Groundsure
LOCATION INTELLIGENCE

Phase 1
Preliminary Risk Assessment

Hazel Stub Depot, Burton End, Haverhill, Suffolk, CB9 9AF

Report details

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Location: 565401, 245032
Area 0.63 ha

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Executive Summary

Report objective

The purpose of the commission is to support a prospective planning permission application for the conversion of the building at Hazel Stub Depot, Burton End, Haverhill, Suffolk, CB9 9AF into nine residential apartments.

Site Setting

Current use: The building to the west is vacant and the building in the east is used as a storage warehouse and offices.

Surroundings: Residential and agricultural.

History: Works and a depot.

Geology: Superficial deposits of the Lowestoft Formation underlain by bedrock layers of the Lewes Nodular Chalk Formation and Seaford Chalk Formation.

Controlled Waters: Secondary undifferentiated and Principal aquifers within the superficial deposits and bedrock. No relevant surface water courses were identified on site.

Human Health: Future site residents, groundworkers during the proposed development, and residents of the nearby dwellings with private gardens.

Ecology: Deciduous woodland adjacent to the north east.

Site Reconnaissance

The Site was visited on 08/02/2023 when it was mostly vacant. There was an operational warehouse and offices and no significant environmental concerns were observed.

Regulatory Consultation

West Suffolk Council has indicated that with respect to the proposed redevelopment of the Site, the minimum requirements would be the submission of a phase 1 desk study including a site walkover. However, given the historical land uses the likelihood of intrusive investigations being required is high and would likely be part of the planning consent (if granted).

Additionally, the Site has been identified as part of West Suffolk Councils Contaminated Land Inspection Strategy but is currently considered low priority and there is currently no intention to undertake inspection under Part 2A.

Conclusions

This Preliminary Risk Assessment has considered potential pollutant linkages with a **Moderate** risk to be present with respect to a legacy of contamination in the shallow soils that could adversely impact future site workers, residents and the groundwater. Further characterisation of the underlying soils and groundwater would be required to confirm whether the Site can be considered suitable for the proposed use or whether any remedial measures need to be implemented.

Recommendations

Undertake a ground investigation and generic quantitative risk assessment in accordance with BS10175 to understand the condition of the shallow soils where excavation is likely to occur. The aim of the assessment should clarify the potentially active pollutant linkages identified in this Preliminary Risk Assessment and identify whether any remedial measures will need to be implemented.

As is standard practice on development Sites, a watching brief should be undertaken during proposed excavations (such as the removal of the existing concrete slabs and reduction in ground levels for services)

for unexpected ground conditions. Should such conditions be identified, work should cease in the area, conditions assessed by a suitably qualified person and the way forward agreed with the Local Authority.

A Health and Safety risk assessment should be addressed as part of the implementation of Construction Design Management 2015 Regulations. This would address the potential for exposure to construction staff, future maintenance staff and off-site users.

Any soils imported for use in the landscaping should be certified clean and suitable for the proposed residential use.

Asbestos was previously identified at the Site, either an updated survey or full demolition asbestos survey should be completed so that any asbestos material can be removed by suitably licensed contractors prior to redevelopment.

This Executive Summary forms part of Groundsure report number GSP-2023-2252-1 is part of a wider document and should not be used in isolation.

Contents Page

1 Introduction

1.1 Background

Groundsure Ltd was instructed by Brian King of MK Associates Ltd to complete a Phase 1 Preliminary Risk Assessment. The report was prepared in accordance with the Groundsure Ltd proposal (ref. GSP-2023-2052P, dated 19 January 2023) and Standard Terms and Conditions of Business for the use of the following entities:

- **MK Associates Ltd**
- **West Suffolk Council**

The study site (known as 'the Site') was Hazel Stub Depot, Burton End, Haverhill, Suffolk, CB9 9AF. A location plan and site layout can be found in Appendix A.

1.2 Purpose of this report

The purpose of the commission was to inform a planning permission application for the conversion of the building on Site from a warehouse/depot to nine residential apartments. The development proposals are currently at pre application stage.

1.3 Scope of works

This Phase 1: Preliminary Risk Assessment comprises a review of readily available environmental, historical and planning records, any additional data supplied by the client and a site inspection. Data, where copyright permits, is presented within the appendices of the report.

The risk assessment was based on a qualitative assessment of the Contaminant – Pathway – Receptor linkages that may exist at the Site because of past activities, in accordance with the Environment Agency's 'Land Contamination Risk Management' (LCRM) published 8 October 2020 (updated 19 April 2021)[1] and BS10175:2011+A2:2017 Investigation of Potentially Contaminated Sites Code of Practice.

These assessments were associated with the following UK legislation

- Environmental Protection Act 1990;
- The Water Resources Act 1991; and
- Environmental Permitting Regulations (2015).

1.4 Data sources

Data sources include:

- Groundsure data reports (refs. GS-9307679 and GS-9307680)
- Site inspection dated 07/02/2023 with David King;
- Data found on the Local Authority planning website;
- Local Authority Environmental Health consultation;
- Environment Agency consultation;
- Reports provided by client (Asbestos Survey Report, Snap Systems, 13/07/2015)

1.5 Report limitations

All work has been undertaken in accordance with our standard terms & conditions for a Consultancy Service. It should be noted that liability for any claim in relation to asbestos is excluded.

The report is based on the data sources listed within the report and is not necessarily exhaustive. The report excludes consideration of potential hazards arising from any activities at the Site other than

[1] https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks

normal use and occupancy for the identified land uses. Where access is restricted this affects the reliability of inferences pertaining to operations and conditions within such areas of a Site. Hazards associated with any other activities are not assessed.

It has been assumed that the conditions on Site at the time of the site reconnaissance are representative of general conditions and operations unless the Site is to be redeveloped and then it has been assumed operations cease. Furthermore, new information, improved practice and changes in legislation may change the conclusions presented here.

The report may only be relied upon by the Client and those with written approval from Groundsure. It may be submitted to regulatory bodies where appropriate. Groundsure will not accept any responsibility for use of the project outside the scope of the report.

Any values provided in recommendations are for indicative purposes of scale only. They should not be considered as quotes.

1.5.1 Site reconnaissance

Note that the site reconnaissance was non-intrusive and below ground services were not inspected and samples were not taken.

2 Risk Assessment Methodology

2.1 Qualitative Risk Ranking Criteria

An assessment of environmental risk associated with geo-environmental ground conditions is made in respect of the Environmental Protection Act 1990, the Water Resources Act 1991, the Environmental Damage Regulations 2015 and associated legislation, to provide a balanced and considered opinion of the property regarding the intended end use. Where applicable, recommendations are made in respect of further actions considered to be appropriate.

The report discusses the potential commercial implications of the identified risks with reference to the following risk assessment definitions (based on CIRIA C552):

2.1.1 Consequence

This is based on an assessment of the most likely outcome. All assessments have a degree of uncertainty.

Minor: *Site considered suitable for present use and environmental setting. Contamination may be present but unlikely to have an unacceptable impact on key targets. No action needed while the Site remains in present use.*

- No permanent health effects
- Easily repairable damage to buildings

Mild Risk: *Site is considered suitable for present use and environmental setting. Contamination may be present but unlikely to have an unacceptable impact on key targets. Action unlikely to be needed in present use.*

- Pollution of non-sensitive water resources
- Minor changes to crops, buildings, structures and services

Medium Risk: *Site may not be suitable for present use or environmental setting. Contamination may be present, and likely to have unacceptable impact on key targets. Action may be needed in the medium term.*

- Chronic damage to human health
- Pollution of controlled waters
- Significant change in ecosystem
- Minor repairable damage to property

Severe Risk: *Site probably or certainly unsuitable for present use or environmental setting. Contamination probably or certainly present and likely to have an unacceptable impact on key targets. Urgent action needed.*

- Short term (acute) risk to human health likely to result in significant harm
- Short term (acute) risk to a sensitive water resource
- Significant short-term risk to an ecosystem or organism forming part of an ecosystem
- Catastrophic damage to property

2.1.2 Likelihood

High Likelihood: There is a pollution linkage and an event either appears very likely in the short term or almost inevitable in the long term, or there is evidence at the receptor of harm or pollution.

Likely: There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such 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 pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place, and is less likely in the shorter term.

Unlikely: There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

Risk Table

Likelihood	Consequence (hazard-pathway-target)			
	Severe	**Medium**	**Mild**	**Minor**
High	High	High	Moderate-High	Moderate
Likely	High	Moderate-High	Moderate	Low-Moderate
Low	Moderate-High	Moderate	Low-Moderate	Low
Unlikely	Moderate	Low-Moderate	Low	Low

3 Site Setting & Description

Site Location	The Site lies within a rural setting, southwest of the Haverhill town centre, Suffolk.	
Current use	The majority of the Site is vacant. Offices and a warehouse were operational in the north-eastern building.	
Proposed use	The existing building on Site is to be converted into nine residential apartments, including the formation of external parking areas and amenities.	
Access/ Security	The Site can be accessed from two minor tracks in the south. No gates were present to restrict access. CCTV was in operation across the south of the Site. There was no evidence of trespassing or vandalism on Site at the time of the site reconnaissance.	
Buildings	Two adjoining two-storey buildings, in good condition, made of brick with metal cladding and flat roofs.	
Topography	The Site and the surrounding area were generally flat with a slight decline towards the south.	
External areas	Good quality hardstanding surrounded the building in the east and comprised the access tracks, with vegetated grass lawn in the west.	
Surface water features	No surface water features were identified on or near to the Site.	
Site drainage	Pipework was visible taking both rainwater from the buildings underground.	
Services	The building appeared to be connected to mains electricity, water and sewage networks.	
Surroundings	**North**	A copse and agricultural land.
	South	Residential dwellings with gardens, and Burton End (road) with further dwellings beyond.
	East	Residential dwellings with gardens, and a copse.
	West	Agricultural land.

Site location plans and a representation of the key site features were presented in Appendix A. Photographs taken during the recent site reconnaissance were shown in Appendix B.

4 Environmental Setting

4.1 Geology

4.1.1 Regional

The anticipated regional geological succession based on 1:10,000 and 1:50,000 scale British Geological Survey (BGS) mapping is presented in the Groundsure Insight and summarised in the table below.

Geological Unit	Description*	Comment
Superficial		
Lowestoft Formation	The Lowestoft Formation forms an extensive sheet of chalky till, together with outwash sands and gravels, silts and clays. The till is characterised by its chalk and flint content.	Mid Pleistocene Epoch
Bedrock		
Lewes Nodular Chalk Formation And Seaford Chalk Formation (undifferentiated)	Composed of hard to very hard nodular chalks with interbedded soft to medium hard chalks (some grainy) and marls; some griotte chalks. Nodular chalks are typically lumpy and iron-stained (usually marking sponges).	Late Cretaceous Epoch
Notes: * Description is based on information within the BGS Lexicon of Named Rock Units and the Groundsure Insight		

4.1.2 Natural Ground Subsidence

The following table summarises the maximum hazard of natural subsidence recorded within 50m of the Site, as assessed by the BGS.

Geotechnical Hazards	Maximum Hazard Rating
Shrink-Swell	Low
Running Sands	Very low
Compressible deposits	Negligible
Collapsible deposits	Very low
Landslides	Very low
Ground dissolution of soluble rocks	Negligible

4.1.3 Mining, ground workings and natural cavities

The Site lies within an area which may have been affected sporadic chalk underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

Additionally, Ordnance Survey mapping has identified seven entries of ponds on Site from 1885 to 1946 with a further entry of a pond 190m north.

The Site does not lie within a coal mining area as defined by the Coal Authority.

4.1.4 Radon

The Site does not fall within a Radon Affected Area, less than 1% of properties are estimated to be affected.

4.2 Controlled Waters

4.2.1 Hydrogeology

Groundsure environmental data may be viewed in Appendix C.

Superficial Aquifer	Secondary Undifferentiated: In general these layers have previously been designated as both minor and non-aquifers in different locations due to the variable characteristics of the rock type.
Bedrock Aquifer	Principal: High permeability layers providing a high level of water storage that may support water supply/river base flow on a strategic scale.
Groundwater Vulnerability - Superficial	Medium - Intermediate between high and low vulnerability. Thickness - >10m
Groundwater Vulnerability - Bedrock	Low - Areas that provide the greatest protection from pollution.
Groundwater vulnerability - Soluble Rock Risk	Maximum soluble risk category - Significant soluble rocks are likely to be present Problems unlikely except with considerable surface or subsurface water flow. Percentage of the grid square covered by maximum risk - 14%
Groundwater Abstractions	Thirty-four groundwater abstraction licences entries have been identified within 2,000m of the Site. The nearest was a historical licence 308m southwest, and the nearest active licence was 1,323m east for the abstraction of water for an unspecified process. *Note <20m^3/day Local Authority registered private supply boreholes have not been considered in this assessment.
Potable Groundwater Abstractions	No potable groundwater abstractions have been identified within 2,000m of the Site.
Source Protection Zones	A Source Protection Zone 3 (Total Catchment) has been identified on Site.

Water Framework Directive (WFD) Groundwater Body Classification	Groundwater body – North Essex Chalk Overall rating – Poor (2019) Reasons for failure – Poor nutrient management, poor livestock management and groundwater abstraction.
Groundwater level and flow	No groundwater level information was available at the time of writing.

4.2.2 Hydrology

Nearest Surface Water	An unnamed inland river not influenced by normal tidal action mapped 80m east.
Water Framework Directive (WFD) Surface Water Body Classification	Water body catchment on-site - Stour Brook River Location - 1539m north of the Site Overall Quality - Moderate
Surface Water Abstractions	No active surface water abstraction licences have been identified within 250m of the Site.

4.2.3 Flood Risk

The table below summarises the highest risk for each flood type data provided in the Groundsure Insight report.

	On Site	**Within 50m**
Risk of Flooding from Rivers and Sea (RoFRaS)	None	None
Historical Flood Events	Not identified	Not identified
Flood Defences	Not identified	Not identified
Areas Benefiting from Flood Defences	Not identified	Not identified
Flood Storage Areas	Not identified	Not identified
Flood Zone 2	None	None
Flood Zone 3	None	None
Surface water flooding	Negligible	1 in 30 year, 0.3m - 1.0m
Groundwater flooding	Low	Low

4.3 Environmental Designations

The relevant environmental designations recorded in the Groundsure Insight on or within 500m of the Site have been summarised in the following table.

Designation	**Number**	**Details**

Nitrate Vulnerable Zones	2 (on-site)	Surface water - Lower Stour NVZ Groundwater - Sandlings and Chelmsford
Sites of Special Scientific Interest (SSSI) Impact Risk Zones	1 (on-site)	Related types of developments requiring consultation included airports, helipads and other aviation proposals. Additionally, developments that may cause air pollution such as livestock & poultry units with floorspace greater than 500m², slurry lagoons & digestate stores greater than 750m² and manure stores greater than 3500t.

4.4 Culturally and Visually Sensitive Sites

Two Listed Buildings were identified 17m and 20m to the east, relating to Hazel Stub Farm and Cowslip Pightle (Number 2) respectively

4.5 Agricultural Designations

The Site and the surrounding area has been classified as Grade 2 (very good) agricultural land.

Additionally, a Countryside Stewardship Scheme was 22m east of the Site and is due to expire on 31 December 2023.

4.6 Ecological Habitat Designations

Deciduous woodland priority habitat is mapped on the eastern boundary of the Site and extending 66m north east.

5 Potentially Contaminative Land Use

5.1 Permits, Authorisations, Licences and Records

Groundsure environmental data may be viewed in Appendix C.

Data held by Groundsure indicates that the Site has not been designated as Contaminated Land under Part 2A of the Environmental Protection Act.The other following records were identified at or near the Site.

Type	No.	Comments
Current industrial land uses		
Licensed Discharges	1	Historic licence to discharge unspecified agricultural effluent at Hazel Stub Farm active from 1962 and revoked 1991.

6 Historical Setting

6.1 Historical Review

The following table provides an outline of the historical land use both on-Site and in the surrounding areas based (unless otherwise referenced) on mapping and aerial imagery from the Groundsure Insight (Appendix C) and MapInsight (Appendix D).

These are not comprehensive as occasionally transient uses existed between map survey dates.

Date	On Site Features	Off Site Features
1886	The Site comprised a building and an adjoining unit in the centre and a unit in the north. Part of a **moat** intersected the eastern access track and the remainder of the footprint was open space.	The moat extended off Site to the south east. Additionally, an **orchard** was adjacent to the northeast. A track extends from buildings in the north east, north off Site.
1886-1903	No significant changes were identified.	No significant changes were identified.
1926	Extension to the footprint of two buildings in the north.	No significant changes were identified.
1924-1951	No significant changes were identified.	No significant changes were identified.
1959	Two **orchards** had been established in the east and west of the Site. Building extended to the south with an access track. A **tank** mapped along northern boundary.	No significant changes were identified.
1972	No significant changes were identified.	The **moat** to the east was no longer identified and had potentially been infilled.
1985-1989	**Tank** in the north no longer mapped. Buildings onsite extend to the west and now labelled as **works**	Orchards along with tank, moat and northern access track no longer mapped.
1988-1995	No significant changes were identified.	No significant changes were identified.
1999 (aerial imagery)	Builings in the north part of the Site are similar to current layout, with an external car parking area to west and south east.	No significant changes were identified.
2007 (aerial imagery)	Minor change in building configuartion with the removal of southern portion so buildings match the current layout.	Bare ground to south of Site indication clearance works at Hazel Stub Farm.
2013 to present (aerial imagery)	Change in roofing material of larger western building in 2020 aerial imagery. No other significant changes were identified.	Landscaping of Hazel Stub Farm in south in 2013.

6.2 Underground features and proposed infrastructure

No records of tunnels or proposed infrastructure projects have been recorded within the Groundsure Insight.

6.3 Historical military land

No additional records of military land have been recorded within the Groundsure Insight.

6.4 Unexploded Ordnance

The UK has a history of military activity, including extensive military training sites, bombing during the First World War and sustained strategic bombing during the Second World War. A legacy of this military activity was the incidence of UXO encountered throughout Britain to this day, particularly during construction and redevelopment works. However, no evidence of bomb damages (such as ruins) were identified on post war mapping.

7 Site Reconnaissance

A walkover of the Site was carried out by a Groundsure representative on 07/02/2023 with the site owner Brian King. The weather was fair and dry. The general description was provided in Section 3.

A site plan of key features (Figure 2) was included in Appendix A and a photographic record of the site walkover was provided in Appendix B.

7.1 Operational and Environmental Observations

Site Activities	The majority of the Site was vacant at the time of inspection. Offices and a warehouse were operational in the north-eastern building.
Materials / Waste Stored	The following waste/materials were stored on concrete hardstanding in the western and eastern buildings: ● Wooden pallets ● General building materials Additionally a general trade waste bin was noted on hardstanding outside the eastern building.
Environmental Management	No formal environmental management system was in operation or required.
Emergency Procedures	Fire alarms and fire extinguishers were observed on the Site. The emergency exits were clear.
Environmental observations - surroundings	Whilst the neighbouring properties were not inspected, no significant environmental concerns were observed.

7.2 Regulated Activities

Groundsure did not identify activities requiring environmental permits were being undertaken at the Site.

8 Regulatory Consultations

8.1 Local Authority Environmental Protection Team

Groundsure contacted West Suffolk Council for details of historical uses and potential contamination for the Site. A response was received from Environment Officer Matthew Axton on 23 January 2023.

West Suffolk Council confirmed a long history of commercial uses and potential agricultural uses such as a works, depot and unspecified tank.

The Site has been identified on their contaminated land inspection strategy however given its current commercial use it is currently considered a low priority and there are no plans to undertake an inspection. In terms of contamination, the council know no reasons as to why the Site cannot continue in its current use. However, would need a full assessment of the Sites suitability for more sensitive residential use. The minimum requirements would be the submission of a phase 1 desk study including a site walkover. In addition given the historical land uses the likelihood of intrusive investigations being required is high and would likely be part of the planning consent (if granted).

The council have a record of a noise complaint against the Site in 2011 and a complaint regarding commercial smoke from 2004. No formal action was taken on both accounts. Additionally, the council does not have any records of Part A2 or Part B sites registered at this address.

The full response from the Local Authority was included in Appendix E.

8.2 Local Authority Planning Section

Groundsure did not consider it necessary to undertake consultations with the Local Authority Planning Department. However, Groundsure reviewed the planning information available on the West Suffolk Council website and a summary of the previous applications on the Site can be found in the table below.

Date of application	Application description
Application validated: 10/10/1974	**Status:** Application refused **E/74/2545/P:** Change of use from apple store to stationary store / warehouse / despatch
Application validated: 14/03/1975	**Status:** Application refused **E/75/1457/P:** Storage of fresh and prepackaged fruit and vegetables from East Anglia on Site.
Application validated: 08/11/1978	**Status:** Application refused **E/78/3479/P:** Change of use to storage purposes and grading and blending of tea on Site.
Application validated: 04/12/1986	**Status:** Application approved **E/86/3595/LB:** Replacement of existing roof covering with new asbestos slates at Cowslip Pightle adjacent to the Site.
Application validated: 19/03/1997	**Status:** Application approved **E/97/1460/P:** Change of use of building from B8 - Storage to B1 - Business Use (assembly of parts of display systems) on Site.

Application validated: 14/09/1998	**Status:** Application approved **E/98/2710/P:** Continued use of building for B1 Business Use and change of use in part to B8 Storage on Site.
Application validated: 29/05/2003	**Status:** Application refused **SE/03/2230/P:** Erection of two storey extension (following demolition of attached and detached outbuildings) on Site
Application validated: 11/11/2003	**Status:** Application approved **SE/03/3642/P:** Erection of two storey extension for B1 (Business) use (following demolition of attached and detached outbuildings) on Site.

An Asbestos Survey Report was conducted at the Site by Snap Systems on 13 July 2015. The report provides findings relating to an asbestos management survey carried out the Site. Provided in the Exec summary is a table of possible asbestos-containing materials with recommendations. Areas that needed further monitoring and reinspecting included the following: Groundfloor office caposil, cold storage rooms partition walls, external damp proof courses, first floor WC sink and anti drumming pad.

Although not finalised, Groundsure has reviewed a *Site Block Plan, Proposed* (ref: TEO-021) prepared by Charles Biss limited dated 13 October 2021 detailing the proposed development of the Site. The plan shows that the footprint and structure of the original buildings will be used within the redevelopment of the Site, minimising the excavations relating to groundworks. However, changes to the external surfaces are shown, such as the formation of a Site access road and parking areas, along with a refuse area and bicycle store. Although minimised by the reuse of the existing fabric of the building, excavations of shallow soils are likely to be required to accommodate new services (additional drains) and for the external proposed landscaping.

8.3 Petroleum Licensing Section

Groundsure did not consider it necessary to undertake consultations with the Petroleum Licensing Department.

8.4 Environment Agency

Groundsure did not consider it necessary to undertake consultations with the Environment Agency as part of this report.

9 Conceptual Site Model

The qualitative assessment provides a conceptual model based on a source-pathway-receptor pollutant linkage risk assessment as detailed in the Environment Agency's Land Contamination Risk Management model (LCRM). If one of these elements is missing there can be no significant environmental risk according to the statutory definition of "Contaminated Land" under Part 2A of the Environmental Protection Act 1990. This is a test to demonstrate that no significant harm is occurring.

9.1 Receptors

The following identified receptors may be impacted by an environmental hazard if linking pathways are found to be present:

- Human health
  - Site Users - Future residents, visitors in the existing format and construction workers during the proposed redevelopment
  - Surrounding Site Users - Residents of dwellings with gardens adjacent to the south and east.
- Controlled waters
  - Groundwater - Superficial Secondary Undifferentiated aquifer and a principal Bedrock aquifer, noted to lie within a Source Protection Zone 3.
- Other
  - Ecological - Deciduous woodland adjacent to the east
  - Property - Existing and proposed subsurface buildings and infrastructure
  - Agricultural - The grade 2 (very good quality) agricultural field adjacent to the north.

9.2 Overview of potential current and historical sources of contamination and associated contaminants

The following identified potentially contaminative land uses may be a source of environmental hazard if linking pathways are found to be present.

9.2.1 On Site

Activity	Dates	Location	Potential contaminants of concern
Agricultural use with an associated tank	1959-1960	on Site	Heavy metals, VOCs, fuel, oils, paints, solvents, inorganic compounds, acids/alkalis, herbicides and pesticides and asbestos
Unspecified works/depot	1979-1995	on Site	Fuel and oils hydrocarbons, PAHs, metals, solvents, other organic and inorganic compounds, extreme pH, asbestos and ash.
Warehouse/cold stores	Unknown -Current	on Site	Fuel and oils, ammonia, urea (adblue), gycols, degreasers and asbestos.

9.2.2 Off Site

Activity	Dates	Location	Potential contaminants of concern
Agricultural use	Pre 1884 until present	Adjacent to the north and west.	Heavy metals, fuel, oils, paints, solvents, inorganic compounds, acids/alkalis, herbicides and pesticides and asbestos.

9.3 Conceptual Model

Receptor	Pathways	Risk
SOURCE: Current and former activities on the Site		
Site Users	Dermal contact; Soil ingestion; Dust ingestion/ inhalation	Moderate
Construction Workers		
Surrounding Site Users	Migration via permeable geology and groundwater then Dermal contact (water/ soils); Soil ingestion.	Low-Moderate
	Migration via surface water runoff then Dermal contact (water/ soils); Soil ingestion.	Low-Moderate
Groundwater	Horizontal and vertical migration	Low-Moderate
Surface Water	Surface water runoff and/or Lateral migration via permeable geology.	Low
Ecology	Surface water runoff and/or Migration via permeable geology and groundwater then Direct uptake then Bioaccumulation	Low-Moderate
Property	Direct contact (chemical attack) Explosive conditions	Low
Agricultural	Surface water runoff and/or Migration via permeable geology and groundwater then Direct update then Bioaccumulation	Low-Moderate

Receptor	Pathways	Risk
SOURCE: Current and former activities in the surrounding area		
Site Users	Migration via permeable geology and groundwater then Dermal contact; Soil ingestion; Dust ingestion/ inhalation	Low
Groundwater	Horizontal and vertical migration via the creation of preferential pathway	Low
Property	Migration via permeable geology and groundwater then Direct contact (chemical attack)	Low

9.4 Justification

Considering the Sites historical land uses which include an unspecified tank, cold stores, warehousing, unspecified works and a depot, the potential for elevated concentrations of chemicals of concern in the underlying soils is considered likely. Presuming the potentially contaminative land uses have always been on hardstanding ground it is unlikely that the underlying soils could pose an unacceptable risk to site users. However, as the Site is to be redeveloped for residential purposes, the potential groundworks including excavations of shallow soils are likely to take place. Therefore the historical use of the Site represents a **Moderate** environmental risk to the proposed development.

The Site is underlain by the Lowestoft formation with a Secondary Undifferentiated aquifer which has a medium permeability and a thickness of >10m potentially restricting the migration of any contamination reaching the Bedrock Chalk and Principal aquifer at depth. The aquifers are noted to lie with a Source Protection Zone 3. However, the existing structure including foundations and floor is to be retained, meaning no new significant preferential pathways are anticipated to be created. As such, there is considered to be a **Low-Moderate** environmental risk with regard to groundwater.

The Site is situated in close proximity to residential dwellings and gardens, deciduous woodland and good-quality agricultural soil. Although the area surrounding the building was covered in good-quality hardstanding, excavations for landscaping and access roads are proposed as part of the development and represent a **Low-Moderate** environmental risk to surrouding sites, ecology and agriculture.

10 Conclusions & Recommendations

10.1 Residual liability from historical land uses

10.1.1 Conclusions

Groundsure considers the Site to present a **Moderate** risk as a result of historical contamination for continued use and format. There are unlikely to be significant environmental liabilities associated with the legacy of historical land uses with the property, however, if left unchecked this may change with time.

The Site has been identified as part of West Suffolk Councils Contaminated Land Inspection Strategy but is currently considered low priority and there is currently no intention to undertake inspection under Part 2A.

10.1.2 Recommendations

None required.

10.2 Proposed Development

10.2.1 Conclusion

This Preliminary Risk Assessment has considered potential pollutant linkages with a **Moderate** risk to be present with respect to a legacy of contamination in the shallow soils that could adversely impact future site workers, residents and the groundwater. Further characterisation of the underlying soils and groundwater would be required to confirm whether the Site can be considered suitable for the proposed use or whether any remedial measures need to be implemented.

10.2.2 Recommendations

Undertake a ground investigation and generic quantitative risk assessment in accordance with BS10175 to understand the condition of the shallow soils where excavation is likely to occur. The aim of the assessment should clarify the potentially active pollutant linkages identified in this Preliminary Risk Assessment and identify whether any remedial measures will need to be implemented. An agreement with the Local Authority (in writing) should be sought as to the rationale and scope of the investigation prior to the commencement of works.

A watching brief should be undertaken during proposed excavations (such as the removal of the existing concrete slabs and reduction in ground levels for services) for unexpected ground conditions. Should such conditions be identified, work should cease in the area, conditions assessed by a suitably qualified person and the way forward agreed with the Local Authority.

A Health and Safety risk assessment should be addressed as part of the implementation of Construction Design Management 2015 Regulations. This would address the potential for exposure to construction staff, future maintenance staff and off-site users.

Any soils imported for use in the landscaping should be certified clean and suitable for the proposed residential use.

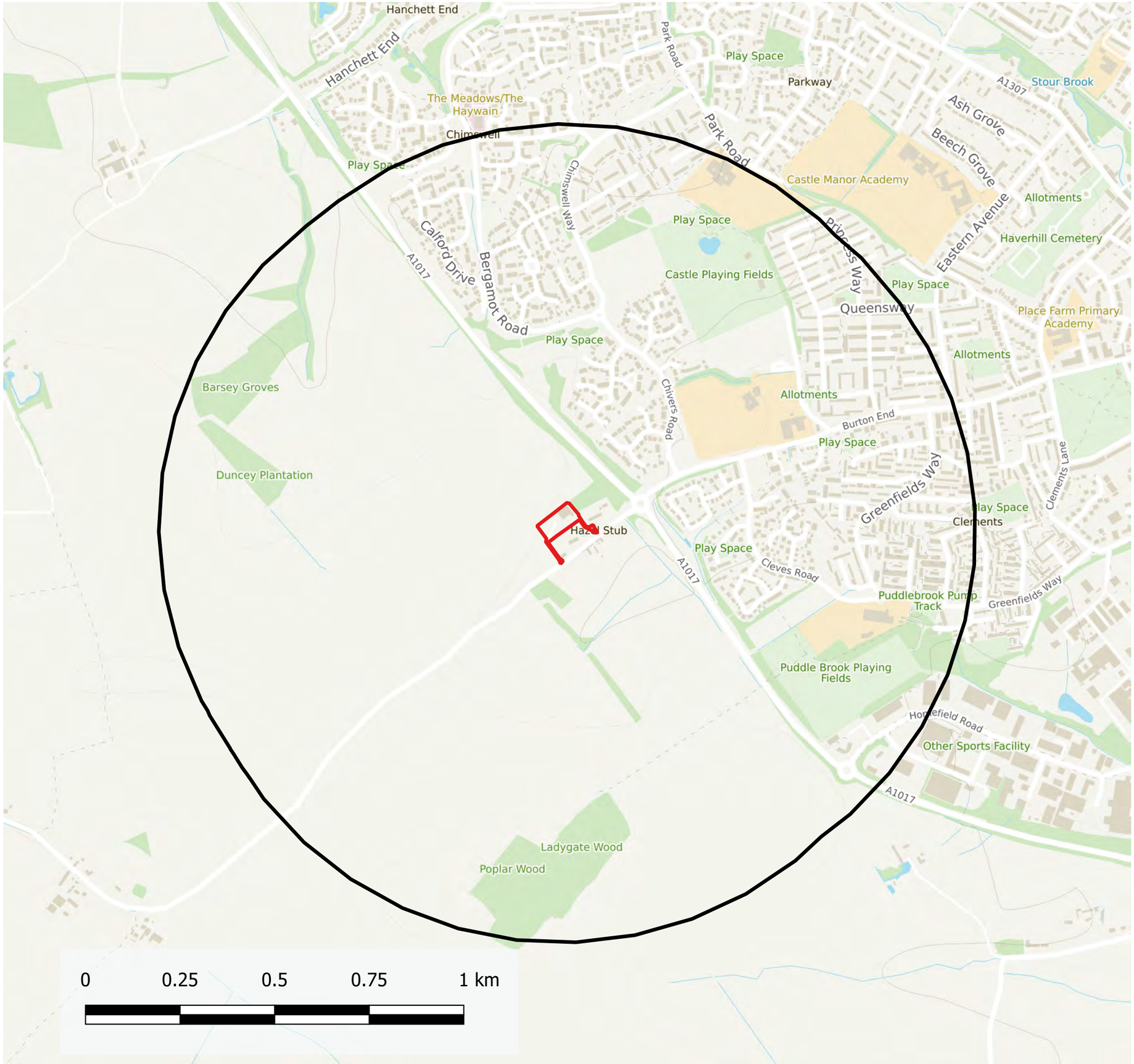
Asbestos was previously identified at the Site, either an updated survey or full demolition asbestos survey should be completed so that any asbestos material can be removed by suitably licensed contractors prior to redevelopment.

