GROUND CONSULTANTS LTD
ENVIRONMENTAL & GEOTECHNICAL SPECIALISTS

PHASE

1 2 3 4

Preliminary Risk Assessment (PRA)

Great Treburrick Farm, Treburrick, St Eval

PL27 7UR

For Mr Richard Old

REF: GCL24632_P1

6th March 2024

Ground Consultants Limited
Unit 67, Clear Space, Dunveth Business Park, West Hill, Wadebridge PL27 7FE
Tel: 01209 822922
Company Registration Number: 13561213

Project

Great Treburrick Farm, Treburrick, St Eval PL27 7UR

Report Type

Phase 1 Preliminary Risk Assessment (PRA)

Client

Mr Richard Old

Project Ref

GCL24632_P1

Date

15 March 2024

Prepared by

Frank Westcott
Associate

Checked by

Dan Jobson
Managing Director

Table of Contents

Figures

Appendices

Tables

Executive Summary

Commissioning	Ground Consultants Limited (GCL) were commissioned by Mr Richard Old to undertake a Phase I Preliminary Risk Assessment at the site known as 'Great Treburrick Farm, Treburrick, St Eval.' GCL were formally instructed to proceed via email on the 26th February 2024.	
Development Proposals	It is proposed to develop the site by conversion and extension of a redundant agricultural barn to form a single dwelling. Based on the development proposals, the most applicable CLEA land use class for the site is considered to be Residential with Consumption of Homegrown Produce. The proposed site plan is contained in Figure 2.1, to the rear of the report.	
Site History	On Site: The site contained an isolated barn at the time of the 1881 map, extended incrementally over the following century as part of a farm yard. Off Site: The immediate surrounding area has been developed as a farmstead, with a farmhouse, agricultural buildings and a further residential curtilage developed incrementally over the past 140 years. The remainder of the surrounding area has remained in agricultural use.	
Geology	The geological map shows no superficial deposits to be present on site. The geological map indicates that the site is underlain by the Trevose Slate Formation and Rosenum Formation (undifferentiated) comprising slate and siltstone of Devonian age formed between 394.3 and 371.1 million years ago. The BGS describes this unit as "Slate with subsidiary siltstone and trace limestone and sandstone."	
Conceptual Site Model Summary	**Source**	**Risk Rating**
	On Site: Radon Gas	**Moderate**
	On Site: Heavy Metals	**Low**
	On Site: AGST and Former Use of the Site	**Moderate**
Recommendations	It is recommended that a Phase 2 Site Investigation be implemented in order to identify, quantify and delineate any potential areas of contamination on site. The Phase II Site Investigation could also include a geotechnical assessment of the site. The Phase 2 Investigation will be aimed at identifying possible sources of contamination highlighted in the Preliminary Conceptual Model. Basic radon protective measures are recommended for the proposed development, installed in-line with BRE guidelines. In the event unexpected contamination is found during development, work should cease until the material can be identified and remediated appropriately. All site workers should be equipped with the correct PPE and have undertaken suitable risk assessments, job safety and environmental analysis before work commences. Waste material to be removed from site should be handled by a suitably licensed waste contractor.	

1 INTRODUCTION

1.1 Commissioning

Ground Consultants Limited (GCL) were commissioned by Mr Richard Old to undertake a Phase I Preliminary Risk Assessment at the site known as 'Great Treburrick Farm, Treburrick, St Eval.' GCL were formally instructed to proceed via email on the 26th February 2024.

This report has been prepared by GCL solely for the benefit of the client. It shall not be relied upon or transferred to any third party without the prior written authorisation of GCL.

1.2 Existing Reports

GCL has not been made aware of any previous land contamination reports commissioned for this site.

1.3 Scope and Objectives

The objective of this desk study is;

- ✓ To provisionally identify any land contamination associated with the proposed development and to support the discharge of relevant planning conditions and/or building control requirements.
- ✓ To provisionally assess the risk of ground instability
- ✓ To identify the need for investigation or remediation works to demonstrate that the site is suitable for use.

Any recommendations for further works have been made as deemed appropriate, based upon the findings of the investigation.

This assessment has been undertaken with guidance from BS10175:201, Environment Agency report CLR11, LCRM, and as such represents a Phase 1 Desk Study / Qualitative Risk Assessment.

1.4 Limitations

The opinions expressed in this report, along with the comments and recommendations, are derived from desk assessments and site surveys. Reliance may have been placed on third-party site plans/data appended to this report. Any plans/data included should be considered in light of this reliance.

It is important to note that this report does not constitute an asbestos inspection as defined by the 'Control of Asbestos' regulations of 2006. Additionally, it should not be used as a basis for assessments concerning neighbouring properties.

Conclusions presented in this report are based on prevailing guidance at the time of its preparation. We cannot accept liability for retroactive effects resulting from changes or amendments to legislation or guidance.

Identified risks are perceived based on reviewed information. However, actual risk assessment requires physical on-site investigations. The ground's dynamic nature, influenced by ongoing natural and artificial processes, leads to varied characteristics across the site. Despite ground investigations, complete elimination of resulting risks is unattainable.

Detailed surveys for invasive species, such as Japanese Knotweed, are beyond the scope of this investigation. Land ownership carries legal responsibilities regarding environmental harm, as defined in Section 57 of the Environment Act 1995, concerning "Contaminated Land."

This report's conclusions and recommendations are based solely on desk assessments and site surveys without intrusive investigations. Validity spans 12 months from the report's issuance. Beyond this timeframe, a qualified geoenvironmental engineer/environmental scientist should review the report to align with industry standards, policies, or guideline alterations.

It is recommended to submit this report to the local authority for approval before initiating further required work.

1.5 Information Sources

This assessment has been based upon mapping and information obtained from a number of trusted third-party sources. Although we only use information from trusted sources, GCL cannot accept any responsibility for any inaccuracy of third party information. The sources used in this assessment are listed below:

- ✓ Environmental and historical data supplied by Groundsure
- ✓ Zetica Unexploded Ordnance (UXO) risk map
- ✓ British Geological Mapping (both online viewer and map scans)

1.6 Proposed Development

It is proposed to develop the site by conversion and extension of a redundant agricultural barn to form a single dwelling. Based on the development proposals, the most applicable CLEA land use class for the site is considered to be Residential with Consumption of Homegrown Produce.

The proposed site plan is contained in Figure 2.1, to the rear of the report.

If the development proposals are substantively changed following completion of this report, the conceptual site model and conclusions must be reconsidered.

2 SITE LOCATION AND DESCRIPTION

2.1 Site Location and Layout

The site is located at the end of a long access track from the unclassified Porthcothan to St Eval road at Treburrick, approximately 1km east of the B3276 Newquay to Padstow coast road.. The site is approximately centred on National Grid Reference SW 86635 70933.

The site is roughly square in shape and covers an area of 0.21ha.

A site location and layout plan (SLP) is contained in Figure 2.1, to the rear of the report.

2.2 Surrounding Area

Table 2.1: Surrounding Land Use

Direction	Land Use
North	Agricultural fields
East	Farm yard and agricultural fields
South	Residential and agricultural fields
West	Residential and agricultural fields

2.3 Site Walkover Survey

GCL conducted a site walkover survey on 4th March 2024. Photographs from the walkover survey are provided in Appendix A.

The site, accessed via an unnamed track to the northwest of St. Eval, is square in shape and occupied by several dilapidated barn structures. Each structure features concrete block or stone construction with timber-framed, corrugated steel-clad roofs. Surrounding the barns are areas of soft landscaping, predominantly grass and overturned earth, with standing water observed during the walkover survey.

The main barn structures are situated in the southeastern quadrant of the site, characterised by significant deterioration with collapsed or collapsing roofs, rendering entry unsafe. The barns predominantly have concrete surfacing, although heavy overgrowth often obscures the floor.

Within the main barn area, an above-ground oil tank (diesel) is located along the southern elevation. The tank, constructed of plastic, rests on timber blocks supported by concrete blocks above soft landscaped ground. Black staining is evident on the concrete blocks and nearby ground surface. Adjacent to the oil tank are two propane Calor gas bottles and a greenhouse utilized for domestic fruit and vegetable cultivation. Additionally, stockpiles of spoil and reworked natural material are present in this area.

No asbestos-containing material (ACM) was identified during the survey.

2.4 Ecological Observations

No invasive species were spotted in the walkover survey. However, conducting an invasive species survey is beyond this report's scope. Consider engaging a specialist surveyor for a thorough assessment if needed.

2.5 Anecdotal Information

No anecdotal information has been supplied by the Client, landowner or any other third parties.

3 SITE HISTORY

3.1 Historical Map Review

Using historical Ordnance Survey mapping and recent aerial photography provided by Groundsure, an overview of pertinent findings relating to the site and its surroundings can be found below in Table 3.1.

Table 3.1: Summary of Historical Site Usage

On Site	Surroundings	Date & Scale
A single rectangular building is present on the eastern edge of the site. The remainder of the site is undeveloped and in assumed agricultural use	The surrounding area is undeveloped and in assumed agricultural use	1881 1:2,500
No significant changes	No significant changes	1888 1:10,560
The building has been extended southwards and a small building is present on the western edge of the site.	A building, assumed farmhouse, is present 30m west.	1907-08 1:2,500, 1:10,560
No significant changes	No significant changes	1962 1:10,560
The building has been extended eastwards ant the small building to the west has been replaced by a larger building.	Two further buildings, assumed agricultural, are present 10m and 30m east of the site.	1971-76 1:2,500, 1:10,000
No significant changes	No significant changes	1995 1:2,500
No changes to buildings. The rest of the southern part of the site is part of a farm yard. The northern part is part of a field.	Further buildings and a farm yard are present abutting the site to the east. The farm house is visible 30m west. The remaining area is in arable cultivation.	1999 Aerial photo
No significant changes	No significant changes	2001-03 1:1,250, 1:10,000
Silage clamp present in northern part of site	Silage clamp in farm yard to east. Surrounding area in mixed arable and pasture.	2005 Aerial photo
Scale too small to show detail	No significant changes	2010 1:10,000

No significant changes	Further farm building 40m south-east. Curtilage of assumed residential building and sheds present abutting to south-west.	2013-22 Aerial photos
Scale too small to show detail	No significant changes	2024 1:10,000

3.2 Site History Summary

On Site: The site contained an isolated barn at the time of the 1881 map, extended incrementally over the following century as part of a farm yard.

Off Site: The immediate surrounding area has been developed as a farmstead, with a farmhouse, agricultural buildings and a further residential curtilage developed incrementally over the past 140 years. The remainder of the surrounding area has remained in agricultural use.

3.3 UXO Risk

The risk to the site and its surroundings from the presence of UXO is low (see Appendix D).

3.4 Nearby Planning Applications

There are no planning applications relevant to land contamination identified in the Cornwall Council online planning register.

4 GEOLOGICAL & GEOTECHNICAL SETTING

4.1 Geological Setting

Reference has been made to the BGS geological mapping at 1:10,000 and 1:50,000 scales in the Groundsure report, as well as the BGS online map viewer.

The geological map shows no superficial deposits to be present on site.

The geological map indicates that the site is underlain by the Trevose Slate Formation and Rosenum Formation (undifferentiated) comprising slate and siltstone of Devonian age formed between 394.3 and 371.1 million years ago. The BGS describes this unit as “Slate with subsidiary siltstone and trace limestone and sandstone.”

4.2 Borehole Records

There are no BGS borehole records within 100m of the site.

4.3 Anticipated Geological Sequence

Based on our experience of the local area, as well as BGS mapping, it is anticipated that the following geological sequence can be expected;

Table 4.1: Anticipated Geological Sequence

Strata	Description	Estimated Thickness (m)	Estimated Permeability	Location
Made Ground	Reworked natural material with potential anthropogenic components including brick and concrete.	0 – 0.5	Unsuitable for conventional drainage	Around and beneath existing structures and hard standing
Topsoil	Brown friable clay or silt	0.3 – 0.5	Unsuitable for conventional drainage	Across the remainder of the site
Weathered Trevose Slate/Rosenum Formation	Sandy gravel of slate and siltstone	20m+	Moderate – good	Across the site

4.4 Potential for Ground Instability

There are many natural and human-induced geotechnical processes which can give rise to ground stability issues. While in all cases instability may arise whether or not there is any development on the surface, it is important to recognise that the development itself or the intensification of development may be the triggering factor, which initiates instability problems.

The risks posed by common types of unstable ground are tabulated below. The assessment of risk is based upon the proposed development, using a range of information sources, including geological and topographical mapping, as well as Groundsure data.

Table 4.2: Unstable Ground Risk Summary

Instability Risk	Risk Rating	Details
Shrinking or Swelling Clay	Negligible	Ground conditions predominantly non plastic.

Running Sand	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on land use due to running conditions.
Compressible Deposits	Negligible	Compressible strata are not thought to occur.
Collapsible Deposits	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.
Landslides	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.
Ground Dissolution of Soluble Rocks	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.

4.5 Mining, Ground Workings & Natural Cavities

According to the Groundsure report, underground mine workings may have occurred in the past. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered. No surface or underground mining features were noted on the historical maps, and none were noted in the Groundsure Data (Appendix B).

4.6 Groundwater

It is unlikely that groundwater will be shallow in this area. It is anticipated that groundwater will flow to the north-east.

