

EnviroSmart



Phase 1 Contaminated Land Assessment

Site address

Land to rear of Gothic House
Oak Lane
Graveley
Hertfordshire
SG4 7LG

Date issued

April 2024

Report status

Final

Grid Reference

522940, 227870

Site Area

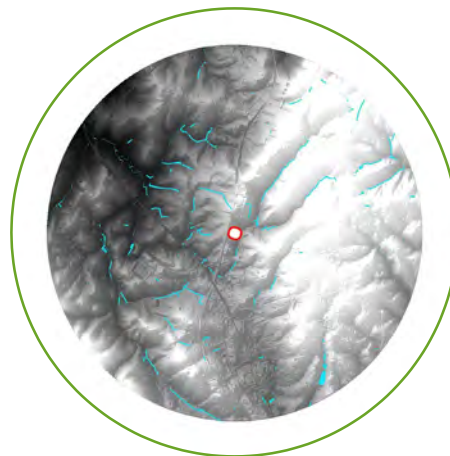
0.32 ha

Report prepared for

MK Properties (Northampton) Ltd
Ardeley
Stevenage
SG2 7AR

Report reference

80763R1



Risk – Low

No immediate action but observe a watching brief during all proposed redevelopment activities and associated ground works (which would include a thorough inspection of any exposed sub surface soils/Made Ground).

Provide a copy of this report to ground workers.

Report author

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Report check & review

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Executive Summary



The purpose of this EnviroSmart report is to provide clear and pragmatic advice regarding the nature and potential significance of contaminated land hazards which may be present at the study site. GeoSmart are providing consultancy and professional opinion based upon our collation, interpretation and assessment of information contained within an Envirocheck report, and other sources where expressly stated (i.e. site visits, photographs, and anecdotal evidence). It is acknowledged that the risk assessment findings are based on documentary sources of information alone.

Site analysis

1. Probability/likelihood of a contaminant hazard at the Site	High likelihood	
	Likely	
	Low likelihood	
	Unlikely	
2. Potential severity/consequence of any impacts	Severe	
	Medium	
	Mild	
	Minor	
3. Overall land quality risks posed by the Site	Very high	
	High	
	Moderate	
	Moderate/low	
	Low	
	Very low	

Summary of existing and proposed development

The Site is currently used within a residential capacity as a garden area with summer house in the northeast. The remains of a previous building are present in the centre of the Site. Development proposals comprise the construction of four dwellings with associated gardens, parking and access. The summer house will be relocated outside of the Site boundary.

Environmental Setting

The underlying superficial geology consists of Mid Pleistocene Glaciofluvial Deposits which are classified as a Secondary (A) Aquifer; the bedrock geology consists of the Holywell Nodular Chalk Formation and New Pit Chalk Formation (Undifferentiated) which are classified as a Principal Aquifer.

The nearest water feature is an unnamed pond, located c. 80 m southeast of the Site boundary. The Ash Brook is located c. 120 m to the east of the Site.

There are no environmentally sensitive land uses within 500 m of the Site.

Site History

According to historical mapping, an assumed residential building was present within the central part of the Site from the late 1800s; according to aerial imagery, this building was demolished in the 2000s. A long standing summer house has also been present in the northeast of the Site. Off-Site land uses include residential and commercial (including a school, public houses and former garage).

Radon

The Site lies in an area where <1% of homes are at or above the UK radon action level (200 Bq/m3).

Coal Mining

The Site does not lie within an identified coal mining area and is therefore unlikely to be affected by related ground stability or mine gas issues.

Summary of Conceptual Site Model (CSM)

Source of Contamination

Limited potential for inorganic and low volatility organic contaminants to be present within the subsurface soils.
Limited potential for asbestos containing materials within the subsurface soils.

Receptors

Human Health, Controlled Water (groundwater within the underlying superficial Secondary (A) Aquifer and bedrock Principal Aquifer; and the nearest surface water features (unnamed pond c. 80 m southeast and the Ash Brook c. 120 m to the east)).

Human Health (pathway)

Dermal contact, ingestion & inhalation of soils & soil dust. Consumption of home grown produce. Ingress into water supply pipework and subsequent water ingestion. Liberation of any sub surface ACMs and inhalation of asbestos fibres.

Controlled Waters (pathway)

Dissolution into pore water/shallow groundwater and subsequent migration. Dissolution into aqueous phase and preferential migration via drainage structures.

Preliminary Risk Assessment

Overall, the preliminary risk classification of the Site in relation to the proposed redevelopment is considered to be **Low**.

Recommendations / Next Steps

No immediate action but observe a watching brief

It is noted that whilst a limited intrusive site investigation (including appropriate laboratory testing of soil samples) could be adopted in order to validate the preliminary risk assessment conclusions, a watching brief during all proposed redevelopment activities and associated ground works (which would include a thorough inspection of any exposed sub surface soils/Made Ground) would likely be sufficient. Appropriate clearance and disposal of all remaining demolition wastes prior to commencement of any development activities is recommended.

1. Introduction



1.1 Background

The study site (from herein known as 'the Site') is situated on land to the rear of Gothic House in Oak Lane, Graveley. A location plan of the Site is shown in Section 1.5. A proposed development plan of the Site is shown in Section 1.6.

GeoSmart was commissioned by MK Properties (Northampton) Ltd in April 2024 to undertake a Phase 1 Land Quality Assessment for the Site. The report has been requested by North Hertfordshire District Council in order to support Planning Application Reference 22/03299/FP.

The proposed development is for the construction of four dwellings with associated gardens, parking and access.

The EnviroSmart report has been undertaken by firstly compiling information concerning the Site and the surrounding area, including current and historical land uses, geological records and registered pollution incidents. The information which is gathered is then used to construct a 'conceptual site model', including an understanding of likely contaminant sources, pathways and receptors. Finally, a preliminary assessment of risks posed to identified receptors (i.e., people, buildings or the natural environment) from the anticipated land quality at the Site is performed. The risk assessment methodology is consistent with CIRIA C552 (2001); see Section 3.4 for details.

1.2 Purpose of this report

The purpose of this EnviroSmart report is to provide clear and pragmatic advice regarding the nature and potential significance of contamination hazards which may be present at the Site.

1.3 Report contents

This report is divided into two sections, as described below:

Section	Content	Purpose
Section 2: LAND QUALITY ASSESSMENT	A summary of the site history and environmental setting, the findings of the preliminary risk assessment and associated recommendations	To present a clear and concise overview of the land quality issues facing the Site, including recommendations of how to manage any land contamination which may be present
Section 3: SUPPORTING INFORMATION	A collection of site specific information on which the land quality assessment is based	To provide detailed information in support of the risk assessment; this section also represents a source of reference data for use in any subsequent site works/assessments

1.4 Report limitations

It is noted that the findings presented in this report are largely based on information supplied by third parties. Whilst we assume that all information is representative of past and present conditions we can offer no guarantee as to its validity.

This report excludes consideration of potential hazards arising from any activities at the Site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities.

1.5 Site location plan

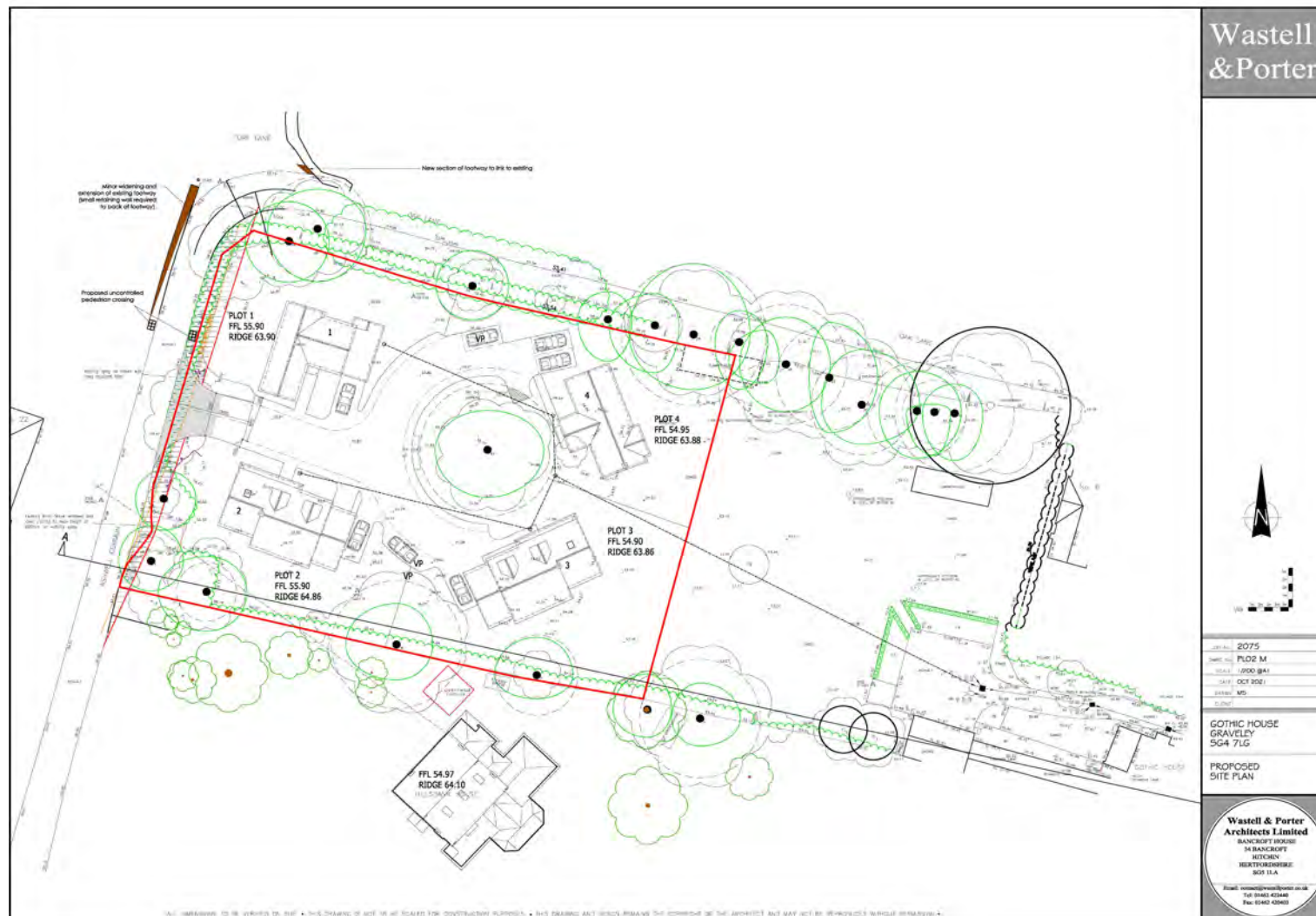


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1.6 Proposed Site development plan



2. Land quality assessment



2.1 Site details

Site name:	Land to rear of Gothic House	Current land cover:	Grassland (99%) with limited hardstanding/building cover (<1%).
Current use:	Garden / grassland		
Proposed use:	Residential with garden	Site area:	0.32 ha

2.2 Conceptual understanding (potential sources of contamination)

 Site history <i>(historical land use taken within 250m radius of the Site boundary)</i>	Date	Description of land use		POTENTIAL SOURCES OF CONTAMINATION	Source description	UNLIKELY	PROBABILITY OF CONTAMINATION
		On-Site	Off-Site				
	1881	The Site is partially developed, with several undefined buildings mapped in the eastern half of the Site. The west of the Site is undeveloped (landscaped).	Land to the north, south and west of the Site is largely undeveloped, although public highways are present along the northern and western boundaries. Residential, commercial and some light industrial development is evident to the east of the Site (Gravelly village). Pond mapped c. 80 m southeast. A smithy is mapped c. 160 m east. A public house is mapped c. 155 m southeast. A modest gravel pit is c. 200 m northeast.		The land use history suggests that there is the potential for contamination to have occurred <u>on-Site</u> relating to the following: Residential land: Miscellaneous small scale fuel or chemical spills relating to domestic land-uses (i.e., fuels used for garden machinery, herbicides, paints/creosote, detergents, etc.) Potential for localised/historical deposition of residential waste materials (ash, litter, packaging, etc.). Made Ground/demolition waste materials associated with former development/demolition activities. Asbestos containing materials (ACM) may have been incorporated within the built structures in the past; the disturbance of any such materials may have resulted in asbestos being present within the sub surface surrounding the buildings. <i>(continued below.)</i>		
	1884	No discernible changes.					
	1898	No changes on-Site.	Gravel pit c. 200 m northeast now mapped as 'Old Gravel Pit'.				
	1899	No discernible changes.					

2.2 Conceptual understanding (potential sources of contamination)

 Site history (historical land use taken within 250m radius of the Site boundary)	Date	Description of land use	
		On-Site	Off-Site
	1923	No changes on-Site.	Smithy c. 160 m east no longer mapped. Residential dwellings mapped c. 60 - 200 m southwest. A large residence is also evident c. 25 m to the south of the Site.
	1924 - 25	No discernible changes.	
	1946	No discernible changes.	
	1947 - 50	No changes on-Site.	Footprint of residential dwellings to the southwest of the Site extended. Dwellings also mapped to the west of the Site, beyond the public highway.
	1960	No changes on-Site.	Undefined buildings mapped c. 60 m south.
	1964	No discernible changes.	
	1972 - 1974	No changes on-Site.	Electricity substations mapped c. 55 m west and c. 175 m southeast. Residential development from c. 40 m to the north. Public house c. 140 m east. Garage mapped c. 195 m east.
	1976	No discernible changes.	
1981	No changes on-Site.	Further development 100m+ to the south of the Site (including residential and a school).	
POTENTIAL SOURCES OF CONTAMINATION			
Source description			
Potential for atmospheric deposition of generic air borne contaminants including lead (historically derived from engine exhaust emissions). The land use history suggests that there is the potential for contamination to have occurred <u>off-Site</u> relating to the following: Public house: Miscellaneous small scale fuel or chemical spills associated with ad hoc commercial activities. Potential for localised/historical deposition of domestic/commercial wastes. Made Ground associated with former development/demolition activities. Asbestos containing materials (ACM) may have been incorporated within the built structures in the past; the disturbance of any such materials may have resulted in asbestos being present within the sub surface surrounding the buildings. Electricity substation: Potential for Polychlorinated Biphenyls (PCB) contamination to have occurred. As the electricity substations were constructed before 1980, it is considered possible that PCBs would be present as the use of PCBs ceased in the late 1970s. Garage: Miscellaneous fuel or chemical spills/leaks (i.e. fuels used for refilling and storage in UST's, oils, lubricants, greases, antifreeze residues ,etc.) associated with the Site's use as a filling station and garage. (continued below.)			
UNLIKELY			
PROBABILITY OF CONTAMINATION			

2.2 Conceptual understanding (potential sources of contamination)

 Site history (historical land use taken within 250m radius of the Site boundary)	Date	Description of land use		POTENTIAL SOURCES OF CONTAMINATION	Source description	UNLIKELY	PROBABILITY OF CONTAMINATION
		On-Site	Off-Site				
	1991 - 92	No changes on-Site.	Small pond mapped c. 195 m south. Garage c. 195 m east no longer mapped.				
	1993	No discernible changes.					
	1999	No changes on-Site.	Unnamed watercourse mapped c. 120 m southeast (watercourse also shown on all previous mapping)				
	2000 - 13 (aerial image)	No changes on-Site. Aerial imagery corresponds with historical mapping, showing a small building footprint in the northeast of the Site as well as a larger building in the centre of the Site.	No changes off-Site.				
	2017 (aerial image)	Evidence of demolition of the building in the centre of the Site.	No changes off-Site.				
	2018 - 22 (aerial image)	No discernible changes.					
2024	No discernible changes.						
 Additional information	According to a land survey plan provided by the Client, the building in the northeast of the Site is a summerhouse. There is a concrete base and wall remains in the centre of the Site, left over from the building that was there previously. Photographic evidence shows building rubble within the fenced-in area where the wall remains are situated.						

2.2 Conceptual understanding (potential sources of contamination)

 Current land use	The Site is currently used as a garden area associated with the Gothic House property to the east. According to aerial imagery and Site photographs, there is a central square containing some wall remains plus a mature tree. There are no known buried storage tanks at the Site. There is no known bulk fuel or chemical storage on Site.	POTENTIAL SOURCES OF CONTAMINATION	The Site's current use is unlikely to have given rise to significant land contamination.	UNLIKELY																																									
 Neighbouring industrial land uses (see environmental data report in Section 3.3 for full listing)	There are one or more potentially contaminative land uses are located within 250 m of the Site: <table><tr><th>Distance from Site</th><th>Number of active industrial land uses</th><th>Number of inactive industrial land uses</th></tr><tr><td>1 - 50 m</td><td>0</td><td>1</td></tr><tr><td>51 - 100m</td><td>0</td><td>0</td></tr><tr><td>101 - 250 m</td><td>0</td><td>3</td></tr></table> <table><tr><th>Nr</th><th>Nearest distance</th><th>Land use / permitted activity / authorisation</th></tr><tr><td>0</td><td>NA</td><td>Fuel station entries</td></tr><tr><td>0</td><td>NA</td><td>Gas pipelines</td></tr><tr><td>0</td><td>NA</td><td>Underground electrical cables</td></tr><tr><td>0</td><td>NA</td><td>Control of major accident hazards sites (COMAH)</td></tr><tr><td>0</td><td>NA</td><td>Notification of installations handling hazardous substances (NIHHS)</td></tr><tr><td>0</td><td>NA</td><td>Explosives sites</td></tr><tr><td>0</td><td>NA</td><td>Planning hazardous substance consents</td></tr><tr><td>0</td><td>NA</td><td>Planning hazardous substance enforcements</td></tr><tr><td>0</td><td>NA</td><td>Sites determined as Contaminated Land under Part IIA of the Environmental Protection Act 1990</td></tr></table>		Distance from Site	Number of active industrial land uses	Number of inactive industrial land uses	1 - 50 m	0	1	51 - 100m	0	0	101 - 250 m	0	3	Nr	Nearest distance	Land use / permitted activity / authorisation	0	NA	Fuel station entries	0	NA	Gas pipelines	0	NA	Underground electrical cables	0	NA	Control of major accident hazards sites (COMAH)	0	NA	Notification of installations handling hazardous substances (NIHHS)	0	NA	Explosives sites	0	NA	Planning hazardous substance consents	0	NA	Planning hazardous substance enforcements	0	NA	Sites determined as Contaminated Land under Part IIA of the Environmental Protection Act 1990	Despite the presence of potential contaminative activities in the area surrounding the Site, since none are active or occur within close proximity (i.e., within a 50 m radius of the Site) they are unlikely to pose a significant contamination hazard in relation to the Site itself. Contemporary trade directory entries include: Pressclean (ironing and home laundry services) c. 40 m southwest. Status: inactive. Graveley Motor Co (garage services) c. 165 m east. Status: inactive. A Z Autos (car dealers) c. 175 m east. Status: inactive. Sas Cleaning (commercial cleaning services) c. 185 m northeast. Status: inactive. 0
Distance from Site	Number of active industrial land uses	Number of inactive industrial land uses																																											
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PROBABILITY OF CONTAMINATION

2.2 Conceptual understanding (potential sources of contamination)

 Neighbouring industrial land uses <i>(see environmental data report in Section 3.3 for full listing)</i>	0	NA	Records of Licensed Discharge Consents.	POTENTIAL SOURCES OF CONTAMINATION	As above.	UNLIKELY	PROBABILITY OF CONTAMINATION
	0	NA	Integrated pollution prevention and control sites				
	0	NA	Local Authority pollution prevention and control sites				
	0	NA	Local Authority pollution prevention and control enforcements				
	0	NA	Records of Category 3 or 4 Radioactive Substance Licences				

