b>Surface Water 1 in 1000 year Flood Extent</b> Environment Agency - Head Office	May 2018	Annually
<b>Surface Water Suitability</b> Environment Agency - Head Office	February 2016	Annually
<b>BGS Groundwater Flooding Susceptibility</b> British Geological Survey - National Geoscience Information Service	May 2013	As notified

Waste	Version	Update Cycle
<b>BGS Recorded Landfill Sites</b> British Geological Survey - National Geoscience Information Service	November 2002	As notified
<b>Historical Landfill Sites</b> Environment Agency - Head Office	March 2023	Quarterly
<b>Integrated Pollution Control Registered Waste Sites</b> Environment Agency - Anglian Region	January 2009	Not Applicable
<b>Licensed Waste Management Facilities (Landfill Boundaries)</b> Environment Agency - Anglian Region - Eastern Area	July 2023	Quarterly
<b>Licensed Waste Management Facilities (Locations)</b> Environment Agency - Anglian Region - Eastern Area	January 2023	Quarterly
<b>Local Authority Landfill Coverage</b> Braintree District Council Chelmsford Borough Council - Environmental Health Department Essex County Council Uttlesford District Council - Environmental Health Department	February 2003 February 2003 February 2003 February 2003	Not Applicable Not Applicable Not Applicable Not Applicable
<b>Local Authority Recorded Landfill Sites</b> Braintree District Council Chelmsford Borough Council - Environmental Health Department Essex County Council Uttlesford District Council - Environmental Health Department	October 2018 October 2018 October 2018 October 2018	
<b>Potentially Infilled Land (Non-Water)</b> Landmark Information Group Limited	December 1999	
<b>Potentially Infilled Land (Water)</b> Landmark Information Group Limited	December 1999	
<b>Registered Landfill Sites</b> Environment Agency - Anglian Region - Eastern Area	March 2006	Not Applicable
<b>Registered Waste Transfer Sites</b> Environment Agency - Anglian Region - Eastern Area	April 2018	
<b>Registered Waste Treatment or Disposal Sites</b> Environment Agency - Anglian Region - Eastern Area	June 2015	
Hazardous Substances	Version	Update Cycle
<b>Control of Major Accident Hazards Sites (COMAH)</b> Health and Safety Executive	March 2023	Bi-Annually
<b>Explosive Sites</b> Health and Safety Executive	March 2017	
<b>Notification of Installations Handling Hazardous Substances (NIHHS)</b> Health and Safety Executive	August 2001	
<b>Planning Hazardous Substance Enforcements</b> Essex County Council Braintree District Council Chelmsford Borough Council Uttlesford District Council - Planning Department	February 2016 June 2023 June 2023 May 2023	Variable Variable Variable Variable
<b>Planning Hazardous Substance Consents</b> Braintree District Council Chelmsford Borough Council Essex County Council Uttlesford District Council - Planning Department	February 2016 February 2016 February 2016 October 2015	Variable Variable Variable Variable



Geological	Version	Update Cycle
<b>BGS 1:625,000 Solid Geology</b> British Geological Survey - National Geoscience Information Service	January 2009	As notified
<b>BGS Estimated Soil Chemistry</b> British Geological Survey - National Geoscience Information Service	December 2015	As notified
<b>BGS Recorded Mineral Sites</b> British Geological Survey - National Geoscience Information Service	June 2023	Bi-Annually
<b>CBSCB Compensation District</b> Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
<b>Coal Mining Affected Areas</b> The Coal Authority - Property Searches	February 2023	Annual Rolling Update
<b>Mining Instability</b> Ove Arup & Partners	June 1998	Not Applicable
<b>Non Coal Mining Areas of Great Britain</b> British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
<b>Potential for Collapsible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	April 2020	As notified
<b>Potential for Compressible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Ground Dissolution Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Landslide Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Running Sand Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Radon Potential - Radon Affected Areas</b> British Geological Survey - National Geoscience Information Service	September 2022	Annually
<b>Radon Potential - Radon Protection Measures</b> British Geological Survey - National Geoscience Information Service	September 2022	Annually

Industrial Land Use	Version	Update Cycle
<b>Contemporary Trade Directory Entries</b> Thomson Directories	July 2023	Quarterly
<b>Fuel Station Entries</b> Catalist Ltd - Experian	June 2023	Quarterly
<b>Gas Pipelines</b> National Grid	October 2021	Bi-Annually
<b>Points of Interest - Commercial Services</b> PointX	June 2023	Quarterly
<b>Points of Interest - Education and Health</b> PointX	June 2023	Quarterly
<b>Points of Interest - Manufacturing and Production</b> PointX	June 2023	Quarterly
<b>Points of Interest - Public Infrastructure</b> PointX	June 2023	Quarterly
<b>Points of Interest - Recreational and Environmental</b> PointX	June 2023	Quarterly
<b>Underground Electrical Cables</b> National Grid	February 2023	Bi-Annually

Sensitive Land Use	Version	Update Cycle
<b>Ancient Woodland</b> Natural England	April 2023	Bi-Annually
<b>Areas of Adopted Green Belt</b> Braintree District Council Chelmsford Borough Council Uttlesford District Council	July 2022 July 2022 July 2022	Quarterly Quarterly Quarterly
<b>Areas of Unadopted Green Belt</b> Braintree District Council Chelmsford Borough Council Uttlesford District Council	July 2022 July 2022 July 2022	Quarterly Quarterly Quarterly
<b>Areas of Outstanding Natural Beauty</b> Natural England	April 2023	Bi-Annually
<b>Environmentally Sensitive Areas</b> Natural England	August 2023	
<b>Forest Parks</b> Forestry Commission	May 2023	Not Applicable
<b>Local Nature Reserves</b> Natural England	March 2023	Bi-Annually
<b>Marine Nature Reserves</b> Natural England	April 2023	Bi-Annually
<b>National Nature Reserves</b> Natural England	February 2023	Bi-Annually
<b>National Parks</b> Natural England	February 2018	Bi-Annually
<b>Nitrate Sensitive Areas</b> Natural England	April 2023	Not Applicable
<b>Nitrate Vulnerable Zones</b> Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Environment Agency - Head Office	April 2016 March 2023	Bi-Annually
<b>Ramsar Sites</b> Natural England	March 2023	Bi-Annually
<b>Sites of Special Scientific Interest</b> Natural England	March 2023	Bi-Annually
<b>Special Areas of Conservation</b> Natural England	April 2023	Bi-Annually
<b>Special Protection Areas</b> Natural England	April 2023	Bi-Annually

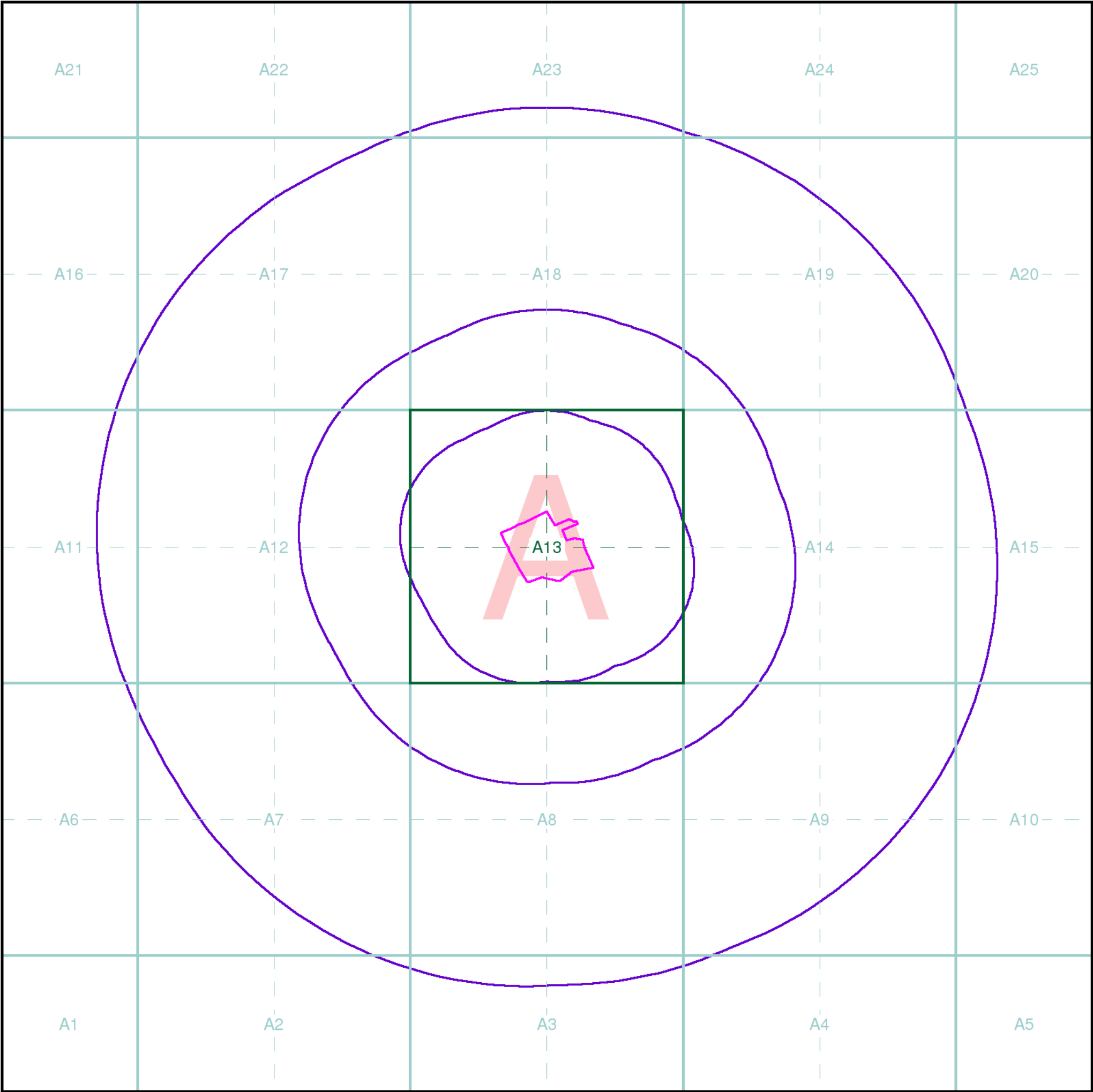


A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 <b>British Geological Survey</b> NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	 <b>Centre for Ecology &amp; Hydrology</b> NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Contact	Name and Address	Contact Details
1	<b>British Geological Survey - Enquiry Service</b> British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: <a href="mailto:enquiries@bgs.ac.uk">enquiries@bgs.ac.uk</a> Website: [REDACTED]
2	<b>Environment Agency - National Customer Contact Centre (NCCC)</b> PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: <a href="mailto:enquiries@environment-agency.gov.uk">enquiries@environment-agency.gov.uk</a>
3	<b>Environment Agency - Head Office</b> Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	<b>Ordnance Survey</b> Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: <a href="mailto:customerservices@ordnancesurvey.co.uk">customerservices@ordnancesurvey.co.uk</a> Website: <a href="http://www.ordnancesurvey.gov.uk">www.ordnancesurvey.gov.uk</a>
5	<b>Uttlesford District Council - Environmental Health Department</b> Council Offices, London Road, Saffron Walden, Essex, CB11 4ER	Telephone: 01799 510581 Fax: 01799 510499 Website: <a href="http://www.uttlesford.gov.uk">www.uttlesford.gov.uk</a>
6	<b>Essex County Council</b> County Hall, Chelmsford, Essex, CM1 1YS	Telephone: 01245 492211 Website: <a href="http://www.essexcc.gov.uk">www.essexcc.gov.uk</a>
7	<b>Chelmsford Borough Council - Environmental Health Department</b> Coval Lane, Chelmsford, Essex, CM1 1TJ	Telephone: 01245 606606 Fax: 01245 606606 Email: <a href="mailto:Environmental.services@chelmsfordbc.gov.uk">Environmental.services@chelmsfordbc.gov.uk</a> Website: <a href="http://www.chelmsfordbc.gov.uk">www.chelmsfordbc.gov.uk</a>
8	<b>PointX</b> 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: [REDACTED]
9	<b>Landmark Information Group Limited</b> Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9966 Fax: 0844 844 9951 Email: <a href="mailto:helpdesk@landmark.co.uk">helpdesk@landmark.co.uk</a> Website: [REDACTED]
-	<b>Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards</b> Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: <a href="mailto:radon@phe.gov.uk">radon@phe.gov.uk</a> Website: [REDACTED]
-	<b>Landmark Information Group Limited</b> Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: <a href="mailto:customerservices@landmarkinfo.co.uk">customerservices@landmarkinfo.co.uk</a> Website: [REDACTED]

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.



Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

**Slice**  
Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

**Segment**  
A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

**Quadrant**  
A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

Client Details

Mr C Unsworth, Green Earth Management Ltd, Building 2, Broomfield Park, Coggeshall Road, Earls Colne, Essex, CO6 2JX

Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568700, 217600  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

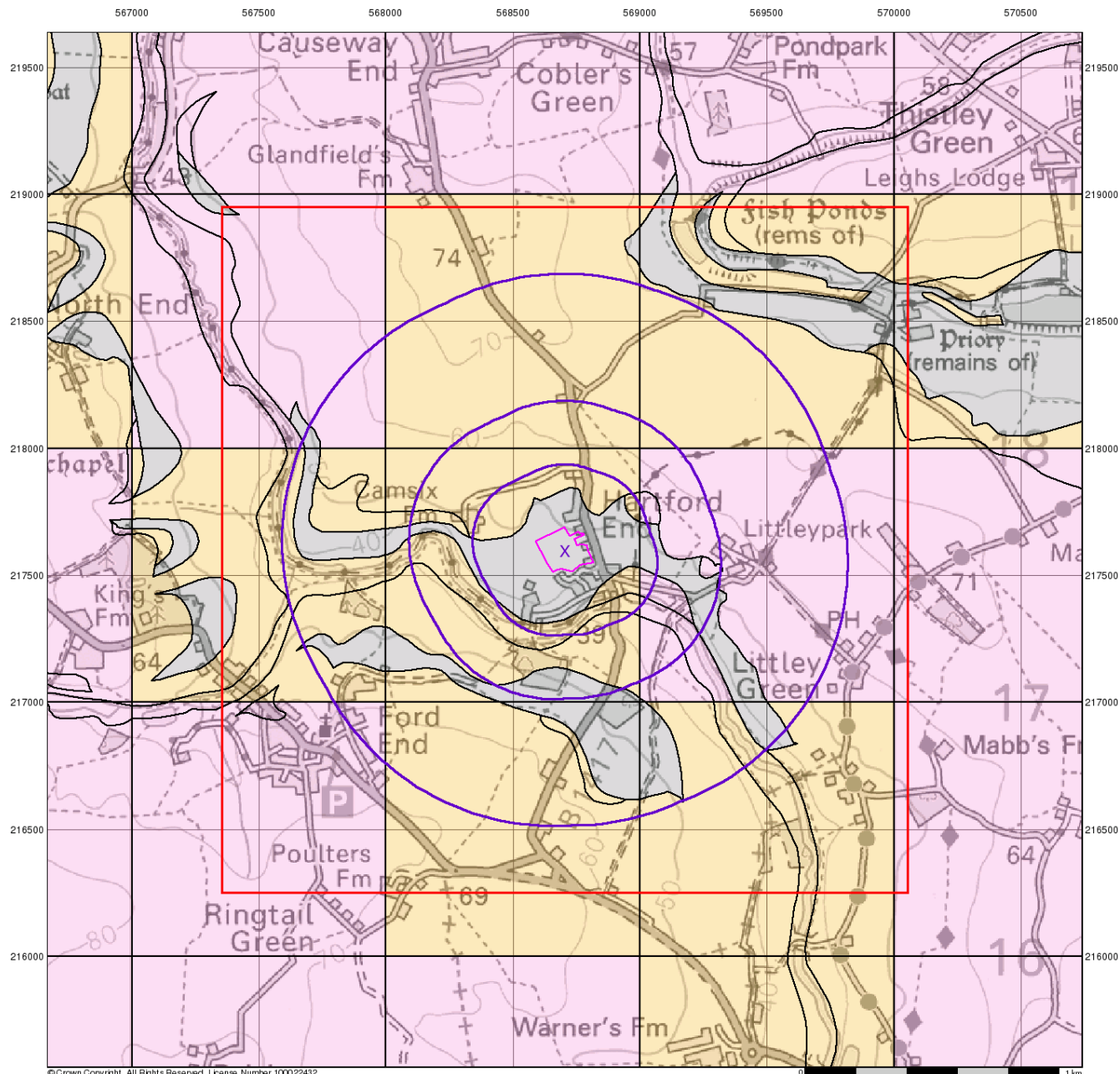
Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

Full Terms and Conditions can be found on the following link:



Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]



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## Groundwater Vulnerability

### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Agency and Hydrological

#### Bedrock Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

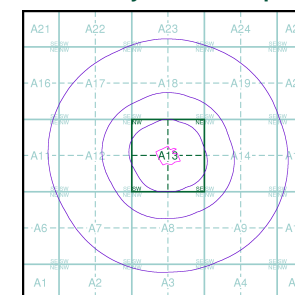
#### Superficial Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

### Site Sensitivity Context Map - Slice A



### Order Details

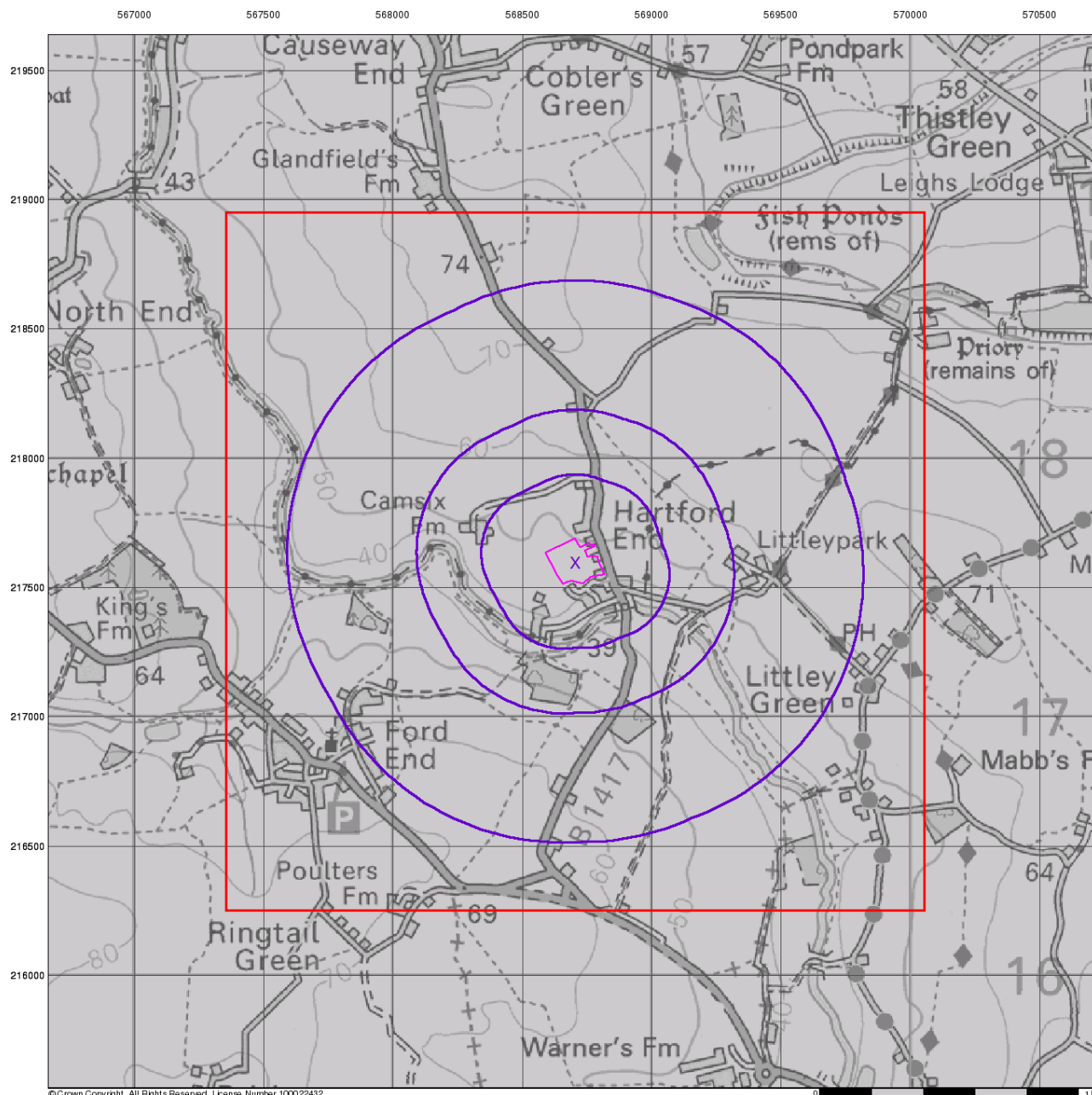
Order Number: 315600858\_1\_1  
 Customer Ref: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

### Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

**Landmark**  
 INFORMATION GROUP

Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: [www.landmarkinfo.co.uk](http://www.landmarkinfo.co.uk)



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0 1 km



## Bedrock Aquifer Designation

### General

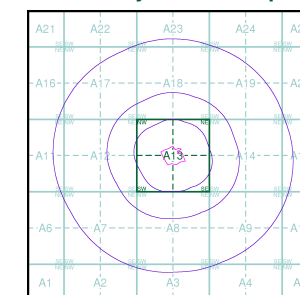
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Agency and Hydrological

#### Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 315600858\_1\_1  
 Customer Ref: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

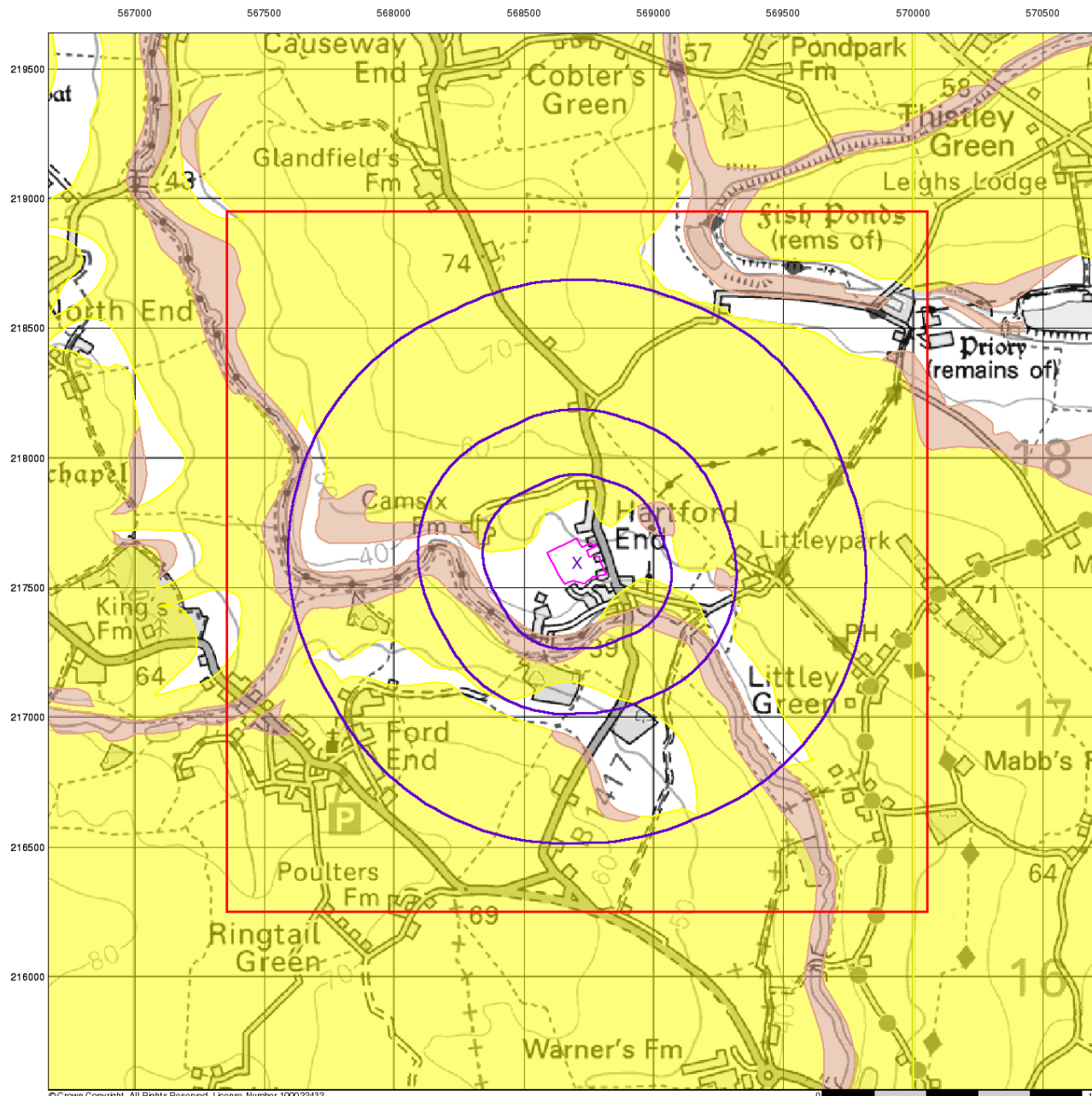
### Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

**Landmark**  
 INFORMATION GROUP

Tel: 0844 844 9952  
 Fax:   
 Web:





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## Superficial Aquifer Designation

### General

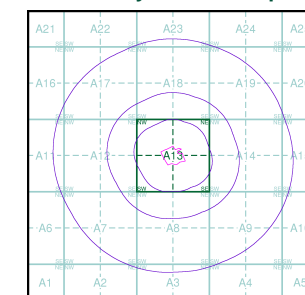
- Specified Site    ○ Specified Buffer(s)    X Bearing Reference Point
- Slice    8 Map ID

