## PHASE 1 SITE INVESTIGATION & PRELIMINARY RISK ASSESSMENT

Lidl Great Britain Ltd
Three Counties Hotel, Hereford

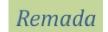
Client: Lidl Great Britain Ltd

Remada

www.remada.co.uk

923.01.01 January 2022





#### **Executive Summary**

Remada Ltd was commissioned by Lidl Great Britain Ltd ('the client') to undertake a Phase 1 Preliminary Risk Assessment for a proposed store at Three Counties Hotel, Belmont Road, Belmont, Hereford HR2 7BP. The objectives of this assessment were to present a preliminary conceptual site model to identify plausible pollutant linkages as a preliminary risk assessment and to provide recommendations for subsequent investigation work.

The proposed new store is to be located to the east, with the car park and soft landscaping to occupy the remainder of the site.

#### Site Setting

The site is currently occupied by the Tree Counties Hotel and car park which is an irregular plot to the north of Belmont Road as indicated in Figure 2. The hotel is split up into four separate buildings surrounding a central courtyard, the largest being the main hotel building/reception to the south and other smaller buildings just for accommodation to the north and east.

#### Site History

The earliest available historic mapping dated 1879 shows the site containing a field with a small stream crossing the site from the south-east to south-west, with a wooded area dominating the south of the site. By 1967, the wooded area has been turned into allotments. By 1979, a road has been constructed in the western half of the site, crossing through the site in a north/south orientation. The stream cutting through the south of the site has now been truncated either side of the site to prevent water flow through the site. By 1988, buildings have now been constructed on site and closely resembles the current day building footprints. The buildings are labelled as 'The Moat House Motel'. The current day pond has also been constructed to the south of the site. By 1989, the main building has been extended towards the north and is now the same as the current day building footprint'. By 2000 the The Moat House Motel is now labelled as "hotel".

#### Geology / Hydrogeology

Published geological maps record that the site is underlain by Alluvium and Glaciofluvial Sheet Deposits, and the Raglan Mudstone Formation bedrock. Both the superficial deposits and bedrock are designated as a Secondary Aquifer - A.

#### Mining

The site is located within an area which may not be affected by coal mining activity.

#### Recommendations

#### **Environmental**

The desk study has identified a number of on-site and off-site potential sources of contamination that would require further investigation. The following is recommended:

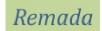
- Investigation of the lateral and vertical extent of made ground/fill beneath the proposed store;
- Collection of soil and groundwater samples from the areas identified above for contaminants of concern; and
- Ground gas monitoring.

#### Geotechnical

It is recommended that a ground investigation is undertaken to enable preliminary foundation design.

The study site is located within both Lower and Intermediate Probability Radon Areas, with less than 1% and 1-3% of homes are estimated to be at or above the Action Level. However, no radon protective measures are considered necessary in the construction of new dwellings or extensions.





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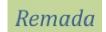
Figure 1 Site Location Plan
Figure 2 Existing Layout
Figure 3 Proposed Site Layout

#### **APPENDICES**

Appendix A Historical Mapping
Appendix B Envirocheck Mapping

Ī	Issue No /	Date	Prepared By T		Technical Review		Authorised	
	01	07.01.2022	D Williams	D. Williams	P Dickinson	P. Diek.	G Jones	Hones





#### 1. INTRODUCTION

Remada Ltd was commissioned by Lidl Great Britain Ltd ('the client') to undertake a Phase 1 Preliminary Risk Assessment for a proposed store at Three Counties Hotel, Belmont Road, Belmont, Hereford, HR2 7BP at the location indicated in **Figure 1**.

#### 1.1. Objectives

The objectives of this assessment are as follows:

- to develop a preliminary conceptual model of the site to identify plausible pollutant linkages; and
- to provide recommendations for subsequent investigation work.

#### 1.2. Scope of Work

The scope of work comprised a:

- review of local geological, hydrogeological, ground stability, and environmental data and historical mapping pertaining to the site and surrounding area; and
- identification of potential sources, pathways, and receptors, and development of a preliminary conceptual site model.

The scope of work did not include a site reconnaissance visit.

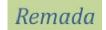
#### 1.3. Previous Reports

It is not known if historic reports are available for review.

#### 1.4. Limitations

The comments given in this report and the opinions expressed are based on the information reviewed and observations during site work. However, there may be conditions pertaining to the site that have not been disclosed by this assessment and therefore could not be taken into account.





#### 2. DESK STUDY

#### 2.1. Description of Site

Site Description	The site is currently occupied by the Tree Counties Hotel and car park which is an irregular plot to the north of Belmont Road as indicated in <b>Figure 2</b> . The hotel is split up into four separate buildings surrounding a central courtyard, the largest being the main hotel building/reception to the south and other smaller buildings just for accommodation to the north and east.
	The proposed new store is to be located to the east, with the car park and soft landscaping to occupy the remainder of the site.
Area of Site	16800 m <sup>2</sup> .
Site Elevation	The topographic elevation of the site is 59m aOD (metres above ordnance datum).
National Grid Co-ordinates	349690, (E), 238590 (N)

#### 2.2. Site Setting

The site is situated in a mixed commercial and residential area.

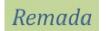
North:	Residential housing is located immediately to the north, with the River Wye beyond.
East:	Residential and commercial buildings are located to the east.
South:	Belmont road is located immediately to the south with residential and commercial buildings located beyond.
West:	Newton Brook is located immediately to the west with residential and commercial buildings beyond.

#### 2.3. Site History

A summary of the historical land use of the site and surrounding area follows.

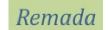
Map Date	Description of on-site activities
1887	The site is comprised of a field with a small stream crossing the site from the south east to south west, with a wooded area dominating the south of the site.
1888	Similar to above.
1904	Similar to above.
1905	Similar to above.
1928	Similar to above.
1930	Similar to above.
1938	Similar to above.
1953	Similar to above.
1964	Similar to above.
1967	Similar to above, but the wooded area to the south has been turned into allotments.





1972	Similar to above.
1977	Similar to above.
1979	A road has been constructed in the western half of the site, crossing through the site in a north/south orientation. The stream cutting through the south of the site has now been truncated either side of the site to prevent water flow through the site.
1988	Buildings have now been constructed on site and closely resembles the current day building footprints. The buildings are labelled as 'The Moat House Motel'. A pond has also been constructed to the south of the site.
1989	The main building has been extended towards the north and is now the same as the current day building footprint.
1990	Similar to above.
1991	Similar to above.
1993	Similar to above.
2000	Similar to above, but The Moat House Motel is now labelled as "hotel"
2021	Similar to above
Map Date	Description of off-site activities
1887	The site is generally surrounded by fields and farms, a stream runs in a north-south orientation circa 30m to the east of the site before running through the south of the site, this is labelled as Newton Brook which flows into the River Wye located circa 430m north of the site. Newton House is located circa 30m south-east of the site, and Newton Farm is located circa 120m to the south. A main road is located circa 15m south in the current day position of Belmont Road, it is labelled as such in 1967.
1888	Similar to above.
1904	Similar to above.
1905	Similar to above.
1928	Similar to above.
1930	Similar to above.
1938	Similar to above.
1953	Similar to above.
1964	Similar to above.
1967	A large residential development has occurred circa 40m east of the site. The Belmont inn is now located where Newton House was.
1972	Similar to above.
1977	The residential development has extended circa 20m south of the site.
1978	The partial mapping coverage of 1978 shows an electric substation located circa 130m south east of the site boundary.





1979	An electric substation is located circa 95m north of the site boundary.
1980	The partial mapping coverage of 1980 shows an electric substation circa 200m
1988	An embankment has been constructed circa 5m to the west of the site. Residential
	dwellings have now been constructed circa 15m to the west of the site.
1989	Residential dwellings are now located circa 50m north-west and south-west.
1990	Similar to above.
1991	Residential dwellings are now located immediately north of the site boundary.
1993	Similar to above.
2000	Similar to above.
2021	Similar to above.

#### 2.4. Proposed Site Use

It is understood that the proposed site use for the majority of the site will be a Lidl retail store with associated car park and soft landscaping. This development will comprise a site area of 16800m<sup>2</sup> fronting onto Belmont Road as shown in **Figure 3**.

#### 2.5. Environmental Setting

#### 2.5.1. Made Ground and Superficial Geology

Information from the environmental report and the British Geological Survey (BGS) 1:50,000 scale map Sheet 215 (Ross on Wye) indicates that no made ground deposits have been recorded at the site. It is not expected to be encountered according to the mapping; however, taking consideration of the site's historic use and satellite imagery it is likely that made ground will be encountered underlying the site.

The superficial deposits underlying the site are indicated to comprise a mixture of Alluvium and Glaciofluvial Sheet Deposits. The BGS describe these as typically comprising 'soft to firm consolidated, compressible silty clay, but can contain layers of silt, sand, peat and basal gravel', and 'sand and gravel, locally with lenses of silt, clay or organic material; characteristic 'sandur' (sheet) and valley train form; of glaciofluvial origin' respectively.

The superficial deposits are designated as a Secondary Aquifer - A (ref Envirocheck Appendix B).

#### 2.5.2. Bedrock Geology

The bedrock directly underlying the site is formed of the Raglan Mudstone Formation. The BGS describes this Formation as typically comprising 'Red mudstones and silty mudstones with calcretes and sandstones'

The bedrock is designated as a Secondary Aquifer - A (ref Envirocheck Appendix B).

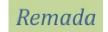
#### 2.5.3. Historic BGS Borehole Records

There are no pertinent historic BGS borehole records within a relevant distance of the site.

#### 2.5.4. Groundwater Abstractions

There are no groundwater abstraction points within the search area (ref Envirocheck Appendix B).





#### 2.5.5. Source Protection Zones

The site is not located within a Groundwater Source Protection Zone (ref Envirocheck Appendix B).

#### 2.5.6. Surface Water Features and Abstractions

An unknown surface water feature is located on site (ref Envirocheck Appendix B).

#### 2.5.7. Flooding Vulnerability

The site is located in an area with the potential for groundwater flooding to occur at the surface and there is an area of extreme flooding from rivers or sea without defences (Zone 2) circa 30m north of the site boundary. (ref Envirocheck **Appendix B**).

#### 2.5.8. Ground Stability

The Envirocheck Report (**Appendix B**) provides the following information regarding ground stability and mining.

Shrinking / Swelling of Clay The site is within an area of very low hazard from shrinking or swelling of clay	Shrinking / Swelling of Clay	The site is within an area of	f very low hazard	l from shrinking o	r swelling of clays
---------------------------------------------------------------------------------------------------------------	------------------------------	-------------------------------	-------------------	--------------------	---------------------

Rock Solubility	There is a no hazard rating from rock solubility at the site.
Compressible Ground	There is a moderate rating from compressible ground.
Collapsible Deposits	There is a very low hazard rating from collapsible rocks.
Running Sand	There is a low hazard rating for running sands.

#### 2.5.9. Radon

The study site is located within both Lower and Intermediate Probability Radon Areas, with less than 1% and 1-3% of homes are estimated to be at or above the Action Level. However, no radon protective measures are considered necessary in the construction of new dwellings or extensions (ref Envirocheck **Appendix B**).

#### 2.5.10. Environmentally Sensitive Site Designations

A nitrate vulnerable zone (NVZ) associated with the Newton Brook is located on site (ref Envirocheck **Appendix B**).

#### 2.6. Industrial Land Use

There are no contemporary trade directory entries within 250m of the site (ref Envirocheck Appendix B).

There is one fuel station entry within 500m of the study site. This is located 311m to the west on Belmont Road and is recorded as being open.

#### 2.7. Environmental Permits, Incidents & Registers

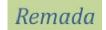
There are no permitted process entries within 250m of the study site.

There are five (5 No.) recorded pollution incident entries within 250m of the site. The nearest was located on site and pertains to sewage- treated effluent impacting an unknown water source in February 1992. The incident was recorded as being a Category 2 (Significant Incident) (ref Envirocheck **Appendix B**).

#### 2.8. Landfill & Waste Sites

There is one (1 no) BGS recorded landfill sites, two (2 No) historical landfill sites, one (1 No) licenced waste management facilities and three (3 No) registered landfill sites within the search area (ref Envirocheck





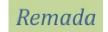
#### Appendix B).

#### 2.9. Mining & Mineral Sites

The site is located within an area which may not be affected by coal mining activity (ref Envirocheck **Appendix B**).

The nearest BGS recorded mineral site is located 726m to the west at Belmont Gravel Pit, with the extraction of Sand and Gravel having been undertaken by opencast methods. The operation is listed as having now ceased (ref Envirocheck **Appendix B**).





#### 3. PRELIMINARY RISK ASSESSMENT

#### 3.1. Introduction

A Preliminary Risk Assessment (PRA) has been completed for the site. This PRA identifies the potential sources, pathways, and receptors for the site, in order to assess the potential risks posed by identified potential sources to human health and / or controlled waters receptors. When required, the viability of the Source-Pathway-Receptor pollutant linkage must be evaluated further to determine whether an actual risk is present.

#### 3.2. Potential Sources

#### On-site Historical

- General Made Ground associated with development and demolition.
- Allotments
- Infilled / truncated stream.

#### On-site Current

• Three Counties Hotel

#### Off-site Historical

- Newton Farm
- Residential dwellings
- Electricity substations

#### Off-site Current

- Residential and Commercial Buildings
- Fuel station (311m to the west).

#### 3.3. Potential Contaminants of Concern (PCOCs)

- Metals
- Asbestos (associated with demolition and redevelopment of the existing site).
- Total petroleum hydrocarbons (TPH)
- Polycyclic aromatic hydrocarbons (PAH).
- Ground gases (carbon dioxide and methane)
- Polychlorinated Biphenyls (PCBs)

#### 3.4. Potential Receptors

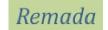
#### Human Health

- On-site Lidl store staff.
- Construction workers.
- On-site general public and visiting staff (such as contractors, including those conducting excavation works).
- Neighbouring residents

#### **Controlled Waters**

- Secondary Aquifer A in Superficial Deposits
- Secondary Aquifer A in bedrock;
- River Wye





#### 3.5. Preliminary Conceptual Model

The Preliminary Conceptual Site Model of the site has been prepared and illustrates the potentially active pollutant linkages. A pollutant linkage is present only when a source, pathway and receptor exist together.

- A **source** is a substance that has potential to cause harm or adversely affect human health, water resources or the wider environment.
- A **pathway** is the route or means by which a source of contamination can migrate resulting in exposure to a receptor.
- A **receptor** is something that could be adversely affected by a contaminant such as human health, an ecological system, animals or crops, buildings or controlled waters.

The Preliminary Conceptual Site Model is presented in **Table 1**.

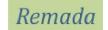


Potential Source Areas	Potential Contaminant of Concern	Pathways	Potential Receptor		Exposure Route (Human unless otherwise stated)	lde Lir	tential ntified nkage itigated)	Findings of Ground investigation	Risk (Un- mitigated)	Proposed Remediation (Mitigation) Measures	Residual Risk Estimation									
On-site Sources General Made		Disturbance due to		•	Direct Soil Ingestion	•	Yes	To be assessed (TBA)	Potential risk	(To be assessed (TBA)	(To be assessed (TBA)									
Ground		construction plant causing direct		•	Indoor Dust ingestion	•	Yes	As above	Potential risk	ТВА	ТВА									
Infilled Stream	Ashastas	contact, dusts, vapours.	Occupants	•	Skin Contact with Soils	•	Yes	As above	Potential risk	ТВА	ТВА									
Existing Hotel	Asbestos / Metals As, Be, Cd, Cu, Cr (VI),	Direct Contact with	of the development / building	•	Skin Contact with Dust	•	Yes	As above	Potential risk	ТВА	ТВА									
Off-site Sources	Cr (III) Hg, Ni, Se, Va, Zn,	occupants of the proposed	fabric	•	Inhalation of Outdoor Dust	•	Yes	As above	Potential risk	ТВА	ТВА									
Newton Farm	Boron, TPH /PAH, PCBs.	development		•	Inhalation of Outdoor Vapours	•	Yes	As above	Potential risk	ТВА	ТВА									
Residential Dwellings		Inhalation of fibres / vapours / gases	Adjacent	•	Inhalation of Indoor Vapours	•	Yes	As above	Potential risk	TBA	TBA									
Electricity		by occupants of proposed	residents during	•	Inhalation of ground gas	•	Yes	As above	Potential risk	ТВА	ТВА									
Substations		Permeation of water supply pipework	construction	construction	construction	construction	construction	Construction	Construction	Construction	•	Inhalation of radon gas	•	Yes	Low & Intermediate Probability Areas	Negligible	None	Negligible		
			water supply	water supply	water supply	water supply	water supply	water supply	water supply	water supply	,		•	Ingestion via permeated water supply pipework	•	Yes	As above	Potential risk	ТВА	ТВА
				***	•	Direct contact with Secondary (A) Aquifer in Superficial Deposits	•	Yes	As above	Potential risk	TBA	TBA								
		Leachate	Secondary A Aquifers	•	In-direct contact with Secondary (A) Aquifer in bedrock	•	Yes	As above	Potential risk	ТВА	ТВА									

**Table 1: Preliminary Conceptual Site Model** 

Direct contact with subsurface soil and/or groundwater during redevelopment works are not assessed as part of the CSM. It is considered that risks to workers will be managed as part of any the redevelopment works at the site through the application of health and safety procedures, where required.





#### 4. CONCLUSIONS & RECOMMENDATIONS

#### 4.1. Conclusions

The site is currently occupied by the Three Counties Hotel and car park which is an irregular plot to the north of Belmont Road as indicated in **Figure 2**. The hotel is split up into four separate buildings surrounding a central courtyard, the largest being the main hotel building/reception to the south and other smaller buildings just for accommodation to the north and east. The proposed new store is to be located to the east, with the car park and soft landscaping to occupy the remainder of the site.

The earliest available historic mapping dated 1879 shows the site containing a field with a small stream crossing the site from the south-east to south west, with a wooded area dominating the south of the site. By 1967, the wooded area has been turned into allotments. By 1979, a road has been constructed in the western half of the site, crossing through the site in a north/south orientation. The stream cutting through the south of the site has now been truncated either side of the site to prevent water flow through the site. By 1988, buildings have now been constructed on site and closely resembles the current day building footprints. The buildings are labelled as 'The Moat House Motel'. The current day pond has also been constructed to the south of the site. By 1989, the main building has been extended towards the north and is now the same as the current day building footprint'. By 2000 The Moat House Motel is now labelled as "hotel".

Published geological maps record that the site is underlain by Alluvium and Glaciofluvial Sheet Deposits, and the Raglan Mudstone Formation bedrock. Both the superficial deposits and bedrock are designated as a Secondary Aquifer - A.

#### 4.2. Recommendations

#### Environmental

The desk study has identified a number of on-site and off-site potential sources of contamination that would require further investigation. The following is recommended:

- Investigation of the lateral and vertical extent of made ground/fill beneath the proposed store;
- Collection of soil and groundwater samples from the areas identified above for contaminants of concern; and
- · Ground gas monitoring.

#### Geotechnical

It is recommended that a ground investigation is undertaken to enable preliminary foundation design.





#### **REFERENCES & GUIDANCE**

AGS, Guidance on the Waste Classification for Soils - A Practitioners' Guide 2019.

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The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015





#### STUDY LIMITATIONS

**IMPORTANT**. This section should be read before reliance is placed on any of the information, opinions, advice, recommendations or conclusions contained in this report.

- 1. This report has been prepared by Remada, Ltd with all reasonable skill, care and diligence within the terms of the Appointment and with the resources and manpower agreed with (the 'Client'). Remada does not accept responsibility for any matters outside the agreed scope.
- 2. This report has been prepared for the sole benefit of the Client unless agreed otherwise in writing.
- 3. Unless stated otherwise, no consultations with authorities or funders or other interested third parties have been carried out. Remada is unable to give categorical assurance that the findings will be accepted by these third parties as such bodies may have published, more stringent objectives. Further work may be required by these parties.
- 4. All work carried out in preparing this report has used, and is based on, Remada' professional knowledge and understanding of current relevant legislation. Changes in legislation or regulatory guidance may cause the opinion or advice contained in this report to become inappropriate or incorrect. In giving opinions and advice pending changes in legislation, of which Remada is aware, have been considered. Following delivery of the report Remada has no obligation to advise the Client or any other party of such changes or their repercussions.
- 5. This report is only valid when used in its entirety. Any information or advice included in the report should not be relied upon until considered in the context of the whole report.
- 6. Whilst this report and the opinions made are to the best of Remada' belief, Remada cannot guarantee the accuracy or completeness of any information provided by third parties.
- 7. This report has been prepared based on the information reasonably available during the project programme. All information relevant to the scope may not have received.

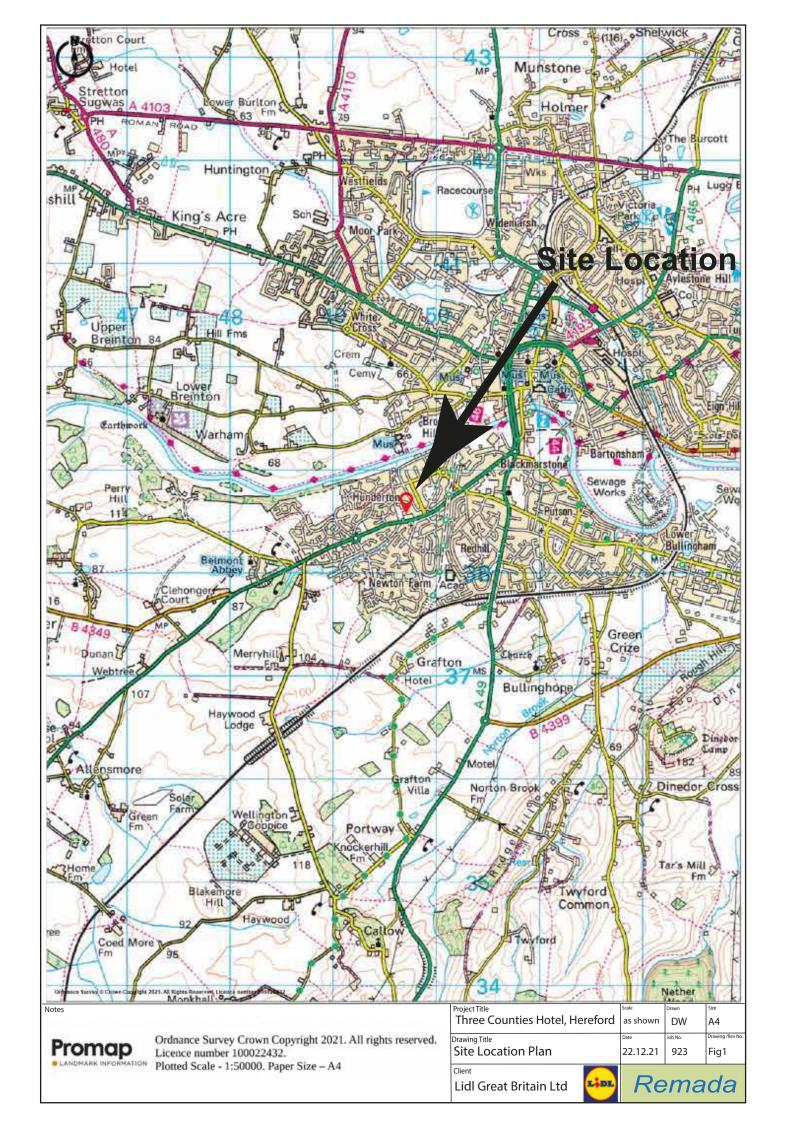
- 8. This report refers, within the limitations stated, to the condition of the site at the time of the inspections. No warranty is given as to the possibility of changes in the condition of the site since the time of the investigation.
- 9. The content of this report represents the professional opinion of experienced environmental consultants. Remada does not provide specialist legal or other professional advice. The advice of other professionals may be required.
- 10. Where intrusive investigation techniques have been employed they have been designed to provide a reasonable level of assurance on the conditions. Given the discrete nature of sampling, no investigation technique is capable of identifying all conditions present in all areas. In some cases the investigation is further limited by site operations, underground obstructions and above ground structures. Unless otherwise stated, areas beyond the boundary of the site have not been investigated.
- 11. If below ground intrusive investigations have been conducted as part of the scope, service tracing for safe location of exploratory holes has been carried out. The location of underground services shown on any drawing in this report has been determined by visual observations and electromagnetic techniques. No guarantee can be given that all services have been identified. Additional services, structures or other below ground obstructions, not indicated on the drawing, may be present on site.
- 12. Unless otherwise stated the report provides no comment on the nature of building materials, operational integrity of the facility or on any regulatory compliance issues.
- 13. Unless otherwise stated, samples from the site (soil, groundwater, building fabric or other samples) have NOT been analysed or assessed for waste classification purposes.