2.2 Conceptual understanding (potential sources of contamination)

 EA recorded pollution incidents (see environmental data report in Section 3.3 for full listing)	One or more Environment Agency pollution incidents have been recorded within 250 m of the Site. These include: An incident occurred in 1992 in relation to a village pond c. 140 m southeast of the Site. The pollutant and the cause of the incident are unknown although the incident was categorised as minor. An incident occurred in 1996 in relation to a stream located c. 235 m east of the Site. The pollutant was crude sewage caused by a blocked sewer and the incident was categorised as minor.	POTENTIAL SOURCES OF CONTAMINATION	Given the scale, timing, location and nature of the recorded incidents these past events do not appear to pose a significant contamination hazard to the Site.	UNLIKELY	PROBABILITY OF CONTAMINATION
 Landfills / waste sites (taken within 500m radius of the Site boundary, see environmental data report in Section 3.3 for full listing)	There are no BGS recorded landfills located within 500 m of the Site. There are no Environment Agency listed historical landfills located within 500 m of the Site. There are no registered landfills located within 500 m of the Site. There are no Local Authority listed historical landfills located within 500 m of the Site. The following other waste sites are registered within 500 m of the Site: 0 Records of registered waste transfer sites. 0 Records of registered waste treatment or disposal sites. 0 Records of licenced waste management facilities.		Given the absence of any historical or operational landfills within close proximity of the Site no associated contamination hazards have been identified. Given the absence of any waste treatment, transfer or disposal sites within close proximity of the Site no associated contamination hazards have been identified.	NEGLIGIBLE	

2.2 Conceptual understanding (potential sources of contamination)

Rn Radon (see environmental data report in Section 3.3 for full listing)	According to current UK radon mapping the Site lies in an area where <1% of homes are at or above the UK radon action level (200 Bq/m3).	POTENTIAL SOURCES OF CONTAMINATION	<1% of homes are at or above the UK radon action level (200 Bq/m3).	UNLIKELY	PROBABILITY OF CONTAMINATION
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2.3 Conceptual understanding (environmental sensitivity / potential severity of impacts)

 Geology and Groundwater <i>(see the environmental data report in Section 3.3 for full details)</i>	British Geological Survey mapping indicates that the underlying superficial geology consists of Mid Pleistocene Glaciofluvial Deposits (GFDMP) which comprise of sand and gravel and are classified as a Secondary (A) Aquifer. British Geological Survey mapping indicates that the bedrock geology consists of the Holywell Nodular Chalk Formation and New Pit Chalk Formation (undifferentiated) (HNCK) which comprise of chalk and are classified as a Principal Aquifer. According to the GeoSmart Groundwater Flood Risk (GW5) Map (GeoSmart, 2024). The risk of groundwater flooding at the Site is 'negligible'. The Site lies within a total catchment groundwater Source Protection Zone (SPZ III). The following groundwater abstraction licences are held within 1 km of the Site: J W Franklin Ltd groundwater abstraction from a single point for general agriculture (spray irrigation) located c. 660 m northeast of the Site. J W Franklin Ltd chalk groundwater abstraction from a single point for general agriculture (spray irrigation) located c. 700 m northeast of the Site. Licence revoked.	POTENTIAL RECEPTORS	A Secondary (A) Aquifer comprises permeable layers capable of supporting water supply at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. A Principal Aquifer comprises rock or drift deposits that have high permeability - meaning they usually provide a high level of water storage. They may support strategic water supply and/or river base flow. Based on the susceptibility of the Site to groundwater flooding, a groundwater flood risk assessment is not considered necessary for the Site. The depth to groundwater beneath the Site is unknown. The presence of one or more groundwater abstraction licences within close proximity of the Site indicates a reasonable groundwater resource potential.	SEVERE	POTENTIAL SEVERITY OF IMPACT
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Superficial Geology (BGS, 2024)



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Contains British Geological Survey materials © NERC 2024

Bedrock Geology (BGS, 2024)



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2.3 Conceptual understanding (environmental sensitivity / potential severity of impacts)

 Geohazards <i>(see the environmental data report in Section 3.3 for full details)</i>	The Site does not lie within a 'Coal Mining Reporting Area'. There are no brine affected areas within 75 m of the Site. The following BGS recorded mineral sites are located within 500 m of the Site: Artificial ground / Made Ground is anticipated on Site. There are no natural hazards (with a hazard rating of moderate or above) at or within 50 m of the Site.	POTENTIAL RECEPTORS	The Site does not lie within an identified coal mining area and is therefore unlikely to be affected by related ground stability or mine gas issues. The Site does not lie within an area of former brine working and is therefore unlikely to be affected by related ground stability issues. Gravely Gravel Pit c. 260 m northeast. Commodity: sand and gravel. Type: opencast. Status: ceased. Although BGS GeoIndex Onshore mapping does not have any artificial deposits recorded at the Site, there has been a phase of demolition activity in the centre of the Site which may have resulted in some localised Made Ground.	MILD	POTENTIAL SEVERITY OF IMPACT
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2.3 Conceptual understanding (environmental sensitivity / potential severity of impacts)

 Surface water <i>(see the environmental data report in Section 3.3 for full details)</i>	The nearest water feature is an unnamed pond, located c. 80 m southeast of the Site boundary. The Ash Brook is located c. 120 m to the east of the Site. The Site lies within a Flood Zone 1 (low probability). There are no surface water abstraction licences within 1 km of the Site.	POTENTIAL RECEPTORS	Given the reasonable distance from the Site, the sensitivity of the identified surface water features is judged to be low.	MILD	POTENTIAL SEVERITY OF IMPACT
 Environmental designations <i>(see the environmental data report in Section 3.3 for full details)</i>	There are no environmentally sensitive land uses within 500 m of the Site.		No relevant environmentally designated sites/receptors have been identified.	NEGLIGIBLE	
 Human receptors	Proposed residents/users of the Site.		Human receptors are proposed to be present on Site.	SEVERE	

2.4 Regulator perspective

Consultation date	11th April 2024	North Hertfordshire District Council
GeoSmart consultant	Emilia Dončić	
Consultation outcome	The Council did not respond to GeoSmart within the time frame of this report.	

2.5 Preliminary Risk Assessment

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
On-Site sources								
1	Potential for inorganic and low volatility organic contaminants to be present within the subsurface soils	Dermal contact, ingestion & inhalation of soils & soil dust	HH	Future Site occupants	MEDIUM	UNLIKELY	LOW RISK	The risk classifications reflect the likely absence of any significant sources of inorganic and low volatility organic contamination based on the known land use history. It is noted that some Made Ground may be present locally on-Site (including areas of former development / demolition) however any appreciable Made Ground will likely to be restricted to the central part of the Site - which will be largely covered by driveways and property footprints post-development.
2		Consumption of home grown produce	HH		MEDIUM	UNLIKELY	LOW RISK	
3		Ingress into water supply pipework and subsequent water ingestion	HH		MEDIUM	UNLIKELY	LOW RISK	
4		Building materials in direct contact with aggressive ground	PROP	Future Site buildings	MEDIUM	LOW LIKELIHOOD	MODERATE/LOW RISK	Given the potential presence of localised Made Ground beneath the Site, it would be considered prudent to verify the underlying ground conditions in order to inform the detailed foundation design.
5		Dissolution into pore water/shallow groundwater and subsequent migration	CW	Mid Pleistocene Glaciofluvial Deposits (a Secondary (A) Aquifer)	MEDIUM	UNLIKELY	LOW RISK	The risk classifications reflect the likely absence of any significant sources of inorganic and low volatility organic contamination (based on the known land use history), the relatively modest Site area and also the planned construction of hard standing / buildings / drainage across much of the Site.
6		Dissolution into pore water/shallow groundwater and subsequent migration	CW	Holywell Nodular Chalk Formation and New Pit Chalk Formation (Undifferentiated) (a Principal Aquifer)	MEDIUM	UNLIKELY	LOW RISK	

2.5 Preliminary Risk Assessment

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
On-Site sources								
7	Potential for inorganic and low volatility organic contaminants to be present within the subsurface soils	Dissolution into pore water/shallow groundwater and subsequent lateral migration	CW	unnamed pond (c. 80 m southeast)	MEDIUM	UNLIKELY	LOW RISK	The risk classification reflects the reasonable distance to the nearest surface water features and also the likely absence of any significant sources of inorganic and low volatility organic contamination
8		Dissolution into aqueous phase and preferential migration via drainage structures	CW	Ash Brook (c. 120 m east)	MEDIUM	UNLIKELY	LOW RISK	

2.5 Preliminary Risk Assessment

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
9	Potential for volatile organic contaminants to be present within the subsurface soils	Dermal contact, ingestion & inhalation of soils & soil dust	HH	Future Site occupants	MEDIUM	UNLIKELY	LOW RISK	The risk classifications reflect the likely absence of any significant sources of volatile organic contamination based on the known land use history.
10		Consumption of home grown produce	HH		MEDIUM	UNLIKELY	LOW RISK	
11		Ingress into water supply pipework and subsequent water ingestion	HH		MEDIUM	UNLIKELY	LOW RISK	
12		Migration of vapours to surface; inhalation indoors	HH		MEDIUM	UNLIKELY	LOW RISK	
13		Migration of vapours to surface; inhalation outdoors	HH		MEDIUM	UNLIKELY	LOW RISK	
14		Building materials in direct contact with aggressive ground	PROP	Future Site buildings	MEDIUM	UNLIKELY	LOW RISK	The risk classifications reflect the likely absence of any significant sources of volatile organic contamination (based on the known land use history), the relatively modest Site area and also the planned construction of hard standing / buildings / drainage across much of the Site.
15		Dissolution into pore water/shallow groundwater and subsequent migration	CW	Mid Pleistocene Glaciofluvial Deposits (a Secondary (A) Aquifer)	MEDIUM	UNLIKELY	LOW RISK	
16		Dissolution into pore water/shallow groundwater and subsequent migration	CW	Holywell Nodular Chalk Formation and New Pit Chalk Formation (Undifferentiated) (a Principal Aquifer)	MEDIUM	UNLIKELY	LOW RISK	
17		Dissolution into pore water/shallow groundwater and subsequent migration	CW	unnamed pond (c. 80 m southeast)	MEDIUM	UNLIKELY	LOW RISK	
18		Dissolution into aqueous phase and preferential migration via drainage structures	CW	Ash Brook (c. 120 m east)	MEDIUM	UNLIKELY	LOW RISK	The risk classification reflects the reasonable distance to the nearest surface water features and also the likely absence of any significant sources of volatile organic contamination.

2.5 Preliminary Risk Assessment

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
19	Potential for asbestos containing materials within the subsurface soils	Liberation of sub surface ACMs and inhalation of asbestos fibres	HH	Future Site occupants	MEDIUM	UNLIKELY	LOW RISK	Given the presence of former on-Site structures, which may have contained some asbestos-containing materials, it is possible that some residual ACMs may be present within the surrounding subsoils (as a result of demolition activities). It is noted however that the area of the main former building (in the central part of the Site) will be largely covered by driveways and property footprints post-development. As such, residual ACMs are considered to be unlikely within the planned rear gardens.
20	Potential for dissolved phase contaminants to be present within shallow groundwater	Lateral and vertical groundwater movement via natural or artificial flow paths	CW	Mid Pleistocene Glaciofluvial Deposits (a Secondary (A) Aquifer)	MEDIUM	UNLIKELY	LOW RISK	The risk classifications reflect the likely absence of any significant sources of dissolved phase contamination based on the known land use history.
21		Lateral and vertical groundwater movement via natural or artificial flow paths	CW	Holywell Nodular Chalk Formation and New Pit Chalk Formation (Undifferentiated) (a Principal Aquifer)	MEDIUM	UNLIKELY	LOW RISK	
22		Lateral and vertical groundwater movement via natural or artificial flow paths	CW	unnamed pond (c. 80 m southeast) Ash Brook (c. 120 m east)	MEDIUM	UNLIKELY	LOW RISK	The risk classification reflects the reasonable distance to the nearest surface water features and likely absence of any significant sources of dissolved phase contamination.

2.5 Preliminary Risk Assessment

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
23	Potential for elevated methane to be present within the sub-surface soils	Lateral and vertical migration into on-Site buildings; potential to cause an explosion	HH	On-Site properties and their occupants	SEVERE	NEGLIGIBLE	NO DISCERNABLE RISK	Based on the prevailing conceptual understanding an appreciable gas source is considered unlikely.
24		Lateral migration towards off-Site buildings; potential to cause an explosion	HH	Off-Site properties and their occupants	SEVERE	NEGLIGIBLE	NO DISCERNABLE RISK	
25	Potential for elevated carbon dioxide to be present within the subsurface soils	Lateral and vertical migration into on-Site buildings; potential to cause asphyxiation	HH	Occupants of on-Site buildings	SEVERE	NEGLIGIBLE	NO DISCERNABLE RISK	
26		Lateral migration towards off-Site buildings; potential to cause asphyxiation	HH	Occupants of off-Site buildings	SEVERE	NEGLIGIBLE	NO DISCERNABLE RISK	
27	Potential for radon within the subsurface	Lateral migration towards on-Site buildings; potential to cause long term health effects	HH	Occupants of on-Site buildings	MEDIUM	UNLIKELY	LOW RISK	The Site lies in an area where <1% of homes are at or above the UK radon action level (200 Bq/m ³).
OVERALL RISK RATING (on-Site)							LOW RISK	

2.5 Preliminary Risk Assessment

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
Off-Site sources: - Public houses c. 140 m east and c. 155 m southeast. - Laundry services c. 40 m southwest. Status: inactive.								
28	Potential for both inorganic and volatile organic contaminants to be present within the subsurface soils	Dermal contact, ingestion & inhalation of soils & soil dust	HH	Future Site occupants	MEDIUM	UNLIKELY	LOW RISK	Laundry services: A laundry service was previously operated c. 40 m to the southwest of the Site; given the reasonable distance to the Site (including the presence of interlying structures / separate land ownership areas) no associated contaminants are likely to have impacted on the study Site. Public houses: Given the relative distance to the identified public houses (>100 m), it is considered unlikely that any associated contaminants will impact on the Site.
29		Consumption of home grown produce	HH		MEDIUM	UNLIKELY	LOW RISK	
30		Ingress into water supply pipework and subsequent water ingestion	HH		MEDIUM	UNLIKELY	LOW RISK	
31		Migration of vapours to surface; inhalation indoors	HH		MEDIUM	UNLIKELY	LOW RISK	
32		Migration of vapours to surface; inhalation outdoors	HH		MEDIUM	UNLIKELY	LOW RISK	

2.5 Preliminary Risk Assessment

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
Off-Site sources: Electricity substations c. 55 m west and c. 175 m southeast.								
33	Potential contaminant: polychlorinated biphenyls (PCBs)	Dermal contact, ingestion & inhalation of soils & soil dust	HH	Future Site occupants	MEDIUM	UNLIKELY	LOW RISK	Given the distance to the substations (>50 m) and also the relatively low mobility of PCB contaminants, it is unlikely that future Site occupants would be impacted by any contamination relating to the sub station features.
34		Consumption of home grown produce	HH		MEDIUM	UNLIKELY	LOW RISK	
35		Ingress into water supply pipework and subsequent water ingestion	HH		MEDIUM	UNLIKELY	LOW RISK	
36		Migration of vapours to surface; inhalation indoors	HH		MEDIUM	UNLIKELY	LOW RISK	
37		Migration of vapours to surface; inhalation outdoors	HH		MEDIUM	UNLIKELY	LOW RISK	
	OVERALL RISK RATING (off-Site)						LOW RISK	

2.6 Next Steps

✓	No immediate action but observe a watching brief		Given the known history of the Site it is considered unlikely that significant contamination is present within the sub-surface. The preliminary risk assessment suggests that the risks posed by in situ land quality are therefore likely to be low. It is noted that whilst a limited intrusive site investigation (including appropriate laboratory testing of soil samples) could be adopted in order to validate the preliminary risk assessment conclusions, a watching brief during all proposed redevelopment activities and associated ground works (which would include a thorough inspection of any exposed sub surface soils/Made Ground) will likely be sufficient. The watching brief should be maintained throughout the entire development phase of works and any possible evidence of contamination encountered during the redevelopment works should be alerted to the Local Authority. Appropriate actions would then be required to further inspect, sample and analyse any suspect materials, and formulate an appropriate remediation plan, as necessary. Appropriate clearance and disposal of all remaining demolition wastes prior to commencement of any development activities is recommended.
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3. Supporting Information



The following supporting information is contained in this section:

Section	Content
3.1	Referenced materials used in the EnviroSmart reporting
3.2	Site photographs
3.3	Published environmental data records (Landmark Envirocheck report Land Rear of Gothic House, Oak Lane, Graveley, Hitchin, SG4 7LG. REF: 342463998_1_1) including: • Aerial photographs and site map • Environmental permits, incidents and registers • Landfill and other waste sites • Current land use information • Geology • Hydrogeology and hydrology • Flooding • Designated environmentally sensitive sites • Other environmental factors
3.4	Risk assessment methodology
3.5	Historical land use maps

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Email: info@geosmartinfo.co.uk

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The Property Ombudsman scheme

Milford House

43-55 Milford Street

Salisbury

Wiltshire SP1 2BP

Tel: 01722 333306

Fax: 01722 332296

Email: admin@tpos.co.uk

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- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

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Martin Lucass
Commercial Director
GeoSmart Information Limited
Suite 9-11, 1st Floor
Old Bank Buildings, Bellstone
Shrewsbury
SY1 1HU

Tel: 01743 298100
martinlucass@geosmartinfo.co.uk

3.1 References

The following references were used to inform the conceptual site model and preliminary risk assessment:

British Geological Survey, 2024. GeoIndex Onshore (<http://mapapps2.bgs.ac.uk/geoindex/home.html>)

British Standards Institute, 2011. Investigation of potentially contaminated sites – code of practice. BS10175:2011+A2:2017.

CIRIA, 2001. Contaminated land risk assessment. A guide to good practice. Publication C552. CIRIA London. ISBN 0-86017-552 9

Environment Agency, 2023. Land Contamination Risk Management (LCRM)

GeoSmart Information Limited, 2024. National Groundwater Flood Risk Map (GW5)

Health Protection Agency, 2000. Spring 2000 Newsletter featuring; Radon: Guidance on Protective Measures for New Dwellings (BR 211).

Landmark, 2024. Landmark Envirocheck report Land Rear of Gothic House, Oak Lane, Graveley, Hitchin, SG4 7LG. REF: 342463998_1_1

3.2 Site photographs

Photograph 1: East-facing view of the Site including fencing and grassland.



Photograph 2: Image showing the existing Site covered in grassland.



Photograph 3: Wall remains and building rubble in the centre of the Site.



Photograph 4: Summerhouse situated in the northeast of the Site.



Photograph 5: Fenced off area in the centre of the Site, with evidence of former demolition activity.



Photograph 6: Summer house in the northeast of the Site.



3.3 Environmental data report

Readily available environmental information relating to the Site and its surrounding area has been provided by Landmark.

