



Goldfinch
ENVIRONMENTAL LTD

**PROPOSED RESIDENTIAL
DEVELOPMENT
LAND AT 67 CHAPELGATE
SUTTON ST JAMES
SPALDING
LINCS.**

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**GEOENVIRONMENTAL
DESK STUDY**

Report Ref.: 0440/1

Prepared by :

D Sargeant

D Sargeant
BSc FGS

Date:

June 2017

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PROPOSED RESIDENTIAL DEVELOPMENT

LAND AT 67 CHAPELGATE

SUTTON ST JAMES, SPALDING

LINCS..

1. INTRODUCTION.

1.1 General.

This report describes the findings of a geoenvironmental desk study undertaken by Goldfinch Environmental Limited, on the instruction of Mr A Hefford (the Client), at a site located at 67 Chapelgate, Sutton St James, Spalding, Lincs..

The site has been proposed for residential development via conversion and linking of the existing two buildings at the site.

South Holland District Council Planning Reference H20-0316-17 refers.

A site location plan as Figure 1 has been included towards the back of this report to assist the reader.

2. LIMITATIONS.

This report is for the sole reliance and use of the Client. Any Third Party coming into possession of this report relies on it at their risk, unless written permission is expressly sought from, and provided by, Goldfinch Environmental Limited. The author owes them no duty of care and skill. Goldfinch Environmental Ltd accepts no responsibility or liability for the consequences of this document being used for purposes other than that for which it was commissioned and the assessments provided herein should not be relied on as a legal opinion.

The findings and opinions expressed are relevant to the time of the site visit and information review and should not be relied upon to represent conditions at substantially later dates. The assessments and opinions given in this report are based upon information available at the time of the report. Where additional information comes available which may affect or identify a need to review our conclusions or assessments we request the opportunity (and reserve the right), to review the information and where warranted, modify our assessment / opinion in part or wholly, accordingly.

The purpose of this desk study report was to determine the historical use of the site and adjacent areas from searches of Public Registers and a review of available historical maps and included a site reconnaissance ('walkover') survey together with brief internet searches. The outcome of these activities is described below and this information was used to construct a conceptual model for the site from which a risk assessment was completed in the context of the proposed residential development of the site.

The risk assessment was based on the source-pathway-receptor framework, with respect to the geoenvironmental condition of the site in the context of various sensitive receptors. Goldfinch Environmental Ltd have based this desk study upon the sources given in this report, and believes them to be reliable but cannot and does not guarantee the authenticity or reliability of the data it has relied upon.

This desk study does not include any geotechnical considerations pertaining to the site as these were outside the agreed brief.

The recommendations given in this report are based on guidance and best practice in place at the time of issue of the report, the information available at the time of the investigation, the nature of the indicated proposed development and associated end user behaviour patterns. Should any of the foregoing change at any time, then this report should be reviewed in the context of proposed changes.

The absence of indicators in search data, or from on site observations does not rule out their presence in other parts of the site. This desk study report has been based on information supplied in the 'GroundSure' report and its component parts included at Appendix 1 towards the back of this report, discussions with the Client and in-house searches.

3. LEGISLATIVE & REGULATORY SETTING.

The Environmental Protection Act of 1990 created the framework for the identification and remediation of contaminated land. The Act defines “contaminated land” as any land, which appears by the Local Authority to be “in such a condition, by reason of substances, in, on, or under the land that significant harm is being caused or there is significant possibility of such harm being caused, or, pollution of Controlled Waters is being, or is likely to be, caused”.

Land potentially affected by ‘contamination’ is a material consideration for planning purposes together with its relationship with ‘regulatory intervention’ (Part IIa), and ‘voluntary’ investigation (which includes redevelopment of sites which may be affected by contamination). The Model Procedures (CLR-11, Environment Agency 2004), provide a generic framework indicating key technical activities applicable in each of these contexts.

The management of land contamination broadly comprises three components that are identified as ‘Risk assessment’, ‘Options appraisal’ and ‘Implementation’. These, in turn, determine if any *unacceptable* risks exist, ascertain the most appropriate remediation strategy for the site and, finally, demonstrate that the strategy will be effective.

In accordance with this and other current guidance, where a ‘land quality’ risk assessment is required each ‘Relevant Pollutant Linkage’ (RPL, formerly referred to as “source-pathway-receptor” framework), is separately identified and a level of risk attached. This is documented in the form of a ‘Conceptual Model’.

The outcome of the assessment of established, plausible relevant pollutant linkages is used to determine qualitatively the need for further investigation, or remediation with ensuing mitigation of the determined unacceptable risk. (In accordance with the Model Procedures and Regulatory preference, detailed remedial measures should be provided in a separate phase).

The risk assessment takes account of the local environment, end user behaviour patterns, and the nature of the development in relation to proven ‘unacceptable’ risk. This is the approach advocated by current guidance (CLR-11 and BS10175 etc), and therefore has been adopted in the assessment of this site.

4. SITE LOCATION AND DESCRIPTION.

4.1 Introduction

This site description and the following sections of this Desk Study report are specific to the curtilage shown in Figure 2 towards the back of this report.

A site visit was carried out during 26 May 2017 the purpose being to:-

- I. Collect additional/relevant information about the site its environs and any site-specific potential contaminants, pathways and receptors.
- II. Record any aspects of the site not revealed by documentary searches. (e.g. the presence of above- or belowground hydrocarbon storage tanks.).
- III. Collect any information that will assist in the planning of any subsequent phases of field investigation where the Desk Study deems this is necessary.

Approximate Grid Reference ⁵39551 ³18284 refers.

The site comprised a subrectangular shaped plot of land on the southern side of the public highway (Chapel Gate) in Sutton St James, Spalding, Lincolnshire.

Topographic levels at the site, by visual inspection, appeared to change little across the site.

At the time of the site walkover survey the northern part of the site was capped with the footprints of three buildings and an entrance driveway and patio area, and the southern part of the site was generally capped with soft cover of long grass with occasional small patches of exposed soils.



Photograph 1: View of the Site from the North.



Photograph 2: View of the Southwestern Corner of the Site.



Photograph 3: View of the Southeastern Corner of the Site.