### Agency and Hydrological

#### Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

### Site Sensitivity Context Map - Slice A



### Order Details

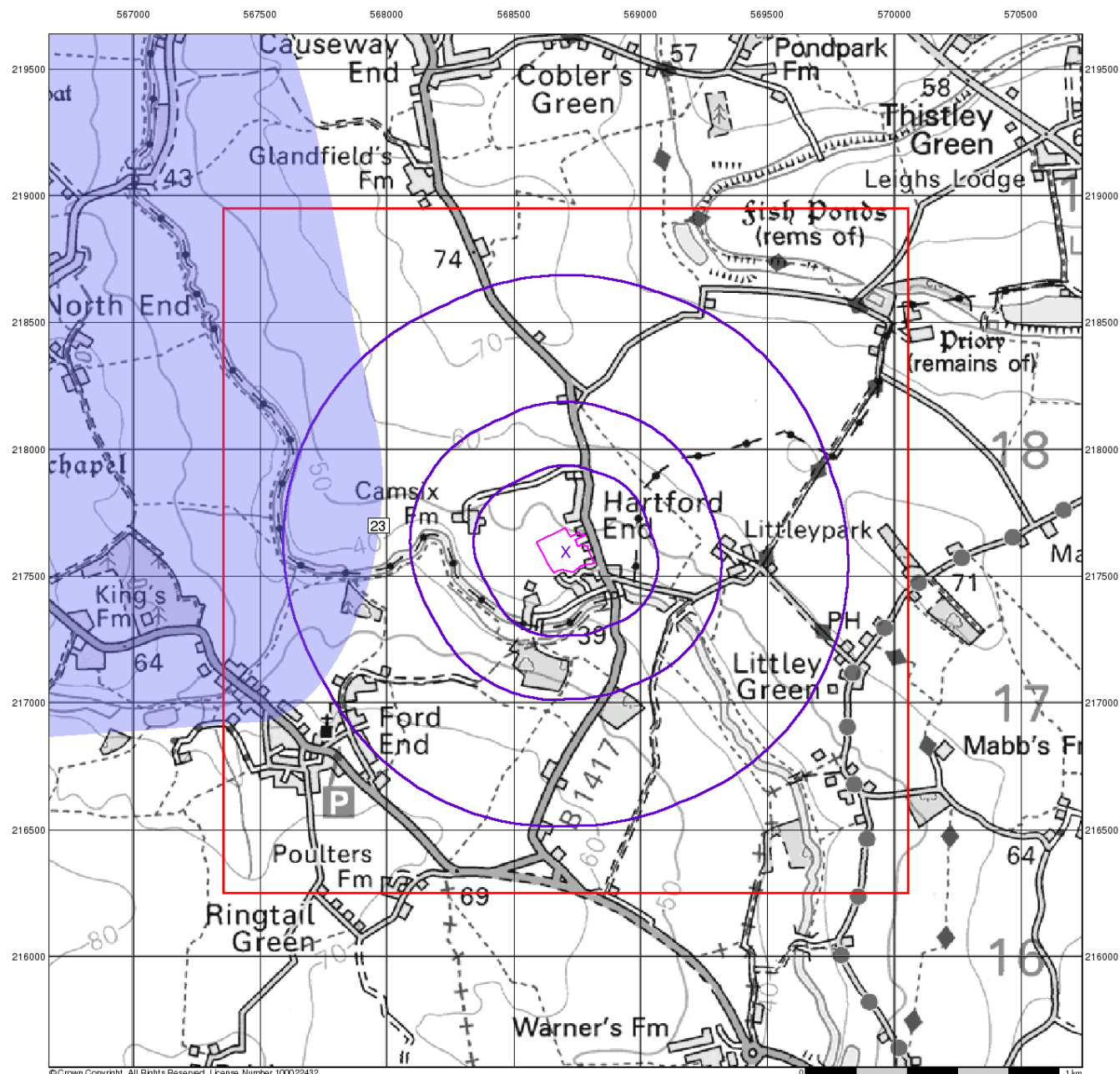
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 Customer Ref: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

### Site Details

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 Fax: 0844 844 9951  
 Web: [Redacted]



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## Source Protection Zones

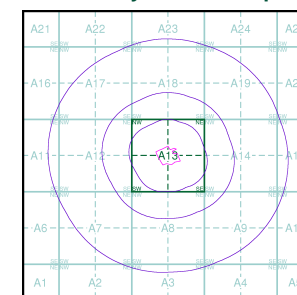
### General

- X Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Slice
- Map ID

### Agency and Hydrological

- Inner zone (Zone 1)
- ▨ Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- ▨ Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- ▨ Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 315600858\_1\_1  
 Customer Ref: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

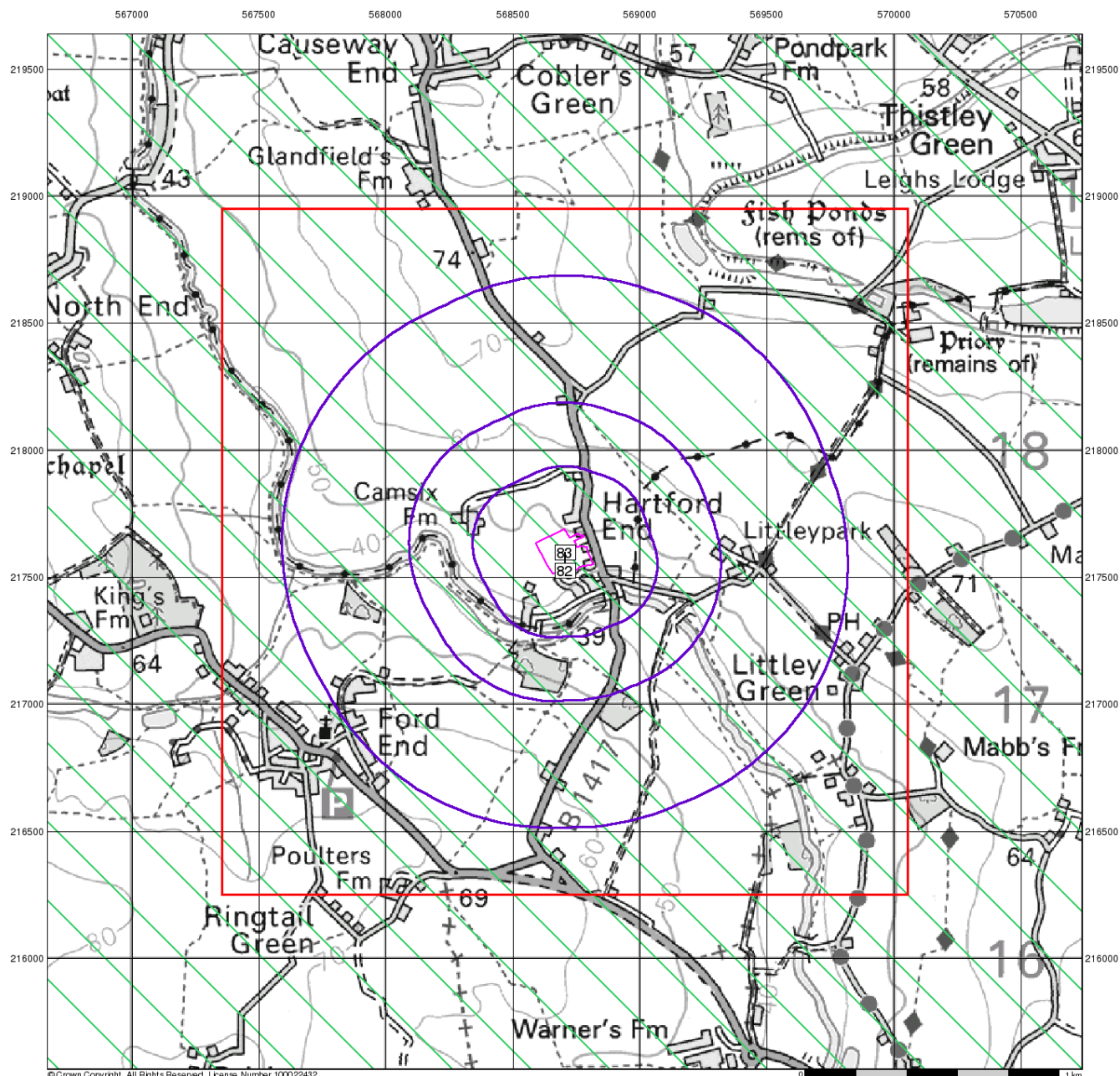
### Site Details

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## Sensitive Land Uses

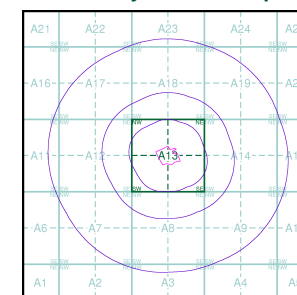
### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

### Site Sensitivity Context Map - Slice A



### Order Details

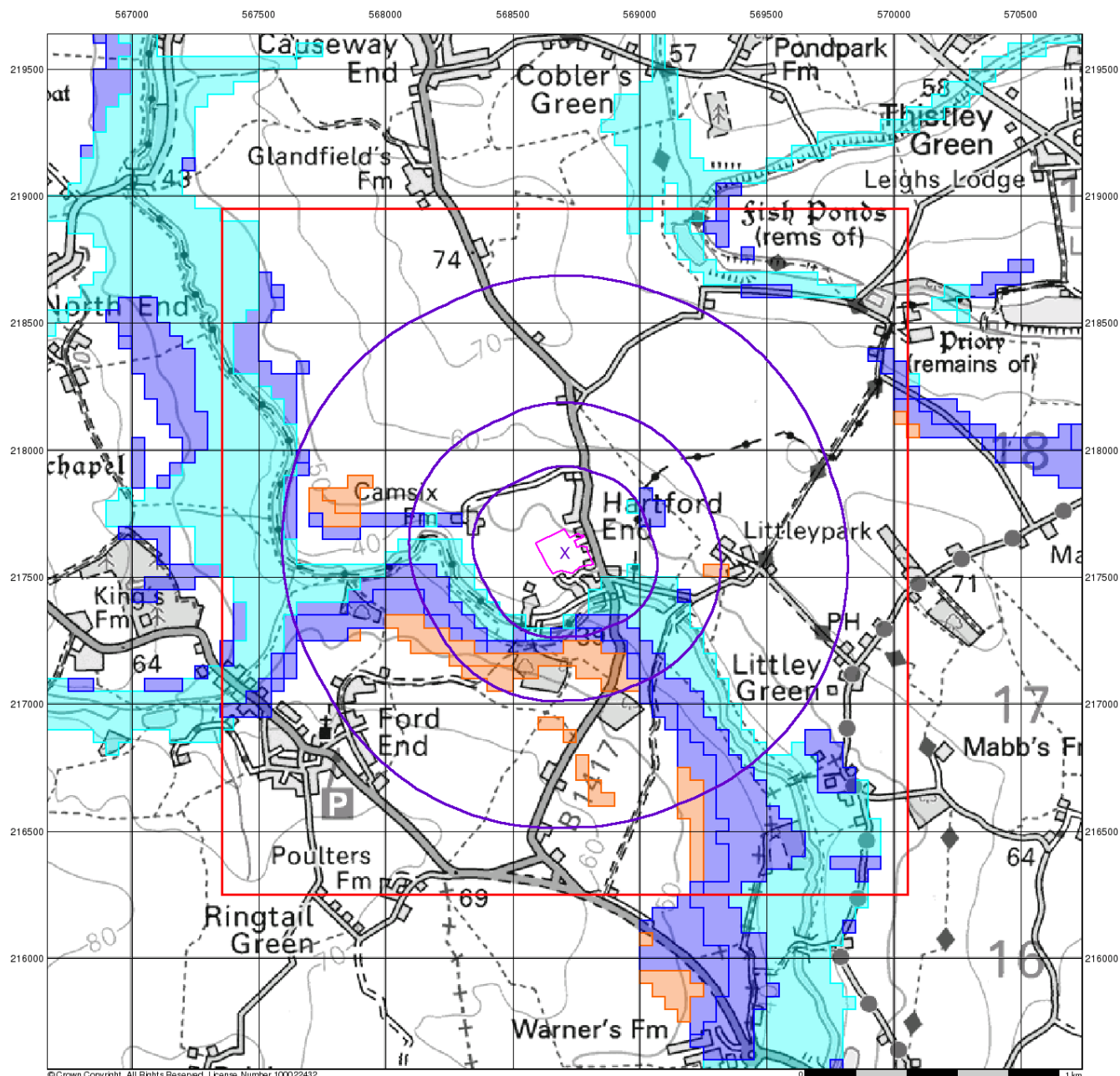
Order Number: 315600858\_1\_1  
 Customer Ref: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

### Site Details

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## BGS Flood GFS Data

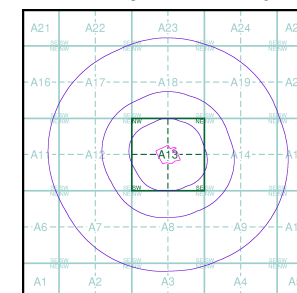
### General

- ◇ Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Slice

### Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

## Site Sensitivity Context Map - Slice A



## Order Details

Order Number: 315600858\_1\_1  
 Customer Ref: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX



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 Fax: 0844 844 9951  
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## General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Types at Location
- Pylon
- Overhead Transmission Line

## Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral
- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

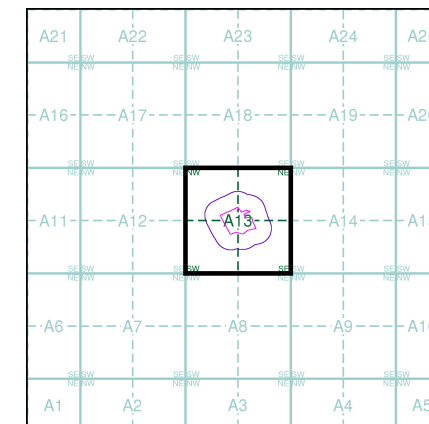
## Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

## Geological

- BGS Recorded Mineral Site

## Site Sensitivity Map - Segment A13



## Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Plot Buffer (m): 100

## Site Details

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### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID

### Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

### Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement
- BGS Recorded Mineral Site

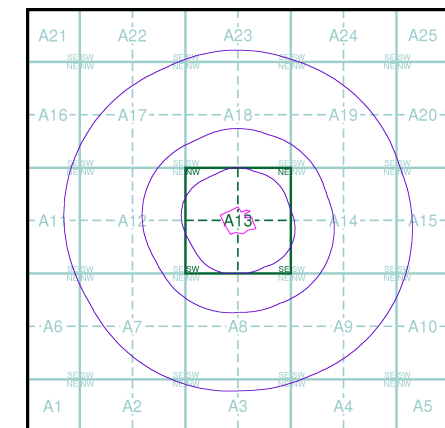
### Geological

- BGS Recorded Mineral Site

### Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

### Site Sensitivity Map - Slice A



### Order Details

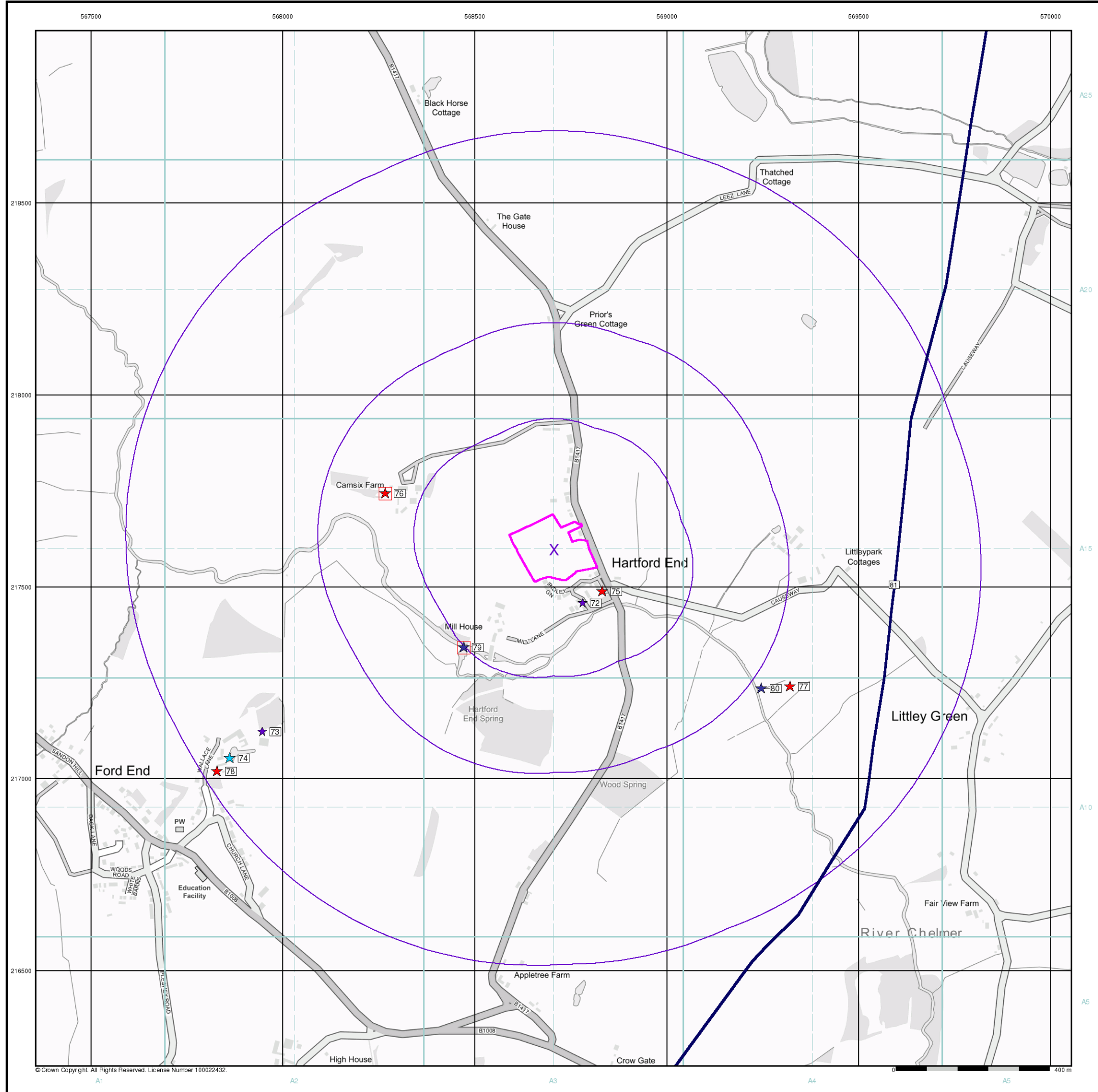
Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

### Site Details

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Industrial Land Use Map

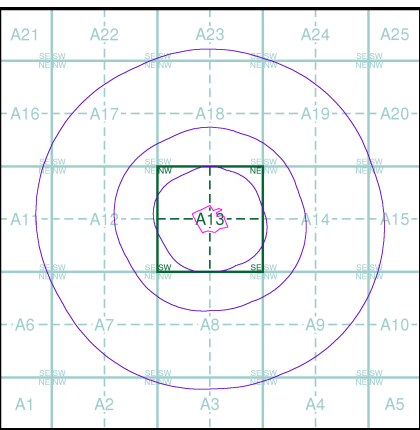
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



Order Details

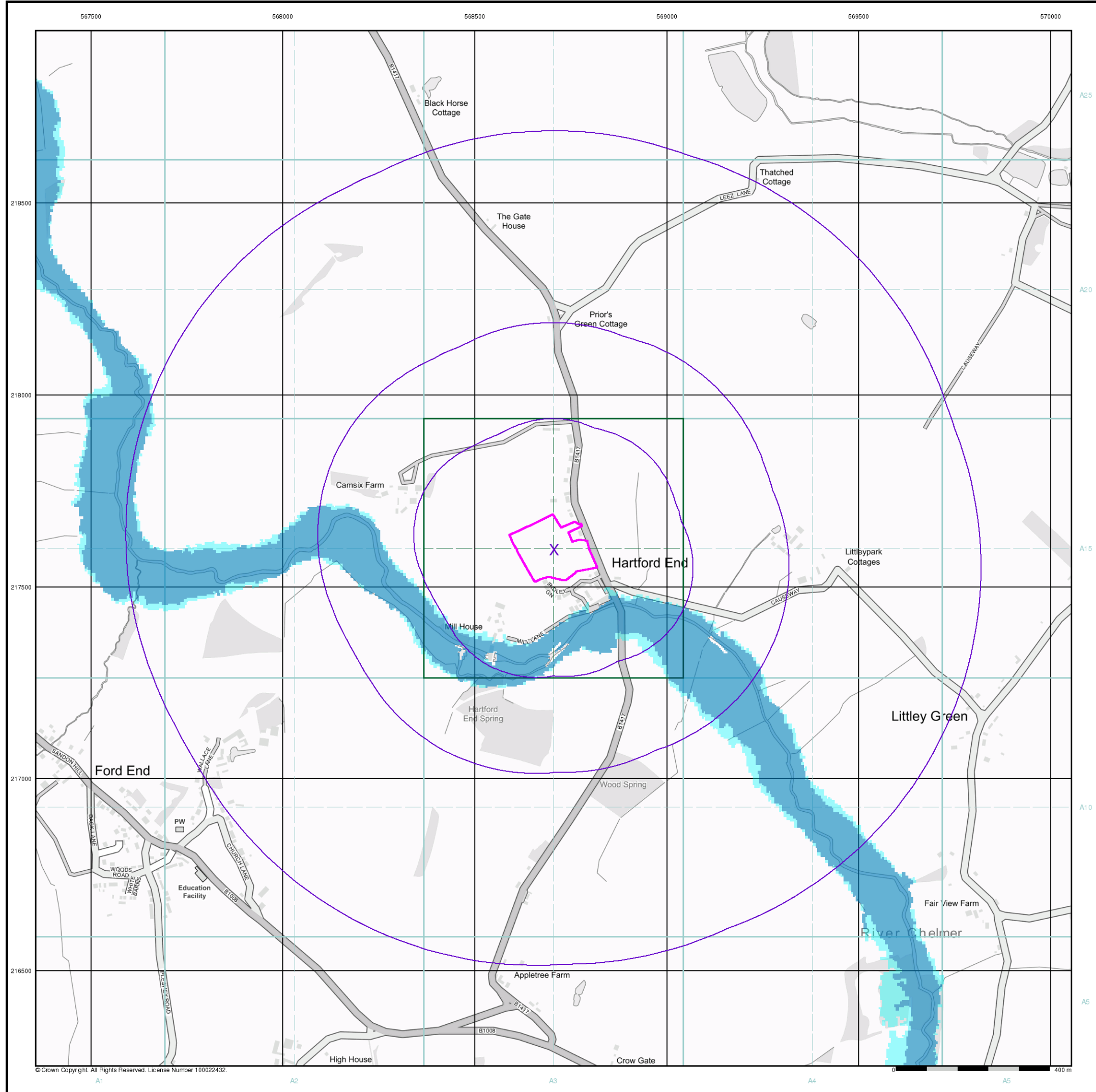
Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

Site Details

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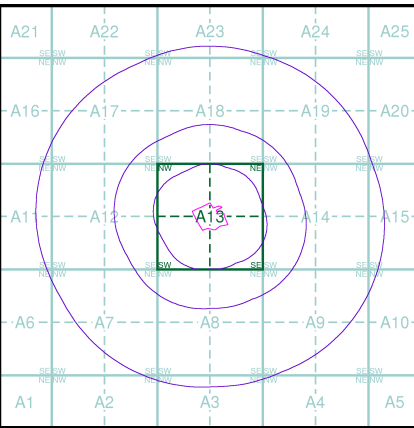
**General**

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

**Agency and Hydrological (Flood)**

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

**Flood Map - Slice A**



**Order Details**

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

**Site Details**

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Web:





### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

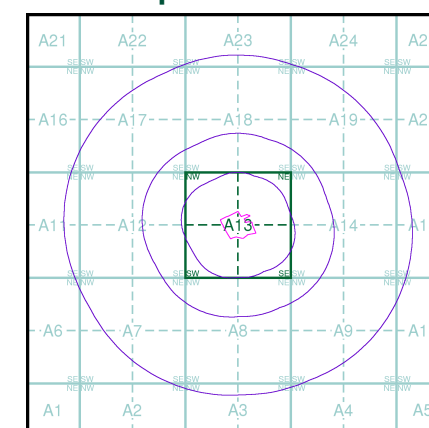
### Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of [REDACTED]

### Borehole Map - Slice A



### Order Details

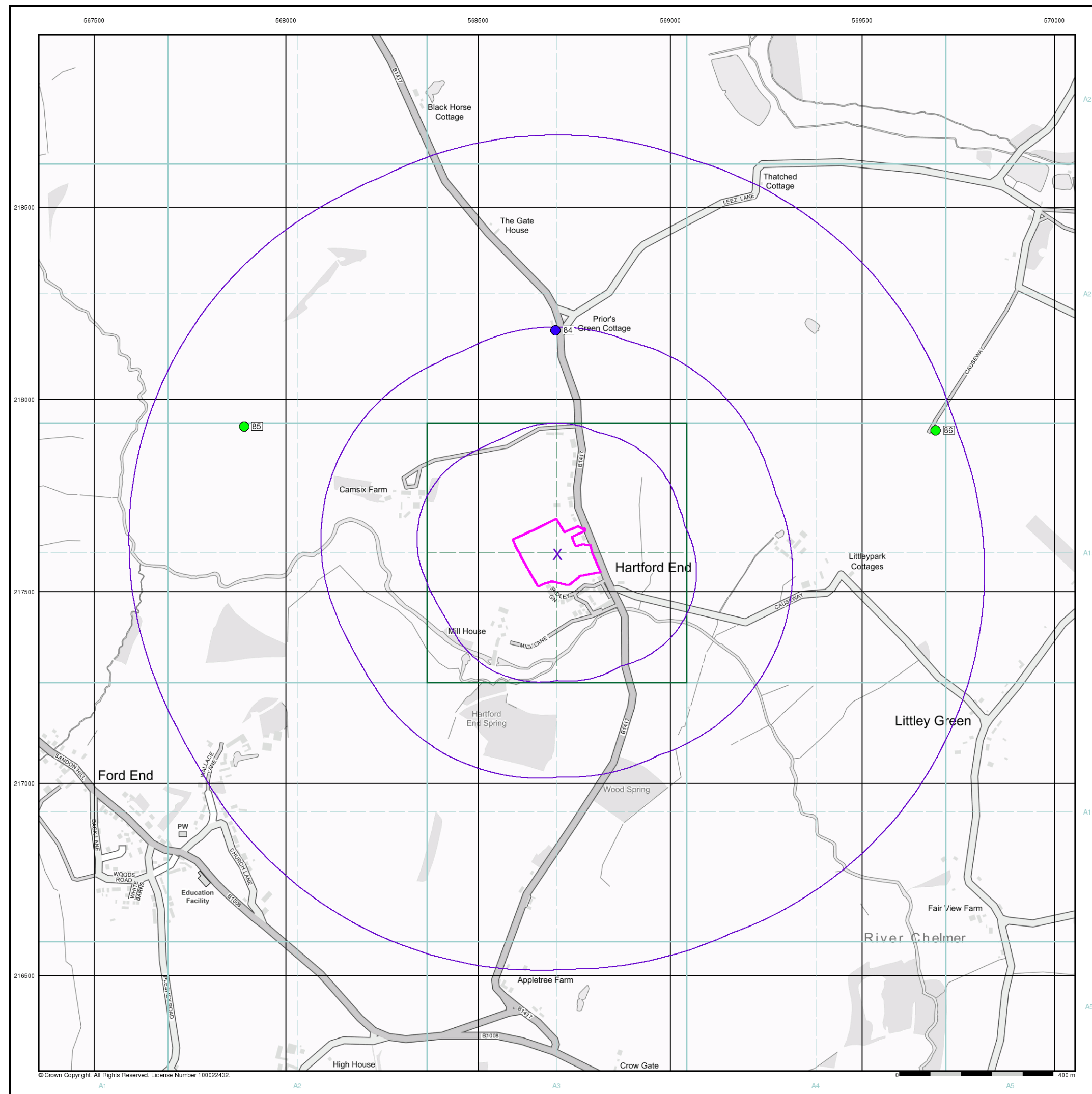
Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