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

342463998_1_1

Customer Reference:

80763

National Grid Reference:

522940, 227870

Slice:

A

Site Area (Ha):

0.26

Search Buffer (m):

1000

Site Details:

Land Rear of Gothic House

Oak Lane

Graveley

HITCHIN

SG4 7LG

Client Details:

Ms J Bayliff

Geo Smart Information Limited

Suite 9-11, 1st Floor

Old Bank Buildings

Bellstone

Shrewsbury

Shropshire

SY1 1HU

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	17
Hazardous Substances	-
Geological	18
Industrial Land Use	20
Sensitive Land Use	21
Data Currency	22
Data Suppliers	27
Useful Contacts	28

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)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes			n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			2	1
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 1		Yes		
Pollution Incidents to Controlled Waters	pg 1		2		
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 2			1	
Water Abstractions	pg 2				3 (*31)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 10	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk	pg 10	1	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 10	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 10	Yes	n/a	n/a	n/a
Source Protection Zones	pg 11	1			
Extreme Flooding from Rivers or Sea without Defences	pg 11		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 12		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 12		2	3	31

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
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	pg 17	2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 18	Yes	n/a	n/a	n/a
BGS Recorded Mineral Sites	pg 18			1	3
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	pg 18	Yes	Yes	n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 18	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 19		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 19	Yes		n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 19	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 19	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 19		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

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Industrial Land Use					
Contemporary Trade Directory Entries	pg 20		4		1
Fuel Station Entries					
Gas Pipelines	pg 20			1	
Underground Electrical Cables					
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt	pg 21	1			1
Areas of Unadopted Green Belt	pg 21		1		
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 21	2			1
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
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (NE)	0	1	522939 227870
1	Discharge Consents Operator: Thames Water Utilities Ltd Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Graveley Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Temp.1038 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: 13th October 2015 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Weston Tributary Status: Surrendered under EPR 2010 Positional Accuracy: Located by supplier to within 100m	A14NW (E)	324	2	523300 227900
2	Discharge Consents Operator: Thames Water Utilities Ltd Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Graveley Authority: Environment Agency, Thames Region Catchment Area: Not Supplied Reference: Temp.1038 Permit Version: 1 Effective Date: 2nd November 1989 Issued Date: 2nd November 1989 Revocation Date: 2nd September 2010 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Weston Tributary Status: Temporary Consents (Water Act 1989, Section 113) Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	477	2	523400 228100
3	Discharge Consents Operator: Mr John Hope Property Type: Domestic Property (Multiple) Location: The Priory Priory Lane, Little Wymondley, Hitchin, Hertfordshire, Sg4 7hd Authority: Environment Agency, Anglian Region Catchment Area: River Hiz (Hitchin) Reference: Eprfp3222gs Permit Version: 1 Effective Date: 26th November 2010 Issued Date: 26th November 2010 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Groundwater Status: New issued under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A12SW (W)	941	2	521960 227860
	Nearest Surface Water Feature	A13SE (SE)	79	-	523041 227811
4	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Bedford District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Village Pond Incident Date: 6th July 1992 Incident Reference: 1577 Catchment Area: Not Given Receiving Water: Into And/Or Watercourse Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SE (SE)	138	2	523100 227800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Foul Sewer Location: Bedford District Authority: Environment Agency, Anglian Region Pollutant: Crude Sewage Note: Ditch Incident Date: 9th March 1996 Incident Reference: 3112 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Blocked Sewer Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13SE (E)	235	2	523200 227800
6	Substantiated Pollution Incident Register Authority: Environment Agency - Thames Region, North East Area Incident Date: 23rd June 2015 Incident Reference: 1347918 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Sewage Materials: Grey Water	A8NE (S)	400	2	522984 227445
7	Water Abstractions Operator: J W Franklin Ltd Licence Number: 6/33/13/*G/0105 Permit Version: 1 Location: Borehole At Graveley Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct 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 March Authorised End: 31 October Permit Start Date: 26th May 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14NW (NE)	657	2	523550 228200
7	Water Abstractions Operator: J W Franklin Limited Licence Number: 6/33/13/*g/084 Permit Version: Not Supplied Location: Borehole At Graveley Hall, GRAVELEY Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Well And Borehole Daily Rate (m3): 9 Yearly Rate (m3): 545450 Details: C Chalk 2; 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	A14NW (NE)	698	2	523600 228195
7	Water Abstractions Operator: J W Franklin Ltd Licence Number: 6/33/13/*G/0091 Permit Version: 100 Location: Borehole At Graveley Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: C Chalk 2; Status: Temporary Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 1st January 1993 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	701	2	523600 228200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/**/034 Permit Version: Not Supplied Location: Watercourse , North Of Great Wymondley Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 10 Yearly Rate (m3): 727270 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	A11NE (W)	1096	2	521805 227895
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/*s/034 Permit Version: Not Supplied Location: Watercourse East Of Great Wymondley, WYMONDLEY, Hertfordshire Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 10 Yearly Rate (m3): 727270 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	A11NE (W)	1101	2	521800 227900
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/*s/034 Permit Version: Not Supplied Location: Pond, WYMONDLEY, Hertfordshire Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Catchpit, Catchment Tank or Collecting Tank Daily Rate (m3): 10 Yearly Rate (m3): 727270 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	A11NE (W)	1101	2	521800 227895
	Water Abstractions Operator: Big Pub Co Ltd Licence Number: 6/33/13/*G/0020 Permit Version: 100 Location: Borehole At Graveley Authority: Environment Agency, Anglian Region Abstraction: Hotels; Public Houses And Conference Centres: 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: C Chalk 2; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st November 1997 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A24SW (N)	1238	2	523280 229080

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: N B Motors Ltd Licence Number: 6/33/13/*G/0021 Permit Version: 100 Location: Borehole W Of Roman Rd Graveley 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: C Chalk 2; 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 100m	A24SW (N)	1307	2	523340 229135
	Water Abstractions Operator: N B Motors Ltd Licence Number: 6/33/13/*G/0021 Permit Version: 100 Location: Borehole W Of Roman Rd Graveley Authority: Environment Agency, Anglian Region Abstraction: Household Water Supply: 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: C Chalk 2; 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 100m	A24SW (N)	1312	2	523340 229140
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/**/034 Permit Version: Not Supplied Location: Catchpit, North Of Great Wymondley Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 10 Yearly Rate (m3): 727270 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	A16NE (NW)	1365	2	521805 228695
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/*s/034 Permit Version: Not Supplied Location: Watercourse East Of Great Wymondley, WYMONDLEY, Hertfordshire Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 10 Yearly Rate (m3): 727270 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	A16NE (NW)	1368	2	521805 228700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/**/034 Permit Version: Not Supplied Location: Watercourse South West Of, Great Wymondley, WYMONDLEY Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 10 Yearly Rate (m3): 727000 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	A16NE (NW)	1369	2	521800 228695
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/*s/034 Permit Version: Not Supplied Location: Catchpit East Of Great Wymondley, WYMONDLEY, Hertfordshire Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Catchpit, Catchment Tank or Collecting Tank Daily Rate (m3): 10 Yearly Rate (m3): 727270 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	A16NE (NW)	1371	2	521805 228705
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/**/034 Permit Version: Not Supplied Location: Catchpit East Of, Great Wymondley, WYMONDLEY, Hertfordshire Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Catchpit, Catchment Tank or Collecting Tank Daily Rate (m3): 10 Yearly Rate (m3): 727000 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	A16NE (NW)	1372	2	521800 228700
	Water Abstractions Operator: F T Gearing Landscape Licence Number: 6/33/13/*G/0097 Permit Version: 100 Location: Borehole At Todds Green Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: C Chalk 2; Status: Perpetuity Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 1st May 1996 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A2NW (SW)	1426	2	522030 226730

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Mr F T Gearing Licence Number: 6/33/13/*g/087 Permit Version: Not Supplied Location: Borehole At Chantry Farm, WYMONDLEY Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Well And Borehole Daily Rate (m3): 9 Yearly Rate (m3): 45500 Details: C Chalk 2; 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	A2NW (SW)	1427	2	522035 226725
	Water Abstractions Operator: Mr F T Gearing Licence Number: 6/33/13/*g/079 Permit Version: Not Supplied Location: Borehole At Chantry Farm, WYMONDLEY Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Well And Borehole Daily Rate (m3): 5 Yearly Rate (m3): 23000 Details: C Chalk 2; 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	A2NW (SW)	1430	2	522030 226725
	Water Abstractions Operator: Affinity Water Limited Licence Number: 6/33/13/*G/0007 Permit Version: 105 Location: Borehole - Little Wymondley Authority: Environment Agency, Anglian Region Abstraction: Public Water Supply: Potable Water Supply - Direct 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: 17th September 2020 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6SW (SW)	1643	2	521500 227000
	Water Abstractions Operator: Affinity Water Limited Licence Number: 6/33/13/*G/0007 Permit Version: 103 Location: Borehole - Little Wymondley Authority: Environment Agency, Anglian Region Abstraction: Public Water Supply: Potable Water Supply - Direct 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: 14th November 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6SW (SW)	1643	2	521500 227000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Veolia Water Central Limited Licence Number: 6/33/13/*G/0007 Permit Version: 102 Location: Borehole - Little Wymondley Authority: Environment Agency, Anglian Region Abstraction: Public Water Supply: Potable Water Supply - Direct 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: 20th July 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6SW (SW)	1643	2	521500 227000
	Water Abstractions Operator: Three Valleys Water Plc Licence Number: 6/33/13/*G/0007 Permit Version: 100 Location: Borehole - Little Wymondley Authority: Environment Agency, Anglian Region Abstraction: Public Water Supply: Potable Water Supply - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: C Chalk 2; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st March 1994 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6SW (SW)	1643	2	521500 227000
	Water Abstractions Operator: Family Golf Ltd Licence Number: 6/33/13/*G/0090 Permit Version: 100 Location: Borehole At Graveley Authority: Environment Agency, Anglian Region Abstraction: Golf Courses: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: C Chalk 2; Status: Temporary Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 1st September 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A25SW (NE)	1659	2	524100 229100
	Water Abstractions Operator: F & D Allen Licence Number: 6/33/13/*G/0094 Permit Version: 100 Location: Well/Borehole At Manor Farm 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: C Chalk 2; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st February 1995 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1725	2	524700 227960

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Mr I Croft Licence Number: 6/33/53/*s/328 Permit Version: Not Supplied Location: Drain North West Of, RAMSEY Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 13 Yearly Rate (m3): 545500 Details: Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Manually positioned within the geographical locality	A25NW (NE)	1751	2	524000 229300
	Water Abstractions Operator: Chesfield Downs Golf Club Limited Licence Number: 6/33/13/*G/0104/R02 Permit Version: 2 Location: Borehole (TI 22/88) At Graveley Authority: Environment Agency, Anglian Region Abstraction: Golf Courses: Spray Irrigation - Direct 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 April Authorised End: 31 October Permit Start Date: 13th September 2021 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1791	2	524080 229291
	Water Abstractions Operator: Chesfield Downs Golf Club Limited Licence Number: 6/33/13/*G/0104/R02 Permit Version: 1 Location: Borehole (TI 22/88) At Graveley Authority: Environment Agency, Anglian Region Abstraction: Golf Courses: Spray Irrigation - Direct 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 April Authorised End: 31 October Permit Start Date: 1st April 2018 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1791	2	524080 229291
	Water Abstractions Operator: Chesfield Downs Golf Club Limited Licence Number: 6/33/13/*G/0104/R01 Permit Version: 1 Location: Borehole (TI 22/88) At Graveley Authority: Environment Agency, Anglian Region Abstraction: Golf Courses: Spray Irrigation - Direct 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 April Authorised End: 31 October Permit Start Date: 15th April 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1791	2	524080 229290

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Chesfield Downs Golf Club Ltd Licence Number: 6/33/13/*G/0104 Permit Version: 3 Location: Borehole (TI 22/88) At Graveley Authority: Environment Agency, Anglian Region Abstraction: Golf Courses: Spray Irrigation - Direct 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 April Authorised End: 31 October Permit Start Date: 2nd May 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1791	2	524080 229290
	Water Abstractions Operator: Clubhaus Plc (Chesfield Downs) Licence Number: 6/33/13/*G/0104 Permit Version: 1 Location: Borehole (TI 22/88) At Graveley Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct 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: 26 March Authorised End: 30 November Permit Start Date: 22nd March 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1791	2	524080 229290
	Water Abstractions Operator: Chesfield Downs Golf Club Ltd Licence Number: 6/33/13/*G/0104 Permit Version: 2 Location: Borehole (TI 22/88) At Graveley Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct 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: 26 March Authorised End: 30 November Permit Start Date: 22nd March 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25NW (NE)	1791	2	524080 229290
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/*s/034 Permit Version: Not Supplied Location: Watercourse North Of Great Wymondley, WYMONDLEY, Hertfordshire Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 22 Yearly Rate (m3): 727000 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	A21SW (NW)	1807	2	521405 228895

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/*s/034 Permit Version: Not Supplied Location: Reservoir, Abstraction Point A, WYMONDLEY, Hertfordshire Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 22 Yearly Rate (m3): 727000 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	A21SW (NW)	1810	2	521405 228900
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/**/034 Permit Version: Not Supplied Location: Catchpit East Of, GREAT WYMONDLEY Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Catchpit, Catchment Tank or Collecting Tank Daily Rate (m3): 10 Yearly Rate (m3): 727000 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	A21SW (NW)	1811	2	521400 228995
	Water Abstractions Operator: Letchworth Garden City Licence Number: 6/33/13/**/034 Permit Version: Not Supplied Location: Watercourse East Of, GREAT WYMONDLEY Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 10 Yearly Rate (m3): 727000 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	A21SW (NW)	1814	2	521400 228900
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Well Connected Fractures Dilution: <300 mm/year Baseflow Index: 40-70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: High	A13SE (NE)	0	3	522939 227870
	Groundwater Vulnerability - Soluble Rock Risk Classification: Significant Risk - Problems Unlikely	A13SE (NE)	0	3	522939 227870
	Bedrock Aquifer Designations Aquifer Designation: Principal Aquifer	A13SE (NE)	0	3	522939 227870
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13SE (NE)	0	3	522939 227870

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	Source Protection Zones 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.	A13SE (NE)	0	2	522939 227870
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (E)	89	2	523065 227865
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (E)	94	2	523070 227890
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied	A13SE (E)	97	2	523068 227841
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied	A13SE (SE)	109	2	523050 227771
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (SE)	117	2	523077 227799
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied	A13SE (SE)	122	2	523040 227745
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied	A13SE (E)	137	2	523105 227825
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied	A13SE (E)	142	2	523107 227810
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (E)	143	2	523119 227877
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied	A13SE (SE)	151	2	523110 227790
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied	A13NE (E)	153	2	523130 227875
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied	A13SE (SE)	159	2	523115 227780
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (SE)	162	2	523119 227780
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (E)	176	2	523151 227904
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied	A13NE (E)	191	2	523165 227914

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (E)	194	2	523167 227915
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Events Boundary Accuracy: As Supplied	A13NE (E)	197	2	523170 227916
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied	A13NE (E)	210	2	523180 227930
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied	A13NE (E)	229	2	523198 227940
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied	A13NE (E)	239	2	523207 227945
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models and Fluvial Events Boundary Accuracy: As Supplied	A13NE (E)	249	2	523216 227950
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (E)	93	2	523065 227845
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
9	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 410.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ash Brook Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A13SE (E)	118	4	523088 227838
10	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 508.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ash Brook Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A13SE (E)	118	4	523090 227846
11	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 94.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ash Brook Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A8NE (S)	391	4	522988 227455
12	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.1 Watercourse Level: Underground Permanent: True Watercourse Name: Ash Brook Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A8NE (S)	484	4	522979 227361

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 83.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ash Brook Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A8NE (S)	491	4	522978 227354
14	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 338.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A19SW (NE)	510	4	523307 228268
15	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 36.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ash Brook Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (E)	572	4	523526 228041
16	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ash Brook Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (E)	573	4	523525 228048
17	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 159.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ash Brook Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A8NE (S)	574	4	522970 227271
18	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 128.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (E)	575	4	523535 228015
19	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (E)	579	4	523525 228067
20	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 82.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A19SW (NE)	583	4	523458 228209
21	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 93.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (E)	585	4	523528 228077

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 81.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (E)	585	4	523528 228077
23	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 127.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A12SE (W)	589	4	522312 227839
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (NE)	624	4	523537 228155
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (NE)	625	4	523536 228158
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 446.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A18SW (N)	628	4	522843 228520
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (NE)	630	4	523532 228176
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (NE)	639	4	523536 228189
29	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 130.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NW (NE)	642	4	523537 228193
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 511.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A14NE (E)	676	4	523649 227954

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A12SW (W)	716	4	522185 227825
32	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 285.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A12SW (W)	724	4	522178 227824
33	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 297.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ash Brook Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A8SE (S)	734	4	522965 227111
34	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 403.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A19SW (NE)	736	4	523567 228320
35	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 130.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A18NE (N)	817	4	523228 228657
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A19NW (NE)	818	4	523364 228600
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 31.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A19NW (NE)	823	4	523364 228606
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A19NW (NE)	846	4	523357 228635
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 68.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A12NW (W)	856	4	522054 227991

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 101.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A12NW (W)	915	4	521992 227965
41	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 18.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A12NW (W)	970	4	521931 227904
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A12NW (W)	970	4	521932 227908
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 16.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A11NE (W)	988	4	521914 227900
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 275.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ash Brook Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A8SW (S)	989	4	522801 226871

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Hertfordshire County Council - Has supplied landfill data		0	5	522939 227870
	Local Authority Landfill Coverage Name: North Hertfordshire District Council - Has supplied landfill data		0	6	522939 227870
	Local Authority Landfill Coverage Name: Stevenage Borough Council - Has supplied landfill data		586	7	522873 227266

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: White Chalk Subgroup	A13SE (NE)	0	1	522939 227870
45	BGS Recorded Mineral Sites Site Name: Graveley Gravel Pit Location: Graveley, Stevenage, Hertfordshire Source: British Geological Survey, National Geoscience Information Service Reference: 166631 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	257	1	523117 228095
46	BGS Recorded Mineral Sites Site Name: Graveley Gravel Pit Location: Graveley, Stevenage, Hertfordshire Source: British Geological Survey, National Geoscience Information Service Reference: 166641 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A8SE (S)	758	1	523192 227120
47	BGS Recorded Mineral Sites Site Name: Little Wymondley Gravel Pit Location: Wymondley, Stevenage, Hertfordshire Source: British Geological Survey, National Geoscience Information Service Reference: 166642 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	965	1	522014 227480
48	BGS Recorded Mineral Sites Site Name: Graveley Chalk Pit Location: Graveley, Stevenage, Hertfordshire Source: British Geological Survey, National Geoscience Information Service Reference: 166630 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Cretaceous Geology: White Chalk Subgroup Commodity: Chalk Positional Accuracy: Located by supplier to within 10m	A19NE (NE)	985	1	523694 228554
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A13SE (NE)	0	1	522939 227870
	Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	137	1	523104 227817
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (NE)	0	1	522939 227870
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	65	1	523031 227823
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	137	1	523104 227817

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (NE)	0	1	522939 227870
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	65	1	523031 227823
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	137	1	523104 227817
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	228	1	522697 227758
	Potential for Ground Dissolution Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (NE)	0	1	522939 227870
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	61	1	522876 227944
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	118	1	522822 227772
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	210	1	523021 228084
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (NE)	0	1	522939 227870
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (NE)	0	1	522939 227870
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	65	1	523031 227823
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (NE)	0	1	522939 227870
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	38	1	522867 227886
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	41	1	523018 227883
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	65	1	523031 227823
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	137	1	523104 227817
	Radon Potential - Radon Affected Areas 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 (NE)	0	1	522939 227870
	Radon Potential - Radon Protection Measures 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 (NE)	0	1	522939 227870

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
49	Contemporary Trade Directory Entries Name: Pressclean Location: 19, Ashwell Common, Graveley, HITCHIN, Hertfordshire, SG4 7LJ Classification: Ironing & Home Laundry Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SW (SW)	41	-	522868 227834
50	Contemporary Trade Directory Entries Name: Graveley Motor Co Location: 16-18, High Street, Graveley, Hitchin, Hertfordshire, SG4 7LB Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (E)	166	-	523143 227868
50	Contemporary Trade Directory Entries Name: A Z Autos Location: 18, High Street, Graveley, Hitchin, SG4 7LB Classification: Car Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (E)	174	-	523151 227883
51	Contemporary Trade Directory Entries Name: Sas Cleaning Location: 38, High Street, Graveley, Hitchin, Hertfordshire, SG4 7LA Classification: Commercial Cleaning Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (NE)	184	-	523122 227993
52	Contemporary Trade Directory Entries Name: Cygnet Hospital Location: Graveley Road, Stevenage, SG1 4YS Classification: Hospitals Status: Active Positional Accuracy: Automatically positioned to the address	A8SW (S)	906	-	522834 226949
53	Gas Pipelines Name: GREAT WILBRAHAM TO WHITWELL Nat Grid: Owned By National Grid Diameter (mm): 900 Building Proximity: Not Supplied Distance (m): Status: Active Pipe Length (m): 54701.95 Pipe Number: Not Supplied	A13NW (NW)	327	8	522604 228011