As can be seen in Photograph 1, the two buildings in the northern part of the site fronting the public highway are of predominantly brick construction with the one on the right having been a former residential dwelling and the one to the left having accommodated a vehicle repair garage. At the time of the site walkover survey these buildings were unoccupied. Equally there was no evidence of the former existence of fuel storage tanks at the site e.g. inspection covers, ventilation pipes etc.

Behind the building formerly accommodating the garage business was an area of concrete hard cover which extended across much of the width (east to west) of the site and in the eastern part of this hard cover a 'temporary' or 'portable' structure stood which had previously accommodated a fish and chip business.

The former Garage building could be accessed either by folding wooden doors which made up much of the northern elevation or via a pedestrian doorway in the southern (rear) elevation. Internal inspection revealed it had been constructed over a concrete slab floor and was being used for 'storage' as shown in Photograph 4 and 5 below.



Photograph 4: Internal View of 'Garage'.



Photograph 4: Internal View of 'Garage'.

While the internal area of the former Garage contained workbenches and a variety of materials which included timber, glass, metalwork, together with electric cabling, an electric concrete mixer and small handtools the exposed concrete surfaces appeared to be relatively stain-free suggesting that when the garage was in operation that 'housekeeping' had been to a good standard and that there was very limited or no potential for impact of the underlying soils from

historic site activity.

The southern part of the site was generally down to a cover of grass and exposed soils as referred above. In the southwestern corner was a small 'domestic' scale greenhouse which contained a number of black plastic sacks which contained garden prunings and grass cuttings. On its eastern side a stockpile of crushed brick and other 'aggregates' which resulted from some partial demolition which had taken place at the site.

Further to the east were a stockpile of window frames (PVC double glazed units), an old metal bath, garden ornaments, textiles (old carpets), timber which included a glazed door.

There were no signs of unusual staining or odours in the exposed soils to suggest impact by potential contamination from historic site usage.

Following visual inspection of the site there were no notable features with regard to land contamination. In addition, although the site had been subject to previous 'development' there was no apparent evidence of:~

1. The presence of Made Ground other than the inert concrete area(s) and aggregate stockpile as referred above.
2. The presence or storage of potentially leachable materials/chemicals.
3. Demolition or dispersal of contaminated rubble or other materials.
4. Importation of potentially contaminated fill onto the site.

4.2 Additional Information

This Author was provided with a copy of the Design And Access Statement from which the following historical (site usage) information has been extracted (our italics).

67 Chapelgate is a working property. Its history lies within the prosperity of the garage building that served the village for many years. A newer development further along the street has since made number 67 redundant in its original format as a garage.

The reader should note that there are no historic fuel storage tanks present at the site.

5. SITE HISTORY.

5.1 Historical Maps.

Where the attached maps are compiled from a composite of editions, the year of map upon which the majority of the site may be found is quoted below. These are reproduced at Appendix 1. Annotation, as it appears on the maps, is indicated by italics.

Land use in excess of 250m from the site is considered of potentially negligible to low risk to the application site and on that basis is generally excluded from the summary provided below (unless record review by this author suggests otherwise). However, should the reader require this additional detail, full disclosure records are included in Appendix 1 towards the back of this report.

(The reader should note at this point that occasionally on the older map editions the site boundaries can be slightly 'shifted' relative to more recent maps.).

1886-7 Edition {County Series - Scale 1:10 560}

The site and its surrounding environs were not shown on this map edition.

1887 Edition {County Series - Scale 1:10 560}

The site, shown on the western side of Sutton St James, and its immediate environs had possibly been sparsely developed. A possible building was established in the northern part of the site fronting the public highway.

1888 Edition {County Series - Scale 1:2 500}

The site and its surrounding environs were not shown on this map edition.

1888 Edition {County Series - Scale 1:2 500}

Development at the site could be clearly seen on this map edition and comprised two buildings in the north of the site with encroachment in the north west by an off site building and a subordinate rectangular structure near the southern site boundary.

Land to the east and west of the site was developed as, albeit more sparsely, was land to the north.

A '*Smithy*' was established on land approximately 175-200m to the north east of the site.

A '*Grave Yard*' was established on land approximately 200m to the north east of the site.

1900-03 Edition {County Series - Scale 1:10 560}

There were no apparent further changes to the site or its immediate surroundings at this scale of mapping.

1903 Edition {County Series - Scale 1:10 560}

There were no apparent changes to the site.

There were no further pertinent land use changes to the immediate environs of the site at this scale of mapping.

1903-5 Edition {County Series - Scale 1:10 560}

There were no apparent changes to the site.

There were further minor developments to the surrounding environs at this scale of mapping.

1904 Edition {County Series - Scale 1:2 500}

There were no apparent changes to the site at this scale of mapping except that the structure formerly in the south of the site was no longer shown.

There were apparent changes to the immediate environs of the site in the context of land quality at this scale of mapping.

1950 Edition {County Series - Scale 1:10 560}

There were no apparent changes to the site or its immediate environs in the context of land quality at this scale of mapping.

1950-55 Edition {Provisional - Scale 1:10 560}

There were no apparent changes to the site or its immediate environs in the context of land quality although this does not preclude undocumented changes taking place.

1974 Edition {National Grid - Scale 1:2 500}

Development at the site now took the form of three buildings (possibly four), located near the northern boundary and a subordinate structure was present in the southeastern corner of the site. This appears to be unchanged from the previous map edition.

There were changes to the immediate environs of the site. These took the form of the establishment of glasshouses to the south of the site with further development (Needham Bungalow) to the south east of the site.

Land to the west of the site was annotated '*Garage*'.

A '*Builders Yard*' was established on land to the south east of the site.

Two '*Sewage Works*' were shown approximately 225m to the south west and approximately 100m to the south east of the site.

A '*Piggery*' was established on land approximately 175m to the south east of the site.

1975 Edition {National Grid - Scale 1:2 500}

There were no apparent changes to the site.

There were no apparent changes to the immediate environs of the site.

1979-80 Edition {National Grid - Scale 1:10 000}

There were no apparent further changes to the site although the surrounding environs had possibly undergone further minor development.

1991 Edition {National Grid - Scale 1:2 500}

There were no apparent changes to the site.