### Site Details

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Fax: 0844 844 9951  
Web: [REDACTED]







### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

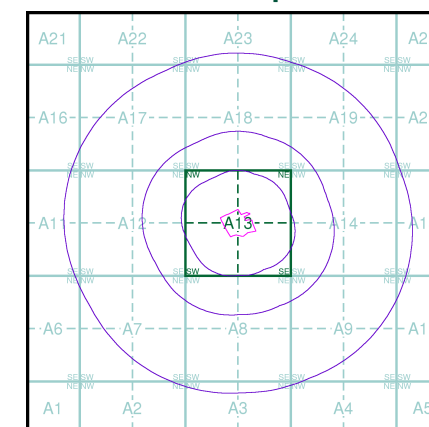
### OS Water Network Data

- |              |                         |
|--------------|-------------------------|
| Canal        | Drain                   |
| Reservoir    | Other                   |
| Foreshore    | Lake                    |
| Marsh        | Transfer                |
| Tidal River  | Lock Or Flight Of Locks |
| Inland River | Sea                     |

### Contours (height in meters)

- Standard Contour 105 100 95
- Master Contour
- Spot Height 167.3
- MLW Mean Low Water
- MHW Mean High Water

### OS Water Network Map - Slice A



### Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

### Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

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Web: [Redacted]



### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

### Risk of Flooding from Surface Water

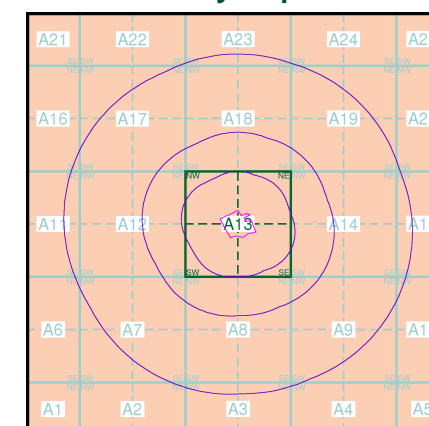
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

### Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

### EANRW Suitability Map - Slice A



### Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

### Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

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Web: [Redacted]



## General

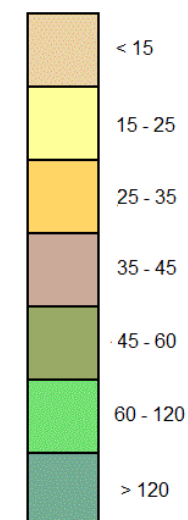
 Specified Site

 Specified Buffer(s)

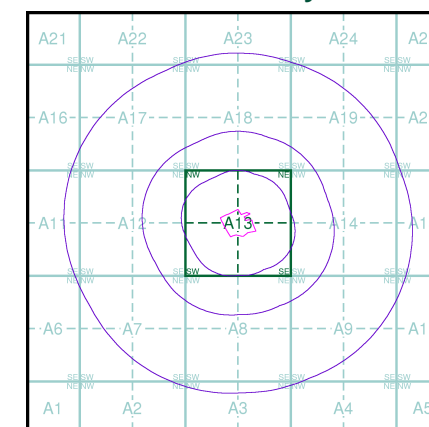
**X** Bearing Reference Point

### Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg



### Estimated Soil Chemistry Arsenic - Slice A



## Order Details

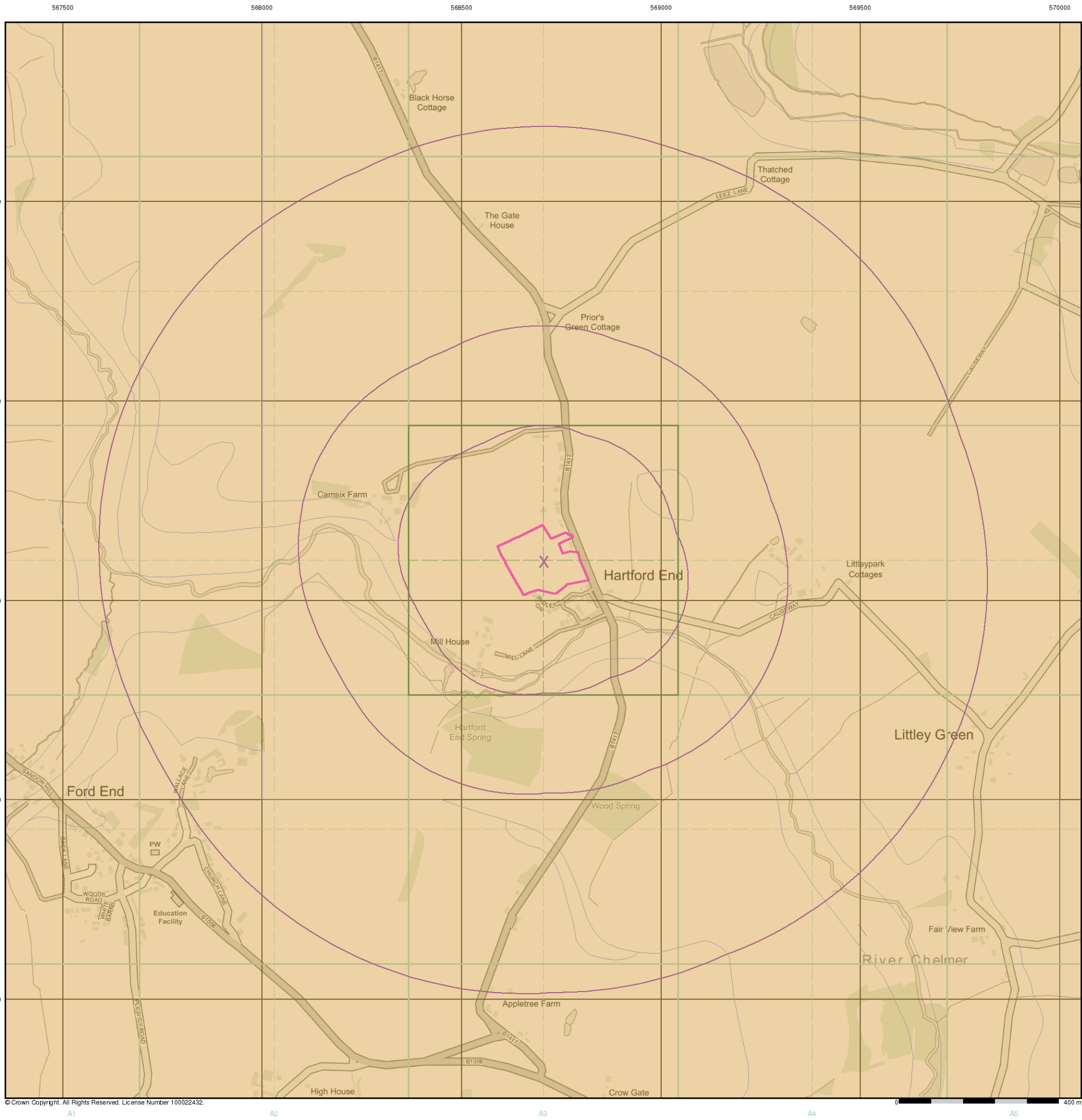
Order Details:	315600858_1_1
Customer Ref:	2268
National Grid Reference:	568710, 217600
Slice:	A
Site Area (Ha):	2.41
Search Buffer (m):	1000

## Site Details

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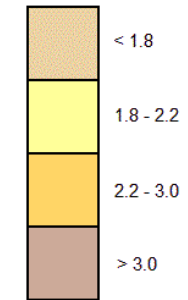


### General

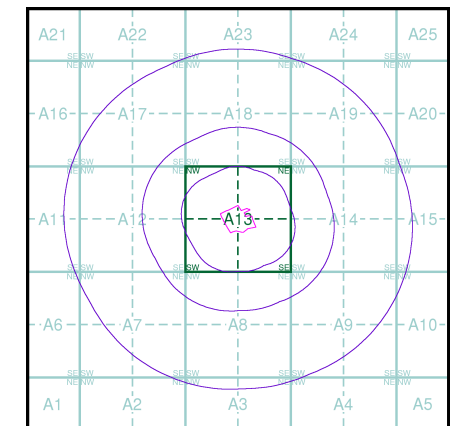
Specified Site Specified Buffer(s) Bearing Reference Point

### Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg



### Estimated Soil Chemistry Cadmium - Slice A



### Order Details

Order Details: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

### Site Details

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Web:

## General

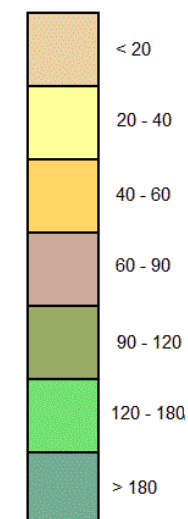
 Specified Site

 Specified Buffer(s)

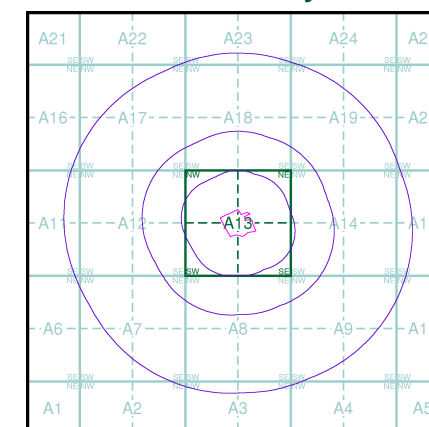
**X** Bearing Reference Point

### Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg



### Estimated Soil Chemistry Chromium - Slice A



## Order Details

Order Details: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

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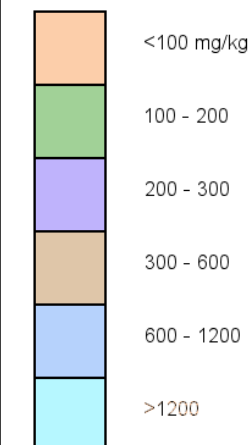


## General

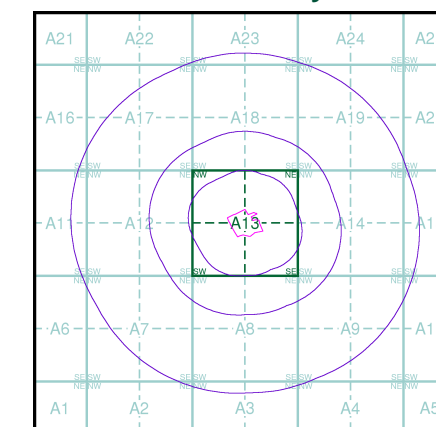
Specified Site Specified Buffer(s) Bearing Reference Point

## Estimated Soil Chemistry Lead

Lead Concentrations mg/kg



## Estimated Soil Chemistry Lead - Slice A



## Order Details

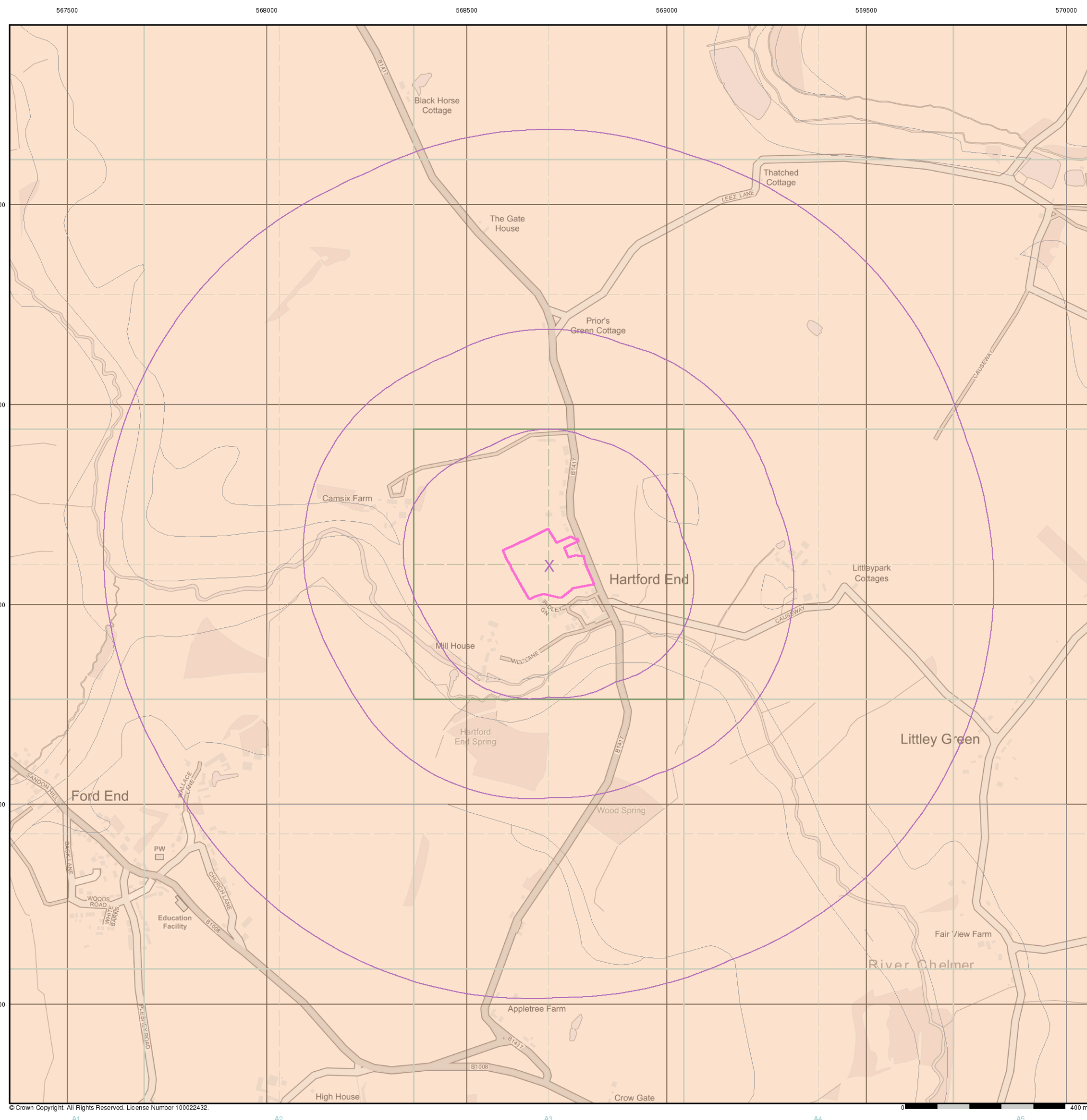
Order Details: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

**Landmark**  
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Fax: 0844 844 9951  
Web:



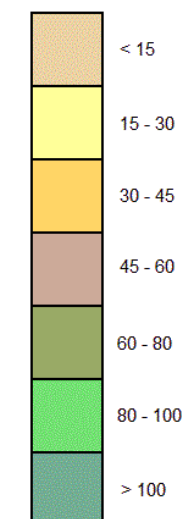


## General

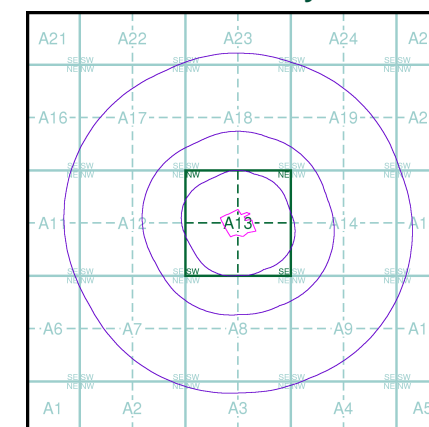
Specified Site Specified Buffer(s) Bearing Reference Point

## Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg



## Estimated Soil Chemistry Nickel - Slice A



## Order Details

Order Details: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

**Landmark**  
INFORMATION GROUP

Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]




## Geology 1:50,000 Maps Legends

### Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	LOFT	Lowestoft Formation	Diamicton	Not Supplied - Anglian
	GFDMP	Glaciofluvial Deposits, Mid Pleistocene	Sand and Gravel	Not Supplied - Cromerian
	KGCA	Kesgrave Catchment Subgroup	Sand and Gravel	Not Supplied - Pleistocene
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary

### Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LC	London Clay Formation	Clay, Silt and Sand	Not Supplied - Ypresian



### Geology 1:50,000 Maps

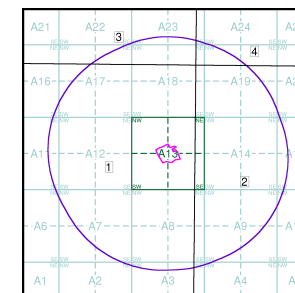
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

### Geology 1:50,000 Maps Coverage

Map ID: 4	Map ID: 2
Map Sheet No: 223	Map Sheet No: 241
Map Name: Braintree	Map Name: Chelmsford
Map Date: 1982	Map Date: 1975
Bedrock Geology: Available	Bedrock Geology: Available
Superficial Geology: Available	Superficial Geology: Available
Artificial Geology: Available	Artificial Geology: Available
Faults: Not Supplied	Faults: Not Supplied
Landslip: Available	Landslip: Available
Rock Segments: Not Supplied	Rock Segments: Not Supplied
Map ID: 3	Map ID: 1
Map Sheet No: 222	Map Sheet No: 240
Map Name: Great Dunmow	Map Name: Epping
Map Date: 1990	Map Date: 1981
Bedrock Geology: Available	Bedrock Geology: Available
Superficial Geology: Available	Superficial Geology: Available
Artificial Geology: Available	Artificial Geology: Available
Faults: Not Supplied	Faults: Not Supplied
Landslip: Not Available	Landslip: Available
Rock Segments: Not Supplied	Rock Segments: Not Supplied

### Geology 1:50,000 Maps - Slice A



### Order Details:

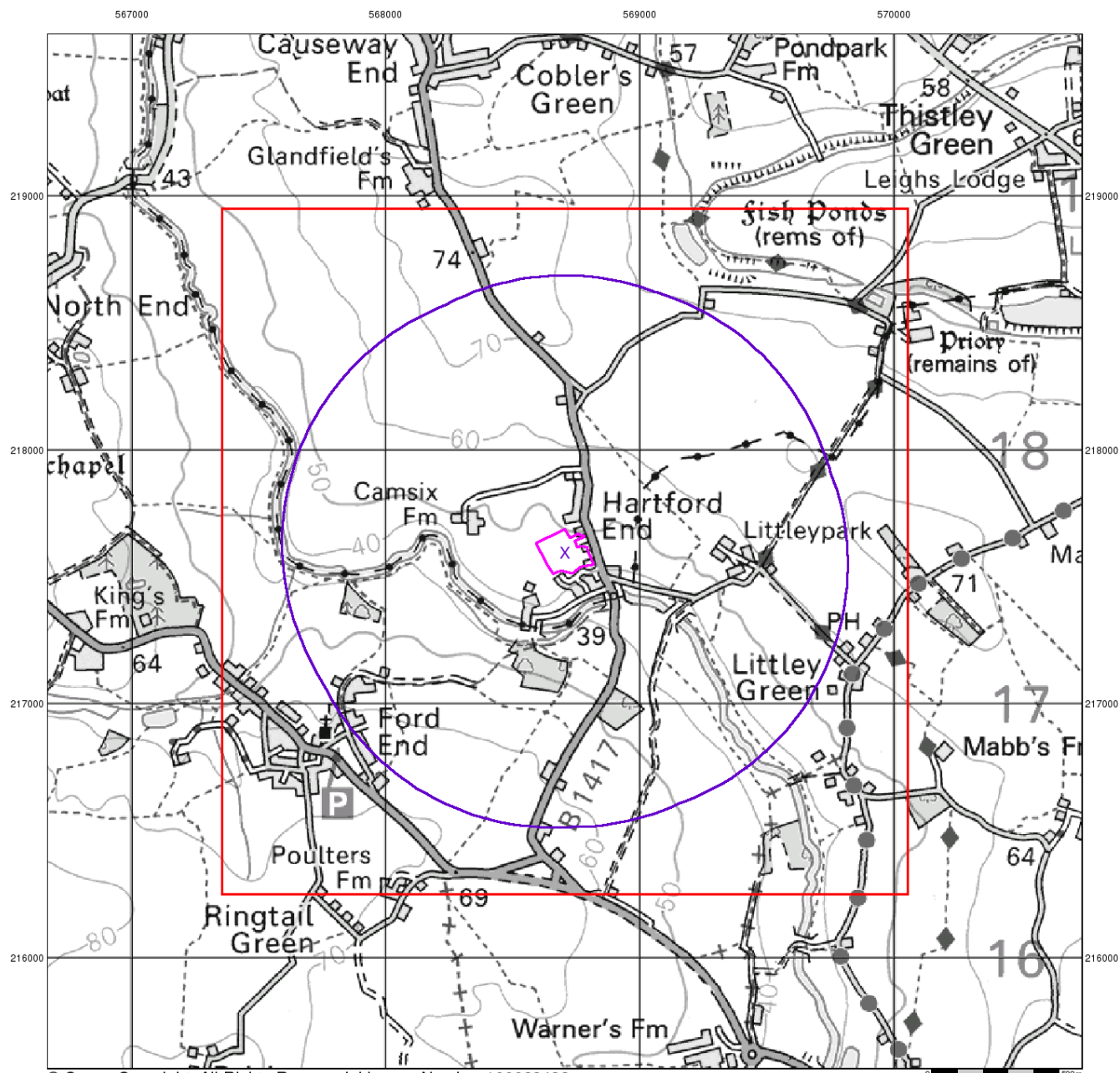
Order Number: 315600858\_1\_1  
 Customer Reference: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

### Site Details:

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

**Landmark**  
 INFORMATION GROUP

Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: 



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### Artificial Ground and Landslip

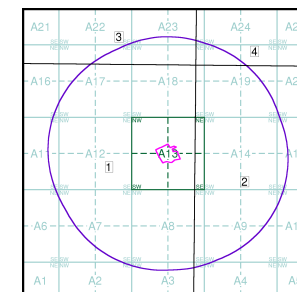
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

### Artificial Ground and Landslip Map - Slice A



### Order Details:

Order Number: 315600858\_1\_1  
 Customer Reference: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

### Site Details:

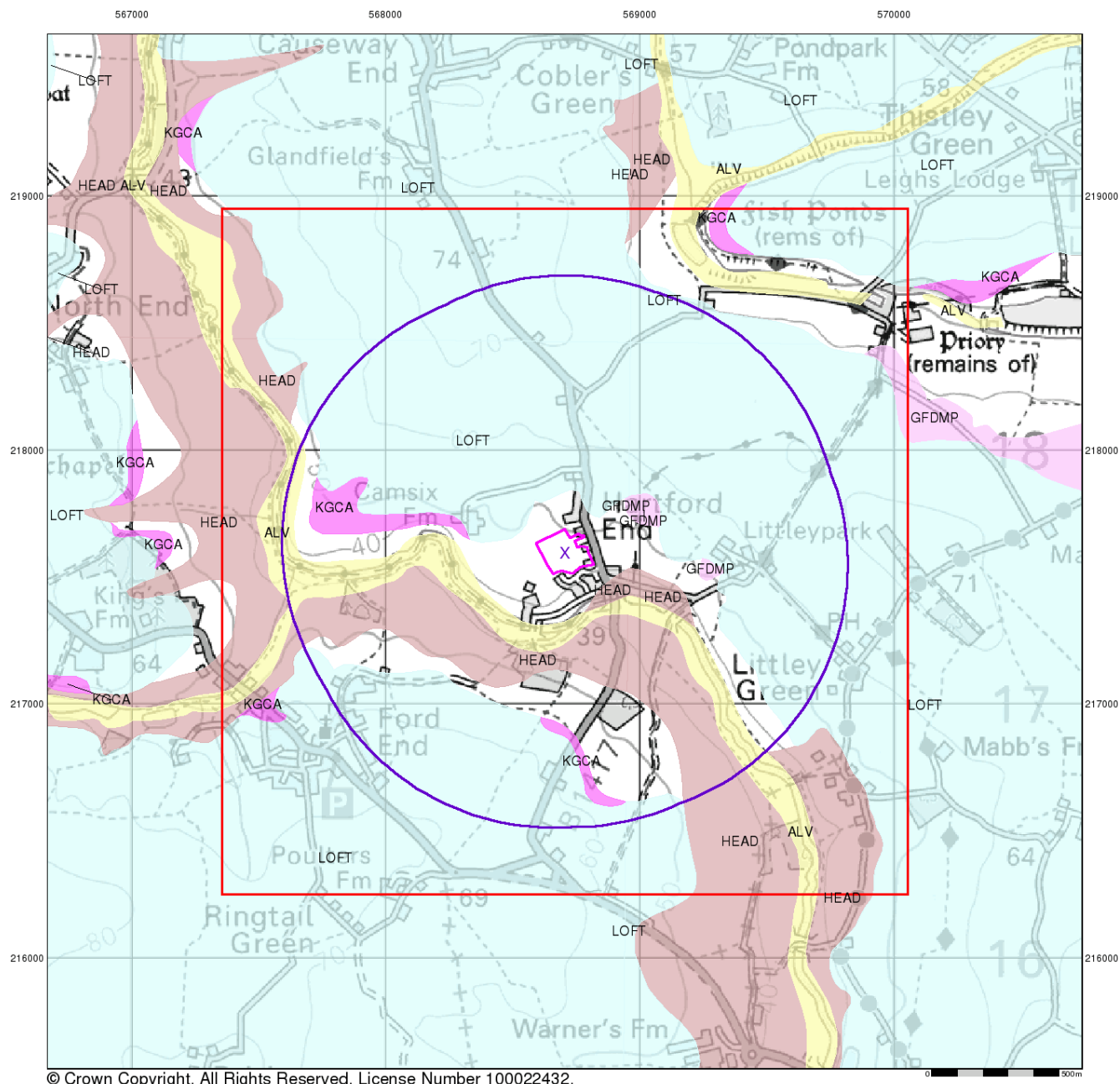
Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

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 Fax: 0844 844 9951  
 Web: [Redacted]

v15.0 14-Aug-2023

Page 2 of 5



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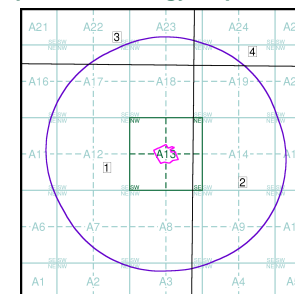
### Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