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
54	Areas of Adopted Green Belt Authority: North Hertfordshire District Council Plan Name: North Hertfordshire District Local Plan Status: Adopted Plan Date: 30th April 1996	A13SE (NE)	0	10	522939 227870
55	Areas of Adopted Green Belt Authority: Stevenage Borough Council Plan Name: Stevenage Local Plan Status: Adopted Plan Date: 22nd May 2019	A8NE (S)	582	11	522949 227263
56	Areas of Unadopted Green Belt Authority: North Hertfordshire District Council Plan Name: North Hertfordshire Local Plan Status: Submission Draft Plan Date: 11th April 2017	A13NW (W)	7	10	522899 227883
57	Nitrate Vulnerable Zones Name: Anglian Chalk Description: Groundwater Source: Environment Agency, Head Office	A13SE (NE)	0	3	522939 227870
58	Nitrate Vulnerable Zones Name: Great Ouse Nvz Description: Surface Water Source: Environment Agency, Head Office	A13SE (NE)	0	3	522939 227870
59	Nitrate Vulnerable Zones Name: Lee Nvz Description: Surface Water Source: Environment Agency, Head Office	A9NE (SE)	896	3	523651 227263

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices East Hertfordshire District Council - Environmental Health Department Environment Agency - Head Office North Hertfordshire District Council - Environmental Health Department Stevenage Borough Council - Environmental Health Department	January 2013 November 2023 October 2017 October 2017	Annual Rolling Update Annually Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - Anglian Region Environment Agency - Thames Region	January 2024 January 2024	Quarterly Quarterly
Enforcement and Prohibition Notices Environment Agency - Thames Region	March 2013	
Integrated Pollution Controls Environment Agency - Thames Region	January 2009	
Integrated Pollution Prevention And Control Environment Agency - South East Region - North East Thames Area Environment Agency - Thames Region	October 2023 October 2023	Quarterly Quarterly
Local Authority Integrated Pollution Prevention And Control Stevenage Borough Council - Environmental Health Department East Hertfordshire District Council - Environmental Health Department North Hertfordshire District Council - Environmental Health Department	April 2015 January 2014 September 2014	Variable Variable Variable
Local Authority Pollution Prevention and Controls Stevenage Borough Council - Environmental Health Department North Hertfordshire District Council - Environmental Health Department East Hertfordshire District Council - Environmental Health Department	April 2015 December 2020 January 2014	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Stevenage Borough Council - Environmental Health Department East Hertfordshire District Council - Environmental Health Department North Hertfordshire District Council - Environmental Health Department	April 2015 January 2014 September 2014	Variable Variable Variable
Nearest Surface Water Feature Ordnance Survey	February 2024	
Pollution Incidents to Controlled Waters Environment Agency - Anglian Region Environment Agency - Thames Region	September 1999 September 1999	
Prosecutions Relating to Authorised Processes Environment Agency - Thames Region	July 2015	
Prosecutions Relating to Controlled Waters Environment Agency - Thames Region	March 2013	
Registered Radioactive Substances Environment Agency - Thames Region Environment Agency - Head Office	June 2016 May 2023	As notified Quarterly
River Quality Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points Environment Agency - Head Office	April 2012	
River Quality Chemistry Sampling Points Environment Agency - Head Office	April 2012	
Substantiated Pollution Incident Register Environment Agency - South East Region - North East Thames Area Environment Agency - Thames Region - North East Area	January 2024 January 2024	Quarterly Quarterly
Water Abstractions Environment Agency - Anglian Region Environment Agency - Thames Region	October 2023 October 2023	Quarterly Quarterly

Agency & Hydrological	Version	Update Cycle
Water Industry Act Referrals Environment Agency - Thames Region	October 2017	
Groundwater Vulnerability Map Environment Agency - Head Office	June 2018	As notified
Groundwater Vulnerability - Soluble Rock Risk Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations Environment Agency - Head Office	January 2018	As notified
Superficial Aquifer Designations Environment Agency - Head Office	January 2018	As notified
Source Protection Zones Environment Agency - Head Office	September 2022	Bi-Annually
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	December 2023	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	December 2023	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	February 2023	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	January 2024	Quarterly
Flood Defences Environment Agency - Head Office	August 2022	Quarterly
OS Water Network Lines Ordnance Survey	January 2024	Quarterly
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	As notified

Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	November 2002	As notified
Historical Landfill Sites Environment Agency - Head Office	July 2023	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Thames Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - South East Region - North East Thames Area Environment Agency - Thames Region - North East Area	January 2024 January 2024	Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - South East Region - North East Thames Area Environment Agency - Thames Region - North East Area	January 2023 January 2023	Quarterly Quarterly
Local Authority Landfill Coverage East Hertfordshire District Council - Environmental Health Department Hertfordshire County Council - Spatial Planning and Economy Unit North Hertfordshire District Council - Environmental Health Department Stevenage Borough Council - Environmental Health Department	February 2003 February 2003 February 2003 February 2003	Not Applicable Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites East Hertfordshire District Council - Environmental Health Department Hertfordshire County Council - Spatial Planning and Economy Unit North Hertfordshire District Council - Environmental Health Department Stevenage Borough Council - Environmental Health Department	October 2018 October 2018 October 2018 October 2018	
Registered Landfill Sites Environment Agency - Thames Region - North East Area	March 2006	Not Applicable
Registered Waste Transfer Sites Environment Agency - Thames Region - North East Area	April 2018	
Registered Waste Treatment or Disposal Sites Environment Agency - Thames Region - North East Area	June 2015	
Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	January 2024	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements Hertfordshire County Council - Spatial Planning and Economy Unit North Hertfordshire District Council Stevenage Borough Council East Hertfordshire District Council	February 2016 February 2016 June 2023 May 2023	Variable Variable Variable Variable
Planning Hazardous Substance Consents East Hertfordshire District Council Hertfordshire County Council - Spatial Planning and Economy Unit North Hertfordshire District Council Stevenage Borough Council	April 2015 February 2016 February 2016 February 2016	Variable Variable Variable Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	As notified
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	January 2024	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
Coal Mining Affected Areas The Coal Authority - Property Searches	February 2023	Annual Rolling Update
Mining Instability Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	October 2023	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	October 2023	Annually
Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	October 2023	Quarterly
Fuel Station Entries Catalist Ltd - Experian	February 2024	Quarterly
Gas Pipelines National Grid	October 2021	Bi-Annually
Underground Electrical Cables National Grid	February 2023	Bi-Annually

Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural England	October 2023	Bi-Annually
Areas of Adopted Green Belt East Hertfordshire District Council North Hertfordshire District Council Stevenage Borough Council	February 2024 February 2024 February 2024	Quarterly Quarterly Quarterly
Areas of Unadopted Green Belt East Hertfordshire District Council North Hertfordshire District Council Stevenage Borough Council	February 2024 February 2024 February 2024	Quarterly Quarterly Quarterly
Areas of Outstanding Natural Beauty Natural England	November 2023	Bi-Annually
Environmentally Sensitive Areas Natural England	August 2023	
Forest Parks Forestry Commission	May 2023	Not Applicable
Local Nature Reserves Natural England	February 2024	Bi-Annually
Marine Nature Reserves Natural England	February 2024	Bi-Annually
National Nature Reserves Natural England	February 2024	Bi-Annually
National Parks Natural England	February 2018	Bi-Annually
Nitrate Sensitive Areas Natural England	April 2023	Not Applicable
Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Environment Agency - Head Office	April 2016 March 2023	Bi-Annually
Ramsar Sites Natural England	February 2024	Bi-Annually
Sites of Special Scientific Interest Natural England	November 2023	Bi-Annually
Special Areas of Conservation Natural England	October 2023	Bi-Annually
Special Protection Areas Natural England	October 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	 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	 Centre for Ecology & Hydrology 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	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	Hertfordshire County Council - Spatial Planning and Economy Unit County Hall, Hertford, Hertfordshire, SG13 8DN	Telephone: 01992 556266 Fax: 01992 556015 Email: spatialplanning@hertfordshire.gov.uk Website: www.hertsdirect.org
6	North Hertfordshire District Council - Environmental Health Department Council Offices, Gernon Road, Letchworth, Hertfordshire, SG6 3JF	Telephone: 01462 474000 Fax: 01462 474559 Website: www.north-herts.gov.uk
7	Stevenage Borough Council - Environmental Health Department Daneshill House, Danestrete, Stevenage, Hertfordshire, SG1 1HN	Telephone: 01438 242242 Fax: 01438 740296 Website: www.stevenage.gov.uk
8	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9966 Fax: 0844 844 9951 Email: helpdesk@landmark.co.uk Website: www.landmark.co.uk
9	Natural England County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
10	North Hertfordshire District Council Council Offices, Gernon Road, Letchworth, Hertfordshire, SG6 3JF	Telephone: 01462 474000 Fax: 01462 474558 Website: www.north-herts.gov.uk
11	Stevenage Borough Council Daneshill House, Danestrete, Stevenage, Hertfordshire, SG1 1HN	Telephone: 01438 242242 Fax: 01438 740296 Website: www.stevenage.gov.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

3.4 Risk assessment methodology

The method of risk evaluation adopted in this document is consistent with CIRIA C552 (2001). Hence, risk is considered to be a function of both the probability (likelihood) of contamination occurring at the study site and also the potential severity (consequence) of the environmental impacts associated with this contamination.

The classification system used to define contaminant probability, consequence and risk is described in the following tables.

Table A: Classification of probability

Classification	Definition
High likelihood	There is a contaminant linkage and an event that appears either 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 contaminant linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term, and likely over the long term.
Low likelihood	There is a contaminant 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 contaminant linkage but circumstances are such that it is improbable that an event would occur even in the long term.

Table B: Classification of consequence

Classification	Receptor	Definition	Examples
Severe	Humans	Short-term (acute) risk to human health likely to result in "significant harm" as defined in the CTL Statutory Guidance	High concentrations of cyanide on the surface of an informal recreation area
	Controlled waters	Short-term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource	Major spillage of contaminants from site into controlled water
	Property	Catastrophic damage to buildings/property	Explosion, causing building collapse (can also equate to an acute human health risk if buildings are occupied)
	Ecology	A short-term risk to a particular ecosystem, or organism forming part of such eco-system	Potentially long term derogation of a designated site or protected species
Medium	Humans	Chronic damage to human health ("significant harm" as defined in the CTL Statutory Guidance)	Concentrations of a contaminant from a residential site exceed the site-specific assessment criteria
	Controlled waters	Pollution of sensitive water resources (note: Water Resources Act contains no scope for considering significance of pollution)	Leaching of contaminants from a site to a principal or secondary aquifer
	Property	Significant damage to crops, buildings, structures and services	Damage to building rendering it unsafe to occupy (e.g. foundation damage resulting in instability)
	Ecology	A significant change in a particular ecosystem	Death of a species within a designated nature reserve

Table B: Classification of consequence (continued)

Classification	Receptor	Definition	Examples
Mild	Humans	Contamination present although unlikely to constitute a significant chronic health risk	Concentrations of a contaminant from a public access site moderately exceed the generic assessment criteria
	Controlled waters	Pollution of non-water resources	Pollution of non-classified groundwater
	Property	Damage to sensitive buildings/structures/services	Aggressive ground conditions leading to potential for long term degradation of buried concrete
	Ecology	Damage to the environment	Localised damage to aquatic habitat causing temporary relocation of certain species
Minor	Humans	Non-permanent health effects to human health (easily prevented by means such as personal protective clothing, etc.)	The presence of contaminants at such concentrations that protective equipment is required during site works
	Controlled waters	Potential minor release of contamination to local water features	Short term or low volume release of potentially polluting material to a secondary surface water course of low existing quality
	Property	Easily reparable effects of damage to buildings, structures and services. Harm which may result in a financial loss, or expenditure to resolve	The loss of plants in a landscaping scheme. Discolouration of concrete
	Ecology	Short term, localised damage may occur; consequences are spatially and temporally limited	Short term or localised disruption to in situ flora or fauna; no lasting effects

Table C: Risk classification (comparison of consequence and probability)

		Consequence (severity)			
		Severe	Medium	Mild	Minor
Probability	High likelihood	Very high risk	High risk	Moderate risk	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 Key

Very High	High	Moderate	Moderate/Low	Low	Very Low
There is a high probability that severe harm could arise to a designated receptor from an identified hazard without appropriate remediation action	Harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remediation action	It is possible that without appropriate remediation action harm could arise to a designated receptor. It is relatively unlikely that any such harm would be severe, and if any harm were to occur it is more likely that such harm would be relatively mild	It is possible that harm could arise to a designated receptor from an identified hazard. It is likely any harm would be mild	It is possible that harm could arise to a designated receptor from an identified hazard. It is likely that, at worst if any harm was realised any effects would be mild	The presence of an identified hazard does not give rise to the potential to cause harm to a receptor

3.5 Historical land use maps

Historical Ordnance Survey maps relating to the site and its surrounding area have been provided by Landmark.

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

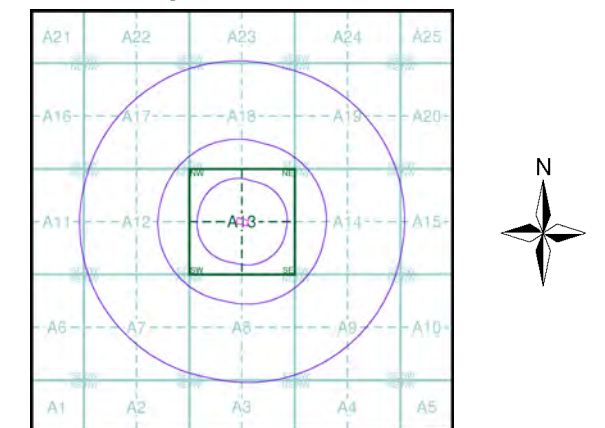
1:10,000 Raster Mapping

	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
Hertfordshire	1:10,560	1884	2
Hertfordshire	1:10,560	1899	3
Hertfordshire	1:10,560	1924 - 1925	4
Hertfordshire	1:10,560	1924 - 1925	5
Hertfordshire	1:10,560	1946	6
Hertfordshire	1:10,560	1947 - 1950	7
Ordnance Survey Plan	1:10,000	1960	8
Ordnance Survey Plan	1:10,000	1964	9
Ordnance Survey Plan	1:10,000	1976	10
Ordnance Survey Plan	1:10,000	1981	11
10K Raster Mapping	1:10,000	1999	12
Street View	Variable		13