10.3 Other Matters

A review of the historical mapping revealed a moat infilled with an unknown material adjacent to the south east. This is considered to be of minor concern, however, if groundworks were to take place in that area it is possible the moat could have been infilled with waste materials and disturbing the area could cause potential contamination to migrate.

Appendix A

Figures



Groundsure
LOCATION INTELLIGENCE

Site Address: Hazel Stub Depot, Burton End, Haverhill, CB9 9AF

Project Reference: GSP-2023-2252

Grid Reference: 565408, 245035

Scale at A3: 1:10,000

Figure 1: Large Scale Site Location

Date: 13/02/2023

N
W E
S

Site Details

Outline

10k Outline

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E: info@groundsure.com
W: www.groundsure.com

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Groundsure
LOCATION INTELLIGENCE

Site Address: Hazel Stub Depot, Burton End, Haverhill, CB9 9AF

Project Reference: GSP-2023-2252

Grid Reference: 565408, 245035

Scale at A3: 1:1000

Figure 2: Key Features Plan

Date: 13/02/2023

N
W E
S

Mastermap Legend

- Multi Surface
- Building
- Water
- Manmade Surface
- Road or Track
- Natural Surface

Site Details

- Outline
- Cold Stores
- Decline
- Offices
- Warehouse
- Toilets
- Trade Waste Bin
- Fire Exits
- Pedestrian Entrance

Annotations not to scale

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Appendix B
Photographic Record

Photo 1: The southern elevation taken from the west.

Photo 2: Western elevation showing the pedestrian entrance to the western building.

Photo 3: Hardstanding at the north of the Site.

Photo 4: Part of the northern elevation.

Photo 5: Part of the northern elevation and the woodland adjacent.

Photo 6: The east of the Site.

Photo 7: Minor access track at the east of the Site.

Photo 8: The access road to the west.

Photo 9: View of the storage area of the western building.

Photo 10: One of the cold stores in the north of the western building.

Photo 11: Cold stores, wooden pallets and the stairway up the offices in the western building.

Photo 12: Fusebox at the top of the stairs in the western building.

Photo 13: Trade waste bin in front of the eastern building.

Photo 14: Corridor to vacant offices on the second floor of the western building.

Photo 15: Front office and kitchen in the entrance to the eastern building.

Photo 16: Fire alarms in the eastern building.

Photo 17: The warehouse in the north of the eastern building.

Photo 18: Kitchenette in the warehouse of the eastern building.

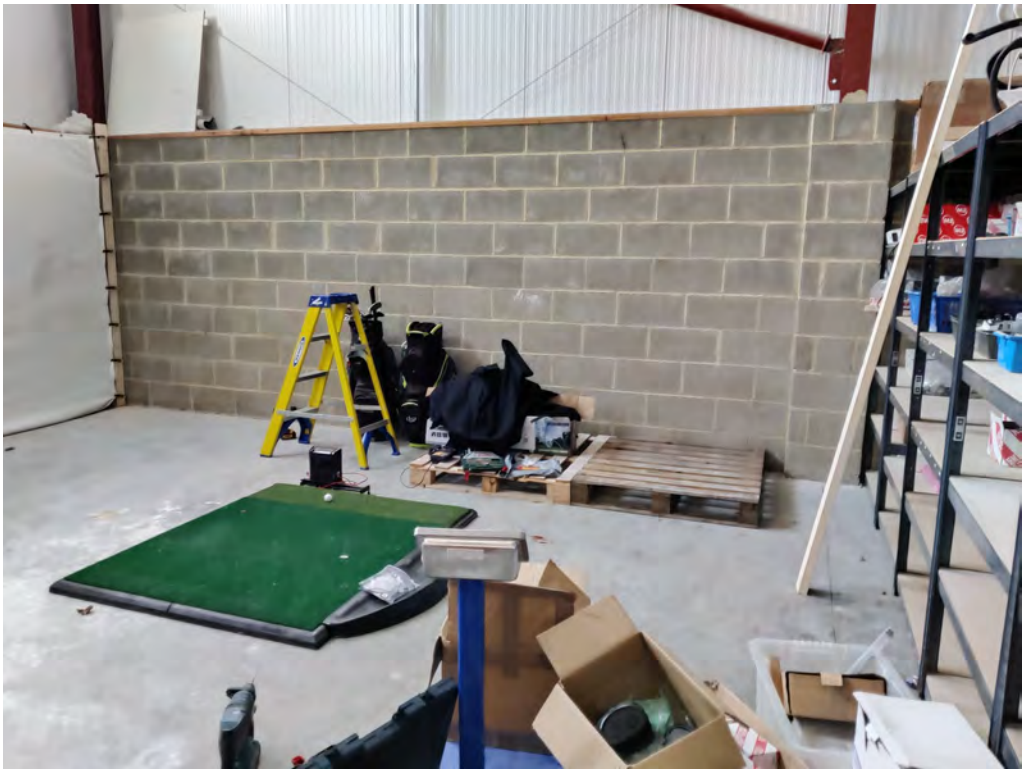

Photo 19: The back of the warehouse building in the eastern building.

Photo 20: Store room in the eastern building, containing general construction materials and equipment.

Appendix C
Groundsure Insight

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Order Details

Date: 19/01/2023

Your ref: GSP-2023-2252

Our Ref: GS-9307680

Site Details

Location: 565401 245032

Area: 0.63 ha

Authority: West Suffolk

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Contact us with any questions at:
info@groundsure.com
08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	Historical industrial land uses	1	0	0	6	-
15	1.2	Historical tanks	1	0	0	0	-
15	1.3	Historical energy features	0	0	0	1	-
16	1.4	Historical petrol stations	0	0	0	0	-
16	1.5	Historical garages	0	0	0	0	-
16	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
17	2.1	Historical industrial land uses	1	0	0	8	-
18	2.2	Historical tanks	1	0	0	0	-
18	2.3	Historical energy features	0	0	0	1	-
19	2.4	Historical petrol stations	0	0	0	0	-
19	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
20	3.1	Active or recent landfill	0	0	0	0	-
20	3.2	Historical landfill (BGS records)	0	0	0	0	-
21	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
21	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
21	3.5	Historical waste sites	0	0	0	0	-
21	3.6	Licensed waste sites	0	0	0	0	-
21	3.7	Waste exemptions	0	0	0	1	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
23	4.1	Recent industrial land uses	0	0	0	-	-
23	4.2	Current or recent petrol stations	0	0	0	0	-
24	4.3	Electricity cables	0	0	0	0	-
24	4.4	Gas pipelines	0	0	0	0	-
24	4.5	Sites determined as Contaminated Land	0	0	0	0	-

24	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
24	4.7	Regulated explosive sites	0	0	0	0	-
25	4.8	Hazardous substance storage/usage	0	0	0	0	-
25	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
25	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
25	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
25	4.12	Radioactive Substance Authorisations	0	0	0	0	-
26	**4.13**	**Licensed Discharges to controlled waters**	0	1	0	2	-
26	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
26	4.15	Pollutant release to public sewer	0	0	0	0	-
27	4.16	List 1 Dangerous Substances	0	0	0	0	-
27	4.17	List 2 Dangerous Substances	0	0	0	0	-
27	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
27	4.19	Pollution inventory substances	0	0	0	0	-
27	4.20	Pollution inventory waste transfers	0	0	0	0	-
28	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
29	**5.1**	**Superficial aquifer**	Identified (within 500m)				
31	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
33	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
34	**5.4**	**Groundwater vulnerability- soluble rock risk**	Identified (within 0m)				
34	5.5	Groundwater vulnerability- local information	None (within 0m)				
35	**5.6**	**Groundwater abstractions**	0	0	0	1	33
43	5.7	Surface water abstractions	0	0	0	0	0
43	5.8	Potable abstractions	0	0	0	0	0
43	**5.9**	**Source Protection Zones**	1	0	1	0	-
43	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
44	**6.1**	**Water Network (OS MasterMap)**	0	0	7	-	-

45	**6.2**	**Surface water features**	0	0	6	-	-
45	**6.3**	**WFD Surface water body catchments**	1	-	-	-	-
46	**6.4**	**WFD Surface water bodies**	0	0	0	-	-
46	**6.5**	**WFD Groundwater bodies**	1	-	-	-	-

Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
47	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
47	7.2	Historical Flood Events	0	0	0	-	-
47	7.3	Flood Defences	0	0	0	-	-
48	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
48	7.5	Flood Storage Areas	0	0	0	-	-
49	7.6	Flood Zone 2	None (within 50m)				
49	7.7	Flood Zone 3	None (within 50m)				

Page	Section	Surface water flooding	
50	**8.1**	**Surface water flooding**	1 in 30 year, 0.3m - 1.0m (within 50m)

Page	Section	Groundwater flooding	
52	**9.1**	**Groundwater flooding**	Low (within 50m)

Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
53	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
54	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
54	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
54	10.4	Special Protection Areas (SPA)	0	0	0	0	0
54	10.5	National Nature Reserves (NNR)	0	0	0	0	0
55	**10.6**	**Local Nature Reserves (LNR)**	0	0	0	0	3
55	**10.7**	**Designated Ancient Woodland**	0	0	0	0	3
55	10.8	Biosphere Reserves	0	0	0	0	0
56	10.9	Forest Parks	0	0	0	0	0
56	10.10	Marine Conservation Zones	0	0	0	0	0
56	10.11	Green Belt	0	0	0	0	0
56	10.12	Proposed Ramsar sites	0	0	0	0	0

56	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
57	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
57	10.15	Nitrate Sensitive Areas	0	0	0	0	0
57	**10.16**	**Nitrate Vulnerable Zones**	2	0	0	0	6
59	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
60	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
61	11.1	World Heritage Sites	0	0	0	-	-
62	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
62	11.3	National Parks	0	0	0	-	-
62	**11.4**	**Listed Buildings**	0	2	0	-	-
63	11.5	Conservation Areas	0	0	0	-	-
63	11.6	Scheduled Ancient Monuments	0	0	0	-	-
63	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
64	**12.1**	**Agricultural Land Classification**	Grade 2 (within 250m)				
65	12.2	Open Access Land	0	0	0	-	-
65	12.3	Tree Felling Licences	0	0	0	-	-
65	12.4	Environmental Stewardship Schemes	0	0	0	-	-
66	**12.5**	**Countryside Stewardship Schemes**	0	1	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
67	**13.1**	**Priority Habitat Inventory**	1	1	1	-	-
68	13.2	Habitat Networks	0	0	0	-	-
68	13.3	Open Mosaic Habitat	0	0	0	-	-
68	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
69	**14.1**	**10k Availability**	Identified (within 500m)				
71	**14.2**	**Artificial and made ground (10k)**	0	0	0	1	-
72	**14.3**	**Superficial geology (10k)**	2	0	0	2	-

73	14.4	Landslip (10k)	0	0	0	0	-
74	**14.5**	**Bedrock geology (10k)**	2	0	0	2	-
75	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
76	**15.1**	**50k Availability**	Identified (within 500m)				
77	15.2	Artificial and made ground (50k)	0	0	0	0	-
77	15.3	Artificial ground permeability (50k)	0	0	-	-	-
78	**15.4**	**Superficial geology (50k)**	1	0	0	0	-
79	**15.5**	**Superficial permeability (50k)**	Identified (within 50m)				
79	15.6	Landslip (50k)	0	0	0	0	-
79	15.7	Landslip permeability (50k)	None (within 50m)				
80	**15.8**	**Bedrock geology (50k)**	1	0	0	0	-
81	**15.9**	**Bedrock permeability (50k)**	Identified (within 50m)				
81	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
82	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
83	**17.1**	**Shrink swell clays**	Low (within 50m)				
84	**17.2**	**Running sands**	Very low (within 50m)				
85	**17.3**	**Compressible deposits**	Negligible (within 50m)				
86	**17.4**	**Collapsible deposits**	Very low (within 50m)				
87	**17.5**	**Landslides**	Very low (within 50m)				
88	**17.6**	**Ground dissolution of soluble rocks**	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
89	18.1	Natural cavities	0	0	0	0	-
90	18.2	BritPits	0	0	0	0	-
90	**18.3**	**Surface ground workings**	7	0	1	-	-
90	18.4	Underground workings	0	0	0	0	0
91	18.5	Historical Mineral Planning Areas	0	0	0	0	-

91	**18.6**	**Non-coal mining**	2	0	0	2	0
92	18.7	Mining cavities	0	0	0	0	0
92	18.8	JPB mining areas	None (within 0m)				
92	18.9	Coal mining	None (within 0m)				
92	18.10	Brine areas	None (within 0m)				
92	18.11	Gypsum areas	None (within 0m)				
93	18.12	Tin mining	None (within 0m)				
93	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
94	**19.1**	**Radon**	Less than 1% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
96	**20.1**	**BGS Estimated Background Soil Chemistry**	4	2	-	-	-
96	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
97	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
98	21.1	Underground railways (London)	0	0	0	-	-
98	21.2	Underground railways (Non-London)	0	0	0	-	-
98	21.3	Railway tunnels	0	0	0	-	-
98	21.4	Historical railway and tunnel features	0	0	0	-	-
98	21.5	Royal Mail tunnels	0	0	0	-	-
99	21.6	Historical railways	0	0	0	-	-
99	21.7	Railways	0	0	0	-	-
99	21.8	Crossrail 1	0	0	0	0	-
99	21.9	Crossrail 2	0	0	0	0	-
99	21.10	HS2	0	0	0	0	-

Recent aerial photograph

Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2023. All Rights Reserved.

Capture Date: 05/04/2020

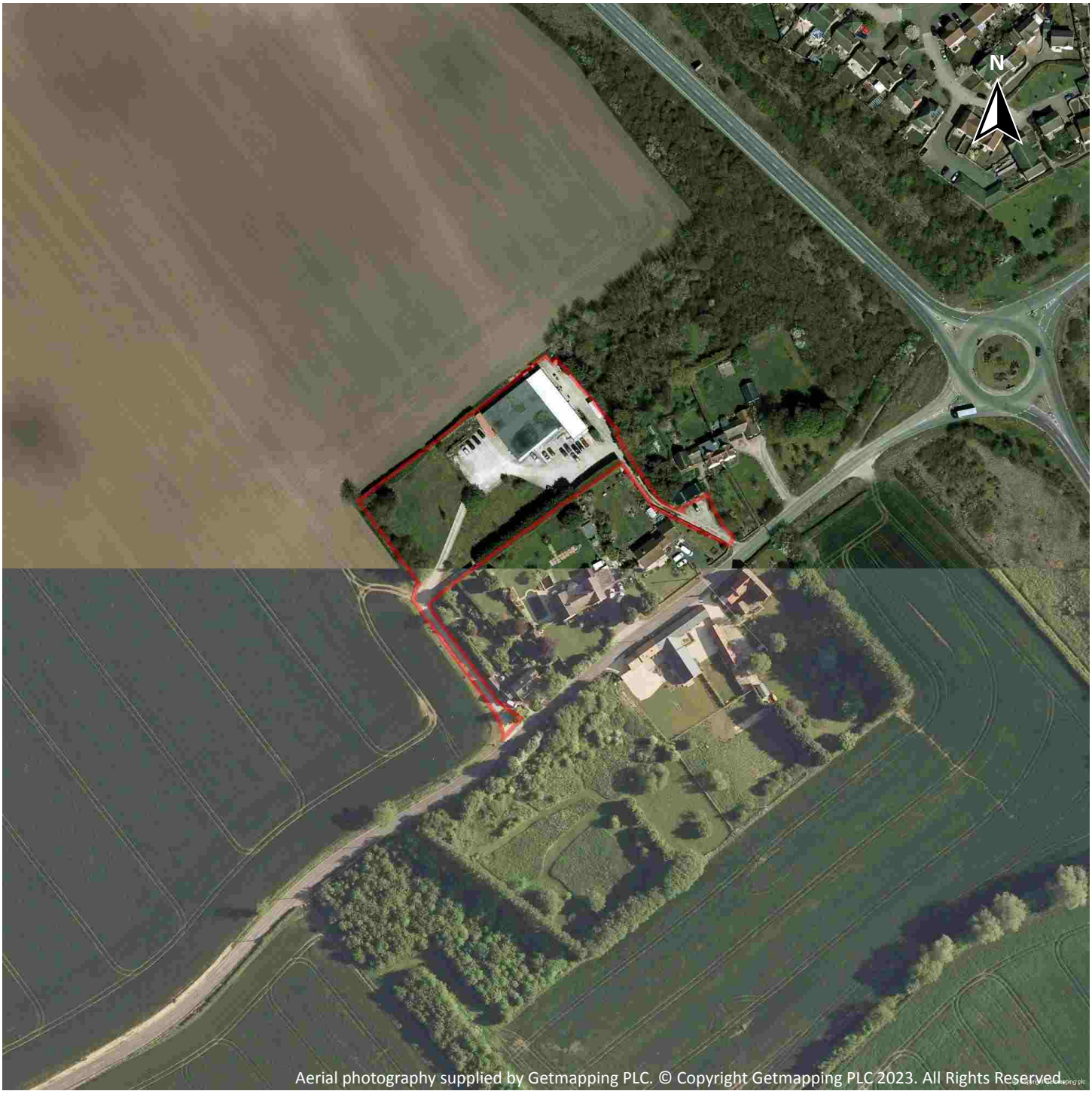
Site Area: 0.63ha

Recent site history - 2017 aerial photograph

Capture Date: 09/04/2017

Site Area: 0.63ha

Recent site history - 2013 aerial photograph



Capture Date: 02/05/2013

Site Area: 0.63ha

Recent site history - 2007 aerial photograph

Capture Date: 23/05/2007

Site Area: 0.63ha

Recent site history - 1999 aerial photograph

Capture Date: 18/07/1999

Site Area: 0.63ha

OS MasterMap site plan

Site Area: 0.63ha

1 Past land use

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Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

1.1 Historical industrial land uses

Records within 500m	7

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

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

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Unspecified Works**	**1991**	**2046596**

ID	Location	Land use	Dates present	Group ID
B	475m E	Unspecified Works	1959	2098041
B	476m E	Water Works	1924	2104105
B	476m E	Water Works	1946 - 1949	2118802
B	480m E	Water Works	1901	2091110
B	480m E	Water Works	1924	2064192
B	482m E	Unspecified Depot	1979	2048072

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**1**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

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

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Unspecified Tank**	**1959**	**344490**

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**1**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

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

ID	Location	Land use	Dates present	Group ID
1	379m NE	Electricity Substation	1998	226407

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped

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Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

2.1 Historical industrial land uses

Records within 500m	9

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 17**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Works**	**1991**	**2046596**
B	475m E	Unspecified Works	1959	2098041
B	476m E	Water Works	1946	2118802

ID	Location	Land Use	Date	Group ID
B	476m E	Water Works	1924	2104105
B	480m E	Water Works	1949	2118802
B	480m E	Water Works	1924	2104105
B	480m E	Water Works	1901	2091110
B	480m E	Water Works	1924	2064192
B	482m E	Unspecified Depot	1979	2048072

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**1**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 17**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Tank**	**1959**	**344490**

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**1**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 17**

ID	Location	Land Use	Date	Group ID
1	379m NE	Electricity Substation	1998	226407

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill

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Site Outline

Search buffers in metres (m)

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

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

3.2 Historical landfill (BGS records)

Records within 500m	0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

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

3.5 Historical waste sites

Records within 500m	0

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

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m	0

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

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

3.7 Waste exemptions

Records within 500m	1

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 20**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	402m NE	New Housing site currently green field	WEX261988	Using waste exemption	Not on a farm	Use of waste in construction

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

4 Current industrial land use

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Site Outline

Search buffers in metres (m)

Licensed Discharges to controlled waters

4.1 Recent industrial land uses

Records within 250m	0

Current potentially contaminative industrial sites.

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

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

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	0

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

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

4.13 Licensed Discharges to controlled waters

Records within 500m	3

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 23**

ID	Location	Address	Details	
1	2m S	HAZEL STUB FARM, CAMPS ROAD, HAVERHILL, CB9 9AF	Effluent Type: AGRICULTURE - UNSPECIFIED Permit Number: PR1NFG0252 Permit Version: 1 Receiving Water: -	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 25/09/1962 Effective Date: 25/09/1962 Revocation Date: 25/07/1991
A	494m E	PROPERTY IN COUPALS ROAD, HAVERHILL, SUFFOLK	Effluent Type: UNSPECIFIED Permit Number: PR2LFS05376 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 21/05/1976 Effective Date: 21/05/1976 Revocation Date: 29/09/2005
A	494m E	PROPERTY IN COUPALS ROAD, HAVERHILL, SUFFOLK	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR2LFS05376 Permit Version: 2 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 30/09/2005 Effective Date: 30/09/2005 Revocation Date: 30/09/2017

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

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

4.17 List 2 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	0

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

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

4.19 Pollution inventory substances

Records within 500m	0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer

Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	4

Aquifer status of groundwater held within superficial geology.

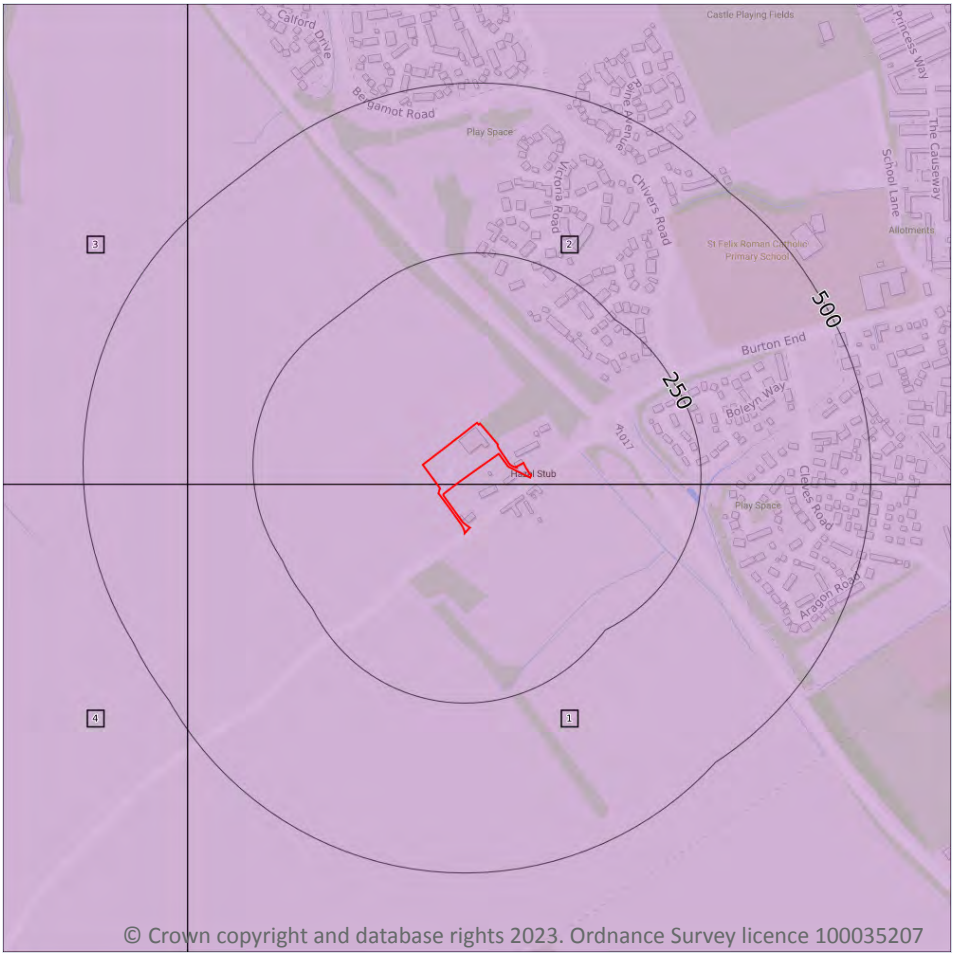
Features are displayed on the Hydrogeology map on **page 29**

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

ID	Location	Designation	Description
3	346m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	347m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	4

Aquifer status of groundwater held within bedrock geology.

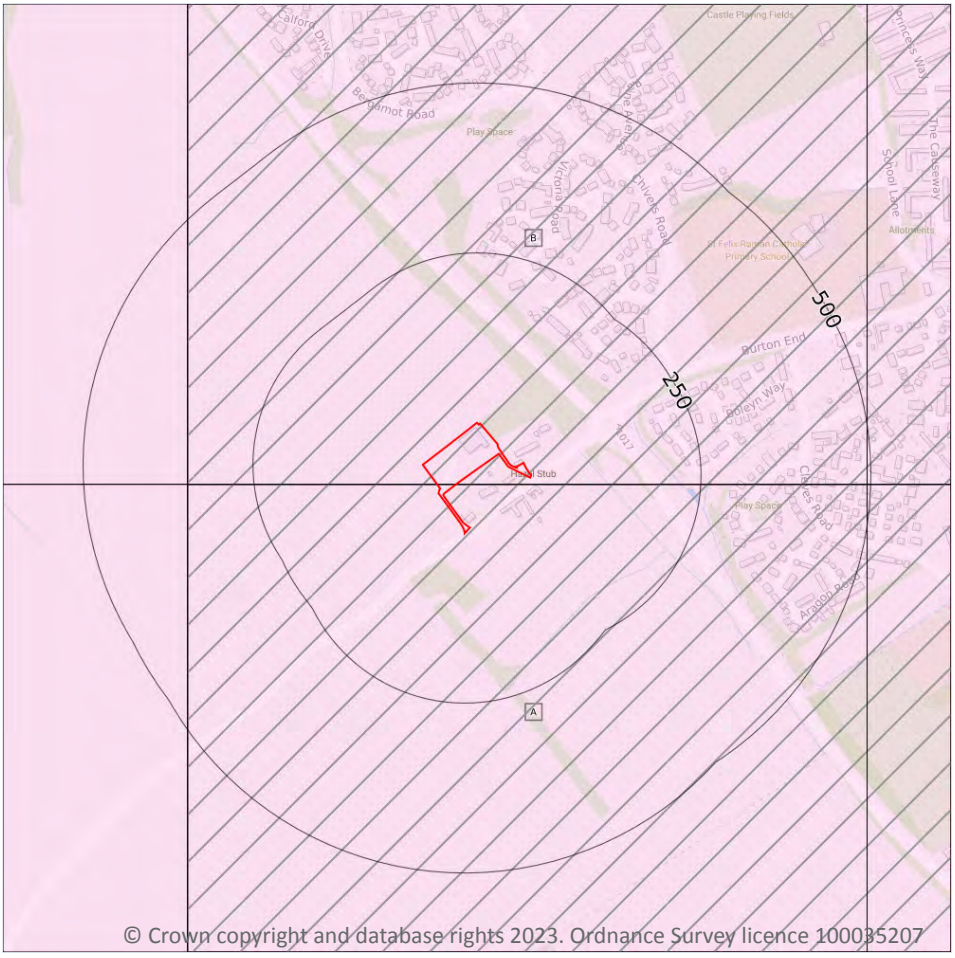
Features are displayed on the Bedrock aquifer map on **page 31**

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

ID	Location	Designation	Description
3	346m W	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
4	347m W	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

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

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	2

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 33**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
A	**On site**	**Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: Medium Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low**	**Vulnerability: Low Aquifer type: Principal Flow mechanism: Well connected fractures**
B	**On site**	**Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: Medium Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low**	**Vulnerability: Low Aquifer type: Principal Flow mechanism: Well connected fractures**

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	**2**

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
A	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**2.0%**
B	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**14.000000000000002%**

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

5.5 Groundwater vulnerability- local information

Records on site	**0**

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

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

Abstractions and Source Protection Zones

Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	34

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 35**

ID	Location	Details	
3	308m SW	Status: Historical Licence No: 8/36/11/*G/0006 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: NOSTERFIELD FM.,CAMBS. Data Type: Point Name: SILLS Easting: 565200 Northing: 244700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1987 Version End Date: -
-	1311m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: I.F.F. BORE 2, HAVERHILL Data Type: Point Name: INTERNATIONAL FLAVOURS & FRAGRANCES LTD Easting: 566800 Northing: 244800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1994 Version End Date: -
-	1311m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Boiler Feed Direct Source: GROUND WATER SOURCE OF SUPPLY Point: I.F.F. BORE 2, HAVERHILL Data Type: Point Name: INTERNATIONAL FLAVOURS & FRAGRANCES LTD Easting: 566800 Northing: 244800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1994 Version End Date: -
-	1311m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Non-Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: I.F.F. BORE 2, HAVERHILL Data Type: Point Name: INTERNATIONAL FLAVOURS & FRAGRANCES LTD Easting: 566800 Northing: 244800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1994 Version End Date: -

ID	Location	Details	
-	1311m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Process water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: I.F.F. BORE 2, HAVERHILL Data Type: Point Name: INTERNATIONAL FLAVOURS & FRAGRANCES LTD Easting: 566800 Northing: 244800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1994 Version End Date: -
-	1317m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Boiler Feed Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566790 Northing: 244720	Annual Volume (m^3): 180000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/01/2005 Version End Date: -
-	1317m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Non-Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566790 Northing: 244720	Annual Volume (m^3): 180000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/01/2005 Version End Date: -
-	1317m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566790 Northing: 244720	Annual Volume (m^3): 180000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/01/2005 Version End Date: -
-	1317m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Boiler Feed Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566790 Northing: 244720	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 103 Version Start Date: 29/03/2016 Version End Date: -

ID	Location	Details	
-	1317m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566790 Northing: 244720	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 103 Version Start Date: 29/03/2016 Version End Date: -
-	1317m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Non-Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566790 Northing: 244720	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 103 Version Start Date: 29/03/2016 Version End Date: -
-	1317m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566790 Northing: 244720	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 103 Version Start Date: 29/03/2016 Version End Date: -
-	1323m E	Status: Active Licence No: 8/36/11/*G/0001 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566797 Northing: 244723	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: NPS/WR/030457 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 104 Version Start Date: 02/03/2020 Version End Date: -
-	1323m E	Status: Active Licence No: 8/36/11/*G/0001 Details: Non-Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566797 Northing: 244723	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: NPS/WR/030457 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 104 Version Start Date: 02/03/2020 Version End Date: -

ID	Location	Details	
-	1323m E	Status: Active Licence No: 8/36/11/*G/0001 Details: Boiler Feed Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566797 Northing: 244723	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: NPS/WR/030457 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 104 Version Start Date: 02/03/2020 Version End Date: -
-	1323m E	Status: Active Licence No: 8/36/11/*G/0001 Details: Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 2 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566797 Northing: 244723	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: NPS/WR/030457 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 104 Version Start Date: 02/03/2020 Version End Date: -
-	1331m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Non-Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: I.F.F. BORE 1, HAVERHILL Data Type: Point Name: INTERNATIONAL FLAVOURS & FRAGRANCES LTD Easting: 566800 Northing: 244700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1994 Version End Date: -
-	1331m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Boiler Feed Direct Source: GROUND WATER SOURCE OF SUPPLY Point: I.F.F. BORE 1, HAVERHILL Data Type: Point Name: INTERNATIONAL FLAVOURS & FRAGRANCES LTD Easting: 566800 Northing: 244700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1994 Version End Date: -
-	1331m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: I.F.F. BORE 1, HAVERHILL Data Type: Point Name: INTERNATIONAL FLAVOURS & FRAGRANCES LTD Easting: 566800 Northing: 244700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1994 Version End Date: -

ID	Location	Details	
-	1331m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Process water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: I.F.F. BORE 1, HAVERHILL Data Type: Point Name: INTERNATIONAL FLAVOURS & FRAGRANCES LTD Easting: 566800 Northing: 244700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1994 Version End Date: -
-	1356m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Boiler Feed Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244830	Annual Volume (m^3): 180000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/01/2005 Version End Date: -
-	1356m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244830	Annual Volume (m^3): 180000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/01/2005 Version End Date: -
-	1356m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Non-Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244830	Annual Volume (m^3): 180000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/01/2005 Version End Date: -
-	1356m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Non-Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244830	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 103 Version Start Date: 29/03/2016 Version End Date: -

ID	Location	Details	
-	1356m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244830	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 103 Version Start Date: 29/03/2016 Version End Date: -
-	1356m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Boiler Feed Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244830	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 103 Version Start Date: 29/03/2016 Version End Date: -
-	1356m E	Status: Historical Licence No: 8/36/11/*G/0001 Details: Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244830	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: - Original Start Date: 20/04/1966 Expiry Date: - Issue No: 103 Version Start Date: 29/03/2016 Version End Date: -
-	1357m E	Status: Active Licence No: 8/36/11/*G/0001 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244826	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: NPS/WR/030457 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 104 Version Start Date: 02/03/2020 Version End Date: -
-	1357m E	Status: Active Licence No: 8/36/11/*G/0001 Details: Boiler Feed Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244826	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: NPS/WR/030457 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 104 Version Start Date: 02/03/2020 Version End Date: -