### Superficial Geology Map - Slice A



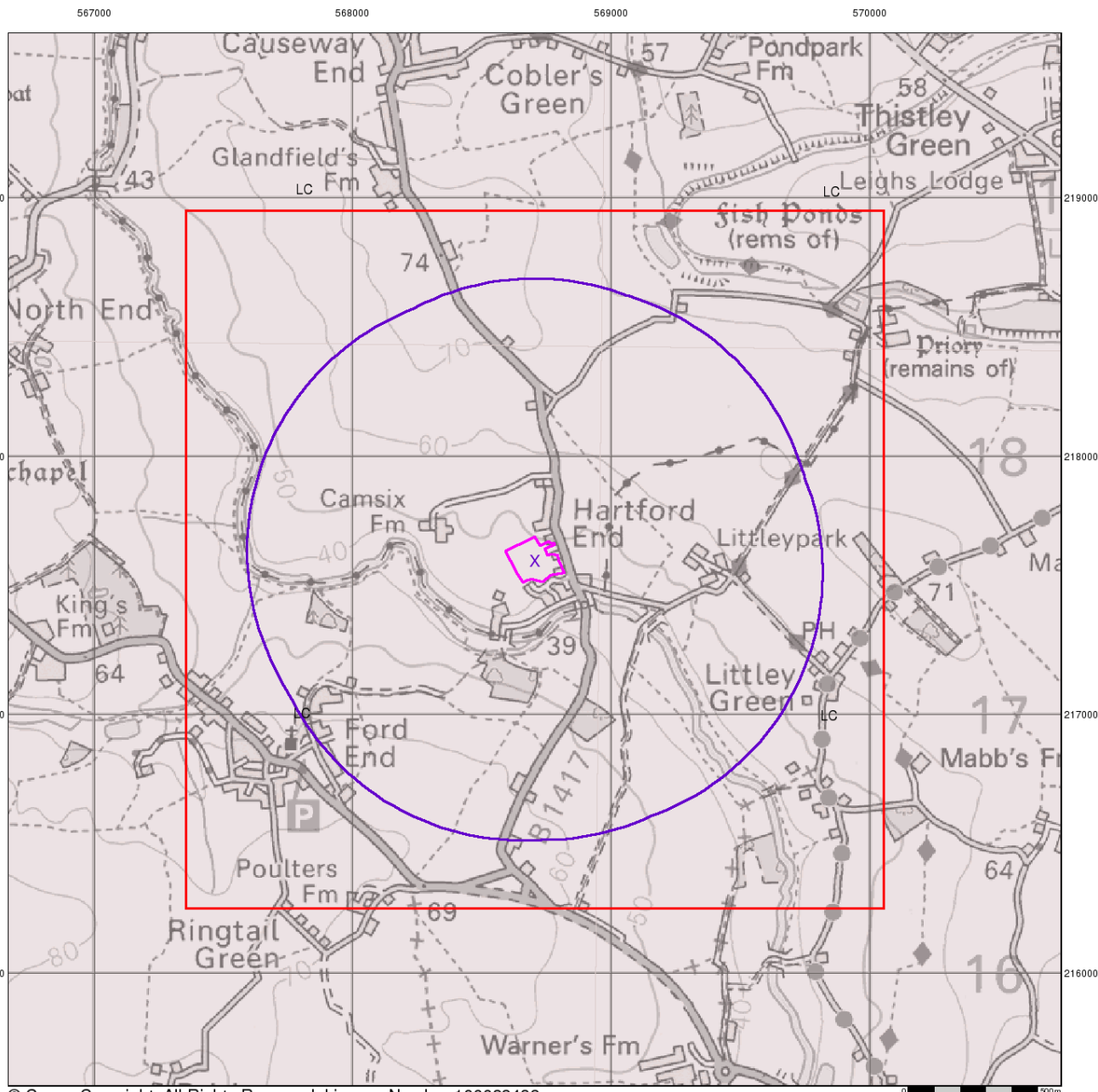
### Order Details:

Order Number: 315600858\_1\_1  
 Customer Reference: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

### Site Details:

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### Bedrock and Faults

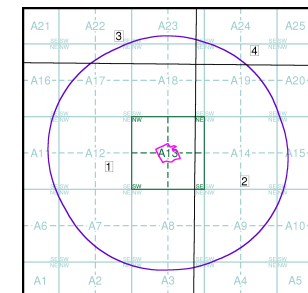
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

### Bedrock and Faults Map - Slice A



### Order Details:

Order Number: 315600858\_1\_1  
 Customer Reference: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

### Site Details:

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: [Redacted]

v15.0 14-Aug-2023





## Envirocheck<sup>®</sup> Report:

### Mining and Ground Stability Datasheet

#### Order Details:

**Order Number:**

315600858\_1\_1

**Customer Reference:**

2268

**National Grid Reference:**

568710, 217600

**Slice:**

A

**Site Area (Ha):**

2.41

**Search Buffer (m):**

1000

#### Site Details:

Land West of B1417

Hartford End

Chelmsford

Essex

CM3 1JX

#### Client Details:

Mr C Unsworth

Green Earth Management Ltd

Building 2

Broomfield Park

Coggeshall Road

Earls Colne

Essex

CO6 2JX

Report Section and Details	Page Number
<b>Summary</b>	-
<p>The Summary section provides an overview of the data contained within the report, detailing the number of data set features or the existence of a data set in relation to the buffer selected.</p> <p>For ease of reference, the report is broken down into 4 sections of data; Mining and Natural Cavities Data, Historical Land Use Information (1:2,500), Historical Land Use Information (1:10,000) and Ground Stability Data (1:50,000).</p>	
<b>Mining and Natural Cavities Data</b>	-
<p>The Mining and Natural Cavities Data section features data sets related to the existence of mining areas and their potential hazards; and details of naturally formed cavities.</p> <p>Data sets within this section are not plotted, with the exception of BGS Recorded Mineral Sites and Potential Mining Areas which feature on the Historical Land Use Information (1:10,000) map.</p>	
<b>Historical Land Use Information (1:2,500)</b>	-
<p>The Historical Land Use Information (1:2,500) section contains data captured from analysis carried out by Landmark of 1:1,250 and 1:2,500 scale historical Ordnance Survey mapping, identifying areas where, historically, the land uses were potentially contaminative.</p> <p>For the purpose of this Envirocheck module, only historical data relating to mining and ground stability has been included and plotted on the corresponding Historical Land Use Information (1:2,500) map. This section also includes the Subterranean Features data set, which details various man-made and man-used underground spaces obtained from the Subterranea Britannica society.</p>	
<b>Historical Land Use Information (1:10,000)</b>	-
<p>The Historical Land Use (1:10,000) section covers data captured from the systematic analysis carried out by Landmark of 1:10, 560 and 1:10,000 scale historical Ordnance Survey mapping dating back to the mid-19th century, identifying potentially contaminative past industrial land uses.</p> <p>For the purpose of this Envirocheck module, only data relating to mining and ground stability has been included and plotted on the accompanying Historical Land Use Information (1:10,000) map.</p>	
<b>Ground Stability Data (1:50,000)</b>	1
<p>The Ground Stability (1:50,000) section includes the BGS Geosure data suite, reporting features to 250m and plotted onto 3 separate maps. Also reported is brine subsidence, brine mining and salt mining data sets, of which Brine Pumping and Salt Mining Related Features are plotted, and subsidence insurance claims and insurance investigations data, which is not plotted.</p>	
<b>Historical Map List</b>	2
<p>The Historical Map List section details the historical mapping that has been analysed for your site, in relation to the Historical Land Use Information sections.</p>	
<b>Data Currency</b>	3
<b>Data Suppliers</b>	4
<b>Useful Contacts</b>	5

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The brine subsidence data relating to the Droitwich area as provided in this report is derived from JPB studies and physical monitoring undertaken annually over more than 35 years. For more detailed interpretation contact enquiries@jpb.co.uk. JPB retain the copyright and intellectual rights to this data and accept no liability for any loss or damage, including in direct or consequential loss, arising from the use of this data.

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

Report Version v53.0



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
<b>Mining and Natural Cavities Data</b>					
BGS Recorded Mineral Sites					
Coal Mining Affected Areas			n/a	n/a	n/a
Man Made Mining Cavities					
Mining Instability			n/a	n/a	n/a
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential Mining Areas					
<b>Historical Land Use Information (1:2,500)</b>					
Extractive Industries or Potential Excavations from 1855-1909 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1893-1915 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1906-1937 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1924-1949 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1950-1980 (100m)				n/a	n/a
Subterranean Features (100m)				n/a	n/a
<b>Historical Land Use Information (1:10,000)</b>					
Air Shafts					
Disturbed Ground					
General Quarrying					
Heap, unknown constituents					
Mineral Railway					
Mining & quarrying general					
Mining of coal & lignite					
Quarrying of sand & clay, operation of sand & gravel pits					
Former Marshes					
Potentially Infilled Land (Non-Water)					
Potentially Infilled Land (Water)					
<b>Ground Stability Data (1:50,000)</b>					
CBSCB Compensation District			n/a	n/a	n/a
Brine Pumping Related Features					
Brine Subsidence Solution Area					
Potential for Collapsible Ground Stability Hazards	pg 1	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 1	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 1	Yes		n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 1	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 1	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 1	Yes	Yes	n/a	n/a
Salt Mining Related Features					



## Summary

Report Version v53.0

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>CBSCB Compensation District</b> The site does not fall within the brine compensation area.				
	<b>Brine Subsidence Solution Area</b> The site does not fall within the brine subsidence solution area.				
1	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
2	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	197	1	568824 217340
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	160	1	568790 217366
3	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	160	1	568790 217366
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	197	1	568824 217340
	<b>Potential for Ground Dissolution Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
4	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
5	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
6	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	160	1	568790 217366
7	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	197	1	568824 217340
8	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	568706 217597
9	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	206	1	568458 217793

The following mapping has been analysed for Historical Land Use Information (1:2,500):








1:2,500	Mapsheet	Published Date
Ordnance Survey Plan	TL6817	1953
Ordnance Survey Plan	TL6917	1953

The following mapping has been analysed for Historical Land Use Information (1:10,000):

1:10,560	Mapsheet	Published Date
Essex	033_00	1881
Essex	033_NE	1897
Essex	033_SE	1898
Essex	034_SW	1923
Essex	044_00	1924
Essex	034_SW	1950
Essex	044_00	1951
Ordnance Survey Plan	TL61NE	1955
Ordnance Survey Plan	TL71NW	1955
1:10,000	Mapsheet	Published Date
Ordnance Survey Plan	TL61NE	1979
Ordnance Survey Plan	TL71NW	1979

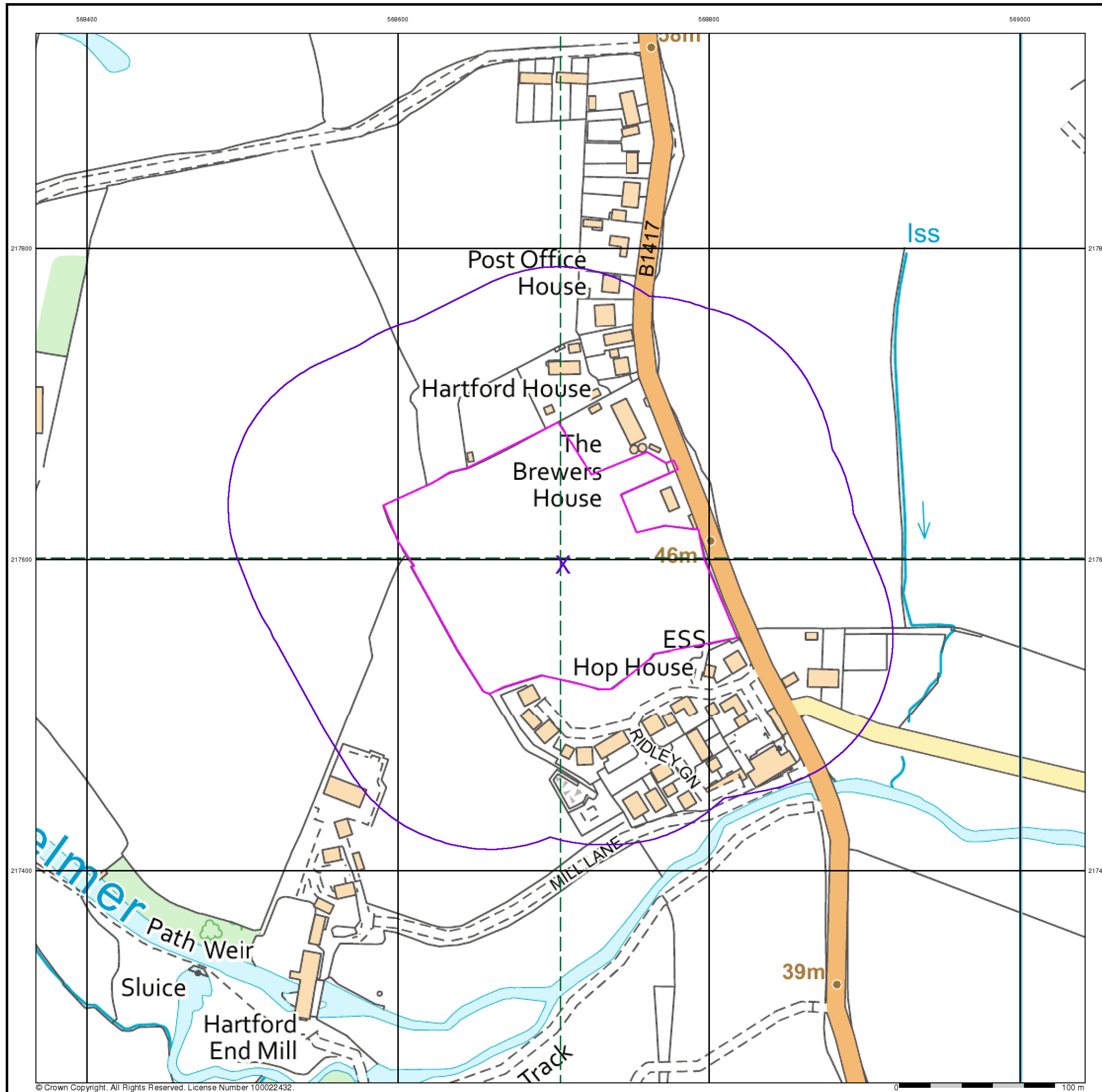
Mining and Cavities Data	Version	Update Cycle
<b>BGS Recorded Mineral Sites</b> British Geological Survey - National Geoscience Information Service	June 2023	Bi-Annually
<b>Coal Mining Affected Areas</b> The Coal Authority - Property Searches	February 2023	Annual Rolling Update
<b>Man Made Mining Cavities</b> Stantec UK Ltd	December 2022	Bi-Annually
<b>Mining Instability</b> Ove Arup & Partners	June 1998	Not Applicable
<b>Natural Cavities</b> Stantec UK Ltd	December 2022	Bi-Annually
<b>Non Coal Mining Areas of Great Britain</b> British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Historical Land Use Information (1:2,500)	Version	Update Cycle
<b>Subterranean Features</b> Landmark Information Group Limited	July 2023	Bi-Annually
Ground Stability Data (1:50,000)	Version	Update Cycle
<b>CBSCB Compensation District</b> Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
<b>Potential for Collapsible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	April 2020	As notified
<b>Potential for Compressible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Ground Dissolution Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Landslide Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Running Sand Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Brine Subsidence Solution Area</b> Johnson Poole & Bloomer	December 2020	

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
British Geological Survey	 <b>British Geological Survey</b> NATURAL ENVIRONMENT RESEARCH COUNCIL
The Coal Authority	
Ove Arup	
Stantec UK Ltd	
Wardell Armstrong	
Johnson Poole & Bloomer	

Contact	Name and Address	Contact Details
1	<b>British Geological Survey - Enquiry Service</b> British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: [REDACTED] Website: <a href="http://www.bgs.ac.uk">www.bgs.ac.uk</a>
-	<b>Landmark Information Group Limited</b> Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: [REDACTED] Website: <a href="http://www.landmarkinfo.co.uk">www.landmarkinfo.co.uk</a>





## Historical Land Use Information (1:2,500)

### General

- Specified Site Specified Buffer(s) Bearing Reference Point Map ID  
Several of Type at Location

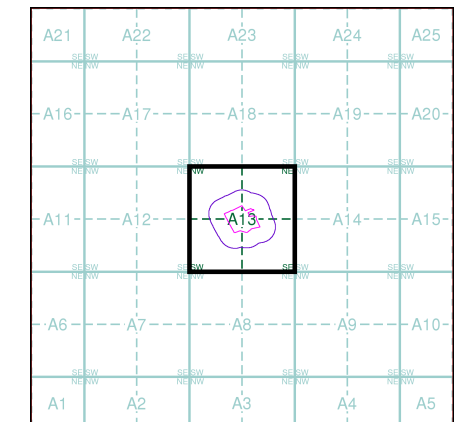
### Potentially Contaminative Industrial Uses (Extractive Industries Activity)

	Point	Line	Polygon
Extractive Industries Activity from 1855 - 1909	▲	—	■
Extractive Industries Activity from 1893 - 1915	▲	—	■
Extractive Industries Activity from 1906 - 1937	▲	—	■
Extractive Industries Activity from 1924 - 1949	▲	—	■
Extractive Industries Activity from 1950 - 1980	▲	—	■

### Subterranean Features

	Point	Line	Polygon
Subterranean Features	▼	---	■

## Mining and Ground Stability - Segment A13



### Order Details

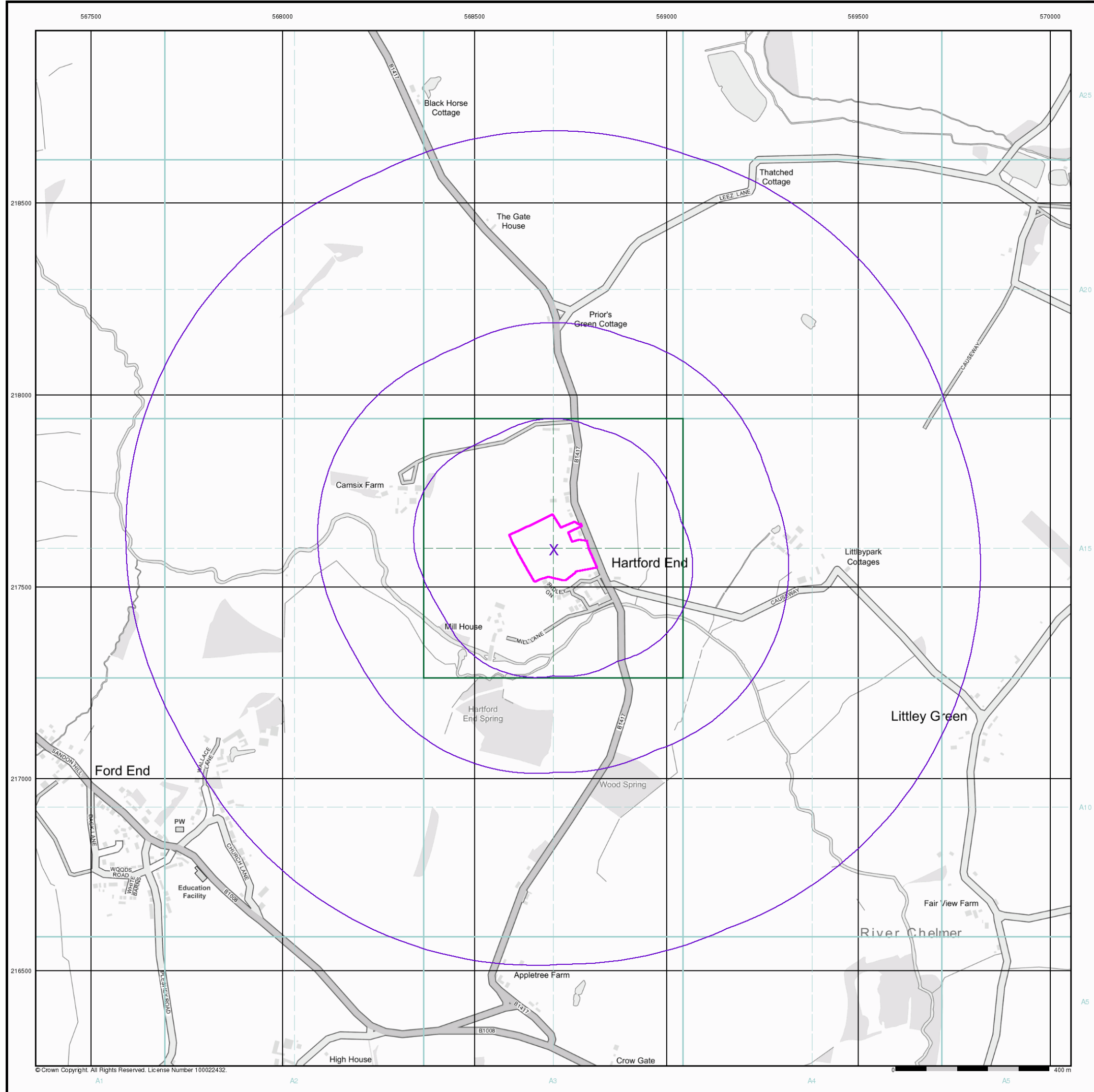
Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Plot Buffer (m): 100

### Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX



Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]



Historical Land Use Information (1:10,000)

General

- Specified Site Specified Buffer(s) Bearing Reference Point Map ID  
Several of Type at Location

Potentially Contaminative Industrial Uses (Past Land Uses - Mining)

	Point	Line	Polygon
Air Shafts			
Disturbed Ground			
General Quarrying			
Heap, unknown constituents			
Mineral Railway			
Mining and Quarrying General			
Mining of Coal & Lignite			
Quarrying of Sand and Clay, Operation of Sand and Gravel Pits			

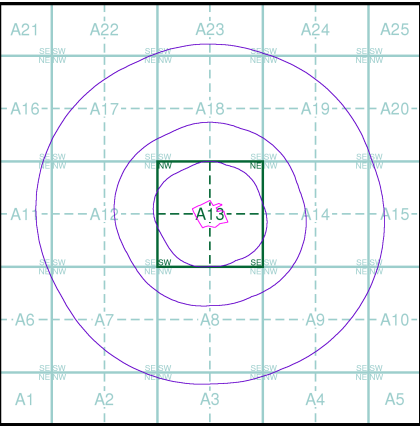
Historical Land Use

	Point	Line	Polygon
Potentially Infilled Land (Non-Water)			
Potentially Infilled Land (Water)			
Former Marsh			

Mining Data

- Potential Mining Area  
BGS Recorded Mineral Site

Mining and Ground Stability - Slice A



Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

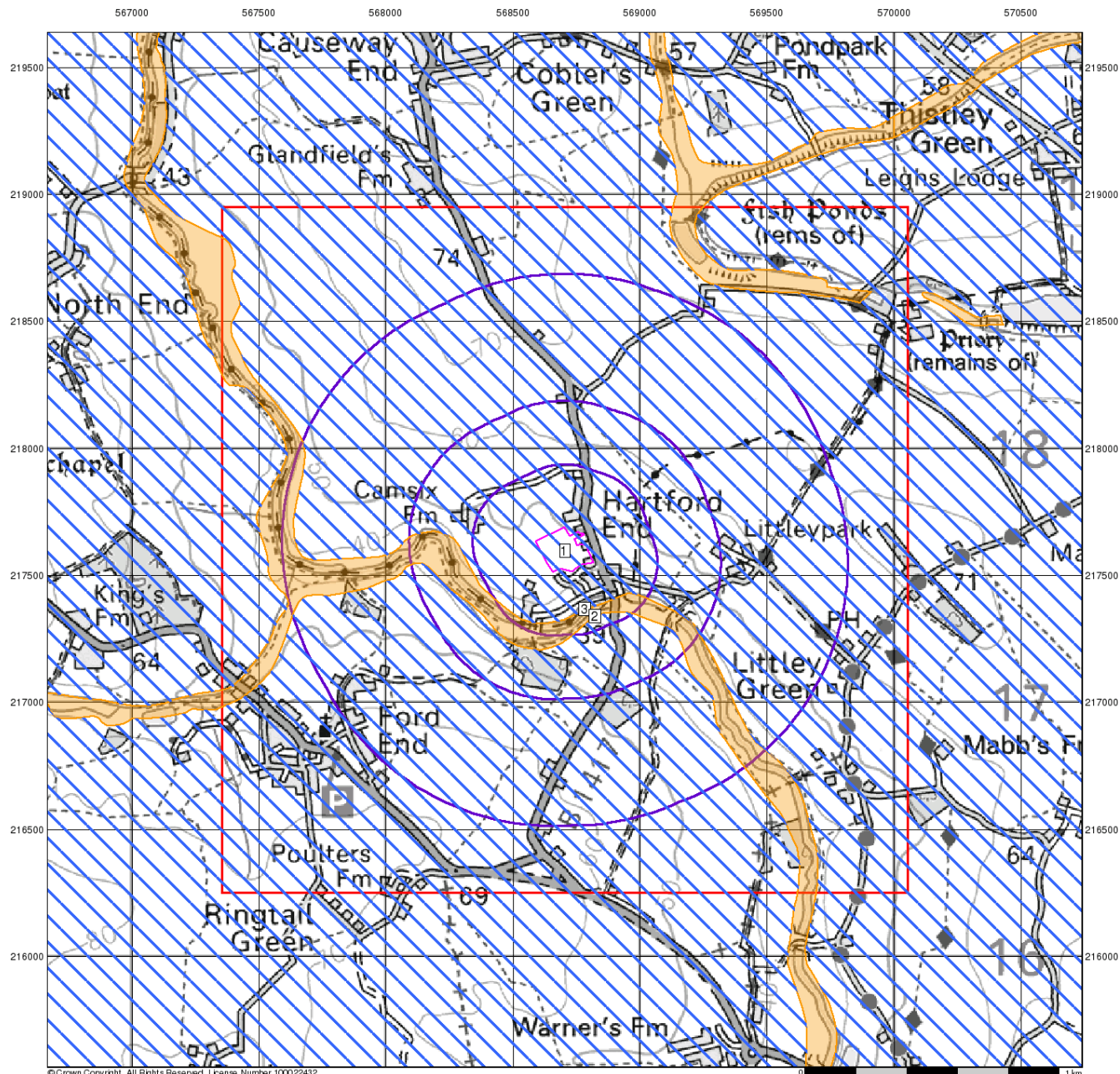
Site Details

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Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]





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## Ground Stability Data (1:50,000)

### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Potential for Compressible Ground Stability Hazards

- High
- Moderate
- Low
- Very Low

### Potential for Collapsible Ground Stability Hazards

- High
- Moderate
- Low
- Very Low

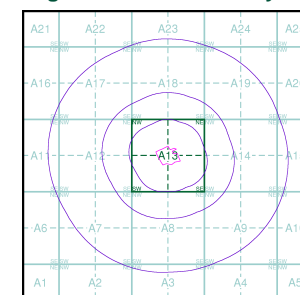
### Brine Pumping and Salt Mining

Brine Pumping Related Feature

Salt Mining Related Feature

- | Point | Polygon |
|-------|---------|
|       |         |
|       |         |