This map edition may be a reissue of an earlier map edition.

1992 Edition {National Grid - Scale 1:10 000}

The site and its surrounding environs were not shown on this map edition.

1995 Edition {National Grid - Scale 1:2 500}

There were no apparent further changes to the site although the surrounding environs had possibly undergone further minor development.

2002 Edition {Raster - Scale 1:10 000}

There were no apparent changes to the site.

The surroundings of the site had undergone further development. Residential development was associated with the establishment of '*Needham Drive*' to the east of the site. This development extended southwards and also occupied land formerly accommodating glasshouses.

2010 Edition {National Grid - Scale 1:10 000}

There were no further changes to the site.

There were no apparent changes to the surrounding environs with respect to land contamination.

2014 Edition {National Grid - Scale 1:10 000}

There were no apparent changes to the site or surrounding environs with respect to land contamination.

5.2 Public Registers.

A search of public register information has been made using an Internet-based system. A disclosure report is reproduced at Appendix 1. The following commentary is restricted to entries within a 250m search radius of the site. Appendix 1 should be referred to for details on entries beyond of this range.

5.2.1 Historical Industrial Sites

There were five records for the category 'Potentially Contaminative Uses identified from 1:10 000 scale mapping' within this dataset for the referred search radius. Supplied information indicated none of these were for the site, none were within 50m of the site and the remaining five were located between approximately 98 and 195m distant from the site and were given as; '*Unspecified Tank*'; '*Smithy*' (x3) and '*Telephone Exchange*'.

There were six records for the category 'Additional Information – Historical Tank Database' within this dataset for the referred search radius. Supplied information indicated none of these were for the site, none were within 50m of the site and the remaining six were located between approximately 98 and 161m distant from the site and were given as '*Unspecified Tank*'.

There was one record for the category 'Historical Energy Features Database' within this dataset for the referred search radius. Supplied information indicated none of these were for the site, none were within 50m of the site and the remaining one was located approximately 74m distant from the site and was given as '*Electricity Substation*'.

There were no records for the category 'Historical Petrol and Fuel Site Database' within this dataset for the referred search radius.

There were four records for the category 'Historical Garage and Motor Vehicle Repair Database' within this dataset for the referred search radius. Supplied information indicated none of these were for the site, three were within 50m of the site and the remaining one was located approximately 244m distant from the site and were given as '*Garage*'.

There were seven records for the category 'Potentially Infilled Land' within this dataset for the referred search radius. Supplied information indicated none of these were for the site, none were within 50m of the site and the remaining seven were located between approximately 115 and 197m distant from the site and were given as; '*Pond*'.

5.2.2 Environmental Permits, Incidents and Registers.

There were sixty-nine records for the category 'Records of Licensed Discharge Consents' within this dataset for the referred search radius. Supplied information indicated these were located between approximately 88 and 220m distant from the site. The reader is referred to Section 2.1.8 of the 'EnviroInsight' report in Appendix 1 towards the back of this Desk Study for further details.

There was one record for the category 'Records of Planning Hazardous Substance Consents and Enforcements within 500m of the site' within this dataset for the referred search radius for the site. Supplied information indicated this was not for the site, there were no records within 50m of the site and the remaining entry was located approximately 98m distant from the site and was given as '*Storage of ammonium nitrate based fertilisers*'.

There was one record for the category 'Records of COMAH and NIHHS sites' within this dataset for the referred search radius for the site. Supplied information indicated this was not for the site, there were no records within 50m of the site and the remaining entry was located approximately 89m distant from the site and was given as '*Historical NIHHS Site*'.

5.2.3 Landfill and Other Wastes.

There were no records within this dataset for the referred search radius.

5.2.4 Current Land Uses.

There were six records for the category 'Current Industrial Sites Data' within this dataset for the referred search radius. Supplied information indicated none of these were for the site, there was one record within 50m of the site and the remaining five entries were

located between approximately 39 and 204m distant from the site and were given as; '*Petrol and Fuel Stations*'; '*Electrical Features*'; '*Container and Storage*' (x2); '*Waste Storage, Processing and Disposal*' and '*Telecommunications Features*'.

5.2.4.i Petrol & Fuel Sites.

There was one record within this dataset for the referred search radius. Supplied information indicated this was not for the site, there was one record within 50m of the site and no further records beyond this and was given as '*Garners Garage*'. This was located approximately 41m to the west of the site.

5.2.5 Geology.

There were no records for the site within the category 'Artificial Ground and Made Ground'.

There were records listed within the category 'Superficial Ground and Drift Geology present beneath the site'. Supplied information indicated Tidal Flat Deposits (Clay and Silt).

The Bedrock & Solid Geology was given as Ampthill Clay Formation (Mudstone).

5.2.6 Hydrogeology and Hydrology.

For the category 'Are there any records of Strata Classification in the Superficial Geology within 500m of the site' a 'Yes' response was provided. Supplied information indicated the site was underlain by a 'Unproductive' aquifer.

For the category 'Are there any records of Strata Classification in the Bedrock geology within 500m of the site' a 'Yes' response was provided. Supplied records showed that the site was underlain by an 'Unproductive' Aquifer.

There were no records for the category 'Groundwater Abstraction Licences' within the referred search radius for the site.

There were no records for the category 'Surface Water Abstraction Licences' within the referred search radius for the site.

There were no records for the category 'Potable Water Abstraction Licences' within the referred search radius for the site.

There were no records for the category 'Source Protection Zones' within the search radius for the site.

There were no records for the category 'Groundwater Vulnerability and Soil Leaching Potential' for the site.

There were no records of Environment Agency information on River Quality available within 1500m of the site.

There was one record for the category 'Detailed River Networks' within the search radius for the site. The reader is referred to Section 6.10 of the 'Enviroinsight' report for further details.

There were six 'Surface Water Features' reportedly within 250m of the study site that were not represented on mapping. The reader is referred to Section 6.11 of the 'EnviroInsight' report in Appendix 1 of this Desk Study for further details.

5.2.7 Flooding.

There were Environment Agency Flood Zone 2 floodplains within 250m of the site.

There were Environment Agency Flood Zone 3 floodplains within 250m of the site.