ID	Location	Details	
-	1357m E	Status: Active Licence No: 8/36/11/*G/0001 Details: Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244826	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: NPS/WR/030457 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 104 Version Start Date: 02/03/2020 Version End Date: -
-	1357m E	Status: Active Licence No: 8/36/11/*G/0001 Details: Non-Evaporative Cooling Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE 1 DUDDERY HILL HAVERHILL Data Type: Point Name: IFF (GREAT BRITAIN) LTD Easting: 566850 Northing: 244826	Annual Volume (m^3): 180,000 Max Daily Volume (m^3): 720 Original Application No: NPS/WR/030457 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 104 Version Start Date: 02/03/2020 Version End Date: -
-	1439m NW	Status: Historical Licence No: 8/36/11/*G/0039 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: HANCHETT HALL, WITHERSFIELD. Data Type: Point Name: HAYLOCK Easting: 564200 Northing: 245900	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1966 Version End Date: -
-	1571m E	Status: Historical Licence No: 8/36/11/*G/0002 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE AT HAVERHILL Data Type: Point Name: INNISFAIL LAUNDRY LTD Easting: 567000 Northing: 245500	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/01/1997 Version End Date: -
-	1631m SE	Status: Historical Licence No: 8/36/11/*G/0042 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: MOON HALL, HAVERHILL. Data Type: Point Name: CARTER Easting: 566700 Northing: 243900	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1994 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	0

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

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

5.8 Potable abstractions

Records within 2000m	0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

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

5.9 Source Protection Zones

Records within 500m	2

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

Features are displayed on the Abstractions and Source Protection Zones map on **page 35**

ID	Location	Type	Description
1	**On site**	**3**	**Total catchment**
2	165m N	3	Total catchment

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

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

6 Hydrology

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Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	7

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 44**

ID	Location	Type of water feature	Ground level	Permanence	Name
B	80m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
C	167m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	194m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	225m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	226m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	226m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	230m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**6**

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 44**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	**1**

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 44**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	**On site**	**River**	**Stour Brook**	**GB105036040950**	**Stour OC**	**Essex Combined**

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

6.4 WFD Surface water bodies

Records identified	**1**

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on **page 44**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	1539m N	River	Stour Brook	GB105036040950	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site	**1**

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 44**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	**On site**	**North Essex Chalk**	**GB40501G400700**	**Poor**	**Poor**	**Poor**	**2019**

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

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m	0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

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

7.2 Historical Flood Events

Records within 250m	0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

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

7.3 Flood Defences

Records within 250m	0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

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

7.5 Flood Storage Areas

Records within 250m	0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

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

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

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

7.7 Flood Zone 3

Records within 50m	0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

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

8 Surface water flooding

Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**Negligible**
Highest risk within 50m	**1 in 30 year, 0.3m - 1.0m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 50**

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding

Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

Highest risk on site	**Low**
Highest risk within 50m	**Low**

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 52**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations

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Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	3

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

Features are displayed on the Environmental designations map on **page 53**

ID	Location	Name	Data source
-	1646m NE	Haverhill Railway Walks	Natural England
4	1661m NE	Haverhill Railway Walks	Natural England
-	1856m NE	Haverhill Railway Walks	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	3

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on **page 53**

ID	Location	Name	Woodland Type
1	615m S	Ladygate/poplar Woods	Ancient & Semi-Natural Woodland
-	1647m NW	Markhams Wood	Ancient & Semi-Natural Woodland
-	1938m N	Howe Wood	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

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

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

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

10.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

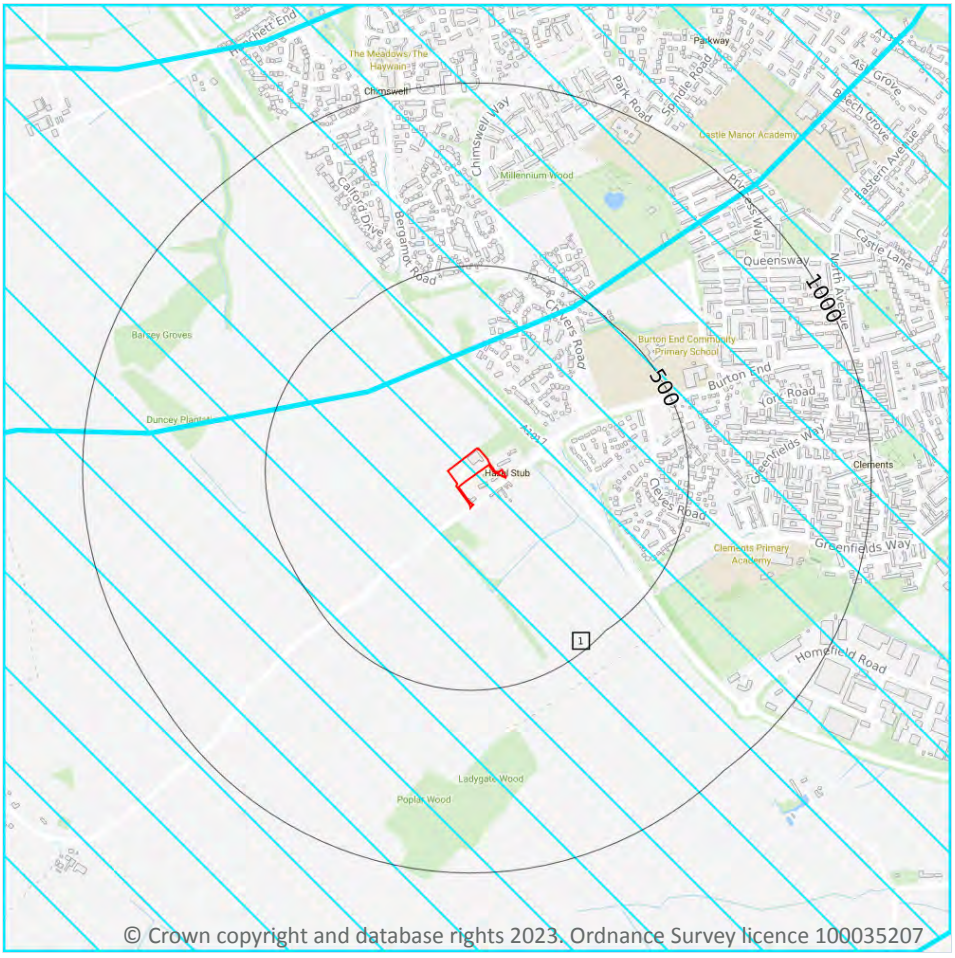
Records within 2000m	8

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	**Lower Stour NVZ**	**Surface Water**	**424**	**Existing**
On site	**Sandlings and Chelmsford**	**Groundwater**	**78**	**Existing**
891m N	Lower Stour NVZ	Surface Water	424	Existing
891m N	Sandlings and Chelmsford	Groundwater	78	Existing
1254m W	Lower Stour NVZ	Surface Water	424	Existing
1254m W	Sandlings and Chelmsford	Groundwater	78	Existing
1575m NW	Lower Stour NVZ	Surface Water	424	Existing
1575m NW	Sandlings and Chelmsford	Groundwater	78	Existing

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

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site	1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 59**

ID	Location	Type of developments requiring consultation
1	**On site**	**Infrastructure - Airports, helipads and other aviation proposals.** **Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

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

11 Visual and cultural designations

Site Outline

Search buffers in metres (m)

Listed buildings

Conservation areas

Conservation areas - no data

National Parks

Areas of Outstanding Natural Beauty

Registered parks and gardens

Scheduled Monuments

World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

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

11.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

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

11.4 Listed Buildings

Records within 250m	2

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on **page 61**

ID	Location	Name	Grade	Reference Number	Listed date
1	17m E	Hazel Stub Farm, Haverhill, West Suffolk, Suffolk, CB9	II	1375503	19/11/1993
2	20m E	Cowslip Pightle (Number 2), Haverhill, West Suffolk, Suffolk, CB9	II	1375502	09/05/1973

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

11.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

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

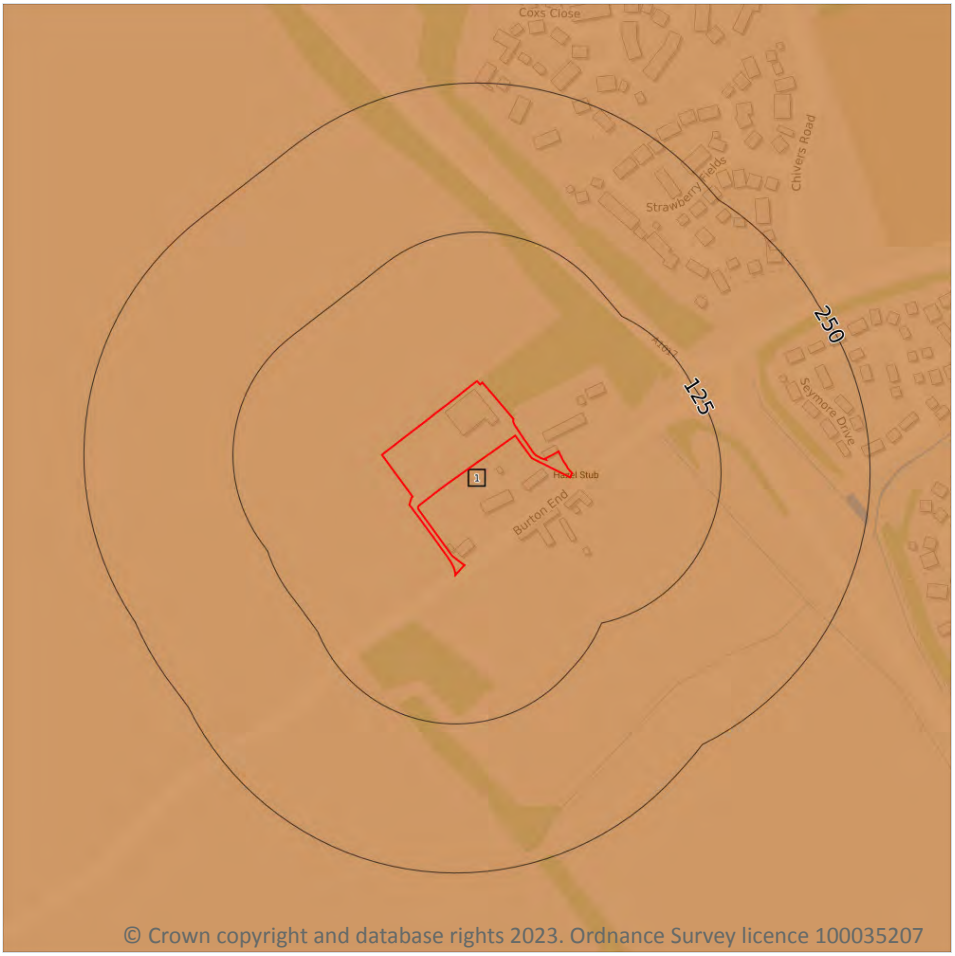
11.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 64**

ID	Location	Classification	Description
1	**On site**	**Grade 2**	**Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.**

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	**0**

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

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

12.3 Tree Felling Licences

Records within 250m	**0**

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	**0**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	**1**

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

Location	Reference	Scheme	Start Date	End Date
22m E	639439	Countryside Stewardship (Middle Tier)	01/01/2019	31/12/2023

This data is sourced from Natural England.

13 Habitat designations

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Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks
Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	**3**

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 67**

ID	Location	Main Habitat	Other habitats
1	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
2	1m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	66m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

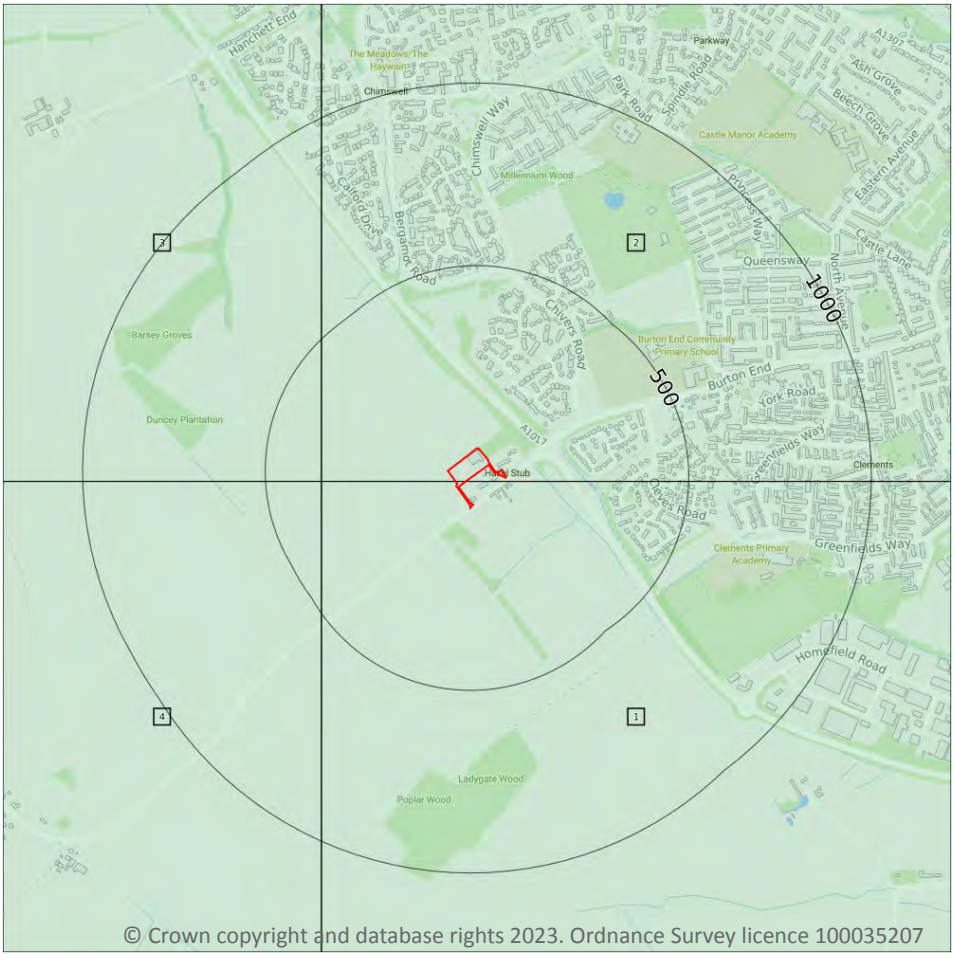
13.4 Limestone Pavement Orders

Records within 250m	0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



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Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m **4**

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 69**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**TL64SE**
2	**On site**	**Full**	**Full**	**Full**	**No coverage**	**TL64NE**
3	346m W	Full	Full	Full	No coverage	TL64NW
4	347m W	Full	Full	Full	No coverage	TL64SW

This data is sourced from the British Geological Survey.

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

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14.2 Artificial and made ground (10k)

Records within 500m	1

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 71**

ID	Location	LEX Code	Description	Rock description
1	420m NE	LSGR-UKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

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Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m **4**

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 72**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**LOFT-DMTN**	**Lowestoft Formation - Diamicton**	**Diamicton**
2	**On site**	**LOFT-DMTN**	**Lowestoft Formation - Diamicton**	**Diamicton**
3	346m W	LOFT-DMTN	Lowestoft Formation - Diamicton	Diamicton
4	347m W	LOFT-DMTN	Lowestoft Formation - Diamicton	Diamicton

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

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Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m **4**

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 74**

ID	Location	LEX Code	Description	Rock age
1	On site	LESE-CHLK	Lewes Nodular Chalk Formation And Seaford Chalk Formation (undifferentiated) - Chalk	Santonian Age - Turonian Age
2	On site	LESE-CHLK	Lewes Nodular Chalk Formation And Seaford Chalk Formation (undifferentiated) - Chalk	Santonian Age - Turonian Age

ID	Location	LEX Code	Description	Rock age
3	346m W	LESE-CHLK	Lewes Nodular Chalk Formation And Seaford Chalk Formation (undifferentiated) - Chalk	Santonian Age - Turonian Age
4	347m W	LESE-CHLK	Lewes Nodular Chalk Formation And Seaford Chalk Formation (undifferentiated) - Chalk	Santonian Age - Turonian Age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	**0**

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability

Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 76**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW205_saffron_walden_v4**

This data is sourced from the British Geological Survey.

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

15.2 Artificial and made ground (50k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial

Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m	1

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 78**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**LOFT-DMTN**	**LOWESTOFT FORMATION**	**DIAMICTON**

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**Moderate**	**Low**
On site	**Mixed**	**Moderate**	**Low**

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock

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Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m	1

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 80**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LESE-CHLK**	**LEWES NODULAR CHALK FORMATION AND SEAFORD CHALK FORMATION (UNDIFFERENTIATED) - CHALK**	**TURONIAN**

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Very High**	**Very High**
On site	**Fracture**	**Very High**	**Very High**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

16 Boreholes

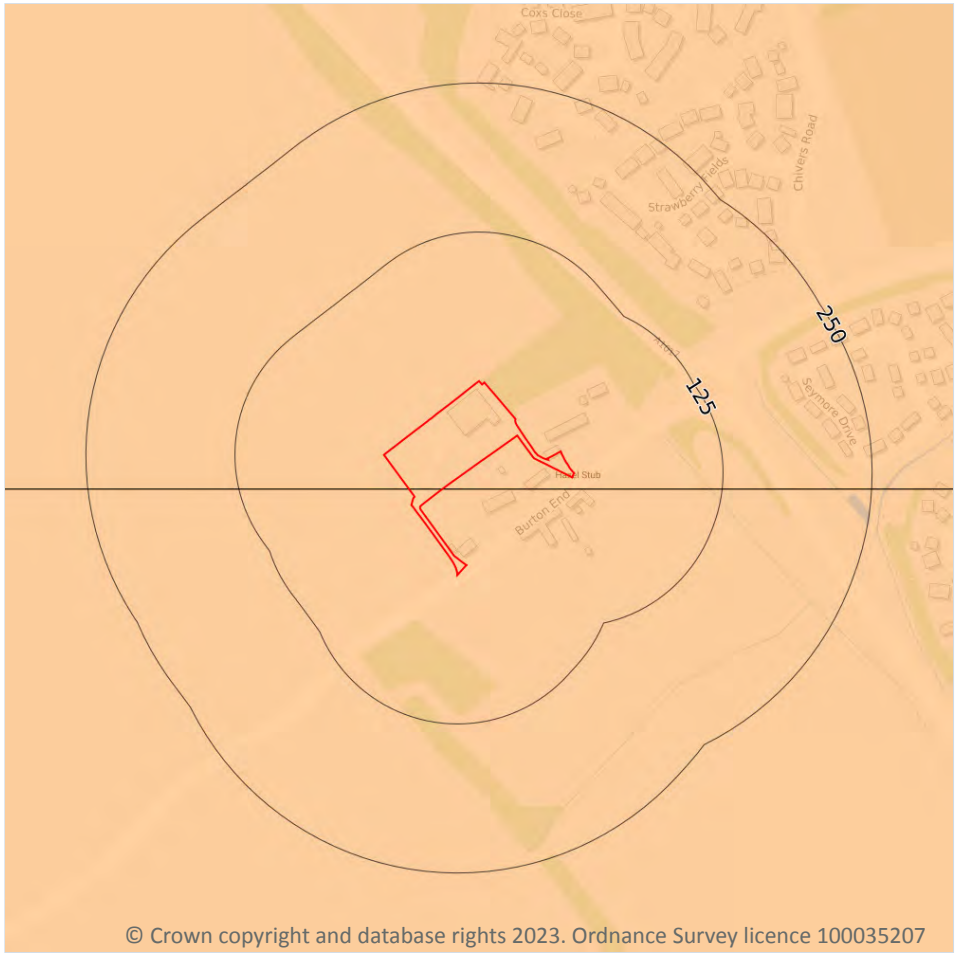
16.1 BGS Boreholes

Records within 250m	0

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	1

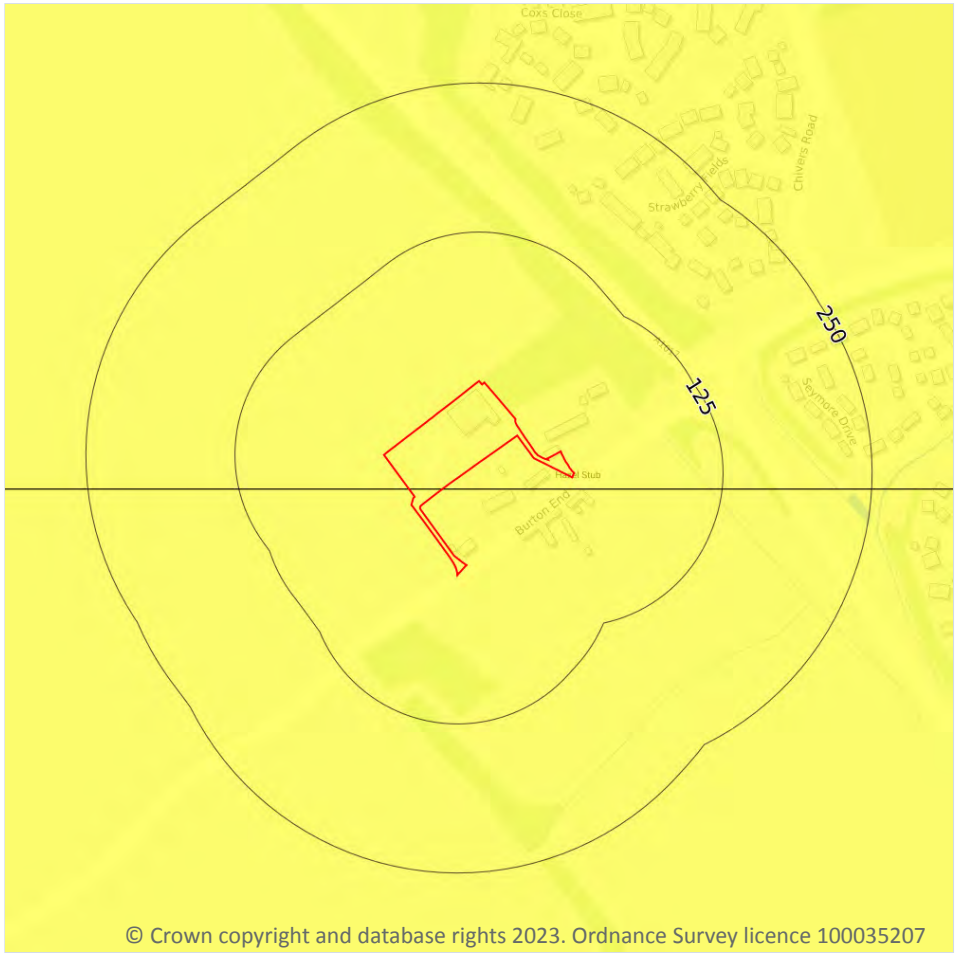
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 83**

Location	Hazard rating	Details
On site	**Low**	**Ground conditions predominantly medium plasticity.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	1

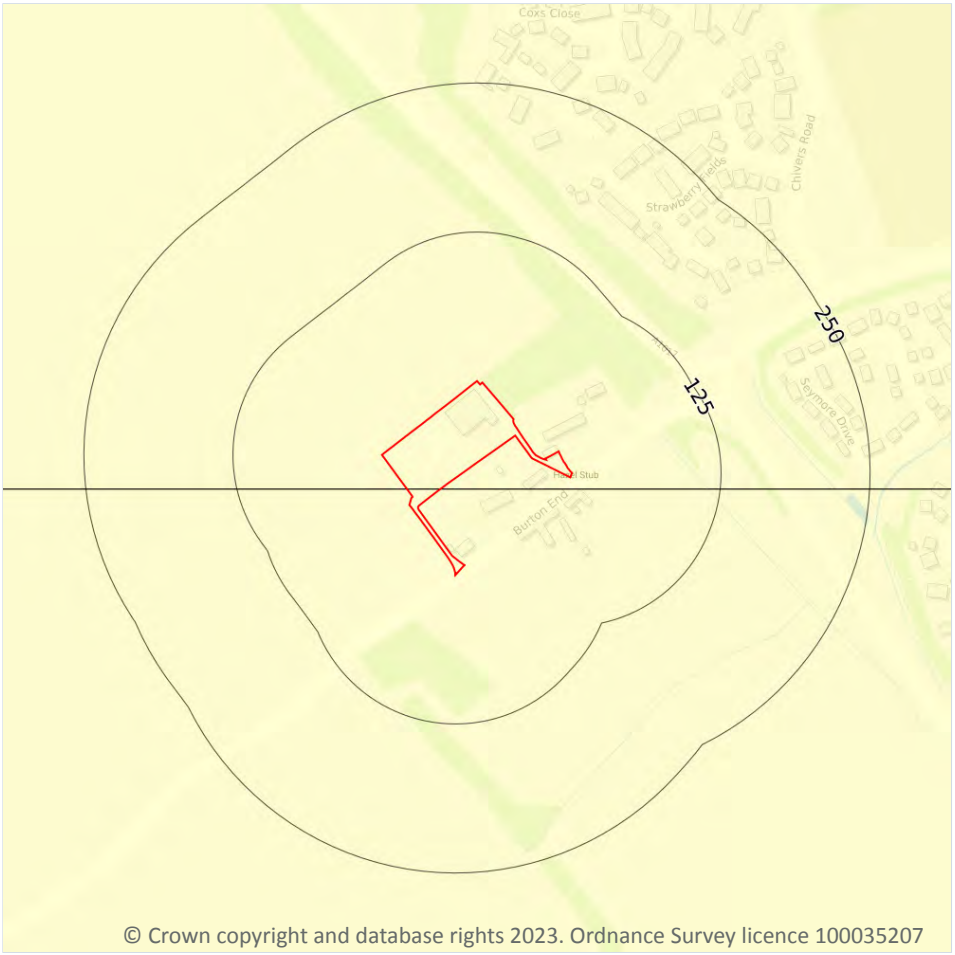
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 84**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	1

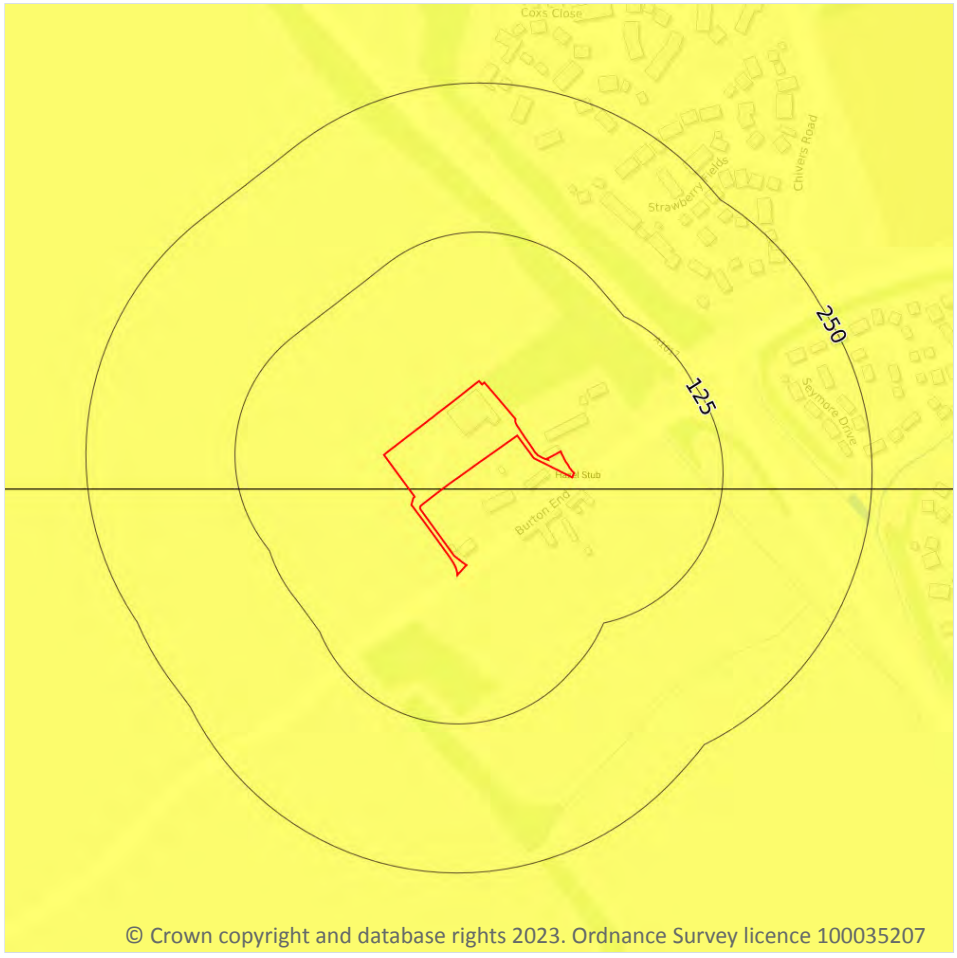
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 85**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	1

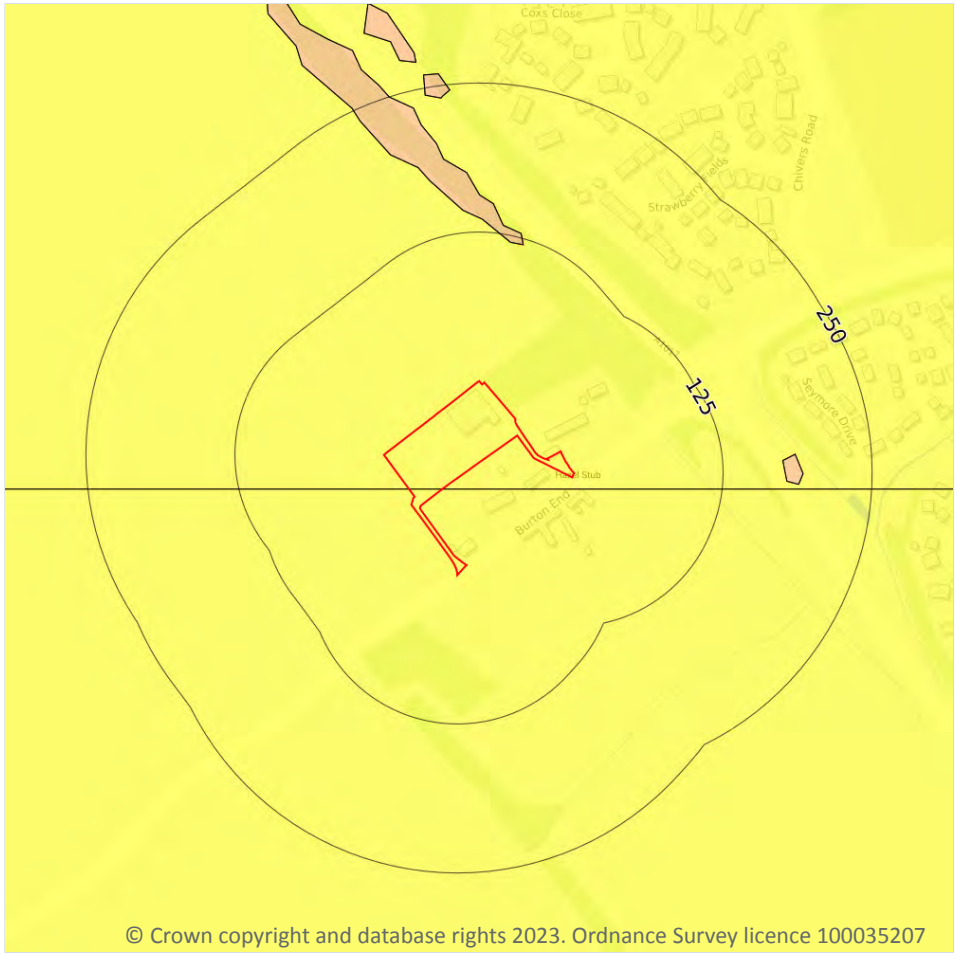
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 86**

Location	Hazard rating	Details
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	1