Historical Map - Slice A

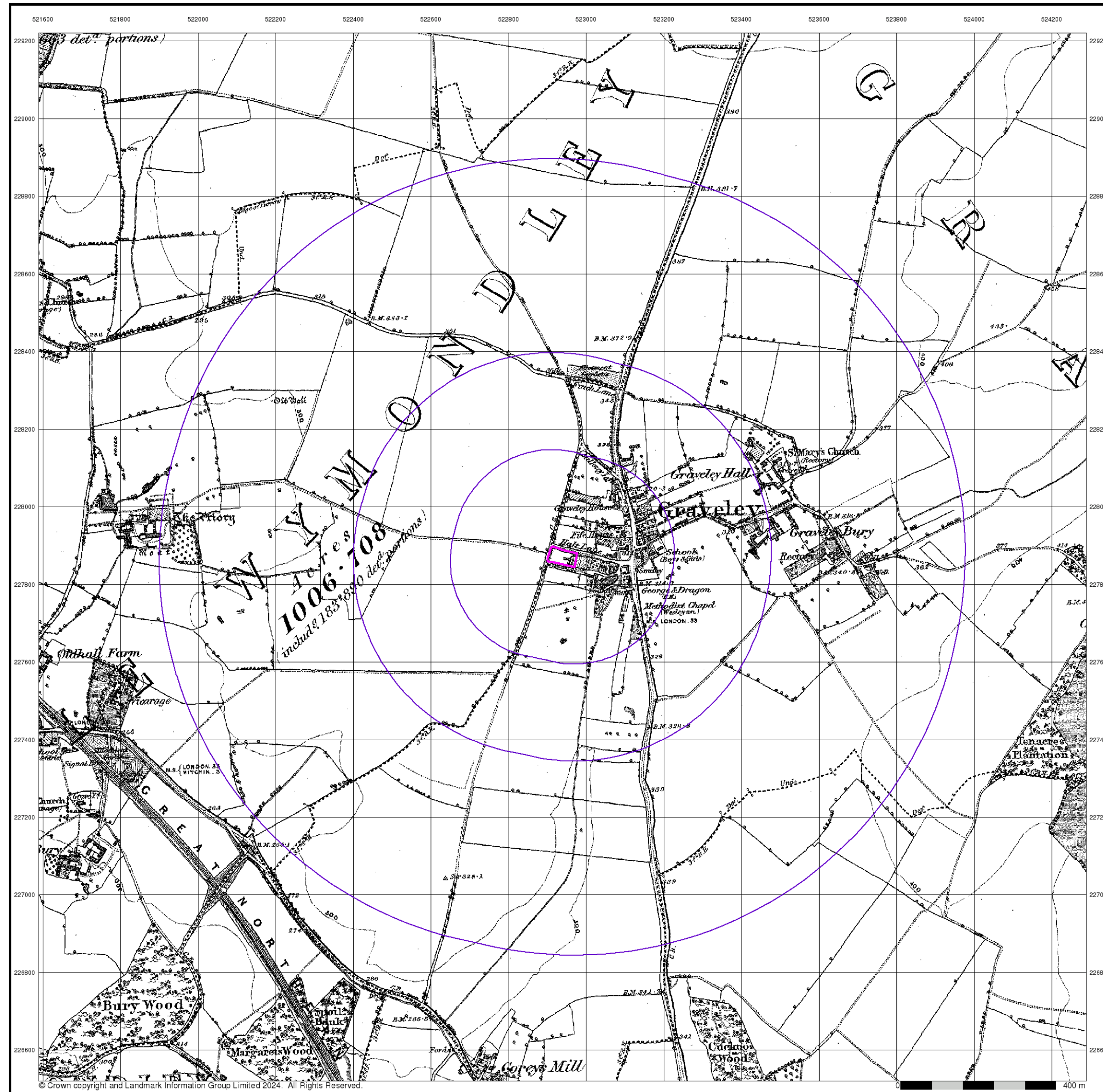


Order Details

Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details

Land Rear of Gothic House, Oak Lane, Graveley, HITCHIN, SG4 7LG



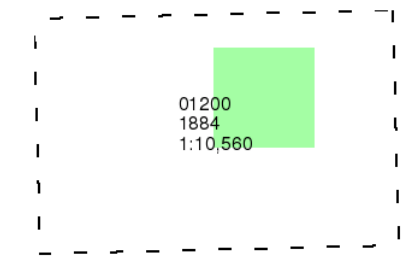
Hertfordshire

Published 1884

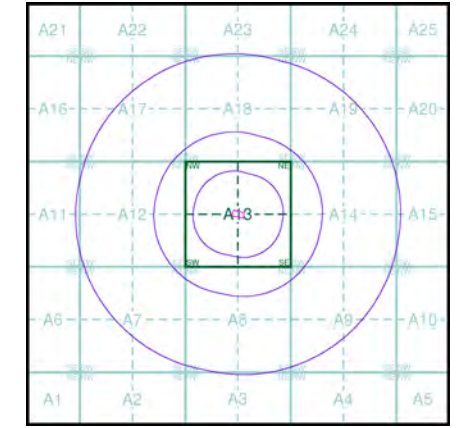
Source map scale - 1:10,560

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

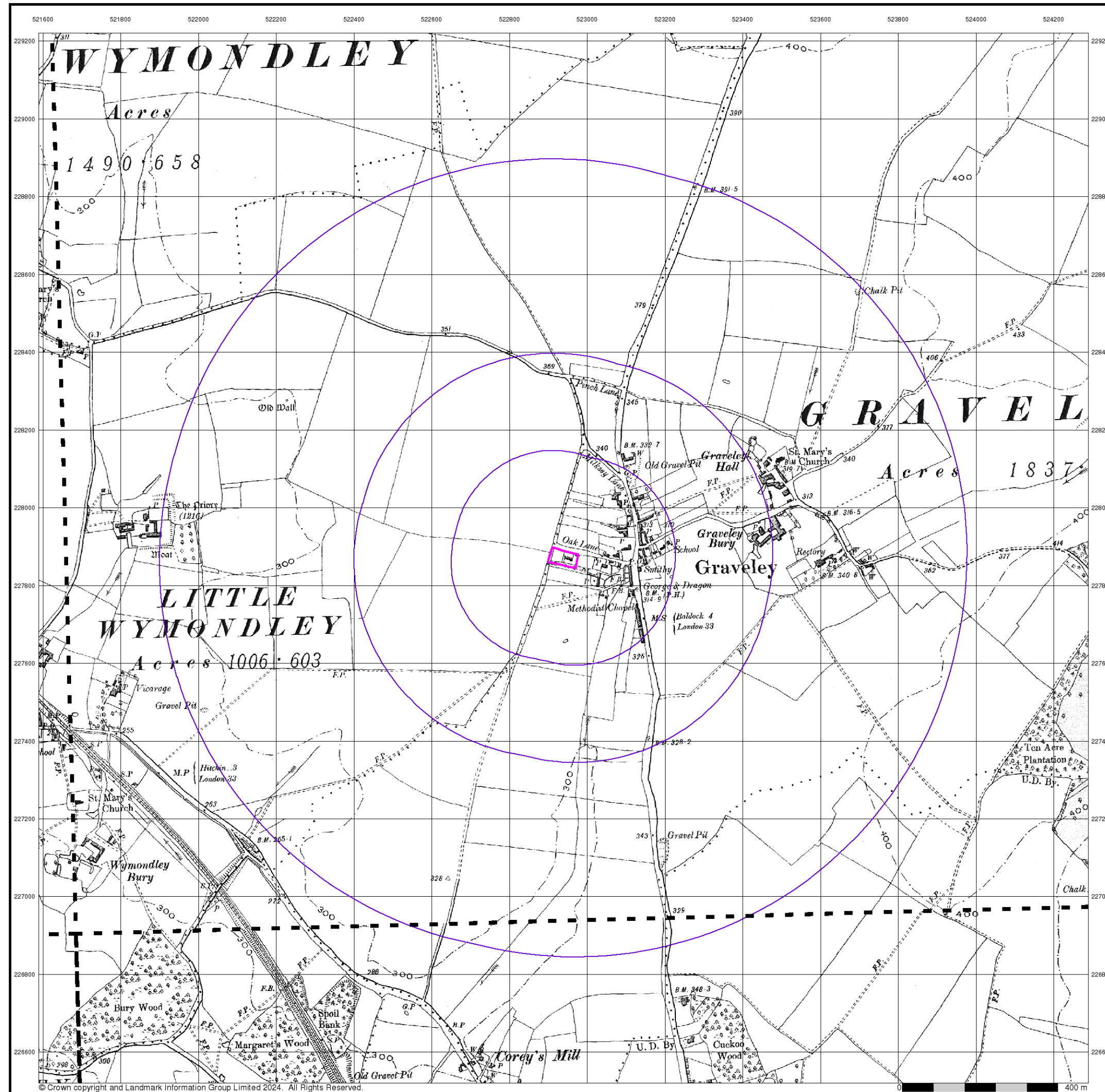


Order Details

Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details

Land Rear of Gothic House, Oak Lane, Graveley, HITCHIN, SG4 7LG

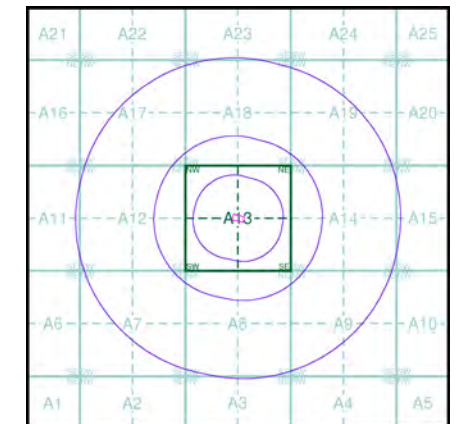


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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)

012NW 1899 1:10,560	012NE 1899 1:10,560
012SW 1899 1:10,560	012SE 1899 1:10,560

Historical Map - Slice A

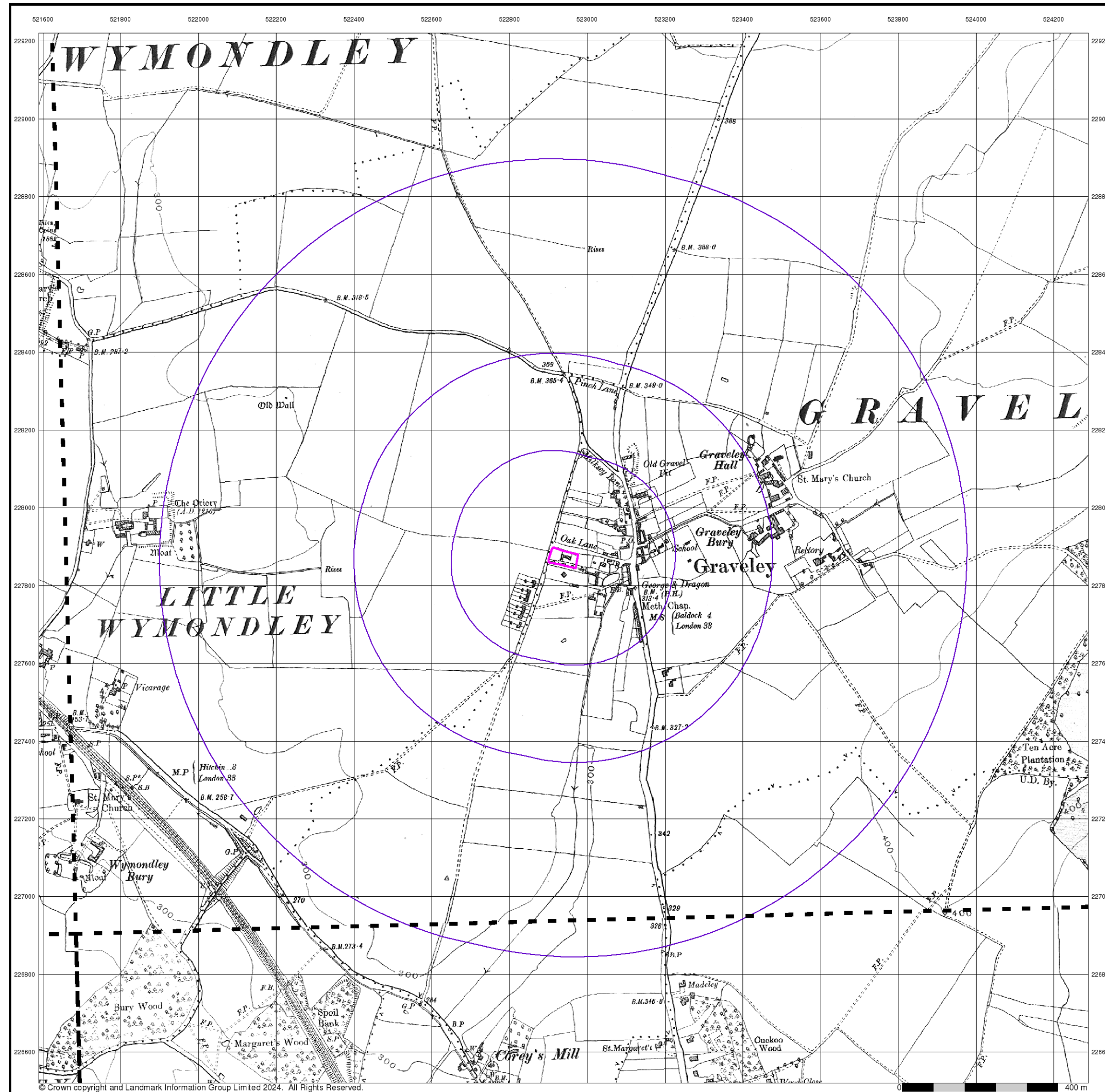


Order Details

Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details

Land Rear of Gothic House, Oak Lane, Graveley, HITCHIN,
SG4 7LG



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Hertfordshire

Published 1924 - 1925

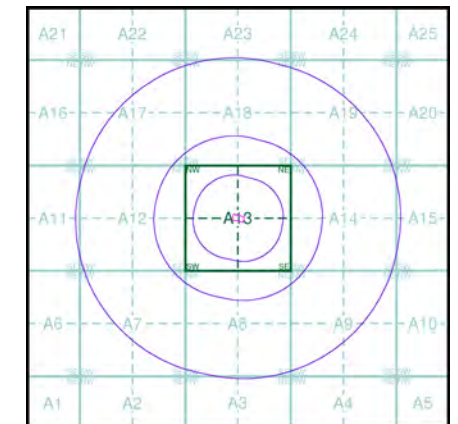
Source map scale - 1:10,560

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)

012NW 1925 1:10,560	012NE 1924 1:10,560
012SW 1924 1:10,560	012SE 1925 1:10,560

Historical Map - Slice A



Order Details

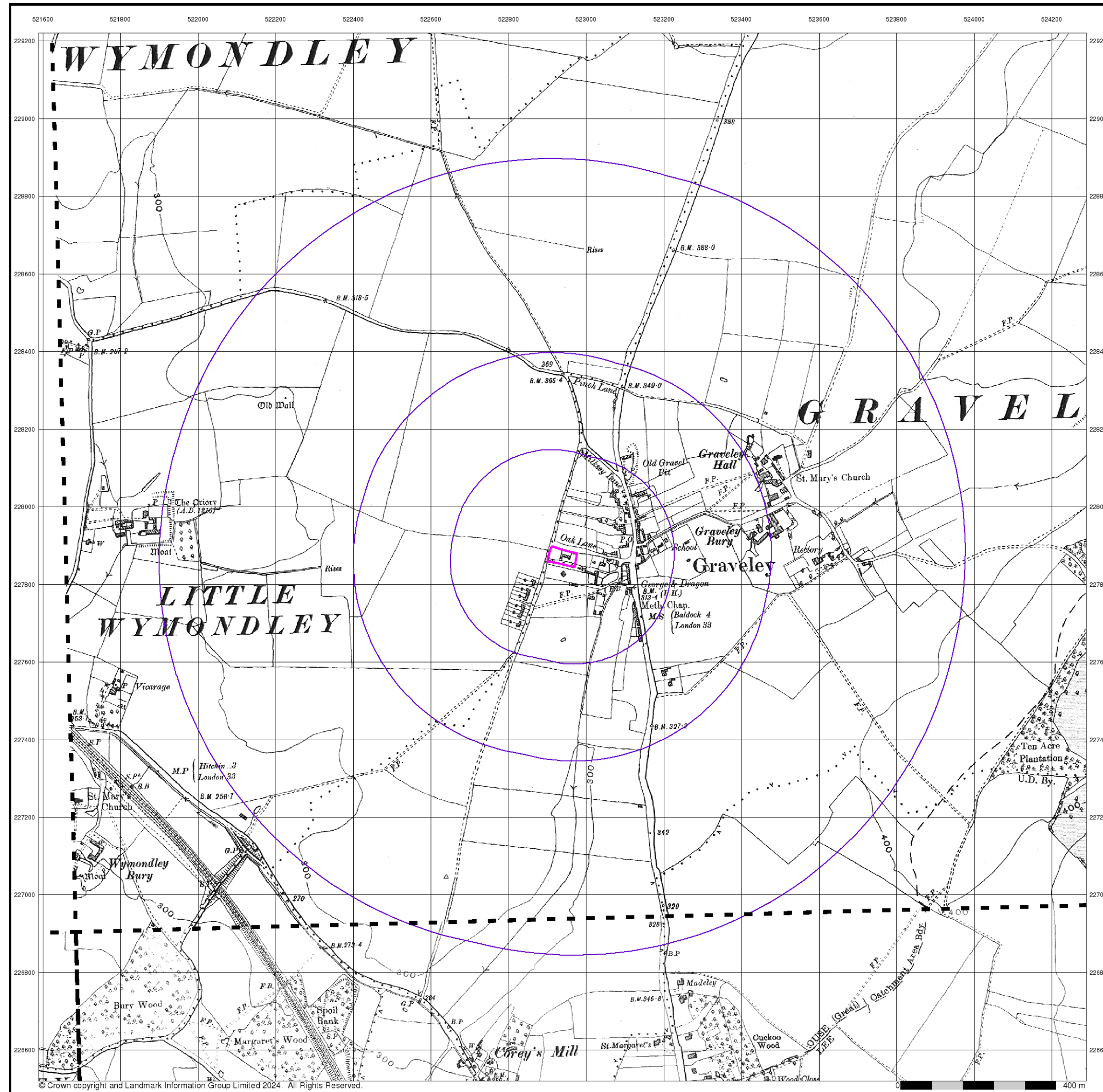
Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details

Land Rear of Gothic House, Oak Lane, Graveley, HITCHIN, SG4 7LG



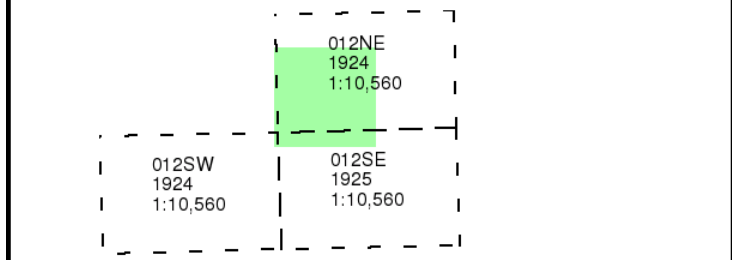
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



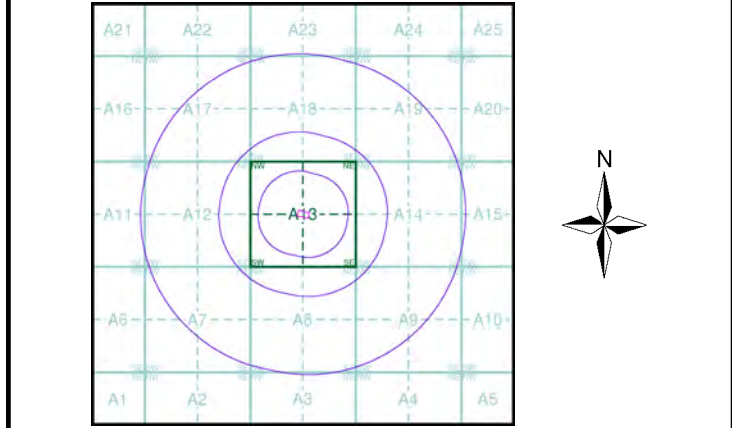
Hertfordshire
Published 1924 - 1925
Source map scale - 1:10,560

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)

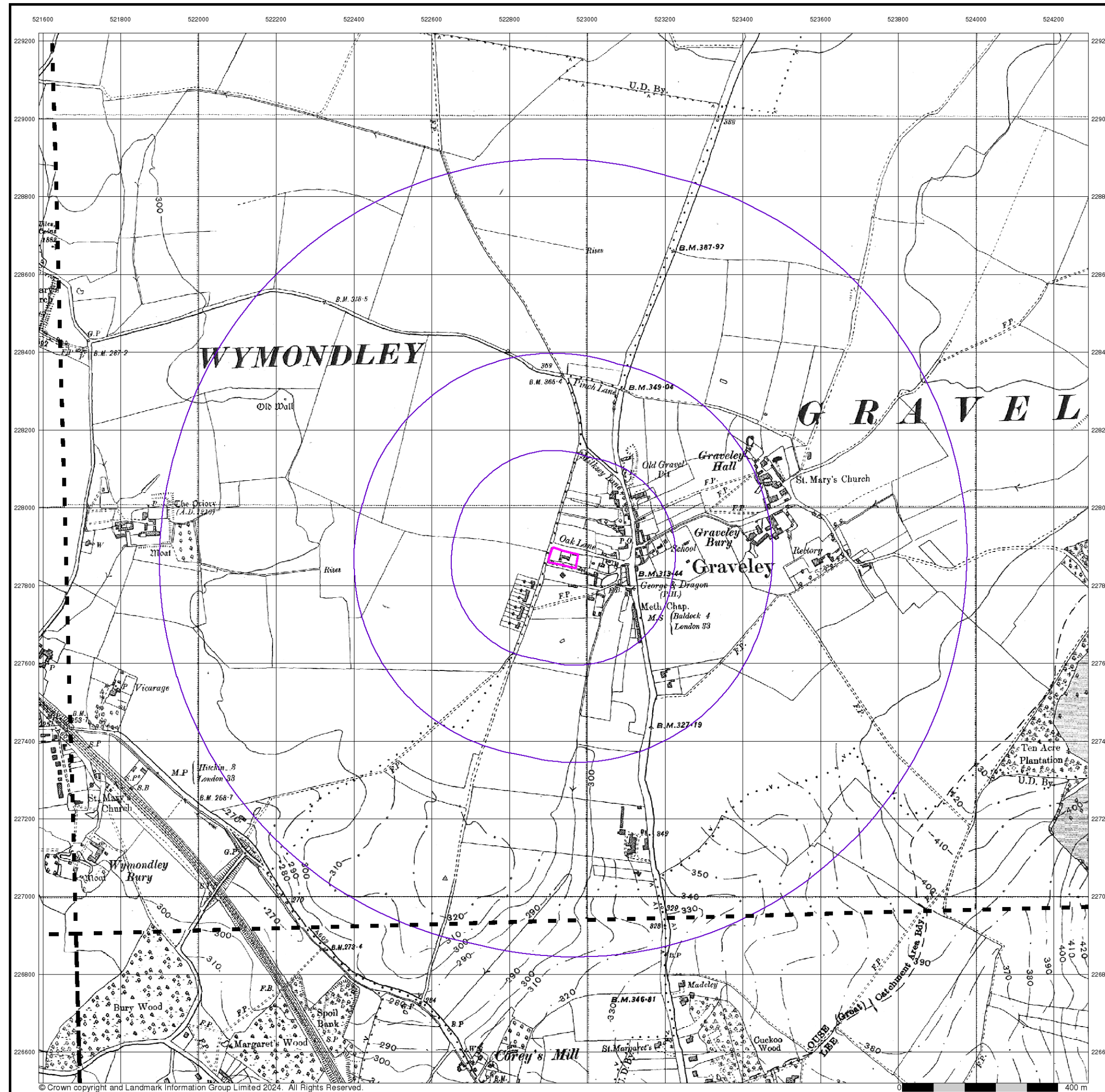


Historical Map - Slice A



Order Details
Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details
Land Rear of Gothic House, Oak Lane, Graveley, HITCHIN, SG4 7LG



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Hertfordshire

Published 1946

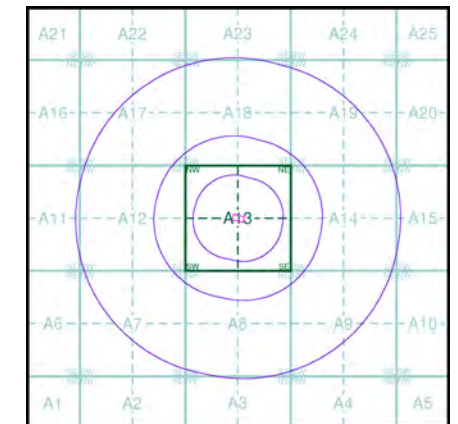
Source map scale - 1:10,560

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)