5 ENVIRONMENTAL, HYDROLOGICAL & HYDROGEOLOGICAL SETTING

5.1 Hydrology & Hydrogeology

A summary of the hydrological and hydrogeological setting is tabulated below, with respect to the anticipated geological sequence set out in section 4.1.

Table 5.1: Overview of the hydrological and hydrogeological setting

Hydrogeology	
Superficial Aquifer	There are no superficial deposits recorded on site.
Bedrock Aquifer	The Trevose Slate Formation and Rosenum Formation (undifferentiated) is designated as a "Secondary A" Aquifer. The Environment Agency describes this type of aquifer as Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
Groundwater Vulnerability	Bedrock geology is designated as high vulnerability. The flow mechanism is defined as well connected fractures.
Groundwater Abstractions	There are no groundwater abstraction licenses within 500m of the site.
Surface Water Abstractions	There are no surface water abstraction licences within 500m of the site.
Source Protection Zones	The site is not within a groundwater Source Protection Zone.
Hydrology	
Ordnance Survey Water Network and Surface Water Features	The nearest surface watercourse is an un-named stream, 250m north-west of the site. The stream is not influenced by normal tidal action.
Water Framework Directive (WFD) Surface Water Body Catchments	The site is within the Porthcothan Stream surface water body catchment. The Porthcothan Stream is 461m north-east of the site.
Flooding and Drainage	
Risk of Flooding from Rivers and Sea (RoFRaS)	The site is not in an area considered to be at risk from flooding from rivers and the sea.
Historical Flood Events	None recorded.
Flood Defences	None within 250m of the site.
Areas Benefitting from Flood Defences	The site is not in an area benefitting from flood defences.
Flood Storage Areas	None within 250m of the site.
Flood Zones	The site is not within a Zone 2 or Zone 3 area at risk from flooding.
Surface Water Flooding	The site is considered to be at negligible risk from surface water flooding.
Groundwater Flooding	The site is considered to be at a negligible risk of groundwater flooding.

5.2 Environmental Setting

The following table summarises all pertinent environmental factors relating to the site, with respect to the ground conditions set out in section 4.

Table 5.2: Environmental Setting

Radon	
Percentage of Properties in above Action Level for Radon	**Required Protection Levels**
Between 3% and 5%	Basic Radon Protection

Radon protection measures should be installed in line with Building Research Establishment (BRE) 211 "Guidance on Protective Measures for New Buildings."

Background Estimated Soil Chemistry (mg / kg)		
Arsenic	15 - 25	Levels of heavy metals are not predicted to exceed the relevant generic assessment criteria
Cadmium	<1.8	
Chromium	60 - 90	
Lead	<100	
Nickel	30 – 45	

Sensitive Land Uses			
Sensitive Land Use	**Within pertinent radius of site? (250m)***		**Distance & Direction (Comments if applicable)**
	Yes	**No**	
Site of Special Scientific Interest	☐	☒	
Ramsar Sites	☐	☒	
Special Areas of Conservation	☐	☒	
Special Protection Area	☐	☒	
National Nature Reserves	☐	☒	
Local Nature Reserves	☐	☒	
Designated Ancient Woodland	☐	☒	
Biosphere Reserves	☐	☒	
Forest Parks	☐	☒	
Marine Conservations Zones	☐	☒	
Green Belt	☐	☒	
Proposed Ramsar Sites	☐	☒	
Possible Special Area of Conservation	☐	☒	
Potential Special Protection Areas	☐	☒	
Nitrate Sensitive Areas	☐	☒	
Nitrate Vulnerable Zones	☐	☒	

Waste & Landfill			
Environmental Source	**Within pertinent radius of site? (250m)***		**Distance & Direction (Comments if applicable)**
	Yes	**No**	
Active or Recent Landfill	☐	☒	
Historical Landfill (BGS, LA or EA)	☐	☒	
Historical Waste Sites	☐	☒	
Licensed Waste Sites	☐	☒	

**Initial search extent limited to 250m from site, unless source of contamination and/or sensitive receptor is considered significant enough to warrant a greater radius of up to 1,000m.*

Past and Present Land Uses

Land Use	Within pertinent radius of site? (100m)*		Distance & Direction (Comments if applicable)
	Yes	No	
Historical Industrial Land Uses	☐	☒	
Historical Tanks	☐	☒	
Historical Energy Features	☐	☒	
Historical Petrol Stations	☐	☒	
Historical Military Land	☐	☒	
Recent Industrial Land Uses	☐	☒	
Current Or Recent Petrol Stations	☐	☒	
Electricity Cables	☐	☒	
Gas Pipelines	☐	☒	
Sites Determined as Contaminated Land	☐	☒	
Control Of Major Accident Hazards	☐	☒	
Regulated Explosive Sites	☐	☒	
Hazardous Substance Storage/Usage	☐	☒	
Historical Licensed Industrial Activities	☐	☒	
Licensed Industrial Activities (Part A(1))	☐	☒	
Licensed Industrial Activities (Part A(2)/B)	☐	☒	
Radioactive Substance Authorisations	☐	☒	
Licensed Discharge to Controlled Water	☐	☒	
Pollutant Release to Surface Waters	☐	☒	
Pollutant Release to Public Sewer	☐	☒	
List 1 Dangerous Substances	☐	☒	
List 2 Dangerous Substances	☐	☒	
Pollution Incidents	☐	☒	

**Initial search extent limited to 100m from site, unless source of contamination and/or sensitive receptor is considered significant enough to warrant a greater radius of up to 1,000m.*

6 PRELIMINARY CONCEPTUAL MODEL

6.1 Introduction

A Preliminary Risk Assessment is underpinned by the conceptual model, which is based on the relationship between the source of contamination, potential receptors, and any pathway between. If a viable source, pathway and receptor is identified, an assessment of the risk is required. CIRIA C552 offers guidance on risk valuation, based on the likelihood of an event, and its severity.

The following table outlines the classification of probability, based on CIRIA C552;

Table 6.1: Classification of Probability

Classification	Definition
High Likelihood	A pollutant link has been identified and a pollution event is very likely in the short term and almost inevitable in the long term.
Likely	A pollutant link has been identified, and it is probable that an event will occur in the long term, and possible in the short term.
Low Likelihood	There is a pollutant linkage and circumstances are such that an event could occur, but it is not probable in the long term and even less likely in the short term.
Unlikely	There is a pollutant linkage but it is unlikely that and event would occur even in the very long term.

The following table outlines the classification of consequence, based on CIRIA C552;

Table 6.2: Classification of Consequence

Classification	Definition
Severe	Short term (acute) risk to human health likely to result in “significant harm” as defined by the Environmental Protection Act 1990 and/or short-term risk of pollution of sensitive water resources and/or catastrophic damage to buildings or property.
Medium	Long term (chronic) damage to human health likely to result in “significant harm” as defined by the Environmental Protection Act 1990 and/or significant pollution of sensitive water resources and/or significant change in a defined ecosystem.
Mild	Long term harm to human health but not significant as defined by the Environmental Protection Act 1990 and/or pollution of non-sensitive water resources and non-significant pollution of sensitive water resources.
Minor	Harm, not significant, but that could result in financial loss or cost implications. Non-permanent human health effects.

Following classification of the probability and severity, a risk category can be assigned. The following table, taken from CIRIA C552 summarises this process;

Table 6.3: Risk Classification Matrix

Risk Classification Matrix					
Taken from CIRIA C552		**Consequence**			
		Severe	**Medium**	**Mild**	**Minor**
Probability	**High Likelihood**	Very High	High	Moderate	Moderate / Low
	Likely	High	Moderate	Moderate / Low	Low
	Low Likelihood	Moderate	Moderate / Low	Low	Very Low
	Unlikely	Moderate / Low	Low	Very Low	Very Low

The risk categories are defined as follows;

Table 6.4: Risk Categories

Classification	Definition
Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard OR there is evidence that severe harm to a designated receptor is currently happening. Urgent investigation and remediation are likely to be required.
High	Harm is likely to arise to a designated receptor from an identified hazard. Urgent investigation is required and remedial works may be necessary.
Moderate	It is possible that harm could arise to a designated receptor from and identified hazard. However it is relatively unlikely that any such harm would be severe.
Low	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very Low	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

6.2 Preliminary Conceptual Site Model

This conceptual site model has been undertaken with due regard to guidance provided in BS10175:2011, CLR11 and CIRIA C552. The assessment of risk from land contamination also pays due regard to the definition of contaminated land, as defined within Part 2A of the Environment Protection Act 1990. This legislation defines contaminated land as any land that is in such a condition that by reason of substances in, on or under the land:

- ✓ Significant harm is being caused or there is a significant possibility of such harm being caused; or
- ✓ Pollution of controlled water is being, or is likely to be, caused.

Potential sources of contamination identified from current activities and the history of the site and surrounding area are presented in table 6.5 below.

Table 6.5: Potential Sources of Contamination

Potential Sources	Contaminants of Concern
Natural Geology	Radon Gas
	Arsenic
AGST, Former Agricultural Land Use	TPH, PAH, Heavy Metals

The conceptual site model is derived from an assessment of the above potential sources of contamination, using the criteria set out in CIRIA C552 and tables 6.1-6.4 above. The table, overleaf, is based on the proposed use and the site in its current condition.

6.3 Preliminary Conceptual Site Model Matrix

Table 6.6: Preliminary Conceptual Site Model

Preliminary Conceptual Model					
Source(s)	**Pathway(s)**	**Receptor(s)**	**Probability**	**Severity**	**Risk Assessment**
On Site: Radon Gas	Ingress into proposed buildings	Future site users	Likely	Medium	**Moderate Risk** – Development is within an area where between 3% and 5% of properties are above the action level.
On Site: Heavy Metals	Dermal contact Soil and dust ingestion and inhalation	Future site users Site workers Site flora and fauna	Unlikely	Medium	**Low Risk** – Levels of heavy metals are not predicted to exceed the relevant generic assessment criteria
On Site: AGST and Former Use of the Site (TPH, PAH, Heavy Metals)	Dermal contact Soil and dust ingestion and inhalation Ground & surface waters	Future site users Site workers Site flora and fauna	Likely	Medium	**Moderate Risk –** Hydrocarbon staining was noted on the ground surface around the Above Ground Storage Tank, likely to be diesel. Though any contamination is likely to be highly localised and superficial, soil sampling will be required to categorically confirm the risk. It would also be considered prudent to also obtain a number of soil samples from across the remainder of the site, for a general contamination screen, given the sites dilapidated state and former agricultural use.

7 CONCLUSIONS AND RECOMMENDATIONS

7.1 Geotechnical Considerations

Any Made Ground encountered on site will not suffice as a suitable bearing stratum, therefore shallow foundations should be placed in the underlying natural material.

Conventional strip foundations may be viable at this site; however a site investigation will be required to confirm this. It would also be considered prudent to carry out soakaway testing in accordance with BRE 365 to asses the sites suitability for conventional drainage.

7.2 Conclusions

Development is within an area where between 3% and 5% of properties are above the action level for Radon.

Levels of heavy metals including arsenic are not predicted to exceed the relevant generic assessment criteria.

Hydrocarbon staining was noted on the ground surface around the Above Ground Storage Tank, likely to be diesel. Though any contamination is likely to be highly localised and superficial, soil sampling will be required to categorically confirm the risk. It would also be considered prudent to also obtain a number of soil samples from across the remainder of the site, for a general contamination screen, given the sites dilapidated state and former agricultural use.

It can be concluded that the site is likely to be suitable for the proposed development, once the recommendations contained within this report have been implemented.

7.3 Recommendations

It is recommended that a Phase 2 Site Investigation be implemented in order to identify, quantify and delineate any potential areas of contamination on site. The Phase II Site Investigation could also include a geotechnical assessment of the site.

The Phase 2 Investigation will be aimed at identifying possible sources of contamination highlighted in the Preliminary Conceptual Model.

Basic radon protective measures are recommended for the proposed development, installed in-line with BRE guidelines.

In the event unexpected contamination is found during development, work should cease until the material can be identified and remediated appropriately.

All site workers should be equipped with the correct PPE and have undertaken suitable risk assessments, job safety and environmental analysis before work commences.

Waste material to be removed from site should be handled by a suitably licensed waste contractor.