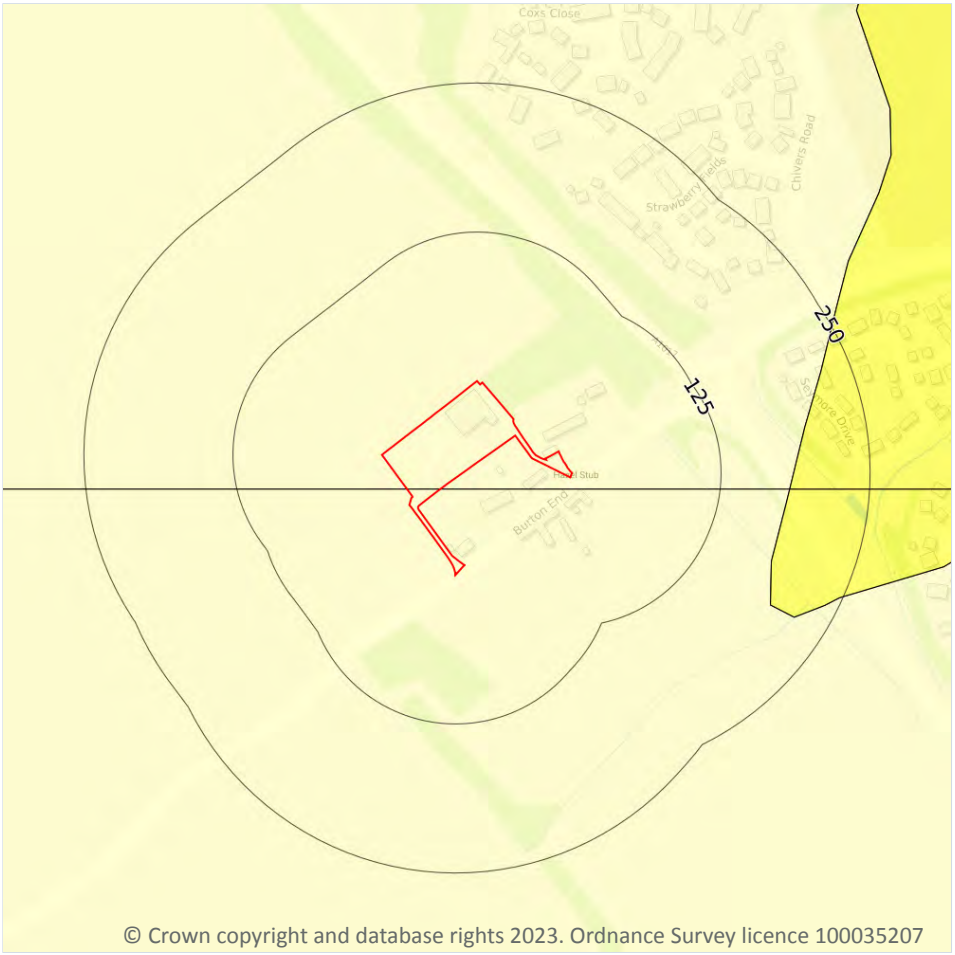
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 87**

Location	Hazard rating	Details
On site	**Very low**	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	1

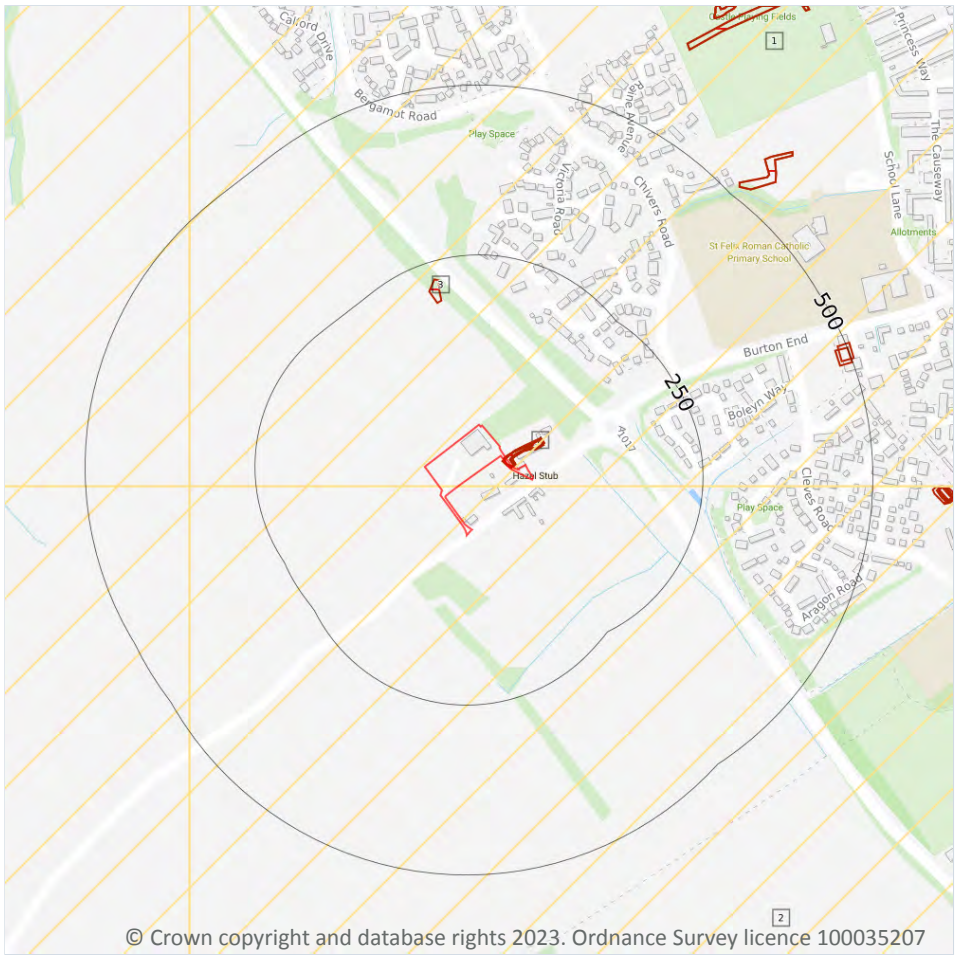
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 88**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

This data is sourced from the British Geological Survey.

18 Mining, ground workings and natural cavities



Site Outline

Search buffers in metres (m)

Natural cavities (Area)

Natural cavities (Point)

BritPits

Surface ground workings

Underground workings

Historical Mineral Planning Areas

Mining Cavities

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m	0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	8

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 89**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Pond**	**1946**	**1:10560**
A	**On site**	**Pond**	**1949**	**1:10560**
A	**On site**	**Pond**	**1924**	**1:10560**
A	**On site**	**Pond**	**1901**	**1:10560**
A	**On site**	**Pond**	**1885**	**1:10560**
A	**On site**	**Pond**	**1924**	**1:10560**
A	**On site**	**Pond**	**1924**	**1:10560**
3	190m N	Pond	1967	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	4

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

Features are displayed on the Mining, ground workings and natural cavities map on **page 89**

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**Not available**	**Chalk**	**A**	**Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered**
2	**On site**	**Not available**	**Chalk**	**A**	**Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered**
4	346m W	Not available	Chalk	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
5	347m W	Not available	Chalk	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

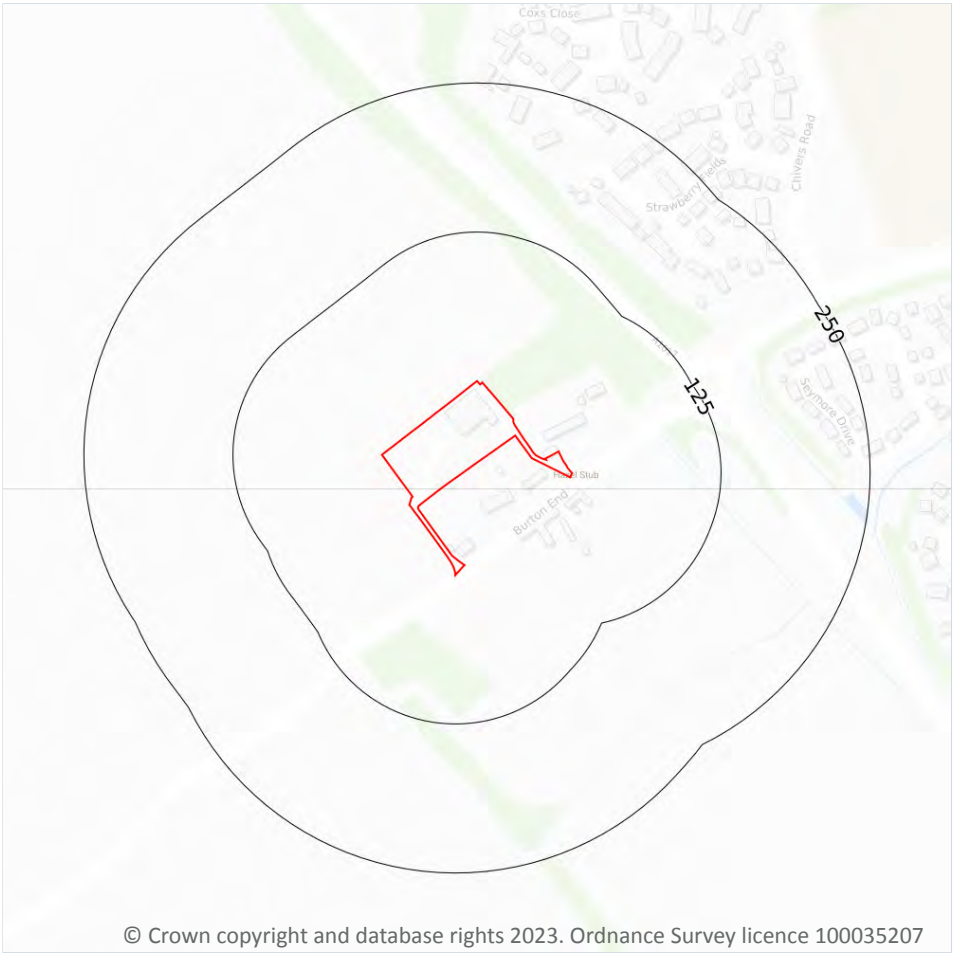
18.13 Clay mining

Records on site	0

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

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

19 Radon



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Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

19.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 94**

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

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

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	6

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
10m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
10m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects

21.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

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

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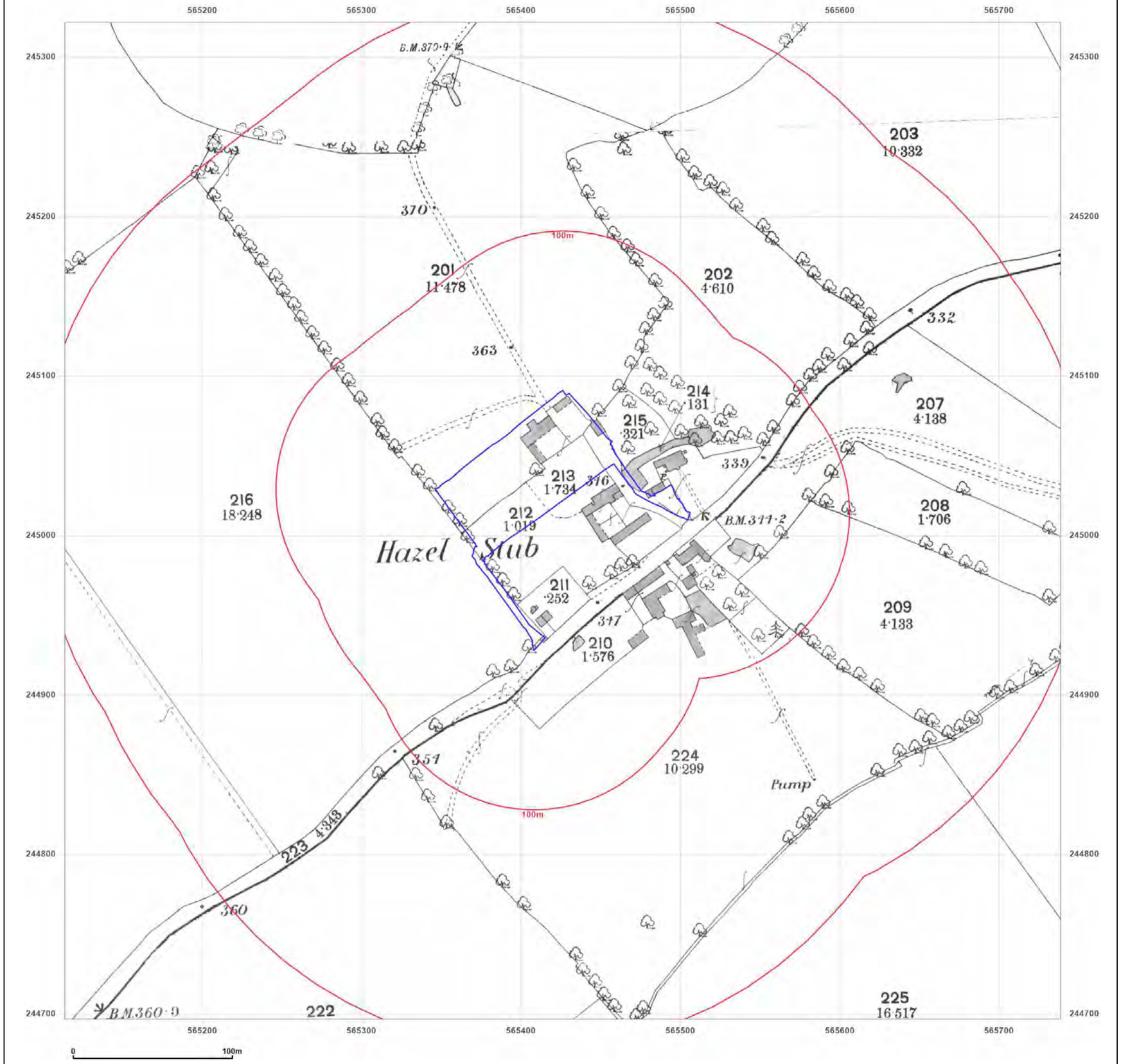
Appendix D

Groundsure Historical Map Pack



Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1884-1886**

Scale: 1:2,500

Printed at: 1:2,500

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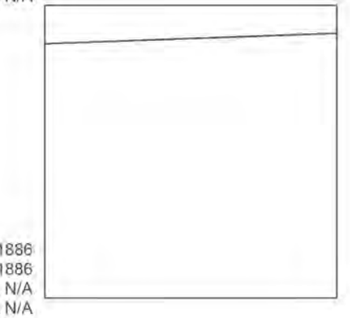
Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A



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Revised 1886
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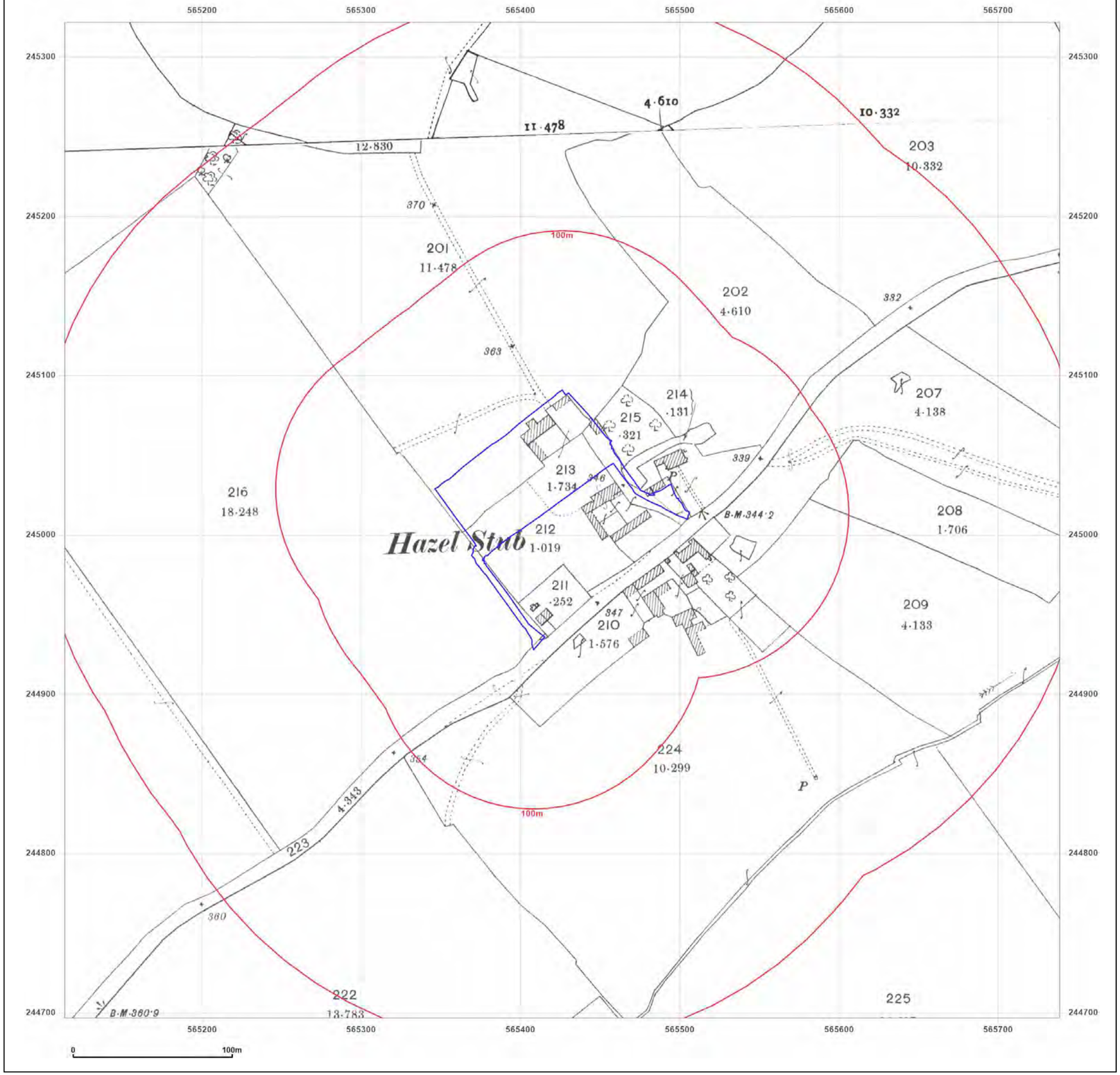

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1898-1903**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1903
Revised 1903
Edition N/A
Copyright N/A
Levelled N/A

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Revised 1898
Edition N/A
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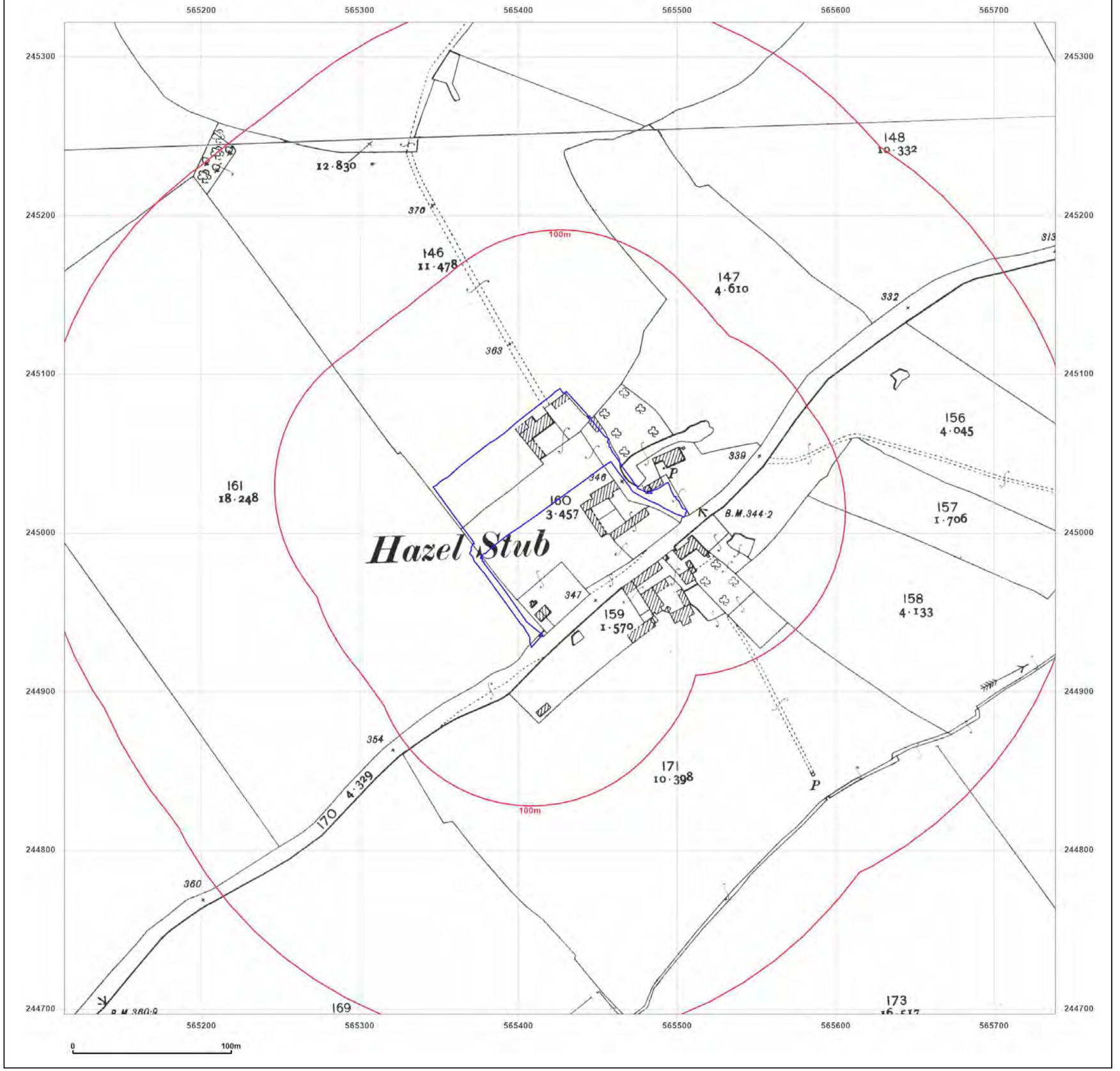

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Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1903**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1903
Revised 1903
Edition N/A
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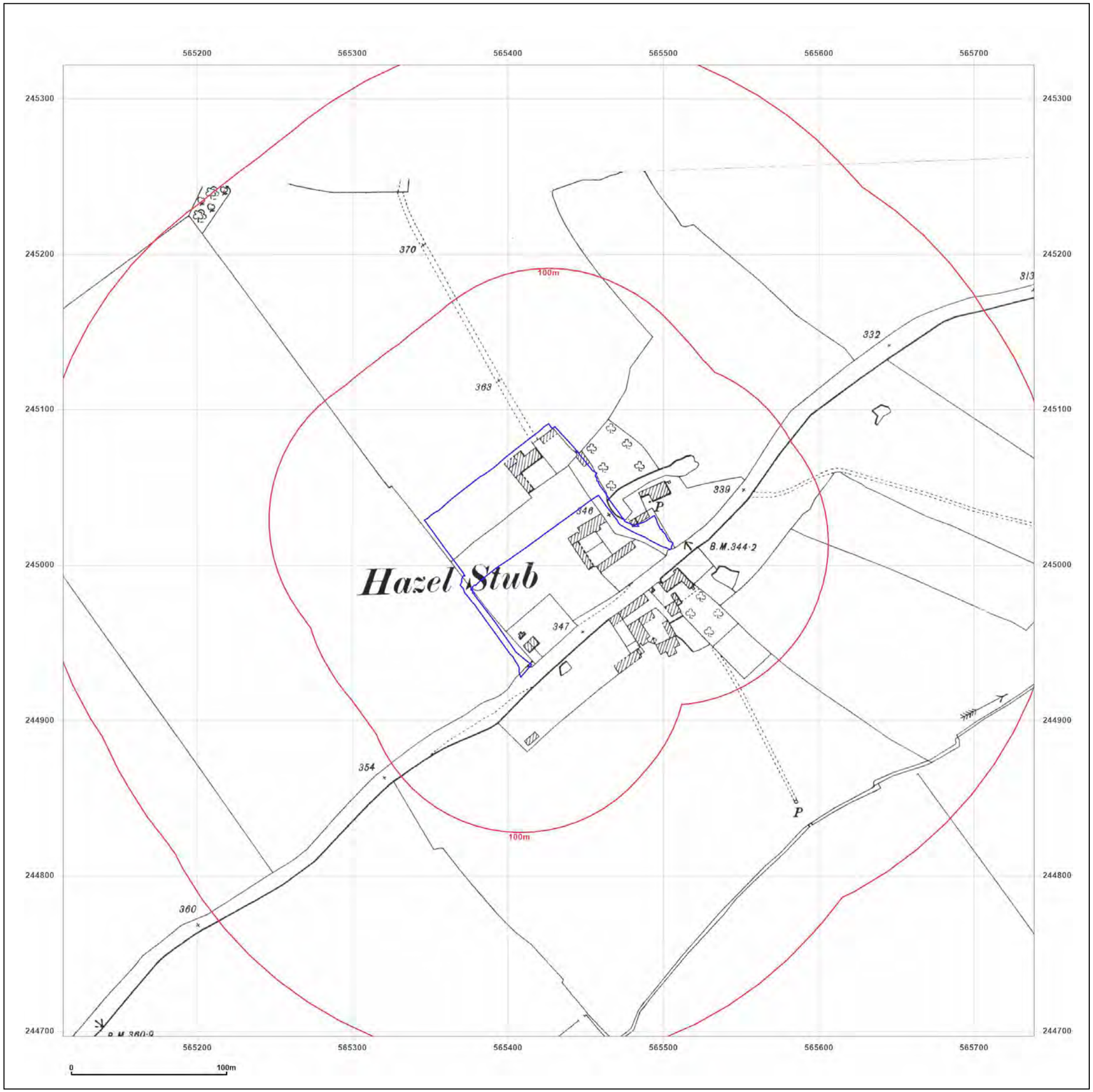

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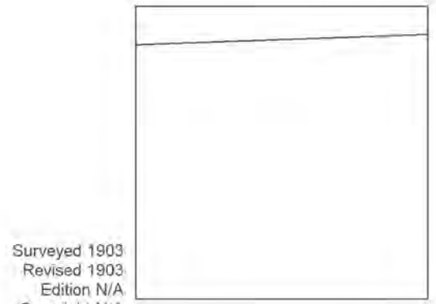

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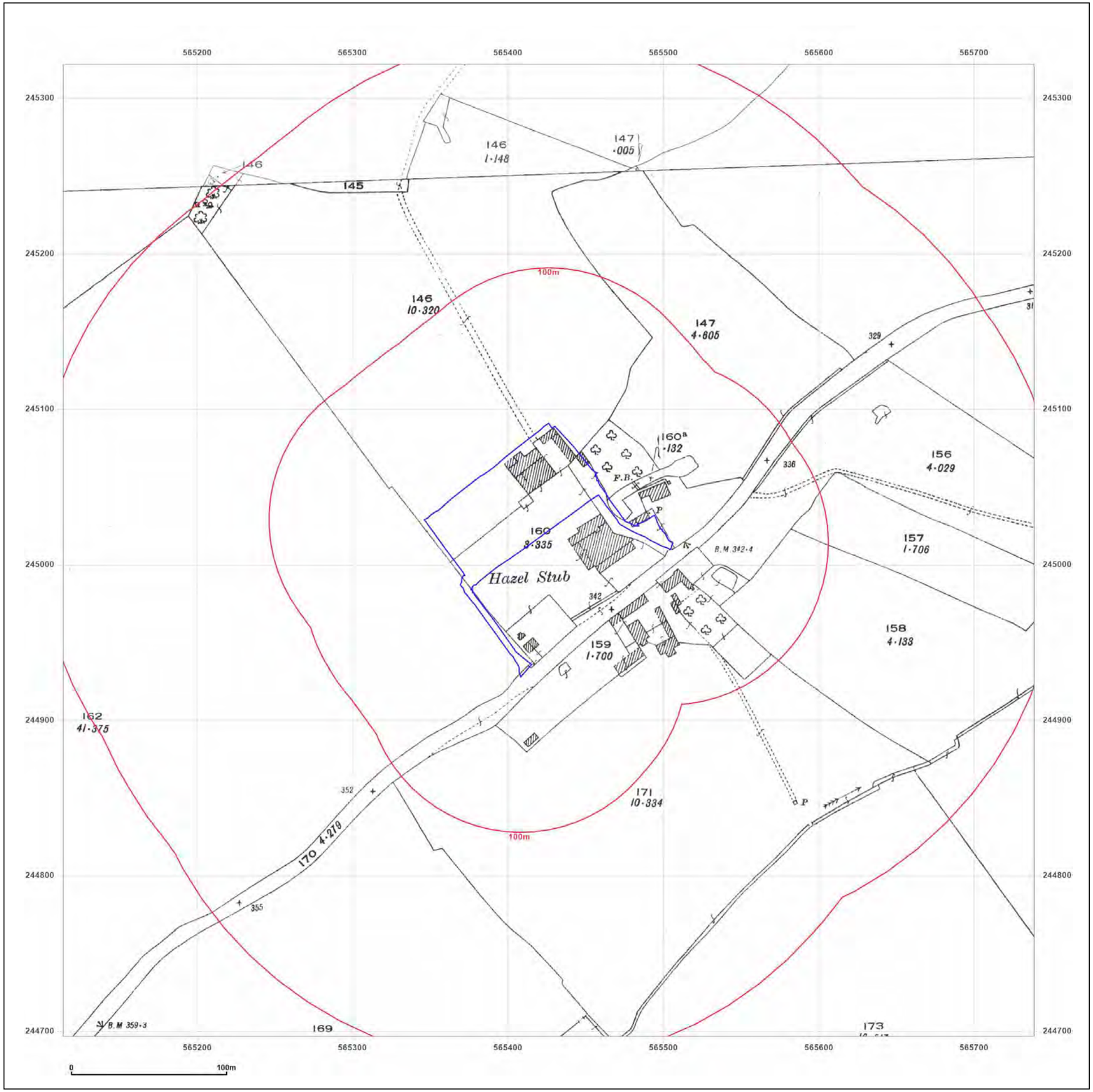

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Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1926**

Scale: 1:2,500

Printed at: 1:2,500

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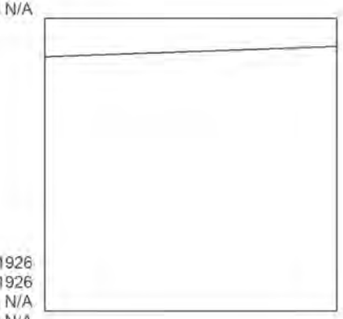
Surveyed 1926
Revised 1926
Edition N/A
Copyright N/A
Levelled N/A



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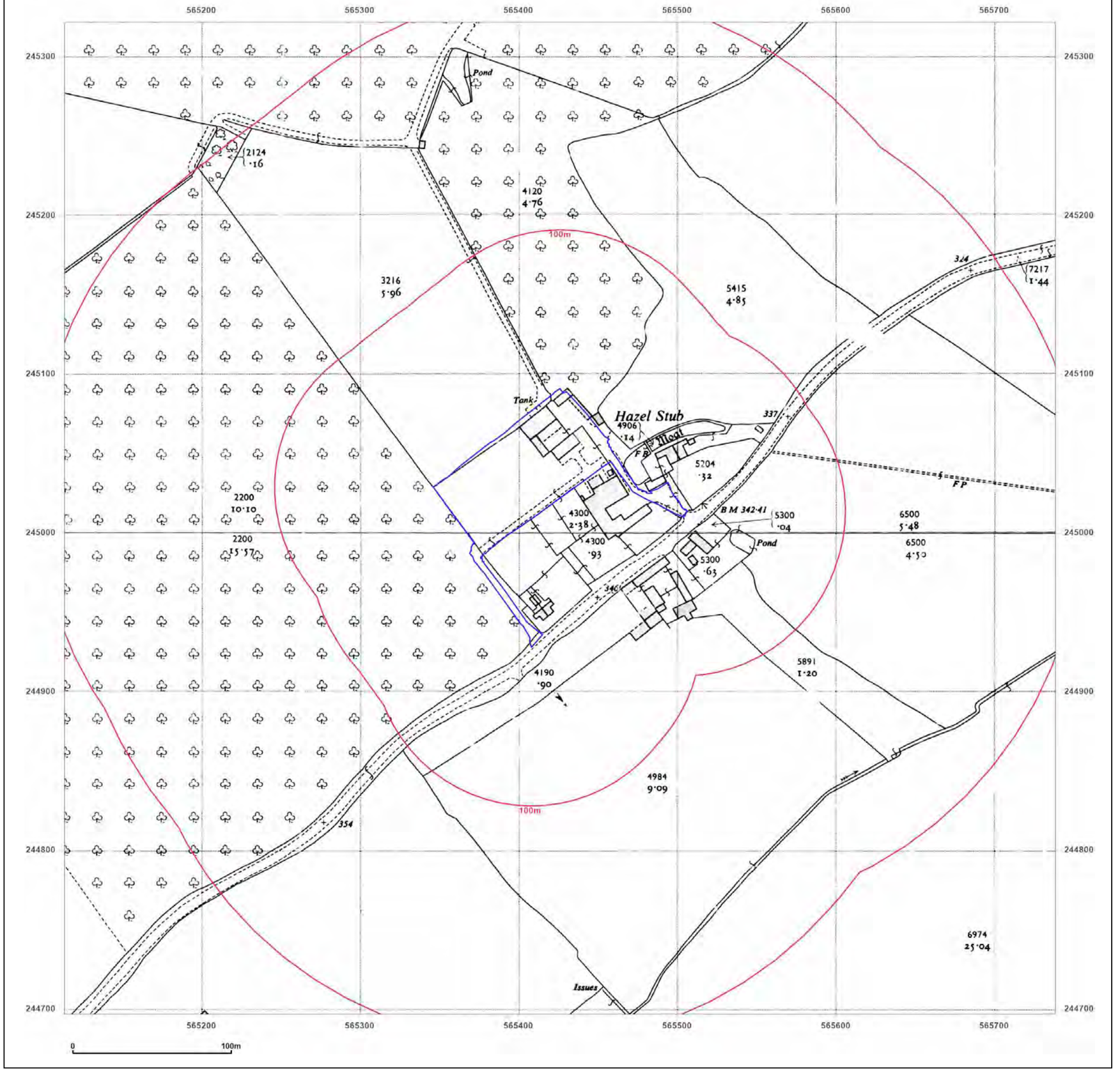