There was a 'Low' risk of flooding from Rivers and Sea for the site.

There were no Flood Defence areas within the search radius of 250m for the site.

There were no areas benefitting from Flood Defences within 250m of the site.

There were no areas used for Flood Storage within 250m of the site.

For the category 'What is the maximum BGS Groundwater Flooding Susceptibility within 50m of the study site'. The response 'Not Prone' was given in the supplied information.

For the category 'What is the BGS confidence rating for the Groundwater Flooding susceptibility areas' the provided response was 'Not Applicable'.

5.2.8 Designated Environmentally Sensitive Sites.

There were no records for the site within this dataset.

5.2.9 Natural Hazards.

Search records indicated there was a 'Moderate' maximum risk of natural ground subsidence.

5.2.10 Mining.

Searches indicated there were no coal mining areas within 75m of the site.

There were no 'Non-Coal Mining areas' within 50m of the study site (Chalk).

There are no brine affected areas within 75m of the site.

5.2.11 Radon.

Searches indicated that the site is in an area where less than 1% of properties are above the 'Action Level' therefore radon protection measures are not necessary in extensions and new dwellings.

6. PRELIMINARY QUALITATIVE RISK ASSESSMENT.

6.1 Introduction.

There are three factors that are taken into account whilst undertaking a qualitative risk assessment. These have been described in Section 3 of this document. At the time of this report, the site had been proposed for residential development.

6.2 Conceptual Model.

Source (s) (Potential)	Pathway	Target	Risk
Soil: The site had existed as a developed plot of land since 1888 with a second phase of development between issue of the 1950-55 and 1974 map editions with no further changes up to and including the time of the site walkover survey carried out by this Author during 26 May 2017. There were no site-specific indicators of potential soil-borne contamination other than Made Ground which is considered to be 'inert' as it comprised brickwork and crushed concrete'. Visual and olfactory indicators of potential contamination immediately nearby off site were not noted.	❖ Dermal contact, ingestion and inhalation	<ul style="list-style-type: none"> • Present users • End users • Construction workers • General public 	<ul style="list-style-type: none"> • Low • Low • Low • Low
	❖ Wind erosion and atmospheric dispersion	<ul style="list-style-type: none"> • Adjacent properties • General public • Ecological Systems • Archaeological Sites & Monuments 	<ul style="list-style-type: none"> • Low • Low • Low • n/a
	❖ Leaching	<ul style="list-style-type: none"> • Adjacent properties • Shallow groundwater • Services/construction materials • Plant life • Surface water • Ecological Systems • Arch. & Monuments 	<ul style="list-style-type: none"> • Low • Low • Low • Low • Low • Low • Low
Shallow groundwater: The site overlies 'Unproductive' aquifers, which were not considered to be pollution sources.	❖ Groundwater migration	<ul style="list-style-type: none"> • Adjacent properties • Deep groundwater • Services/construction materials • Plant life • Ecological Systems • Archaeological Sites & Monuments 	<ul style="list-style-type: none"> • Low • Low • Low • n/a • Low • Low
	❖ Dermal contact, ingestion and inhalation	<ul style="list-style-type: none"> • Present users • End users • Construction workers • General public 	<ul style="list-style-type: none"> • Low • Low • Low • Neg-Low
Gas: Measurable (background) concentrations of ground gas would not (reasonably) be anticipated to be present as a result of historical site use or the underlying natural geology.	❖ Direct inhalation ❖ Soil migration ❖ Services migration	<ul style="list-style-type: none"> • End users • Construction workers • Buildings • Ecological Systems • Arch. Sites & Monuments 	<ul style="list-style-type: none"> • Low • Low • Low • Low • Neg
Negligible Risk Defined as the site should be considered suitable for present or future use and environmental setting. Contaminants unlikely to be present, which might have unacceptable impact on key targets. Low Risk Defined as the site should be considered suitable for present or future use and environmental setting. Contaminants may be present but unlikely to have unacceptable impact on key targets. Medium Risk Defined as the site may not be suitable for present or future use and environmental setting. Contaminants are probably present and might have unacceptable impact on key targets. High Risk Defined as the site is probably or certainly not suitable for present or future use and environmental setting. Contaminants probably or certainly present and likely to have an unacceptable impact on key targets.			
Notes: n/a = not applicable			

The risk assessment follows below:-

6.3 Targets.

Potential targets, in the context of the risk assessment (based on the relevant pollutant linkage), where a plausible pathway can be proven, are discussed as follows.

At the time of this report, the proposed scheme comprised residential development.

6.3.1 Human Health (Site Users & Construction Workers)

The site had a documented developmental history as described above. There is no potential for the presence of Made Ground other than the 'inert' Made Ground comprising brick and concrete as described above.

Based upon the foregoing and the final paragraph of this report, regarding 'unanticipated contamination:-

A Low risk has been identified until proven otherwise.

6.3.2 Services and Construction Materials

6.3.2.1 Concrete & Potable water supplies.

Adverse effects on services and construction materials may be anticipated where soils are impacted by localised raised/lowered pH values, PAH's, TPHs and metals contamination and where these are present in Made Ground materials. However, in this instance and based on the absence of Made Ground and the foregoing:-

A Low risk has been identified.

6.4 Landscaping & Planting

Based on the foregoing a 'Low' risk is presented to this receptor.

6.5 Groundwater (Controlled Waters)

The site is underlain by 'Unproductive' Aquifers. However, there remains the potential for small quantities of perched groundwater in any superficial fills (or Made Ground), where these are present. However, searches indicated in this instance that the presence of significant thicknesses of Made Ground would not be reasonably anticipated given the documented history of the site.

A Low risk to deeper groundwater has been identified.

6.6 Ground Gas

Measurable concentrations of soil gases (predominantly carbon dioxide) would not be reasonably anticipated to be present as a function of any made ground present. However, where present, any granular overburden would mitigate the risk of ground gas buildup via natural ventilation of ground gas to atmosphere.

On the basis of the foregoing:~

A Low risk has been identified.

7. RECOMMENDATIONS FOLLOWING PRELIMINARY RISK ASSESSMENT.

7.1 Overview.

The desk study information (including the outcome of the walkover survey), showed the site had a documented developmental history.