## **FIGURES**

Figure 1 Site Location Plan Figure 2 Existing Site Layout

**Figure 3 Proposed Site Layout** 





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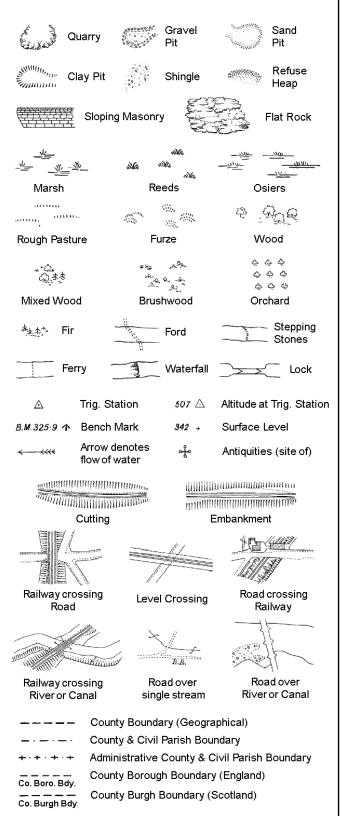


## **APPENDIX A**

1:2500 & 1:10000 Scale Historical Mapping

## **Historical Mapping Legends**

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



B.R.

E.P

F.B.

M.S

Bridle Road

Foot Bridge

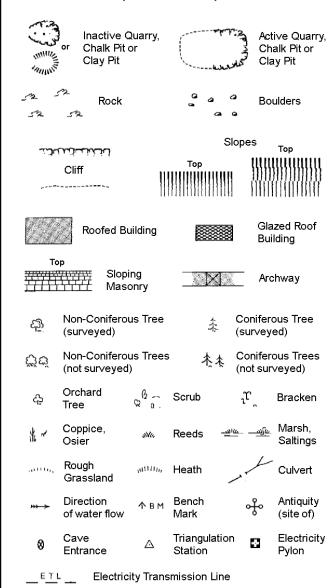
Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Guide Post or Board

#### Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



County Boundary (Geographical) County & Civil Parish Boundary Civil Parish Boundary Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary Symbol marking point where boundary mereing changes

Police Call Box

Telephone Call Box

Signal Post

Pump

Sluice

Spring

Trough

Well

S.P

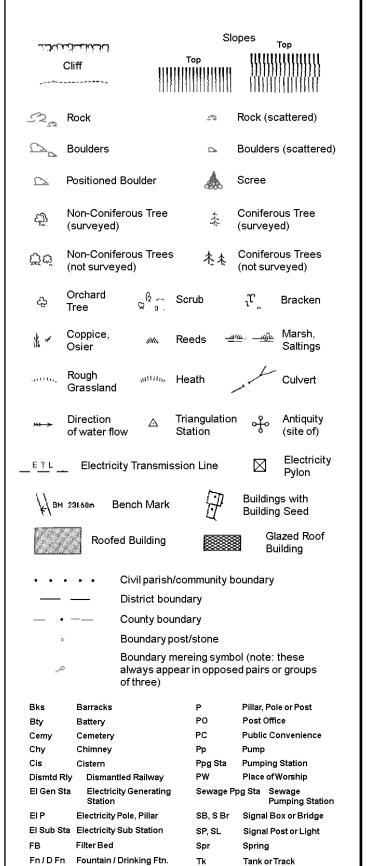
Sl.

 $T_T$ 

T.C.B

Beer House Pillar, Pole or Post **Boundary Post or Stone** Post Office Capstan, Crane Public Convenience PH Public House Chv D Fn Drinking Fountain EIP Electricity Pillar or Post SB, SB Signal Box or Bridge FAP Fire Alarm Pillar SP. SL Signal Post or Light FB Foot Bridge Spring Tank or Track Guide Post Τk Hydrant or Hydraulic TCB Telephone Call Box LC Level Crossing TCP Telephone Call Post Manhole Trough MP Mile Post or Mooring Post Water Point, Water Tap MS NTL Normal Tidal Limit Wd Pp Wind Pump

## 1:1,250



Gas Valve Compound

Mile Post or Mile Stone

Gas Governer

**Guide Post** 

Manhole

Tr

Wd Pp

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

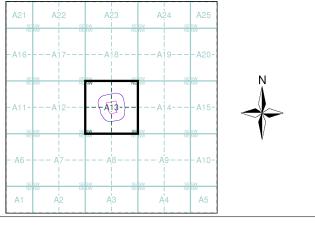
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#### **Historical Mapping & Photography included:**

Mapping Type	Scale	Date	Pg
Herefordshire	1:2,500	1888	2
Herefordshire	1:2,500	1904	3
Herefordshire	1:2,500	1928 - 1929	4
Herefordshire	1:2,500	1937	5
Ordnance Survey Plan	1:1,250	1967 - 1991	6
Ordnance Survey Plan	1:2,500	1968 - 1972	7
Additional SIMs	1:1,250	1977 - 1988	8
Ordnance Survey Plan	1:1,250	1979 - 1989	9
Additional SIMs	1:1,250	1985 - 1989	10
Additional SIMs	1:1,250	1990	11
Ordnance Survey Plan	1:1,250	1991	12
Additional SIMs	1:1,250	1991	13
Large-Scale National Grid Data	1:1,250	1993 - 1994	14
Large-Scale National Grid Data	1:1,250	1994 - 1995	15
Large-Scale National Grid Data	1:1,250	1995	16
Large-Scale National Grid Data	1:1,250	1996	17

### **Historical Map - Segment A13**



#### **Order Details**

Order Number: 288980021\_1\_1 Customer Ref: 923.01 National Grid Reference: 349690, 238590 Slice: Α

Site Area (Ha): Search Buffer (m): 100

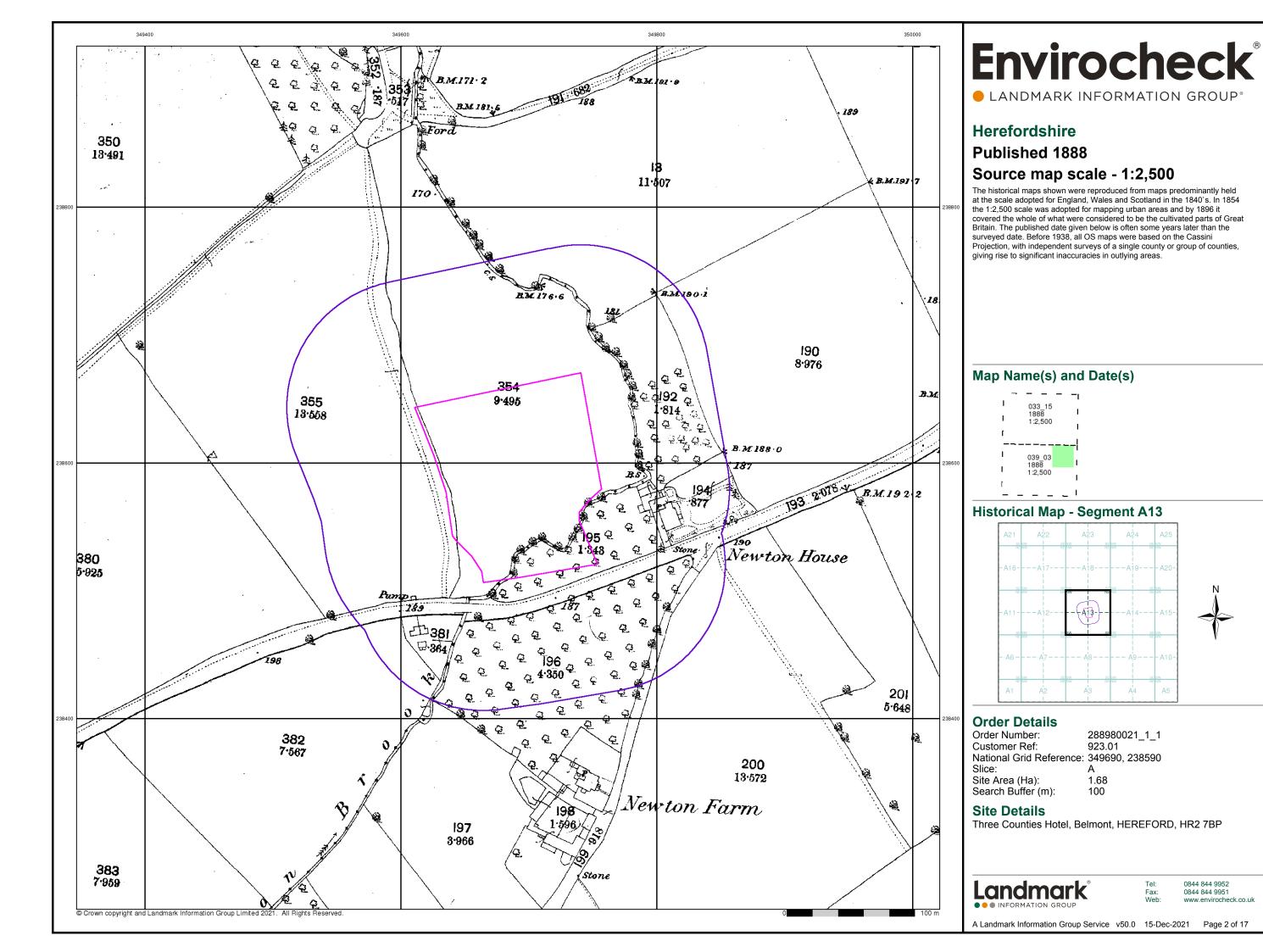
#### **Site Details**

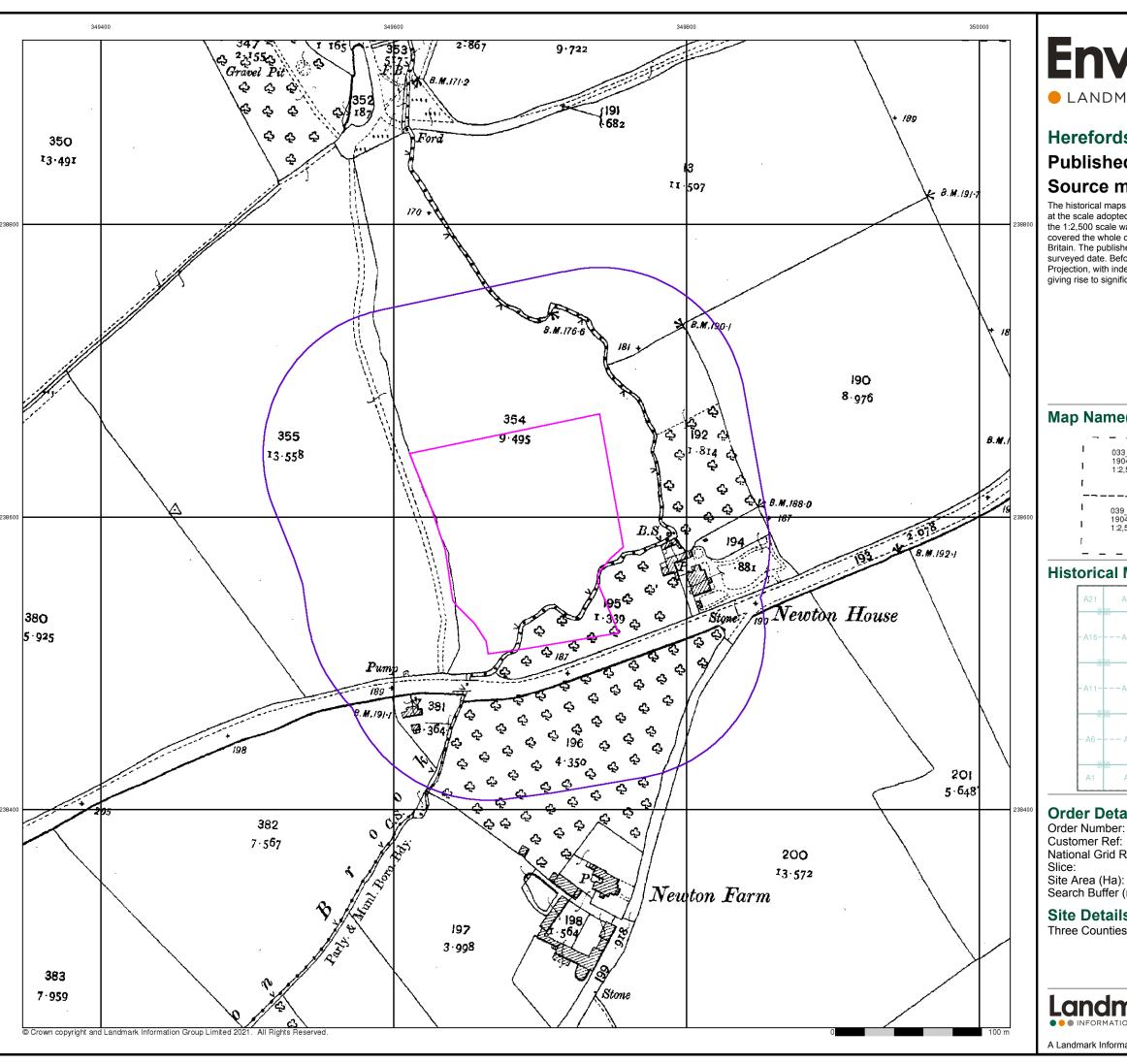
Three Counties Hotel, Belmont, HEREFORD, HR2 7BP



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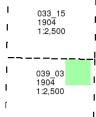
#### Herefordshire

### **Published 1904**

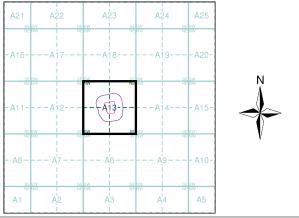
### Source map scale - 1:2,500

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**

288980021\_1\_1 Customer Ref: 923.01 National Grid Reference: 349690, 238590

Site Area (Ha): Search Buffer (m): 100

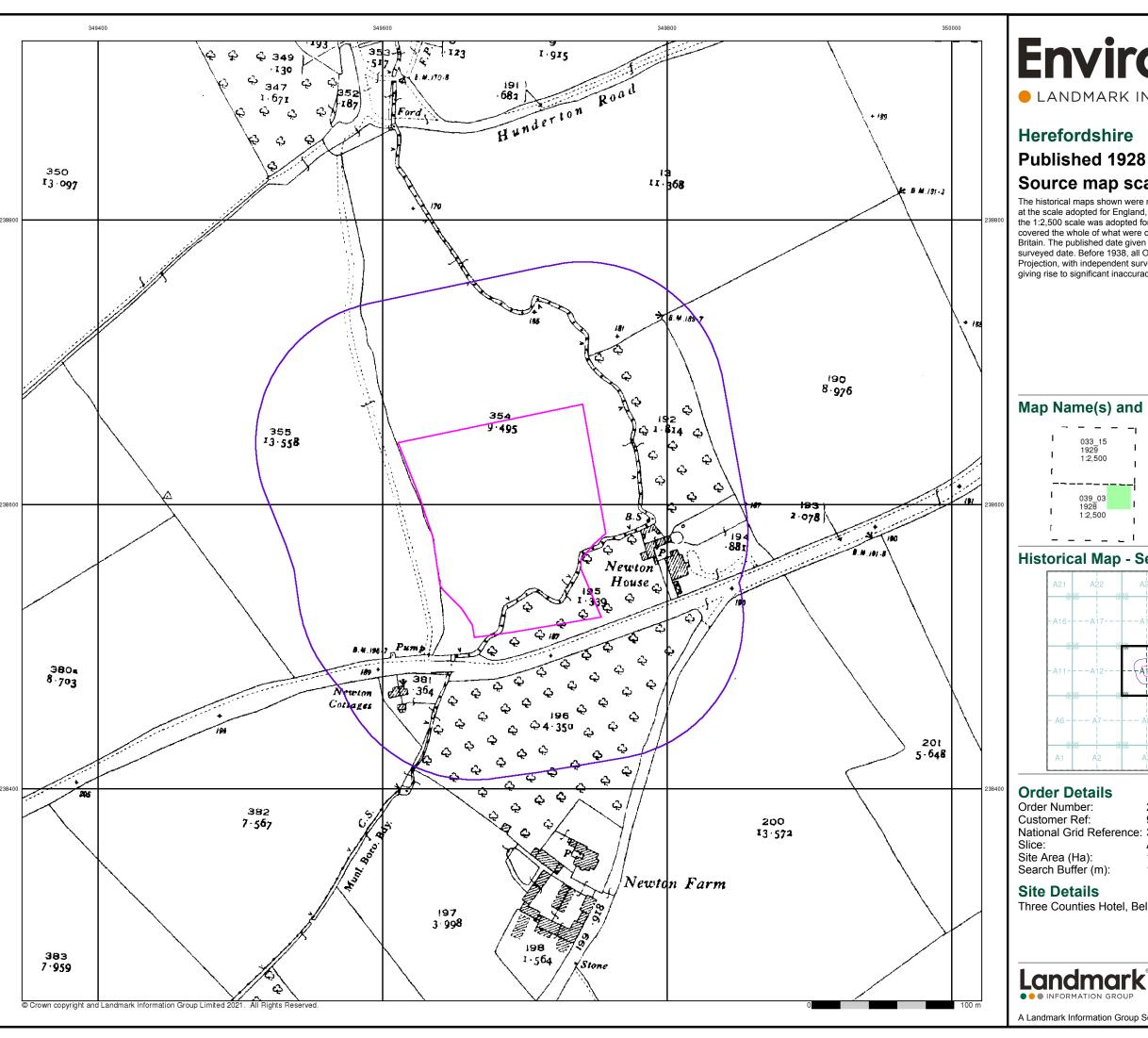
#### **Site Details**

Three Counties Hotel, Belmont, HEREFORD, HR2 7BP



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A Landmark Information Group Service v50.0 15-Dec-2021 Page 3 of 17

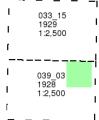


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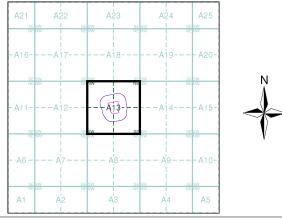
### Published 1928 - 1929 Source map scale - 1:2,500

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**



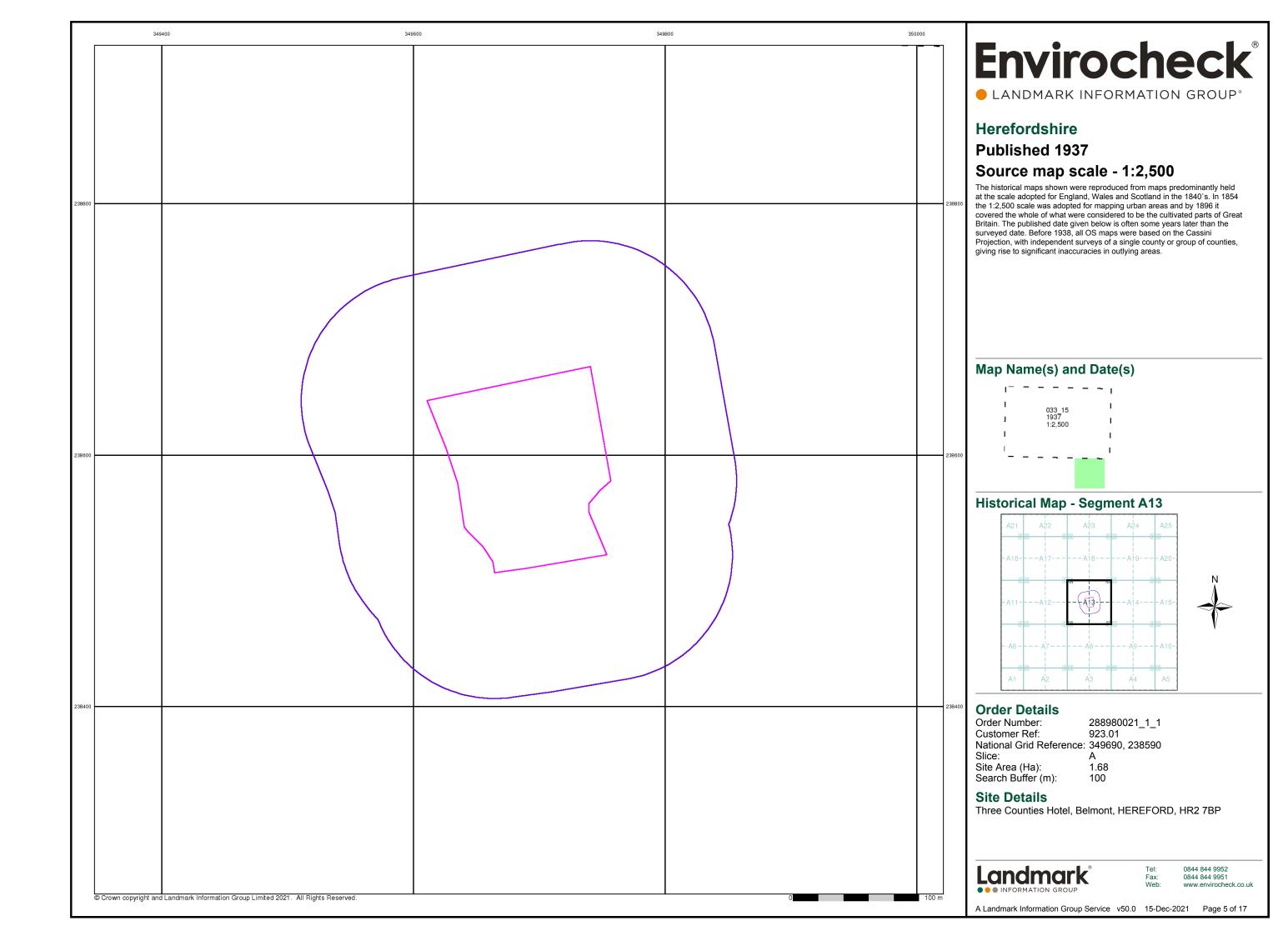
288980021\_1\_1 National Grid Reference: 349690, 238590

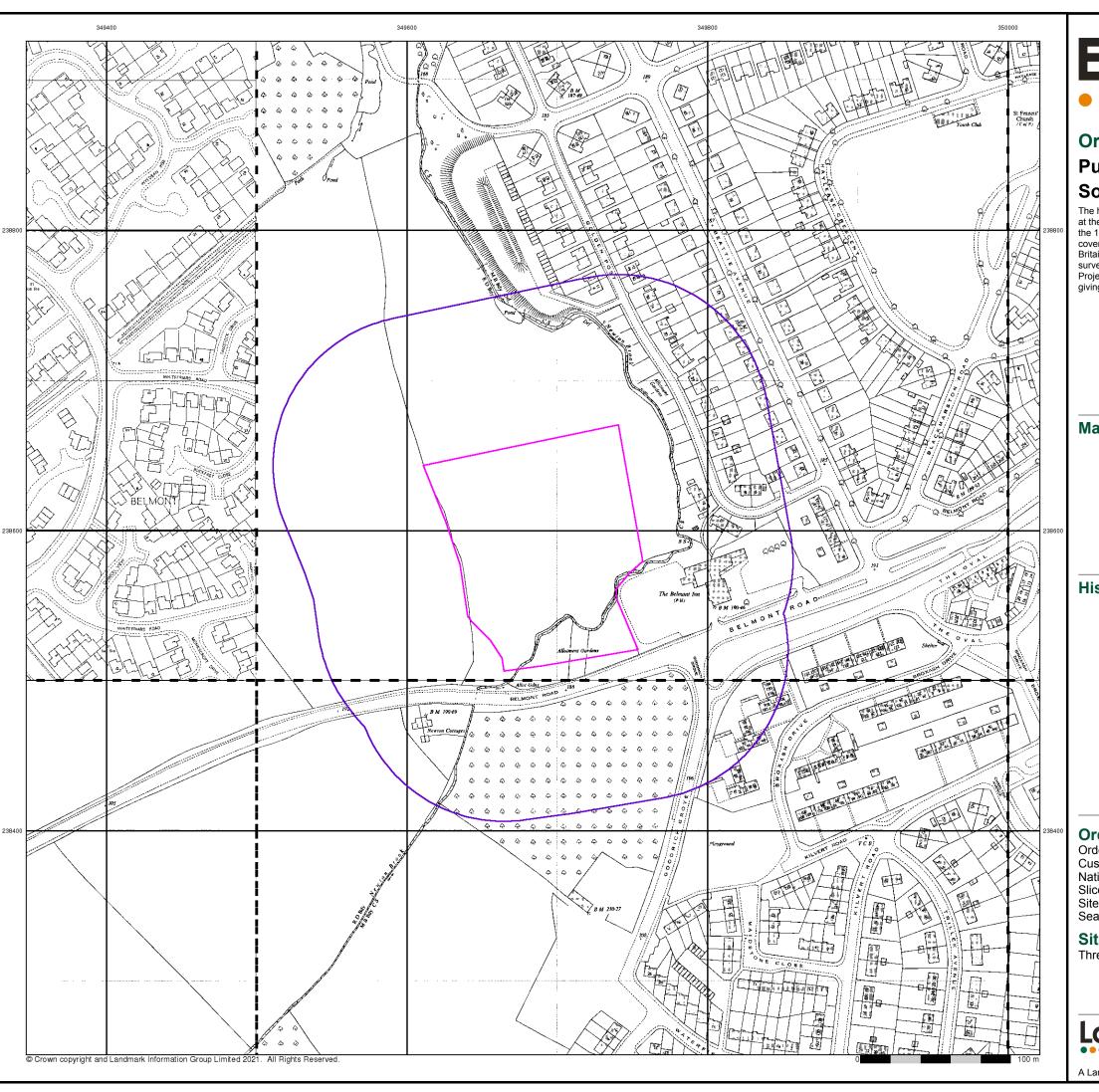
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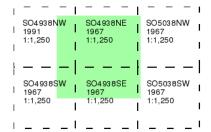
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## **Ordnance Survey Plan** Published 1967 - 1991