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Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: National Grid

Map date: **1960**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed N/A
Revised N/A
Edition N/A
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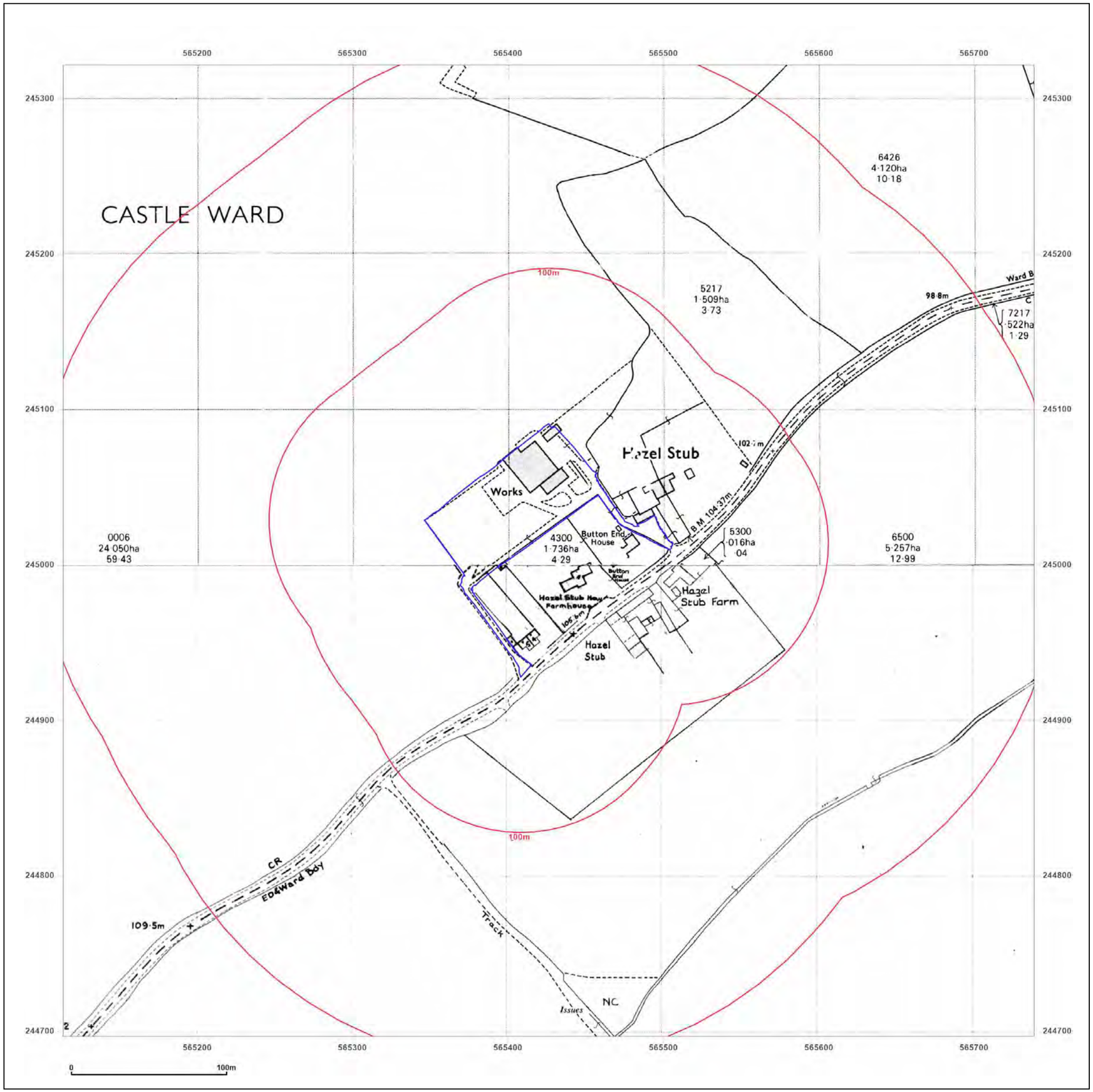

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Report Ref: GS-9307679
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Map Name: National Grid

Map date: **1985-1988**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed N/A
Revised N/A
Edition N/A
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Surveyed 1970
Revised 1988
Edition N/A
Copyright 1988
Levelled 1970

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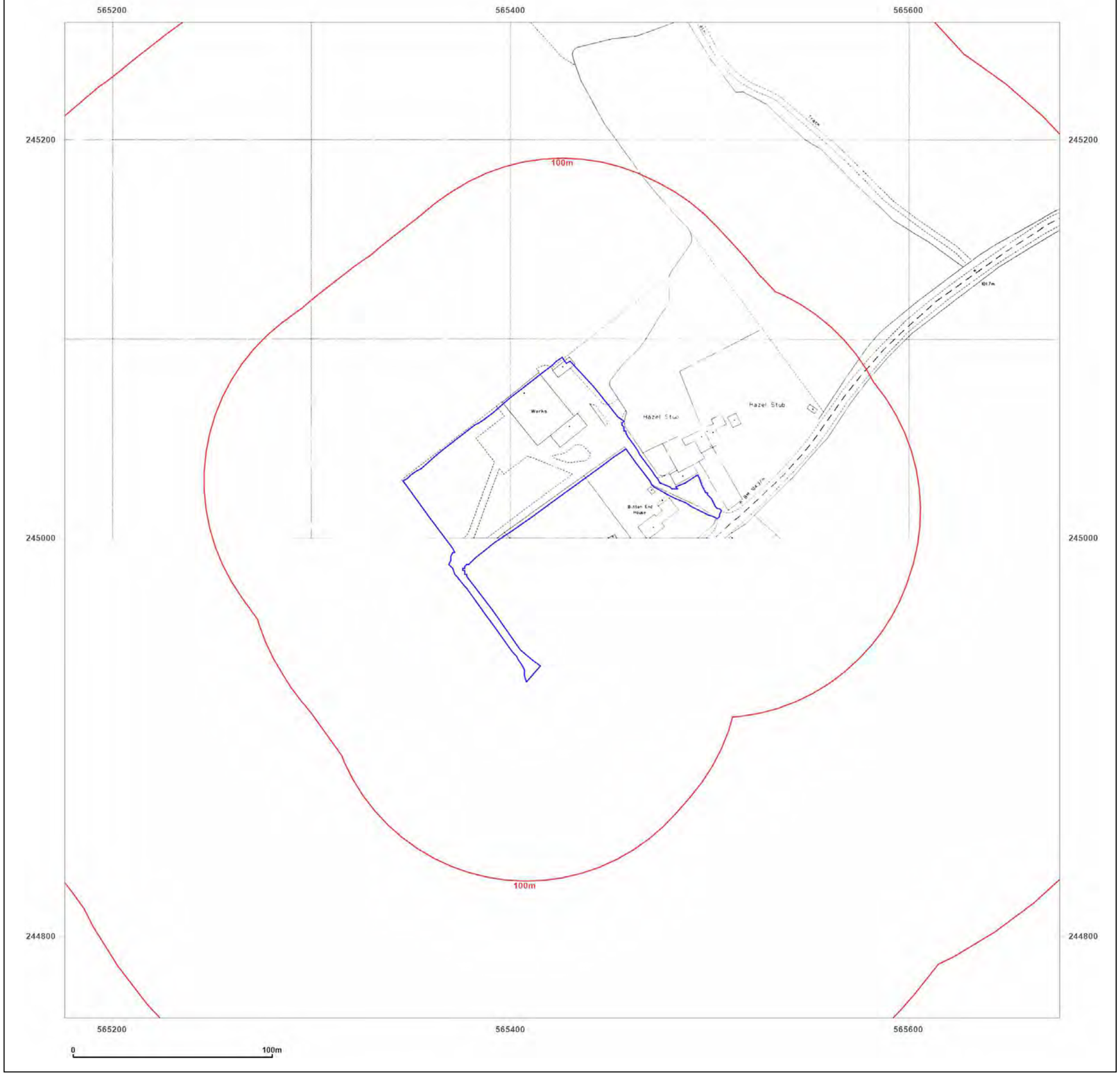

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Site Details:

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Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: National Grid
Map date: **1994**
Scale: 1:1,250
Printed at: 1:2,000

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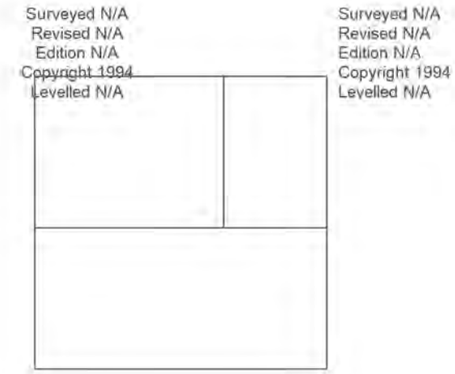

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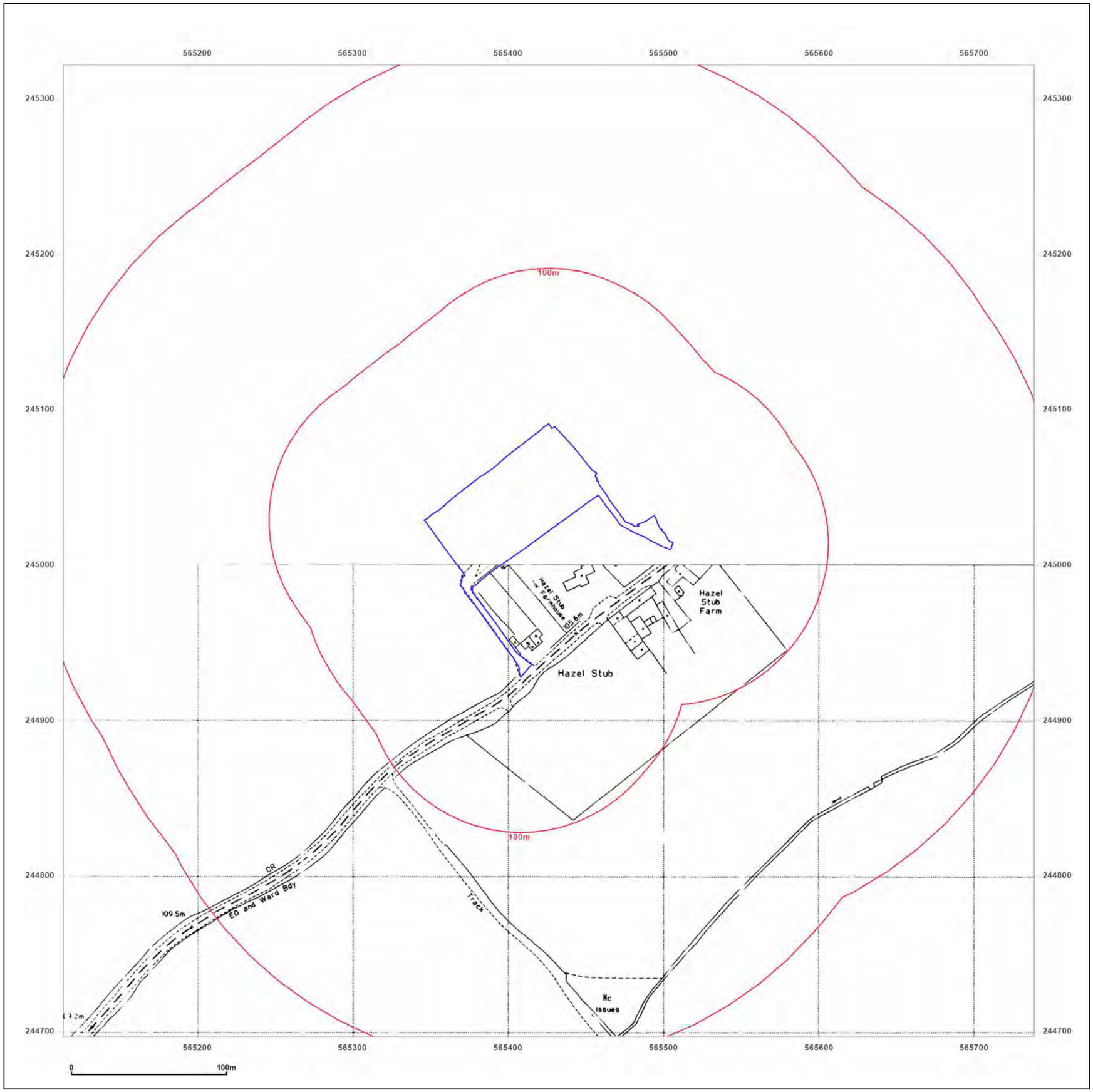

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Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: National Grid

Map date: **1994**

Scale: 1:2,500

Printed at: 1:2,500

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Revised N/A
Edition N/A
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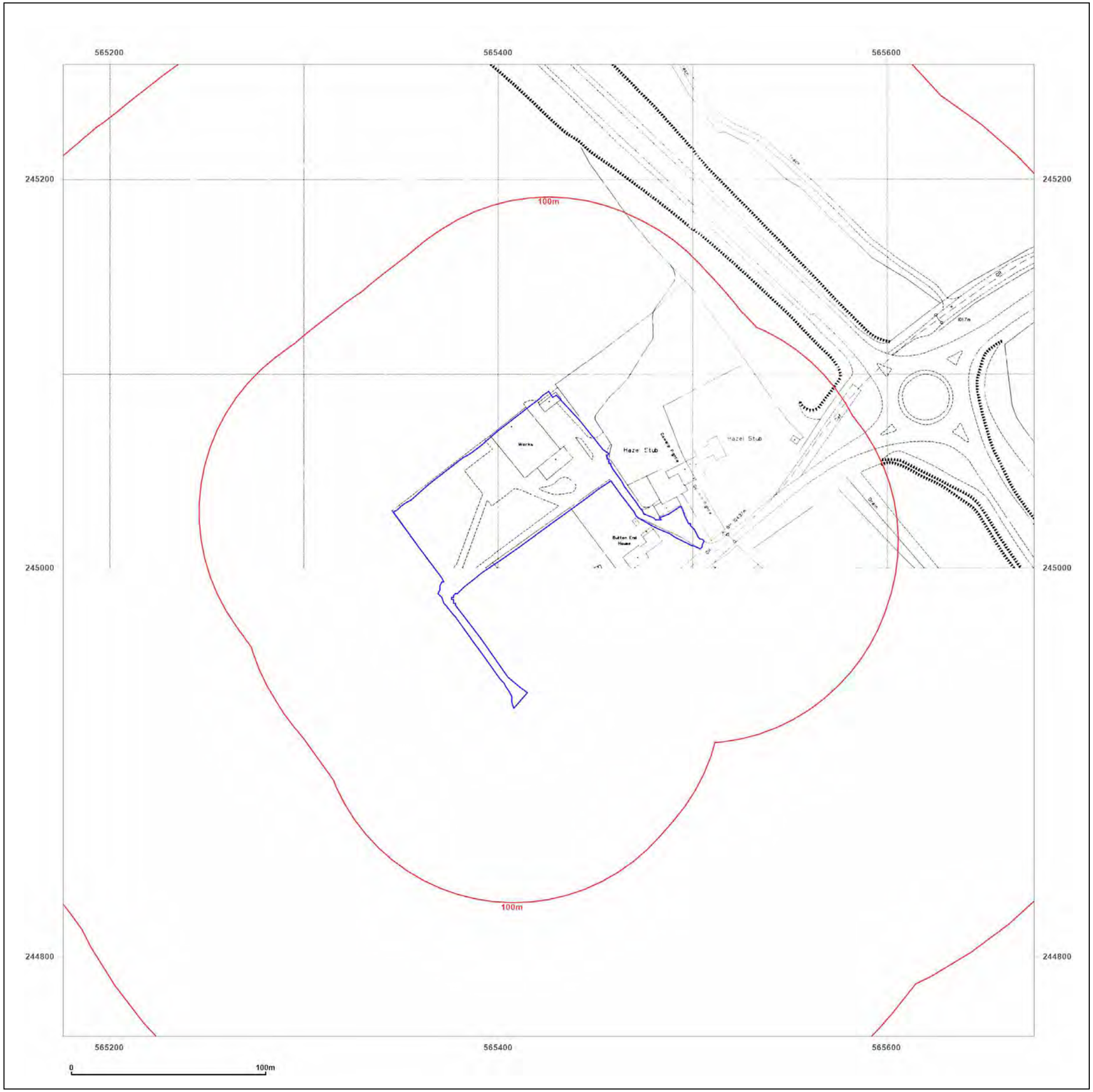

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Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: National Grid
Map date: **1995**
Scale: 1:1,250
Printed at: 1:2,000

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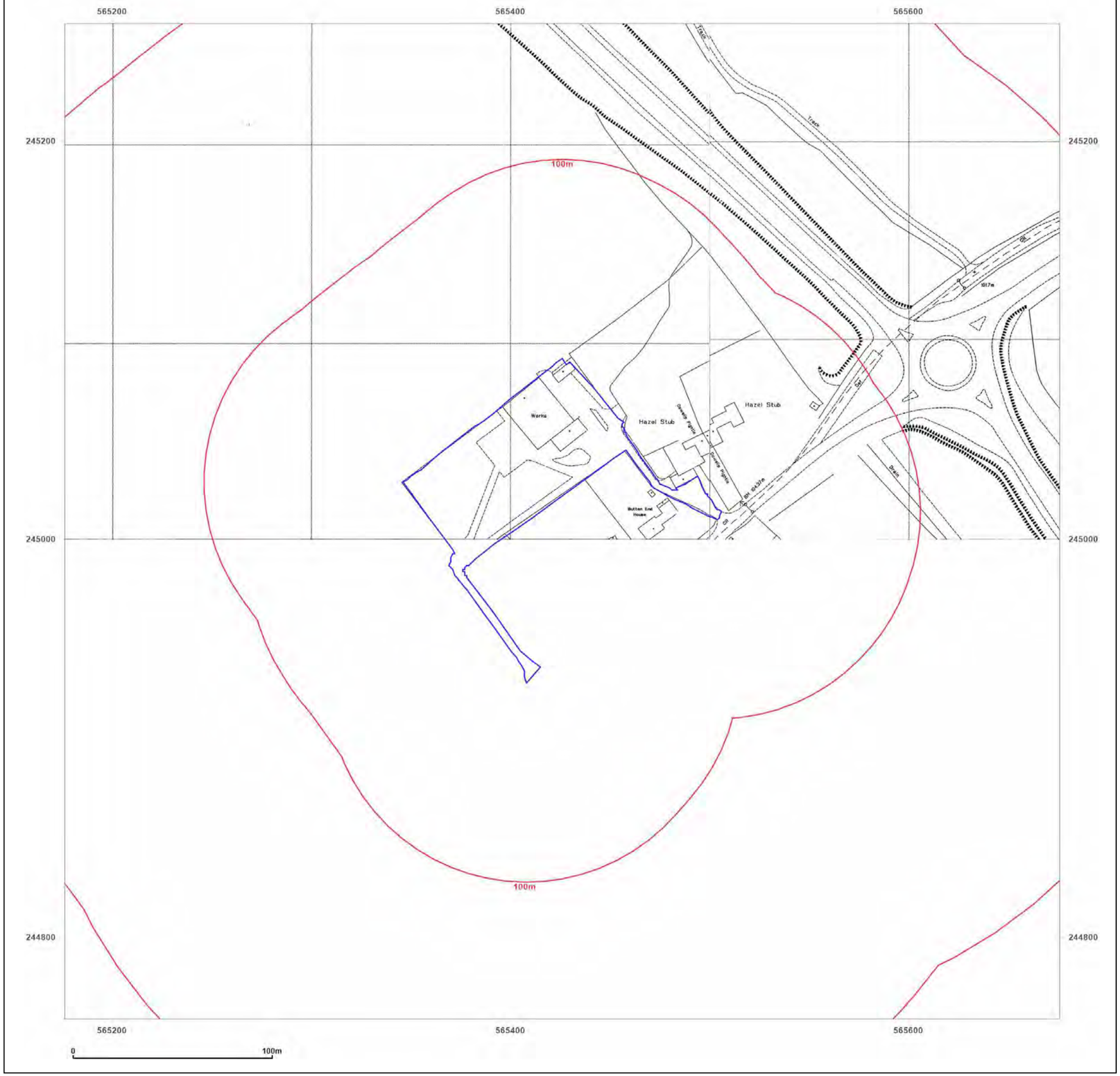

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Report Ref: GS-9307679
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Map Name: National Grid

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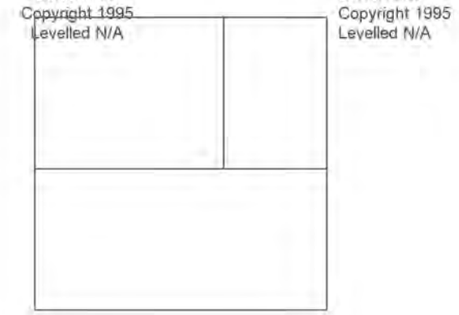

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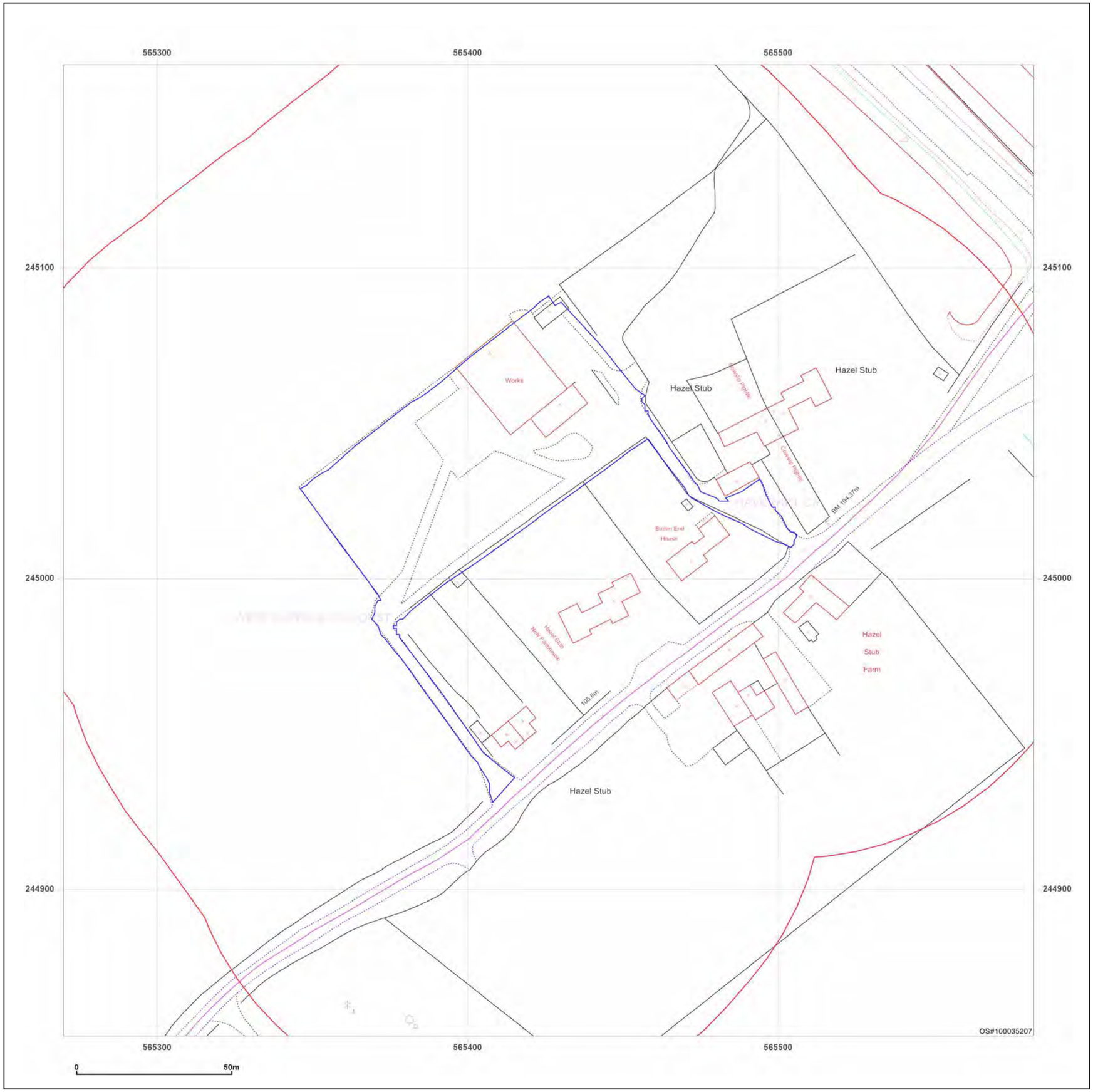

Groundsure INSIGHTS

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HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

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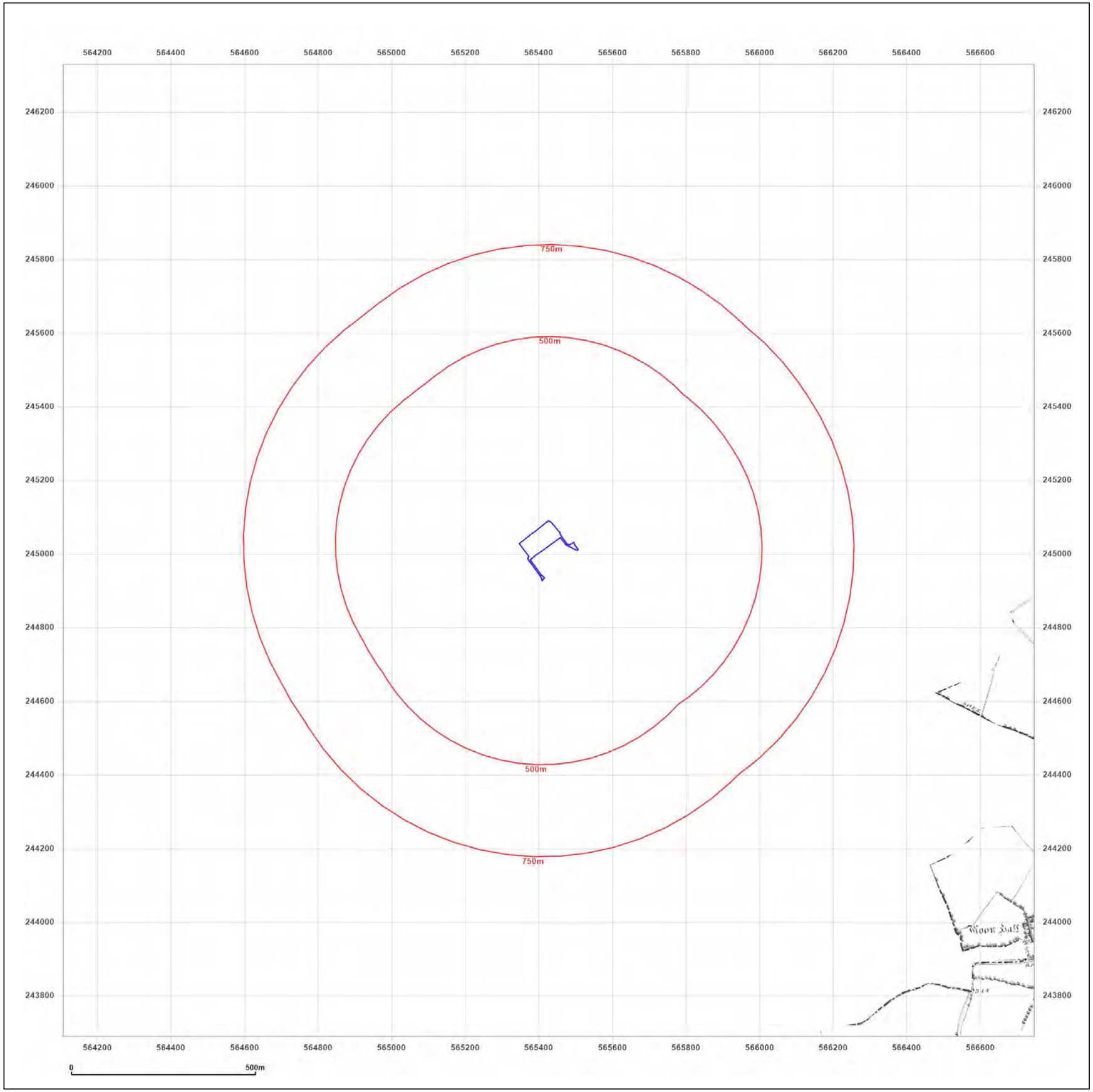

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

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Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1880**

Scale: 1:10,560

Printed at: 1:10,560

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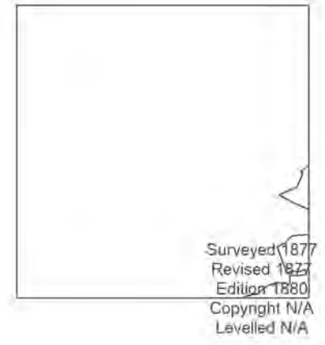

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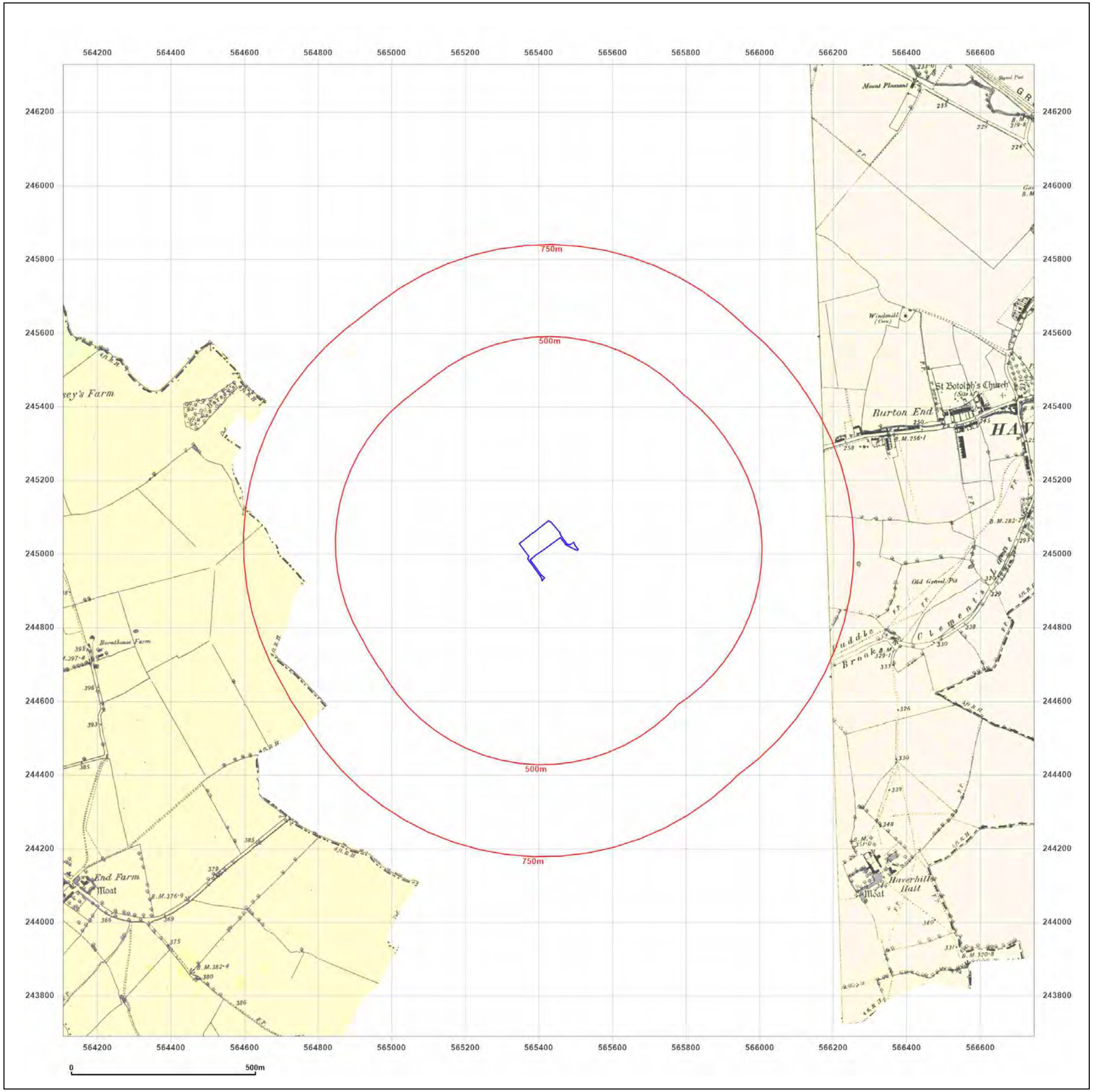