8 REFERENCES

- BSI (2011) BS 10175:2011 +a1:2013 Investigation of Potentially Contaminated Sites – Code of Practice. London, British Standards Institution
- Building Research Establishment (BRE) (2007) BR211 - Radon: Guidance on Protective Measures for New Buildings. Watford, BRE
- CIRIA (2001) CIRIA C552 - Contaminated land risk assessment: A guide to good practice. London, CIRIA
- CIRIA (2007) CIRIA C665 – Assessing Risks Posed by Hazardous Ground Gases to Buildings. London, CIRIA
- Contaminated Land: Applications in Real Environments (CL:AIRE), Association of Geotechnical and Geo-environmental Specialists (AGS) and The Environmental Industries Commission (EIC) (2010) Soil Generic Assessment Criteria for Human Health Risk Assessment. London, CL:AIRE
- Department of Communities and Local Government (2012) National Planning Policy Framework. London, DCLG
- Environment Agency (2004) Contaminated Land Report 11 - Model Procedures for the Management of Land Contamination. Bristol, Environment Agency
- Environment Agency (2005) Guidance on Assessing the Risk Posed by Land Contamination and Its Remediation on Archaeological Resource Management. Bristol, EA
- Great Britain. Environmental Protection Act (1990). London, The Stationery Office
- Great Britain. Environmental Damage (Prevention and Remediation) Regulations (2009). London, The Stationery Office
- Great Britain. Water Act (2003). London, The Stationery Office
- Great Britain. The Water Framework Directive (Standards and Classification) Directions (England and Wales) (2015). London, The Stationery Office
- Land Quality Press (2015) The LQM/CIEH Suitable 4 Use Levels for Human Health Risk Assessment (2nd Edition). Nottingham, Land Quality Press
- National House Building Council (NHBC), Environment Agency and Chartered Institute of Environmental Health (CIEH) (2008) Research & Development Publication 66: Guidance for the Safe Development of Housing on Land Affected by Contamination. Amersham, NHBC
- Royal Institution of Chartered Surveyors (RICS) (2012) Japanese Knotweed and Residential Property. Coventry, RICS

Figure 2.1
Site Location Plan

Plan may be provided by a third party

Ground Consultants Limited
Unit 67, Clear Space, Dunveth Business Park, West Hill, Wadebridge PL27 7FE
Tel: 01209 822922
Company Registration Number: 13561213

1 Existing Location Plan

1 : 1250

2 Existing Block Plan

1 : 500

6 Google Earth Image

1 : 1

4 Proposed Block Plan

1 : 500

5 Proposed Location Plan

1 : 1250

3 Proposed Site Plan

1 : 200

Site Boundary = 4980.10 m2 Site Area = 2175.45 m2

Scale = 1:200@A1

Scale = 1:500@A1

Scale = 1:1250@A1

Cornwall Planning Group

Head Office: Chi Gallos,
Hayle Marine Renewables Business Park,
North Quay, Hayle,
Cornwall, TR27 4DD
Phone: +44 (0)1736 448 500
Email: office@cornwallplanninggroup.co.uk
Web: www.cornwallplanninggroup.co.uk

Client:	Mr Richard Old
Project:	Conversion & Extension of Redundant Agricultural Barn to From Dwelling House & Associated Works
Address:	Great Treburrick Farm, Treburrick, St Eval, PL27 7UR
Title:	Location Plans

Revisions

Rev.	Issue Date	Description	Issued by

Stage:	Planning
Scale:	As indicated
Date:	01/02/2024
Drawn: Author	Checked: Checker
Project No: 2594	Drawing No: 001
Rev:	

Appendix A
Site Photographs

Plan may be provided by a third party

Ground Consultants Limited
Unit 67, Clear Space, Dunveth Business Park, West Hill, Wadebridge PL27 7FE
Tel: 01209 822922
Company Registration Number: 13561213

SITE PHOTOGRAPHS

PLATE 1

PLATE 2

SITE:	Great Treburrick Farm, Treburrick, St Eval PL27 7UR
REF:	GCL24632_P1
CLIENT:	Mr Richard Old

SITE PHOTOGRAPHS

PLATE 3

PLATE 4

SITE:	Great Treburrick Farm, Treburrick, St Eval PL27 7UR
REF:	GCL24632_P1
CLIENT:	Mr Richard Old

SITE PHOTOGRAPHS

PLATE 5

PLATE 6

SITE:	Great Treburrick Farm, Treburrick, St Eval PL27 7UR
REF:	GCL24632_P1
CLIENT:	Mr Richard Old

SITE PHOTOGRAPHS

PLATE 7

PLATE 8

SITE:	Great Treburrick Farm, Treburrick, St Eval PL27 7UR
REF:	GCL24632_P1
CLIENT:	Mr Richard Old

SITE PHOTOGRAPHS

PLATE 9

PLATE 10

SITE:	Great Treburrick Farm, Treburrick, St Eval PL27 7UR
REF:	GCL24632_P1
CLIENT:	Mr Richard Old

Appendix B Groundsure Environmental Data

Plan may be provided by a third party

Ground Consultants Limited
Unit 67, Clear Space, Dunveth Business Park, West Hill, Wadebridge PL27 7FE
Tel: 01209 822922
Company Registration Number: 13561213

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

GREAT TREBURRICK FARM, TREBURRICK, ST EVAL, WADEBRIDGE, CORNWALL, PL27 7UR

Order Details

Date: 28/02/2024

Your ref: 24632

Our Ref: GS-AB8-K9W-P48-HCV

Site Details

Location: 186635 070933

Area: 0.21 ha

Authority: Cornwall Council (Unitary) ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	0	0	1	10	-
16	1.2	Historical tanks	0	0	0	0	-
16	1.3	Historical energy features	0	0	0	0	-
17	1.4	Historical petrol stations	0	0	0	0	-
17	1.5	Historical garages	0	0	0	0	-
17	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
18 >	2.1 >	Historical industrial land uses >	0	0	1	11	-
19	2.2	Historical tanks	0	0	0	0	-
19	2.3	Historical energy features	0	0	0	0	-
19	2.4	Historical petrol stations	0	0	0	0	-
20	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
22	3.5	Historical waste sites	0	0	0	0	-
22	3.6	Licensed waste sites	0	0	0	0	-
22 >	3.7 >	Waste exemptions >	0	10	0	10	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
25	4.1	Recent industrial land uses	0	0	0	-	-
25	4.2	Current or recent petrol stations	0	0	0	0	-
25	4.3	Electricity cables	0	0	0	0	-
25	4.4	Gas pipelines	0	0	0	0	-
25	4.5	Sites determined as Contaminated Land	0	0	0	0	-

26	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
26	4.7	Regulated explosive sites	0	0	0	0	-
26	4.8	Hazardous substance storage/usage	0	0	0	0	-
26	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
26	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
27	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
27	4.12	Radioactive Substance Authorisations	0	0	0	0	-
27	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
27	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
27	4.15	Pollutant release to public sewer	0	0	0	0	-
28	4.16	List 1 Dangerous Substances	0	0	0	0	-
28	4.17	List 2 Dangerous Substances	0	0	0	0	-
28	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
28	4.19	Pollution inventory substances	0	0	0	0	-
28	4.20	Pollution inventory waste transfers	0	0	0	0	-
29	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	**Hydrogeology** >	On site	0-50m	50-250m	250-500m	500-2000m
30 >	**5.1** >	**Superficial aquifer** >	Identified (within 500m)				
32 >	**5.2** >	**Bedrock aquifer** >	Identified (within 500m)				
33 >	**5.3** >	**Groundwater vulnerability** >	Identified (within 50m)				
34	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
34	5.5	Groundwater vulnerability- local information	None (within 0m)				
35 >	**5.6** >	**Groundwater abstractions** >	0	0	0	0	7
37 >	**5.7** >	**Surface water abstractions** >	0	0	0	0	4
38	5.8	Potable abstractions	0	0	0	0	0
39	5.9	Source Protection Zones	0	0	0	0	-
39	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	**Hydrology** >	On site	0-50m	50-250m	250-500m	500-2000m
40	6.1	Water Network (OS MasterMap)	0	0	0	-	-

40	6.2	Surface water features	0	0	0	-	-
41 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
41 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
42 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
43	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
43	7.2	Historical Flood Events	0	0	0	-	-
43	7.3	Flood Defences	0	0	0	-	-
44	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
44	7.5	Flood Storage Areas	0	0	0	-	-
45	7.6	Flood Zone 2	None (within 50m)				
45	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
46	8.1	Surface water flooding	Negligible (within 50m)				
Page	Section	Groundwater flooding >					
47 >	9.1 >	Groundwater flooding >	Negligible (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
48 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	0	1
49	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
49 >	10.3 >	Special Areas of Conservation (SAC) >	0	0	0	0	2
49	10.4	Special Protection Areas (SPA)	0	0	0	0	0
50	10.5	National Nature Reserves (NNR)	0	0	0	0	0
50	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
50	10.7	Designated Ancient Woodland	0	0	0	0	0
50	10.8	Biosphere Reserves	0	0	0	0	0
51	10.9	Forest Parks	0	0	0	0	0
51 >	10.10 >	Marine Conservation Zones >	0	0	0	0	7
51	10.11	Green Belt	0	0	0	0	0
52	10.12	Proposed Ramsar sites	0	0	0	0	0

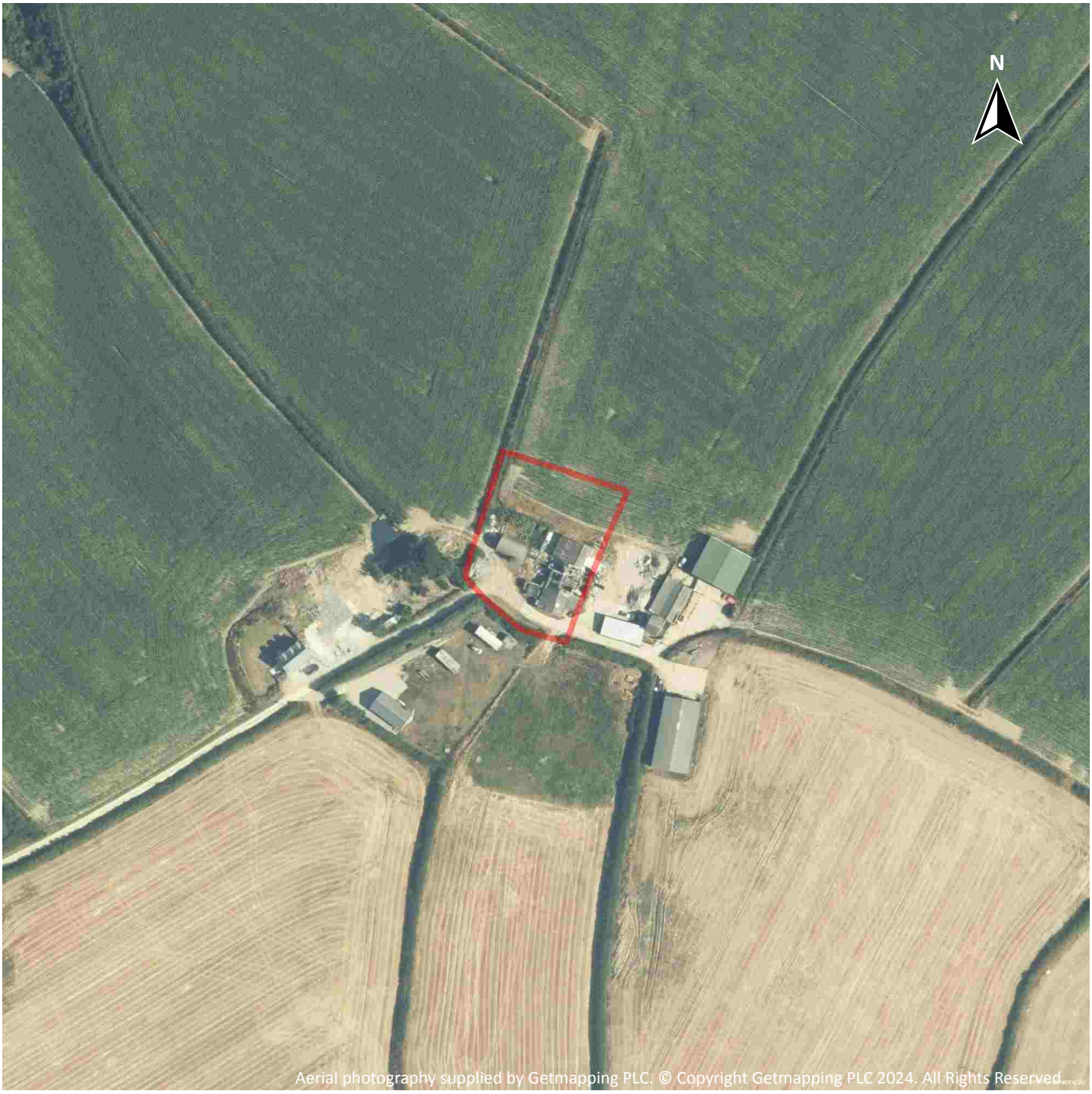
52	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
52	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
52	10.15	Nitrate Sensitive Areas	0	0	0	0	0
53	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
54 >	**10.17 >**	**SSSI Impact Risk Zones >**	1	-	-	-	-
55 >	**10.18 >**	**SSSI Units >**	0	0	0	0	3
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
57	11.1	World Heritage Sites	0	0	0	-	-
57	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
57	11.3	National Parks	0	0	0	-	-
57	11.4	Listed Buildings	0	0	0	-	-
58	11.5	Conservation Areas	0	0	0	-	-
58	11.6	Scheduled Ancient Monuments	0	0	0	-	-
58	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
59 >	**12.1 >**	**Agricultural Land Classification >**	Grade 4 (within 250m)				
60	12.2	Open Access Land	0	0	0	-	-
60	12.3	Tree Felling Licences	0	0	0	-	-
60 >	**12.4 >**	**Environmental Stewardship Schemes >**	1	0	0	-	-
61	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
62	13.1	Priority Habitat Inventory	0	0	0	-	-
62	13.2	Habitat Networks	0	0	0	-	-
62	13.3	Open Mosaic Habitat	0	0	0	-	-
62	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
63 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
64	14.2	Artificial and made ground (10k)	0	0	0	0	-
65	14.3	Superficial geology (10k)	0	0	0	0	-