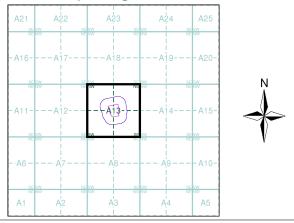
Source map scale - 1:1,250

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: 288980021\_1\_1 Customer Ref: National Grid Reference: 349690, 238590

Site Area (Ha): Search Buffer (m): 100

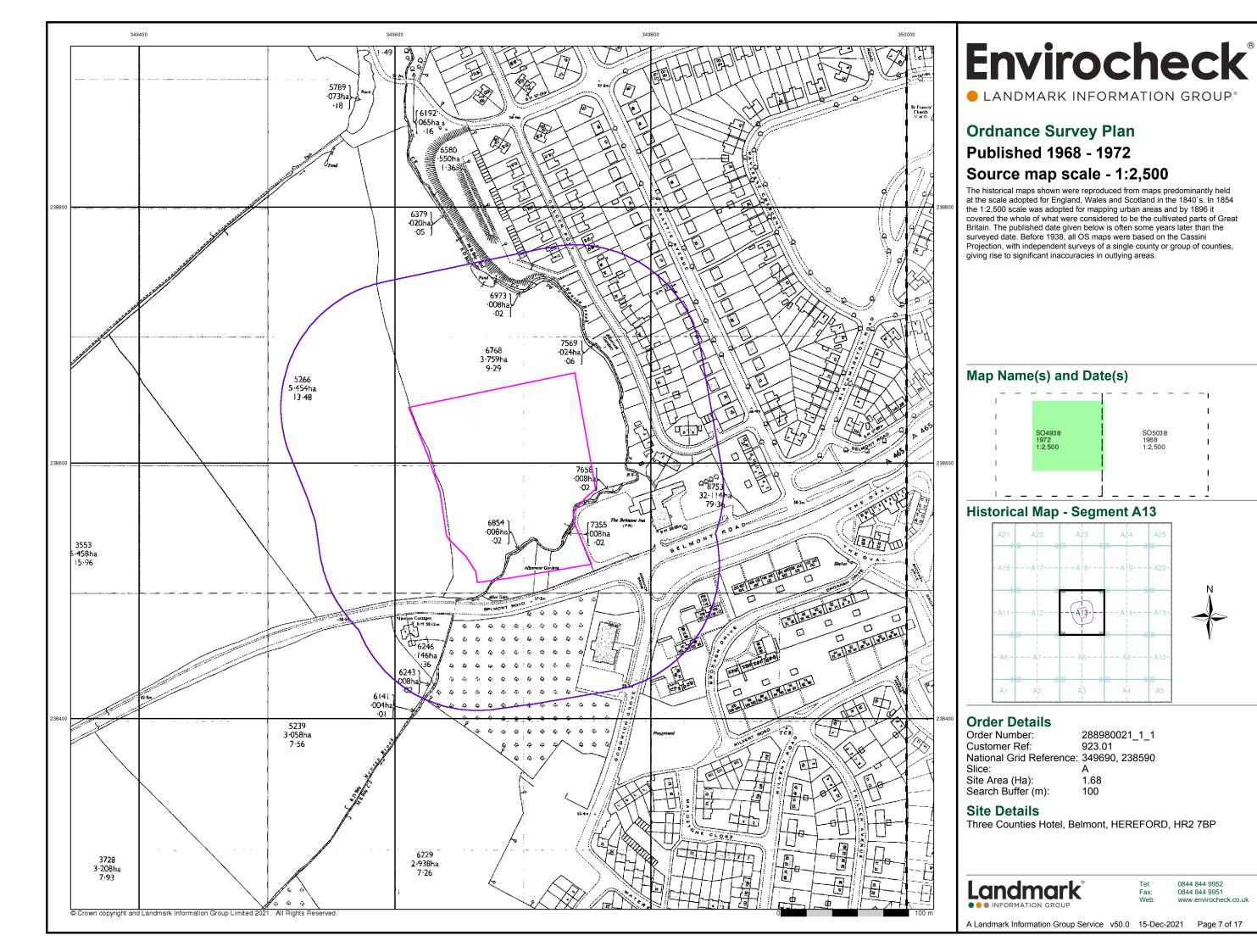
#### **Site Details**

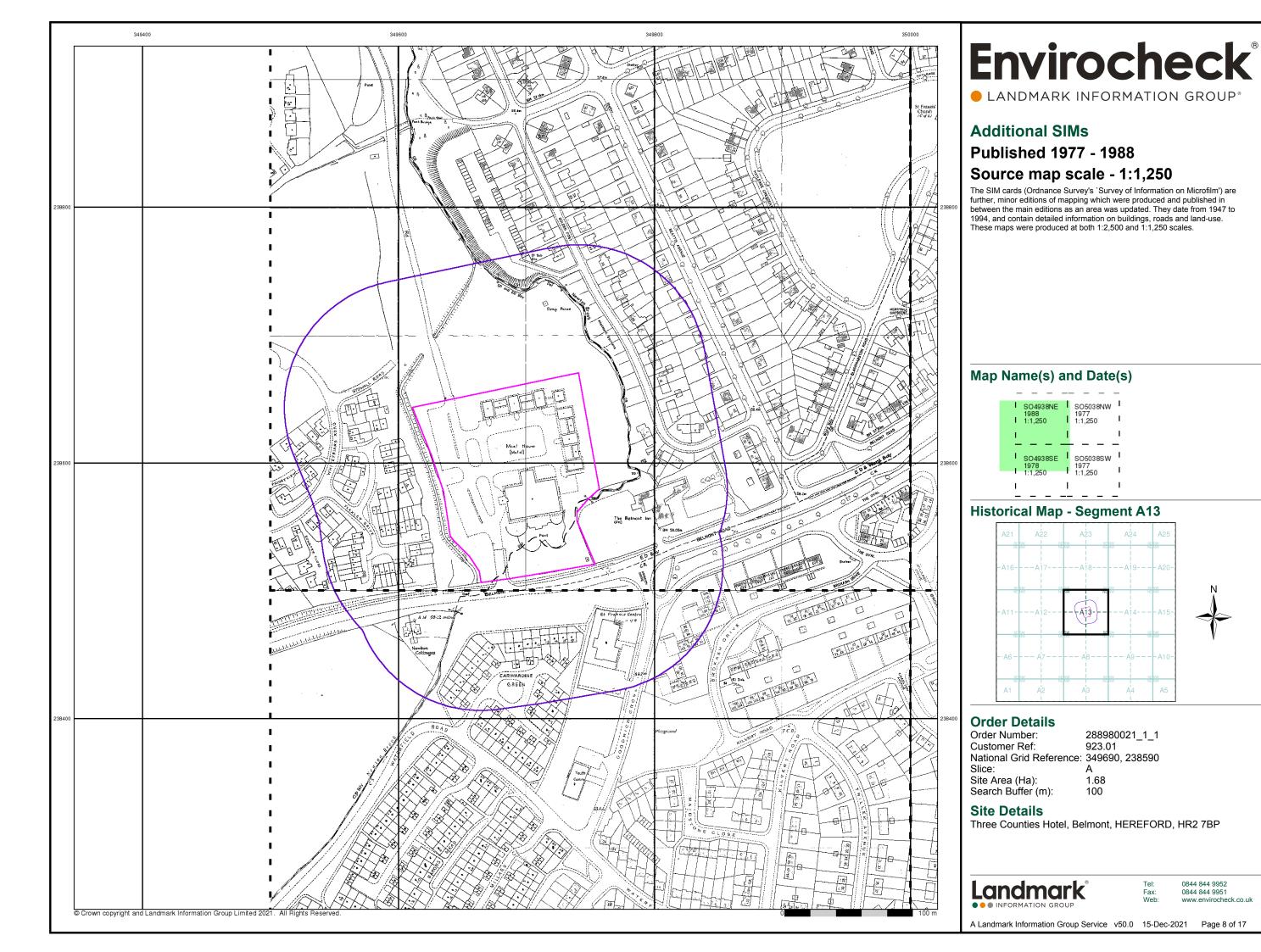
Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

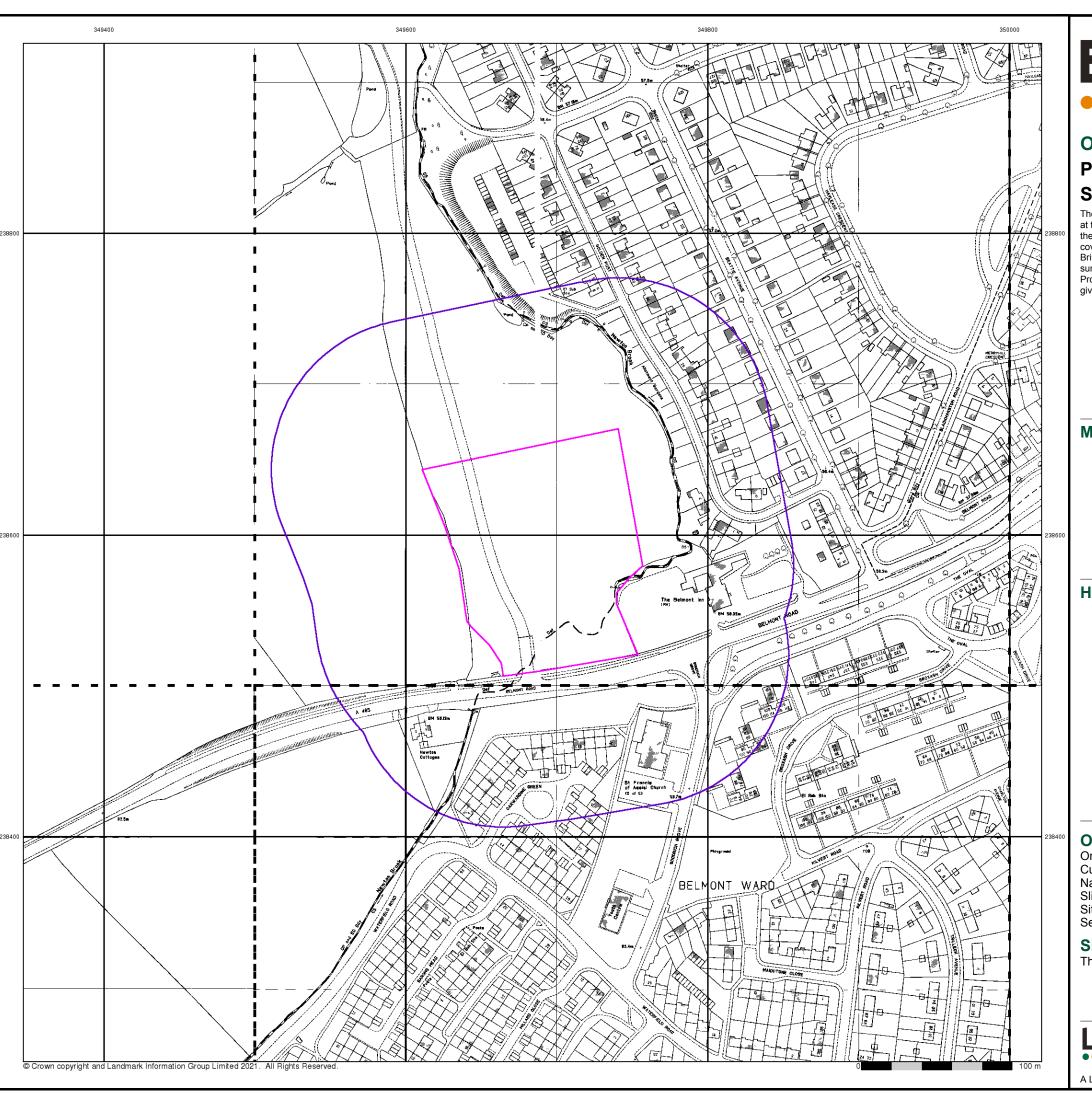
Landmark

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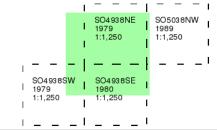
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## **Ordnance Survey Plan Published 1979 - 1989**

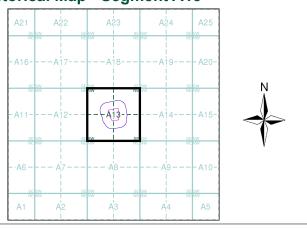
### Source map scale - 1:1,250

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: 288980021\_1\_1 Customer Ref: National Grid Reference: 349690, 238590

Site Area (Ha): Search Buffer (m): 100

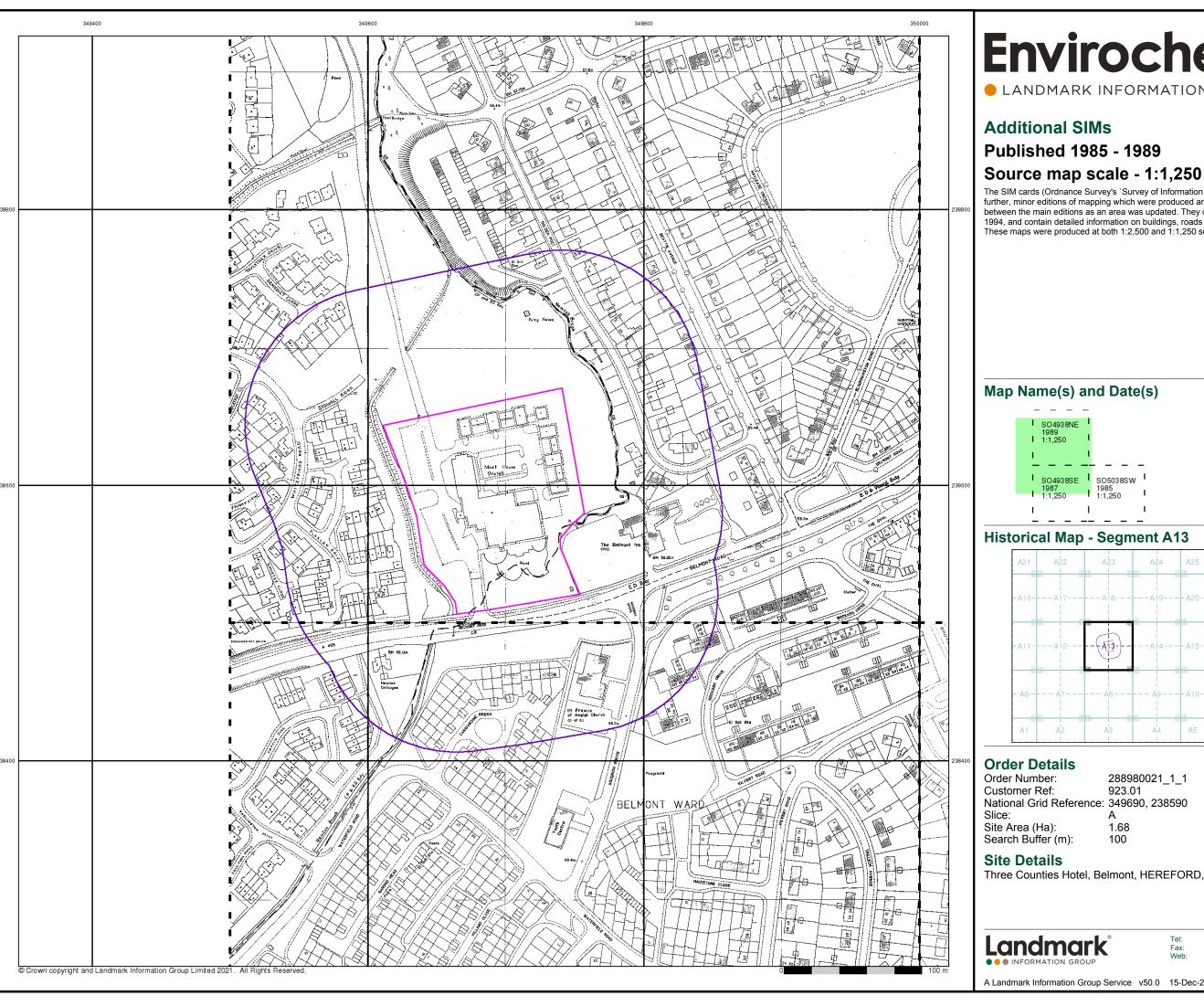
#### **Site Details**

Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

Landmark

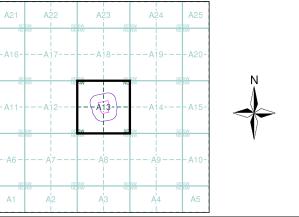
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The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information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