Groundsure INSIGHTS

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HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1885**

Scale: 1:10,560

Printed at: 1:10,560

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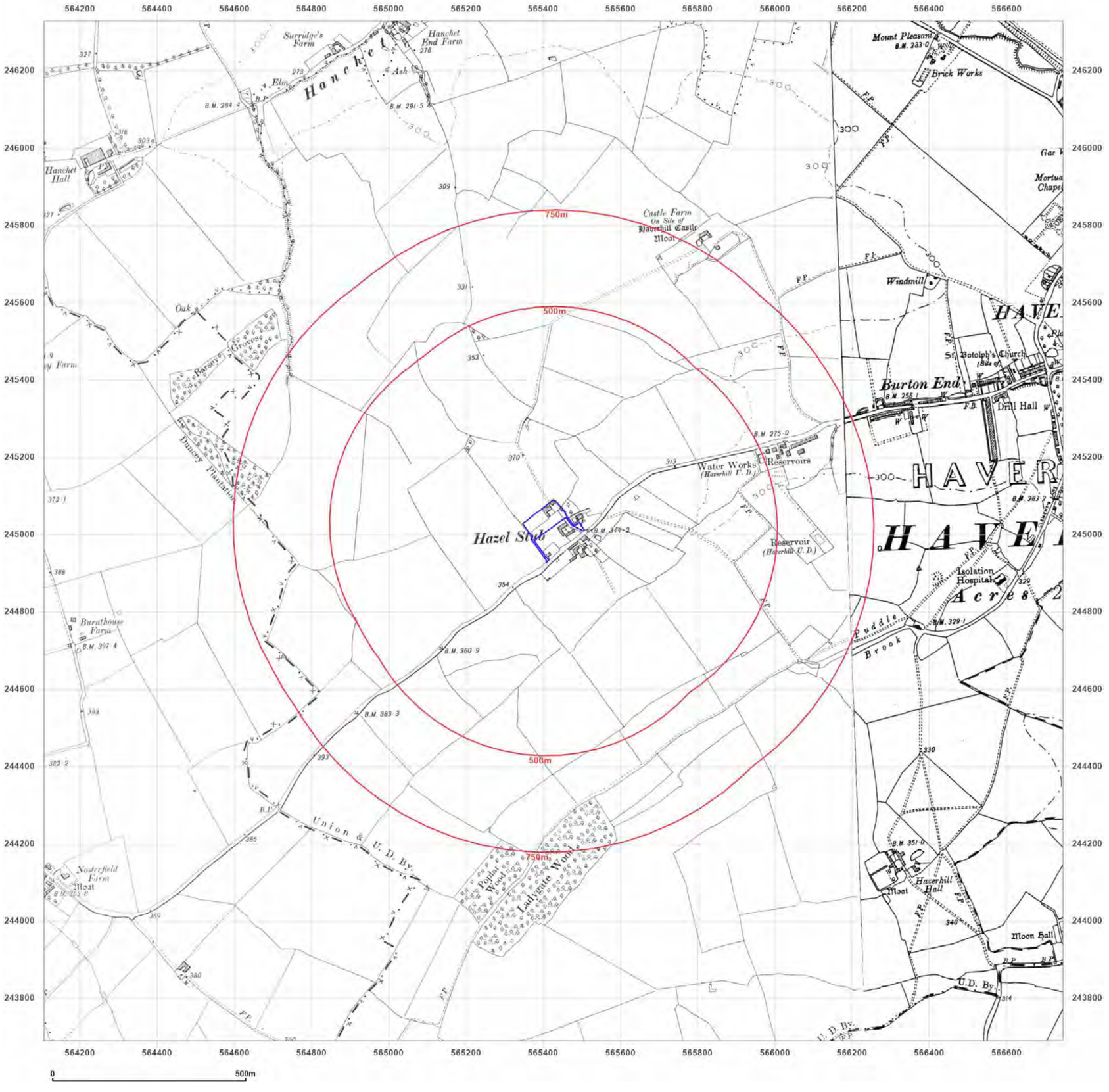

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1901-1905**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1885
Revised 1901
Edition N/A
Copyright N/A
Levelled N/A

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

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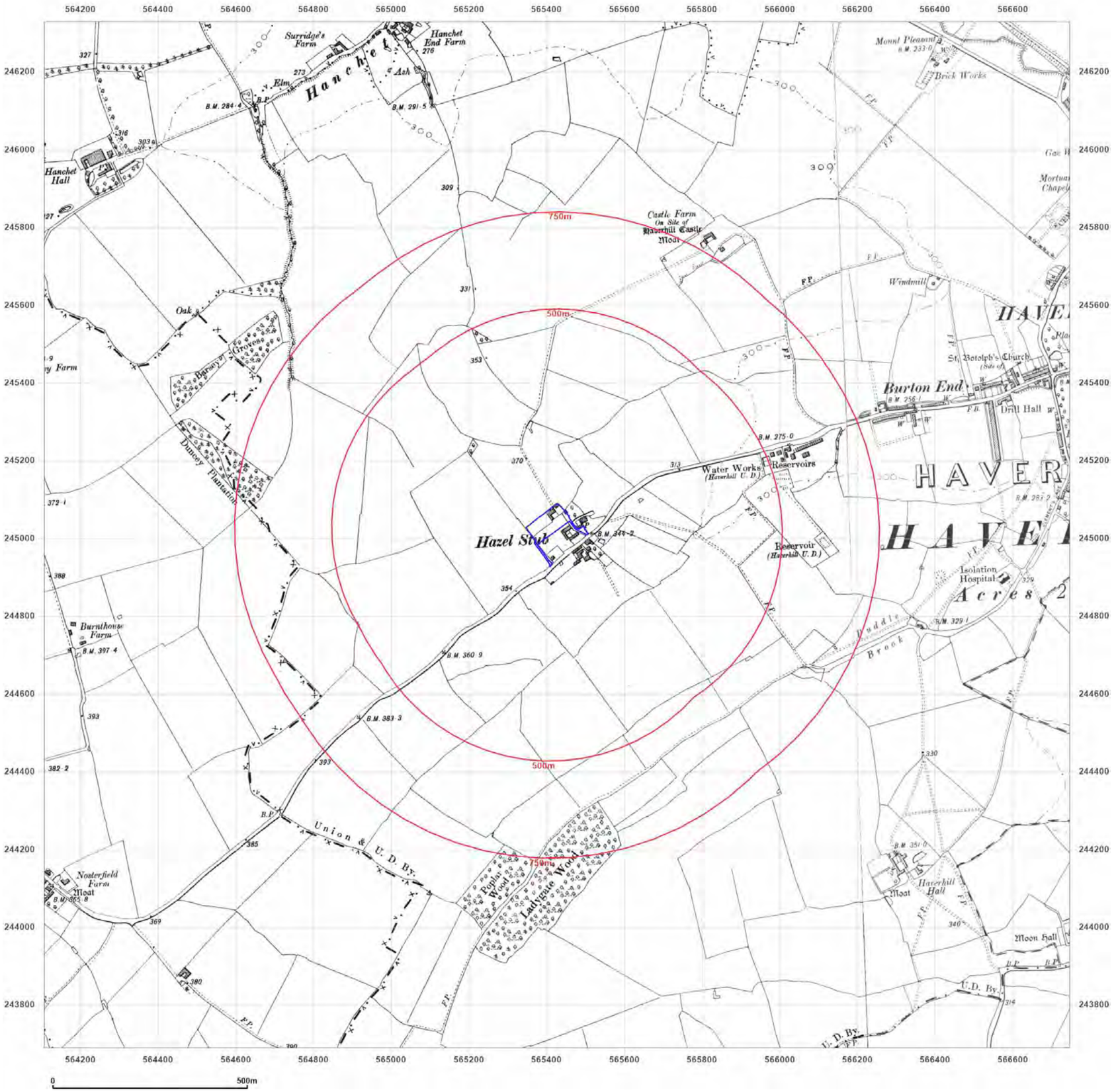
Production date: 19 January 2023

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1903-1905**

Scale: 1:10,560

Printed at: 1:10,560

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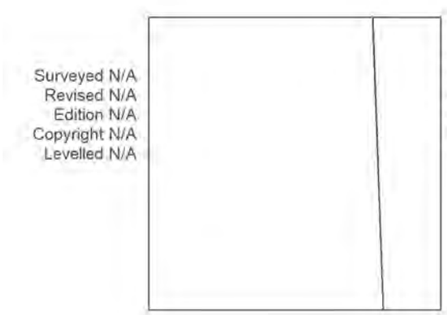

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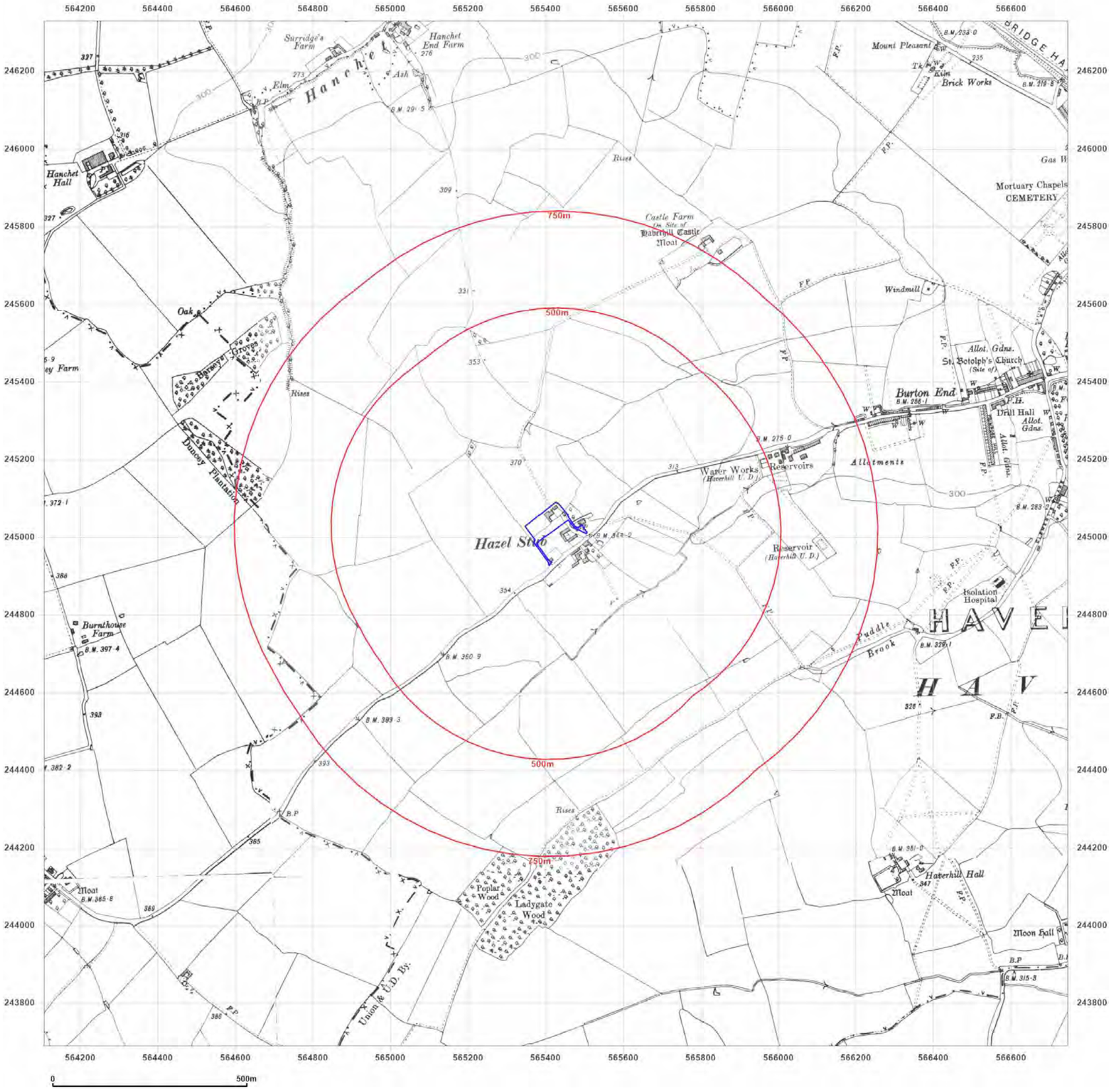

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1919-1924**

Scale: 1:10,560

Printed at: 1:10,560

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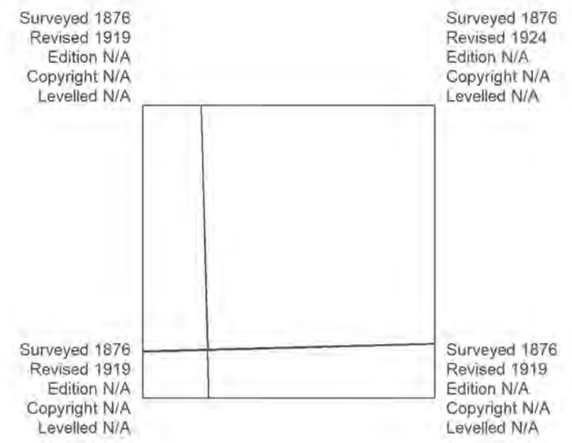

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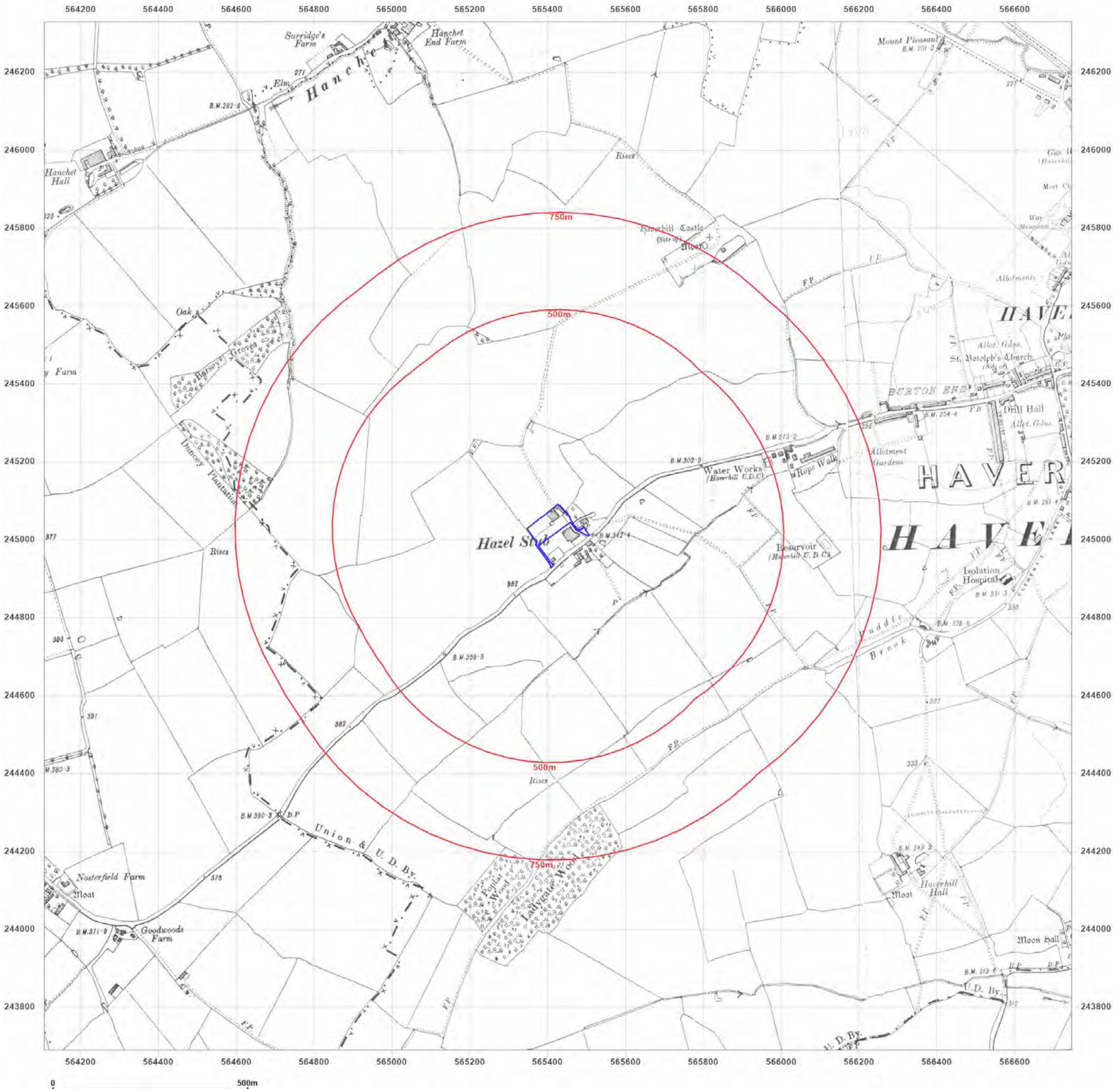

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1924**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1885
Revised 1924
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1884
Revised 1924
Edition N/A
Copyright N/A
Levelled N/A

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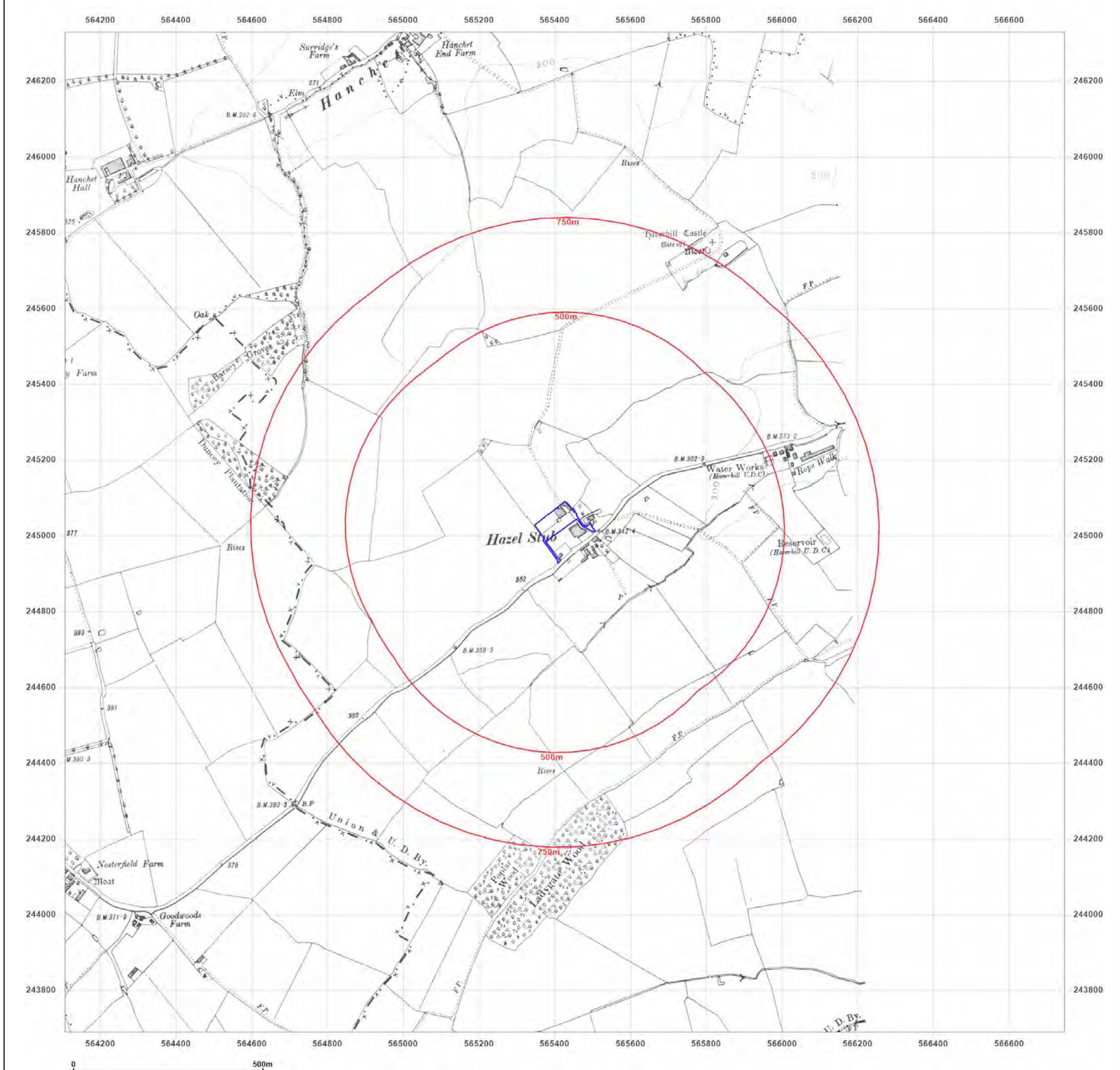

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1924**

Scale: 1:10,560

Printed at: 1:10,560

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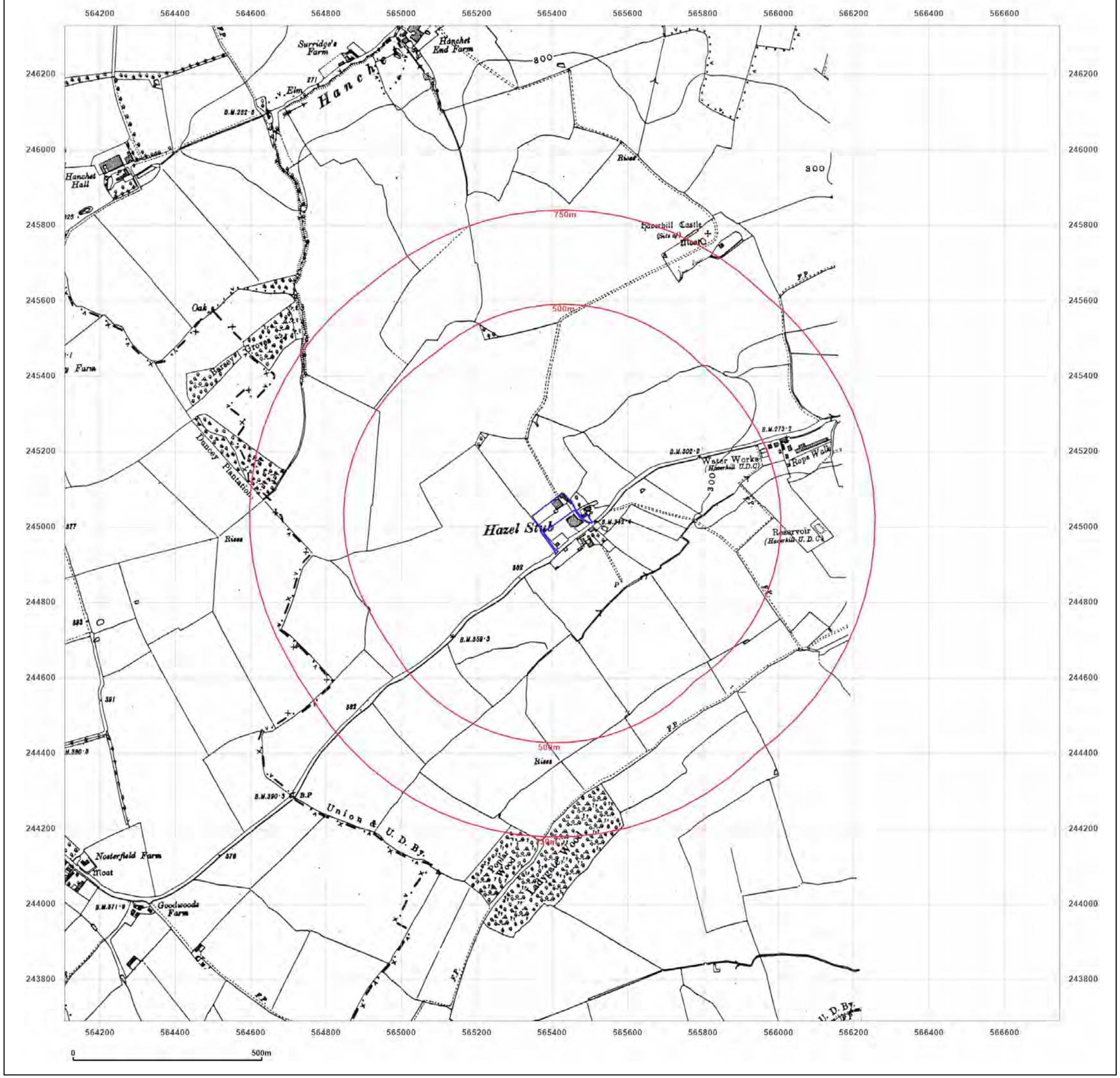

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1927**

Scale: 1:10,560

Printed at: 1:10,560

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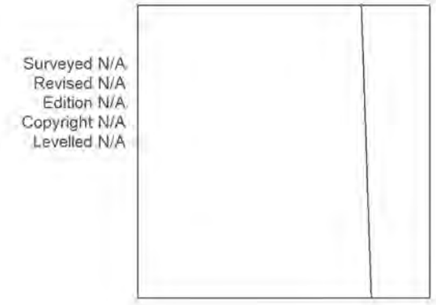

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Production date: 19 January 2023

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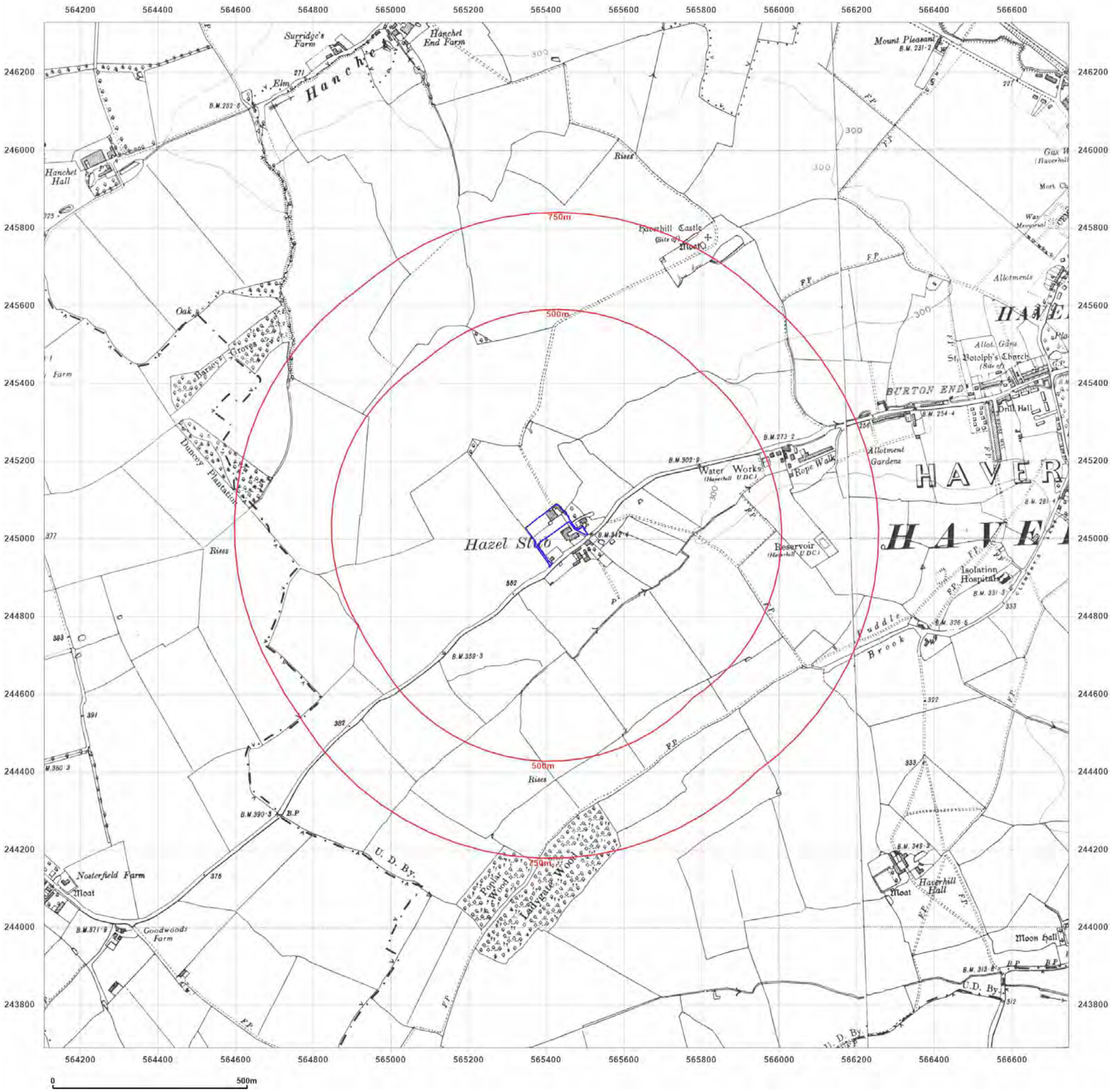

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1949**

Scale: 1:10,560

Printed at: 1:10,560

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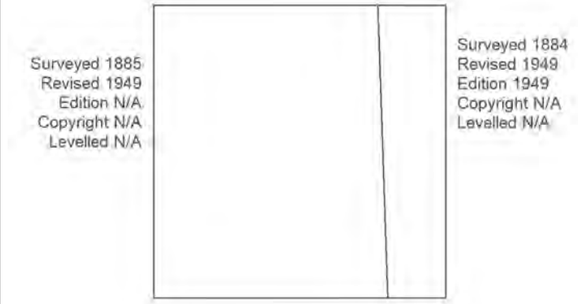

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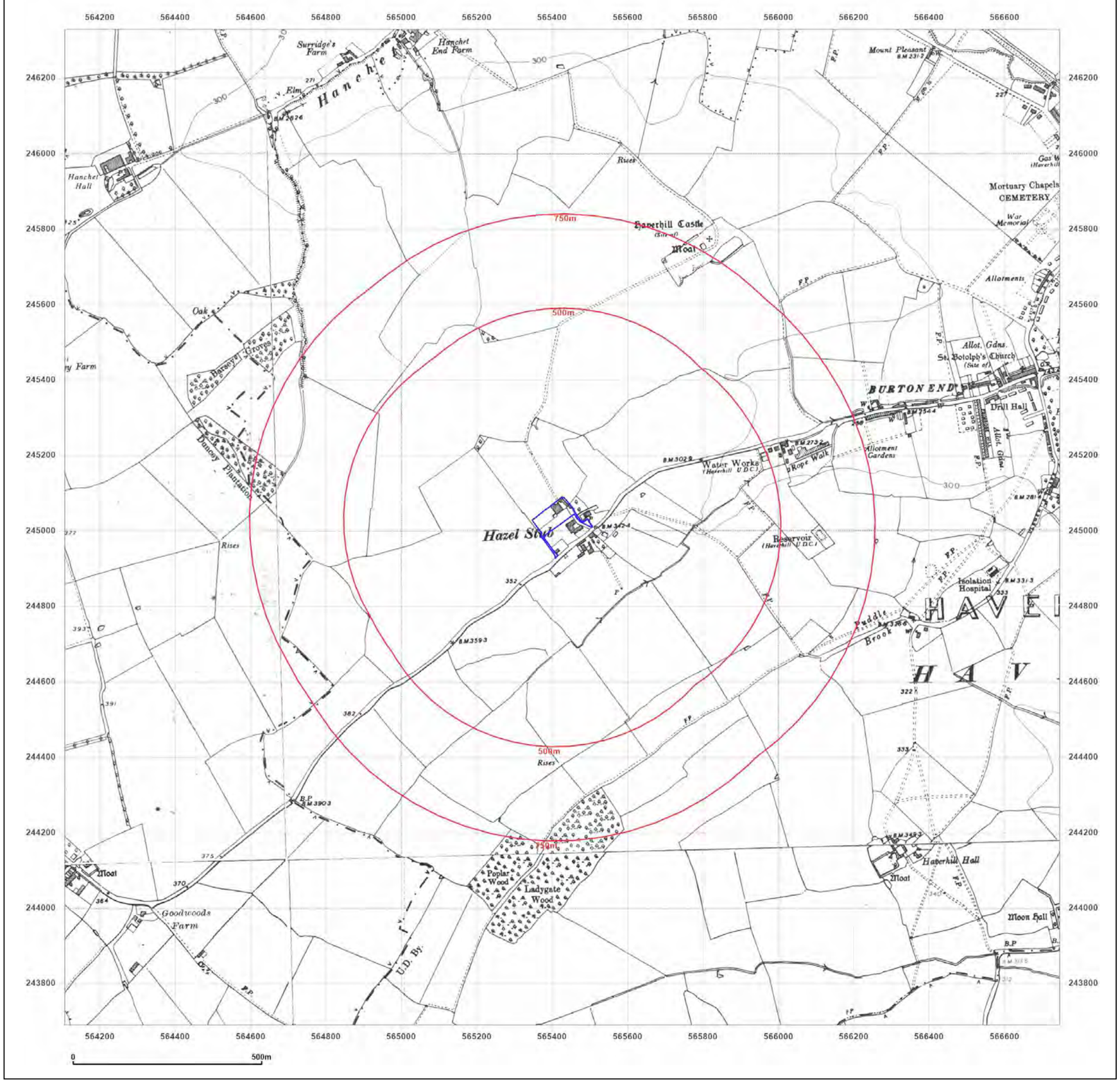