012NW 1946 1:10,560	012NE 1946 1:10,560
012SW 1946 1:10,560	012SE 1946 1:10,560

Historical Map - Slice A

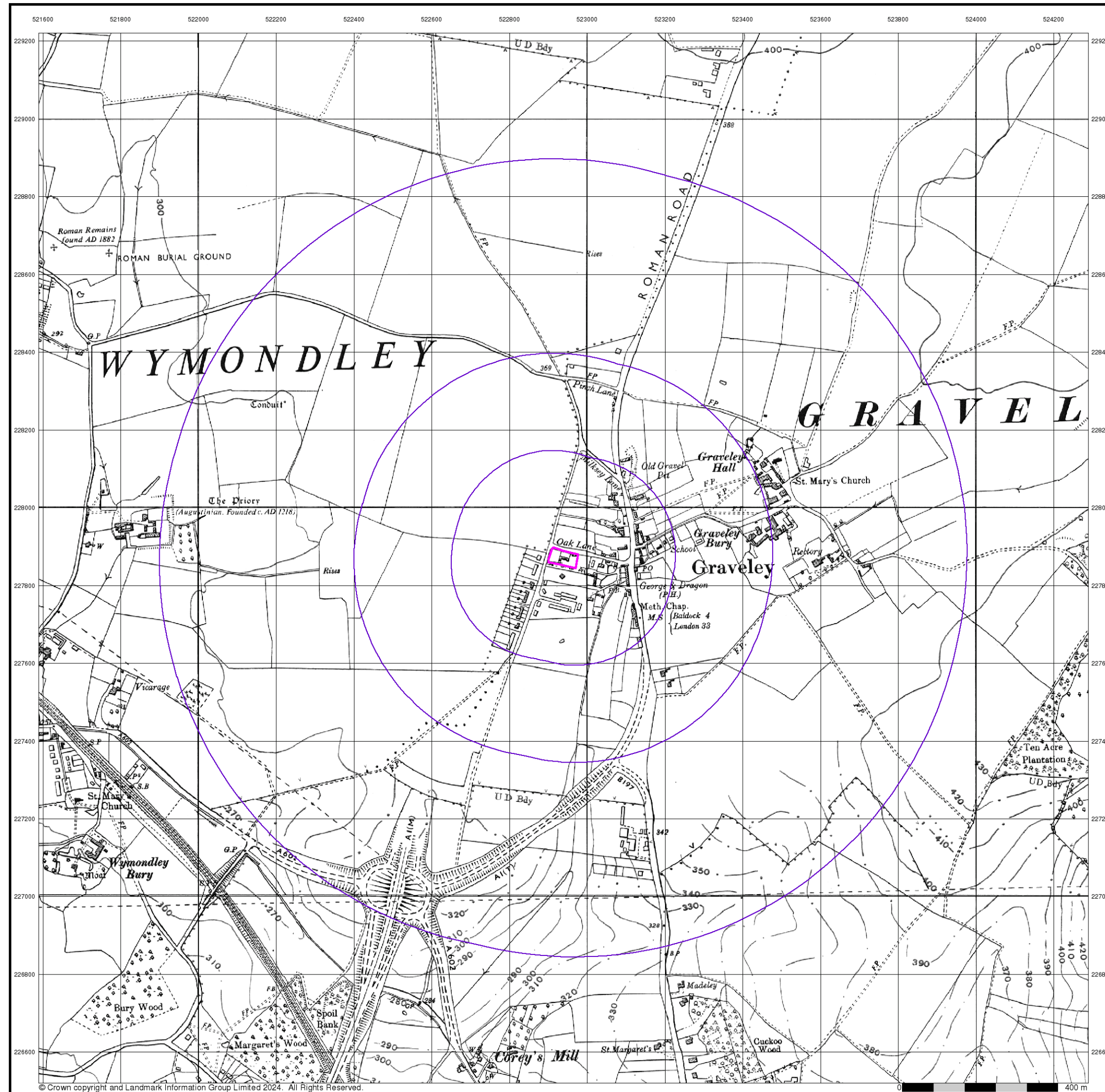


Order Details

Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details

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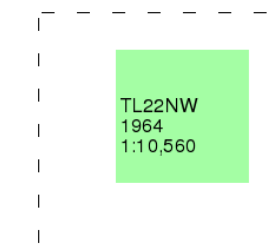
Ordnance Survey Plan

Published 1964

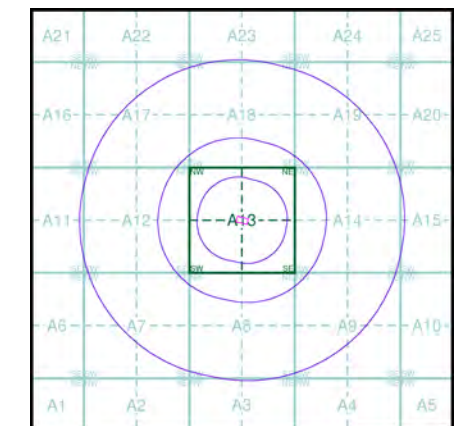
Source map scale - 1:10,000

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

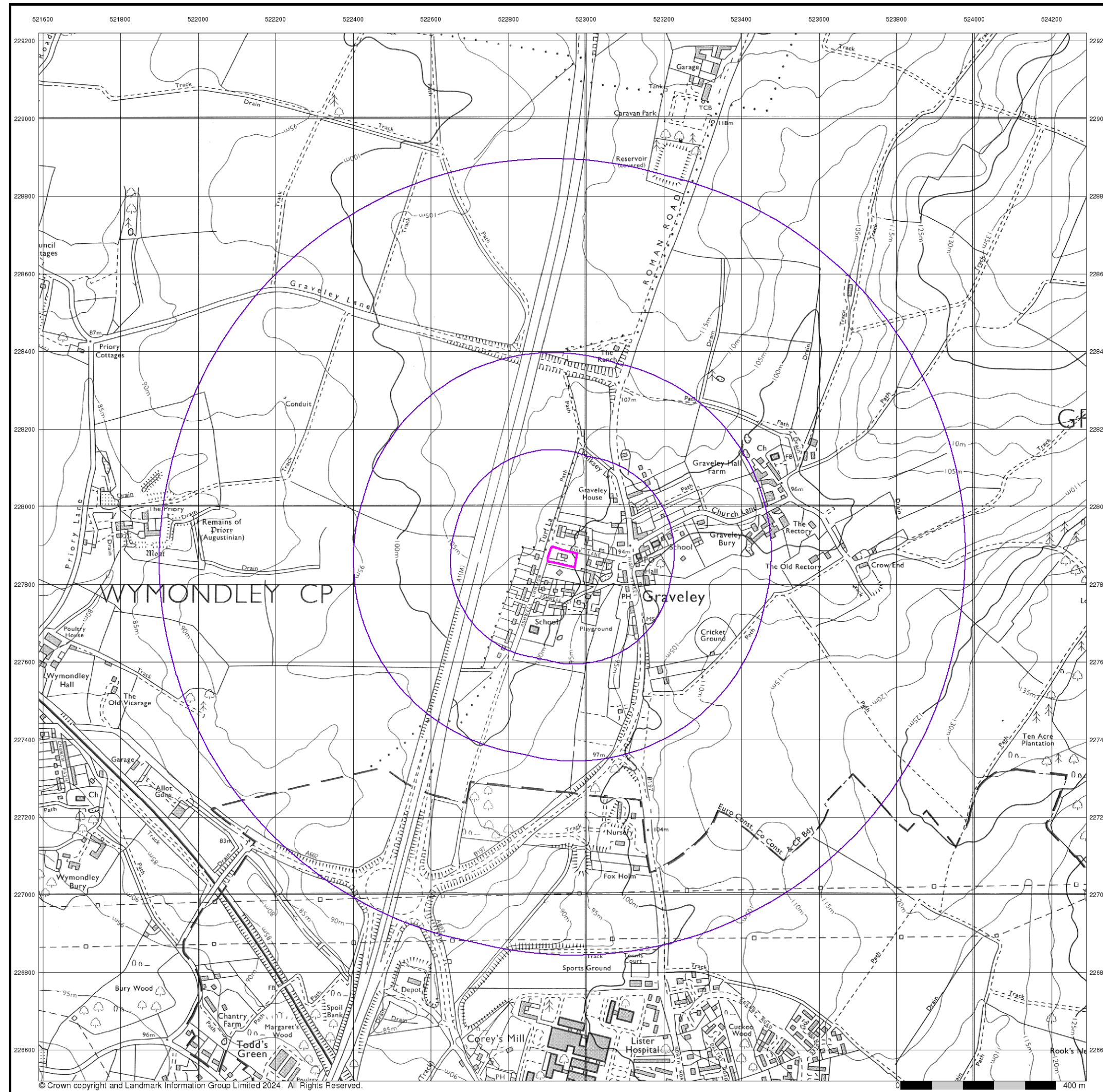
Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details

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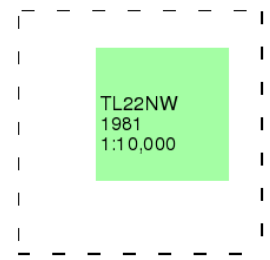
Ordnance Survey Plan

Published 1981

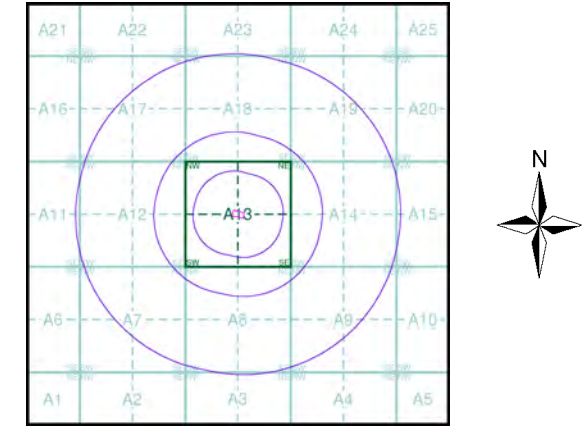
Source map scale - 1:10,000

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

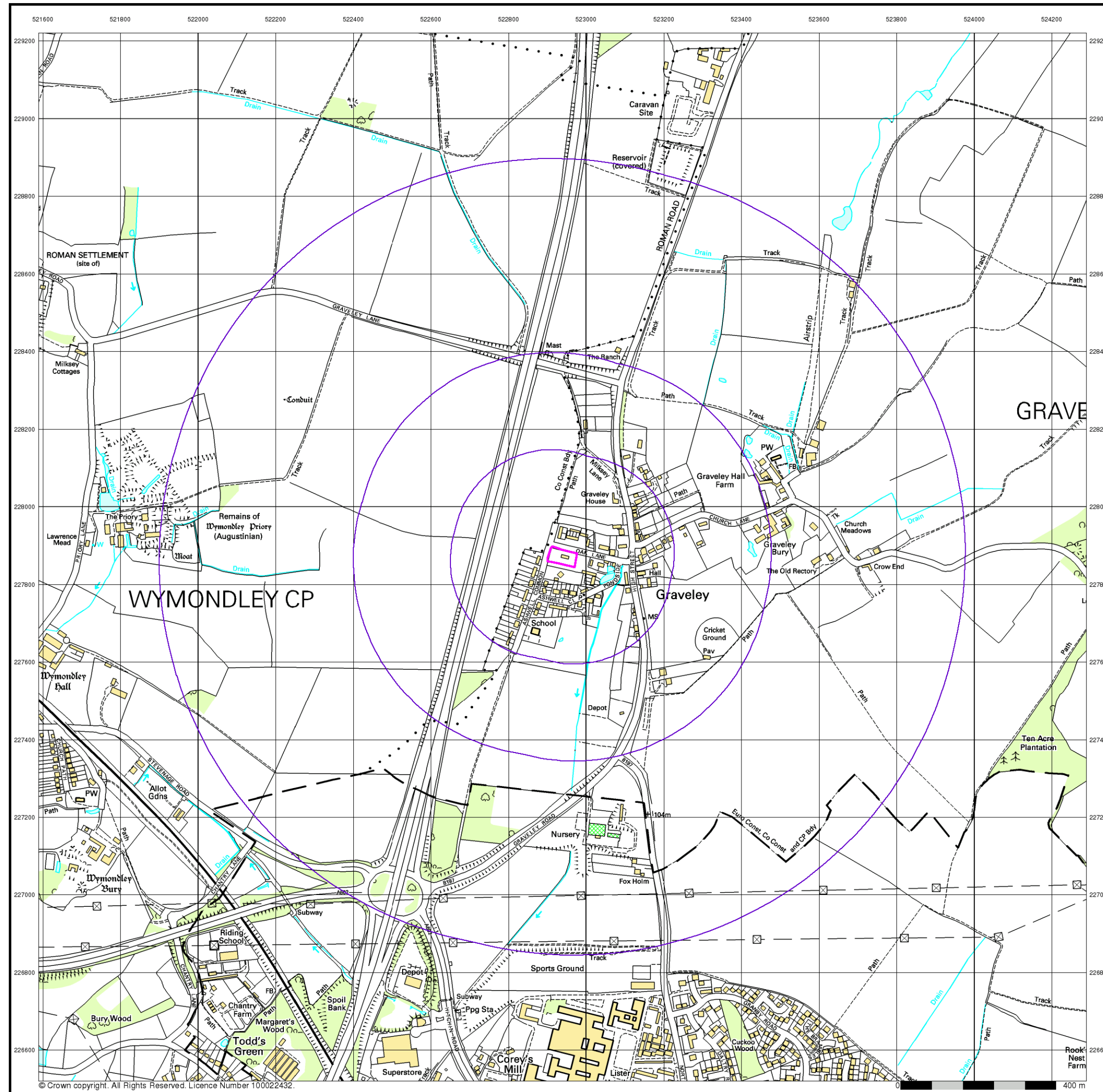


Order Details

Order Number:	342463998_1_1
Customer Ref:	80763
National Grid Reference:	522940, 227870
Slice:	A
Site Area (Ha):	0.26
Search Buffer (m):	1000

Site Details

Land Rear of Gothic House, Oak Lane, Graveley, HITCHIN, SG4 7LG

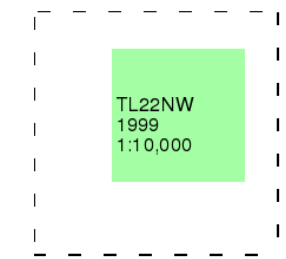


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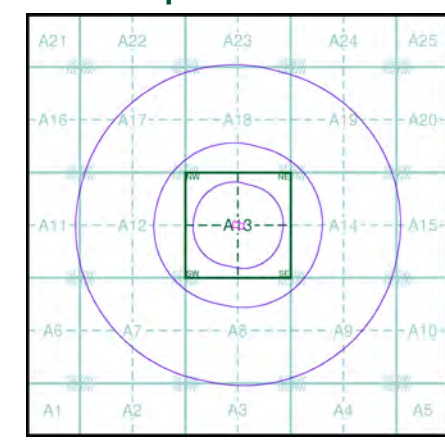
10k Raster Mapping
Published 1999
Source map scale - 1:10,000

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

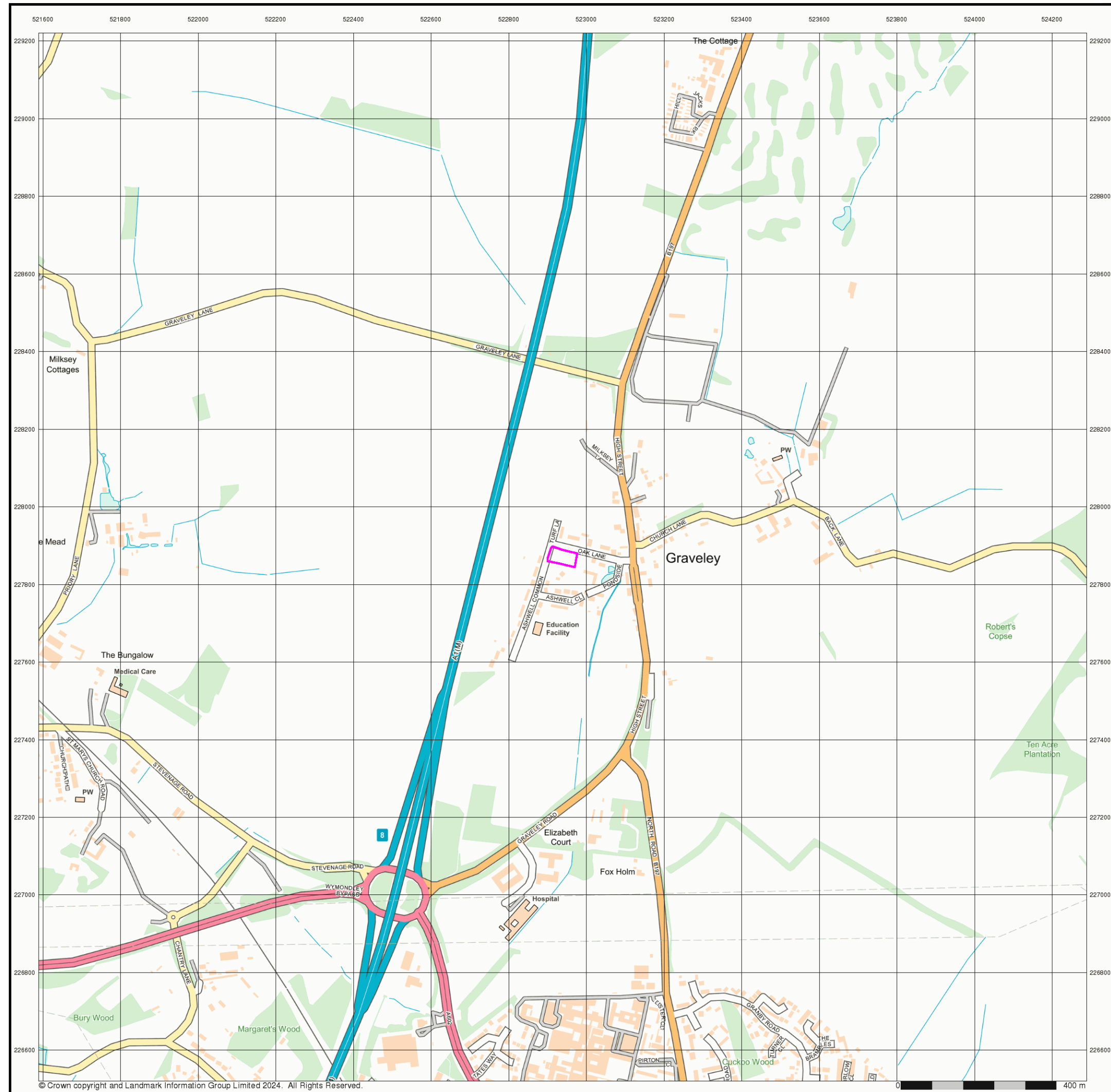


Order Details

Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 1000

Site Details

Land Rear of Gothic House, Oak Lane, Graveley, HITCHIN, SG4 7LG





Street View

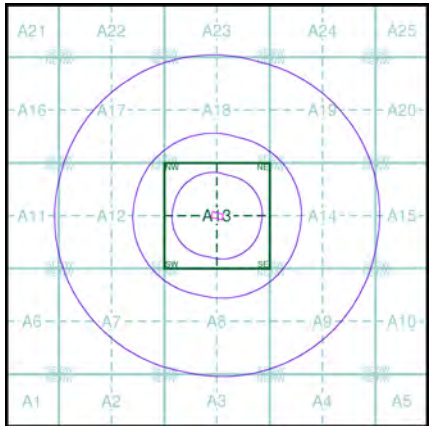
Published 2024

Source map scale - 1:10,000

Street View is a street-level map for the whole of Great Britain produced by the Ordnance Survey. These maps are provided at a nominal scale of 1:10,000