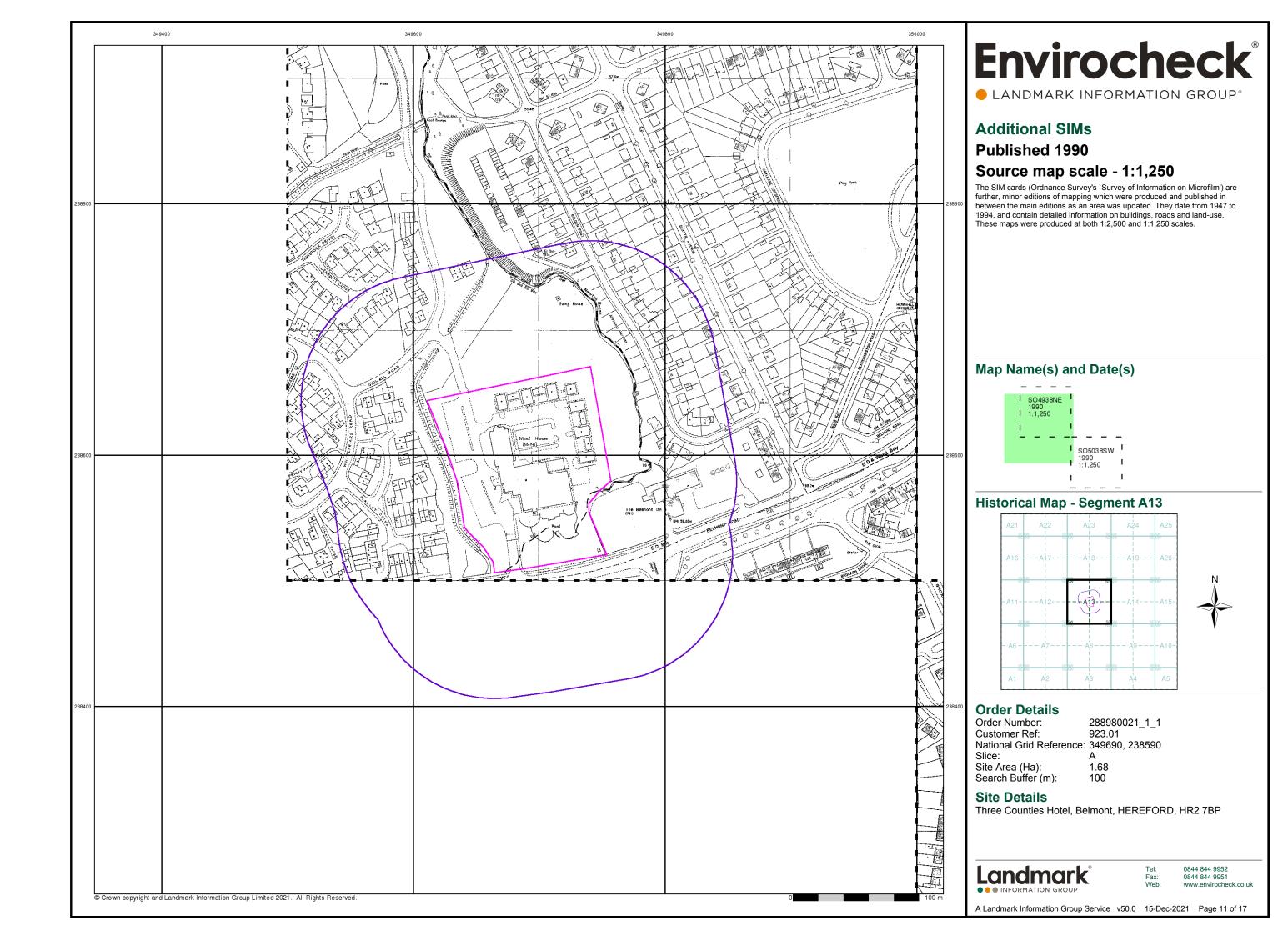


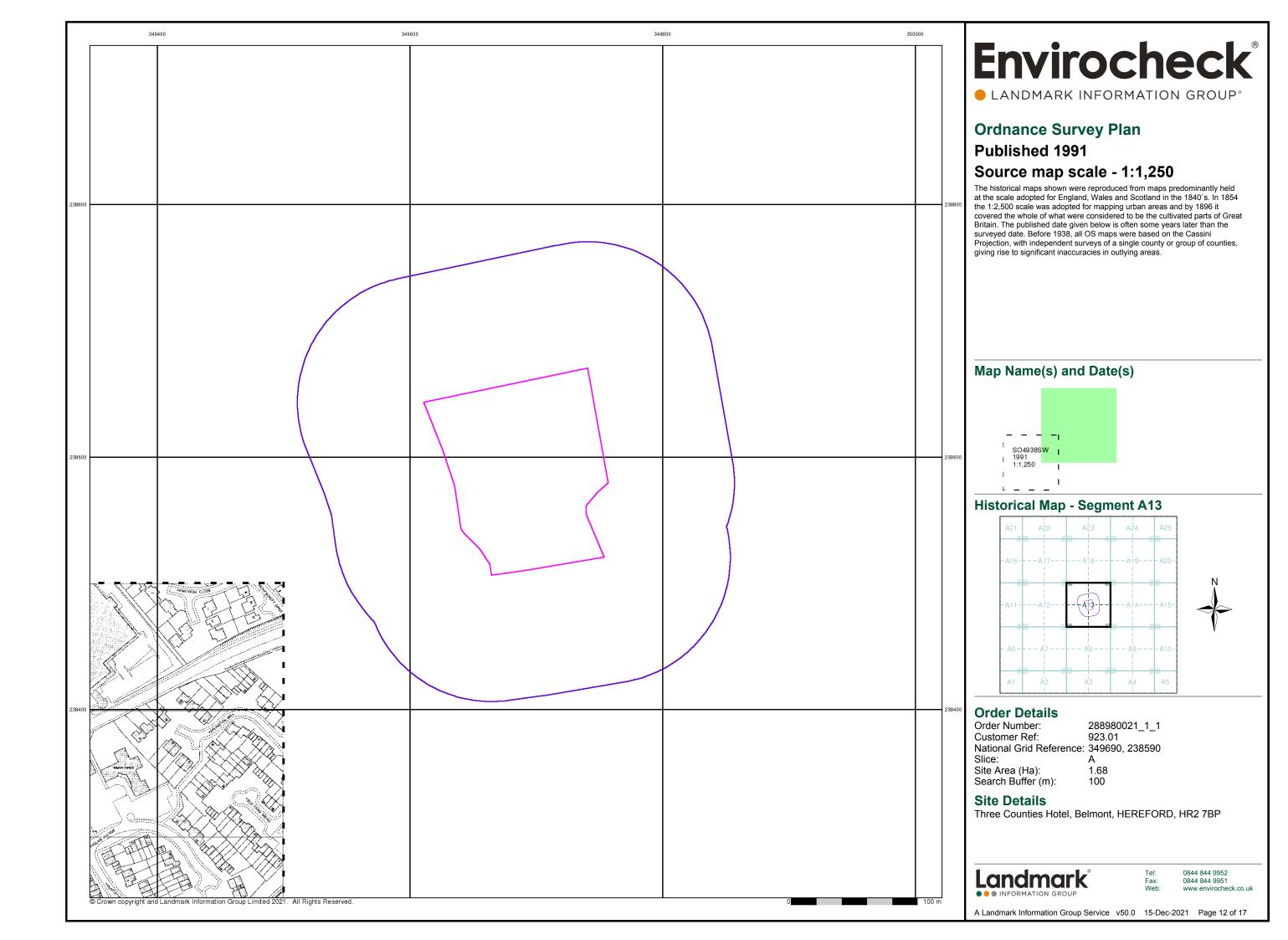
National Grid Reference: 349690, 238590

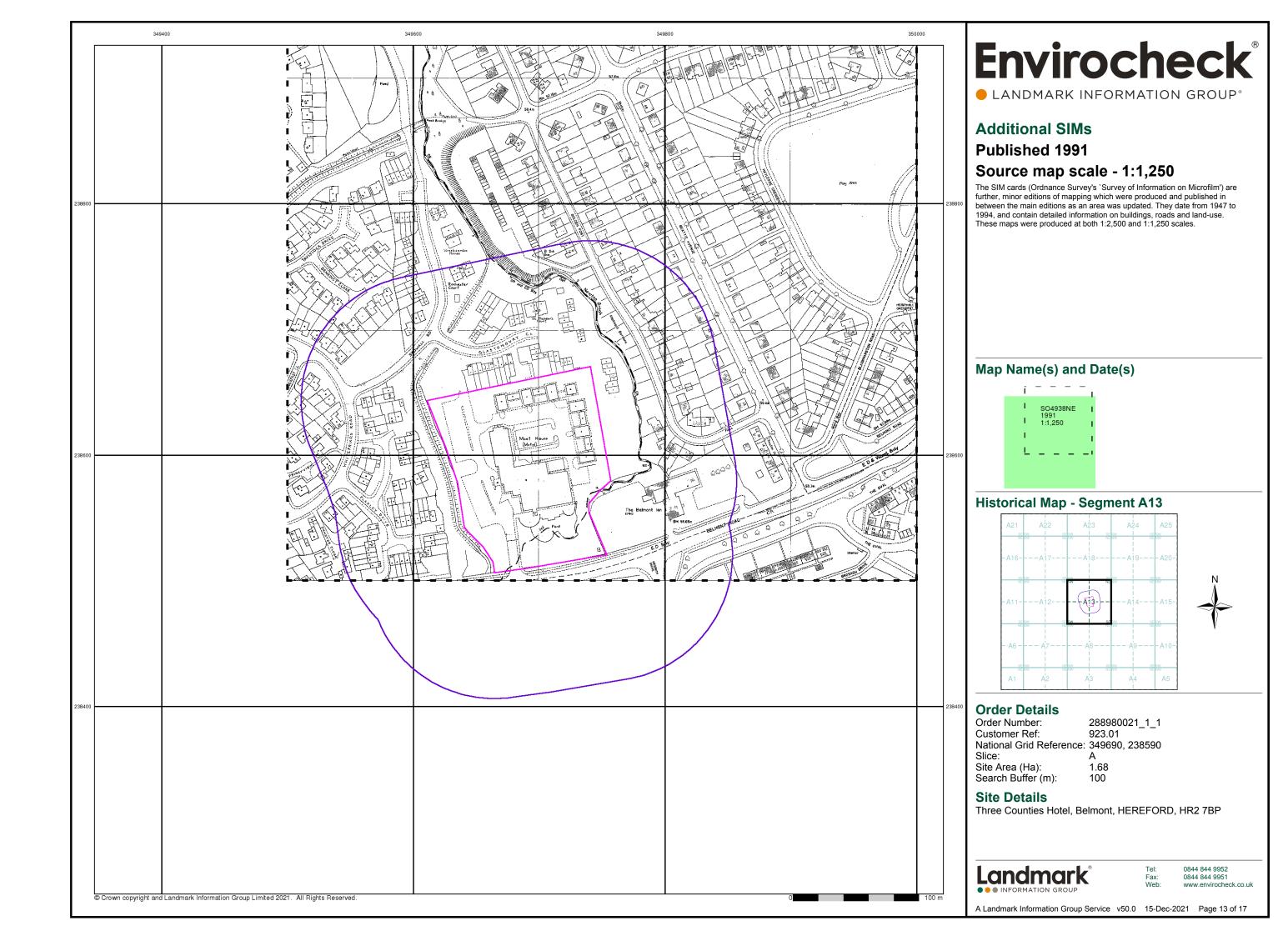
Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

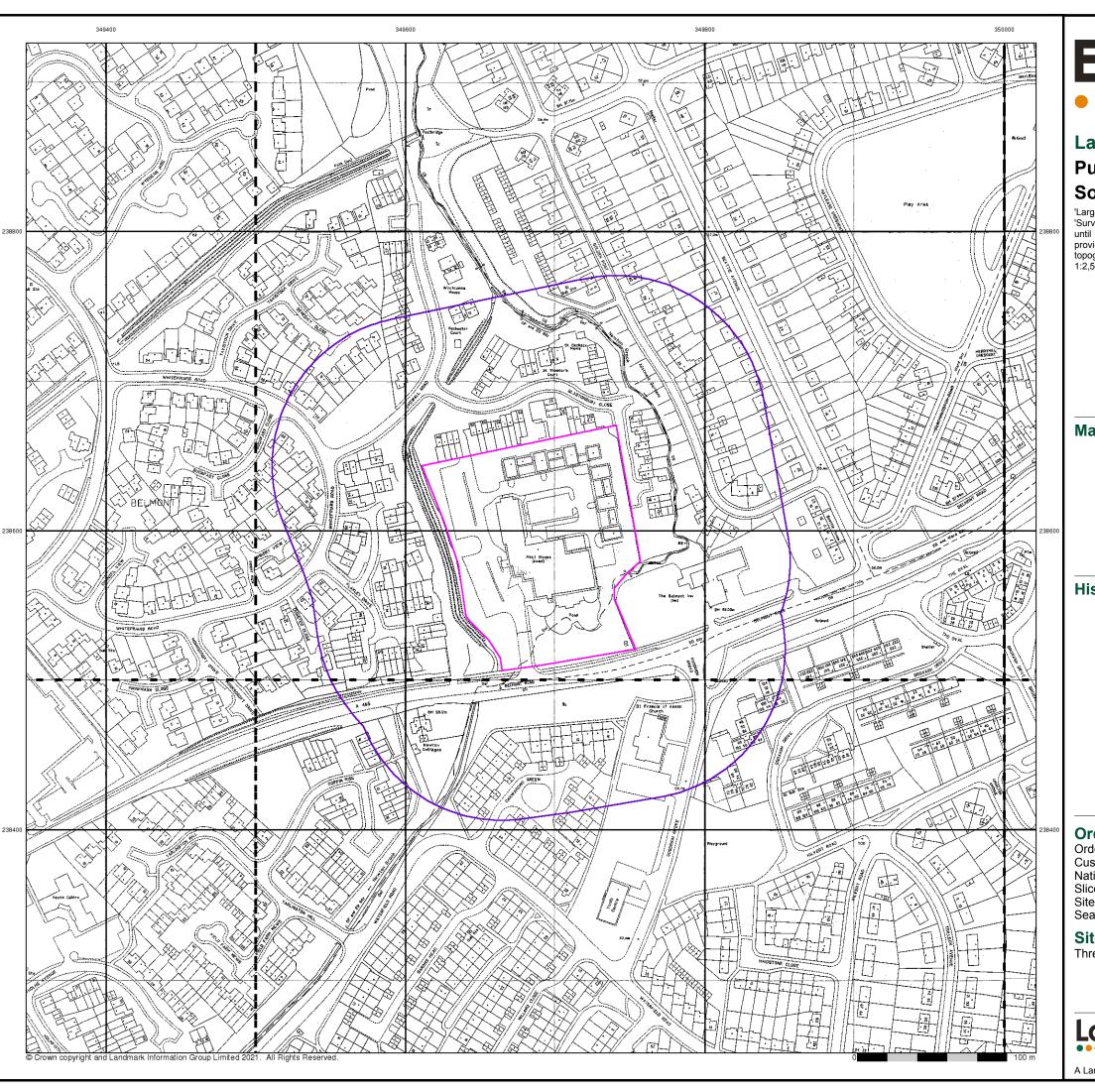
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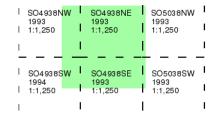


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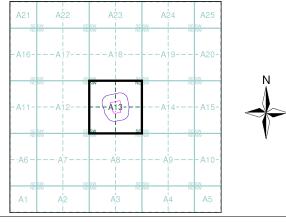
## Large-Scale National Grid Data Published 1993 - 1994 Source map scale - 1:1,250

'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: 288980021\_1\_1
Customer Ref: 923.01
National Grid Reference: 349690, 238590

e:

Site Area (Ha): 1.68 Search Buffer (m): 100

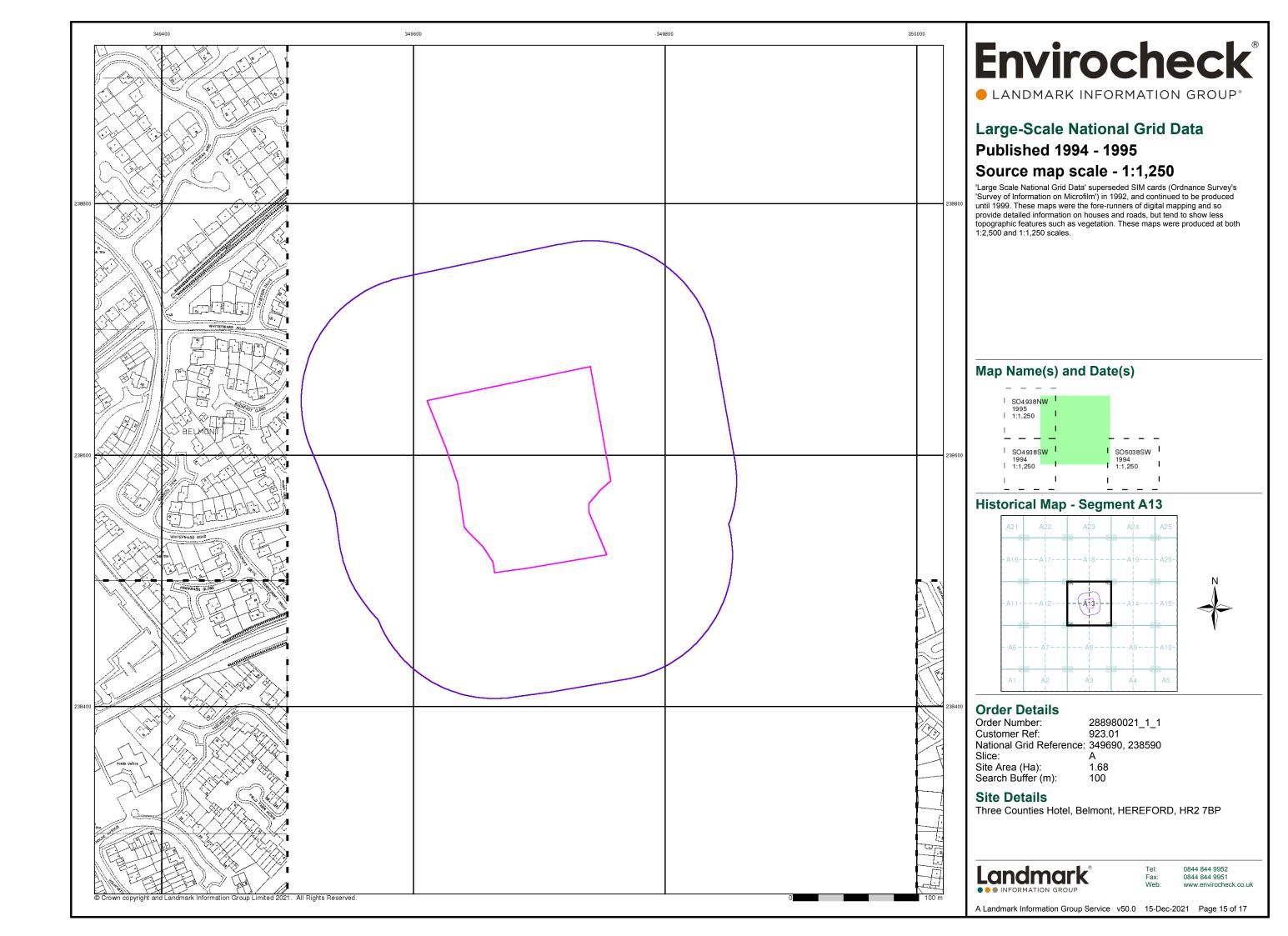
#### **Site Details**

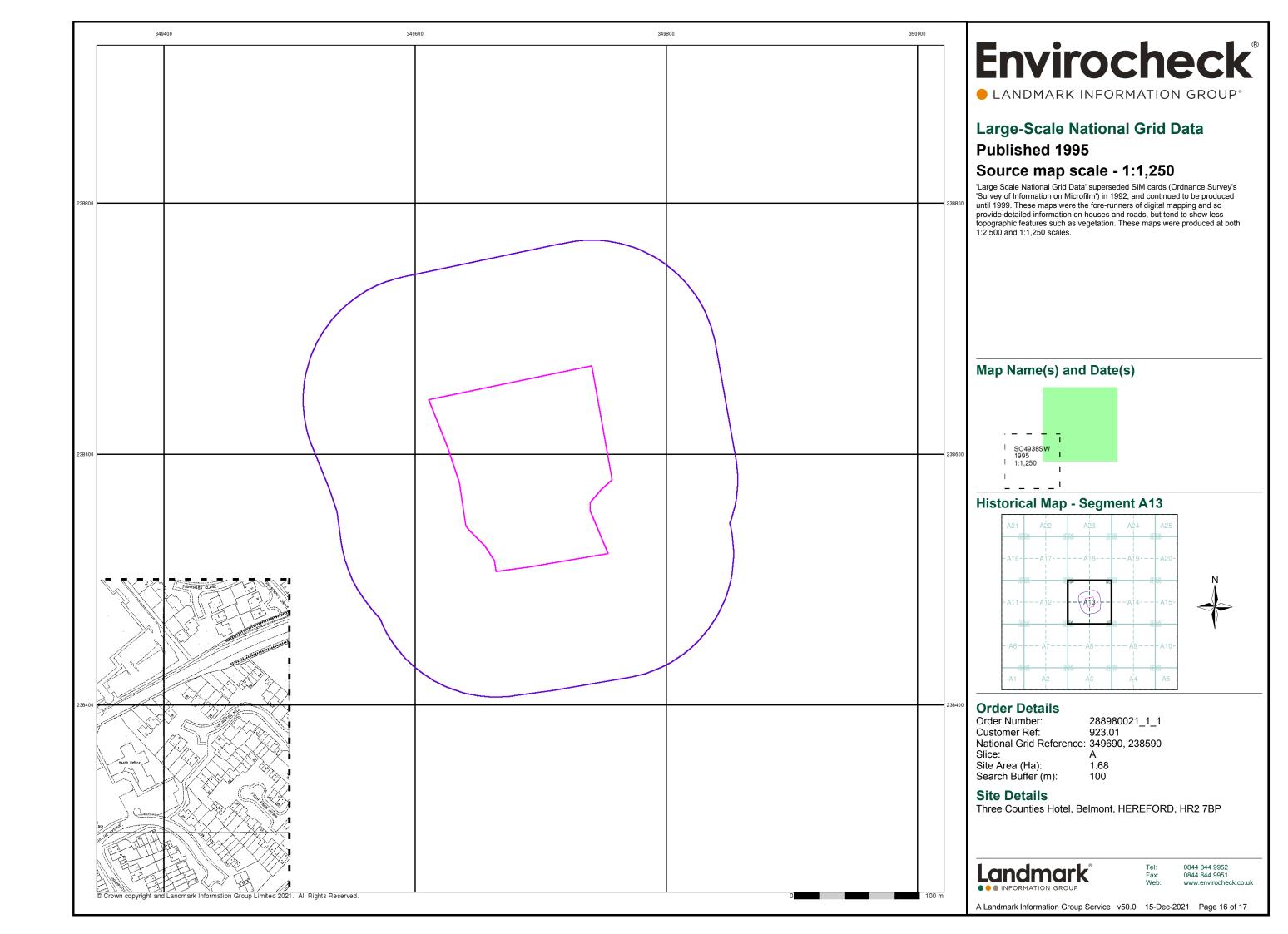
Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

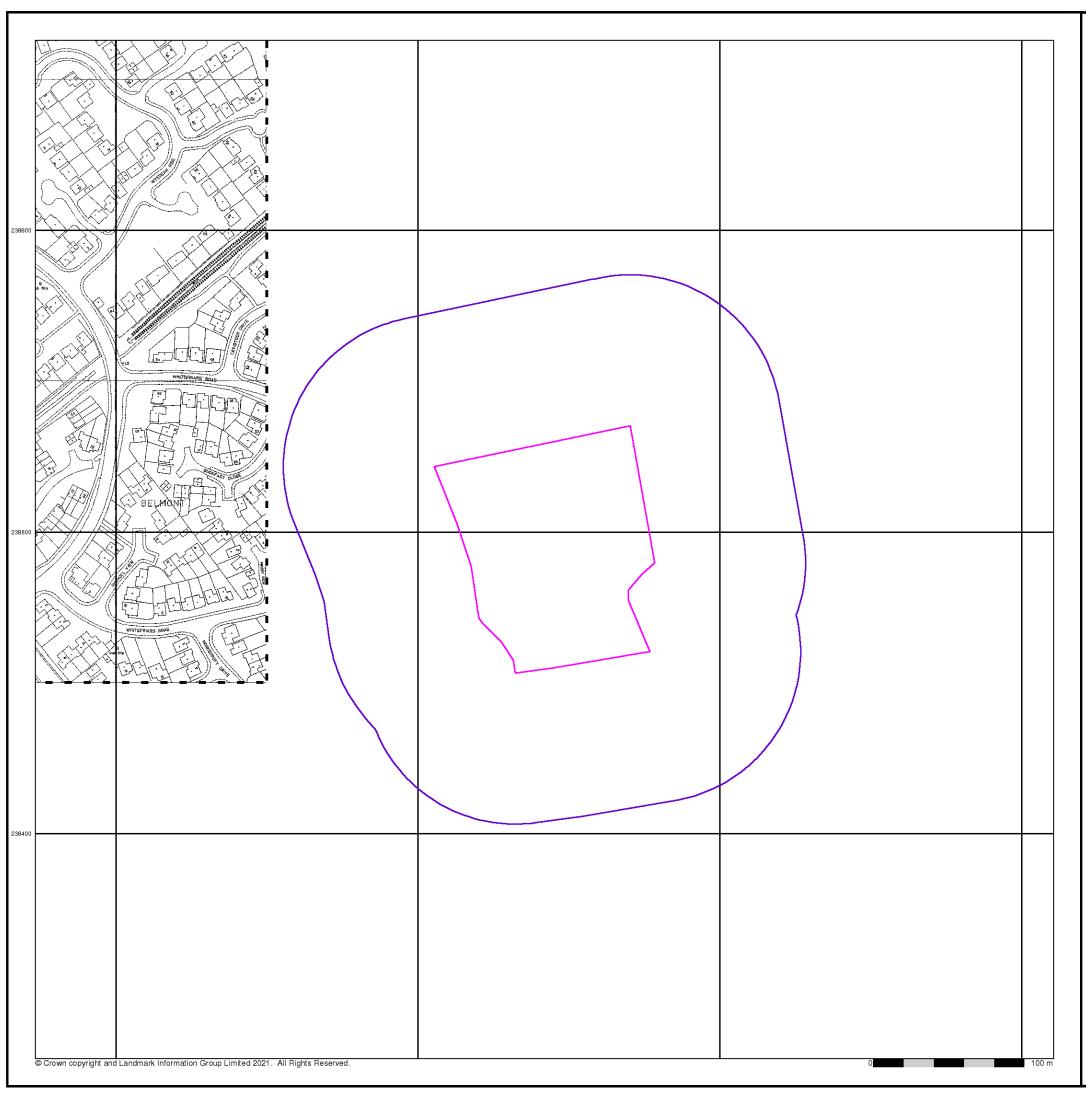
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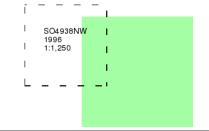
#### **Large-Scale National Grid Data**

#### Published 1996

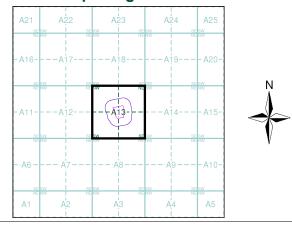
#### Source map scale - 1:1,250

'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: 288980021\_1\_1 Customer Ref: National Grid Reference: 349690, 238590

Slice:

Site Area (Ha): Search Buffer (m): 100

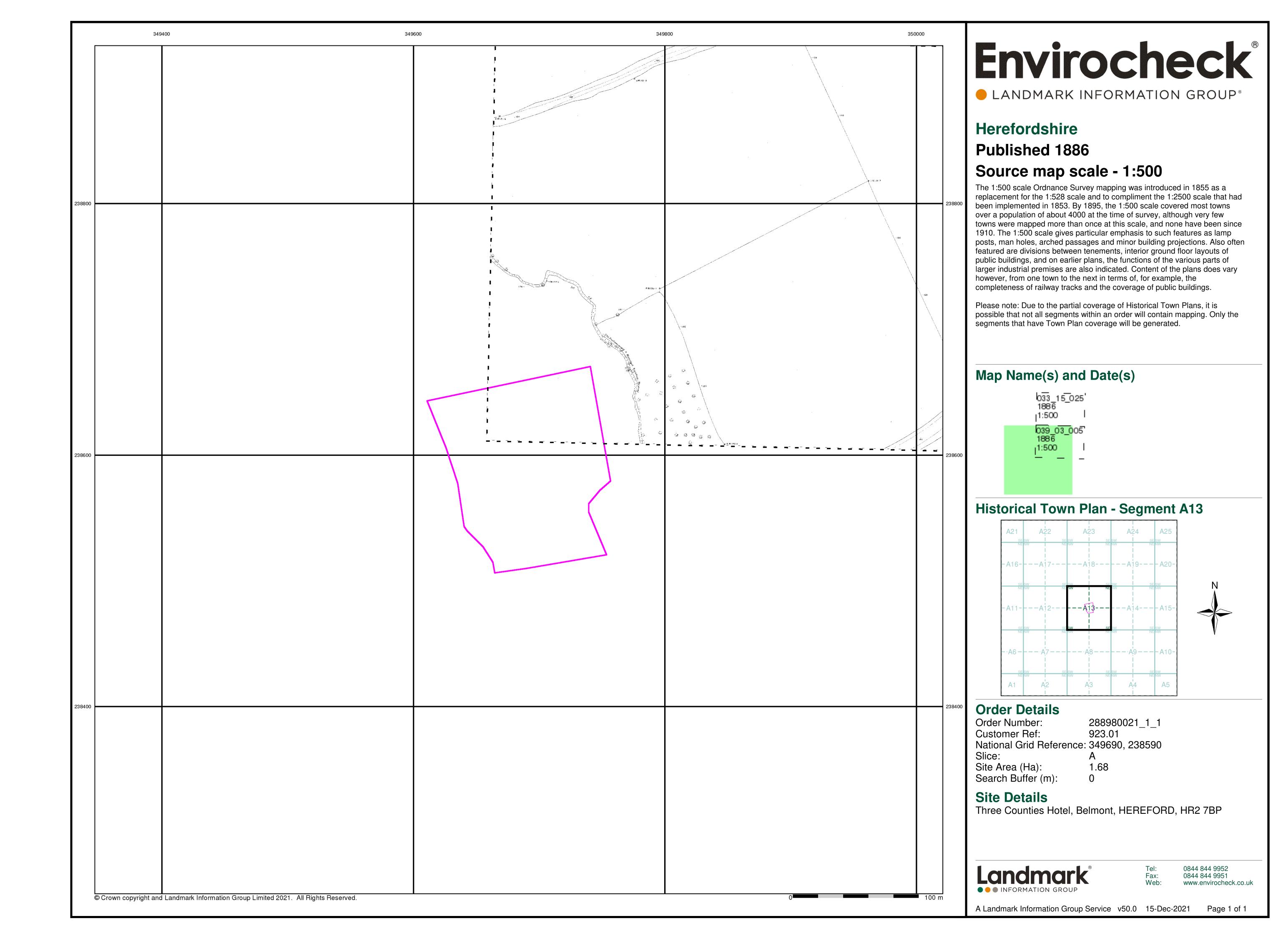
#### **Site Details**

Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

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### **Historical Mapping Legends**

#### Gravel Pit Other Orchard Mixed Wood Deciduous Brushwood Furze Rough Pasture Arrow denotes Trigonometrical flow of water Station Bench Mark Site of Antiquities Pump, Guide Post, Well, Spring, Signal Post **Boundary Post** ·285 Surface Level Sketched Instrumental Contour Contour Fenced Main Roads Minor Roads Un-Fenced Sunken Road Raised Road Railway over Road over Railway Ri∨er Railway over Level Crossing Road over Road over Road over County Boundary (Geographical) County & Civil Parish Boundary Administrative County & Civil Parish Boundary County Borough Boundary (England) Co. Boro. Bdy. County Burgh Boundary (Scotland) Rural District Boundary RD. Bdy.