65	14.4	Landslip (10k)	0	0	0	0	-
66	14.5	Bedrock geology (10k)	0	0	0	0	-
66	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
67 >	15.1 >	**50k Availability >**	Identified (within 500m)				
68 >	15.2 >	**Artificial and made ground (50k) >**	0	0	0	1	-
69	15.3	Artificial ground permeability (50k)	0	0	-	-	-
70 >	15.4 >	**Superficial geology (50k) >**	0	0	1	2	-
71	15.5	Superficial permeability (50k)	None (within 50m)				
71	15.6	Landslip (50k)	0	0	0	0	-
71	15.7	Landslip permeability (50k)	None (within 50m)				
72 >	15.8 >	**Bedrock geology (50k) >**	1	0	0	1	-
73 >	15.9 >	**Bedrock permeability (50k) >**	Identified (within 50m)				
73 >	15.10 >	**Bedrock faults and other linear features (50k) >**	0	0	0	1	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
74	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	**Natural ground subsidence >**					
75 >	17.1 >	**Shrink swell clays >**	Negligible (within 50m)				
76 >	17.2 >	**Running sands >**	Negligible (within 50m)				
77 >	17.3 >	**Compressible deposits >**	Negligible (within 50m)				
78 >	17.4 >	**Collapsible deposits >**	Very low (within 50m)				
79 >	17.5 >	**Landslides >**	Very low (within 50m)				
80 >	17.6 >	**Ground dissolution of soluble rocks >**	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
82 >	18.1 >	**BritPits >**	0	0	1	1	-
83 >	18.2 >	**Surface ground workings >**	0	0	1	-	-
83	18.3	Underground workings	0	0	0	0	0
84	18.4	Underground mining extents	0	0	0	0	-
84	18.5	Historical Mineral Planning Areas	0	0	0	0	-

84 >	18.6 >	Non-coal mining >	1	0	0	0	1
85	18.7	JPB mining areas	None (within 0m)				
85	18.8	The Coal Authority non-coal mining	0	0	0	0	-
85	18.9	Researched mining	0	0	0	0	-
85	18.10	Mining record office plans	0	0	0	0	-
86	18.11	BGS mine plans	0	0	0	0	-
86	18.12	Coal mining	None (within 0m)				
86	18.13	Brine areas	None (within 0m)				
86	18.14	Gypsum areas	None (within 0m)				
86	18.15	Tin mining	None (within 0m)				
87	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
88	19.1	Natural cavities	0	0	0	0	-
88	19.2	Mining cavities	0	0	0	0	0
88	19.3	Reported recent incidents	0	0	0	0	-
88	19.4	Historical incidents	0	0	0	0	-
89	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
90 >	20.1 >	Radon >	Between 3% and 5% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
92 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	1	-	-	-
92	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
92	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
93	22.1	Underground railways (London)	0	0	0	-	-
93	22.2	Underground railways (Non-London)	0	0	0	-	-
93	22.3	Railway tunnels	0	0	0	-	-
93	22.4	Historical railway and tunnel features	0	0	0	-	-
93	22.5	Royal Mail tunnels	0	0	0	-	-

94	22.6	Historical railways	0	0	0	-	-
94	22.7	Railways	0	0	0	-	-
94	22.8	Crossrail 1	0	0	0	0	-
94	22.9	Crossrail 2	0	0	0	0	-
94	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 06/08/2022

Site Area: 0.21ha

Recent site history - 2019 aerial photograph

Capture Date: 22/06/2019

Site Area: 0.21ha

Recent site history - 2013 aerial photograph

Capture Date: 08/06/2013

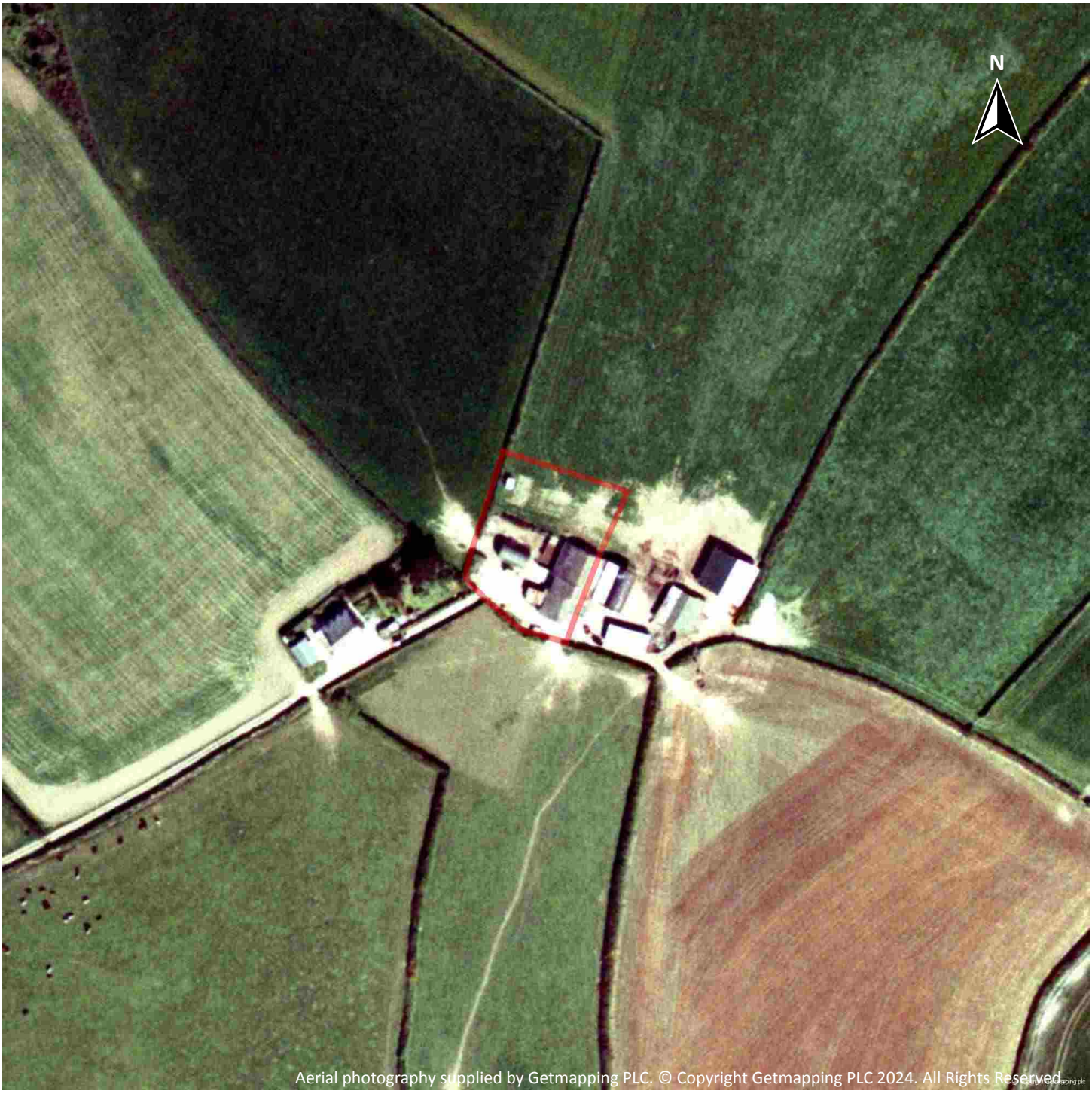
Site Area: 0.21ha

Recent site history - 2005 aerial photograph

Capture Date: 09/08/2005

Site Area: 0.21ha

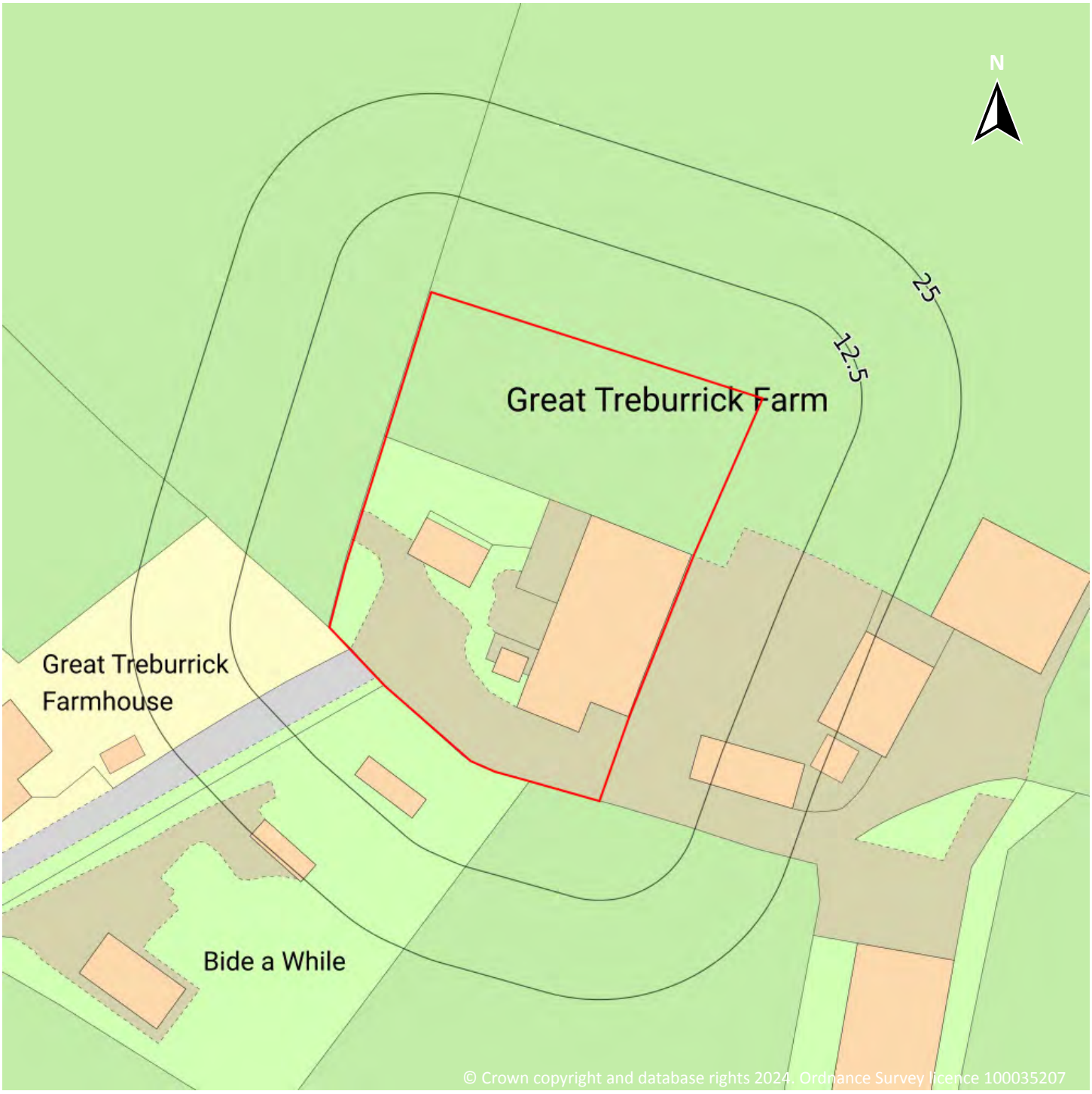
Recent site history - 1999 aerial photograph



Capture Date: 02/09/1999

Site Area: 0.21ha

OS MasterMap site plan



Site Area: 0.21ha

1 Past land use

Site Outline

Search buffers in metres (m)

Historical industrial land uses

1.1 Historical industrial land uses

Records within 500m	11

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 15 >**

ID	Location	Land use	Dates present	Group ID
1	135m NW	Unspecified Old Quarry	1880	28839

ID	Location	Land use	Dates present	Group ID
A	305m SW	Malthouse	1880	28050
B	307m SW	Quarry	1907	36662
B	307m SW	Unspecified Quarry	1880	43476
B	307m SW	Unspecified Quarry	1906	59221
B	308m SW	Unspecified Disused Quarry	1975	19106
B	308m SW	Unspecified Old Quarry	1958	28840
A	330m SW	Smithy	1880	58867
A	346m SW	Smithy	1906 - 1907	41737
A	398m SW	Smithy	1958	47462
2	401m NE	Unspecified Quarry	1958	19937

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

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'.

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0

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'.

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

Site Outline

Search buffers in metres (m)

Historical industrial land uses

2.1 Historical industrial land uses

Records within 500m	12

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 18 >**

ID	Location	Land Use	Date	Group ID
1	135m NW	Unspecified Old Quarry	1880	28839
A	305m SW	Malthouse	1880	28050
B	307m SW	Quarry	1907	36662

ID	Location	Land Use	Date	Group ID
B	307m SW	Unspecified Quarry	1880	43476
B	307m SW	Unspecified Quarry	1906	59221
B	308m SW	Unspecified Old Quarry	1958	28840
B	308m SW	Unspecified Disused Quarry	1975	19106
A	330m SW	Smithy	1880	58867
A	346m SW	Smithy	1906	41737
A	383m SW	Smithy	1907	41737
A	398m SW	Smithy	1958	47462
2	401m NE	Unspecified Quarry	1958	19937

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**0**

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'.

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**0**

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'.