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: County Series

Map date: **1946-1951**

Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1876
Revised 1949
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1885
Revised 1949
Edition 1951
Copyright N/A
Levelled 1920

Surveyed 1876
Revised 1946
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1949
Edition N/A
Copyright N/A
Levelled N/A

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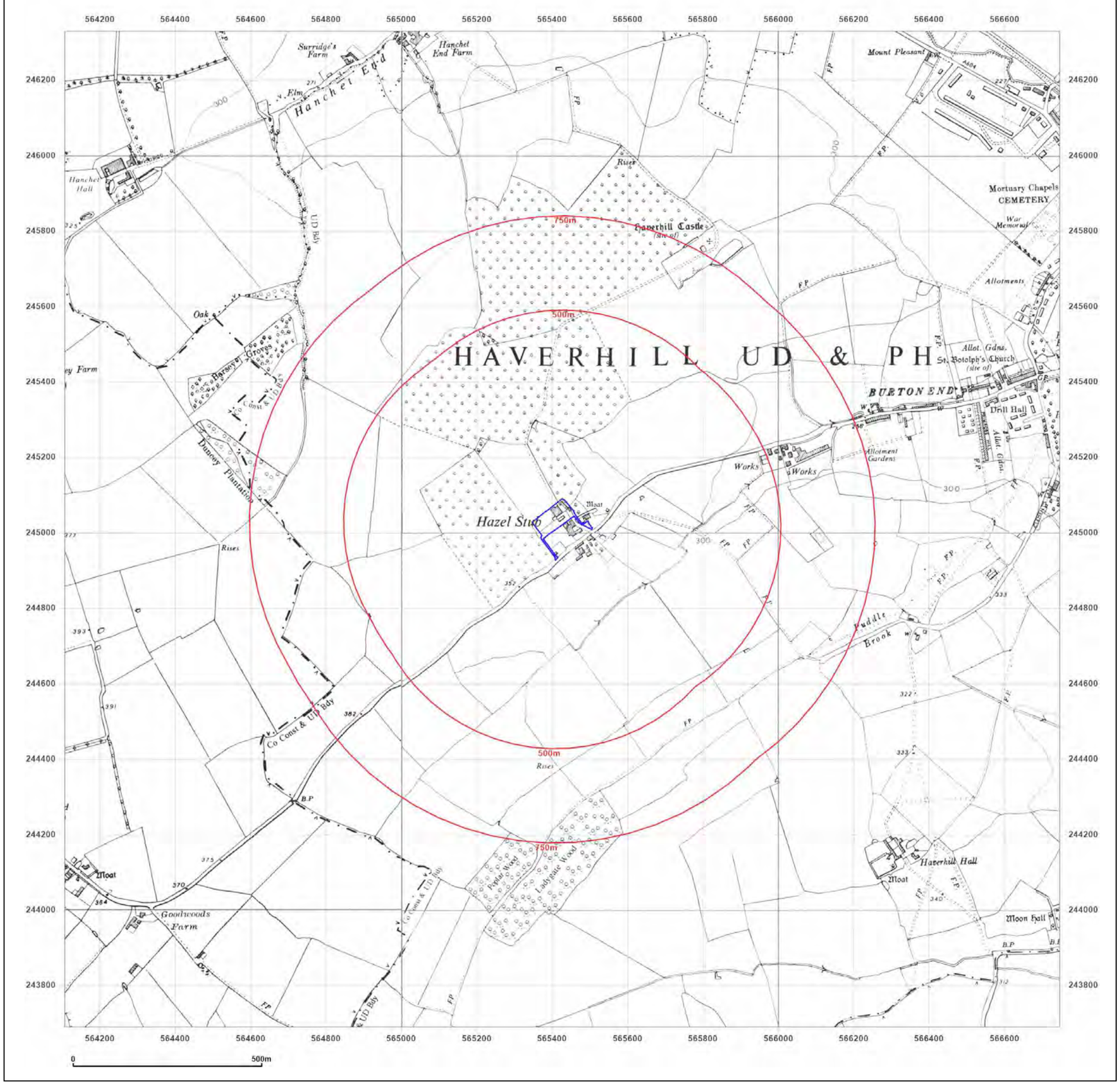

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: Provisional
Map date: **1959-1960**
Scale: 1:10,560
Printed at: 1:10,560

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Surveyed N/A Revised 1959 Edition N/A Copyright N/A Levelled N/A	Surveyed N/A Revised 1959 Edition N/A Copyright 1960 Levelled N/A
Surveyed N/A Revised 1959 Edition N/A Copyright 1960 Levelled N/A	Surveyed N/A Revised 1959 Edition N/A Copyright 1960 Levelled N/A

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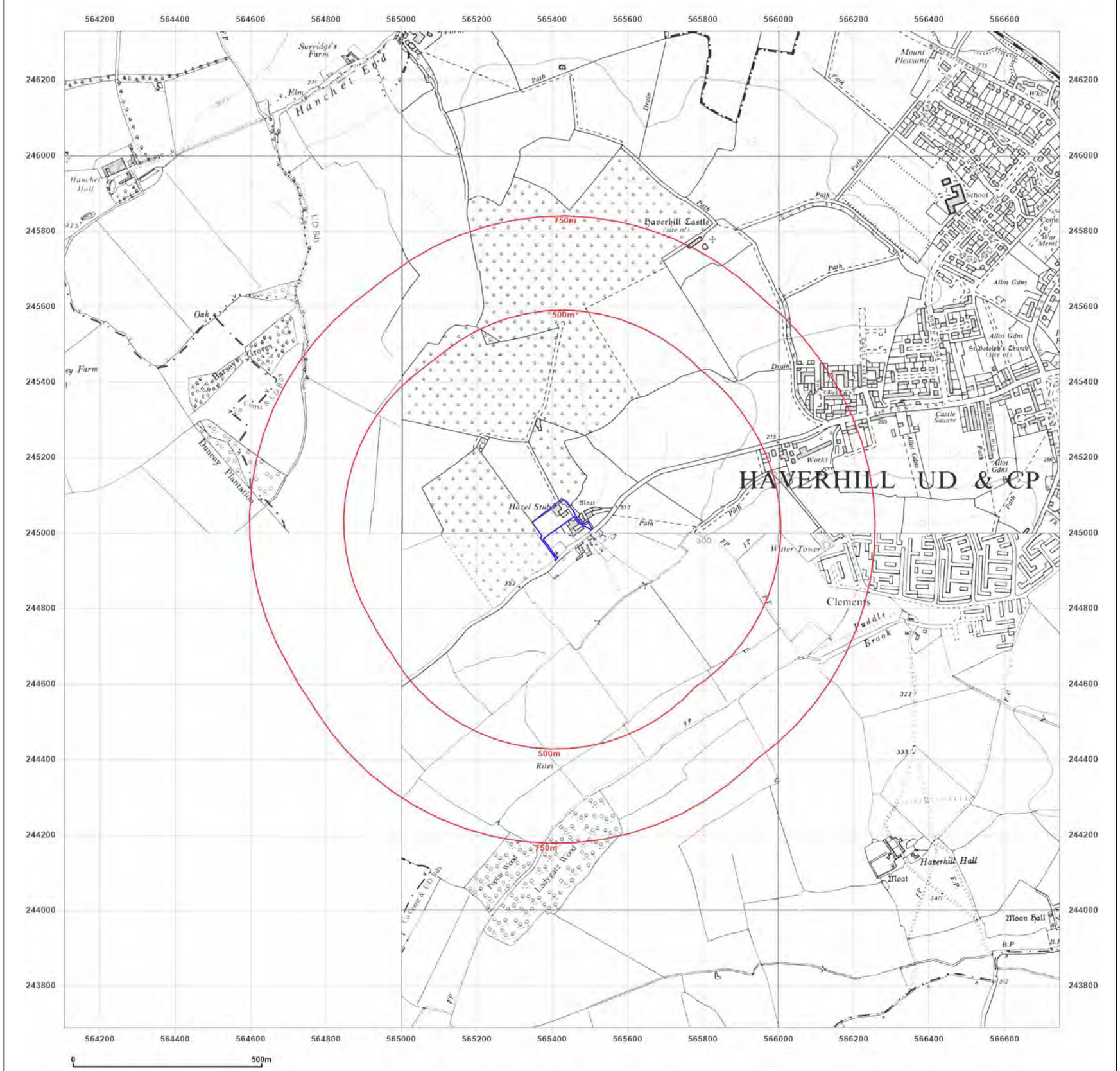

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: Provisional
Map date: **1967-1970**
Scale: 1:10,560
Printed at: 1:10,560

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Surveyed N/A
Revised 1970
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1967
Revised 1967
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised 1970
Edition N/A
Copyright 1960
Levelled N/A

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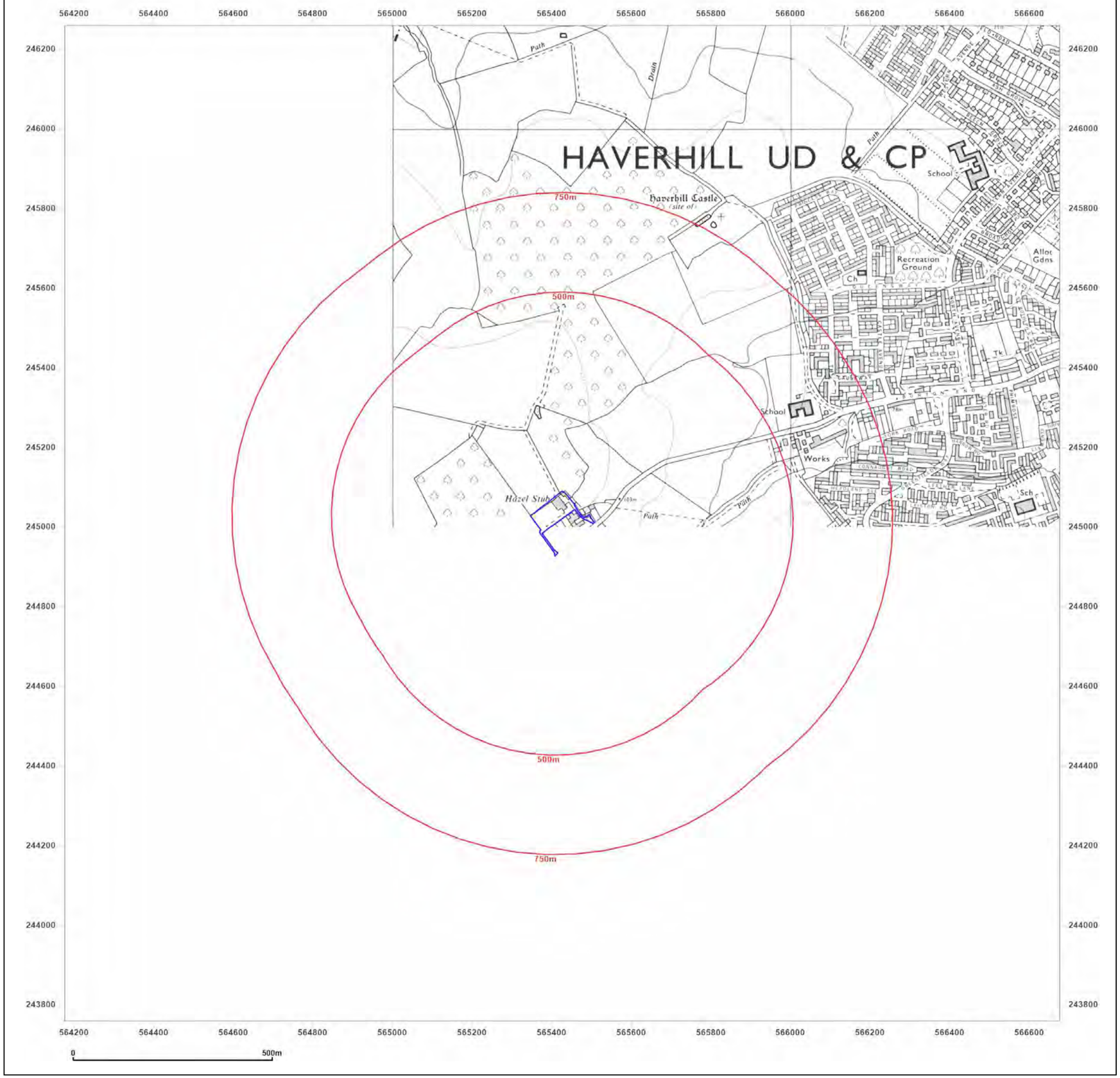

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: National Grid

Map date: **1972**

Scale: 1:10,000

Printed at: 1:10,000

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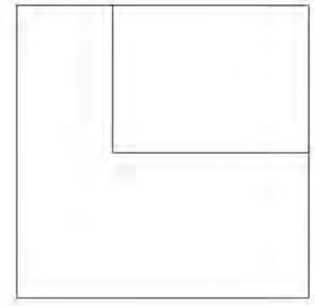
Surveyed 1970
Revised 1972
Edition N/A
Copyright 1972
Levelled 1961



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Production date: 19 January 2023

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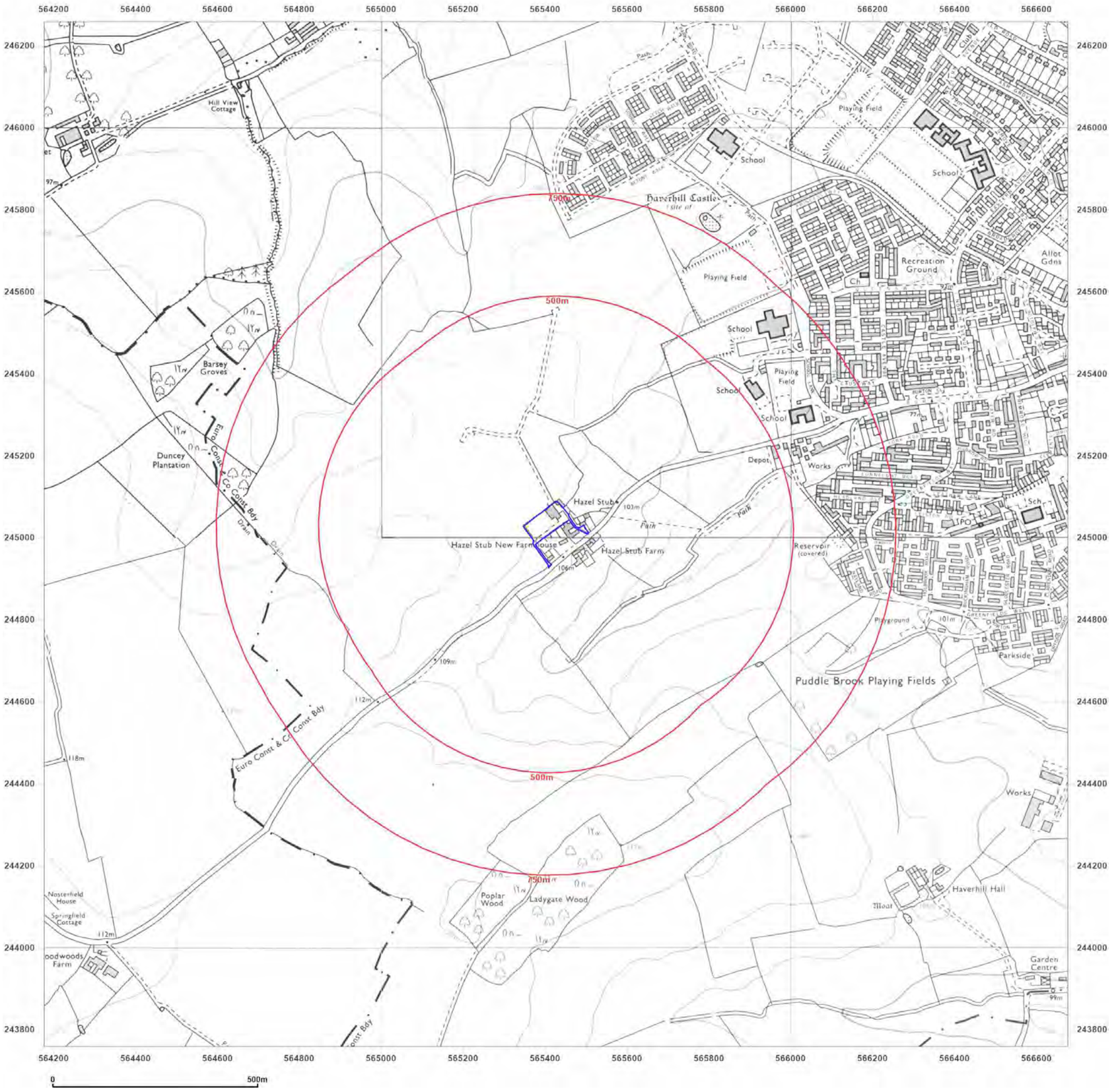

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: National Grid

Map date: **1981-1982**

Scale: 1:10,000

Printed at: 1:10,000

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Surveyed 1978 Revised 1982 Edition N/A Copyright N/A Levelled N/A	Surveyed 1977 Revised 1981 Edition N/A Copyright 1981 Levelled 1978
Surveyed 1979 Revised 1981 Edition N/A Copyright N/A Levelled N/A	Surveyed 1978 Revised 1981 Edition N/A Copyright N/A Levelled N/A

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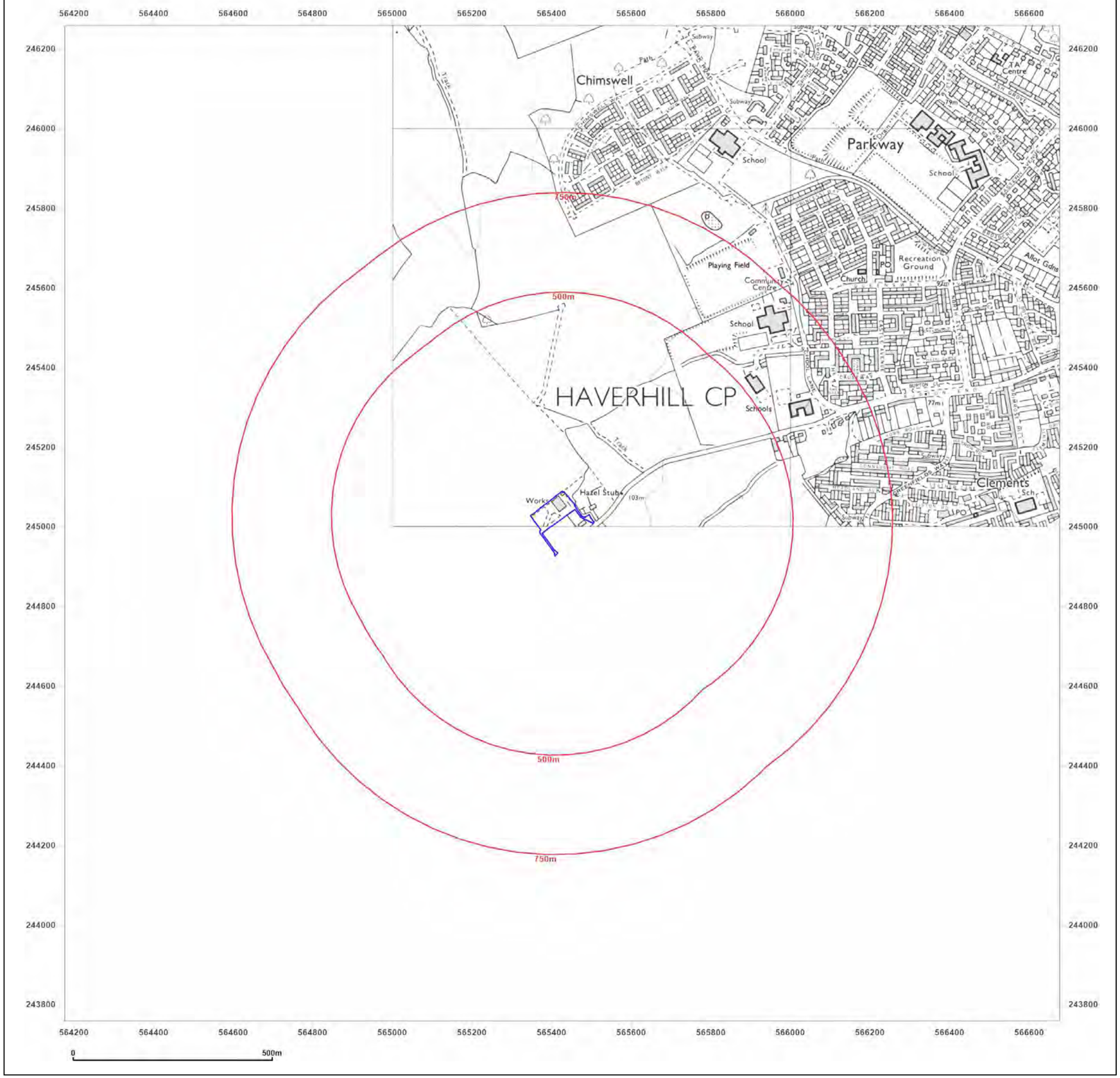

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: National Grid

Map date: **1991**

Scale: 1:10,000

Printed at: 1:10,000

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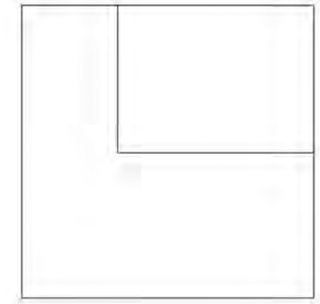
Surveyed 1989
Revised 1991
Edition N/A
Copyright N/A
Levelled N/A



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Production date: 19 January 2023

Map legend available at:
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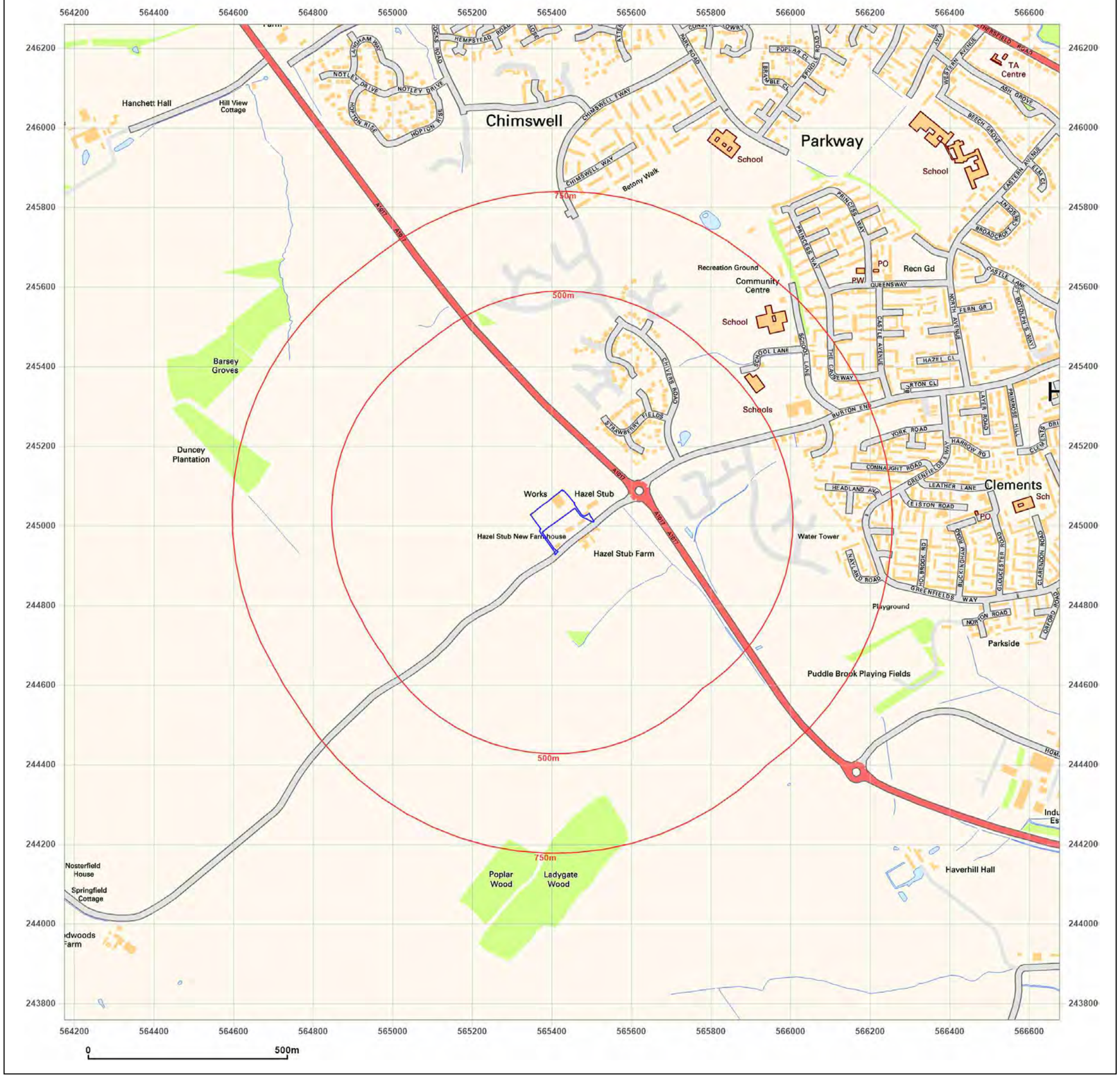

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: National Grid
Map date: 2001
Scale: 1:10,000
Printed at: 1:10,000

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Production date: 19 January 2023

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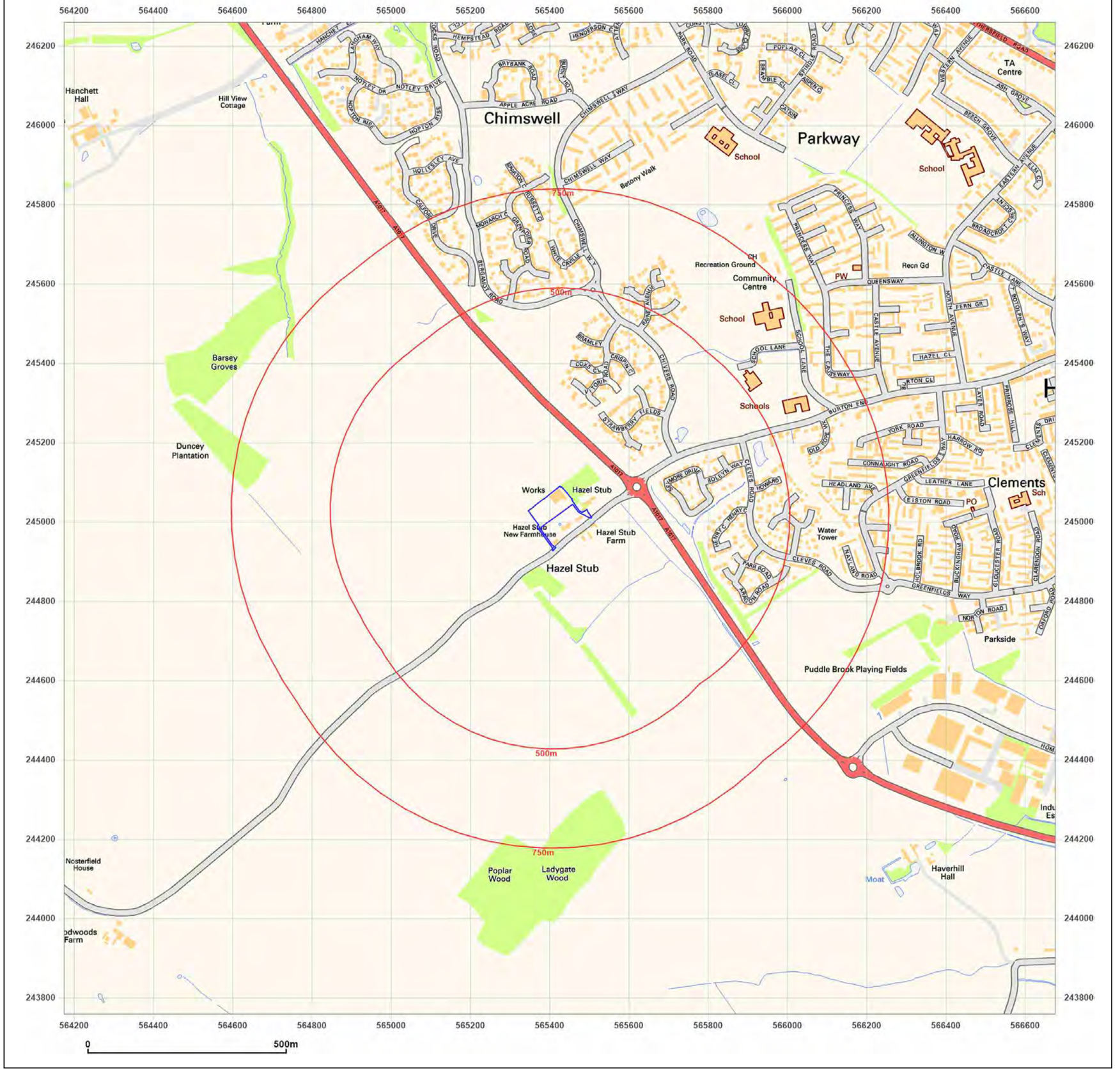

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

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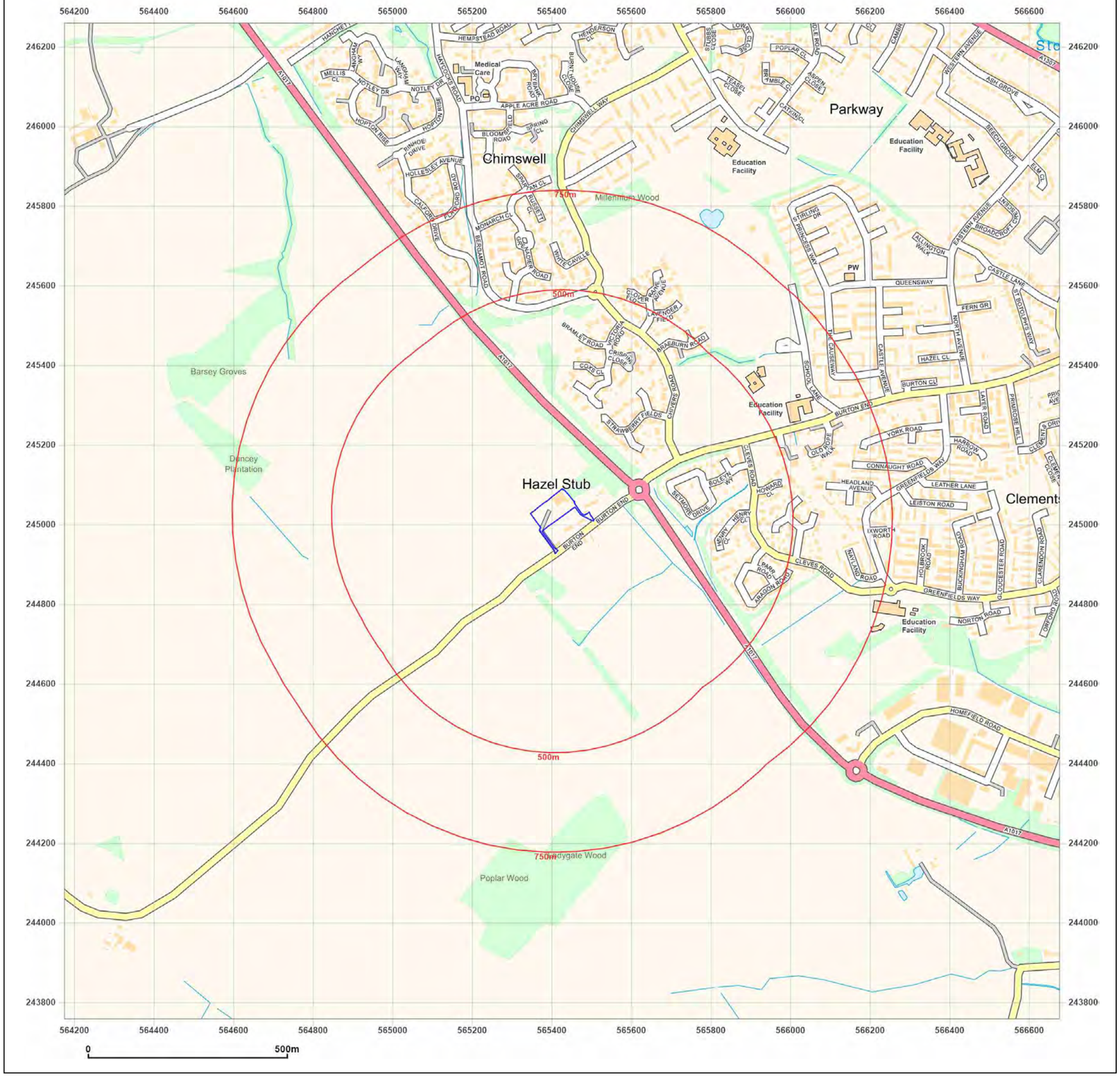

Groundsure INSIGHTS

Site Details:

HAZEL STUB DEPOT, BURTON END, HAVERHILL, CB9 9AF

Client Ref: GSP-2023-2252
Report Ref: GS-9307679
Grid Ref: 565426, 245009

Map Name: National Grid
Map date: 2023
Scale: 1:10,000
Printed at: 1:10,000

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Production date: 19 January 2023

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Appendix E

Regulatory Responses

RE: GSP-2023-2252 - Contaminated Land Information Request - (NGR: 565401 245032) Hazel Stub Depot, Burton End, Haverhill, Suffolk, CB9 9AF

Aaron Moyle <aaron.moyle@groundsure.com> 23 January 2023 at 13:42
Draft

On Monday, 23 January 2023, 12:07:03 GMT, Axton, Matthew <matthew.axton@westsuffolk.gov.uk> wrote:

Dear Aaron,

Thank you for your email regarding the above site, I am happy to respond on behalf of West Suffolk Council.