····· Civil Parish Boundary

**Ordnance Survey County Series 1:10,560** 

#### Ordnance Survey Plan 1:10,000

MP

Mile Post

وسرسه		ılk Pit, Clay Pit Quarry		Gravel Pit		
	: Sar	d Pit		Disused Pit or Quarry		
1.00.00		use or g Heap	<b>((()</b>	Lake, Loch or Pond		
	. Dur	es		Boulders		
<b>弁</b> # /	Cor Tre	iferous es	44	Non-Coniferous Trees		
<b>φ</b> φ	Orcha	rd No_	Scrub	∖Y₁v Coppice		
ជ ជ ជ	Bracke	en allin	Heath	Grassland		
<u> </u>	Marsh	V///	Reeds	스크스 Saltings		
		Direct	tion of Flow of	F Water		
	Buildin	g	15	Shingle		
	Glassh	nouse	<i>**</i> *//	Sand		
	Sloping	g Masonry	Pylon  Pole  Pole	<ul><li>Electricity</li><li>Transmission</li><li>Line</li></ul>		
o		Fort and a				
Cutting		Embankme	ent 			
		//	\\	Manple Track		
Road '	'n'''	Road Leve	Foot	∃⊨ Standard Gauge Single Track		
Under		Over Cross	ing Bridg	e Siding, Tramway		
				or Mineral Line		
	-+ + + + + + + + + + Narrow Gauge					
— — Geographical County						
Administrative County, County Borough						
Municipal Borough, Urban or Rural District, Burgh or District Council						
Borough, Burgh or County Constituency Shown only when not coincident with other boundaries						
Civil Parish Shown alternately when coincidence of boundaries occurs						
BP, BS Boundary Post or Stone Pol Sta Police Station						
Ch	Church	, . out or otorie	PO Sta	Post Office		
СН	Club Hou		PC	Public Convenience		
F E Sta	_	ne Station	PH	Public House		
FB Fn	Foot Brid Fountain	-	SB Spr	Signal Box Spring		
GP	Guide Po		TCB	Telephone Call Box		
MD	Mile Deet		TCD	Talanhana Call Boot		

Telephone Call Post

#### 1:10,000 Raster Mapping

	Gravel Pit		Refuse tip or slag heap
	Rock	3 3	Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle	Mud	Mud
Sand	Sand		Sand Pit
***************************************	Slopes		Top of cliff
	General detail		Underground detail
	- O∨erhead 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
۵ <sup>۵</sup>	Area of wooded ∨egetation	۵ <sup>۵</sup>	Non-coniferous trees
$\Diamond$	Non-coniferous trees (scattered)	**	Coniferous trees
		** **	
۵ *	trees (scattered) Coniferous	**	trees Positioned
* *	trees (scattered)  Coniferous trees (scattered)		trees  Positioned tree  Coppice
\$ \$\phi \ \phi \phi	trees (scattered)  Coniferous trees (scattered)  Orchard  Rough	£ £ £	trees Positioned tree  Coppice or Osiers
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	trees (scattered)  Coniferous trees (scattered)  Orchard  Rough Grassland	£ € € € € € € € € € € € € € € € € € € €	trees Positioned tree Coppice or Osiers Heath Marsh, Salt
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	trees (scattered)  Coniferous trees (scattered)  Orchard  Rough Grassland  Scrub	£ € € € € € € € € € € € € € € € € € € €	trees Positioned tree Coppice or Osiers Heath Marsh, Salt Marsh or Reeds
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	trees (scattered)  Coniferous trees (scattered)  Orchard  Rough Grassland  Scrub  Water feature  Mean high		trees  Positioned tree  Coppice or Osiers  Heath  Marsh, Salt Marsh or Reeds  Flow arrows  Mean low
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	trees (scattered)  Coniferous trees (scattered)  Orchard  Rough Grassland  Scrub  Water feature  Mean high water (springs)  Telephone line		trees  Positioned tree  Coppice or Osiers  Heath  Marsh, Salt Marsh or Reeds  Flow arrows  Mean low water (springs)  Electricity transmission line
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	trees (scattered)  Coniferous trees (scattered)  Orchard  Rough Grassland  Scrub  Water feature  Mean high water (springs)  Telephone line (where shown)  Bench mark	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	trees  Positioned tree  Coppice or Osiers  Heath  Marsh, Salt Marsh or Reeds  Flow arrows  Mean low water (springs)  Electricity transmission line (with poles)  Triangulation
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	trees (scattered)  Coniferous trees (scattered)  Orchard  Rough Grassland  Scrub  Water feature  Mean high water (springs)  Telephone line (where shown)  Bench mark (where shown)  Point feature (e.g. Guide Post	# #	trees  Positioned tree  Coppice or Osiers  Heath  Marsh, Salt Marsh or Reeds  Flow arrows  Mean low water (springs)  Electricity transmission line (with poles)  Triangulation station  Pylon, flare stack

Building

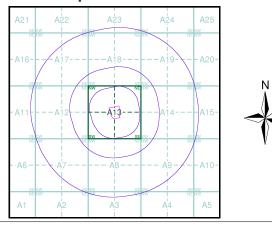
## **Envirocheck**®

LANDMARK INFORMATION GROUP®

#### **Historical Mapping & Photography included:**

Mapping Type	Scale	Date	Pg
Herefordshire	1:10,560	1887	2
Herefordshire	1:10,560	1905	3
Herefordshire	1:10,560	1930	4
Herefordshire	1:10,560	1938	5
Herefordshire	1:10,560	1953	6
Ordnance Survey Plan	1:10,000	1964	7
Ordnance Survey Plan	1:10,000	1970 - 1977	8
Ordnance Survey Plan	1:10,000	1985	9
Ordnance Survey Plan	1:10,000	1993	10
10K Raster Mapping	1:10,000	2000	11
Street View	Variable		12

#### **Historical Map - Slice A**



#### **Order Details**

288980021\_1\_1 Order Number: Customer Ref: 923.01 National Grid Reference: 349690, 238590 Slice:

Site Area (Ha): Search Buffer (m): 1000

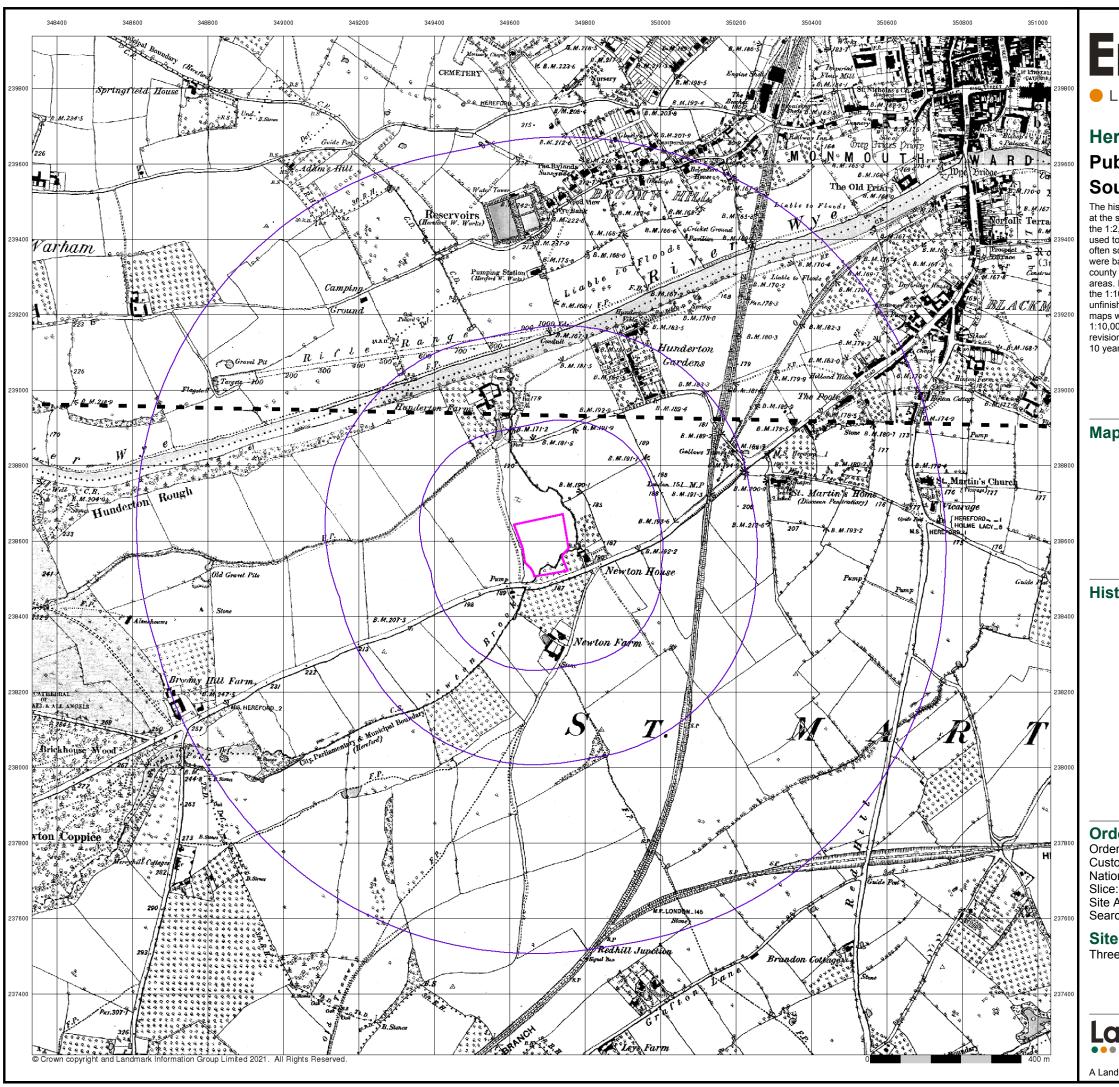
#### **Site Details**

Three Counties Hotel, Belmont, HEREFORD, HR2 7BP



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A Landmark Information Group Service v50.0 15-Dec-2021 Page 1 of 12



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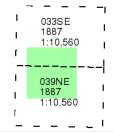
#### Herefordshire

#### Published 1887

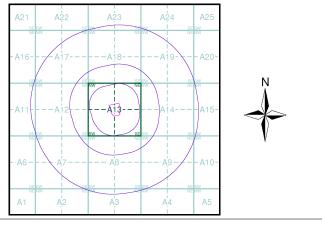
#### Source map scale - 1:10,560

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**

288980021\_1\_1 Order Number: Customer Ref: 923.01 National Grid Reference: 349690, 238590

Site Area (Ha): Search Buffer (m): 1000

#### **Site Details**

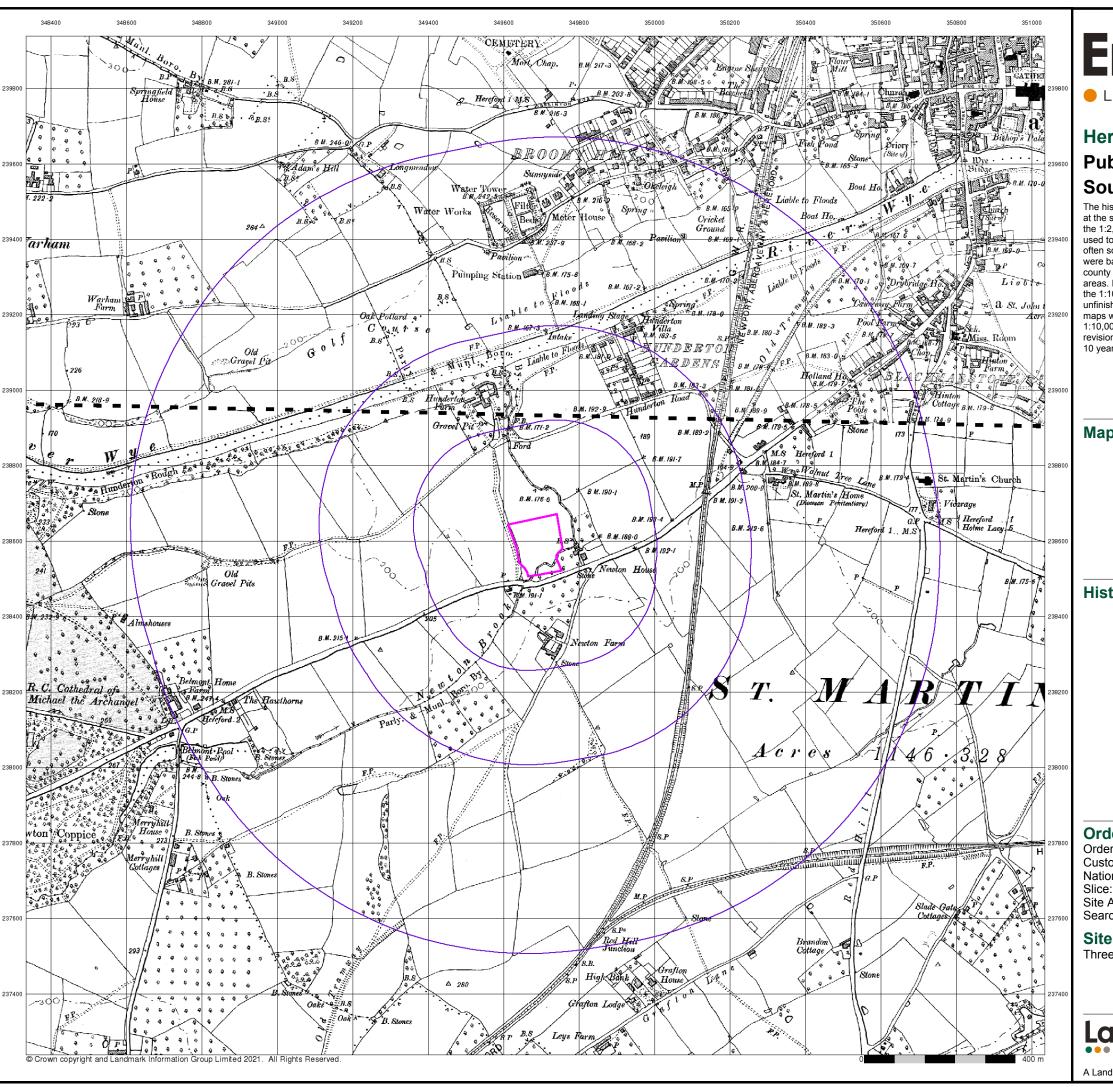
Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

Α

Landmark

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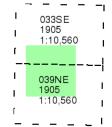
#### Herefordshire

### Published 1905

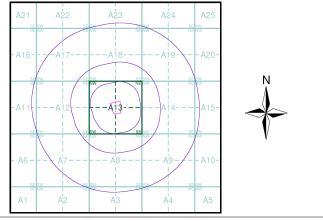
#### Source map scale - 1:10,560

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: 288980021\_1\_1 Customer Ref: 923.01 National Grid Reference: 349690, 238590 Α

Site Area (Ha): Search Buffer (m): 1000

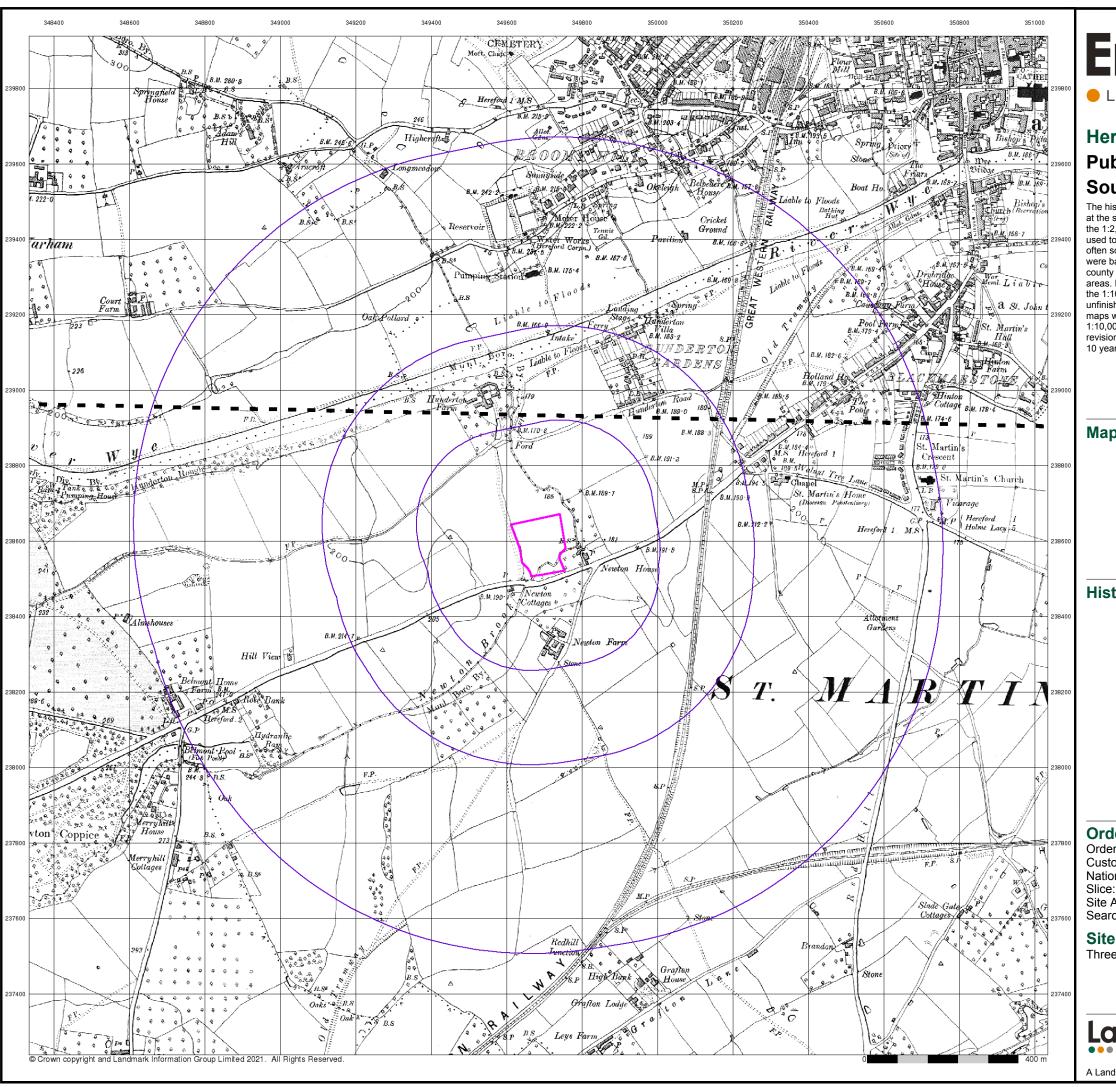
#### **Site Details**

Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

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0844 844 9951

A Landmark Information Group Service v50.0 15-Dec-2021 Page 3 of 12



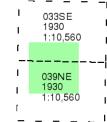
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#### Herefordshire

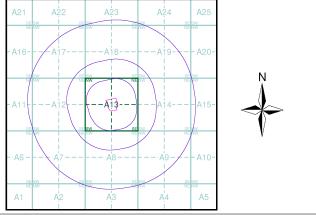
#### Published 1930 Source map scale - 1:10,560

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



#### **Historical Map - Slice A**



#### **Order Details**

Order Number: 288980021\_1\_1 Customer Ref: 923.01 National Grid Reference: 349690, 238590 Α

Site Area (Ha): Search Buffer (m): 1000

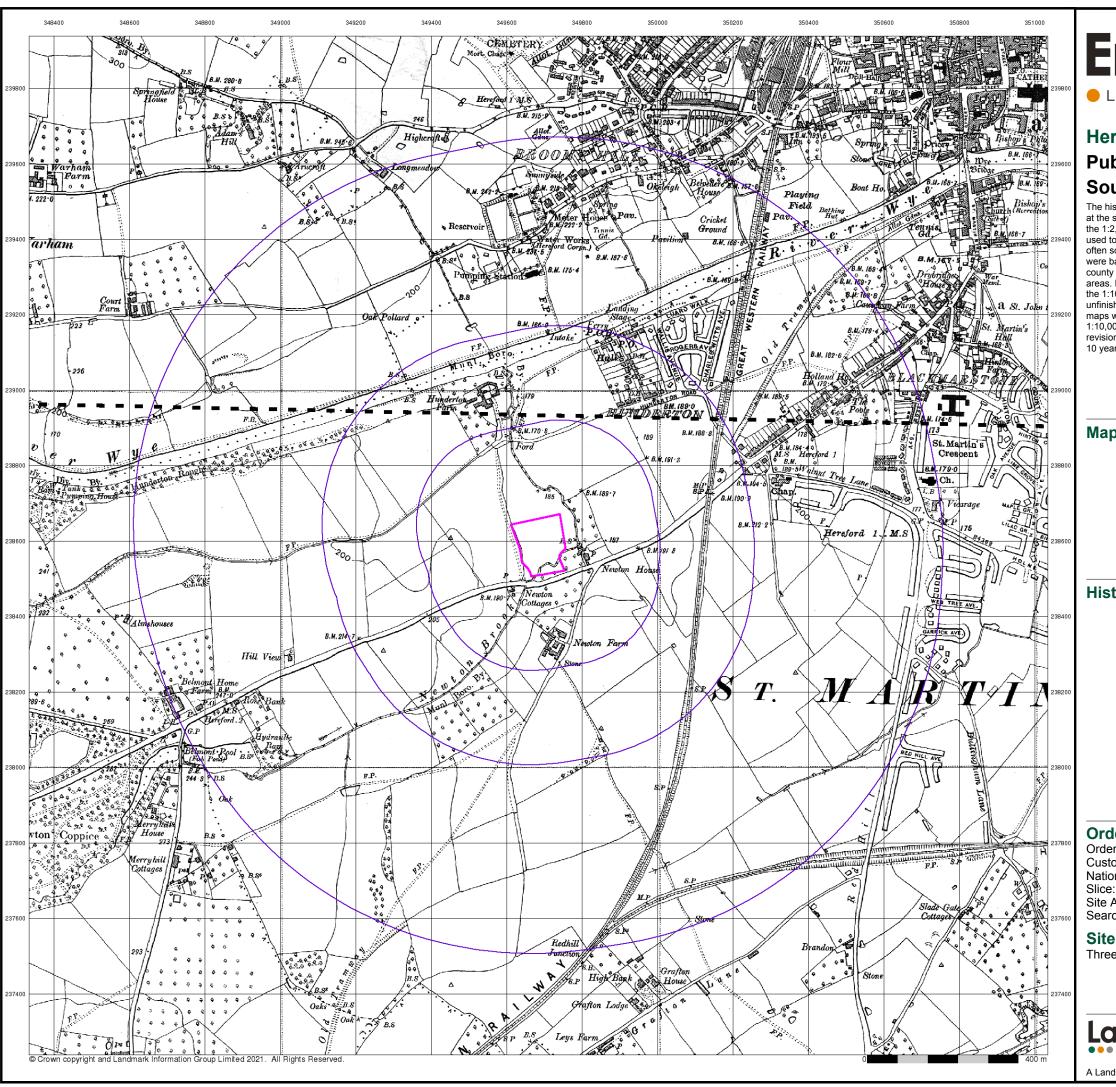
#### **Site Details**

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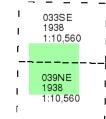
#### Herefordshire