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

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	20

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 21 >**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	44m W	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX049057	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
A	44m W	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX049057	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
A	44m W	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX049057	Using waste exemption	On a farm	Use of waste for a specified purpose
A	44m W	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX049057	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
A	44m W	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX049057	Disposing of waste exemption	On a farm	Burning waste in the open
A	49m SW	Great Treburrick Farm WADEBRIDGE Cornwall PL27 7UR	EPR/NH0770RZ/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
A	49m SW	Great Treburrick Farm WADEBRIDGE Cornwall PL27 7UR	EPR/NH0770RZ/A001	Using waste exemption	Agricultural Waste Only	Burning of waste as a fuel in a small appliance
A	49m SW	Great Treburrick Farm WADEBRIDGE Cornwall PL27 7UR	EPR/NH0770RZ/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
A	49m SW	Great Treburrick Farm WADEBRIDGE Cornwall PL27 7UR	EPR/NH0770RZ/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
A	49m SW	Great Treburrick Farm WADEBRIDGE Cornwall PL27 7UR	EPR/NH0770RZ/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
B	384m SW	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX319951	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
B	384m SW	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX319951	Using waste exemption	On a farm	Use of waste for a specified purpose
B	384m SW	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX319951	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters

ID	Location	Site	Reference	Category	Sub-Category	Description
B	384m SW	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX319951	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
B	384m SW	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX319951	Disposing of waste exemption	On a farm	Burning waste in the open
B	384m SW	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX192779	Using waste exemption	On a Farm	Burning of waste as a fuel in a small appliance
B	384m SW	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX192779	Using waste exemption	On a Farm	Use of waste for a specified purpose
B	384m SW	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX192779	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
B	384m SW	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX192779	Disposing of waste exemption	On a Farm	Burning waste in the open
B	384m SW	GREAT TREBURRICK FARM, TREBURRICK, ST. EVAL, WADEBRIDGE, PL27 7UR	WEX192779	Disposing of waste exemption	On a Farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice

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

4 Current industrial land use

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	0

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

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	3

Aquifer status of groundwater held within superficial geology.

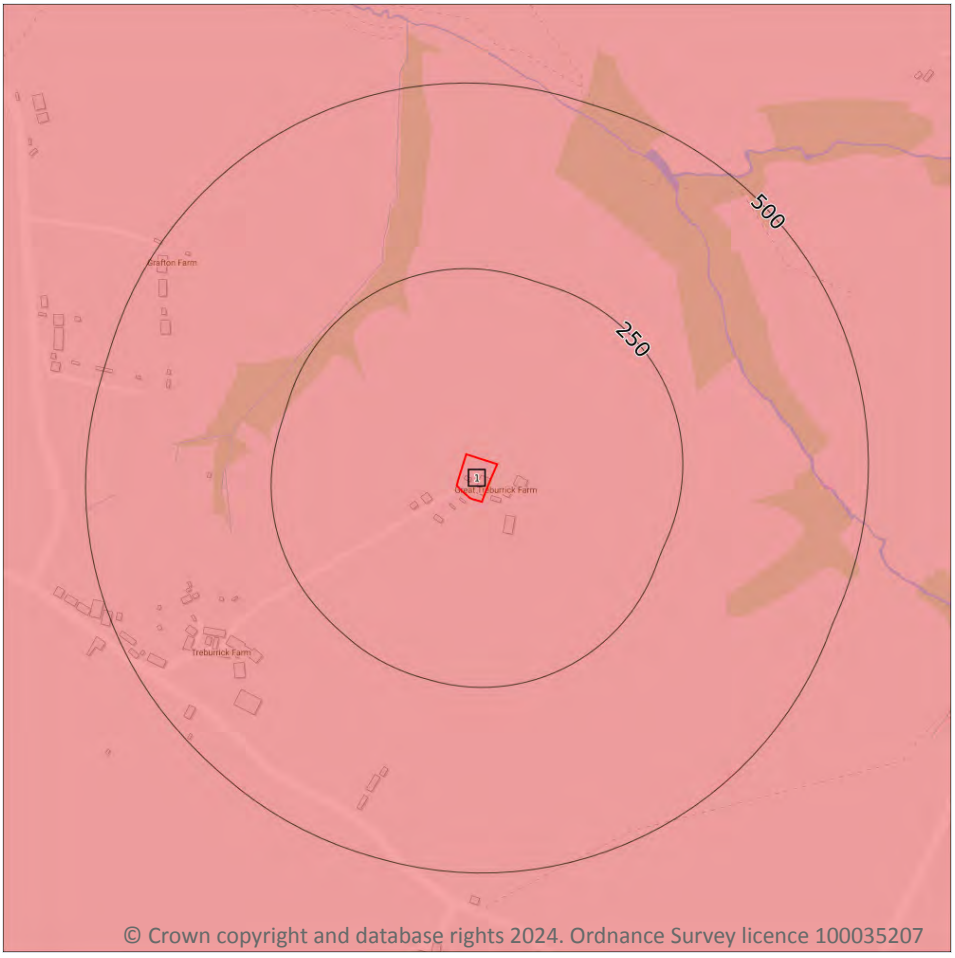
Features are displayed on the Hydrogeology map on **page 30 >**

ID	Location	Designation	Description
1	234m NW	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	344m E	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	427m NE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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	1

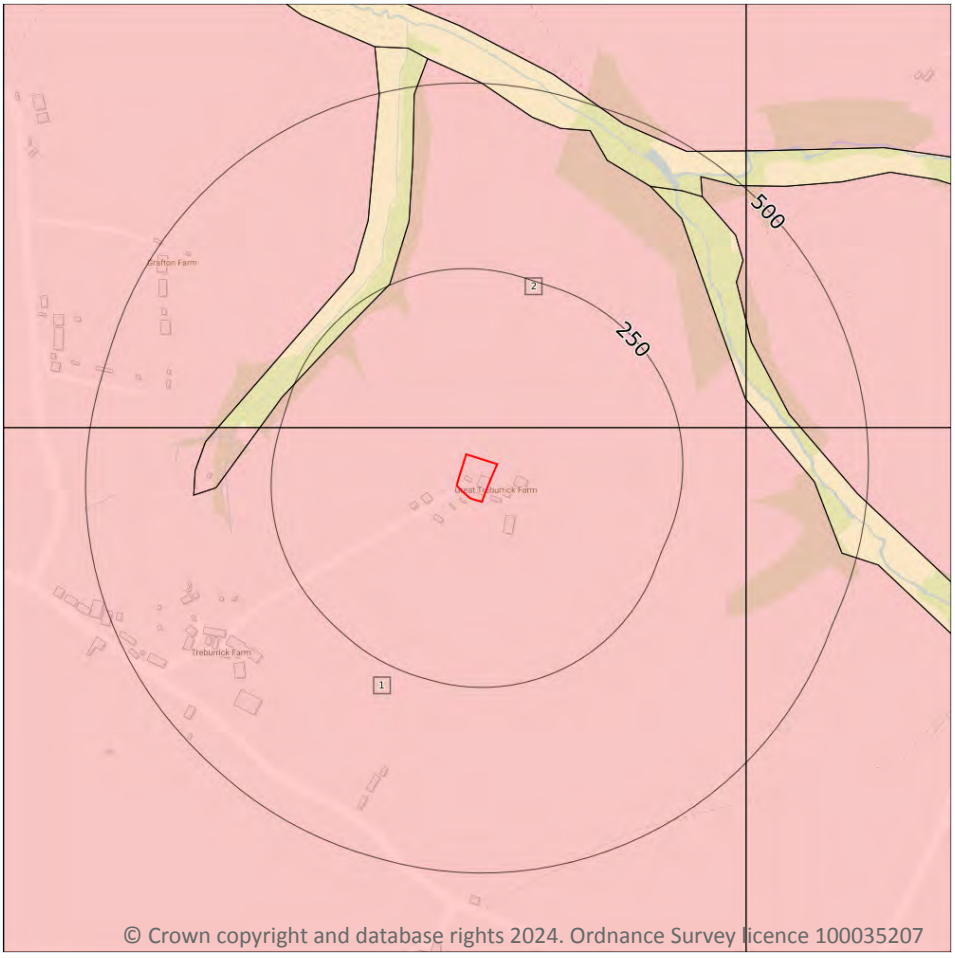
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 32 >**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor 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
1	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Intermediate Infiltration value: 40-70% Dilution value: 300-550mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
2	35m N	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary 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	**0**

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

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	7

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	
-	1149m NW	Status: Historical Licence No: 15/49/272/G/074 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: "TREVEMEDAR, ST EVAL - BOREHOLE A" Data Type: Point Name: Sandry Easting: 185560 Northing: 71400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 29/11/1983 Expiry Date: - Issue No: 101 Version Start Date: 20/07/2000 Version End Date: -
-	1149m NW	Status: Historical Licence No: 15/49/272/G/074 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - Fresh Point: "TREVEMEDAR, ST EVAL - BOREHOLE A" Data Type: Point Name: Sandry Easting: 185560 Northing: 71400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 29/11/1983 Expiry Date: - Issue No: 101 Version Start Date: 20/07/2000 Version End Date: -
-	1149m NW	Status: Historical Licence No: 15/49/272/G/074 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: TREVEMEDAR, ST EVAL - BOREHOLE A Data Type: Point Name: Sandry Easting: 185560 Northing: 71400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 29/11/1983 Expiry Date: - Issue No: 101 Version Start Date: 20/07/2000 Version End Date: -
-	1149m NW	Status: Historical Licence No: 15/49/272/G/074 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - Fresh Point: TREVEMEDAR, ST EVAL - BOREHOLE A Data Type: Point Name: Sandry Easting: 185560 Northing: 71400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 29/11/1983 Expiry Date: - Issue No: 101 Version Start Date: 20/07/2000 Version End Date: -
-	1770m E	Status: Historical Licence No: 15/49/272/G/052 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: "TREGINEGAR FARM, ST ERVAN - BOREHOLE" Data Type: Point Name: Partridge Easting: 188400 Northing: 71300	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 04/01/1979 Expiry Date: - Issue No: 100 Version Start Date: 04/01/1979 Version End Date: -

ID	Location	Details	
-	1770m E	Status: Historical Licence No: 15/49/272/G/052 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: TREGINEGAR FARM, ST ERVAN - BOREHOLE Data Type: Point Name: Partridge Easting: 188400 Northing: 71300	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 04/01/1979 Expiry Date: - Issue No: 100 Version Start Date: 04/01/1979 Version End Date: -
-	1840m S	Status: Historical Licence No: 15/49/272/G/087 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - Fresh Point: ST. EVAL CHURCH - WELL Data Type: Point Name: Rector & P C C of St Eval Easting: 187300 Northing: 69180	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 03/06/1998 Expiry Date: - Issue No: 101 Version Start Date: 09/04/2003 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**4**

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.

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

ID	Location	Details	
-	933m E	Status: Active Licence No: 15/49/272/S/022/R01 Details: Lake & Pond Throughflow Direct Source: Surface Water - Fresh Point: PORTHCOTHAN STREAM AT TREVIO FARM ST MERRYN CORNWALL Data Type: Point Name: Ford Easting: 187553 Northing: 71238	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: NPSWR021657 Original Start Date: 01/04/2017 Expiry Date: 31/03/2029 Issue No: 1 Version Start Date: 01/04/2017 Version End Date: -

ID	Location	Details	
-	959m E	Status: Historical Licence No: 15/49/272/S/022 Details: Lake & Pond Throughflow Direct Source: Surface Water - Fresh Point: INLAND WATER KNOWN AS PORTHCOTHAN STREAM Data Type: Point Name: Ford Easting: 187580 Northing: 71240	Annual Volume (m^3): 63072 Max Daily Volume (m^3): 172 Original Application No: - Original Start Date: 27/03/2007 Expiry Date: 31/03/2017 Issue No: 101 Version Start Date: 01/04/2016 Version End Date: -
-	1405m SE	Status: Historical Licence No: 15/49/272/S/001 Details: Spray Irrigation - Direct Direct Source: Surface Water - Fresh Point: "PLOT NO'S 351,359 ND 360,ST ERVAN" Data Type: Point Name: Biddick & Son Easting: 187800 Northing: 70100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/10/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
-	1405m SE	Status: Historical Licence No: 15/49/272/S/001 Details: Spray Irrigation - Direct Direct Source: Surface Water - Fresh Point: PLOT NO'S 351,359 ND 360,ST ERVAN Data Type: Point Name: Biddick & Son Easting: 187800 Northing: 70100	Annual Volume (m^3): 31822 Max Daily Volume (m^3): 181.84 Original Application No: - Original Start Date: 18/10/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -

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	0

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

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

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	0

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

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	0

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.