### Mining and Ground Stability - Slice A



### Order Details

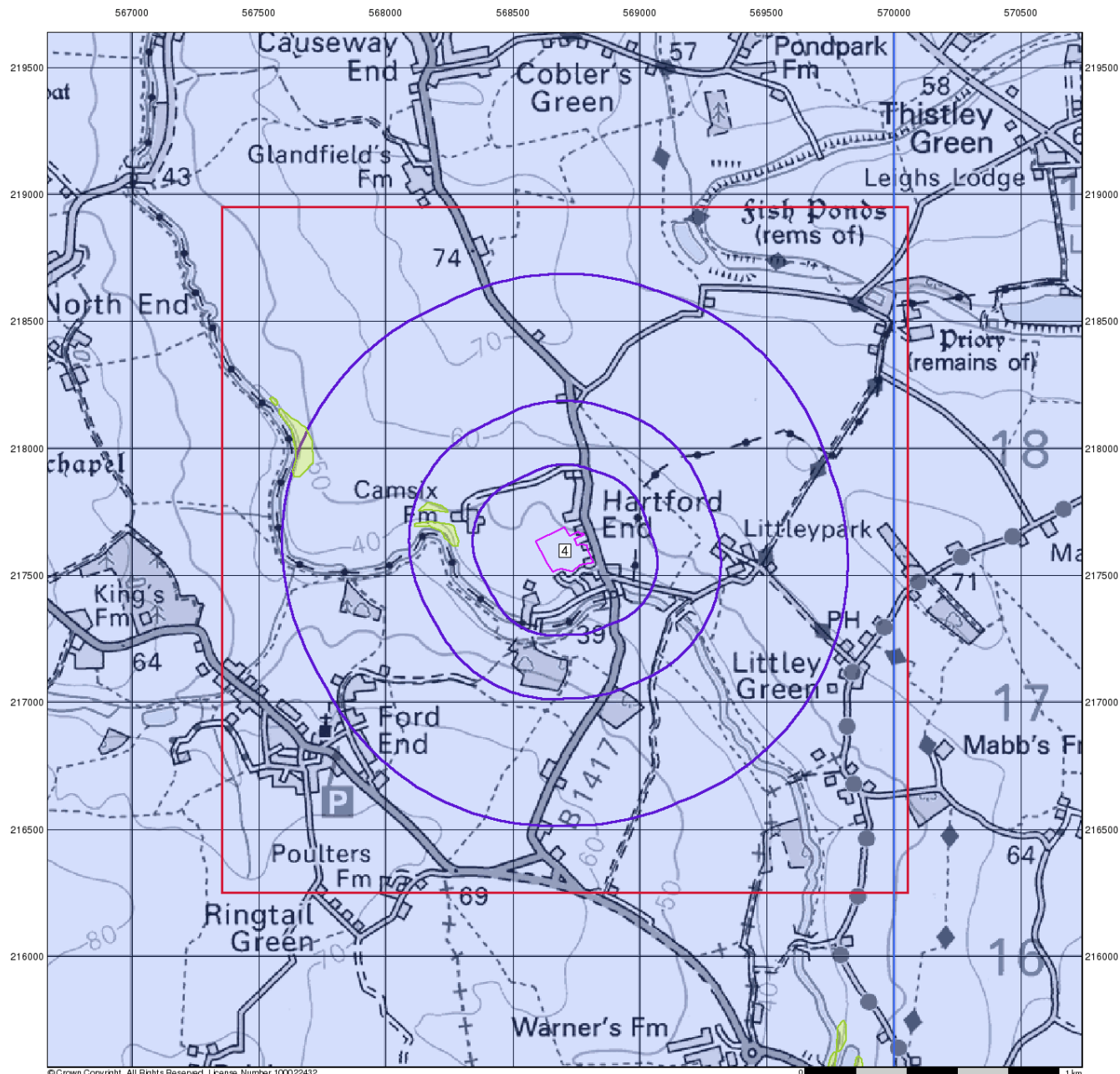
Order Number: 315600858\_1\_1  
 Customer Ref: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

### Site Details

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## Ground Stability Data (1:50,000)

### General

- ◊ Specified Site    ○ Specified Buffer(s)    X Bearing Reference Point
- Slice    8 Map ID

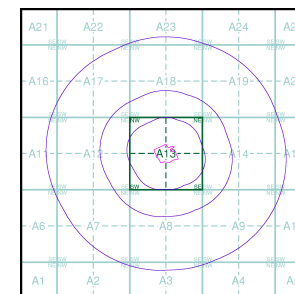
### Potential for Landslide Ground Stability Hazards

- High     Low
- Moderate     Very Low

### Potential for Ground Dissolution Stability Hazards

- High     Low
- Moderate     Very Low

### Mining and Ground Stability - Slice A



### Order Details

Order Number: 315600858\_1\_1  
 Customer Ref: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

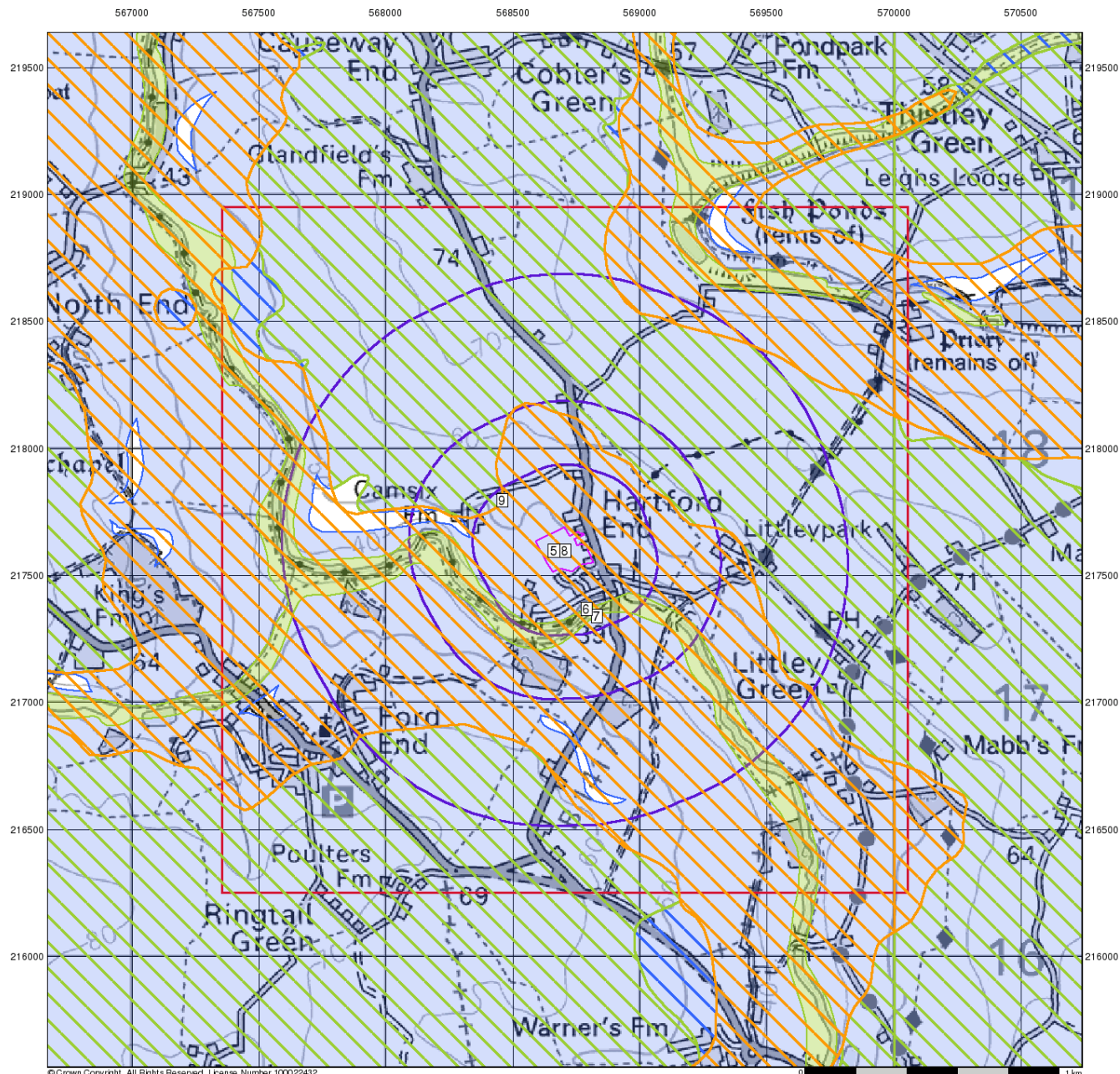
### Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX



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## Ground Stability Data (1:50,000)

### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

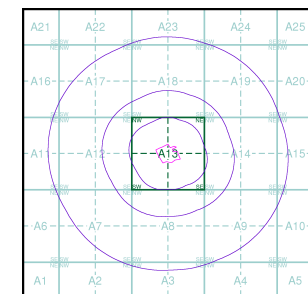
### Potential for Running Sand Ground Stability Hazards

- High
- Low
- Moderate
- Very Low

### Potential for Shrinking or Swelling Clay Ground Stability Hazards

- High
- Low
- Moderate
- Very Low

### Mining and Ground Stability - Slice A



### Order Details

Order Number: 315600858\_1\_1  
 Customer Ref: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
 Search Buffer (m): 1000

### Site Details

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 Web: [www.landmarkinfo.co.uk](http://www.landmarkinfo.co.uk)

# Historical Mapping Legends

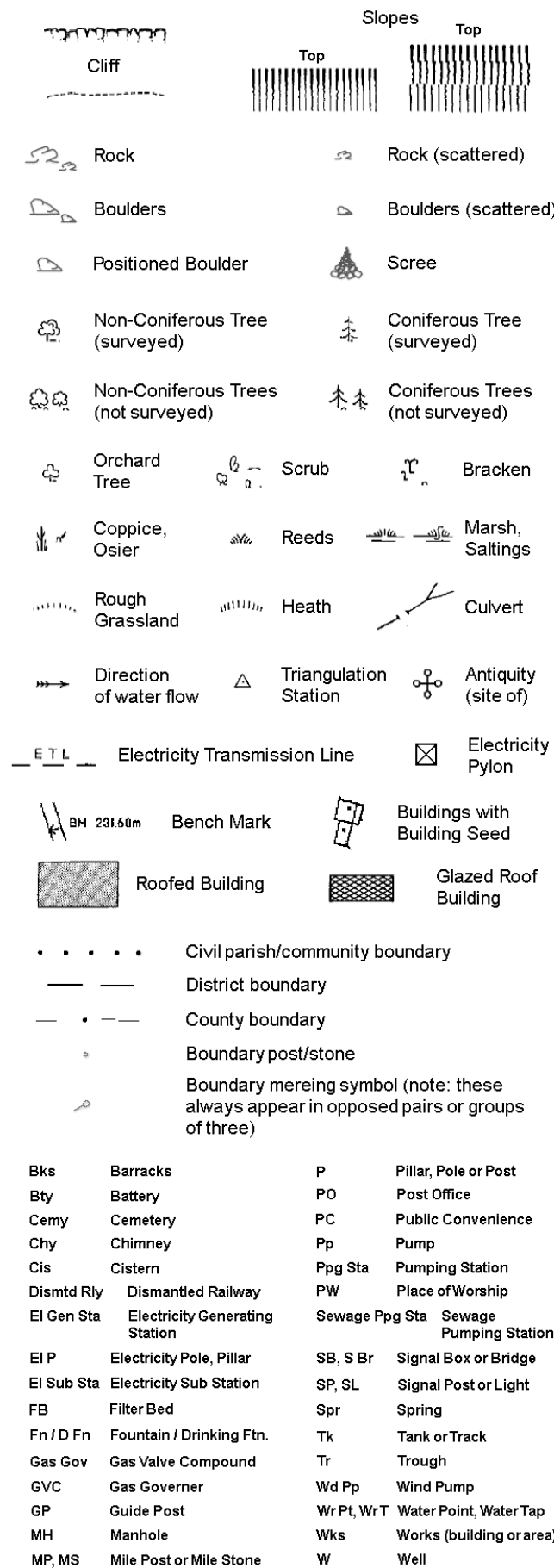
## Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



## Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



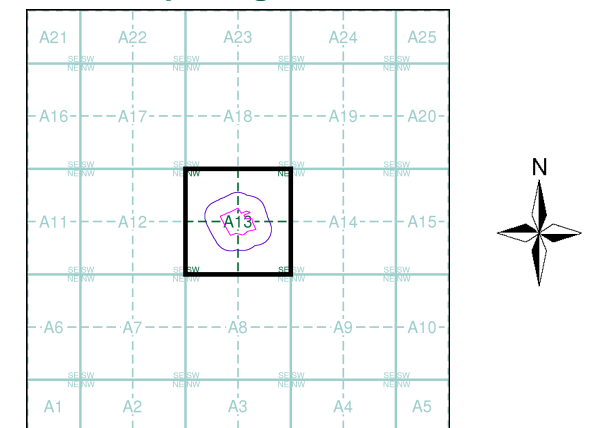
## Large-Scale National Grid Data 1:2,500 and 1:1,250



## Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Essex	1:2,500	1875	2
Essex	1:2,500	1897	3
Essex	1:2,500	1921	4
Ordnance Survey Plan	1:2,500	1953	5
Additional SIMs	1:2,500	1953	6
Additional SIMs	1:2,500	1985 - 1986	7
Large-Scale National Grid Data	1:2,500	1993	8
Historical Aerial Photography	1:2,500	1999	9

## Historical Map - Segment A13



## Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 100

## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX



Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]





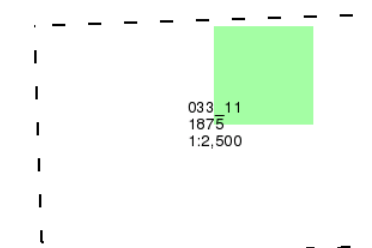
Essex

Published 1875

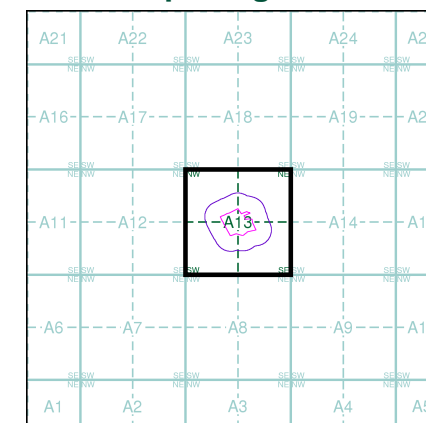
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

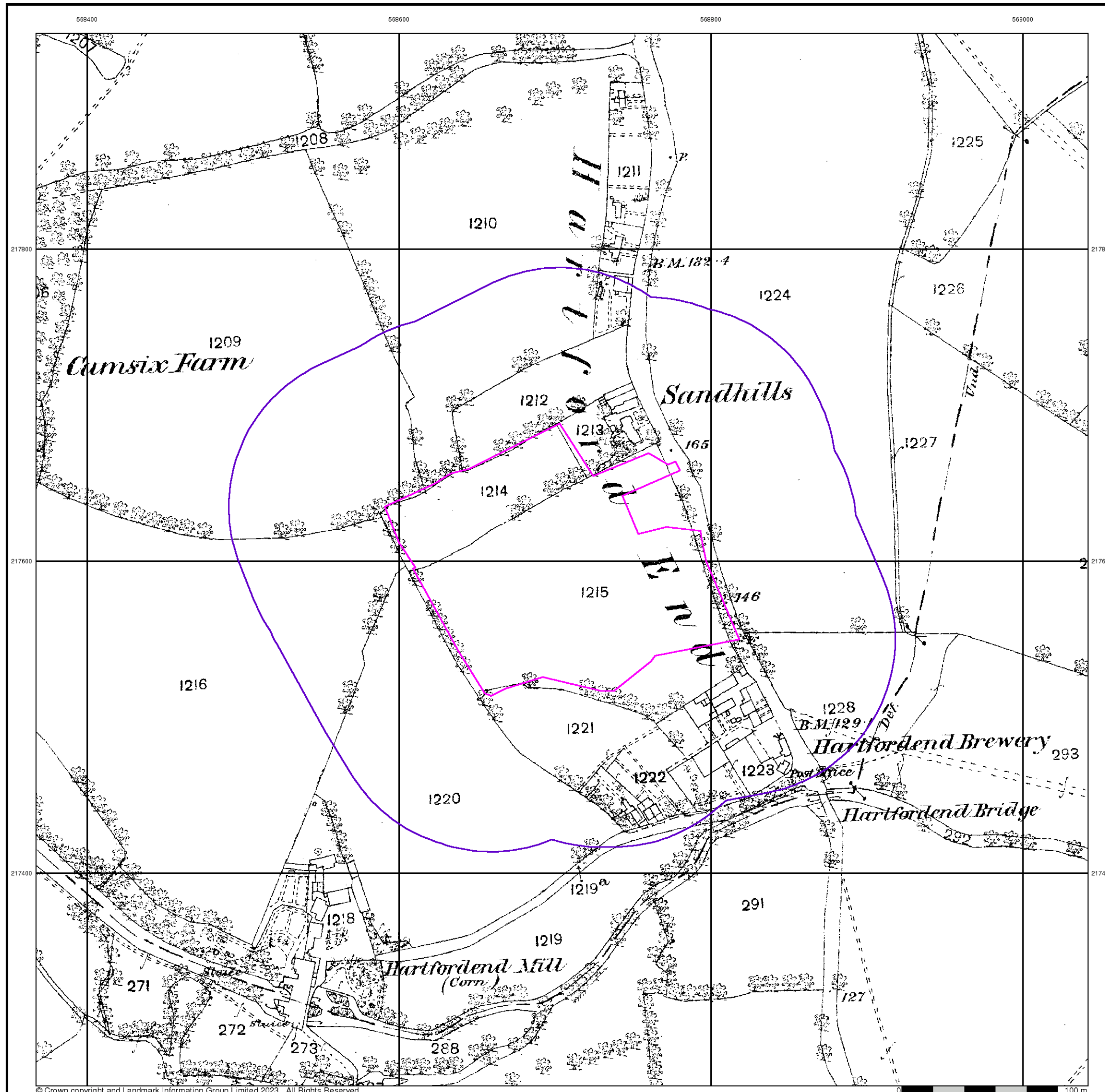
Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
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Site Area (Ha): 2.41  
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**Landmark**  
INFORMATION GROUP

Tel: 0844 844 9952  
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Web: [Redacted]





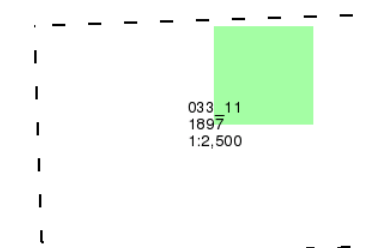
Essex

Published 1897

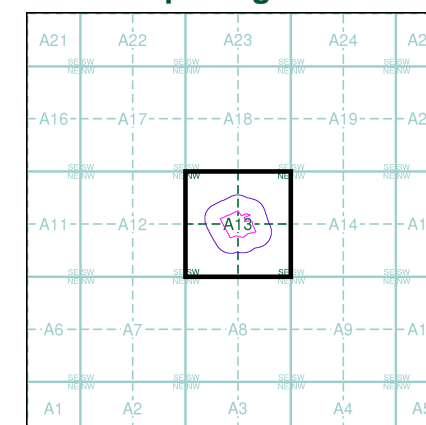
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

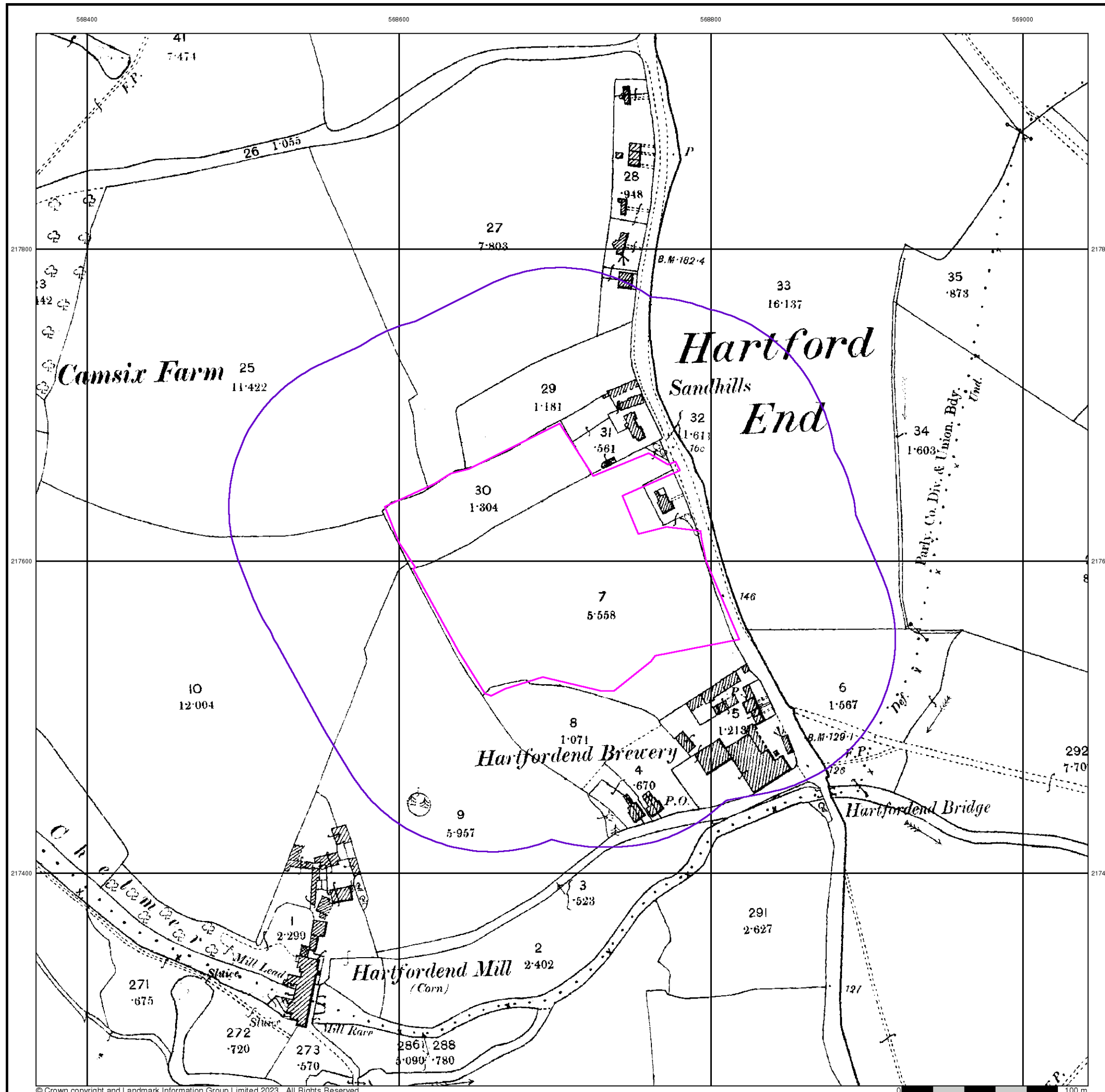
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Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 100

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**Landmark**  
INFORMATION GROUP

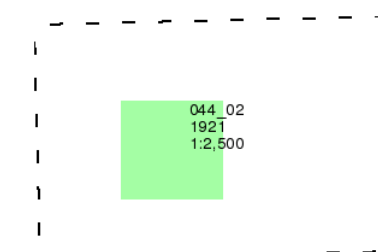
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Fax: 0844 844 9951  
Web: [Redacted]



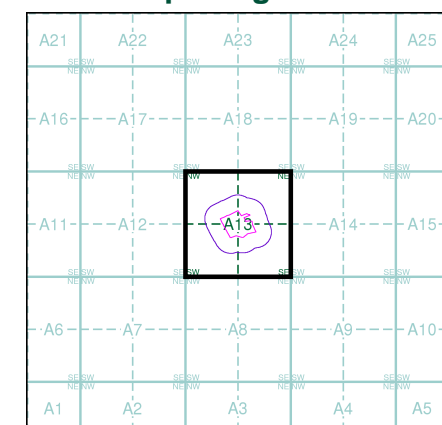


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)



## Historical Map - Segment A13



## Order Details

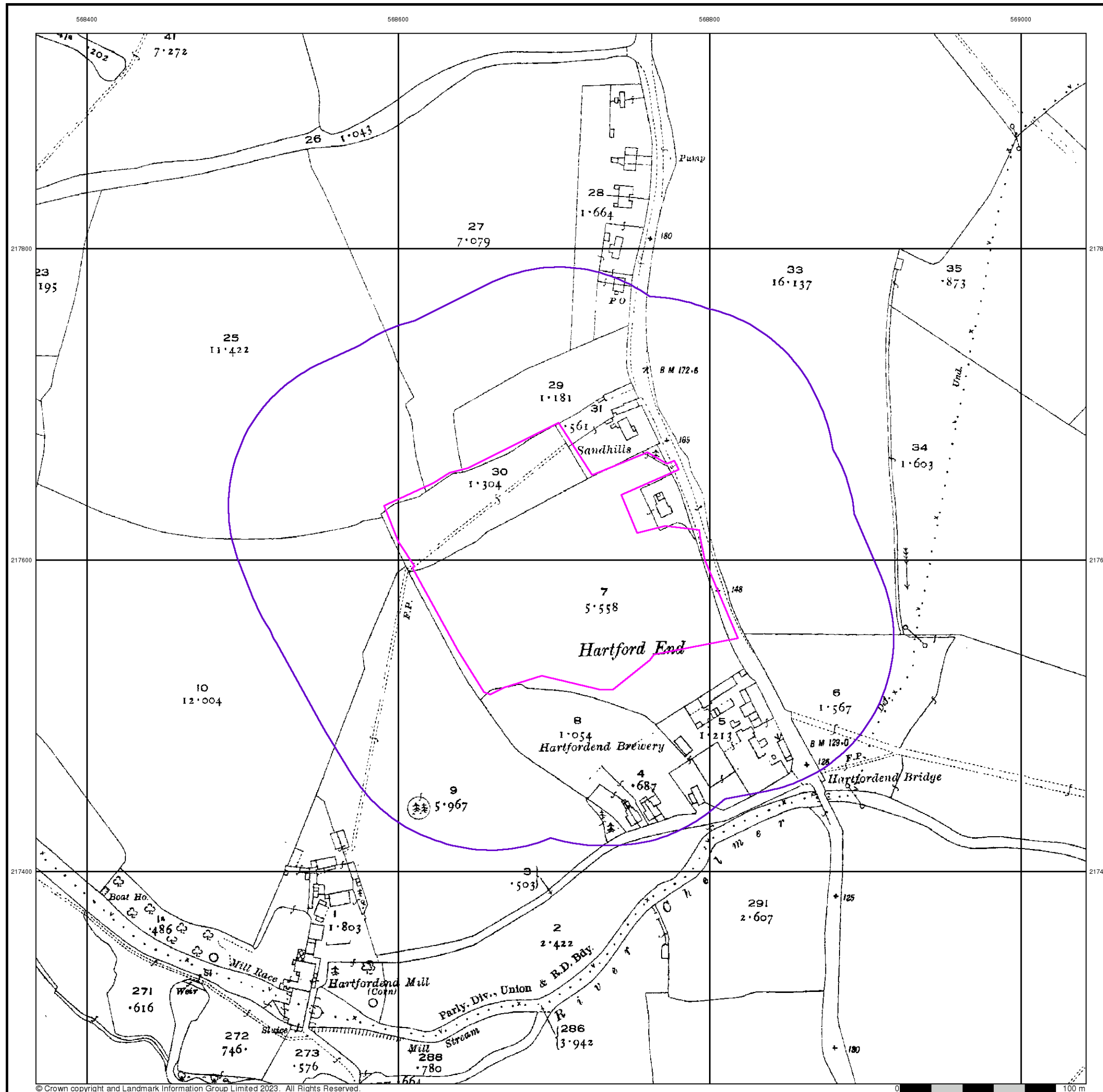
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Customer Ref:	2268
National Grid Reference:	568710, 217600
Slice:	A
Site Area (Ha):	2.41
Search Buffer (m):	100

## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

**Landmark**  
INFORMATION GROUP

Tel: 0844 844 9952  
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Web: [www.brexit.co.uk](http://www.brexit.co.uk)







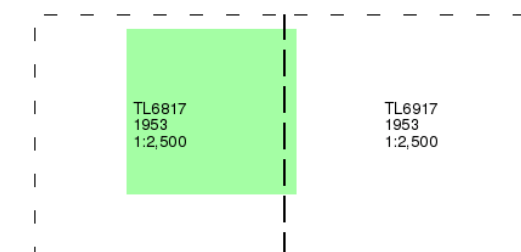
## Ordnance Survey Plan

Published 1953

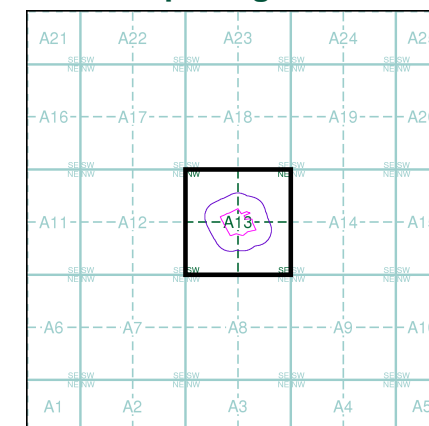
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

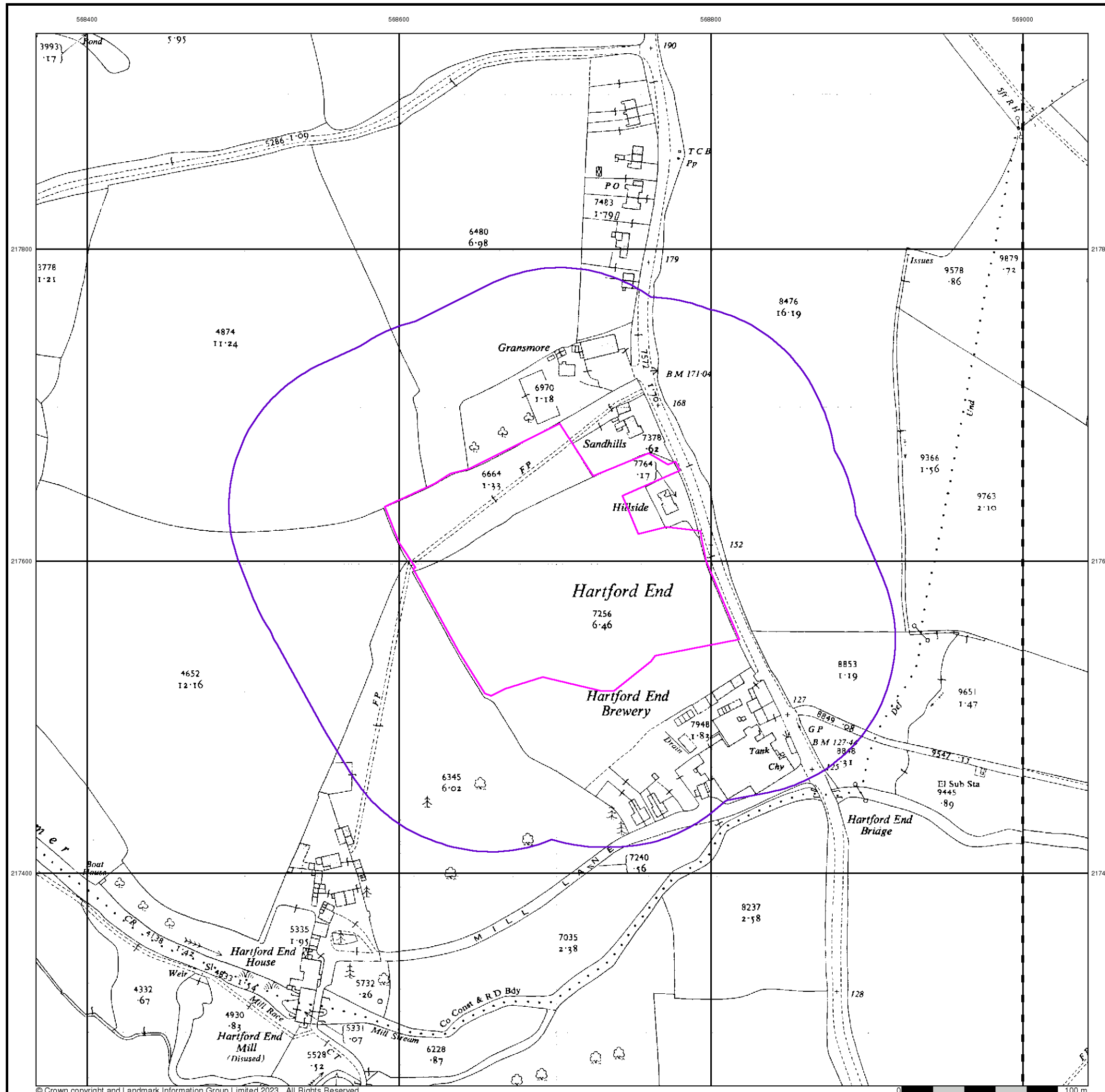
Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
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INFORMATION GROUP

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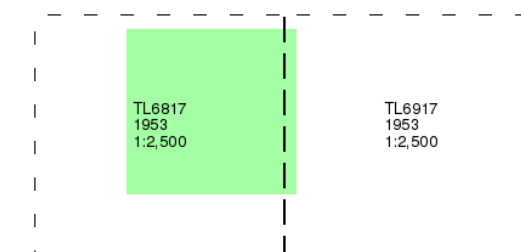
## Additional SIMs

Published 1953

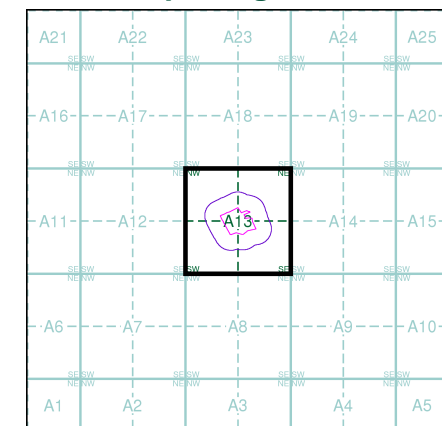
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

## Map Name(s) and Date(s)



## Historical Map - Segment A13



## Order Details

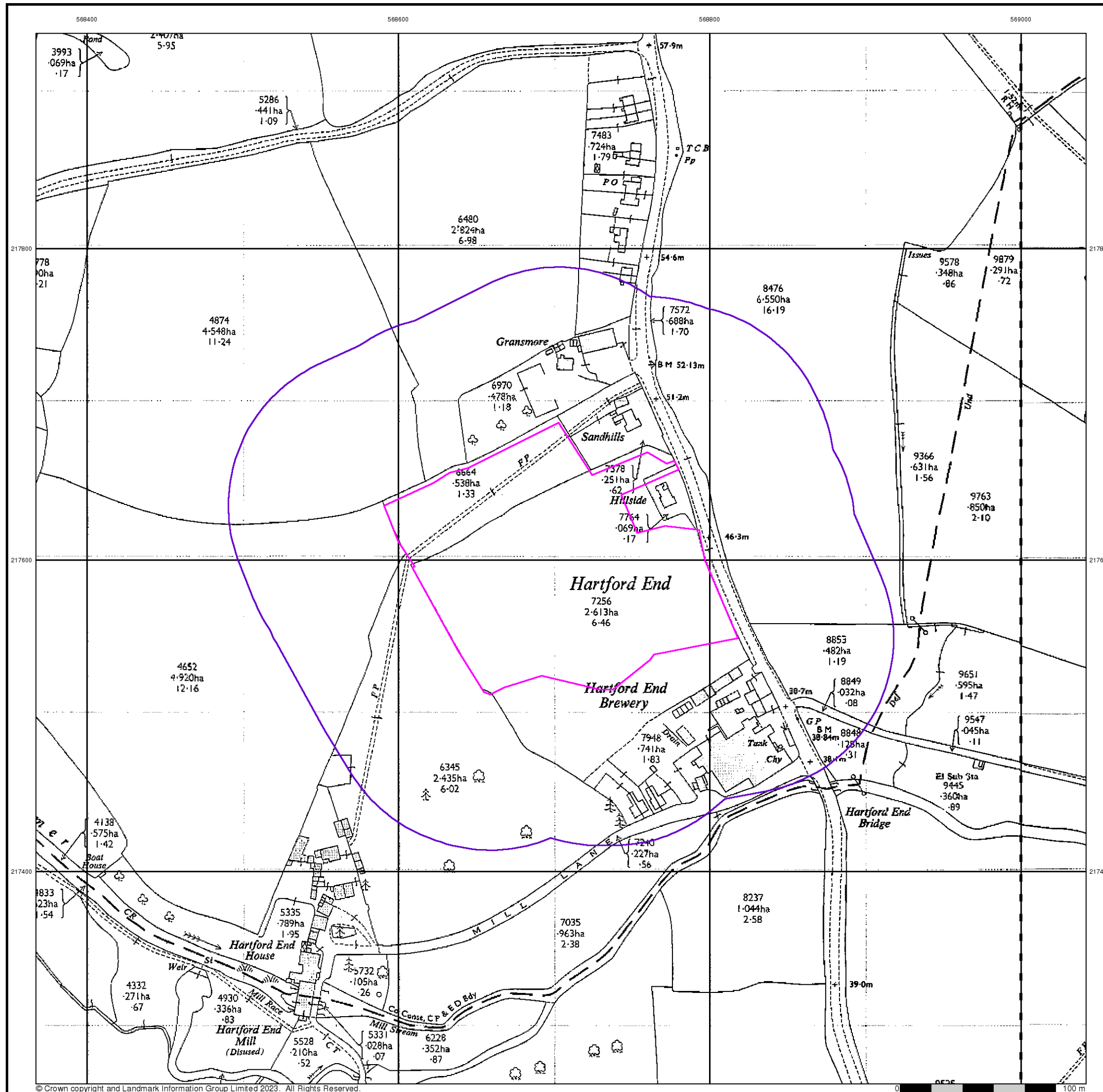
Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 100

## Site Details

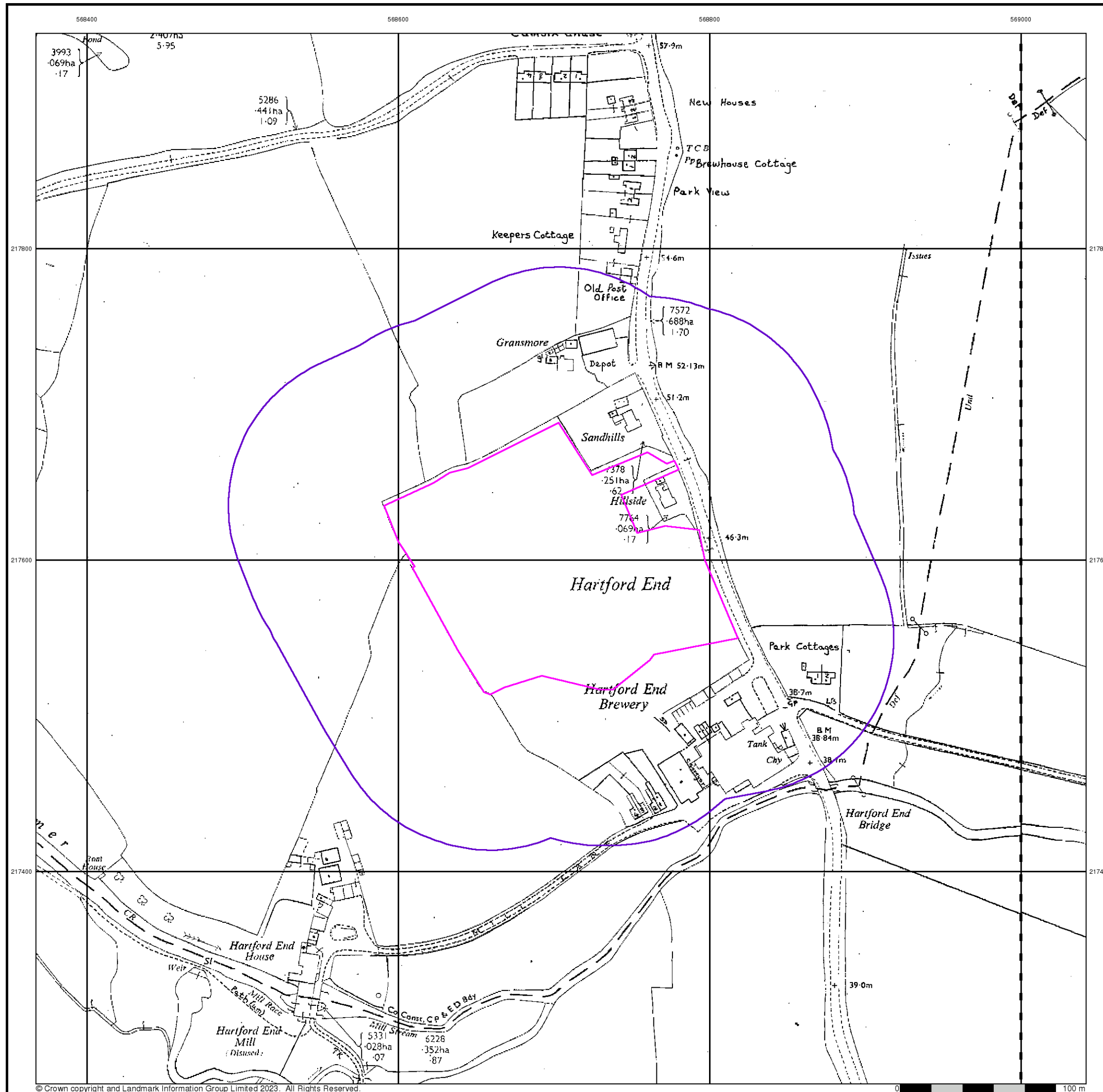
Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX



Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]







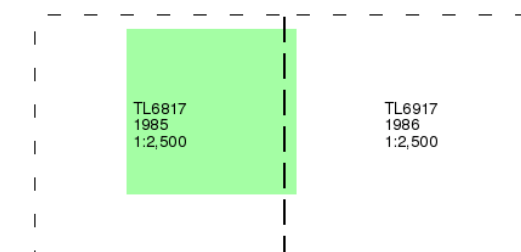
## Additional SIMs

Published 1985 - 1986

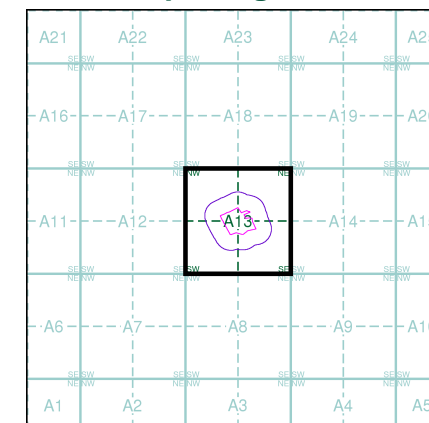
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

## Map Name(s) and Date(s)



## Historical Map - Segment A13



## Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 100

## Site Details

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**Landmark**  
INFORMATION GROUP

Tel: 0844 844 9952  
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Web: [Redacted]



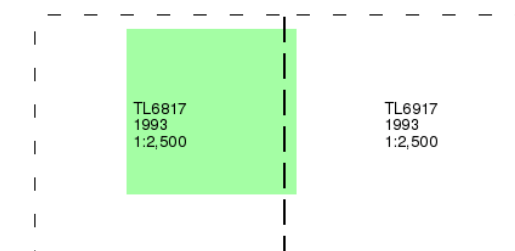
## Large-Scale National Grid Data

Published 1993

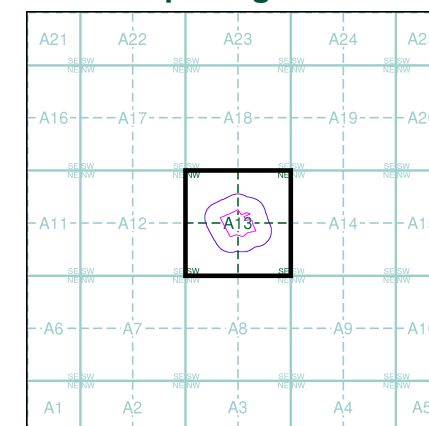
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

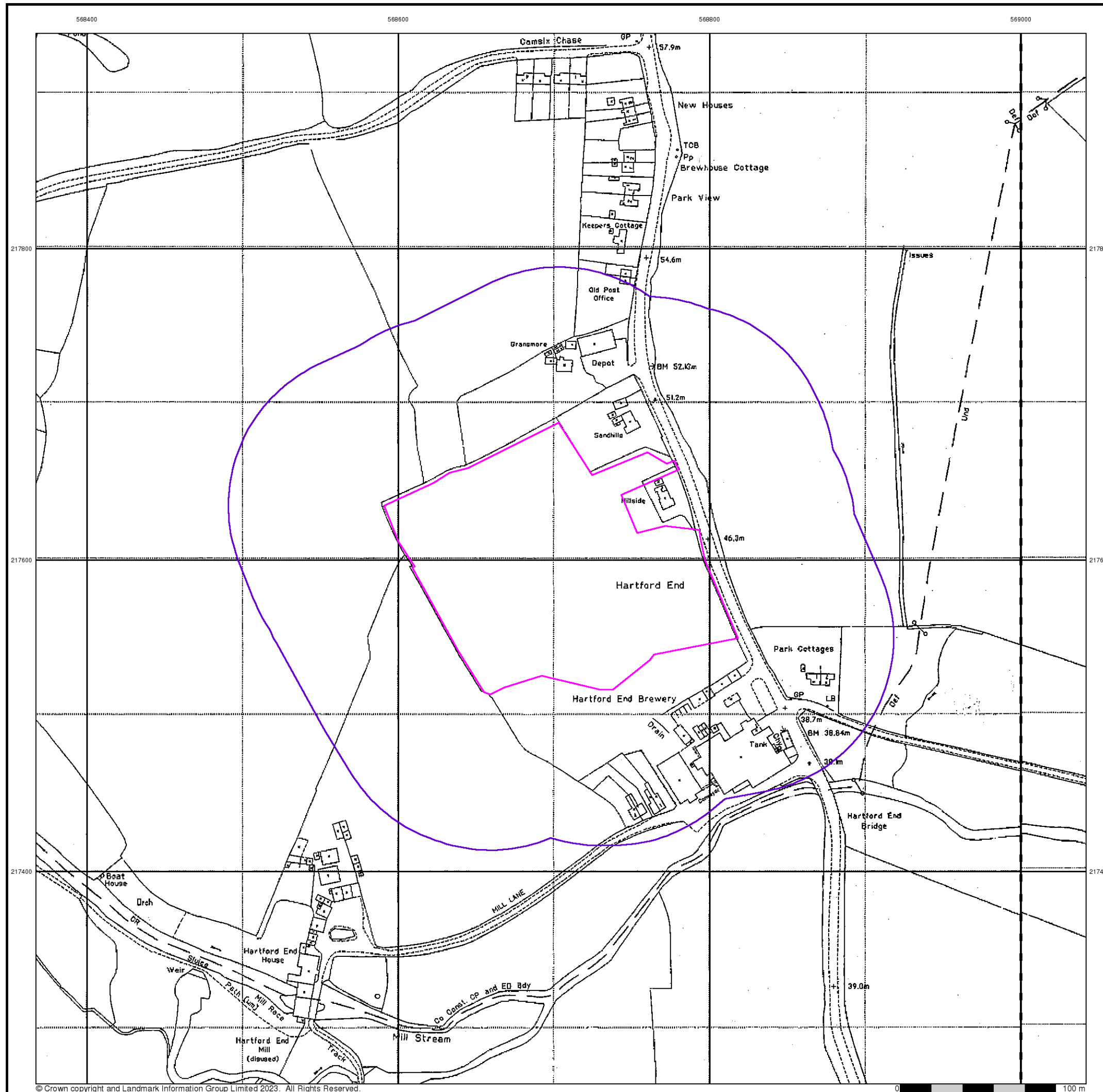
Order Number: 315600858\_1\_1  
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Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 100

### Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

**Landmark**  
INFORMATION GROUP

Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]





568400

568600

568800

569000

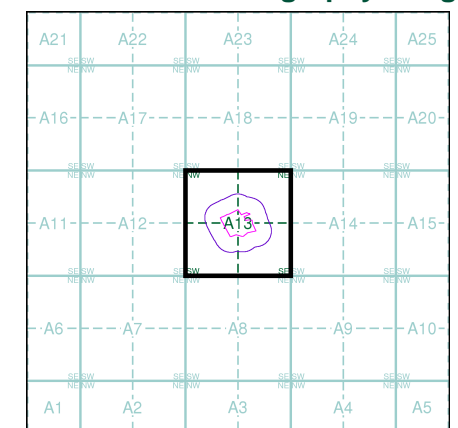


## Historical Aerial Photography

**Published 1999**

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

### Historical Aerial Photography - Segment A13



### Order Details

Order Number: 315600858\_1\_1  
 Customer Ref: 2268  
 National Grid Reference: 568710, 217600  
 Slice: A  
 Site Area (Ha): 2.41  
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### Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

**Landmark**  
 INFORMATION GROUP

Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: [Redacted]





# Historical Mapping Legends

## Ordnance Survey County Series 1:10,560

	Gravel Pit		Sand Pit		Other Pits
	Quarry		Shingle		Orchard
	Osiers		Reeds		Marsh
	Mixed Wood		Deciduous		Brushwood
	Fir		Furze		Rough Pasture
	Arrow denotes flow of water		Trigonometrical Station		
	Site of Antiquities		Bench Mark		
	Pump, Guide Post, Signal Post		Well, Spring, Boundary Post		
	•285 Surface Level				
	Sketched Contour		Instrumental Contour		
	Main Roads		Minor Roads		
	Sunken Road		Raised Road		
	Road over Railway		Railway over River		
	Railway over Road		Level Crossing		
	Road over River or Canal		Road over Stream		
	Road over Stream				
	County Boundary (Geographical)				
	County & Civil Parish Boundary				
	Administrative County & Civil Parish Boundary				
	County Borough Boundary (England)				
	County Burgh Boundary (Scotland)				
	Rural District Boundary				
	Civil Parish Boundary				

## Ordnance Survey Plan 1:10,000

	Chalk Pit, Clay Pit or Quarry		Gravel Pit
	Sand Pit		Disused Pit or Quarry
	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
	Coniferous Trees		Non-Coniferous Trees
	Orchard		Scrub
	Bracken		Heath
	Marsh		Reeds
	Building		Glasshouse
	Sloping Masonry		Pylon
	Cutting		Embankment
	Road Under		Road Over
	Level Crossing		Foot Bridge
	Standard Gauge Multiple Track		Standard Gauge Single Track
	Siding, Tramway or Mineral Line		Narrow Gauge
	Geographical County		Administrative County, County Borough or County of City
	Municipal Borough, Urban or Rural District, Burgh or District Council		Borough, Burgh or County Constituency
	Civil Parish		
	BP, BS Boundary Post or Stone		Police Station
	Church		Post Office
	Club House		Public Convenience
	Fire Engine Station		Public House
	Foot Bridge		Signal Box
	Fountain		Spring
	Guide Post		Telephone Call Box
	Mile Post		Telephone Call Post
	Mile Stone		Well

## 1:10,000 Raster Mapping

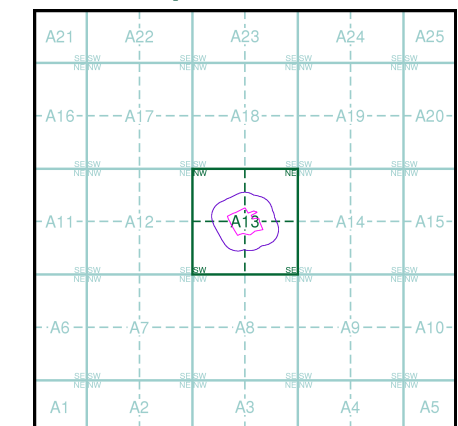
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
	Area of wooded vegetation		Non-coniferous trees
	Non-coniferous trees (scattered)		Coniferous trees
	Coniferous trees (scattered)		Positioned tree
	Orchard		Coppice or Osiers
	Rough Grassland		Heath
	Scrub		Marsh, Salt Marsh or Reeds
	Water feature		Flow arrows
	Mean high water (springs)		Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
	Bench mark (where shown)		Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare stack or lighting tower
	Site of (antiquity)		Glasshouse
	General Building		Important Building



## Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Essex	1:10,560	1881	2
Essex	1:10,560	1897 - 1898	3
Essex	1:10,560	1923 - 1924	4
Historical Aerial Photography	1:10,560	1947	5
Essex	1:10,560	1950 - 1951	6
Ordnance Survey Plan	1:10,000	1955	7
Ordnance Survey Plan	1:10,000	1979	8
10K Raster Mapping	1:10,000	1999	9
10K Raster Mapping	1:10,000	2006	10
VectorMap Local	1:10,000	2023	11