### **Published 1938**

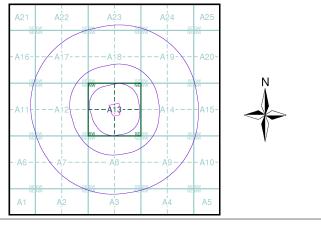
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. 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: 288980021\_1\_1 Customer Ref: 923.01 National Grid Reference: 349690, 238590 Α

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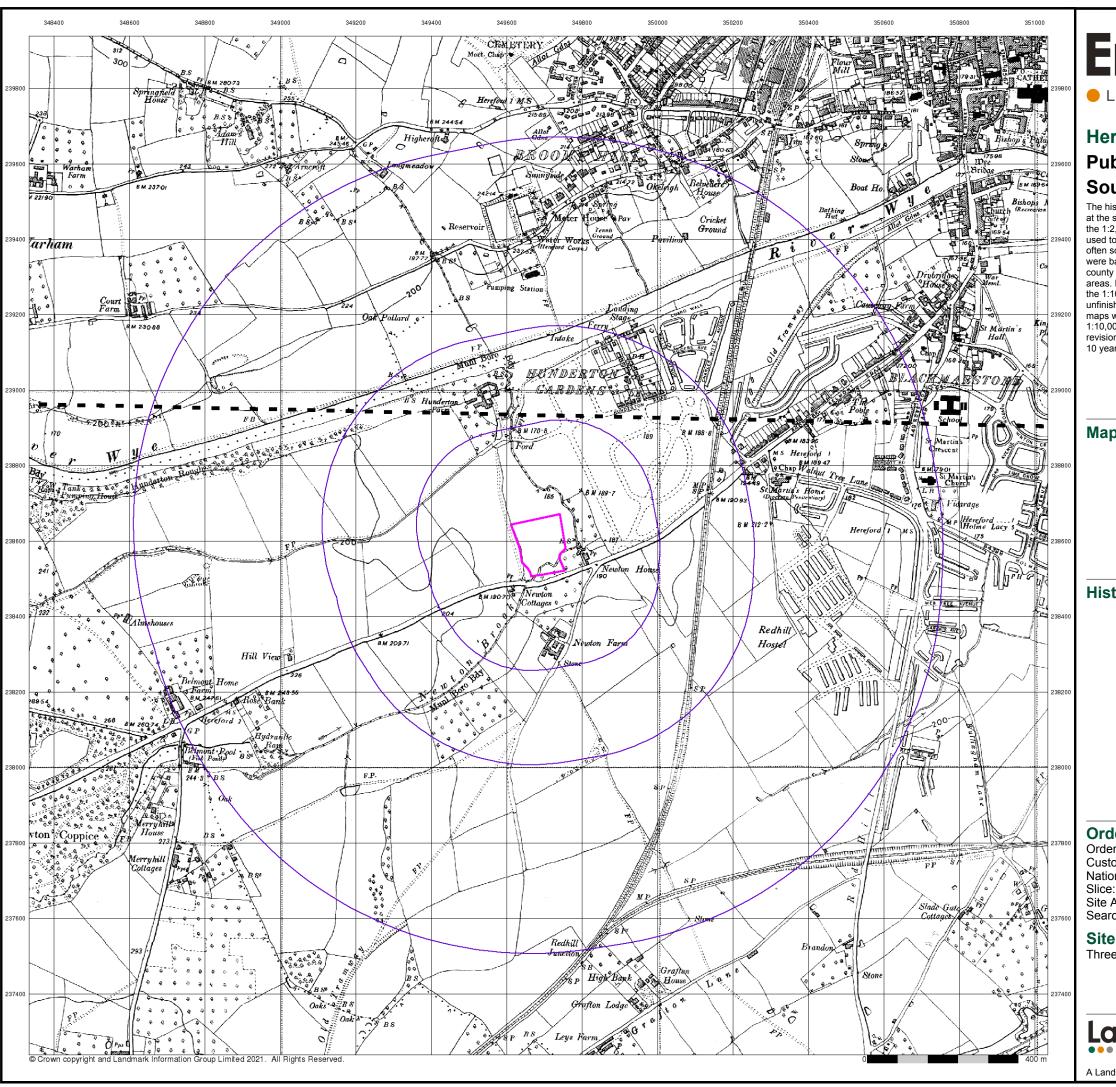
#### **Site Details**

Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

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A Landmark Information Group Service v50.0 15-Dec-2021 Page 5 of 12



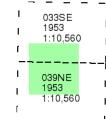
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#### Herefordshire

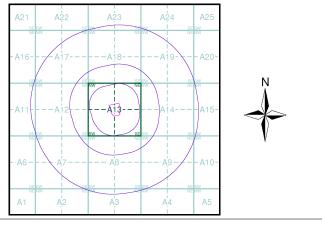
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#### Map Name(s) and Date(s)



#### **Historical Map - Slice A**



#### **Order Details**

Order Number: 288980021\_1\_1 Customer Ref: 923.01 National Grid Reference: 349690, 238590 Α

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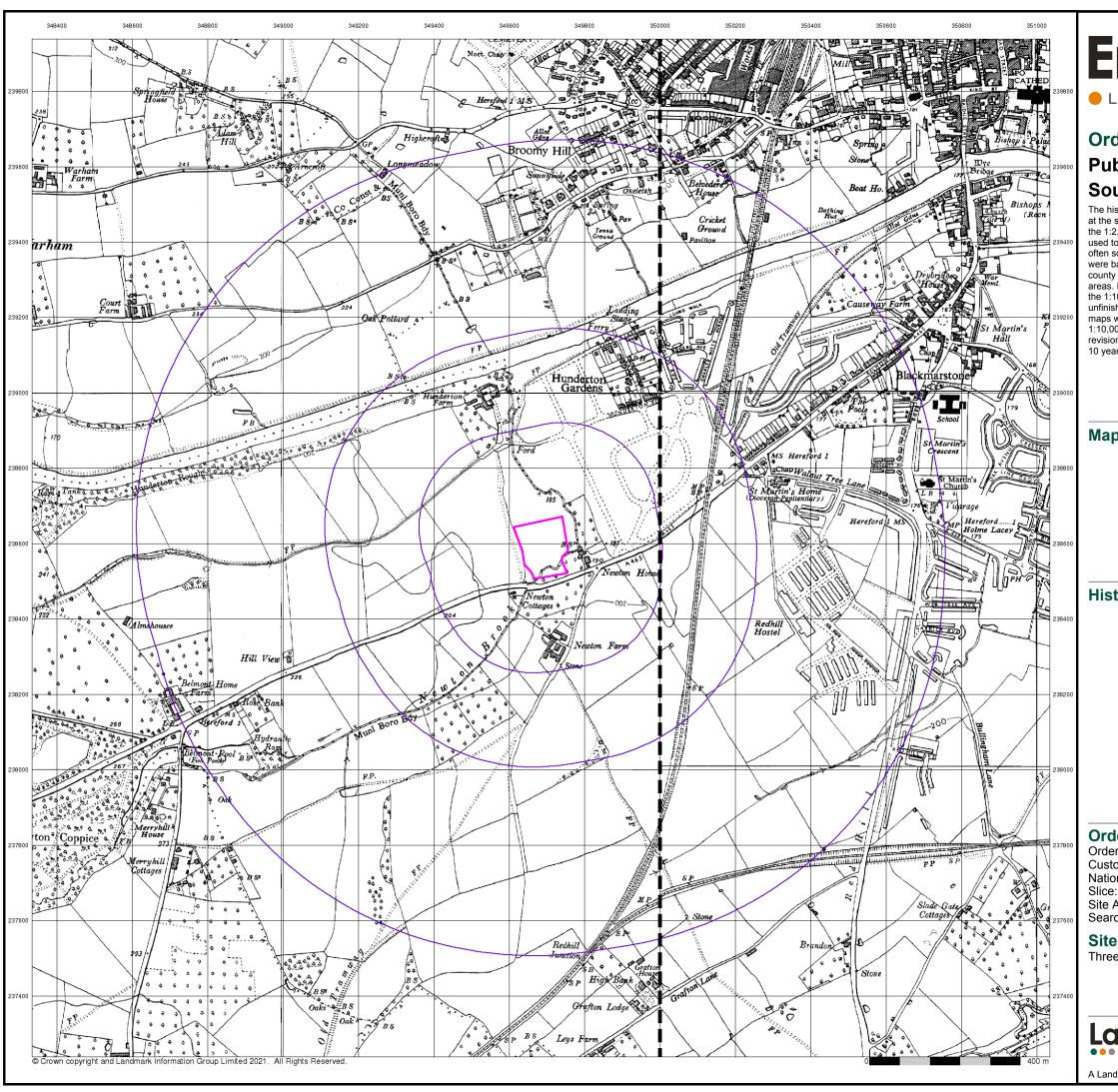
#### **Site Details**

Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

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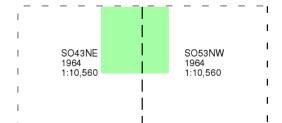


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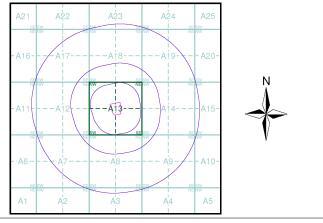
# Ordnance Survey Plan Published 1964 Source map scale - 1:10,000

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



#### **Historical Map - Slice A**



#### **Order Details**

Order Number: 288980021\_1\_1
Customer Ref: 923.01
National Grid Reference: 349690, 238590

Ce: - Δrea (Ha)·

Site Area (Ha): 1.68 Search Buffer (m): 1000

#### **Site Details**

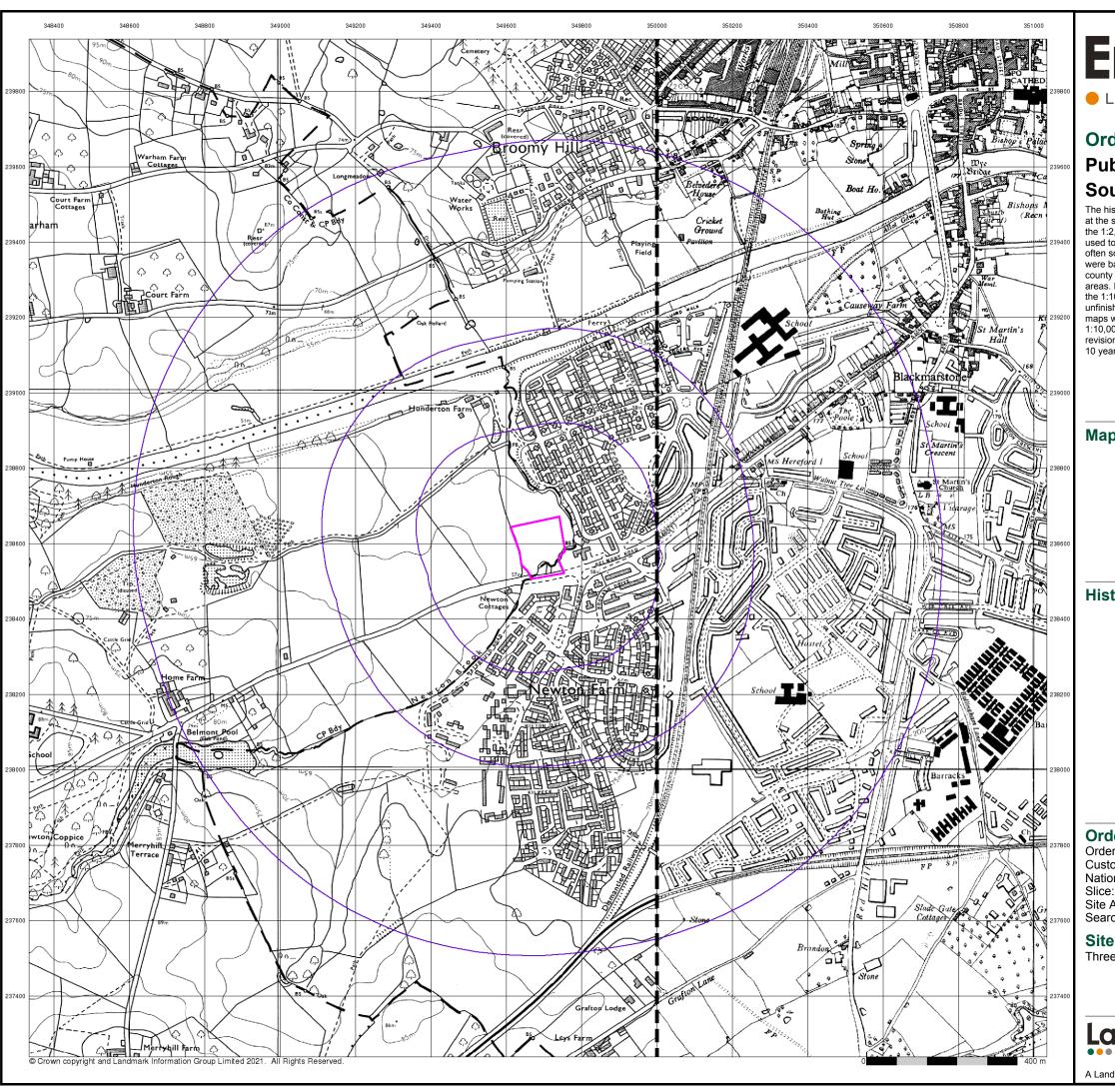
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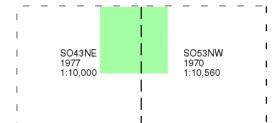


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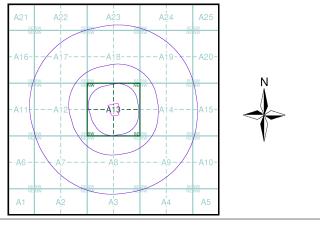
#### **Ordnance Survey Plan Published 1970 - 1977** Source map scale - 1:10,000

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



#### **Historical Map - Slice A**



#### **Order Details**

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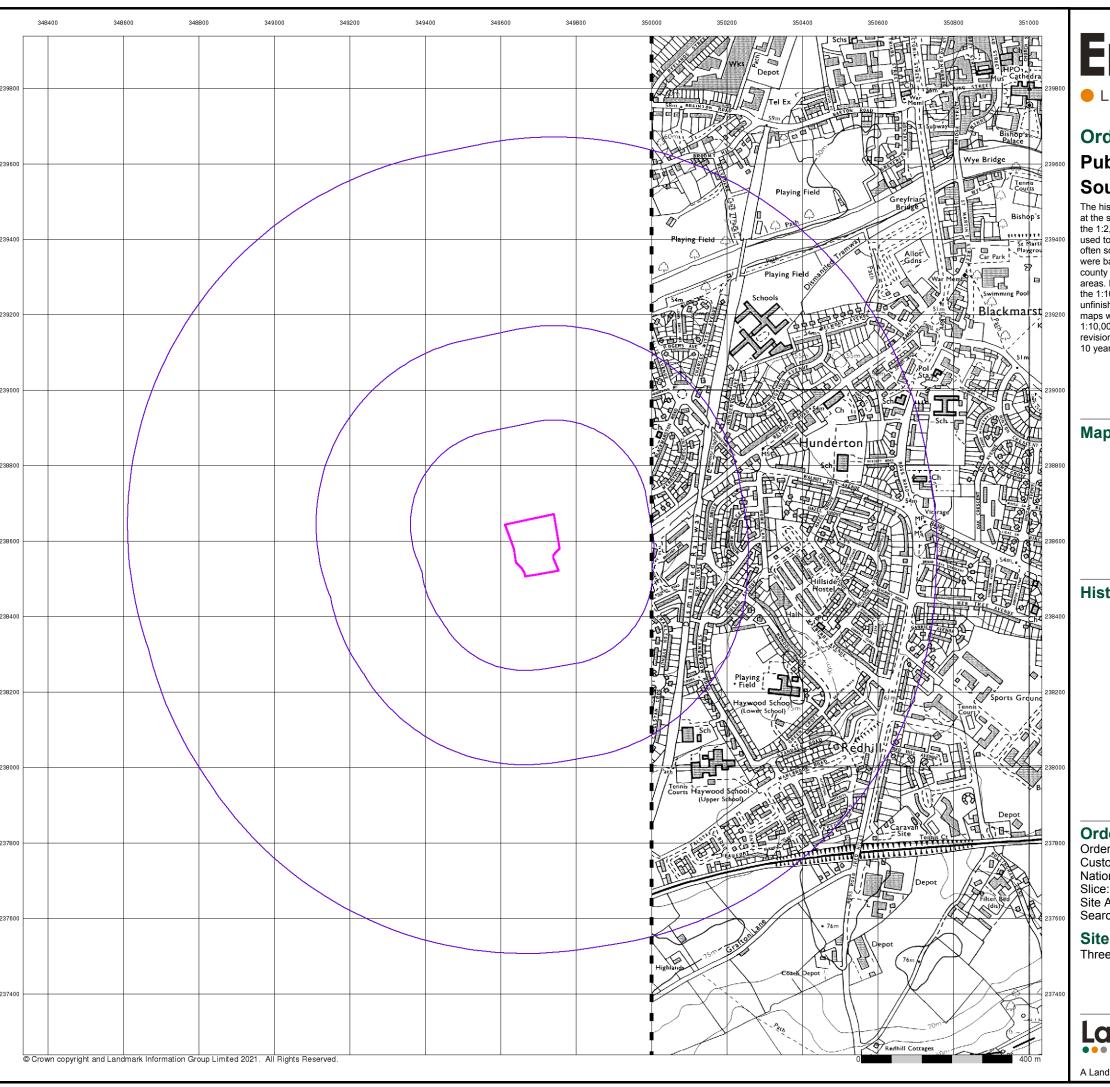
#### **Site Details**

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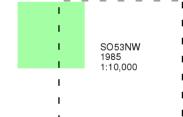


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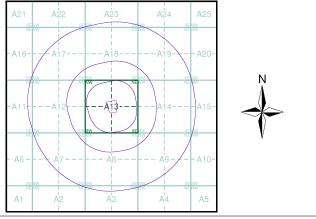
#### **Ordnance Survey Plan** Published 1985 Source map scale - 1:10,000

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



#### **Historical Map - Slice A**



#### **Order Details**

Order Number: 288980021\_1\_1 Customer Ref: 923.01 National Grid Reference: 349690, 238590

Site Area (Ha): Search Buffer (m): 1000

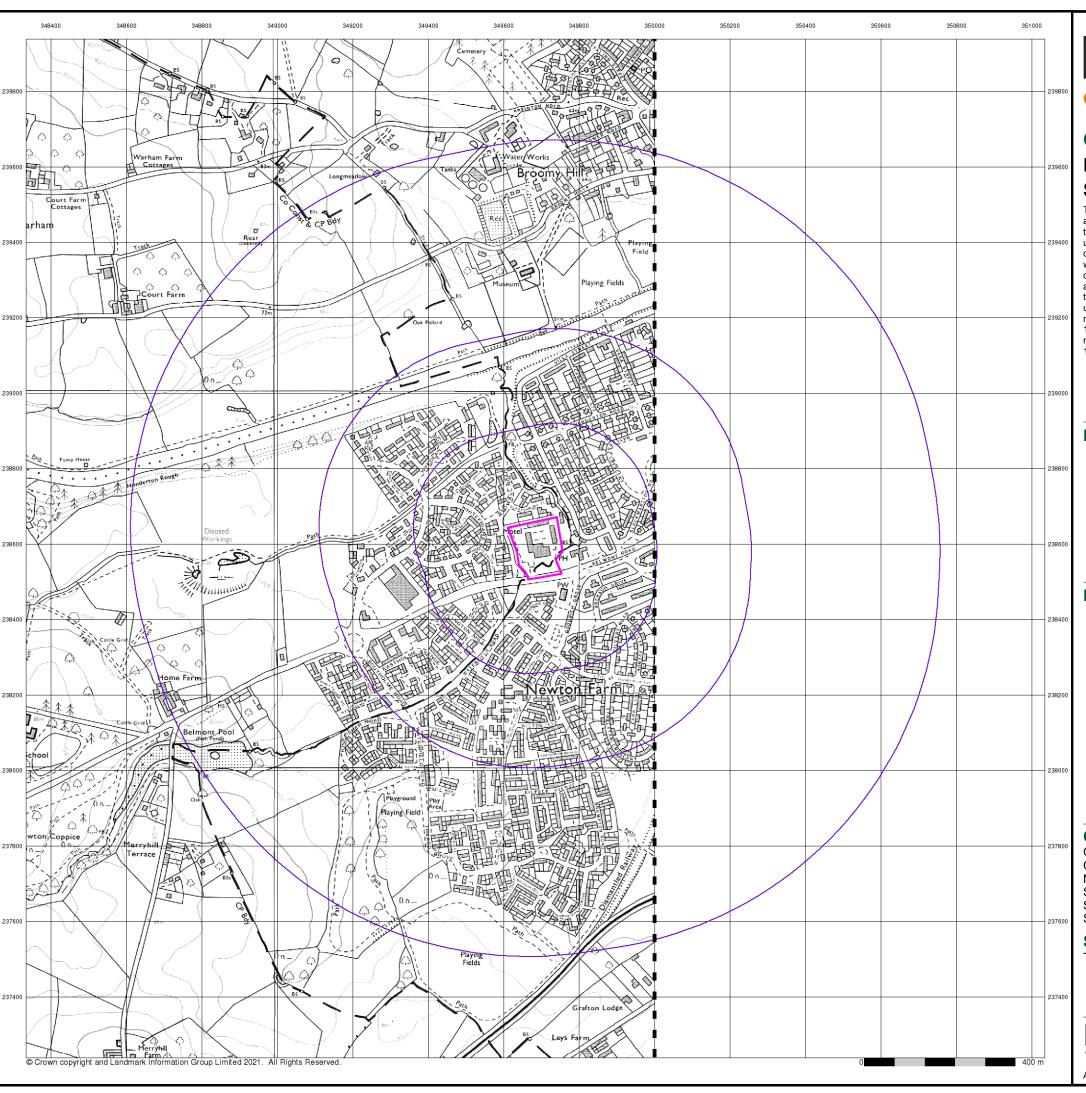
#### **Site Details**

Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

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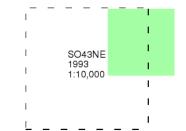


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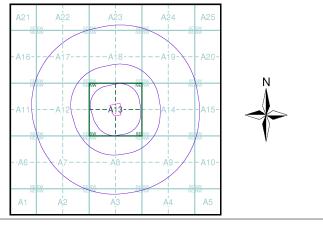
# Ordnance Survey Plan Published 1993 Source map scale - 1:10,000

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



#### **Historical Map - Slice A**



#### **Order Details**

Order Number: 288980021\_1\_1
Customer Ref: 923.01
National Grid Reference: 349690, 238590

Slice:

Site Area (Ha): 1.68 Search Buffer (m): 1000

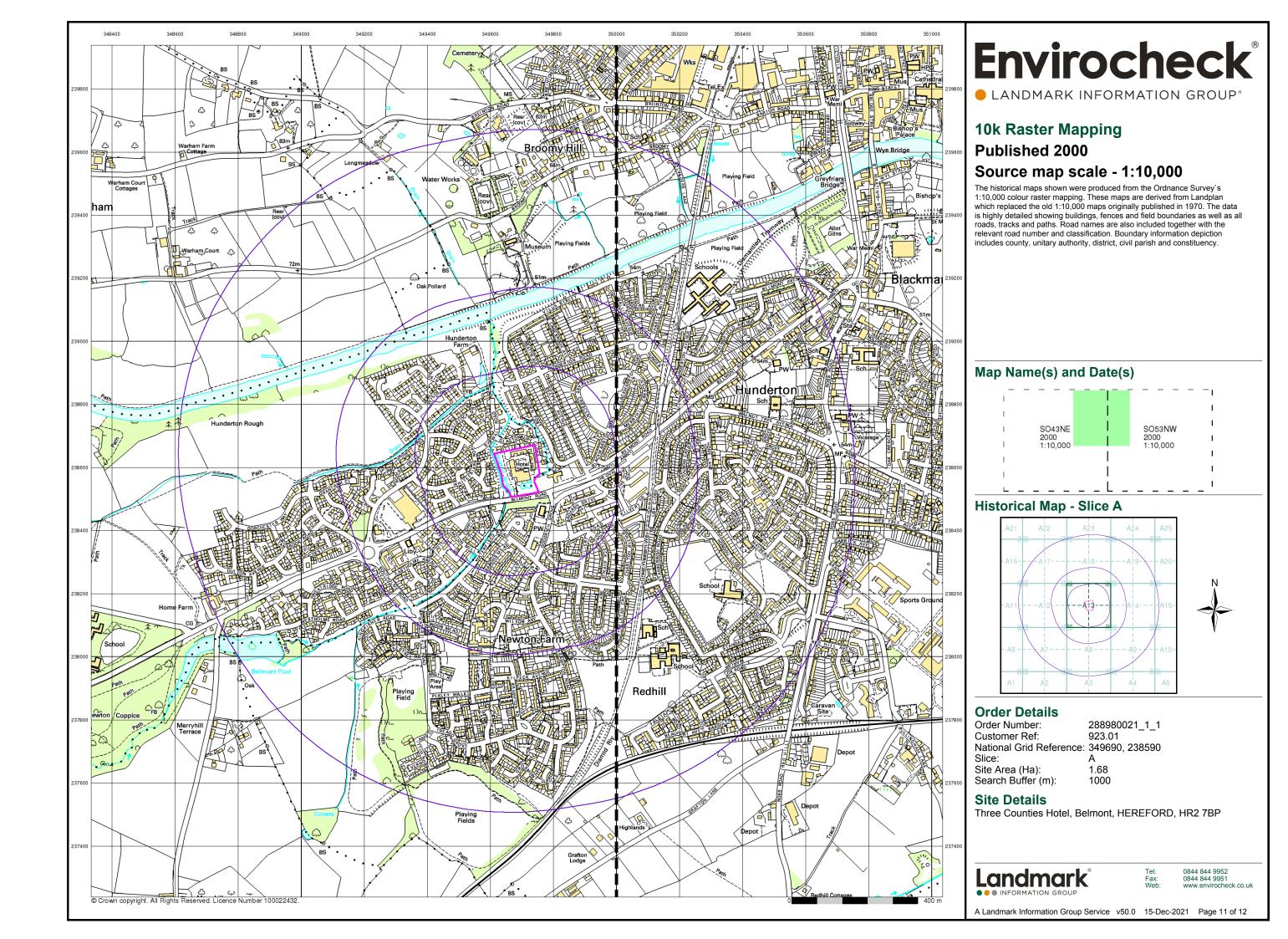
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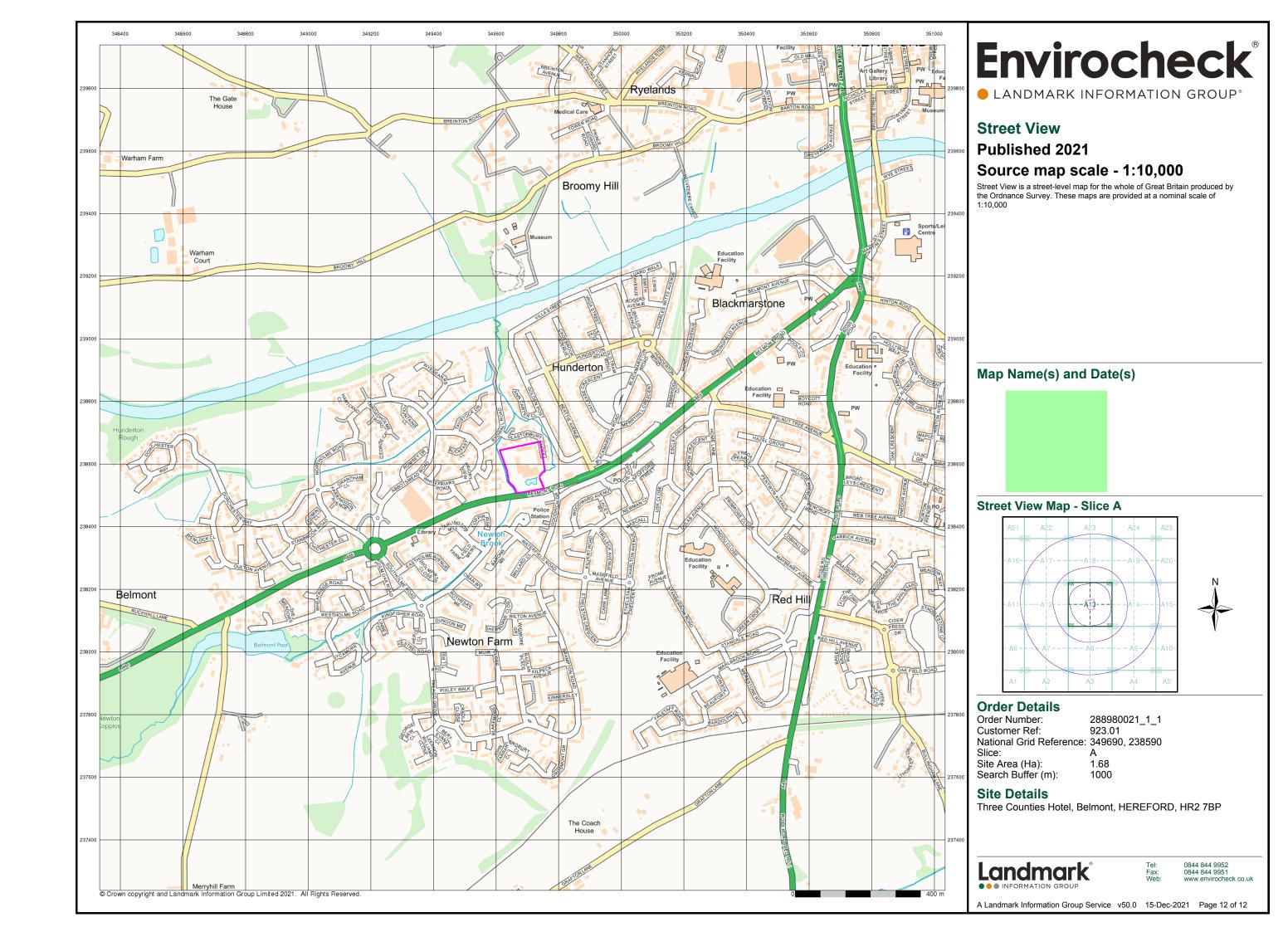
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A Landmark Information Group Service v50.0 15-Dec-2021 Page 10 of 12



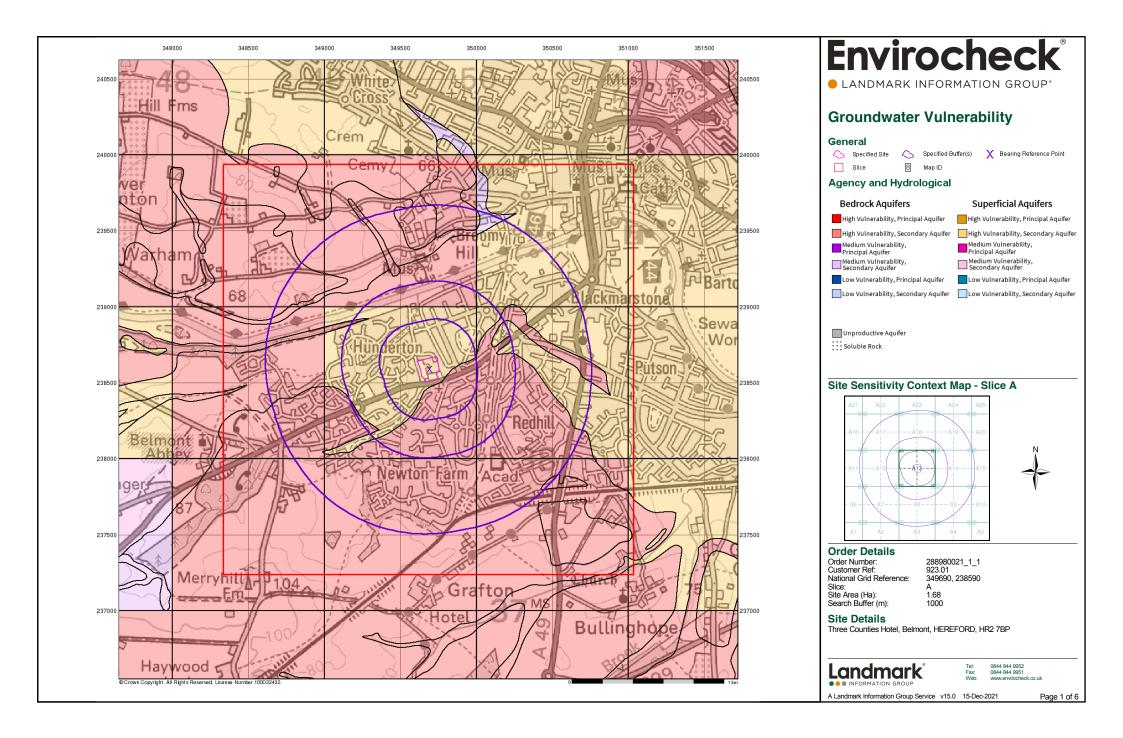


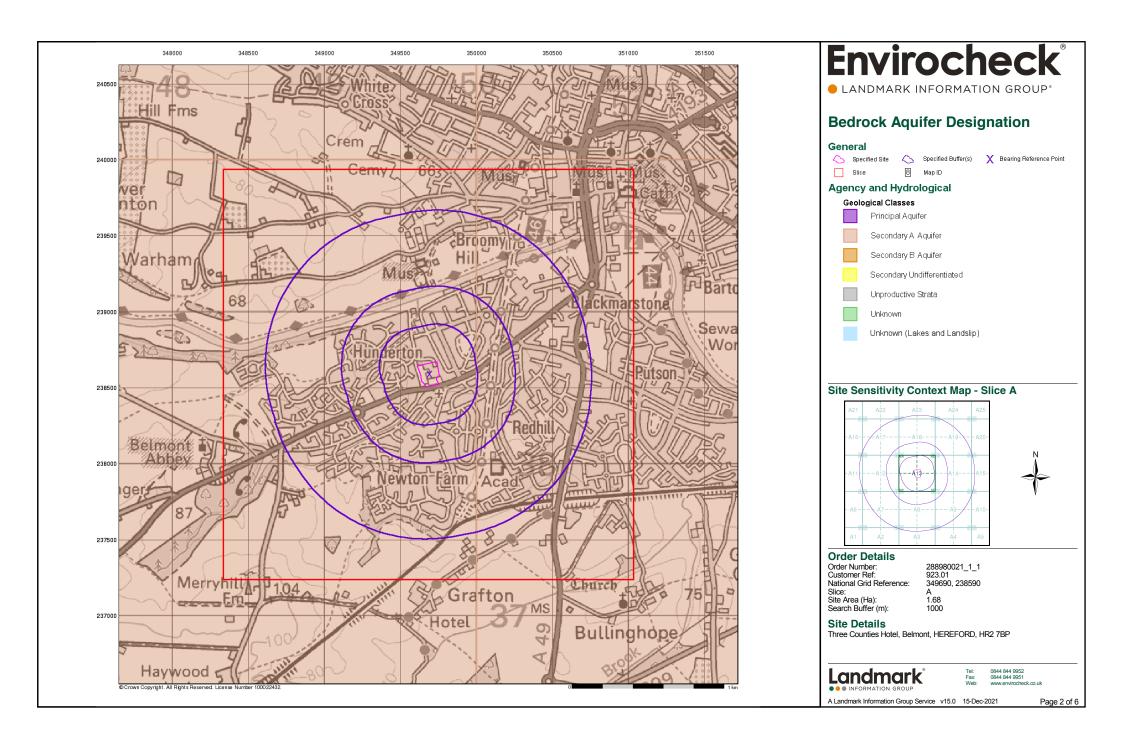


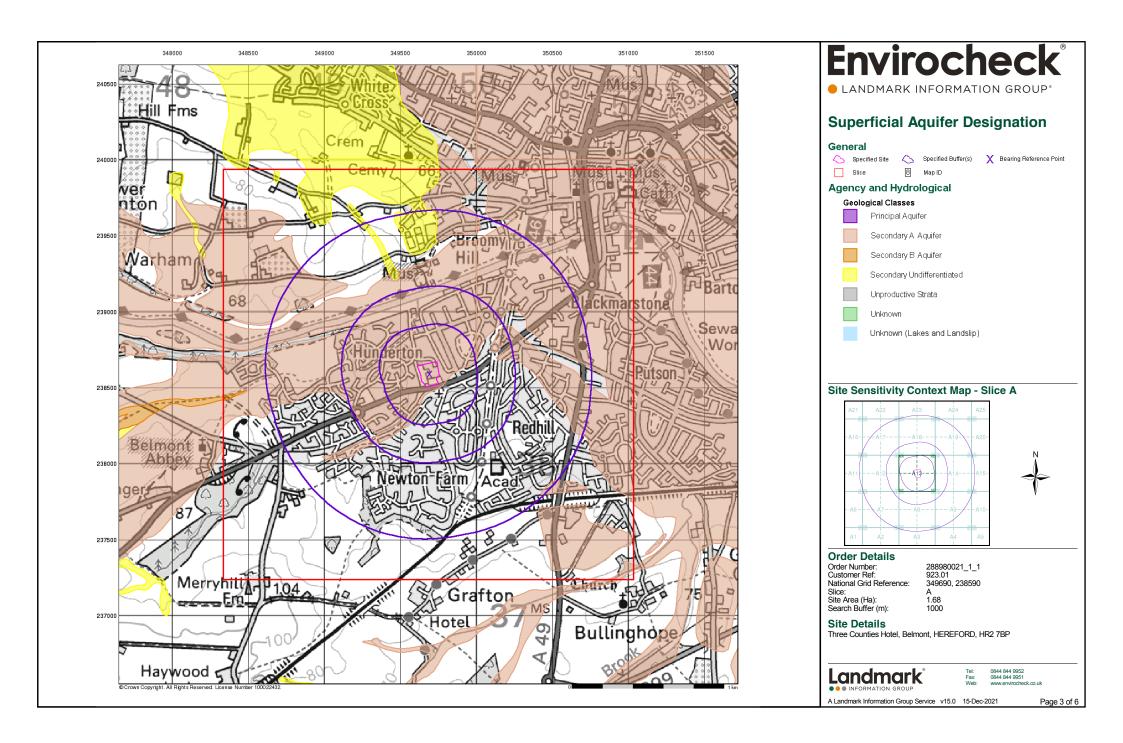


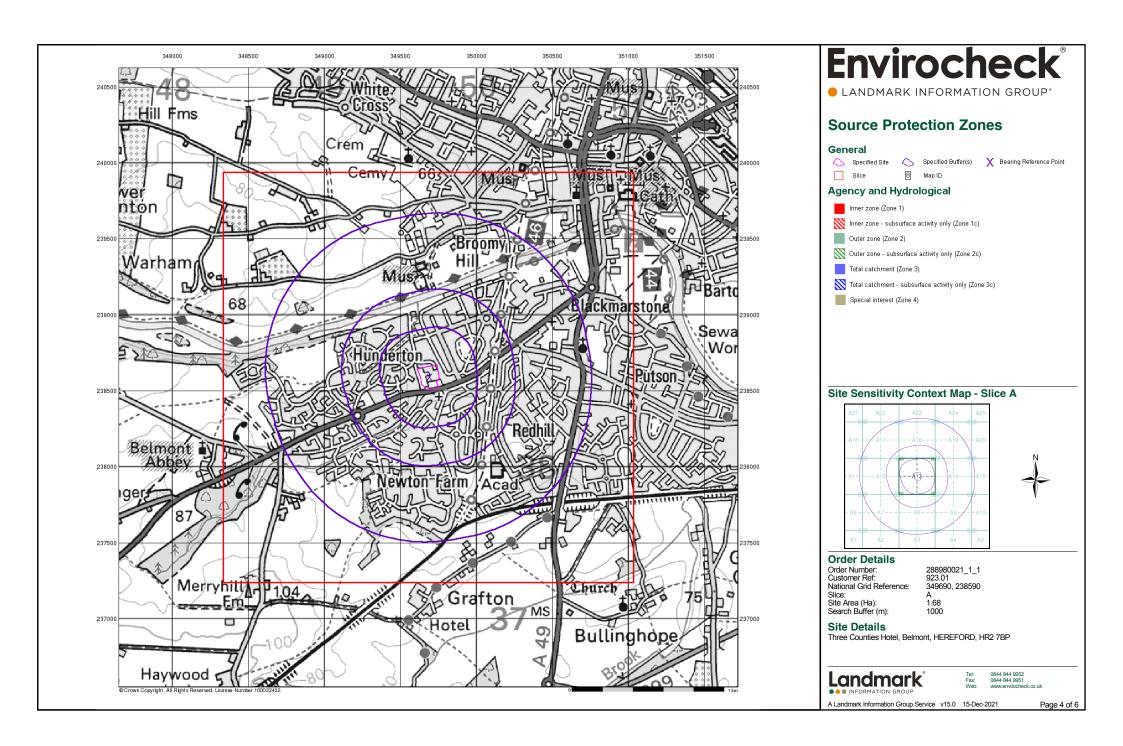
### **APPENDIX B**

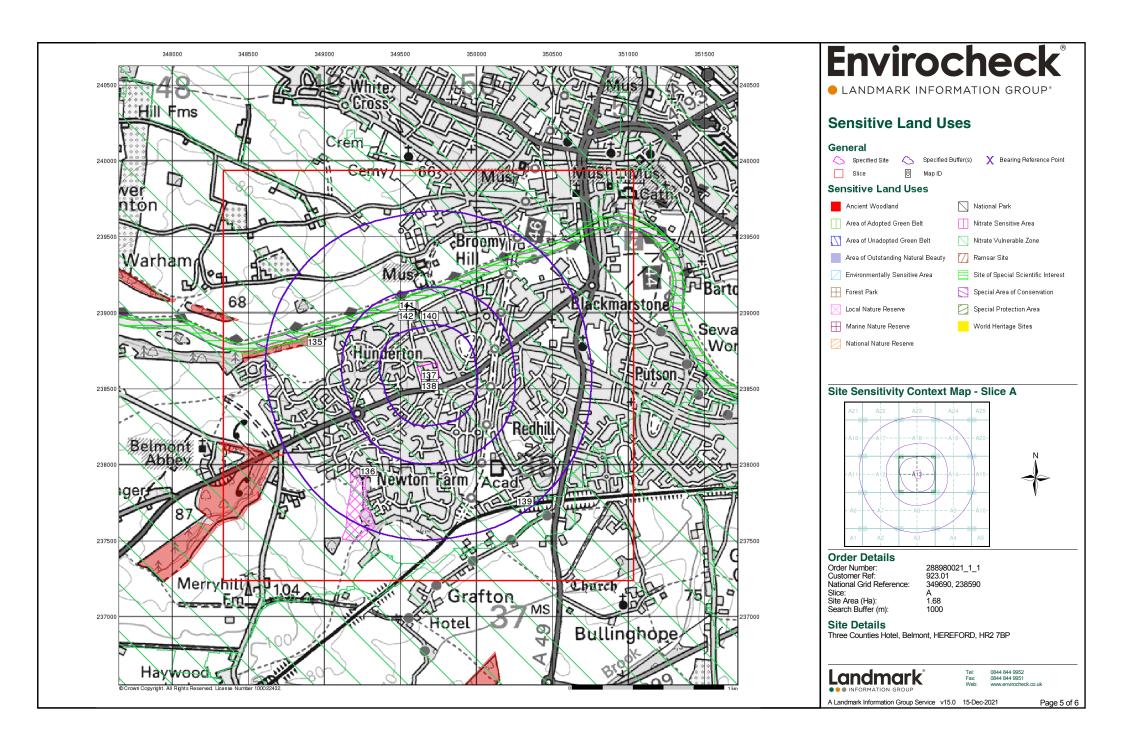
**Envirocheck Report – Mapping** 

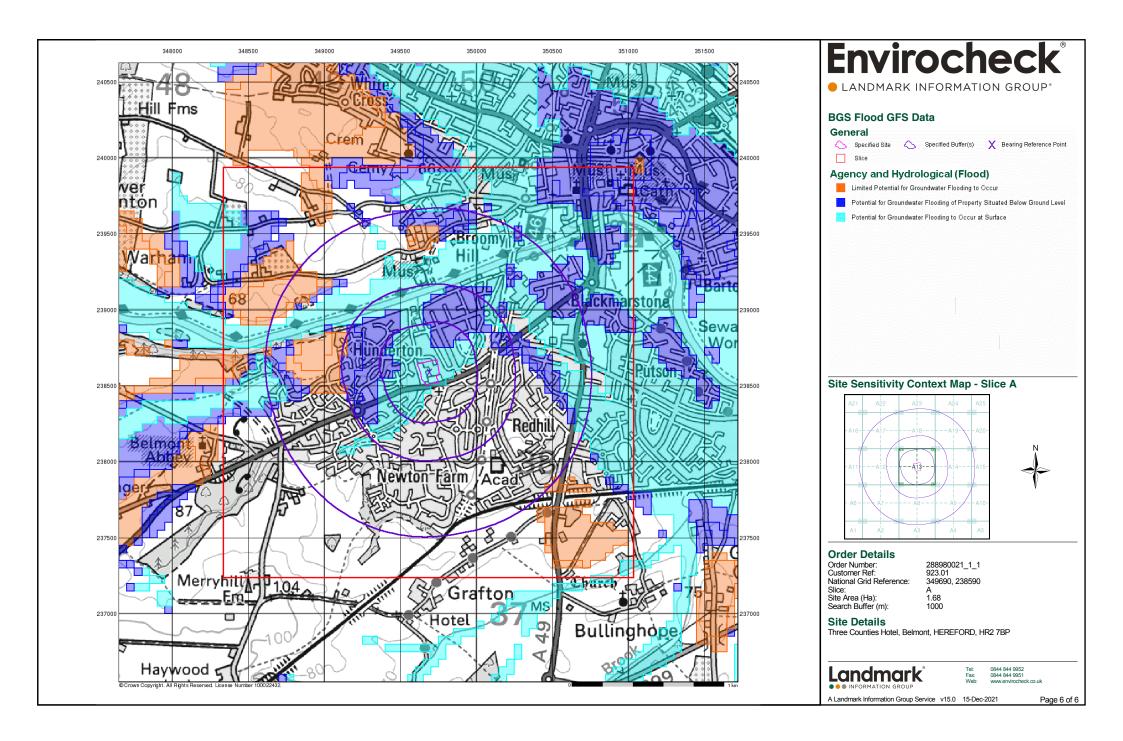












#### **Geology 1:50,000 Maps Legends**

#### **Artificial Ground and Landslip**

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WGR	Worked Ground (Undivided)	Void	Not Supplied - Holocene
	MGR	Made Ground (Undivided)	Artificial Deposit	Not Supplied - Holocene

#### **Superficial Geology**

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	GFSDD	Glaciofluvial Sheet Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	HMGDD	Hummocky (Moundy) Glacial Deposits, Devensian	Diamicton, Sand and Gravel	Not Supplied - Devensian
	TILLD	Till, Devensian	Diamicton	Not Supplied - Devensian
	RTD2	River Terrace Deposits, 2	Sand and Gravel	Not Supplied - Quaternary
	RTD1	River Terrace Deposits, 1	Sand and Gravel	Not Supplied - Quaternary
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary
	RTD4	River Terrace Deposits, 4	Sand and Gravel	Not Supplied - Quaternary
	LDE	Lacustrine Deposits	Sand, Silt and Clay	Not Supplied - Quaternary
	ALF	Alluvial Fan Deposits	Sand and Gravel	Not Supplied - Quaternary

#### **Bedrock and Faults**

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	RG	Raglan Mudstone Formation	Siltstone and Mudstone, Interbedded	Not Supplied - Pridoli
	RG	Raglan Mudstone Formation	Sandstone	Not Supplied - Pridoli
		Faults		

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#### 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:
 1

 Map Sheet No:
 215

 Map Name:
 Ross on Wye

 Map Date:
 2000

 Bedrock Geology:
 Available

 Superificial Geology:
 Available

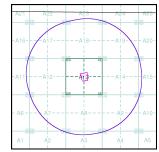
 Artificial Geology:
 Available

 Faults:
 Not Supplied

 Landslip:
 Available

 Rock Segments:
 Not Supplied

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





#### Order Details:

 Order Number:
 288980021\_1\_1

 Customer Reference:
 923.01

 National Grid Reference:
 349690, 238590

 Slice:
 A

 Site Area (Ha):
 1.68

 Search Buffer (m):
 1000

#### Site Details:

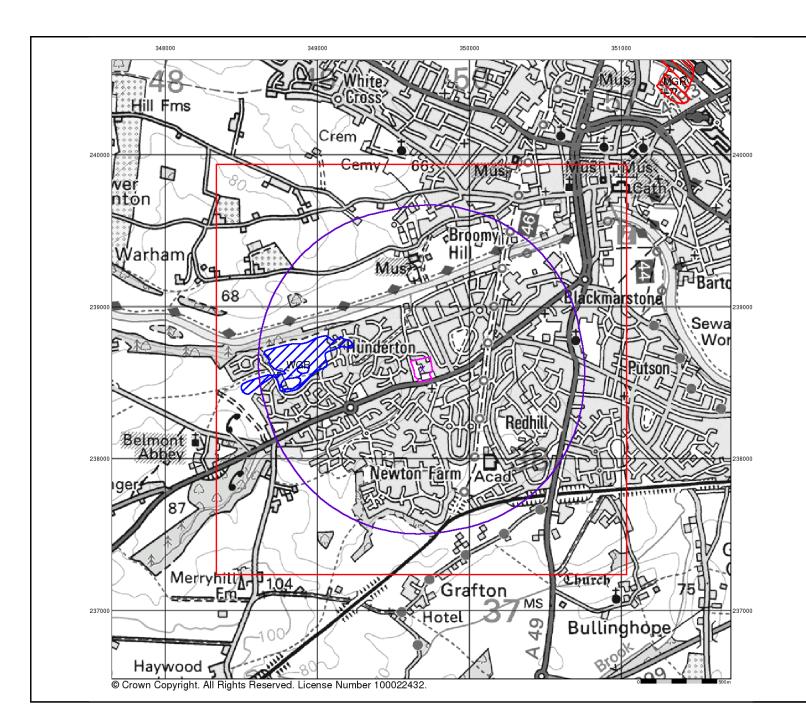
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#### **Artificial Ground and Landslip**

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.