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 40 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Porthcothan Stream**	**GB108049000120**	**Gannel Porth and Menalhyl**	**North Cornwall Seaton Looe and**

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 40 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
7	461m NE	River	Porthcothan Stream	GB108049000120 ↗	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 40 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	**On site**	**North Cornwall**	**GB40802G800300** ↗	**Poor**	**Poor**	**Good**	**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

8.1 Surface water flooding

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

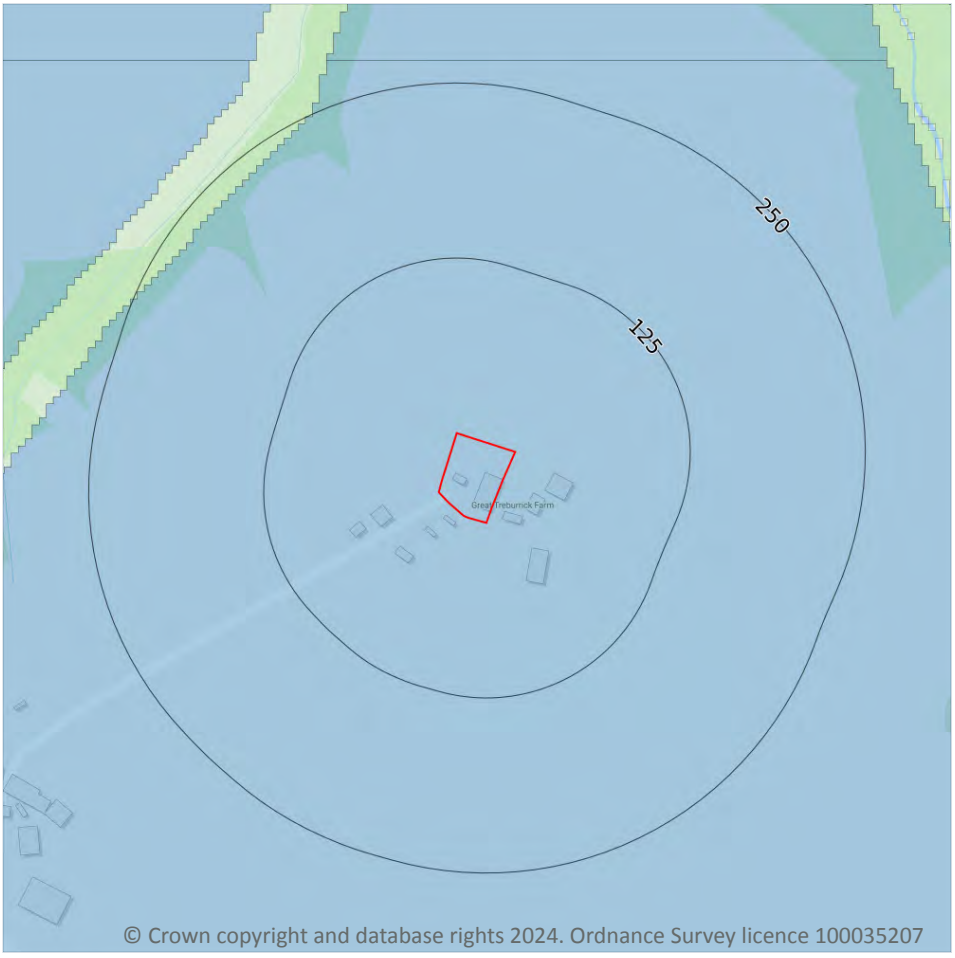
Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year 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.

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

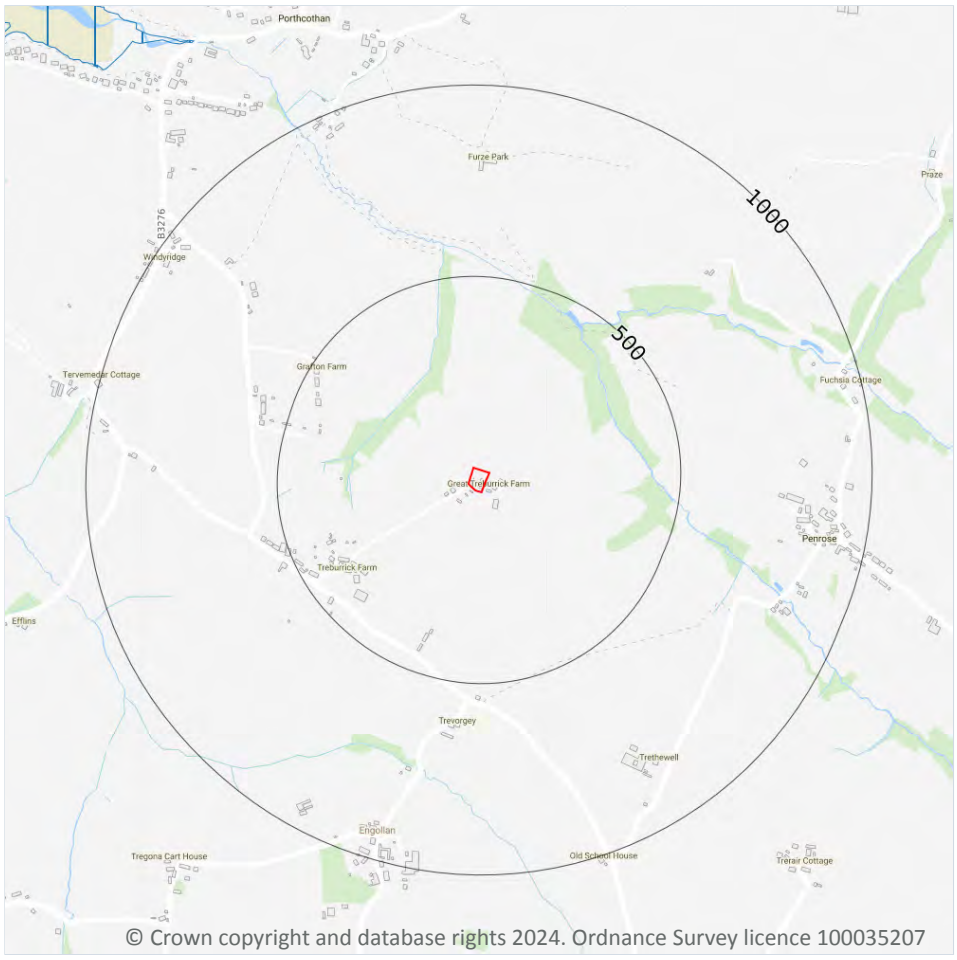
Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

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 47 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SSSI)

Special Areas of Conservation (SAC)

Marine Conservation Zones

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	**1**

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.

Features are displayed on the Environmental designations map on **page 48 >**

ID	Location	Name	Data source
-	1541m W	Bedruthan Steps and Park Head	Natural England

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	2

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.

Features are displayed on the Environmental designations map on **page 48 >**

ID	Location	Name	Features of interest	Habitat description	Data source
-	1844m NW	Bristol Channel Approaches / Dynesfeydd Mor Hafren	Harbour porpoise.	Marine areas, Sea inlets	Natural England
-	1844m NW	Bristol Channel Approaches / Dynesfeydd Môr Hafren	Harbour porpoise.	Marine areas, Sea inlets	Natural Resources Wales

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	0

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.

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

10.7 Designated Ancient Woodland

Records within 2000m	0

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.

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	7

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.

Features are displayed on the Environmental designations map on **page 48 >**

ID	Location	Name	Status
1	1332m NW	Padstow Bay and Surrounds	Designated
-	1784m W	Padstow Bay and Surrounds	Designated
-	1884m NW	Padstow Bay and Surrounds	Designated
-	1908m NW	Padstow Bay and Surrounds	Designated
-	1929m NW	Padstow Bay and Surrounds	Designated
-	1939m NW	Padstow Bay and Surrounds	Designated
-	1942m NW	Padstow Bay and Surrounds	Designated

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.

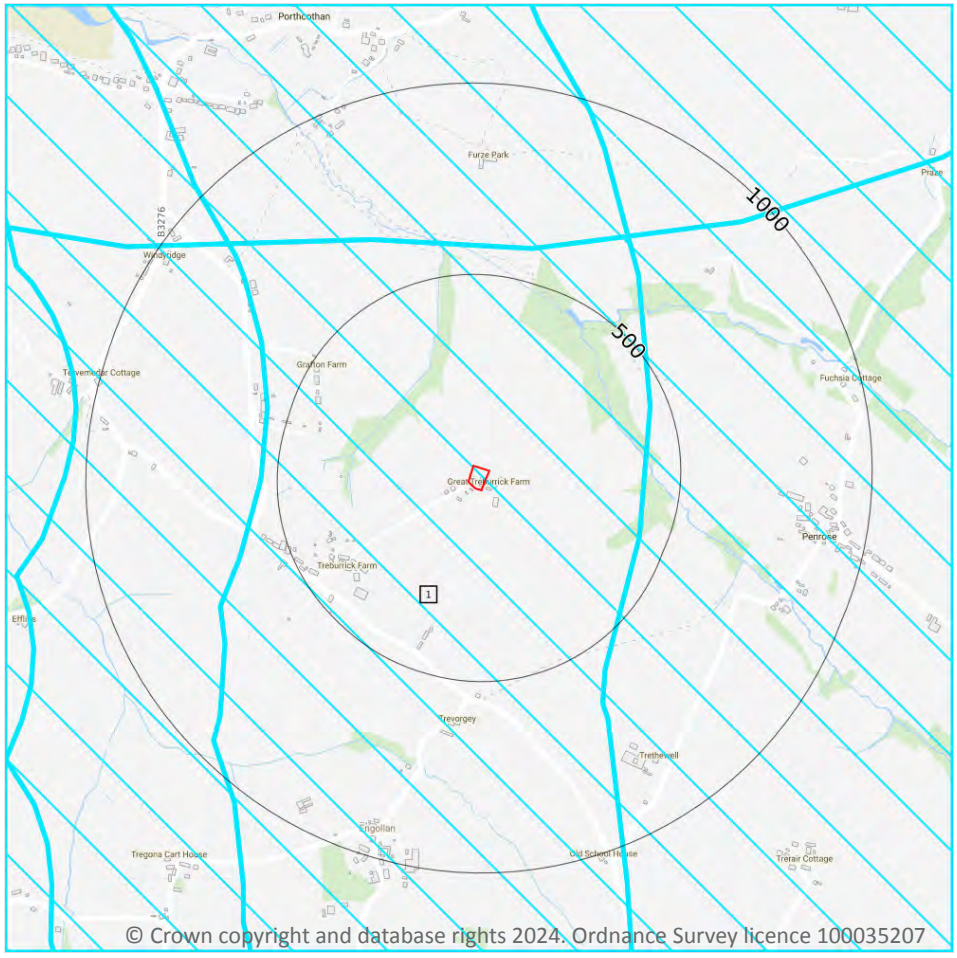
10.16 Nitrate Vulnerable Zones

Records within 2000m	0

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.

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 54 >**

ID	Location	Type of developments requiring consultation
1	On site	**Infrastructure - Airports, helipads and other aviation proposals.** **Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t).** **Combustion - General combustion processes >20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.** **Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.** **Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	3

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.

Features are displayed on the SSSI Impact Zones and Units map on **page 54 >**

ID: -
Location: 1541m W
SSSI name: Bedruthan Steps and Park Head
Unit name: Side Valley
Broad habitat: Supralittoral Rock
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Hard maritime cliff and slope	Favourable	04/09/2012
Lowland dry heath	Favourable	04/09/2012

ID: -
Location: 1701m W
SSSI name: Bedruthan Steps and Park Head
Unit name: Parkhead
Broad habitat: Supralittoral Rock
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Hard maritime cliff and slope	Favourable	04/09/2012
Lowland dry heath	Favourable	04/09/2012

ID: -
Location: 1909m SW
SSSI name: Bedruthan Steps and Park Head
Unit name: Bedruthan Steps And Carnewas
Broad habitat: Supralittoral Rock
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
EC - Marine Devonian	Favourable	18/12/2009
Hard maritime cliff and slope	Favourable	17/03/2009
Lowland dry heath	Favourable	04/09/2012

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

11 Visual and cultural designations

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	0

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.

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.

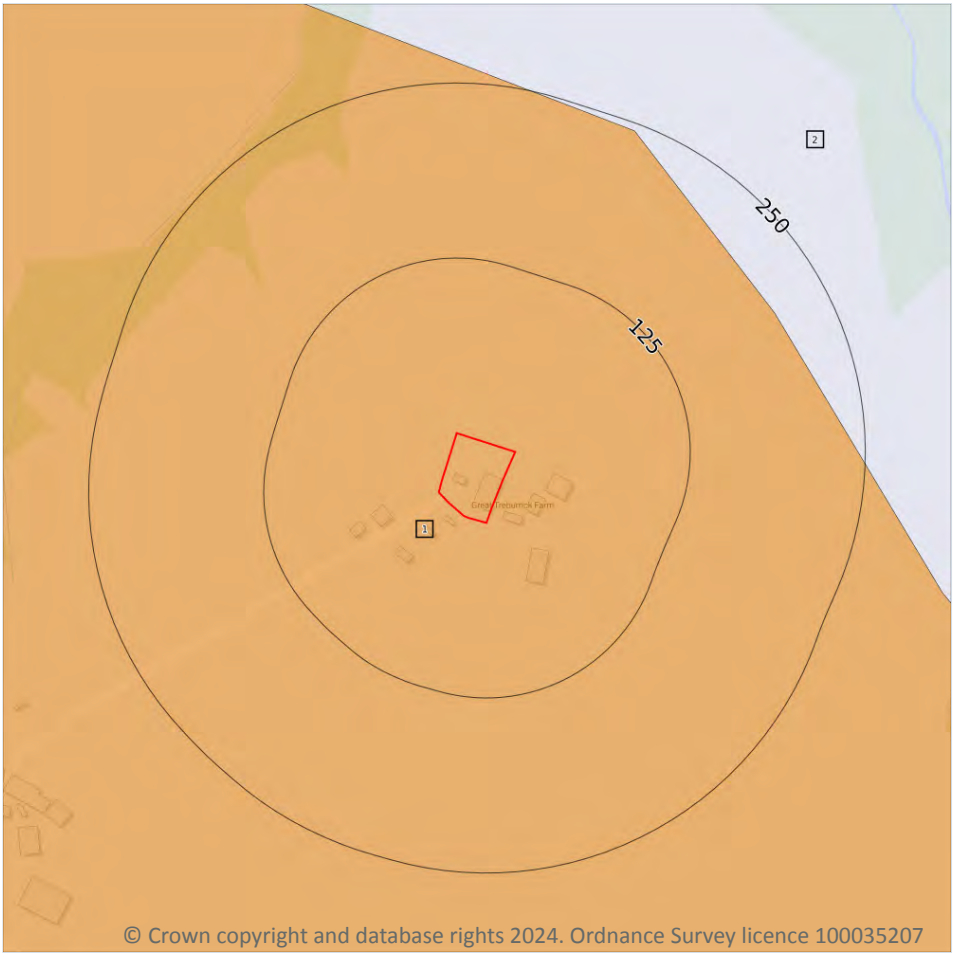
11.7 Registered Parks and Gardens

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	2

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 59 >**

ID	Location	Classification	Description
1	**On site**	**Grade 3**	**Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.**

ID	Location	Classification	Description
2	207m NE	Grade 4	Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

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	1

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.