The site walkover survey and the searches carried out as part of this Desk Study indicated that there were no readily identifiable plausible sources of contamination.

On that basis, and subject to the final paragraph in this report (in blue text), the need for a Phase 2 intrusive investigation is considered *unwarranted*.

The opinions and recommendations in this report are subject to the agreement of the Regulators.

8. CONCLUSIONS.

This geoenvironmental desk study prepared by Goldfinch Environmental Limited was undertaken on the instruction of Mr A Hefford (the Client), at a site located at 67 Chapelgate, Sutton St James, Spalding, Lincs..

The site had a previous history of development as described above and was proposed for residential use.

There were no notable features present in the context of land contamination.

Desk Study searches have shown that the site rests on Clay and Silt (Tidal Flat Deposits) with the Bedrock & Solid Geology comprising Ampthill Clay Formation (Mudstone).

An *overall Low* risk is associated with the site *subject to the final paragraph in this report.*

Recommendations for the need for further work (or otherwise) have been discussed in Section 7 of this report.

Also, at all times especially once any necessary groundworks have commenced, the final paragraph below applies regarding 'unanticipated' contamination.

The reader should note that the opinions, recommendations and conclusions in this report are subject to the agreement of the Local Authority who are the final arbiters in these matters.

Based on the foregoing, a Low risk to construction workers and services installations has been associated with the site until proven otherwise. Site personnel, particularly groundworkers, should follow sound health and safety welfare practices that will further mitigate this level of risk.

Should unanticipated contamination be suspected, or revealed during any groundworks, then the area should be temporarily isolated and further advice sought by a suitably independent qualified person and a management strategy for these occurrences should be submitted to the Local Authority for their approval prior to proceeding, as required by Regulatory Offices.

FIGURES

Approximate Site Location

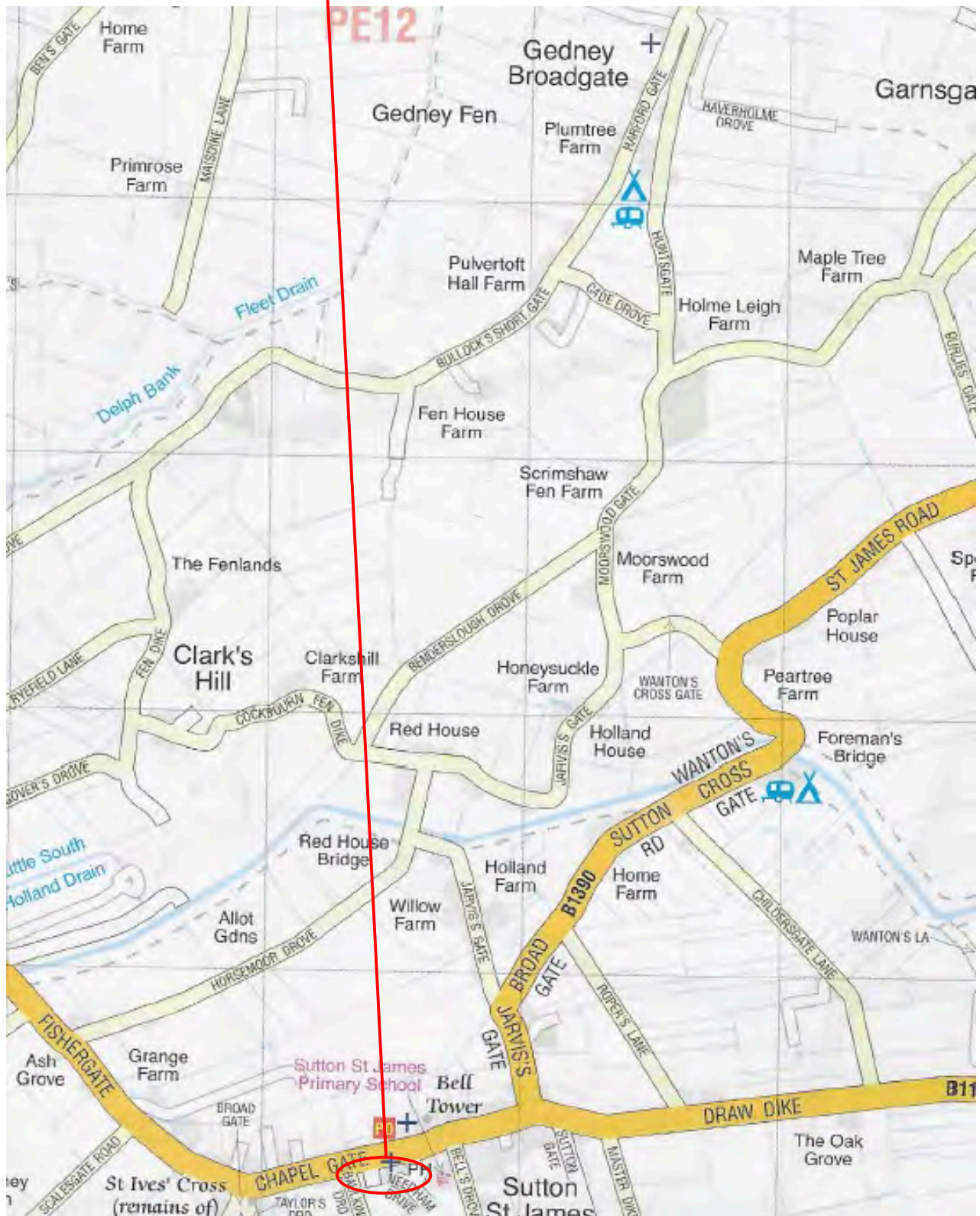


Figure 1

Site Location Plan

Ref: 0440/1

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APPENDIX 1

‘Groundsure’ Report

Site Details:

67, CHAPELGATE, SPALDING,
PE12 0EF

Client Ref: 0440-ds
Report Ref: GS-2391-3930474
Grid Ref: 539551, 318284

Map Name: County Series

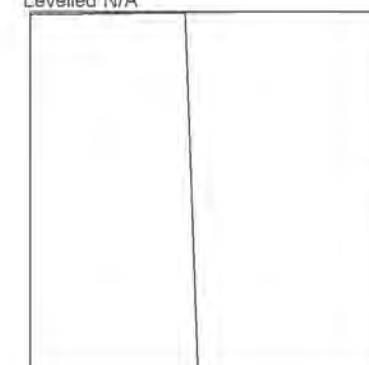
Map date: 1886-1887

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1887
Revised 1887
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1886
Revised 1886
Edition N/A
Copyright N/A
Levelled N/A



Produced by
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Production date: 24 May 2017

To view map legend click here [Legend](#)

Site Details:

67, CHAPELGATE, SPALDING,
PE12 0EF

Client Ref: 0440-ds
Report Ref: GS-2391-3930474
Grid Ref: 539551, 318284

Map Name: County Series

Map date: 1887

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1887
Revised 1887
Edition N/A
Copyright N/A
Levelled N/A

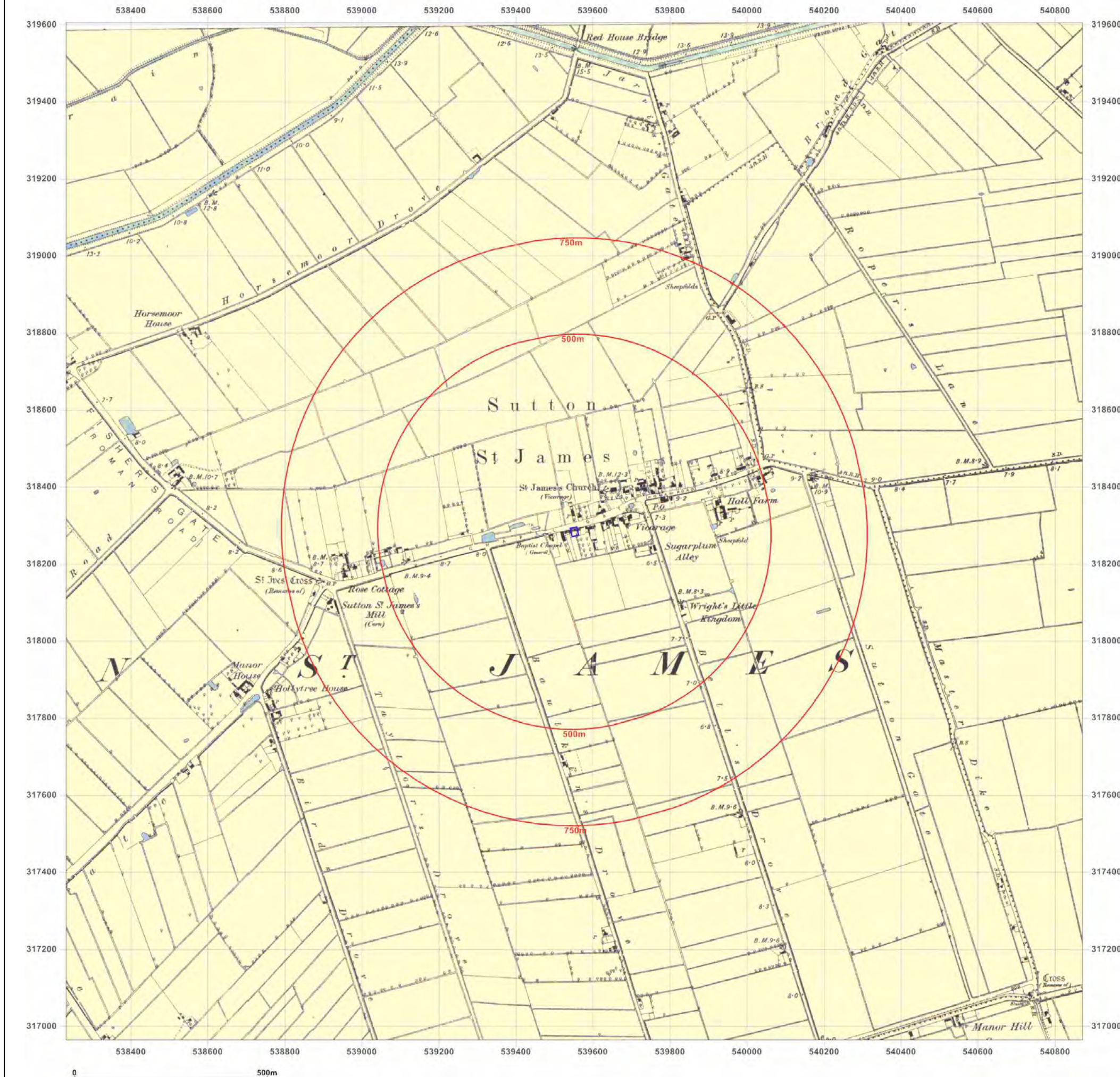


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Site Details:

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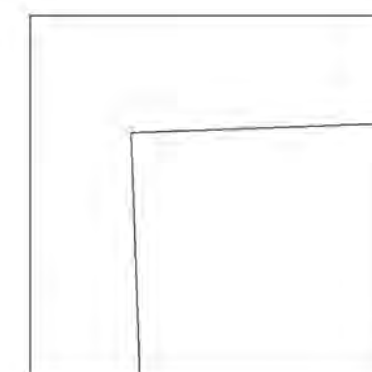
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Report Ref: GS-2391-3930474
Grid Ref: 539551, 318284