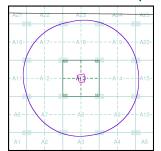
Artificial ground includes:

- 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
- 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:
 288980021\_1\_1

 Customer Reference:
 923.01

 National Grid Reference:
 349690, 238590

 Slice:
 A

 Site Area (Ha):
 1.68

 Search Buffer (m):
 1000

ch Buffer (m):

#### Site Details:

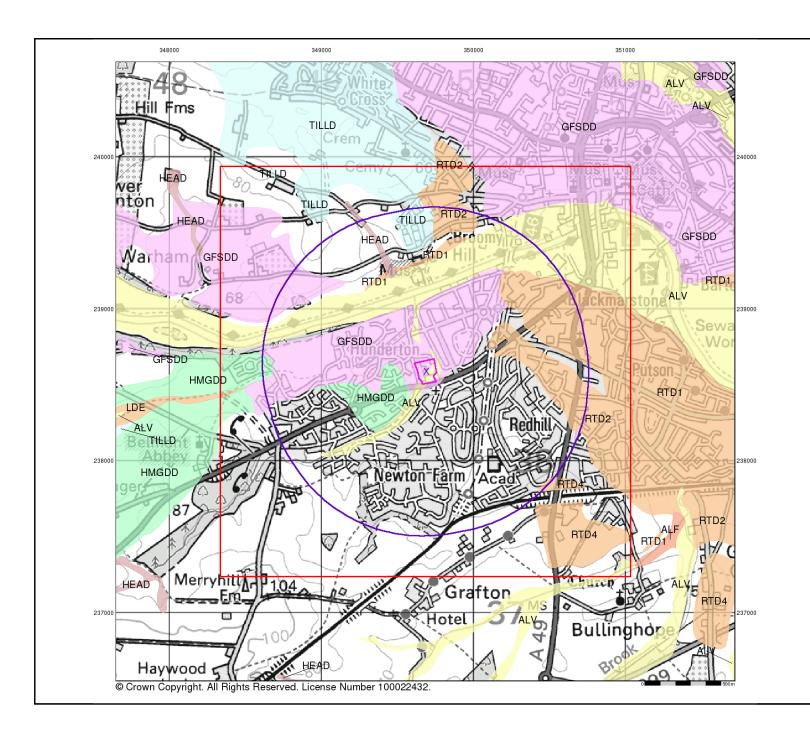
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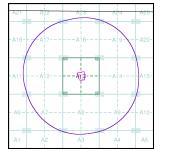
#### **Superficial Geology**

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: Customer Reference: 288980021\_1\_1 923.01 National Grid Reference: 349690, 238590 A 1.68 Site Area (Ha): Search Buffer (m):

1000

#### Site Details:

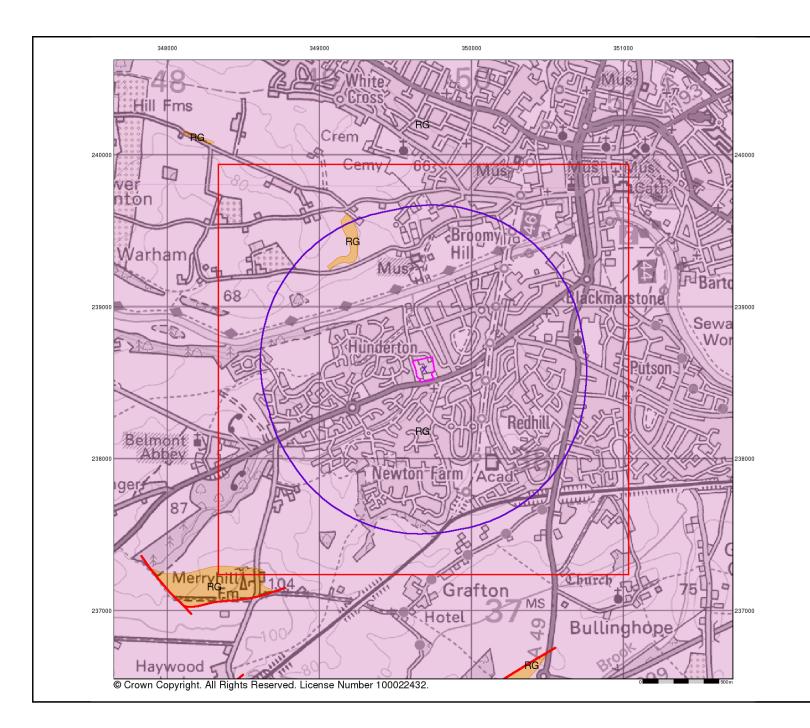
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#### **Bedrock and Faults**

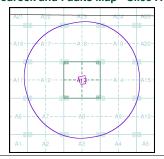
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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: 288980021\_1\_1
Customer Reference: 923.01
National Grid Reference: 349690, 238590
Slice: A
Site Area (Ha): 1.68
Search Buffer (m): 1000

Site Details:

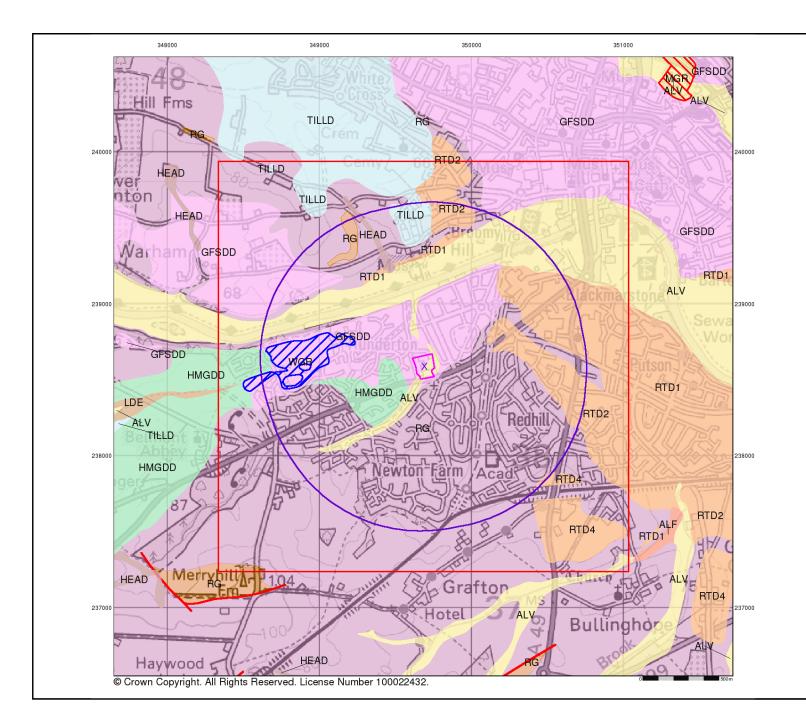
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#### **Combined Surface Geology**

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

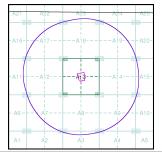
#### **Additional Information**

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

#### Contact

British Geological Survey Kingsley Dunham Centre Keyworth Nottingham NG12 5GG Telephone: 0115 936 3143 Fax: 0115 936 3276 email: enquiries@bgs.ac.uk website: www.bgs.ac.uk

#### Combined Geology Map - Slice A





#### Order Details:

Order Number: 288980021\_1\_1
Customer Reference: 923.01
National Grid Reference: 349690, 238590
Slice: A
Sile Area (Ha): 1.68
Search Buffer (m): 1000

#### Site Details:

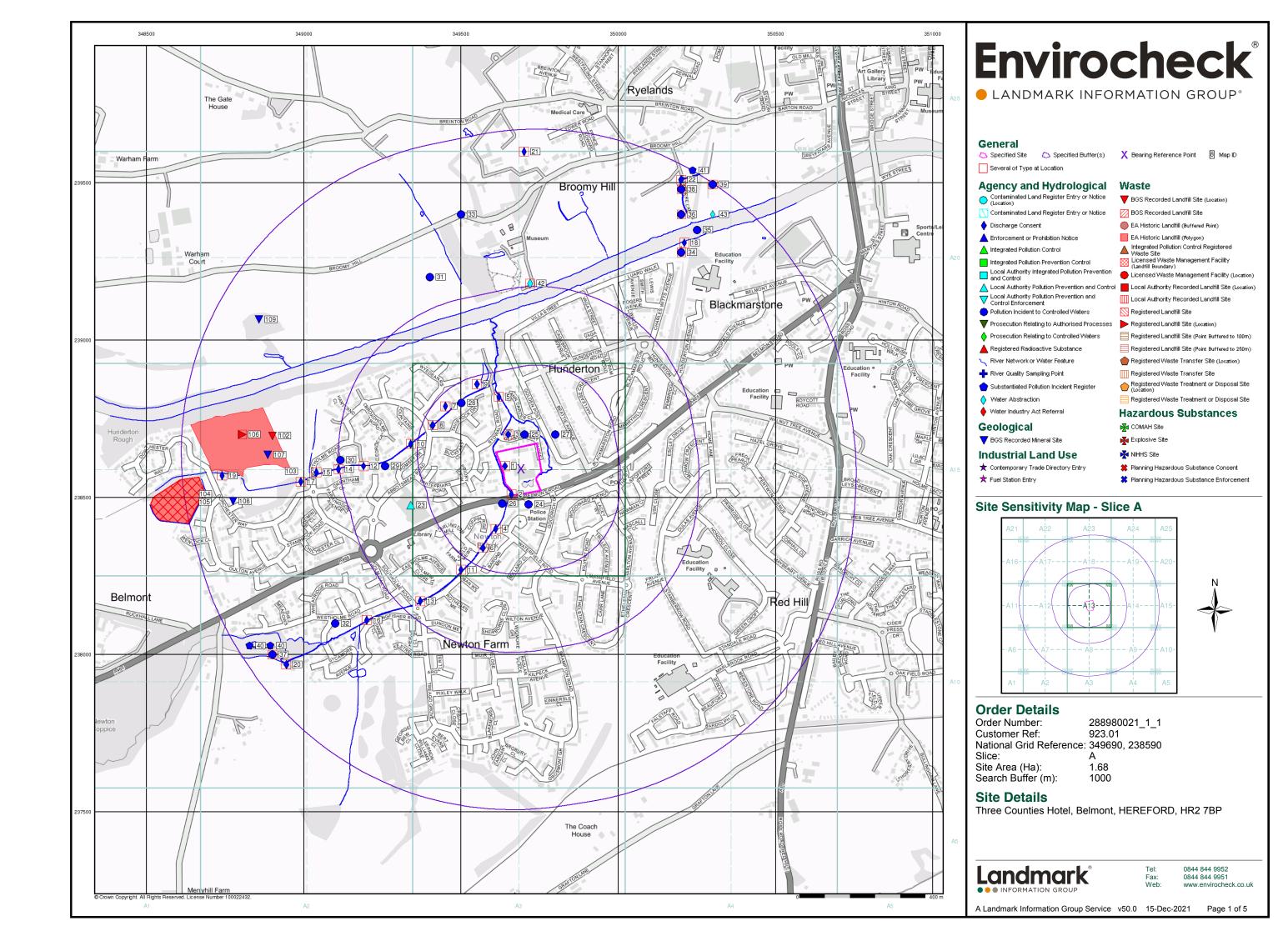
Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

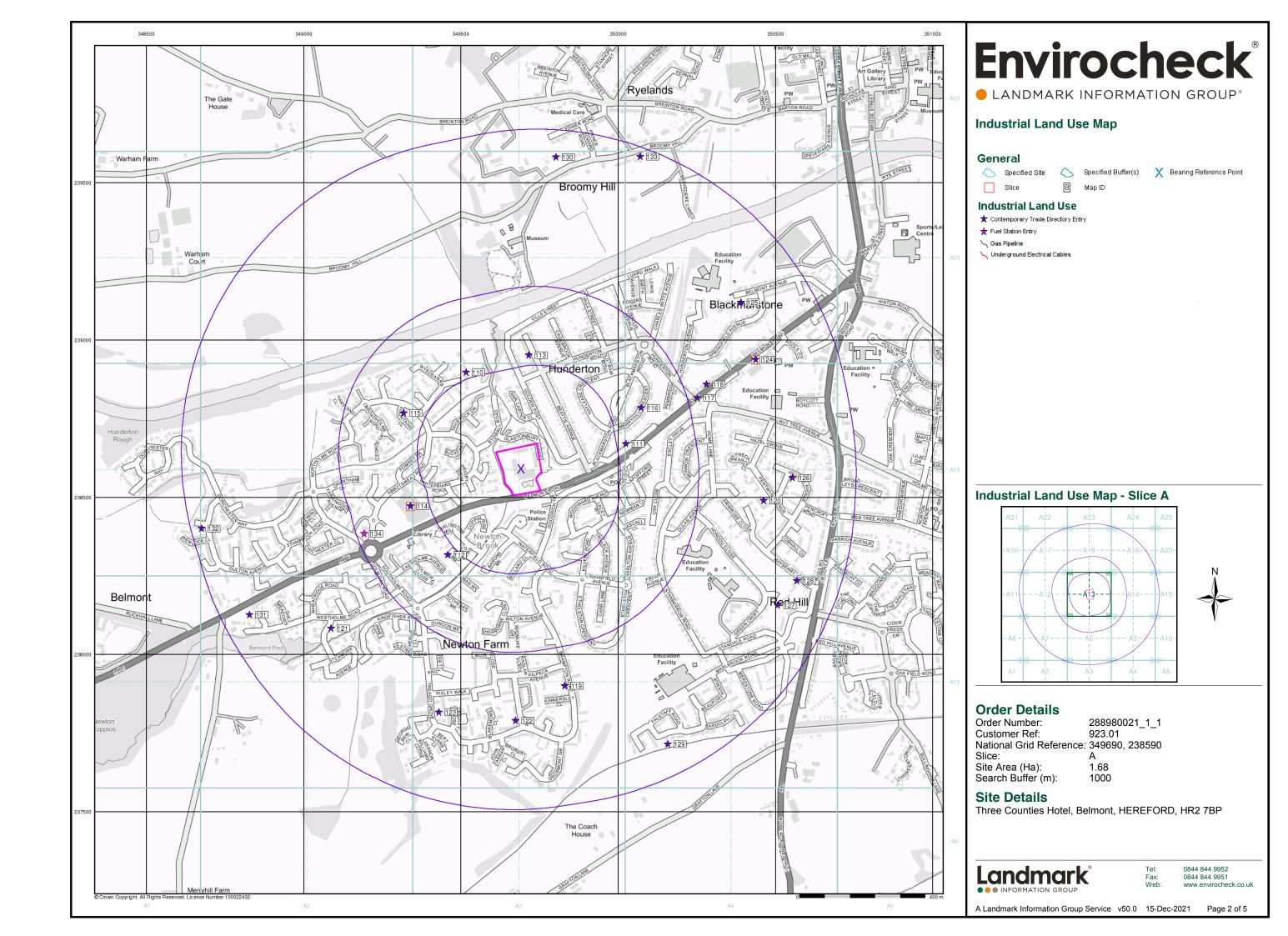


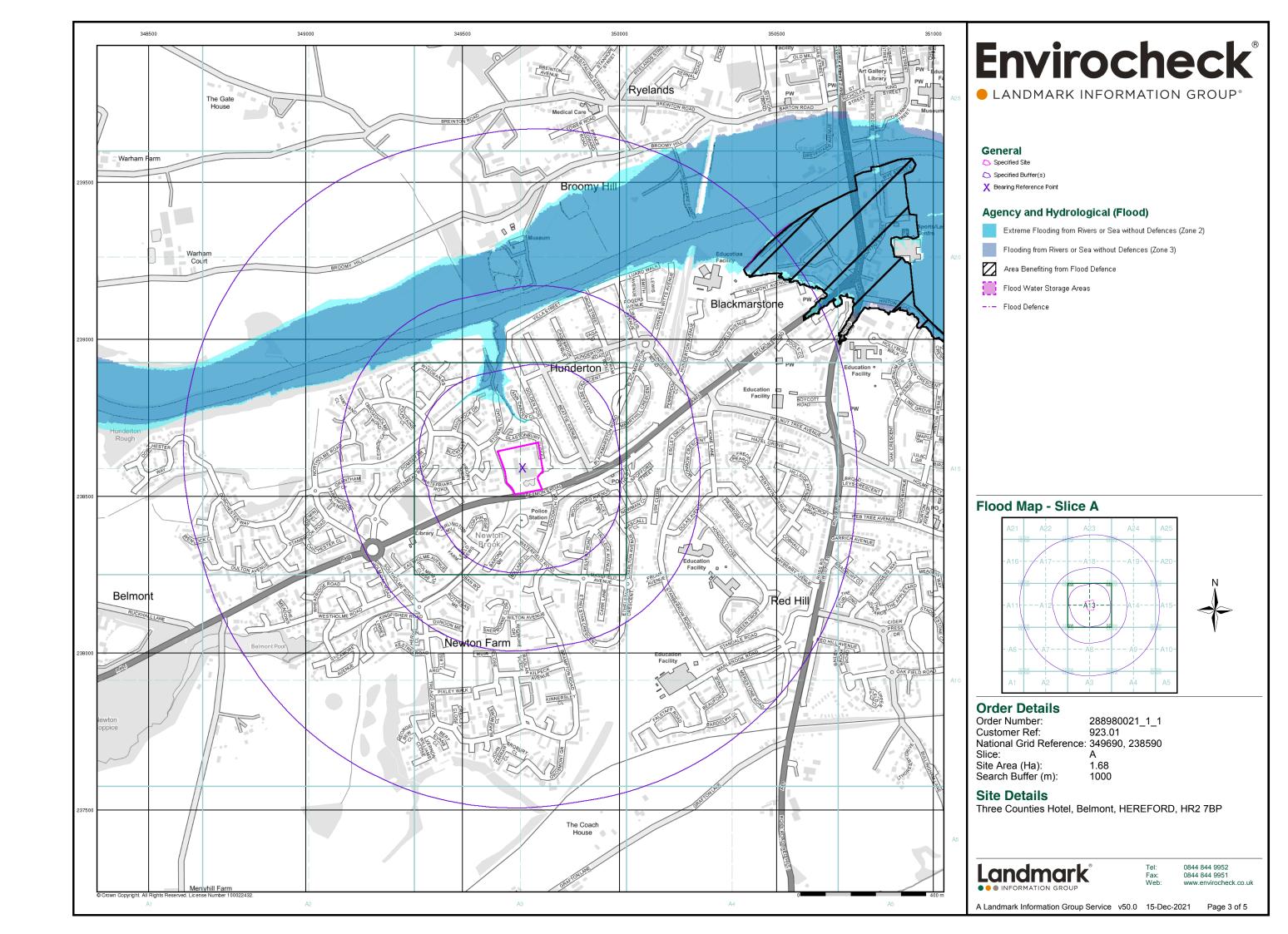
Tel: 0844 844 9952 Tax: 0844 844 9951 Veb: www.envirocheck.c

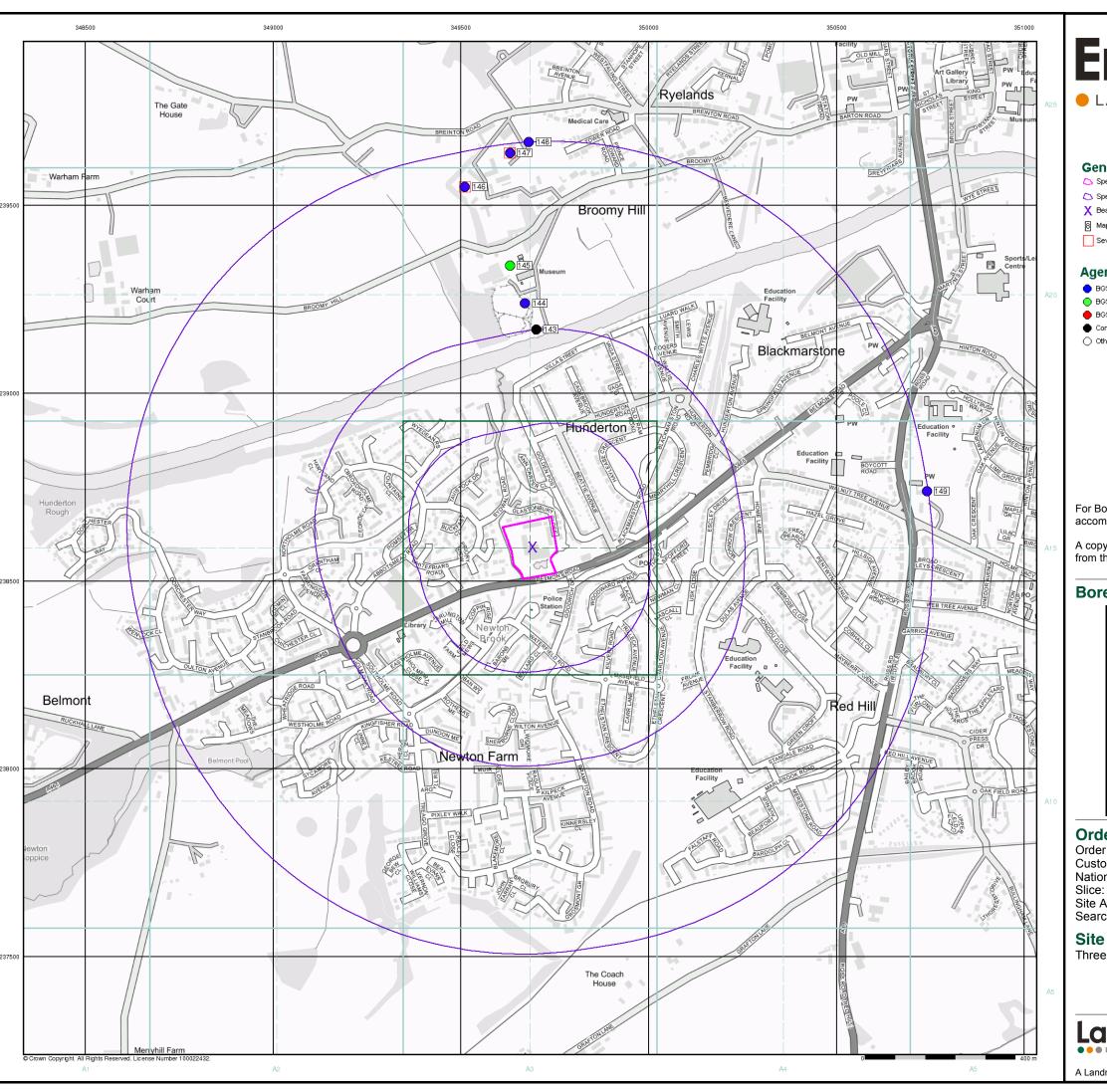
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#### General

Specified Buffer(s)

X Bearing Reference Point

8 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 +

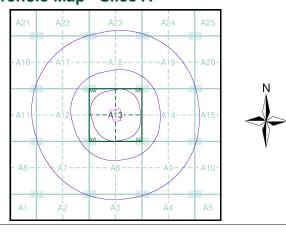
Confidential

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 www.envirocheck.co.uk.

#### **Borehole Map - Slice A**



#### **Order Details**

Order Number: 288980021\_1\_1 Customer Ref: 923.01 National Grid Reference: 349690, 238590

Site Area (Ha): Search Buffer (m): 1000

#### **Site Details**

Three Counties Hotel, Belmont, HEREFORD, HR2 7BP

Landmark

0844 844 9952

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