Location	Reference	Scheme	Start Date	End date
On site	**AG00469115**	**Entry Level Stewardship**	**01/07/2013**	**30/06/2018**

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	0

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.

This data is sourced from Natural England.

13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m	0

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

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.

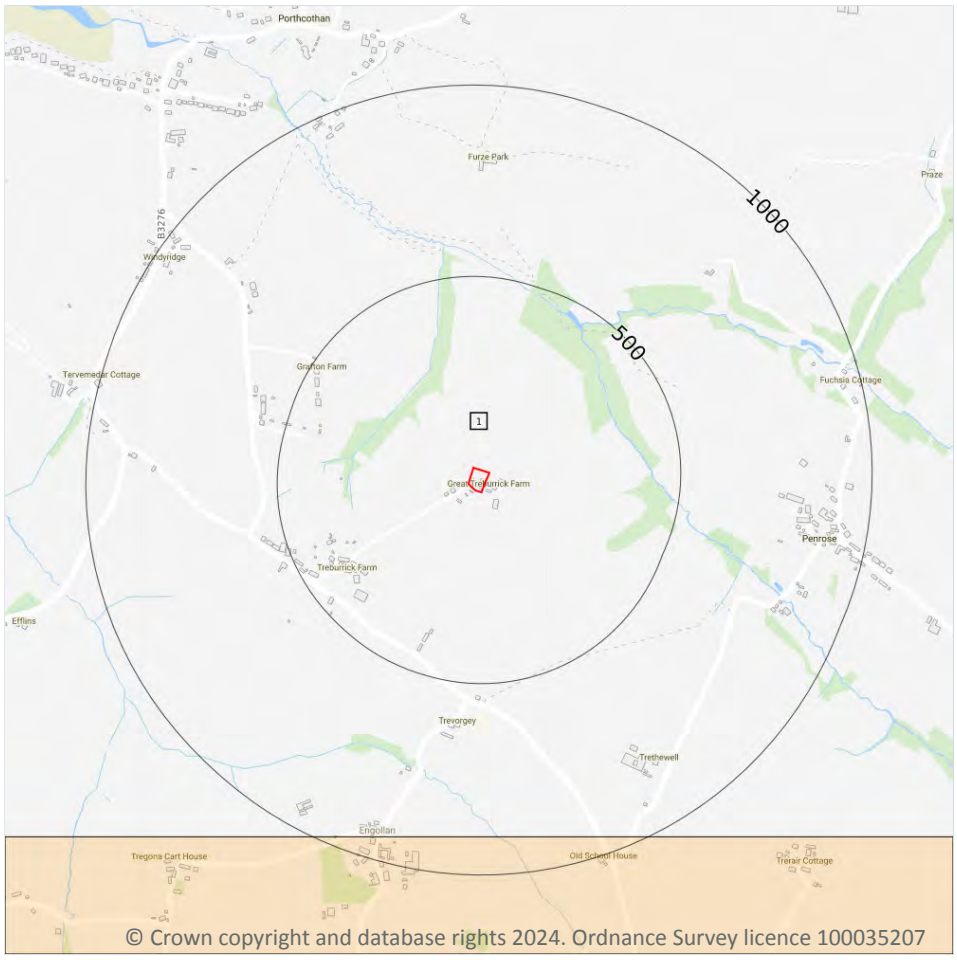
13.4 Limestone Pavement Orders

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



Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m	1

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 63 >**

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

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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.

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

14.5 Bedrock geology (10k)

Records within 500m	0

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.

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

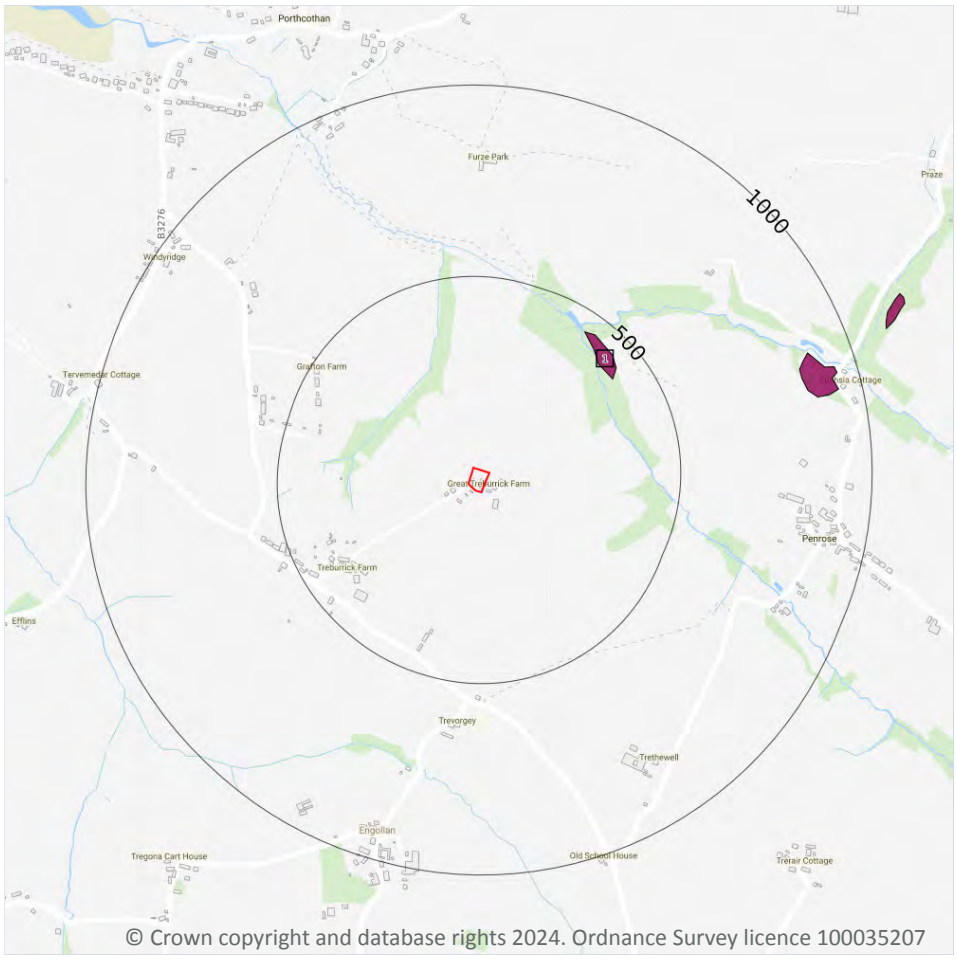
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 67 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**Full**	**Full**	**Full**	**EW335_336_trevose_head_and_camelford_v4**

This data is sourced from the British Geological Survey.

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



Site Outline

Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m	1

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.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 68 >**

ID	Location	LEX Code	Description	Rock description
1	403m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

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	3

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 70 >**

ID	Location	LEX Code	Description	Rock description
1	234m NW	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
2	344m E	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
3	427m NE	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial 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 superficial deposits (the zone between the land surface and the water table).

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.

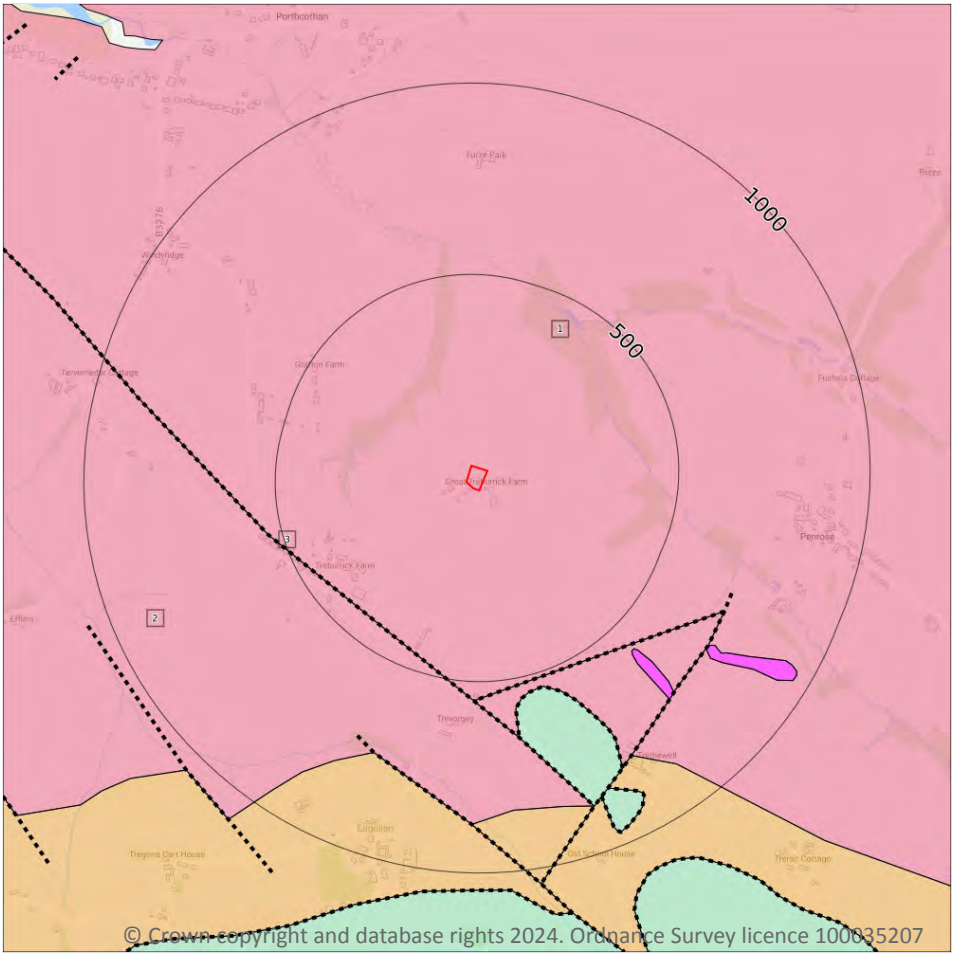
15.7 Landslip permeability (50k)

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



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	2

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 72 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**TVRN-SLAS**	**TREVOSE SLATE FORMATION AND ROSENUM FORMATION (UNDIFFERENTIATED) - SLATE AND SILTSTONE**	**EIFELIAN**
2	431m SW	TVRN-SLAS	TREVOSE SLATE FORMATION AND ROSENUM FORMATION (UNDIFFERENTIATED) - SLATE AND SILTSTONE	EIFELIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**1**

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**	**Low**	**Low**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	**1**

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.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 72 >**

ID	Location	Category	Description
3	431m SW	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.