## Historical Map - Slice A



## Order Details

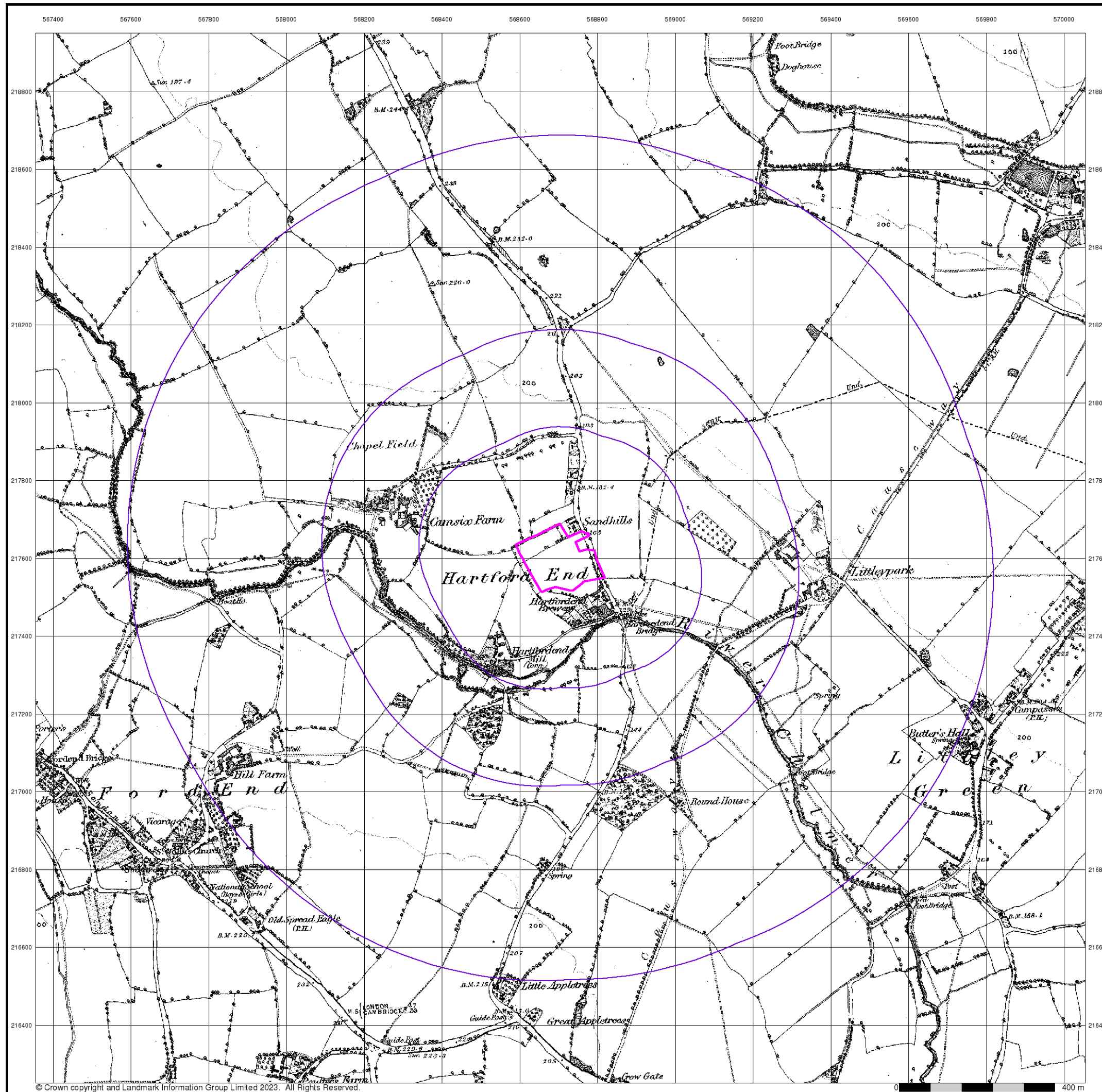
Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

**Landmark**  
INFORMATION GROUP

Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]



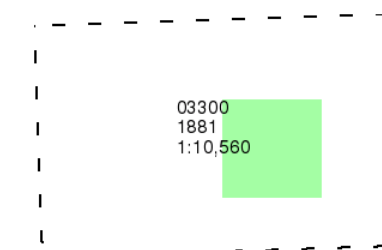
Essex

Published 1881

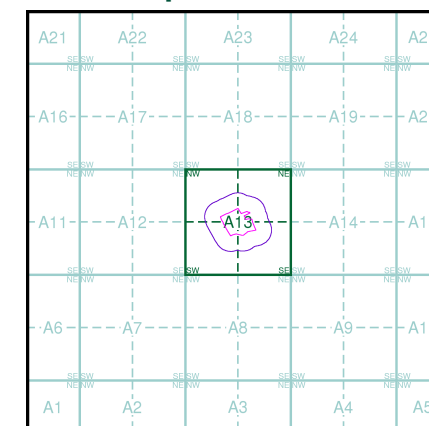
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

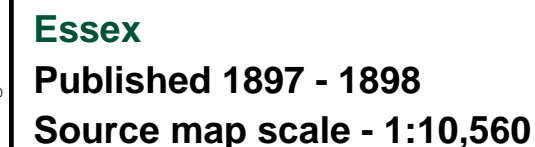
Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

Landmark  
INFORMATION GROUP

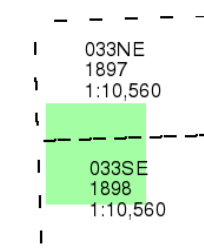
Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]



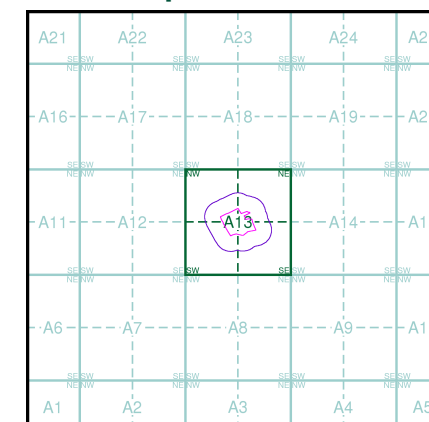


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## Historical Map - Slice A



## Order Details

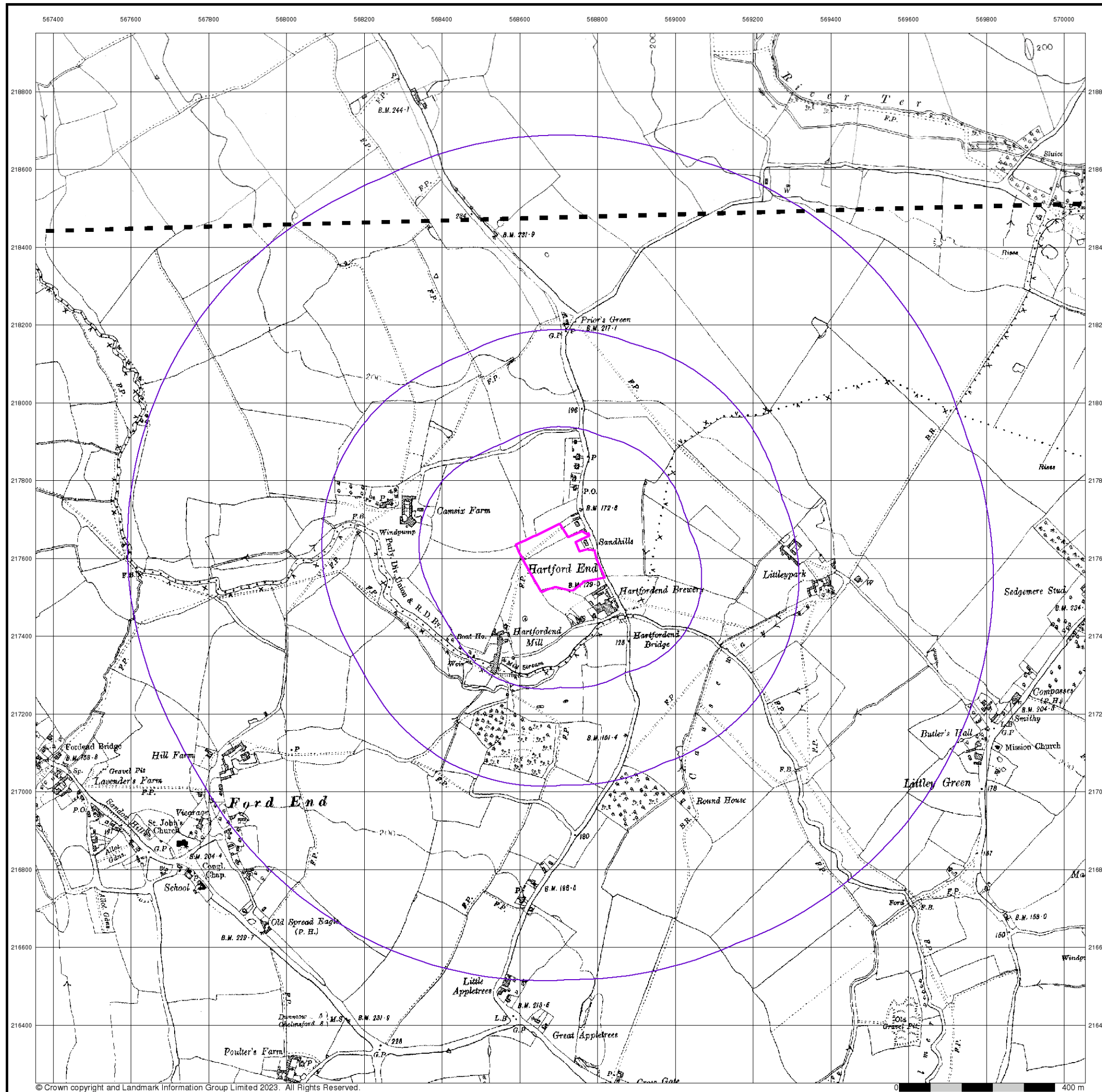
Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
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Tel: 0844 844 9952  
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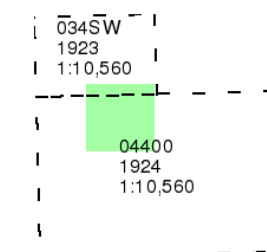
## Essex

Published 1923 - 1924

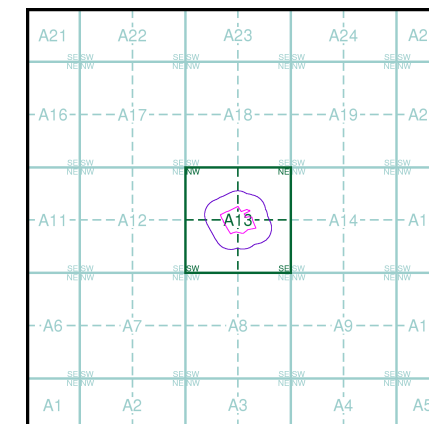
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

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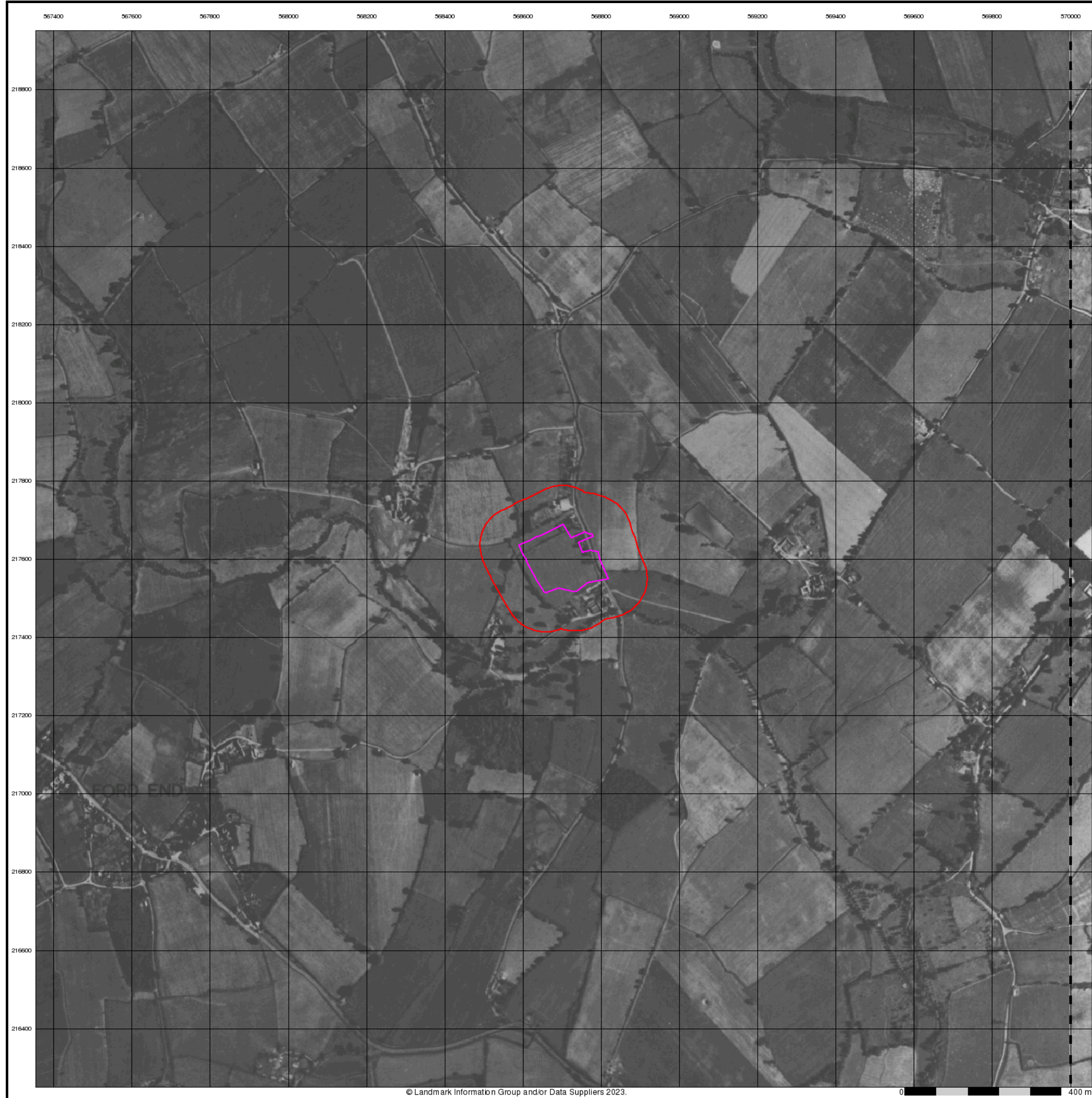
## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX



Tel: 0844 844 9952  
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Web: [Redacted]





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0 400 m



Historical Aerial Photography

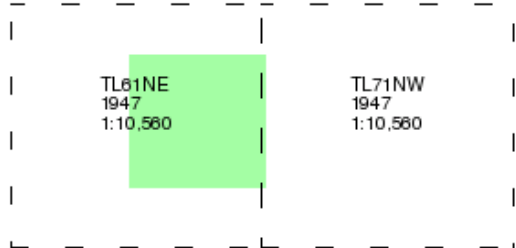
Published 1947

Source map scale - 1:10,560

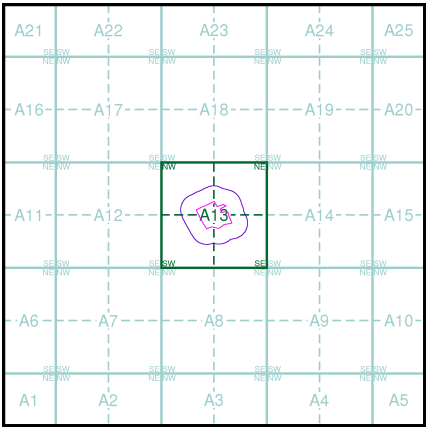
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

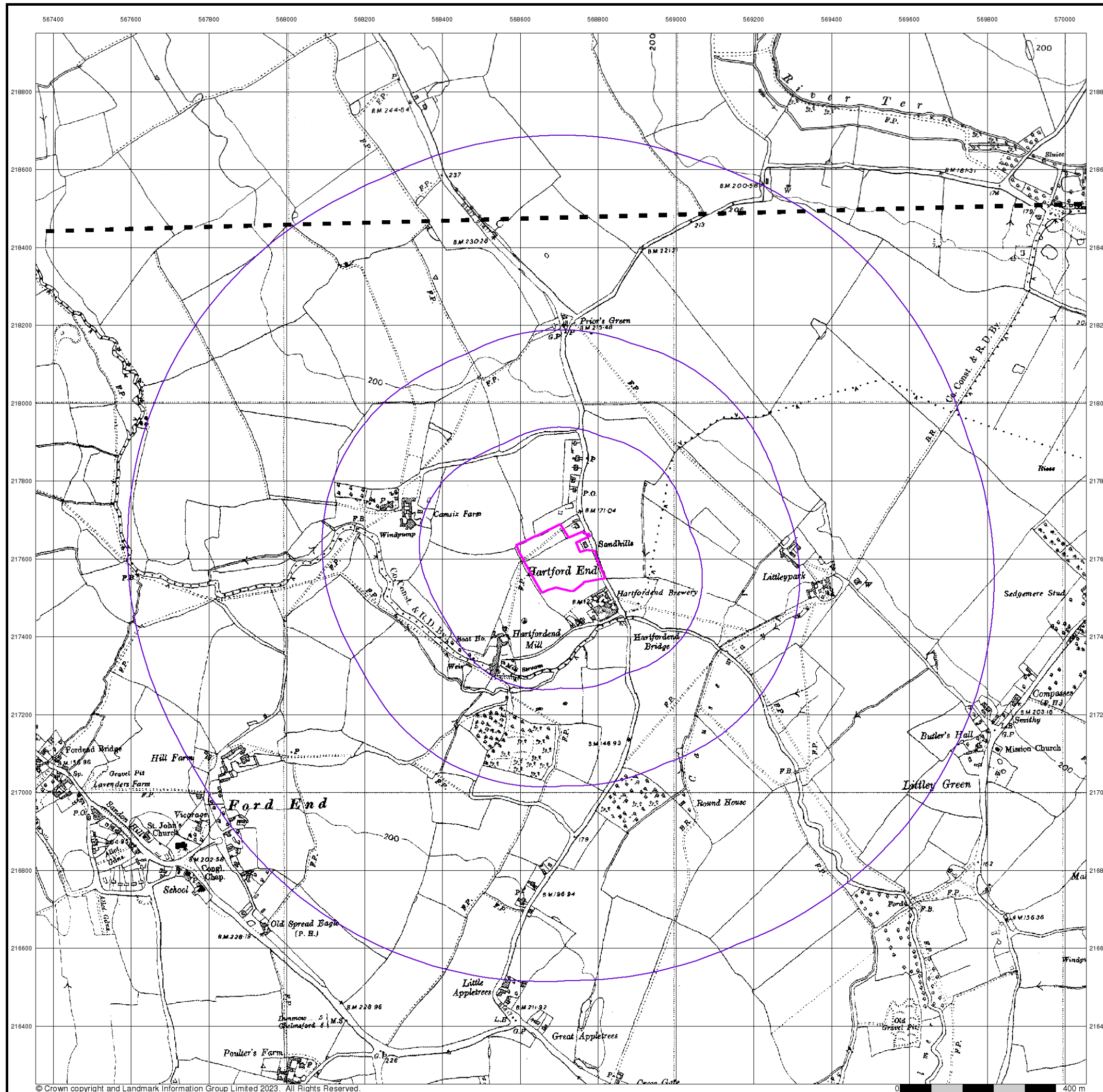
Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX



Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]





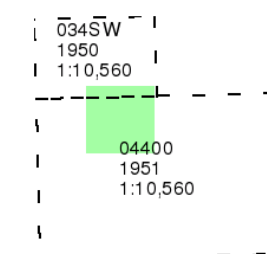
## Essex

Published 1950 - 1951

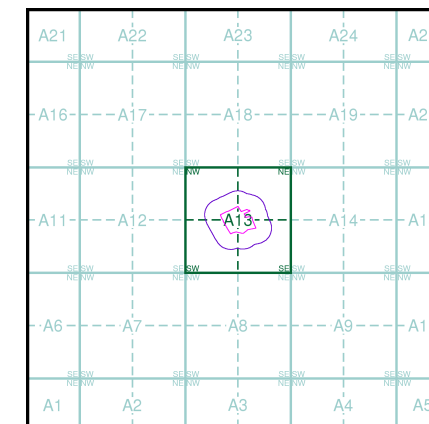
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

## Map Name(s) and Date(s)



## Historical Map - Slice A



## Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
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Site Area (Ha): 2.41  
Search Buffer (m): 1000

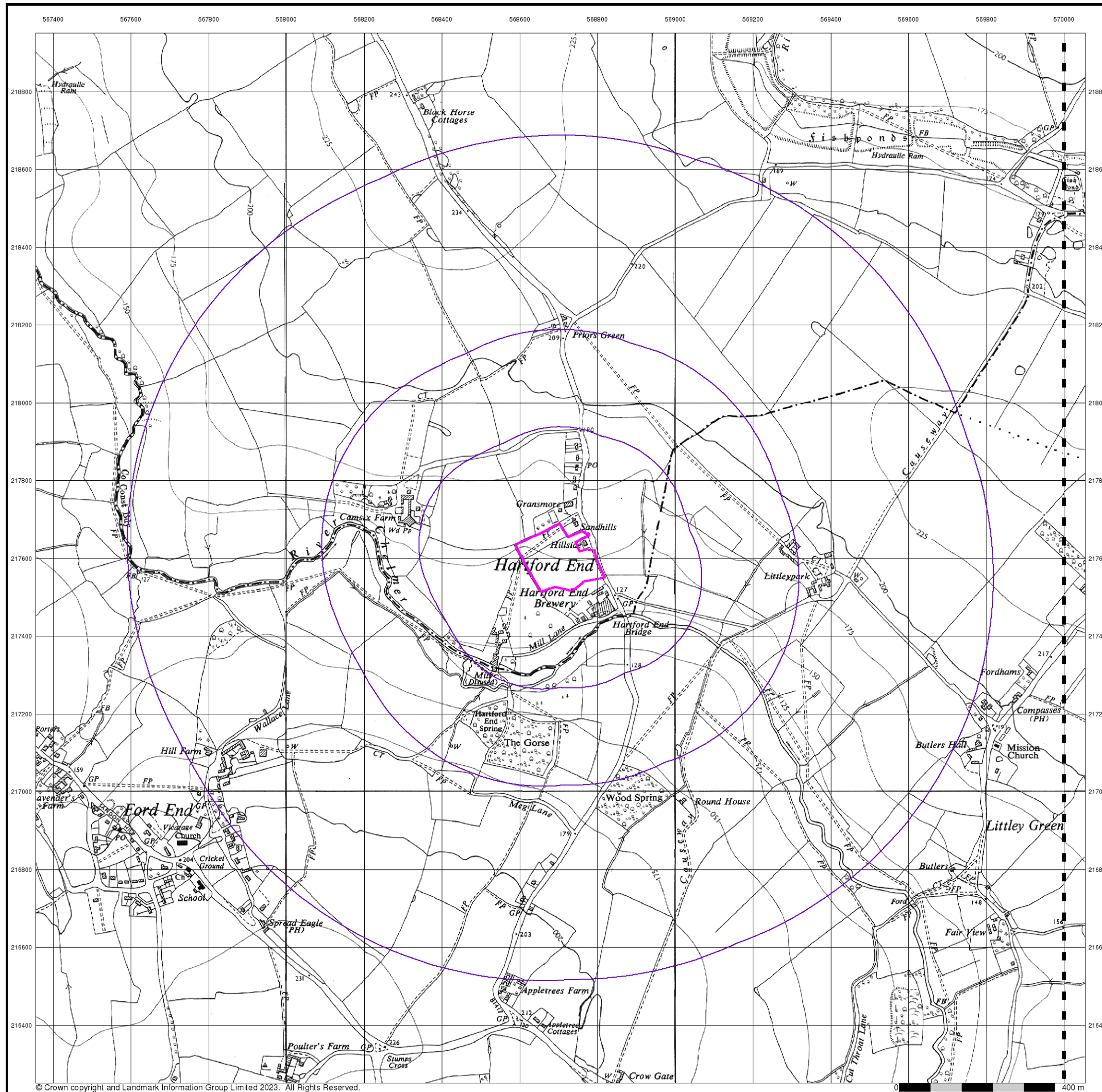
## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX

**Landmark**  
INFORMATION GROUP

Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]





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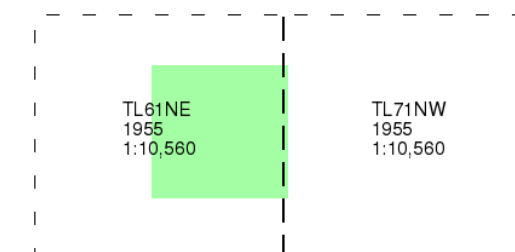
## Ordnance Survey Plan

Published 1955

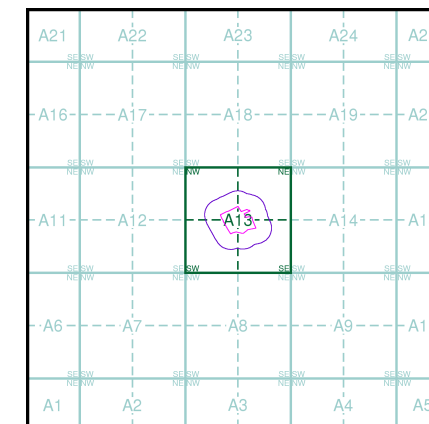
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