Map Name(s) and Date(s)

Street View Map - Slice A



Order Details

Order Number:	342463998_1_1
Customer Ref:	80763
National Grid Reference:	522940, 227870
Slice:	A
Site Area (Ha):	0.26
Search Buffer (m):	1000

Site Details

Land Rear of Gothic House, Oak Lane, Graveley, HITCHIN, SG4 7LG

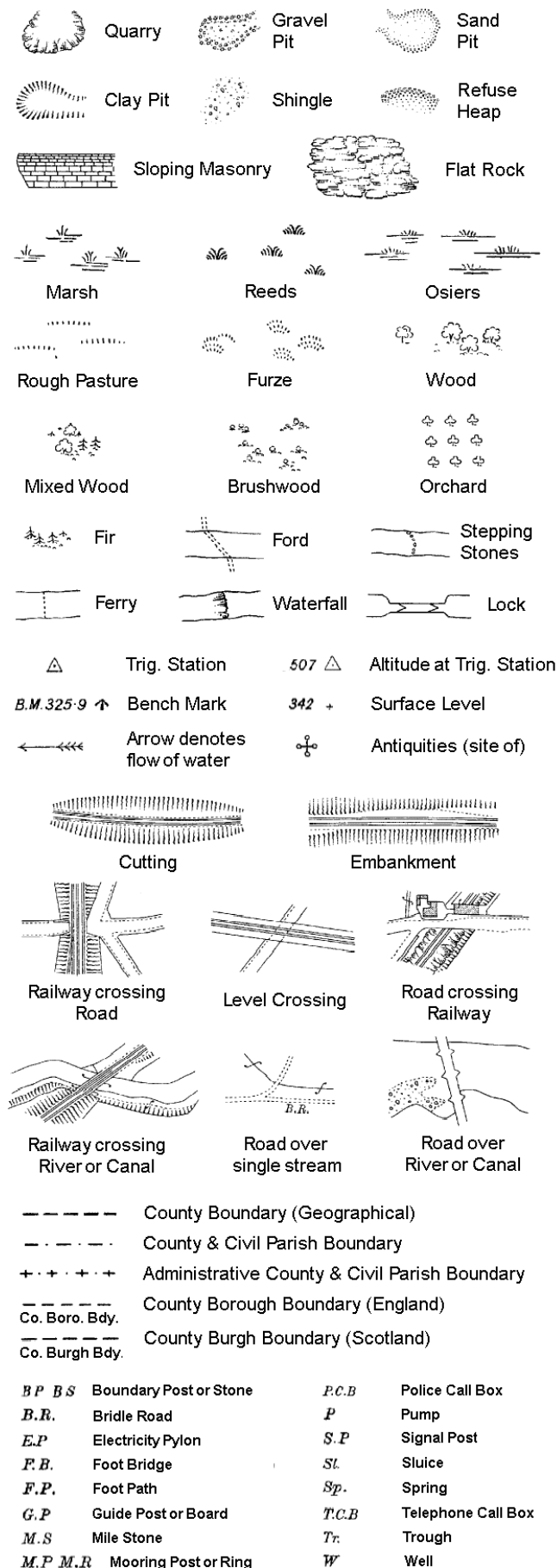


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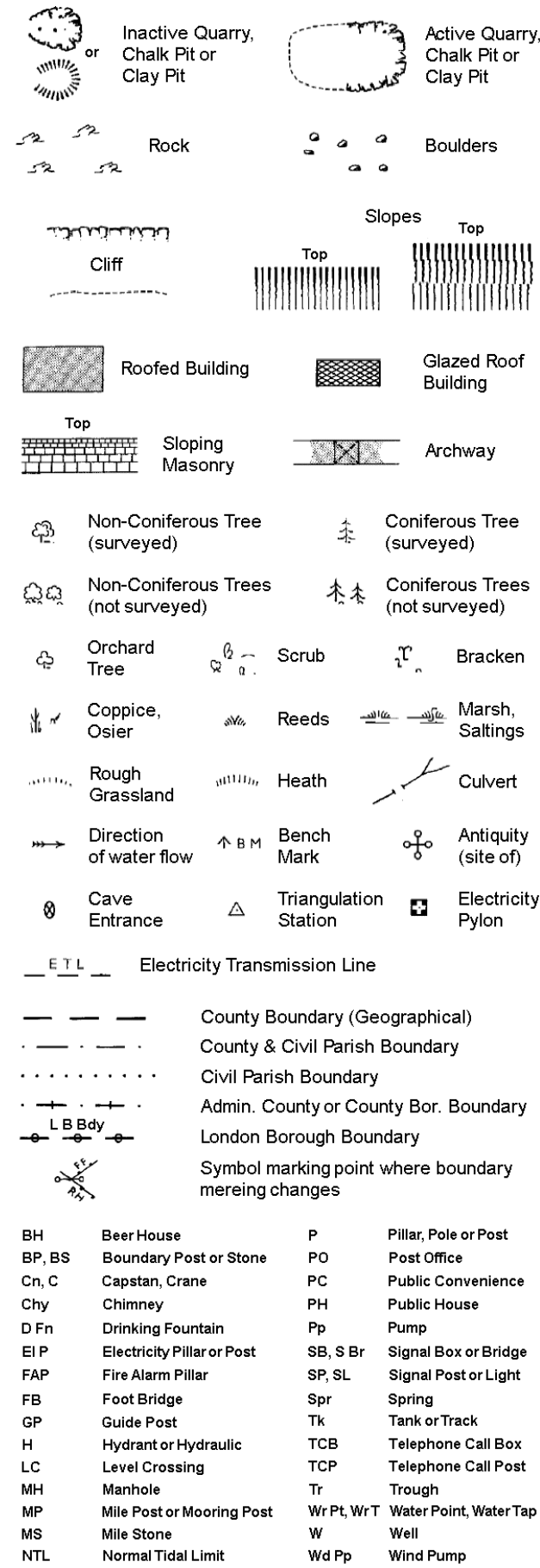
A Landmark Information Group Service v50.0 11-Apr-2024 Page 13 of 13

Historical Mapping Legends

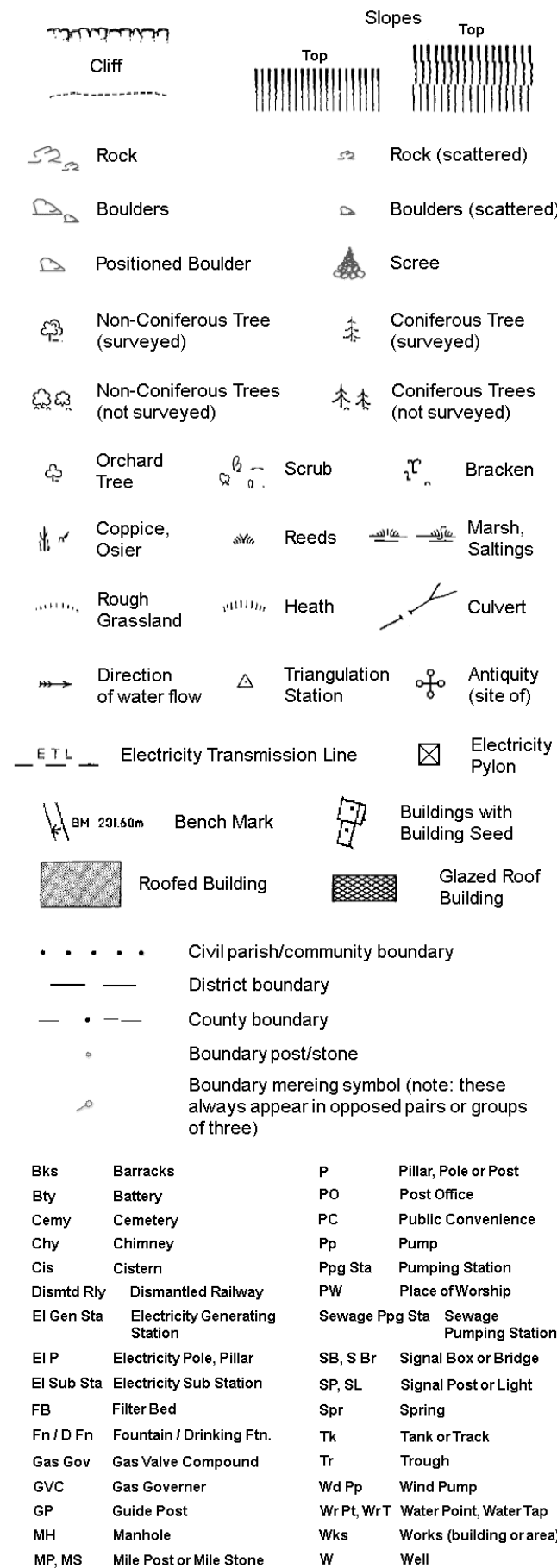
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



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



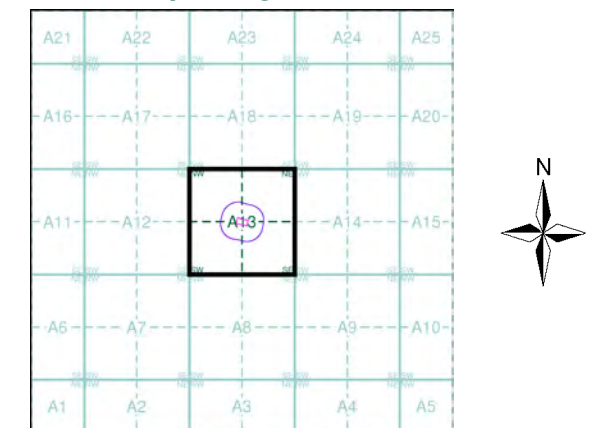
Large-Scale National Grid Data 1:2,500 and 1:1,250



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Hertfordshire	1:2,500	1881	2
Hertfordshire	1:2,500	1898	3
Hertfordshire	1:2,500	1923	4
Ordnance Survey Plan	1:2,500	1972 - 1974	5
Additional SIMs	1:2,500	1991 - 1992	6
Large-Scale National Grid Data	1:2,500	1993	7
Large-Scale National Grid Data	1:2,500	1993	8

Historical Map - Segment A13

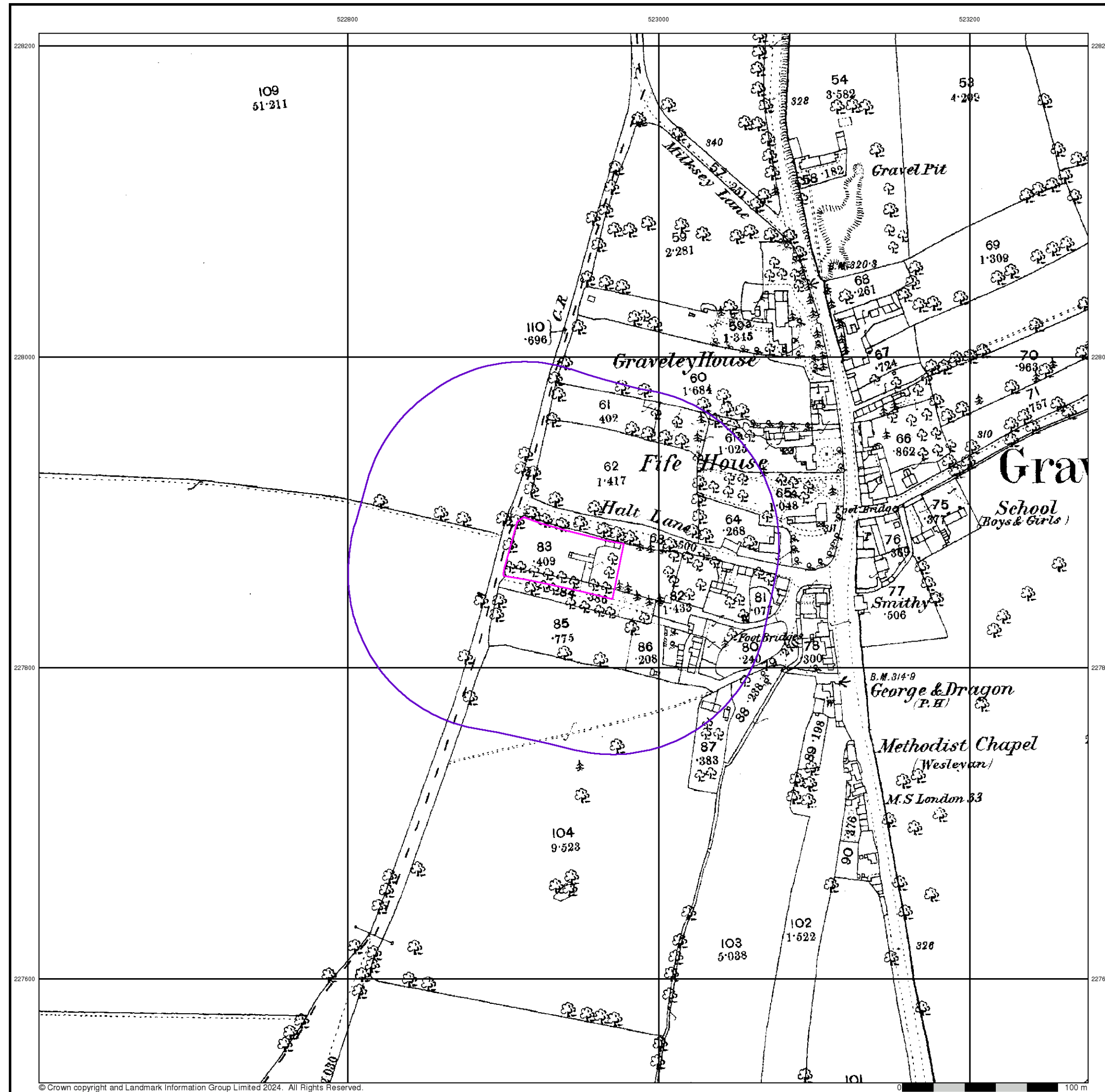


Order Details

Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 100

Site Details

Land Rear of Gothic House, Oak Lane, Graveley, HITCHIN,
SG4 7LG



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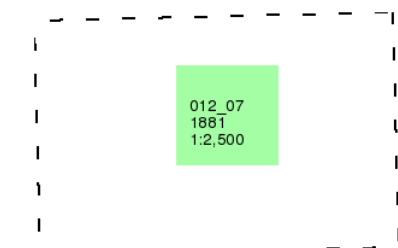
Hertfordshire

Published 1881

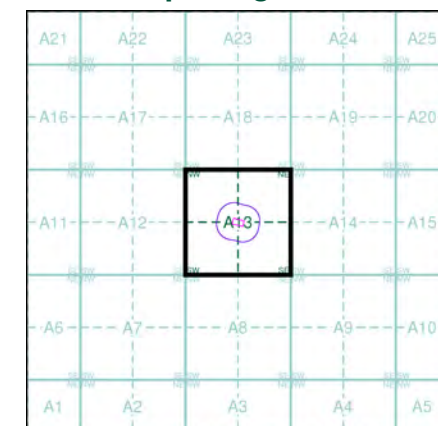
Source map scale - 1:2,500

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

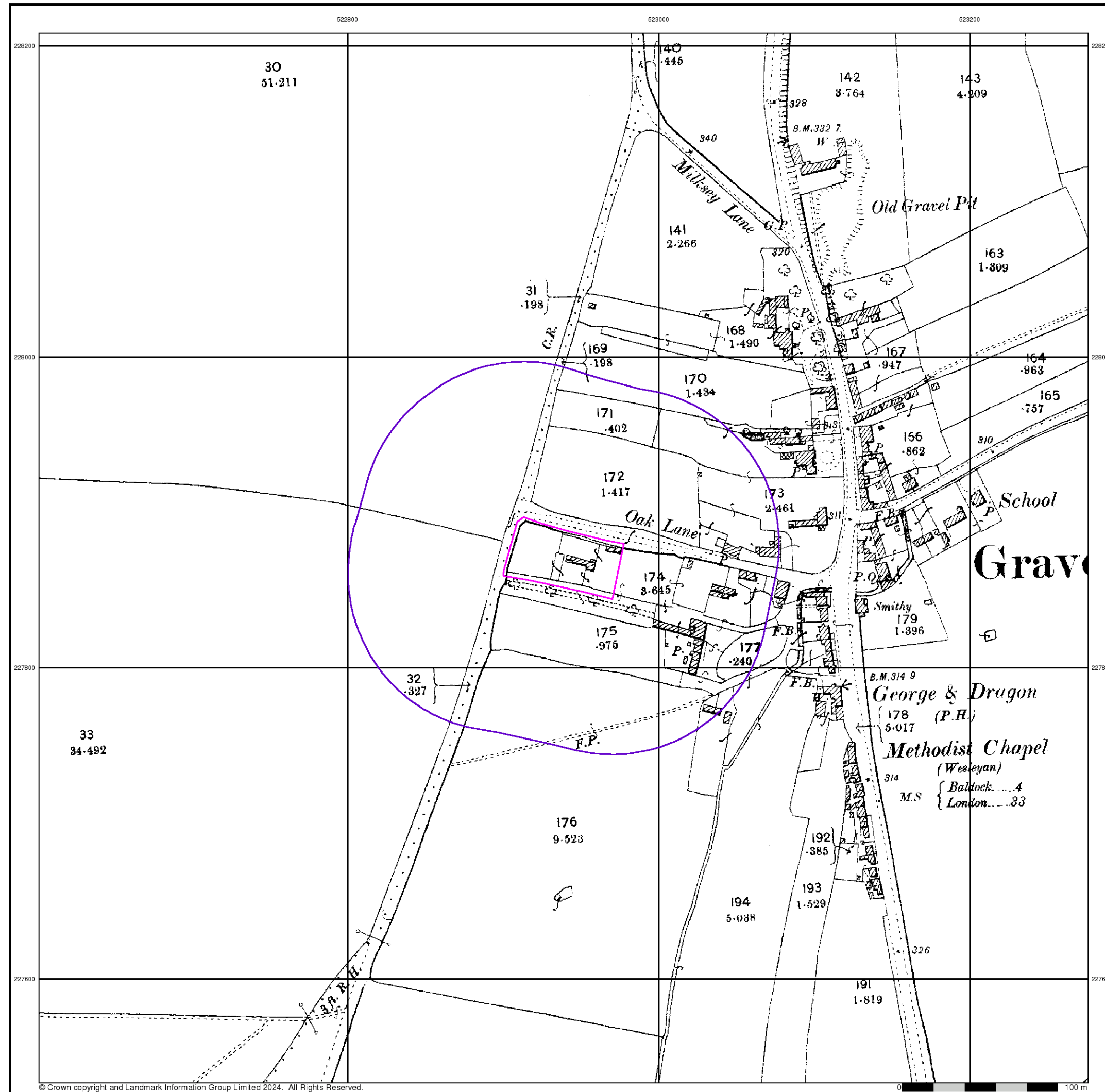


Order Details

Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
Slice: A
Site Area (Ha): 0.26
Search Buffer (m): 100

Site Details

Land Rear of Gothic House, Oak Lane, Graveley, HITCHIN, SG4 7LG



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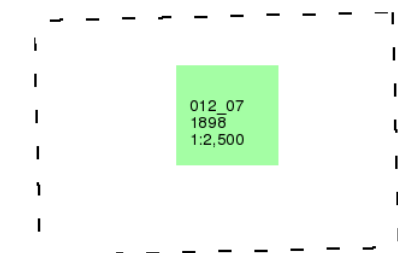
Hertfordshire