Map Name: County Series

Map date: 1888

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1888
Revised 1888
Edition N/A
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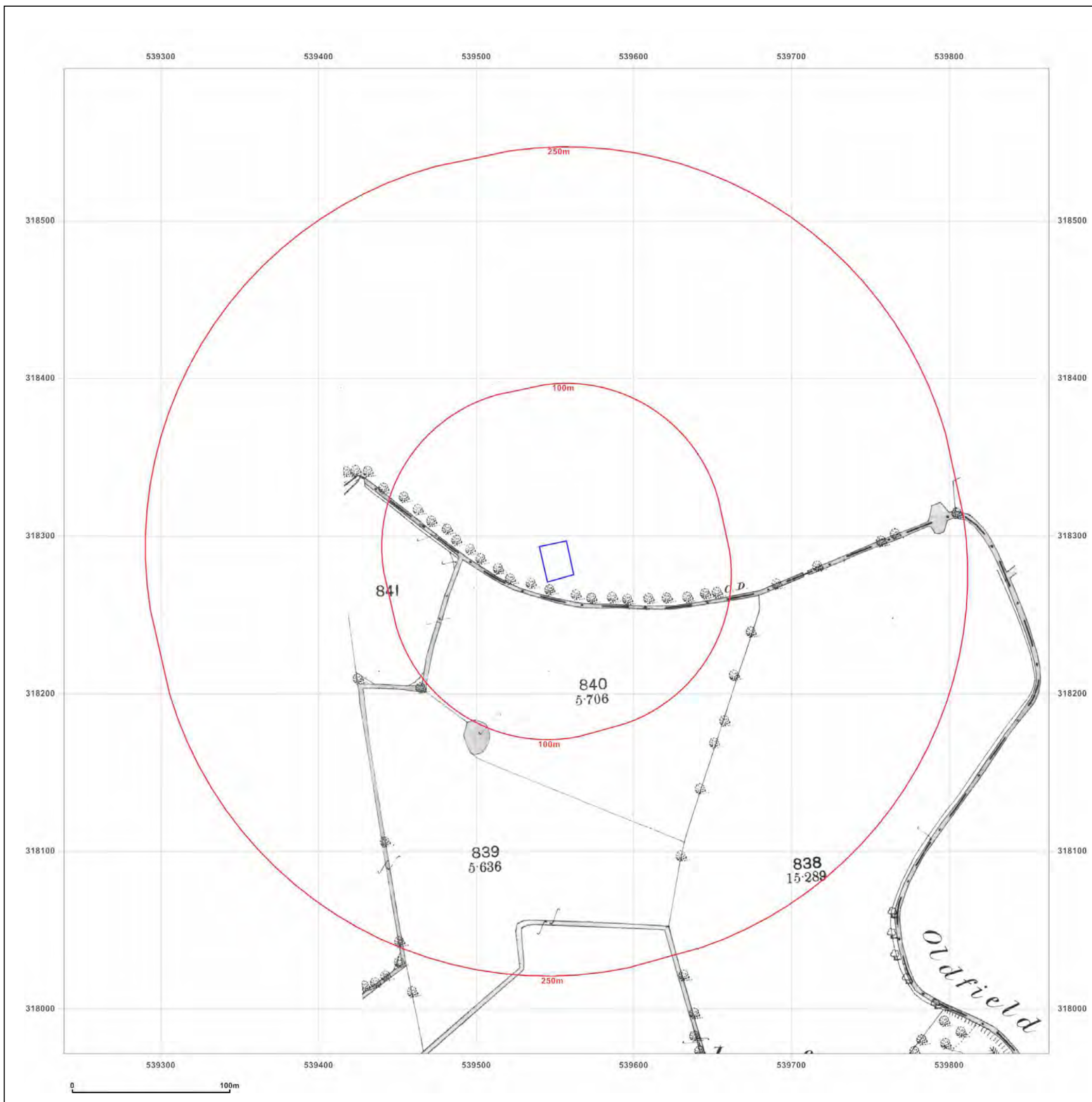


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Site Details:

67, CHAPELGATE, SPALDING,
PE12 0EF

Client Ref: 0440-ds
Report Ref: GS-2391-3930474
Grid Ref: 539551, 318284

Map Name: County Series

Map date: 1888

Scale: 1:2,500

Printed at: 1:2,500



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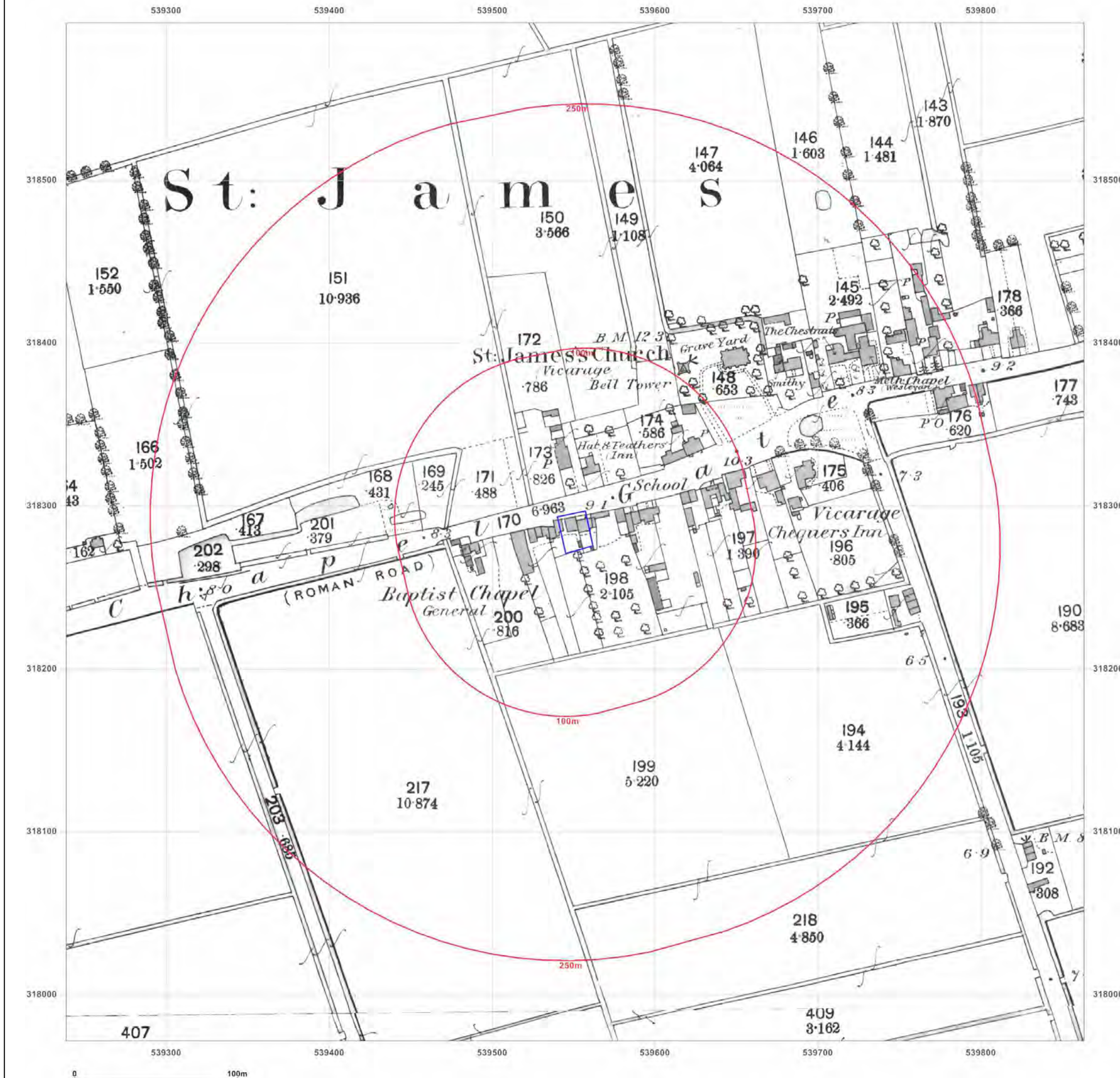