Please see below your specific questions and our responses to those questions:

- Can you confirm that you are aware of the current and former uses and any other potentially contaminative activities at the study site?
  - We are aware that the site has a long history of commercial use, including possible agricultural uses (possibly at one point associated with the surrounding orchards), a works and a depot. We are also aware that historic maps show the presence of a tank on site.
- Is the study site (or part of it) likely to be assessed as part of the Local Authority Contaminated Land Inspection Strategy? Please give details of likely priority and approximate time scales, if known.
  - The site is identified on our Contaminated Land Inspection Strategy, however, given the sites current commercial use, it is considered a lower priority and there are no current plans to undertake an inspection under our Part IIA duties.
- Are you aware of any site investigations (Part 2A or otherwise) or remedial works undertaken at the site or close by ? Please provide details where appropriate.
  - No.
- Are there any reasons why the site may not be considered suitable for its current/proposed use? If yes, please specify why.
  - In terms of land contamination there are no known reasons it could not continue in its current commercial use. For a more sensitive residential use, we would need a full assessment of the site before making any comment on the sites suitability.
- If the Site were to be redeveloped for more sensitive use, please can you confirm what your minimum requirements would be (if any) for the development?
  - Minimum requirements would be the submission of a Phase One Desk Study (including site walkover) undertaken by a competent person as defined by the NPPF and in line with established procedures. We would expect the desk study to include a conceptual site model and risk assessment and recommendations for further works where appropriate. Given the historic uses identified, the likelihood of intrusive investigations being required are considered to be high, although we are likely to be able to condition intrusive works as part of a planning consent (if granted).
- Is the Local Authority aware of any action at the Site under the Environmental Damage (Prevention and Remediation) Regulations? If so, please provide more details.
  - Not aware of any action under the Site under the Environmental Damage (Prevention and Remediation) Regulations
- Is the Local Authority aware of environmental nuisance issues relating to the Site? If so, please provide more details.
  - West Suffolk Council have a record of a noise complaint against the site from 2011, however no action was taken on this occasion. We also have a record of a single complaint regarding commercial smoke from 2004, which appears to have been an isolated incident. No formal action was taken.
- Do you have records of Part A2 and B Authorisations for the Site? If so, please provide us with records of permits, compliance and/or site inspections.
  - West Suffolk Council do not have any Part A2 or Part B sites registered at the site.

The above information is provided on the basis of information currently held by this Service on the understanding that there may be other information or site conditions of which we have no knowledge and for which we can accept no responsibility.

I trust the above is clear and helpful, however, if you have further questions or queries please let me know.

Kind regards

Matthew

Matthew Axton

Environment Officer

Regulatory Services

Direct dial: 01284 757041

Email: matthew.axton@westsuffolk.gov.uk

www.westsuffolk.gov.uk
West Suffolk Council
#TeamWestSuffolk

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From: Groundsure Ltd <projects@groundsure.com>
Sent: 20 January 2023 10:03
To: customer.services <customer.services@westsuffolk.gov.uk>
Subject: GSP-2023-2252 - Contaminated Land Information Request - (NGR: 565401 245032) Hazel Stub Depot, Burton End, Haverhill, Suffolk, CB9 9AF

> You don't often get email from projects@groundsure.com. Learn why this is important

[THIS IS AN EXTERNAL EMAIL]

Dear Sir/Madam,

We have been asked to carry out an environmental assessment and as part of our data search would appreciate the following information.

The Site address is: Hazel Stub Depot, Burton End, Haverhill, Suffolk, CB9 9AF (NGR: 565401 245032) and the site boundary is shown below:

It is understood that the Study Site is currently used for light industrial purposes and that there is currently a pre planning application for it to be converted into nine residential dwellings.

- Can you confirm that you are aware of the current and former uses and any other potentially contaminative activities at the study site?
- Is the study site (or part of it) likely to be assessed as part of the Local Authority Contaminated Land Inspection Strategy? Please give details of likely priority and approximate time scales, if known.
- Are you aware of any site investigations (Part 2A or otherwise) or remedial works undertaken at the site or close by ? Please provide details where appropriate.
- Are there any reasons why the site may not be considered suitable for its current/proposed use? If yes, please specify why.
- If the Site were to be redeveloped for more sensitive use, please can you confirm what your minimum requirements would be (if any) for the development?
- Is the Local Authority aware of any action at the Site under the Environmental Damage (Prevention and Remediation) Regulations? If so, please provide more details.
- Is the Local Authority aware of environmental nuisance issues relating to the Site? If so, please provide more details.
- Do you have records of Part A2 and B Authorisations for the Site? If so, please provide us with records of permits, compliance and/or site inspections.

I understand that there may be a fee attached to undertaking this search. Please provide me with the cost and information on how to make payment and the expected timeframe

Kind regards,

Aaron Moyle MSci(Hons) FGS
He/Him

Environmental Manager

Mobile 07900 803943 **Office** +44 (0)1273 257755

Pool Innovation Centre, Trevenson Road, Pool, Redruth, TR15 3PL

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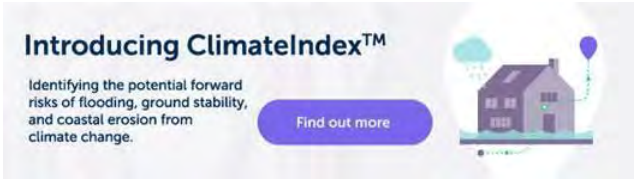

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Appendix F

Planning Documents

PLANNING

CBA

CHARTERED ARCHITECT

Tel - 07771 887 691 - e-mail - charlie.biss@btinternet.com

client	MK Associates Ltd
project	Conversion of existing light industrial unit to create nine apartments. Hazel Stub Depot, Burton End Haverhill, Suffolk, CB9 9AF
drawing	Site Block Plan, Existing - -

date	scale	drawn by
13/10/22	1:200@A1	AB

drg.no.	revision
TEO-011	-

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SHARED AMENITY SPACE

Flat 7
Flat 6
Flat 4
Flat 3
Flat 2
Flat 1

31700

10000

±9000

32600

Escape

Bedroom 2
Bedroom 1
Living room
Meters
FLAT 2
150.5m²
Kitchen
Utility
Bathroom
Post
FLAT 3
150.5m²
Bathroom
Utility
Kitchen
Dining
FLAT 1
150.5m²
FLAT 4
150.3m²
FLAT 5
2x 76.8m² =
153.6m²
WC

FIRE TENDER

Flat 5

Refuse

Bicycles

Private access for Flat 5 only

Access to Flats 1–4 and 6 –9
Refuse collection and Fire Engines

Flat 8
Flat 9
visitors/ disabled

Hazel Stub House

Pond

Button End House

Cowslip Pightle

5
4

Scale 1:300 at A3
0 2 4 6 8 10m

Scale 1:200 at A1
0 1 2 4 6 8 10m

N

CBA

CHARTERED ARCHITECT

Tel - 07771 887 691 - e-mail - charlie.biss@btinternet.com

client
MK Associates Ltd

project
Conversion of existing light industrial unit to create nine apartments.
Hazel Stub Depot, Burton End
Haverhill, Suffolk, CB9 9AF

drawing
Site Block Plan, Proposed
-
-

date	scale	drawn by
13/10/22	1:200@A1	AB

drg.no.	revision
TEO-021	-

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Blue Sky Group

3 The Barns
Lower Farm High Street
IRCHESTER NN29 7AB

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Web: www.bluesky-group.org
Tel: 01933 271123 or 07870 549014

Asbestos Survey Report

Snap Systems
Hazel Stubs Depot
Haverhill

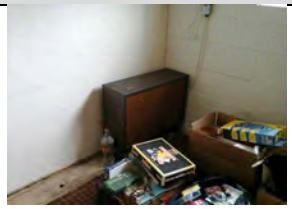
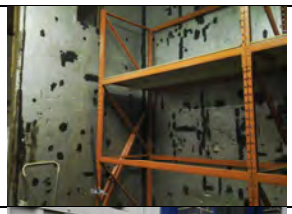
13th July 2015

Contents

1 Executive Summary

The following table lists the asbestos containing materials that have been identified, presumed or strongly presumed. The recommended actions required to manage the asbestos containing materials are summarised.

For a detailed explanation of the recommended action required to manage your asbestos containing materials please refer to the '**Action Descriptions**' section of this report.

ACM Item	Asbestos Material	Recommended Action	Photo
Ground floor, Office, 'caposil' insulating blocks, panels, paper, string in domestic heater, Office 1 As Seen	ACM Presumed	Action C Monitor	
Ground floor, Cold storage rooms, Partition walls As Seen	Chrysotile	Action C Monitor	
External, Dpc As Seen	Chrysotile	Action D Re-Inspect at Intervals	
Ground floor, Entrance / exit porch , Electricity consumer panel flashguards As Seen	Chrysotile	Action D Re-Inspect at Intervals	
First floor, Wc, Sink, anti-drumming pad As Seen	Chrysotile	Action D Re-Inspect at Intervals	

*Note: If the above table is blank then no asbestos has been detected within the scope of the survey. However, please also refer to the '**Exclusions**' and '**Non Asbestos Materials**' sections of this report.*

2 Introduction

This report contains the findings of an asbestos **Management Survey** carried out at Hazel Stubs Depot, Haverhill , CB9 9AF on the 13th July 2015

- Blue Sky Group carried out the survey.
- The purpose of the survey is to enable Snap Display Systems Ltd to comply with CAR2012. The aim of the survey is to locate, identify and assess asbestos containing materials.
- Samples, if taken, have been analysed by *Environtec* to determine the presence of asbestos fibres using the method of polarised light microscopy and central stop dispersion staining based on HSG 248.
- Samples were not taken, where there was an electrical hazard, or it was deemed that in taking a sample it would damage the critical integrity of the product, in these cases presumptions were made on the Asbestos content.
- The extent of the survey was all accessible parts of the premises shown on plans or as detailed in this report. Any non-accessible areas are noted in the '**Exclusions**' section of this report.

Whilst every effort has been made to detect all sources of asbestos, without extensive demolition work, Blue Sky Group cannot be held liable for any omissions in this report.

3 Survey Method

This Survey was carried out following the guidelines set out in the Health and Safety Executive Document **HSG264** as detailed below.

Management Survey

- A management survey is the standard survey. Its purpose is to locate, as far as reasonably practicable, the presence and extent of any suspect ACMs in the building which could be damaged or disturbed during normal occupancy, including foreseeable maintenance and installation, and to assess their condition.

- Management surveys will often involve minor intrusive work and some disturbance. The extent of intrusion will vary between premises and depend on what is reasonably practicable for individual properties, i.e. it will depend on factors such as the type of building, the nature of construction, accessibility etc. A management survey should include an assessment of the condition of the various ACMs and their ability to release fibres into the air if they are disturbed in some way. This material assessment will give a good initial guide to the priority for managing ACMs as it will identify the materials, which will most readily release airborne fibres if they are disturbed.

- The survey will usually involve sampling and analysis to confirm the presence or absence of ACMs. However a management survey can also involve presuming the presence or absence of asbestos. A management survey can be completed using a combination of sampling ACMs and presuming ACMs or, indeed, just presuming.

- Any materials presumed to contain asbestos must also have their condition assessed (i.e. a material assessment)

4 Survey Details

The following is a brief description of the client's building and the survey undertaken.

Building Details	
Client	Snap Display Systems Ltd
Job Reference	Snap Display Systems /150713
Building Reference	Snap Display Systems
Building Description	Industrial unit
Address	Hazel Stubs Depot Haverhill CB9 9AF

Survey Overview		
Survey Type	Management Survey	
Survey Purpose	Duty to Manage	
Date/Time	13th July 2015	11:19:41
Surveyor	Nye Phillips P402cert	

5 Summary of Results

Asbestos Content

The following table shows a breakdown of the laboratory results for any samples taken during this survey.

Asbestos Content	Quantity Found
Chrysotile (White)	2
Amosite (Brown)	0
Crocidolite (Blue)	0
Amosite/Chrysotile (Brown/White)	0
Crocidolite/Amosite (Blue/Brown)	0
Crocidolite/Chrysotile (Blue/White)	0
Crocidolite/Amosite/Chrysotile (Blue/Brown/White)	0
No Asbestos Detected	1

Fibre Release

The following table counts the number of asbestos containing items found by their potential fibre release risk.

Fibre Release Risk	Quantity Found
None	1
Very Low	3
Low	2
Medium	0
High	0

Summary of Results… continued

Presumptions

Samples were not taken where there was an electrical hazard, or it was deemed that in taking a sample it would damage the critical integrity of the product.

Following the guidelines set out in the Health & Safety Document HSG264, various materials may be **presumed** to contain asbestos, and if so these will be included in the Asbestos Register – 3 material(s) were presumed to contain asbestos

- Ground floor, Office, 'caposil' insulating blocks, panels, paper, string in domestic STORAGE heater, Office 1
- Ground floor, Entrance / exit porch , Electricity consumer panel flashguards
- First floor, Wc, Sink, anti-drumming pad

6 Results and Analysis

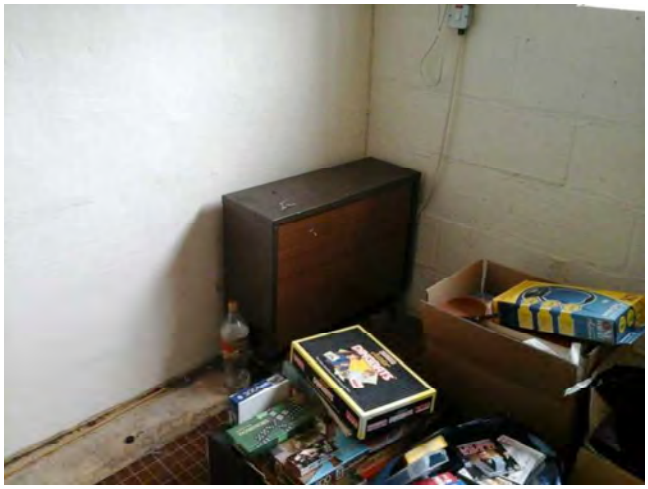
EXTERNAL - Dpc (Other External)

Client	Snap Display Systems Ltd				
Survey Address	Hazel Stubs Depot, Haverhill , CB9 9AF				
Building					
Location	External, Dpc				
Survey Ref	Snap Display Systems /150713				
Sample Ref	Snap Display Systems /150713/01				
Photo Details					
Risk Matrix					
Asbestos Type	**Chrysotile** (Identified)	1	Product/Use	Asbestos-Reinforced Composites	1
Condition	Good Condition	0	Treatment	Composite Materials	0
Identified Risk	Very Low	2	Action	Action D	
Extent	As Seen				
Accessibility	Easy Access				
Remarks	**Perimeter of units 1 - 2**				

INTERIOR WALLS/PANELS - (Partition walls)

Client	Snap Display Systems Ltd				
Survey Address	Hazel Stubs Depot, Haverhill , CB9 9AF				
Building					
Location	Ground floor, Cold storage rooms, Partition walls				
Survey Ref	Snap Display Systems /150713				
Sample Ref	Snap Display Systems /150713/02				
Photo Details					
Risk Matrix					
Asbestos Type	**Chrysotile** (Identified)	1	Product/Use	Thermal Insulation	3
Condition	Low Damage	1	Treatment	Composite Materials	0
Identified Risk	Low	5	Action	Action C	
Extent	As Seen				
Accessibility	Easy Access				
Remarks	**All Cold Storage Rooms**				

DOMESTIC APPLIANCES - Office 1 ('Caposil' insulating blocks, panels, paper, string in domestic heater)

Client	Snap Display Systems Ltd				
Survey Address	Hazel Stubs Depot, Haverhill , CB9 9AF				
Building					
Location	Ground floor, Office, 'caposil' insulating blocks, panels, paper, string in domestic heater, Office 1				
Survey Ref	Snap Display Systems /150713				
Sample Ref	No Sample Taken				
Photo Details					
Risk Matrix					
Asbestos Type	**ACM Presumed** (Presumed)	3	Product/Use	Asbestos-Reinforced Composites	1
Condition	Low Damage	1	Treatment	Composite Materials	0
Identified Risk	Low	5	Action	Action C	
Extent	As Seen				
Accessibility	Easy Access				
Remarks	**All storage heaters on the premises**				

INTERNAL - Electricity consumer panel flashguards (Other Internal)

Client	Snap Display Systems Ltd				
Survey Address	Hazel Stubs Depot, Haverhill , CB9 9AF				
Building					
Location	Ground floor, Entrance / exit porch , Electricity consumer panel flashguards				
Survey Ref	Snap Display Systems /150713				
Sample Ref	No Sample Taken				
Photo Details					
Risk Matrix					
Asbestos Type	**Chrysotile** (Presumed)	1	Product/Use	Asbestos-Reinforced Composites	1
Condition	Low Damage	1	Treatment	Composite Materials	0
Identified Risk	Very Low	3	Action	Action D	
Extent	As Seen				
Accessibility	Difficult Access				
Remarks					

INTERNAL - (Sink, anti-drumming pad)

Client	Snap Display Systems Ltd				
Survey Address	Hazel Stubs Depot, Haverhill , CB9 9AF				
Building					
Location	First floor, Wc, Sink, anti-drumming pad				
Survey Ref	Snap Display Systems /150713				
Sample Ref	No Sample Taken				
Photo Details					
Risk Matrix					
Asbestos Type	**Chrysotile** (Presumed)	1	Product/Use	Asbestos-Reinforced Composites	1
Condition	Good Condition	0	Treatment	Composite Materials	0
Identified Risk	Very Low	2	Action	Action D	
Extent	As Seen				
Accessibility	Easy Access				
Remarks					

7 Bulk Sample Identification Summary

Bulk samples were analysed by *Environtec*. Their detailed laboratory analysis report is available as a separate attachment to this report.

A summary of the laboratory results is shown in the table below.

Sample Ref	Asbestos Material	Location
Snap Display Systems /150713/01	Chrysotile	External, Dpc
Snap Display Systems /150713/02	Chrysotile	Ground floor, Cold storage rooms, Partition walls
Snap Display Systems /150713/03	No Asbestos Detected	Ground floor, Stair nosing , Floor tiles & adhesive

Note: The above table may be blank in the case of an interim report where the laboratory samples analysis is still in progress.

8 Asbestos Register

Sample Ref	Location	Asbestos Content	Asbestos Product	Material Description	Condition	Score	Action	Comments	Date Signature
Snap Display Systems /150713/01	External, Dpc As Seen	Chrysotile	Asbestos-Reinforced Composites	External, DPC	Good Condition	2	Re-Inspect at Intervals	Perimeter of units 1 - 2	
Snap Display Systems /150713/02	Ground floor, Cold storage rooms, Partition walls As Seen	Chrysotile	Thermal Insulation	Partition walls	Low Damage	5	Monitor	All Cold Storage Rooms	
Snap Display Systems /150713/03	Ground floor, Stair nosing , Floor tiles & adhesive As Seen	No Asbestos Detected	N/A	Floor tiles & adhesive	Good Condition	0	No Action	Unit 2	
Sample Not Taken	Ground floor, Office, 'caposil' insulating blocks, panels, paper, string in domestic heater, Office 1 As Seen	ACM Presumed	Asbestos-Reinforced Composites	'Caposil' insulating blocks, panels, paper, string in domestic heater, Office 1	Low Damage	5	Monitor	All storage heaters on the premises	
Sample Not Taken	Ground floor, Entrance / exit porch , Electricity consumer panel flashguards As Seen	Chrysotile	Asbestos-Reinforced Composites	Internal, Electricity consumer panel flashguards	Low Damage	3	Re-Inspect at Intervals		
Sample Not Taken	First floor, Wc, Sink, anti-drumming pad As Seen	Chrysotile	Asbestos-Reinforced Composites	Sink, anti-drumming pad	Good Condition	2	Re-Inspect at Intervals		

9 Material Assessment Algorithm Guide

Product Type	Asbestos-reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement.	**1**	AIB, Millboard, other low density insulating boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt.	**2**	Thermal insulation (e.g. pipe and boiler lagging) sprayed asbestos, loose asbestos, asbestos mattresses and packing.	**3**		
Damage or Deterioration	Good condition: No visible damage	**0**	Low damage: a few scratches or surface marks; broken edges on boards, tiles etc.	**1**	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres.	**2**	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris.	**3**
Surface Treatment	Composite materials containing asbestos: reinforced plastics, resins, and vinyl tiles.	**0**	Enclosed sprays and lagging, AIB (with exposed face painted or encapsulated), asbestos cement sheets etc.	**1**	Unsealed AIB, or encapsulated lagging and sprays.	**2**	Unsealed lagging and sprays.	**3**
Asbestos Type	Chrysotile	**1**	Amphibole asbestos excluding Crocidolite.	**2**	Crocidolite.	**3**		

10 Recommendations

An asbestos **Management Survey** does not allow for intrusive inspection to all areas, and therefore in non-accessible areas it was not practicable to inspect and sample.

- Caution should be taken when any future refurbishments/demolitions are carried out in areas that were not inspected.
- **If at any time you are unsure of any materials that you encounter, please do not hesitate to contact us.**
- It is recommended that on receipt of this report, all asbestos materials (confirmed or presumed) in the register should be identified so that they can be managed according to the recommendations set out below.
- All relevant personnel should be made aware of the location of the material to ensure it is not damaged or disturbed during refurbishment work or routine maintenance.
- The register is only a record of the condition of the materials on the day they were inspected, and therefore must be re-inspected at regular intervals to determine if there has been any deterioration of condition. The register should then be updated accordingly.

Recommended actions, as highlighted in the '**Asbestos Register**' section**,** are described in the '**Action Descriptions**' section.

11 Action Descriptions

Action A - Immediate Removal

Asbestos containing materials in poor condition, not adequately surface treated and/or vulnerable to damage. This material requires immediate removal under controlled conditions. The area containing this material must be cordoned off to prevent access to all personnel.

 # Asbestos removal work must be carried out under the provisions of the Control of Asbestos Regulations 2012.

Contact the Health and Safety Executive on 08701 545500 or www.hse.gov.uk/asbestos for more information.

Action B - Encapsulation

Asbestos containing materials showing signs of deterioration and or damage. This material requires encapsulation with a suitable surface sealant, or area to be sealed off to prevent material being disturbed; if encapsulated it should be monitored at six monthly intervals to assess its condition, and comments added to the asbestos register.

Action C - Monitor

This material is not posing a significant hazard to personnel at present, provided it remains undisturbed; however it should be monitored at six monthly intervals to assess its condition, and comments added to the asbestos register.

Action D - Re-Inspect at Intervals

Asbestos containing material in good or reasonable condition, and requiring no attention unless disturbed or condition deteriorates; however it should be monitored annually to assess its condition, and comments added to the asbestos register.

N/A - No Action

No action required for non asbestos material.

Exclusion - Non Accessed Area

Non accessed area. This area should be surveyed prior to refurbishment or demolition.

Dispose

Dispose carefully under *controlled conditions.

Labelling

All materials identified on the Asbestos Register (actual or presumed) must be clearly labelled with an approved label, to prevent the accidental disturbance of the asbestos by maintenance personnel or sub-contractors.

 # Blue Sky Group recommends that if asbestos removal is required, the client obtains quotations from more than one contractor.

12 Scope of Survey

Every effort has been made to identify all asbestos materials so far as was reasonably practical to do so within the scope of the survey and the attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.

Survey techniques used involves trained and experienced surveyors using the combined approach with regard to visual examination and necessary bulk sampling. It is always possible after a survey that asbestos based materials of one sort or another may remain in the property or area covered by that survey, this could be due to various reasons.

- Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.
- Materials may be hidden or obscured by other items or cover finishes i.e. paint, over boarding, disguising etc. Where this is the case then its detection will be impaired.
- Asbestos may well be hidden as part of the structure to a building and not visible until the structure is dismantled at a later date.
- Debris from previous asbestos removal projects may well be present in some areas; general asbestos debris does not form part of this survey however all good intentions are made for its discovery.
- Where an area has been previously stripped of asbestos i.e. plant rooms, ducts etc. and new coverings added, it must be pointed out that asbestos removal techniques have improved steadily over the years since its introduction. Most notably would be the Control of Asbestos at Work Regulations (2012) or other similar subsequent Regulations laying down certain enforceable guidelines. Asbestos removal prior to this regulation would not be of today's standard and therefore debris may be present below new coverings.
- This survey will detail all areas accessed and all samples taken, where an area is not covered by this survey it will be due to No Access for one reason or another i.e. working operatives, sensitive location or just simply no access. It may have been necessary for the limits of the surveyor's authority to be confirmed prior to the survey.
- Access for the survey may be restricted for many reasons beyond our control such as height, inconvenience to others, immovable obstacles or confined space. Where electrical equipment is present and presumed in the way of the survey no access will be attempted until proof of its safe state is given. Our operatives have a duty of care under the Health and Safety at Work act (1974) for both themselves and others.
- In the building where asbestos has been located and it is clear that not all areas have been investigated, any material that is found to be suspicious and not detailed as part of the survey should be treated with caution and sampled accordingly.
- Certain materials contain asbestos to varying degrees and some may be less densely contaminated at certain locations (Artex for example). Where this is the case the sample taken may not be representative of the whole product throughout.

- Where a survey is carried out under the guidance of the owner of the property, or his representative, then the survey will be as per his instruction and guidance at that time.

- Blue Sky Group cannot accept any liability for loss, injury, damage or penalty issues due to errors or omissions within this report.

- Blue Sky Group cannot be held responsible for any damage caused as part of this survey carried out on your behalf. Due to the nature and necessity of sampling for asbestos some damage is unavoidable and will be limited to just that necessary for the taking of the sample

13 Exclusions

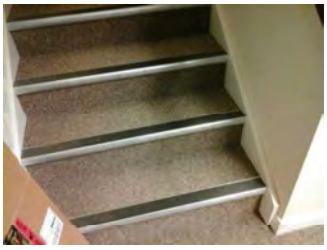
During the survey it was not possible to access the following areas.

Area	Reason	Photo
N/A	There were no excluded areas in this building	N/A

14 Non-Asbestos Materials

The following areas were inspected during the survey and for one or more of the following reasons have been identified as containing no asbestos.

- Area inspected in detail and no suspected asbestos containing materials identified.
- Knowledge of product – manufactured from a known non-asbestos product.
- The product is very unlikely to contain asbestos or have asbestos added (e.g. wallpaper, plasterboard etc.).
- Post 1985 construction for amphibole ACM's such as insulating board.
- Post 1990 construction for decorative textured coatings.
- Post 1999 construction for chrysotile products.
- Laboratory sample analysis has identified non-asbestos containing materials.

Location	Justification	Photo
Unit 3, All rooms , No asbestos identified or presumed at this location	Post 2002 construction for chrysotile products.	
Ground floor, Stair nosing , Floor tiles & adhesive	Lab Results	

15 Quality Assurance Statement

This report has been compiled for the sole use of Snap Display Systems Ltd and should not be relied upon by any third party or organisation.

The data contained within this report is intended to provide factual information only as to the presence of asbestos materials. Measurements or quantities described herein should not be relied upon for any contractual purpose.

The following authorised surveyor has checked the contents of this report:

Name: *Nye Phillips P402cert*

Date: *13th July 2015*

Signature: 

*** END OF REPORT ***

Attachments may follow if applicable

Appendix: Site Plans

Appendix: Sample Certificates

environtec
INTERNATIONAL ENVIRONMENTAL CONSULTANTS

Head Office:Environtec House, The Street, Hatfield Peverel, Chelmsford, Essex CM3 2EJ
email enquiries@environtec.com website:www.environtec.com

UKATA

UKAS TESTING 2030

CERTIFICATE FOR THE IDENTIFICATION OF ASBESTOS FIBRES

Client:	Blue-Sky Group	Surveyor:	Blue-Sky Group
Client Address:	120 Higham Road, Rushden, NN10 6DT	Analysis Report No:	J282584
Attention of:	Nye Phillips	Report Date:	23rd July 2015
Site Address:	Conrad Hawkins, Snap Display Systems Hazel Stubbs Depot Haverhill, CB9 9AF	Site Reference No:	N/A
Date Samples Taken:		No. of Samples Obtained:	3
Date Samples Received:	21st July 2015		
Date of Analysis:	23rd July 2015		
Analysed By:	Linzie Glover		

Method Statement:
Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Environtec 'In House' documented technical method of transmitted/polarised light microscopy and centre stop dispersion staining, in accordance with our UKAS Accreditation, based on the HSG 248 Asbestos: The Analyst Guide. Calibration of equipment and general quality control procedures are in accordance with our in house quality control document. Sampling methods are in accordance with documented in-house procedures and UKAS Accreditation.
Disclaimer
If samples have been DELIVERED the site address and actual sample location or sample type is given by the client at the time of delivery. Environtec are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Environtec cannot be held responsible for the interpretation of the results shown. When the test certificate indicates that bulk samples were taken by the client, they are outside the scope of our UKAS Accreditation for sampling. Environtec takes responsibility of information reported, only when a staff member of Environtec takes the sample(s).

Sample Number	Client Ref	Sample Location / Sample Type	Fibre Type Detected
BS173448	1	Perimeter Of Building- DPC - Bitumen	Chrysotile
BS173449	2	Cold Stores - Panels - Bitumen	Chrysotile
BS173450	3	Offices-FloorTiles - Vinyl Floor Tile	NADIS

Material type is a subjective opinion by the analyst based on asbestos content, appearance and experience. On rare occasions where there is an element of doubt for samples which are borderline or too insignificant to determine whether the material is asbestos insulation board or asbestos cement, you will be notified and offered a water absorption test. A water absorption test is a longer process undertaken to a supplement asbestos analysis and has a cost implication. We will advise you accordingly should this situation arise. Environtec Ltd cannot be held responsible for inaccuracies based on the material type opinion if a water absorption test has been offered and refused. Material type opinion falls outside the scope of our UKAS accreditation.

K	NADIS	= NO ASBESTOS DETECTED IN SAMPLE
	CROCIDOLITE	= Typically Known as Blue Asbestos (Amphibole Group)
	AMOSITE	= Typically Known as Brown Asbestos (Amphibole Group)
E	CHRYSOTILE	= Typically Known as White Asbestos (Serpentine Group)
	ANTHOPHYLLITE	= Asbestos (Amphibole Group)
	ACTINOLITE	= Asbestos (Amphibole Group)
Y	TREMOLITE	= Asbestos (Amphibole Group)

All samples will be retained in the laboratory for a minimum of 6 Months.

Typed By:	Linzie Glover	Authorised Signatory:	
Position:	Laboratory Technician	Print Name:	Linzie Glover

UKAS/New AFI/Statements/EA

Certificate issued by Environtec Ltd, Construction House, Hemmingr Way, Mansfield, Notts,NG18 5ES

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