## Map Name(s) and Date(s)



## Historical Map - Slice A



## Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

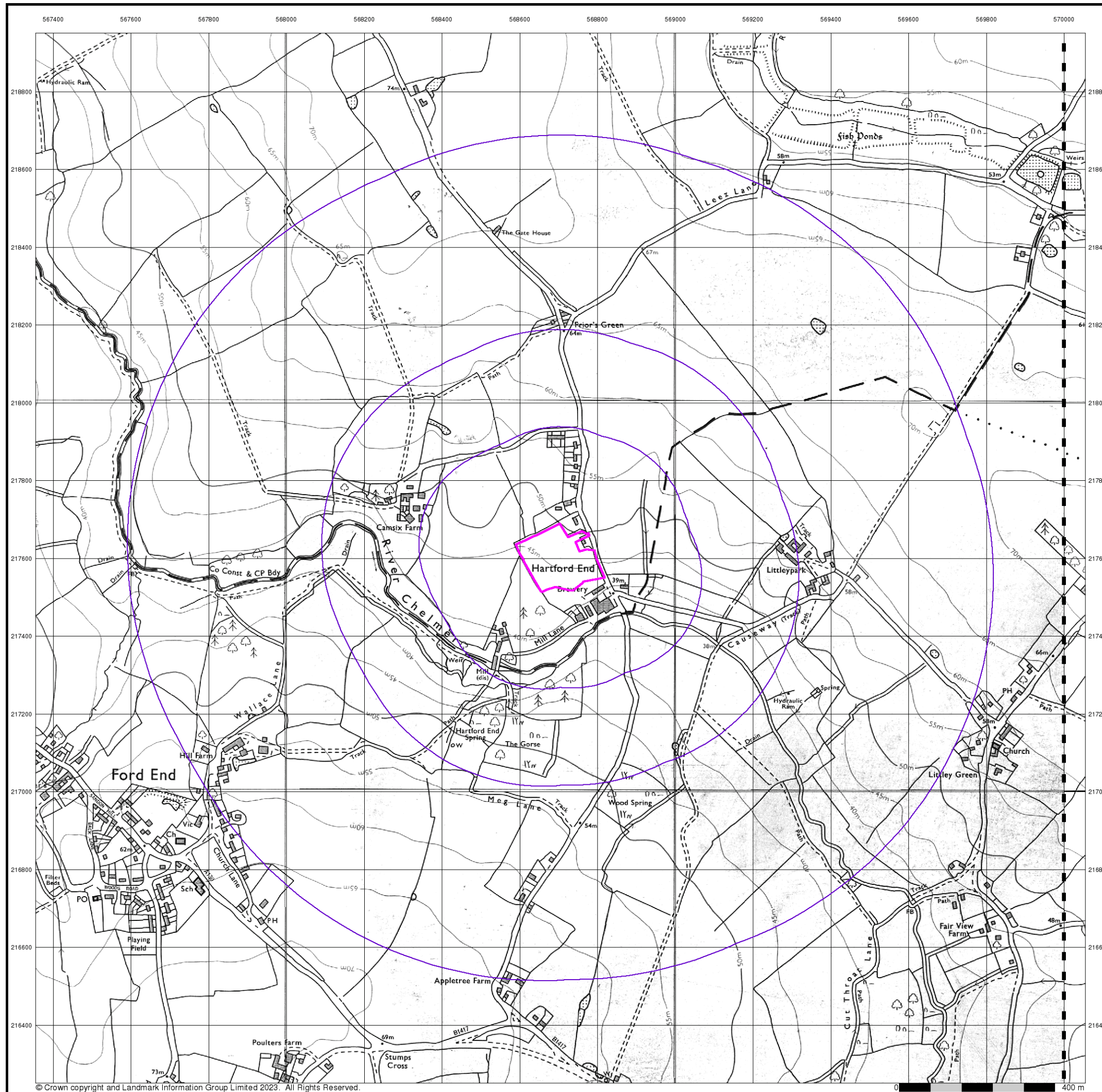
## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX



Tel: 0844 844 9952  
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Web: [Redacted]





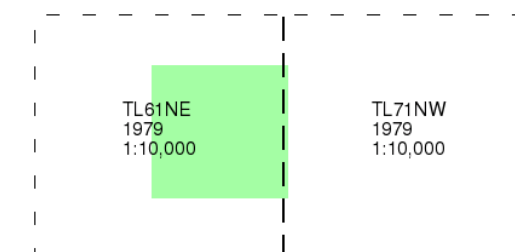
## Ordnance Survey Plan

Published 1979

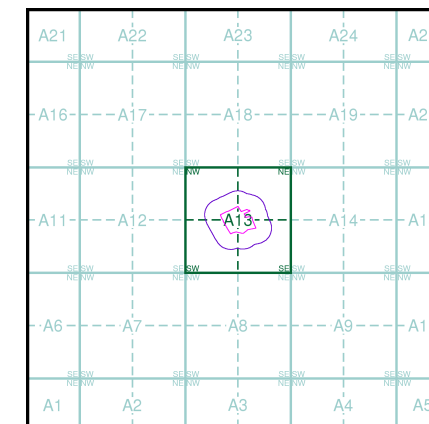
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

## Map Name(s) and Date(s)



## Historical Map - Slice A



## Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

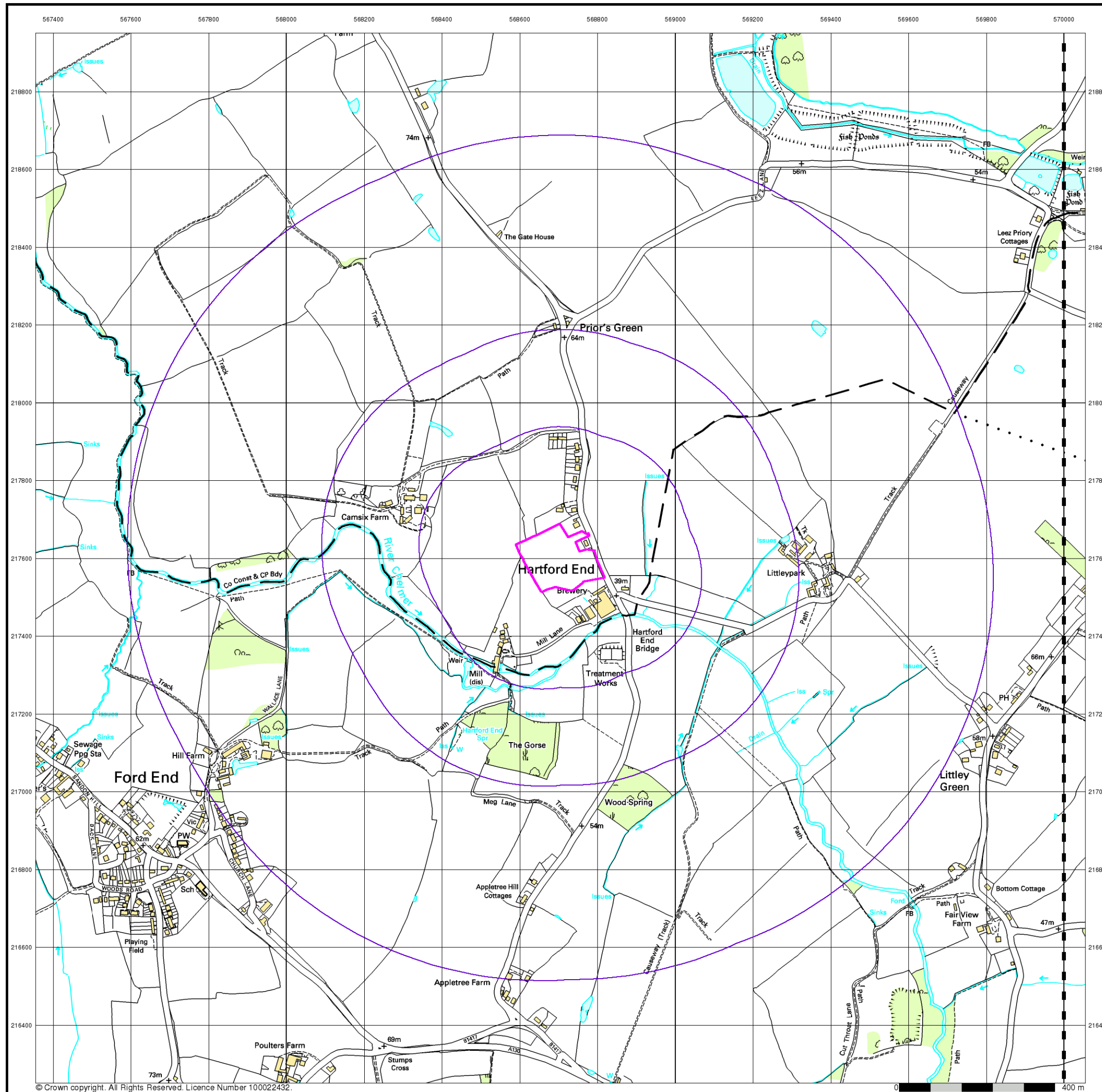
## Site Details

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Tel: 0844 844 9952  
Fax: 0844 844 9951  
Web: [Redacted]





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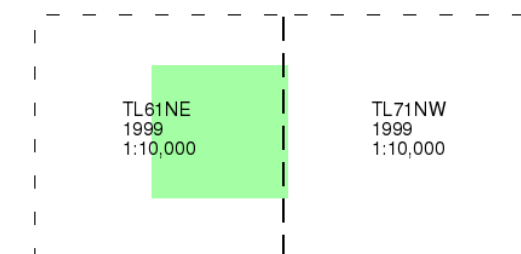
## 10k Raster Mapping

Published 1999

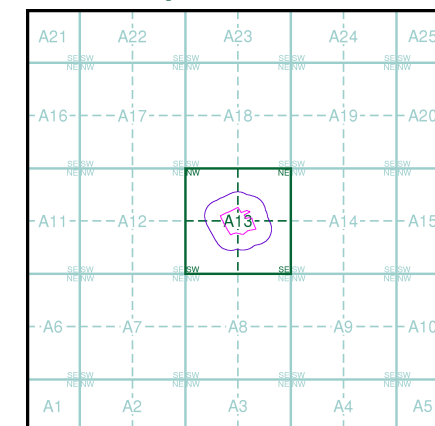
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

### Map Name(s) and Date(s)



### Historical Map - Slice A



### Order Details

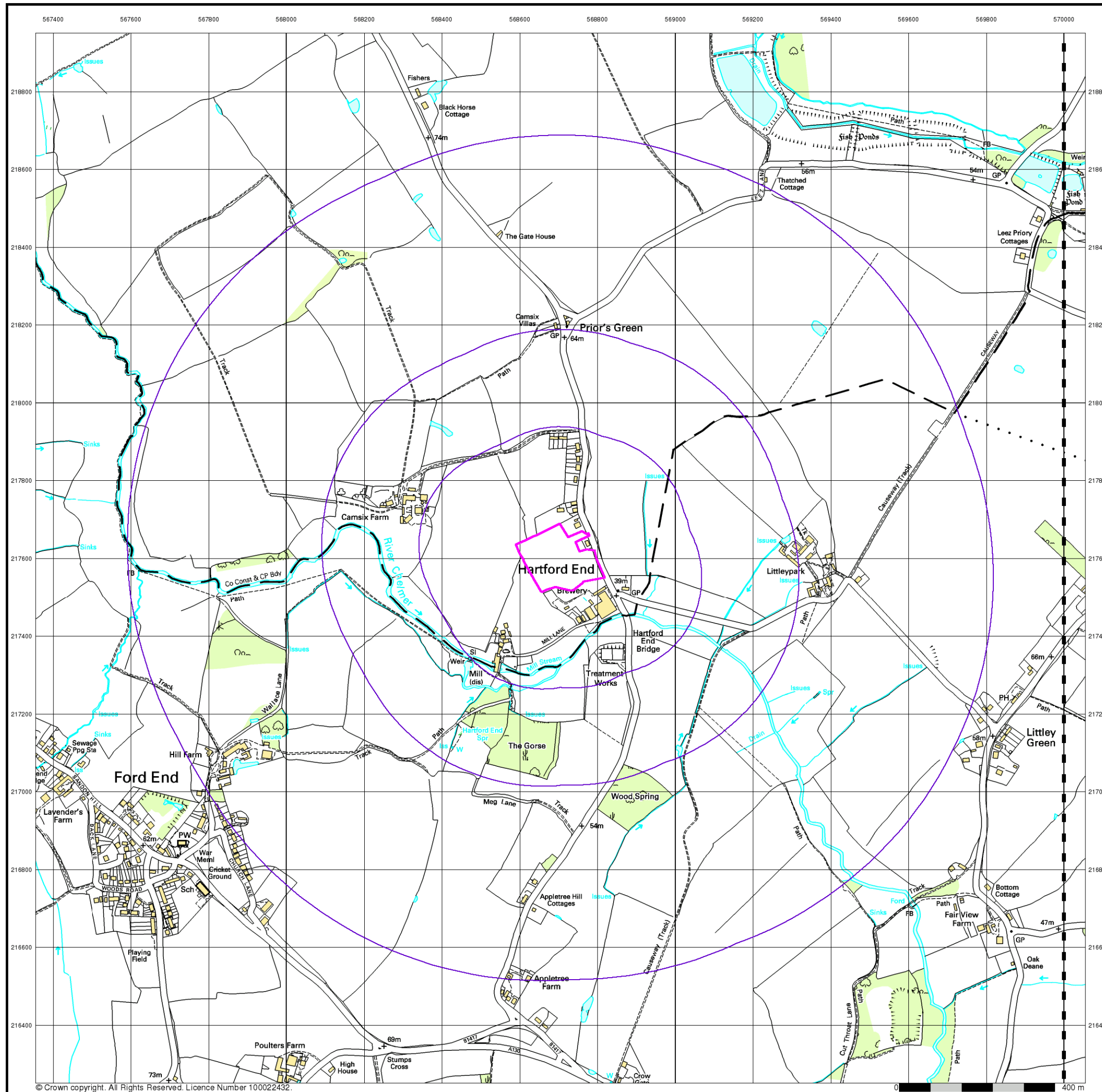
Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

### Site Details

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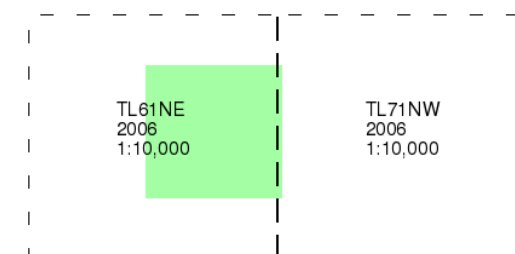
## 10k Raster Mapping

Published 2006

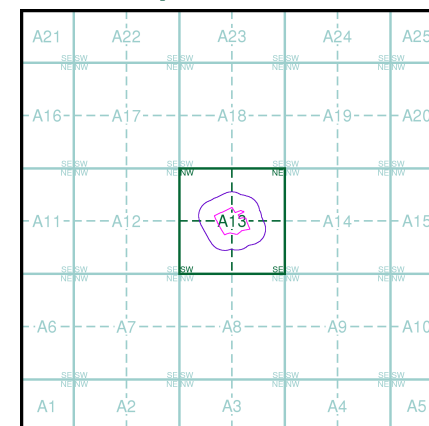
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

### Map Name(s) and Date(s)



### Historical Map - Slice A



### Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

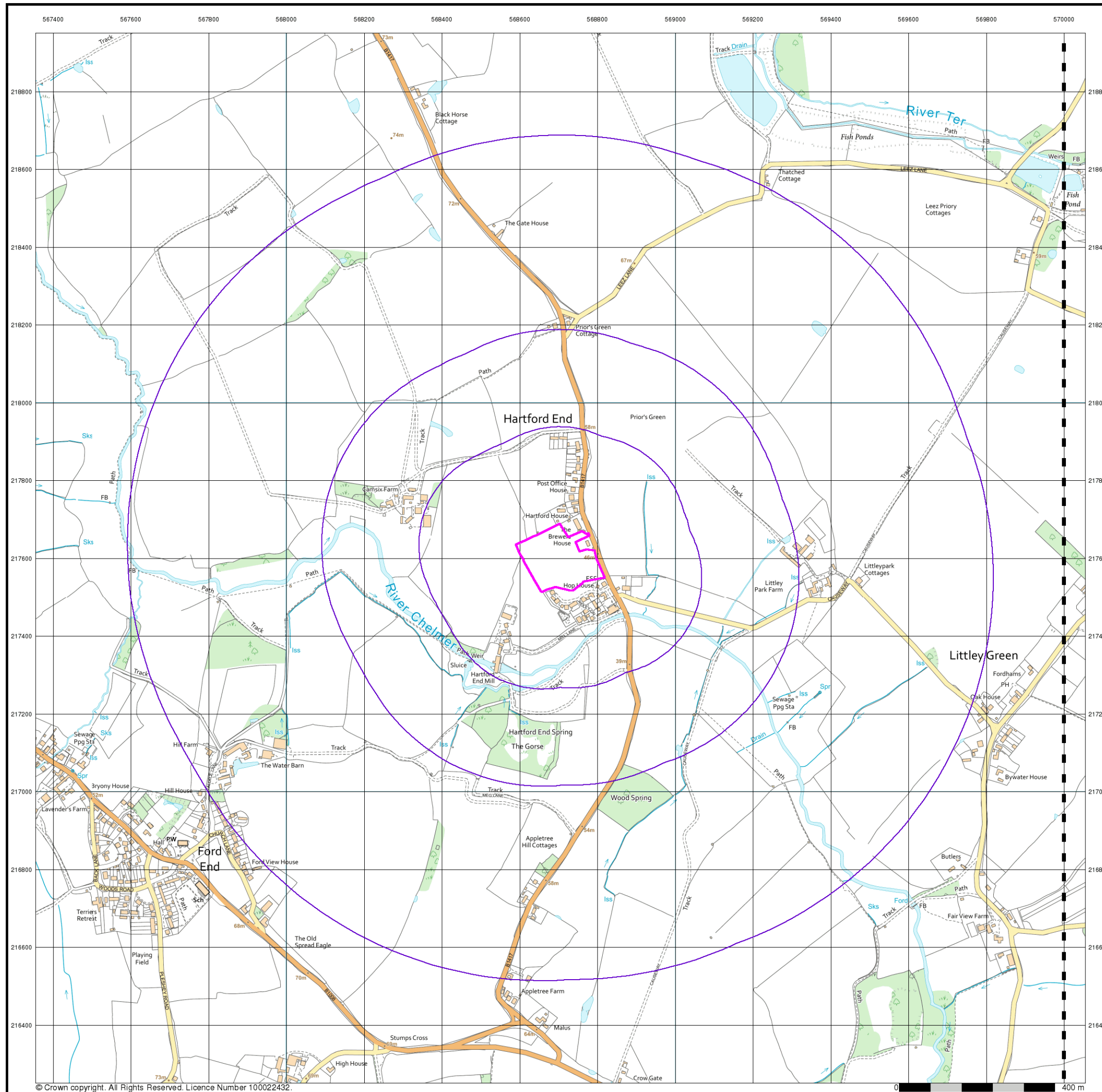
### Site Details

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Tel: 0844 844 9952  
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Web: [Redacted]





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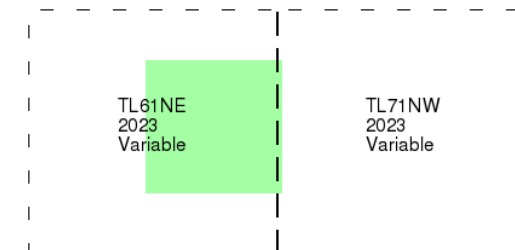
## VectorMap Local

Published 2023

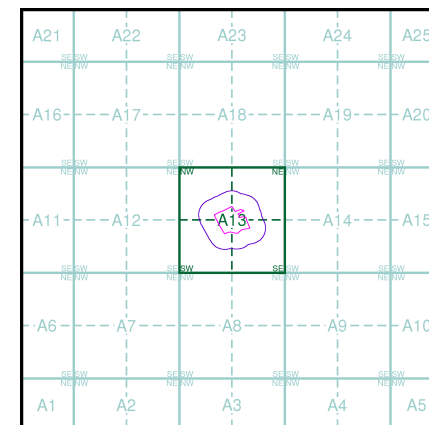
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

## Map Name(s) and Date(s)



## Historical Map - Slice A



## Order Details

Order Number: 315600858\_1\_1  
Customer Ref: 2268  
National Grid Reference: 568710, 217600  
Slice: A  
Site Area (Ha): 2.41  
Search Buffer (m): 1000

## Site Details

Land West of B1417, Hartford End, Chelmsford, Essex, CM3 1JX



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Fax: 0844 844 9951  
Web: [Redacted]



# Appendix 4

## EA Flood Map

# Flood map for planning

Your reference  
**2268 Hartford**

Location (easting/northing)  
**568704/217601**

Created  
**7 Sep 2023 12:07**

**Your selected location is in flood zone 1, an area with a low probability of flooding.**

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger than 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

## Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>

## Flood map for planning

Your reference  
**2268 Hartford**

Location (easting/northing)  
**568704/217601**

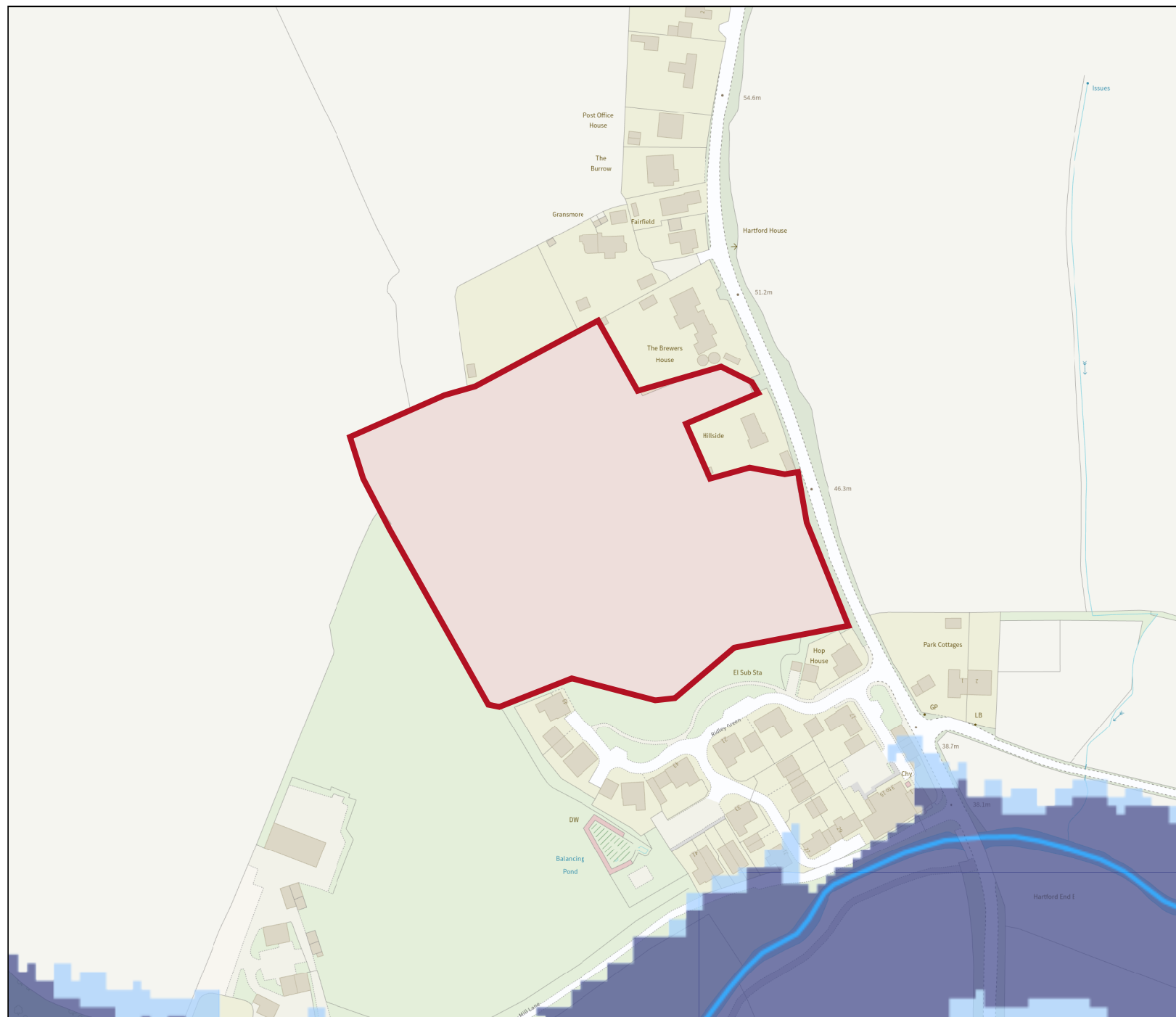
Scale  
**1:2500**

Created  
**7 Sep 2023 12:07**

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area

0 20 40 60m

Page 2 of 2



# Appendix 5

## ZeticaUXO Ltd UXO/UXB Risk Map

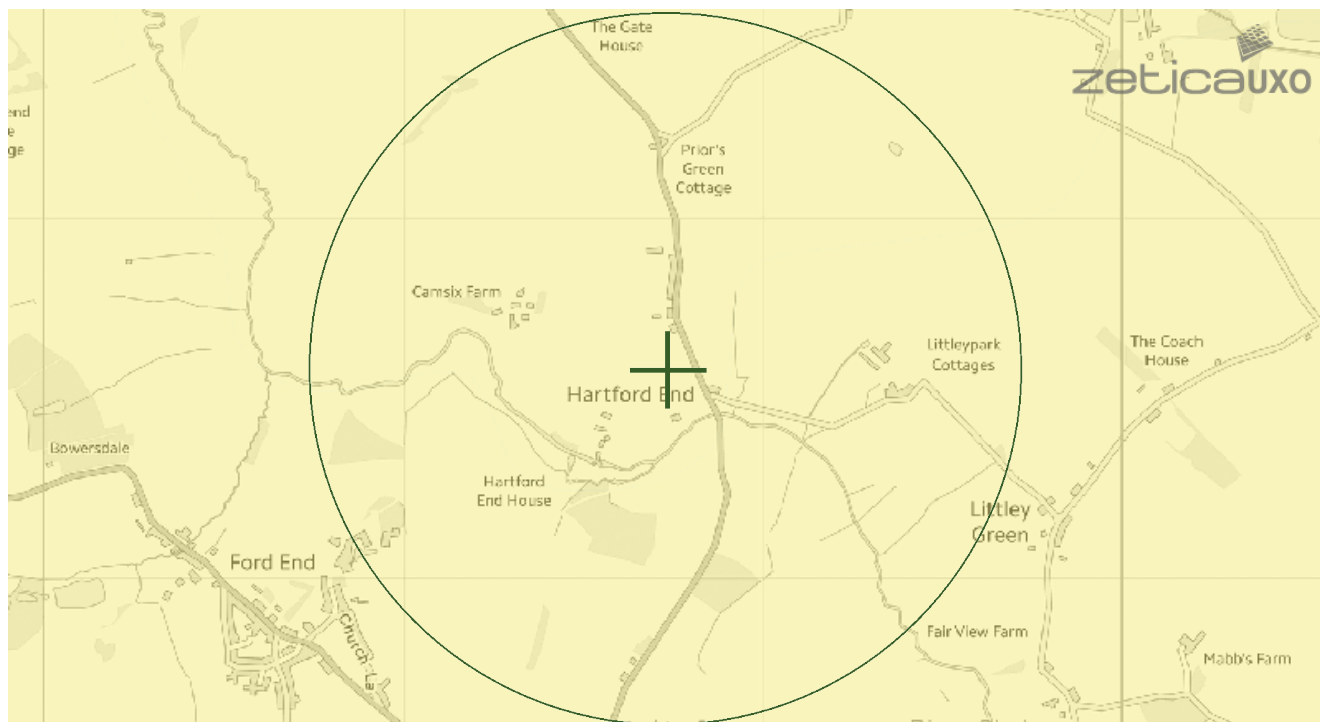


# UNEXPLODED BOMB RISK MAP



## SITE LOCATION

Map Centre: 568741,217582



## LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.

- military**
- industry**
- UXO find**
- transport**
- dock**
- Luftwaffe targets**
- utilities**
- Bombing decoy**
- other**

### How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment\* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment\* is necessary.

### What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

**Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.**

### If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

### If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **[REDACTED]**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgment. The copyright remains with Zetica Ltd.

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

\*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.