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Site Details:

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Client Ref: 0440-ds
Report Ref: GS-2391-3930474
Grid Ref: 539551, 318284

Map Name: County Series

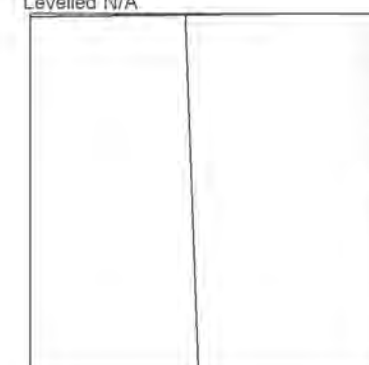
Map date: 1900-1903

Scale: 1:10,560

Printed at: 1:10,560



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Surveyed 1886
Revised 1900
Edition N/A
Copyright N/A
Levelled N/A

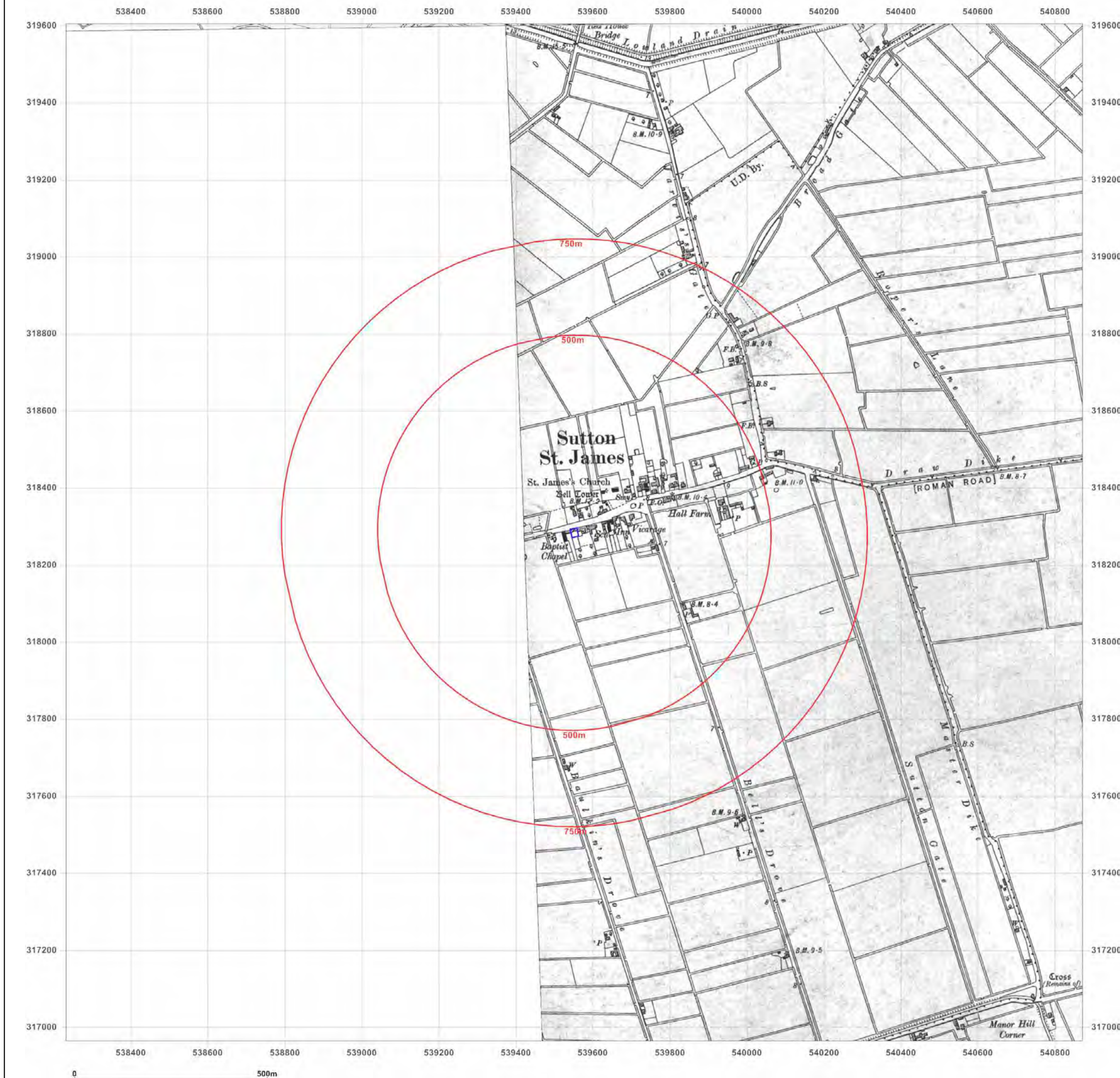


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Client Ref: 0440-ds
Report Ref: GS-2391-3930474
Grid Ref: 539551, 318284

Map Name: County Series

Map date: 1903

Scale: 1:10,560

Printed at: 1:10,560



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