Published 1898

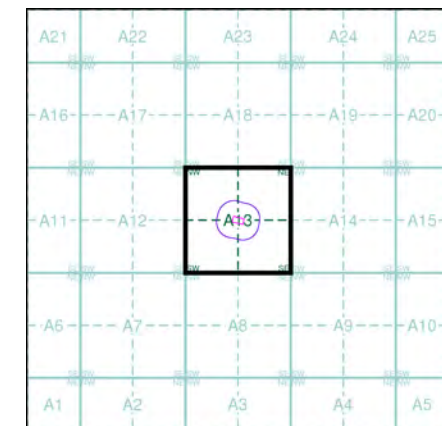
Source map scale - 1:2,500

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

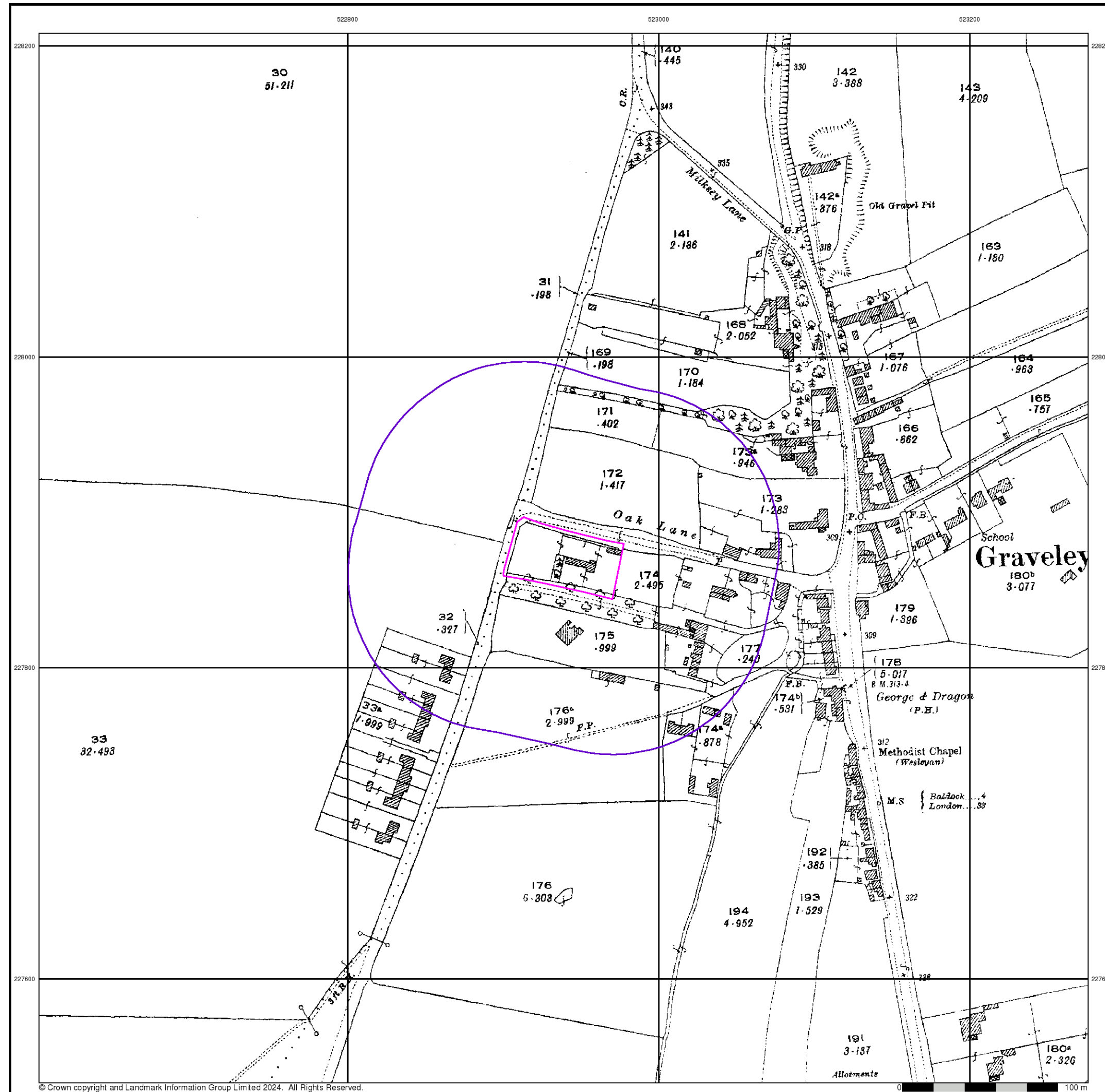
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Customer Ref: 80763
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Site Details

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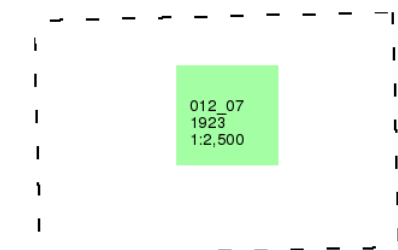
Hertfordshire

Published 1923

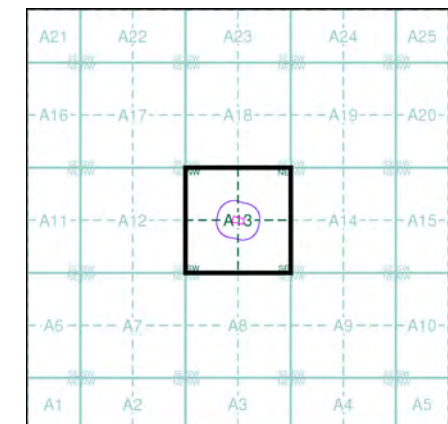
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered 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

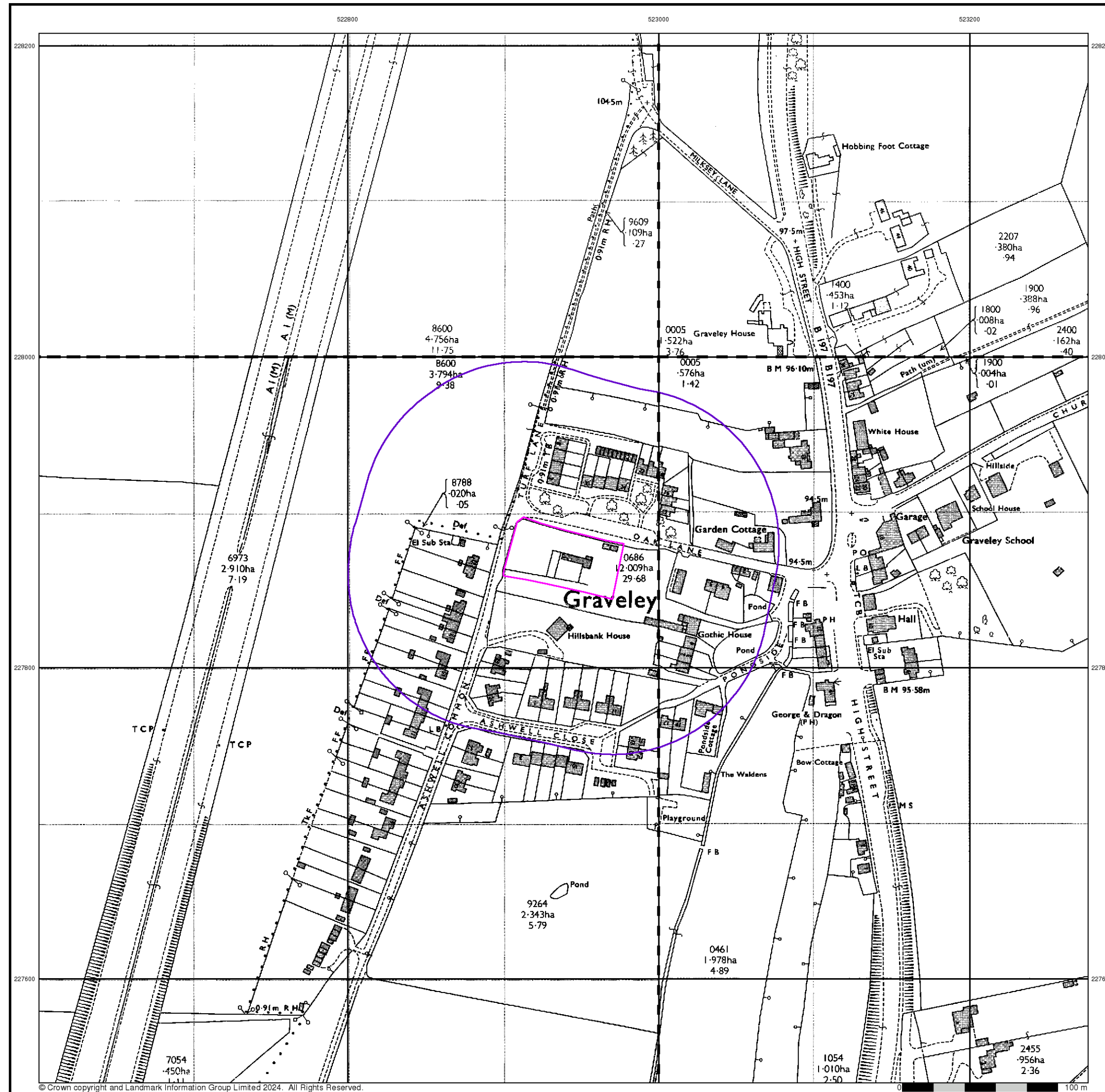
Order Number: 342463998_1_1
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Ordnance Survey Plan

Published 1972 - 1974

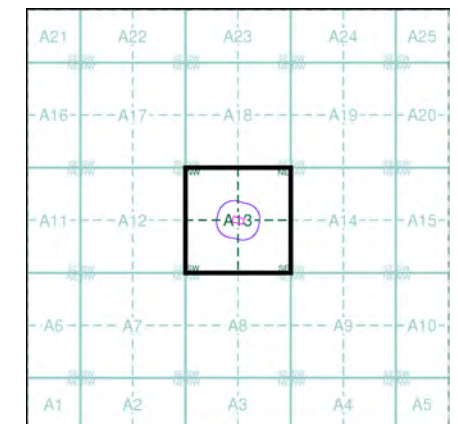
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered 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)

TL2228 1972 12,500	TL2328 1972 12,500
TL2227 1974 12,500	TL2327 1974 12,500

Historical Map - Segment A13



Order Details

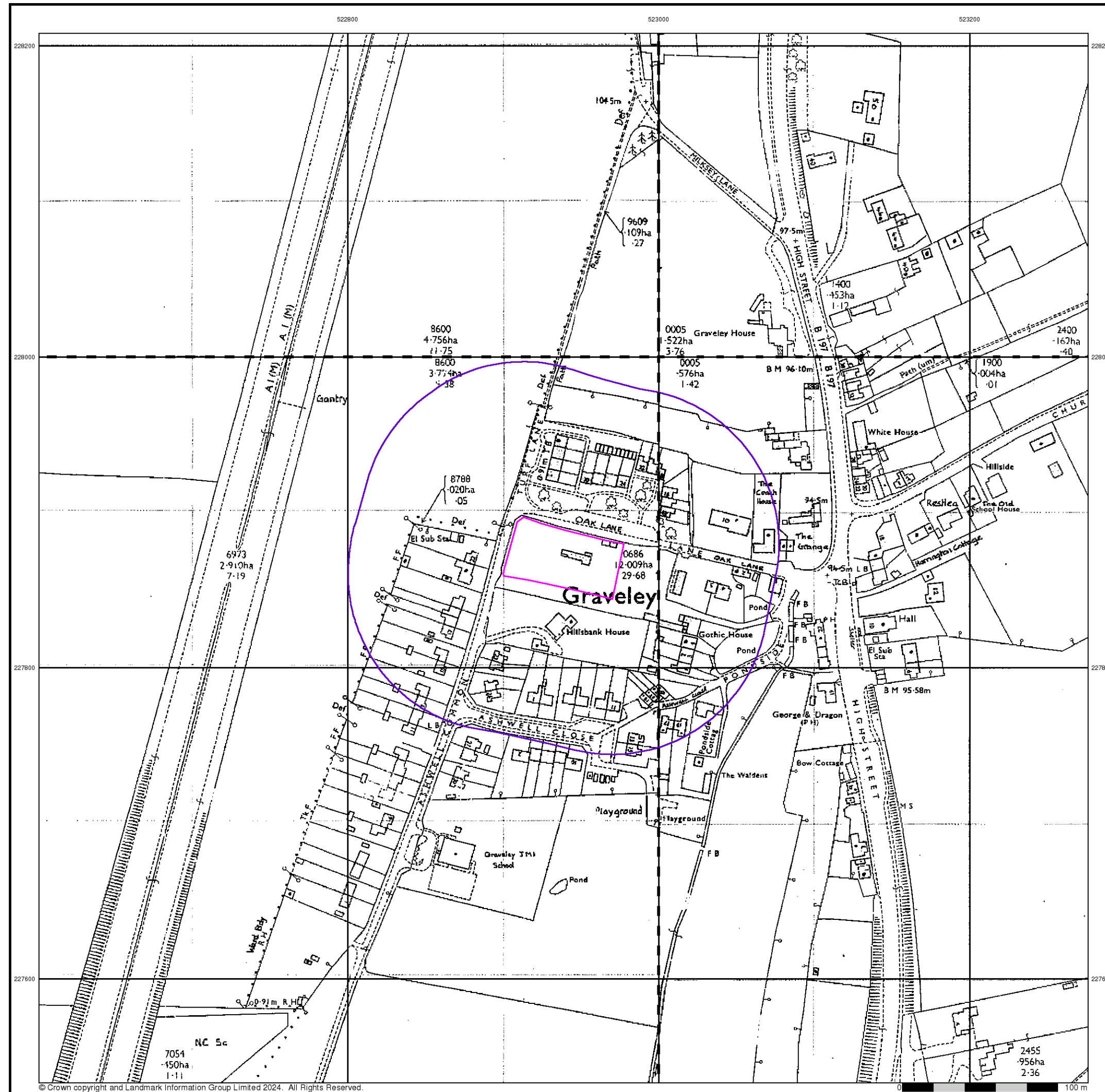
Order Number: 342463998_1_1
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Additional SIMs

Published 1991 - 1992

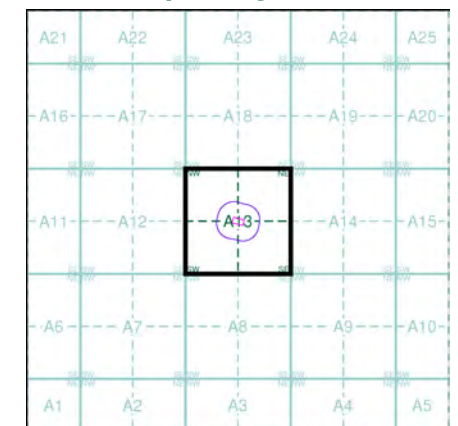
Source map scale - 1:2,500

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)

TL2228	1991	12,500
TL2328	1992	12,500
TL2227	1991	12,500
TL2327	1991	12,500

Historical Map - Segment A13

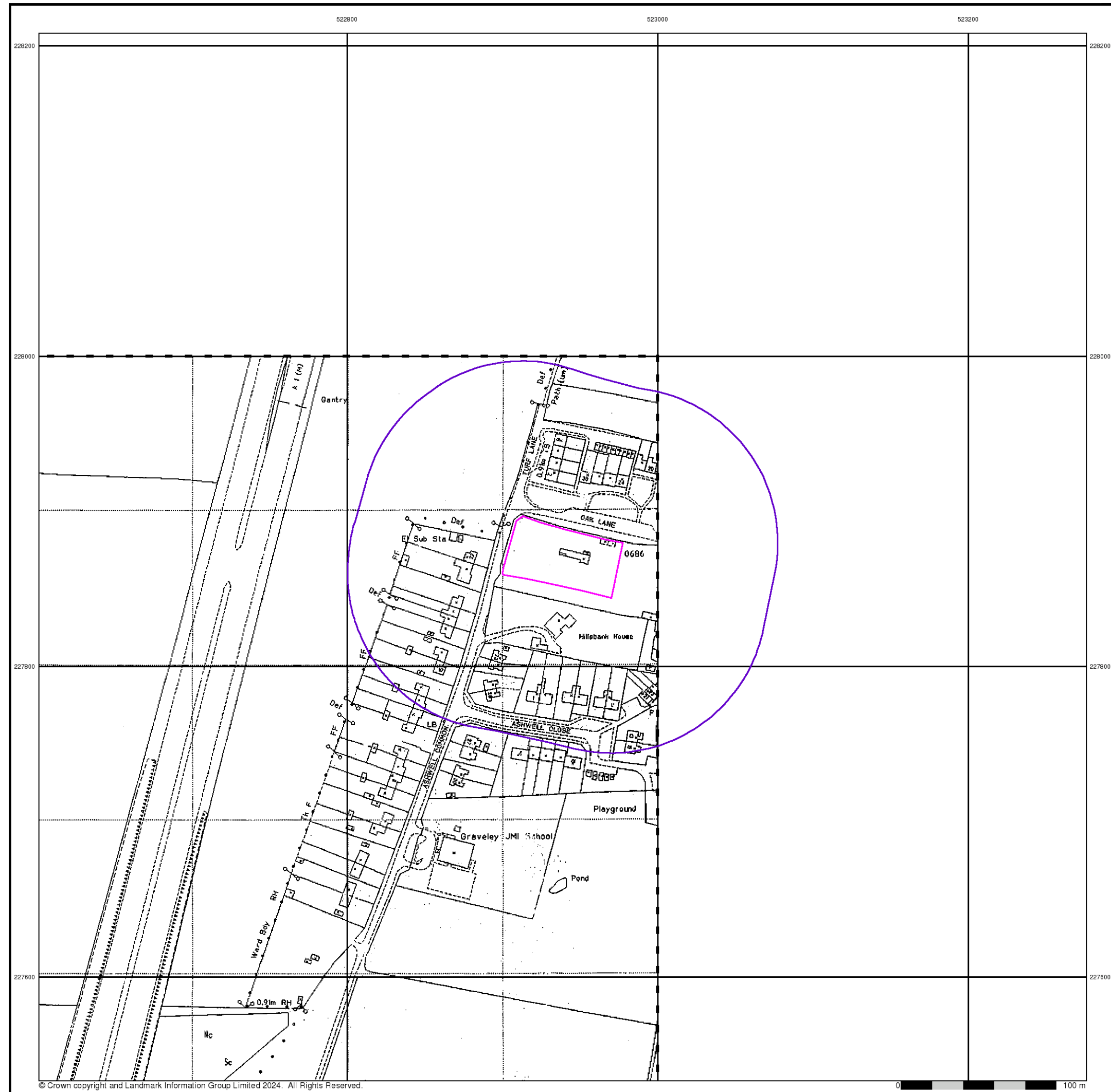


Order Details

Order Number: 342463998_1_1
Customer Ref: 80763
National Grid Reference: 522940, 227870
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Site Area (Ha): 0.26
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Site Details

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SG4 7LG



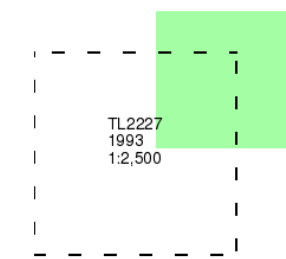
Large-Scale National Grid Data

Published 1993

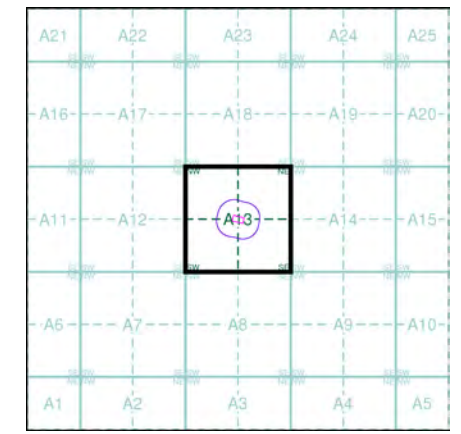
Source map scale - 1:2,500

'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



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