16 Boreholes

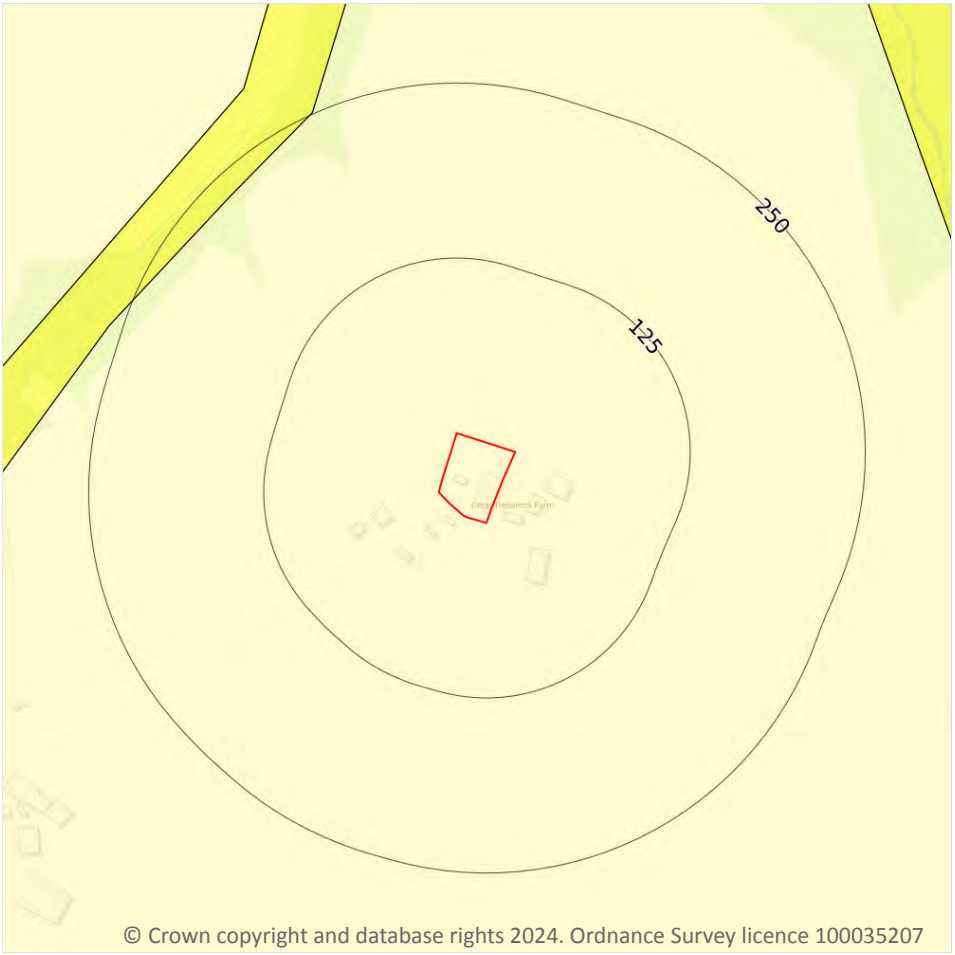
16.1 BGS Boreholes

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

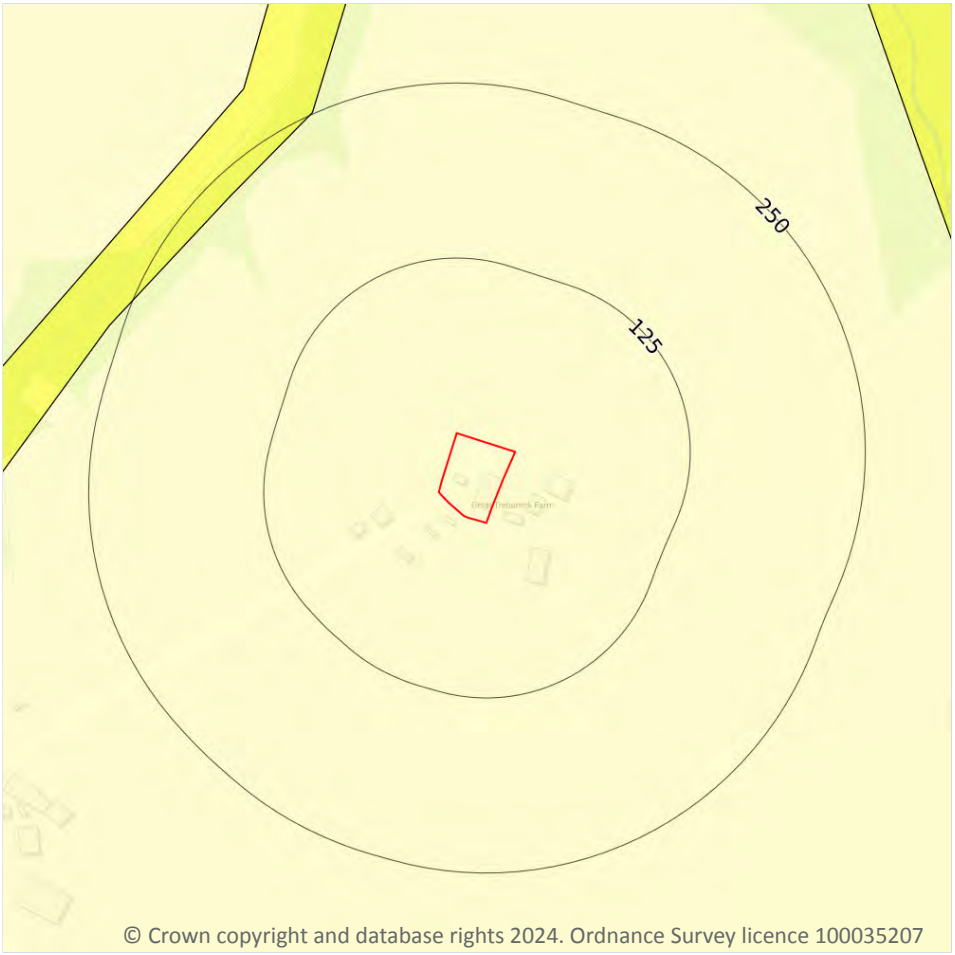
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 75 >**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**

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

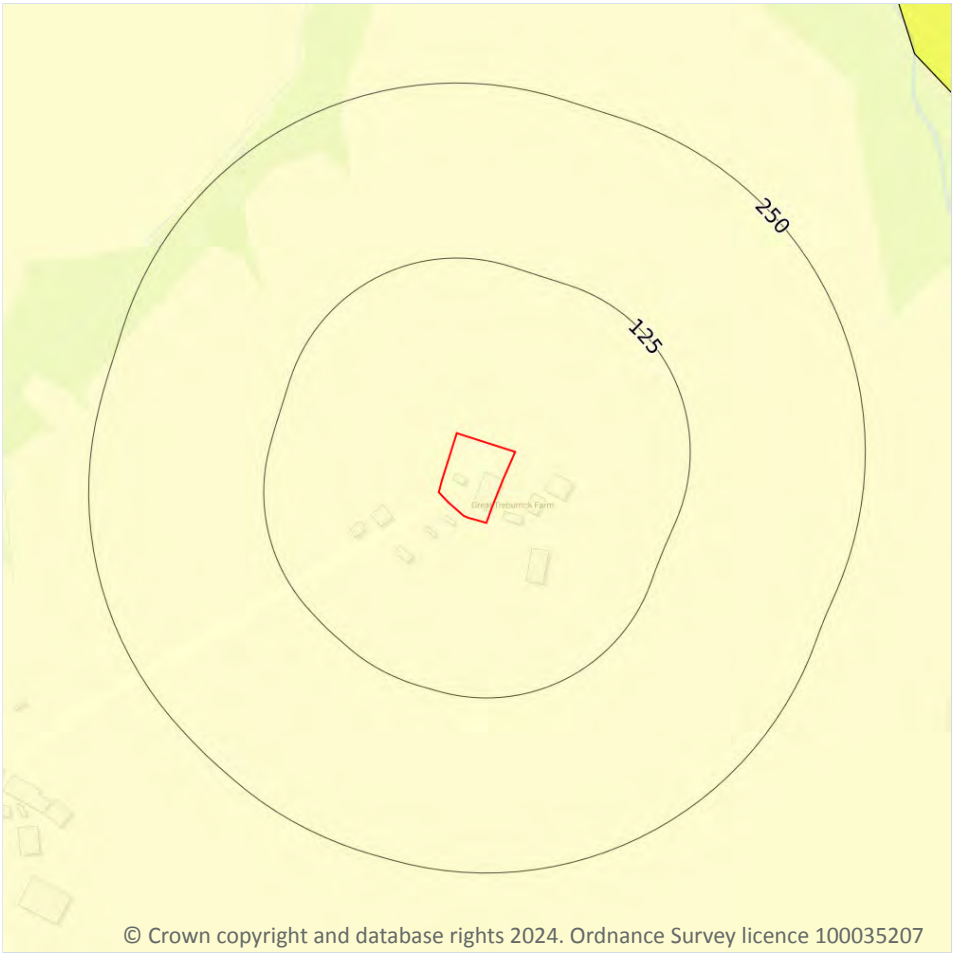
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 76 >**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	1

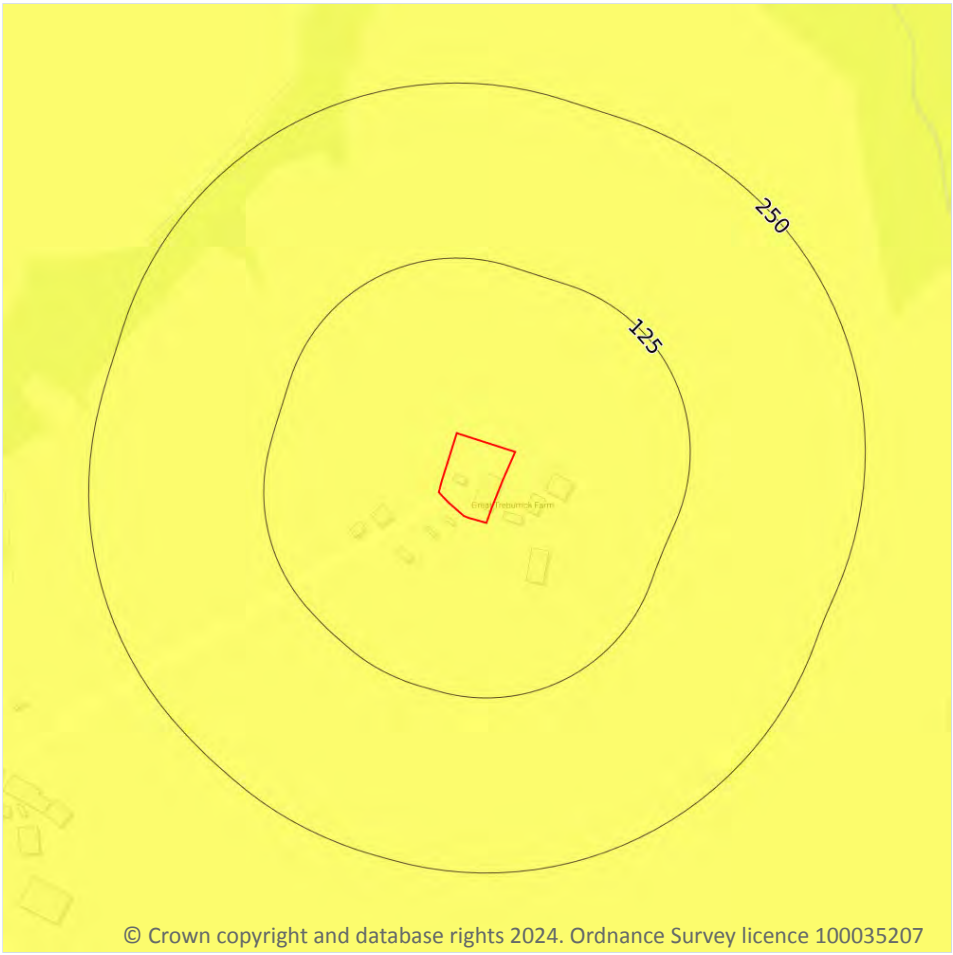
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 77 >**

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



Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	1

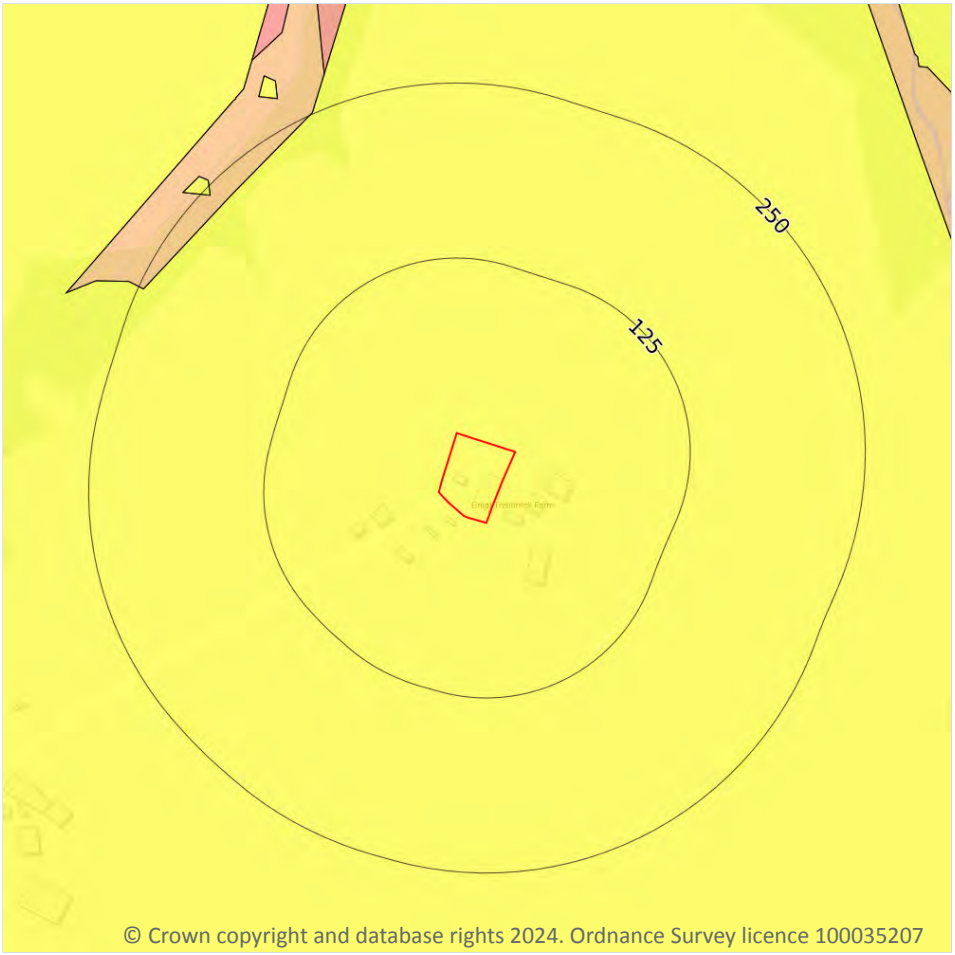
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 78 >**

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

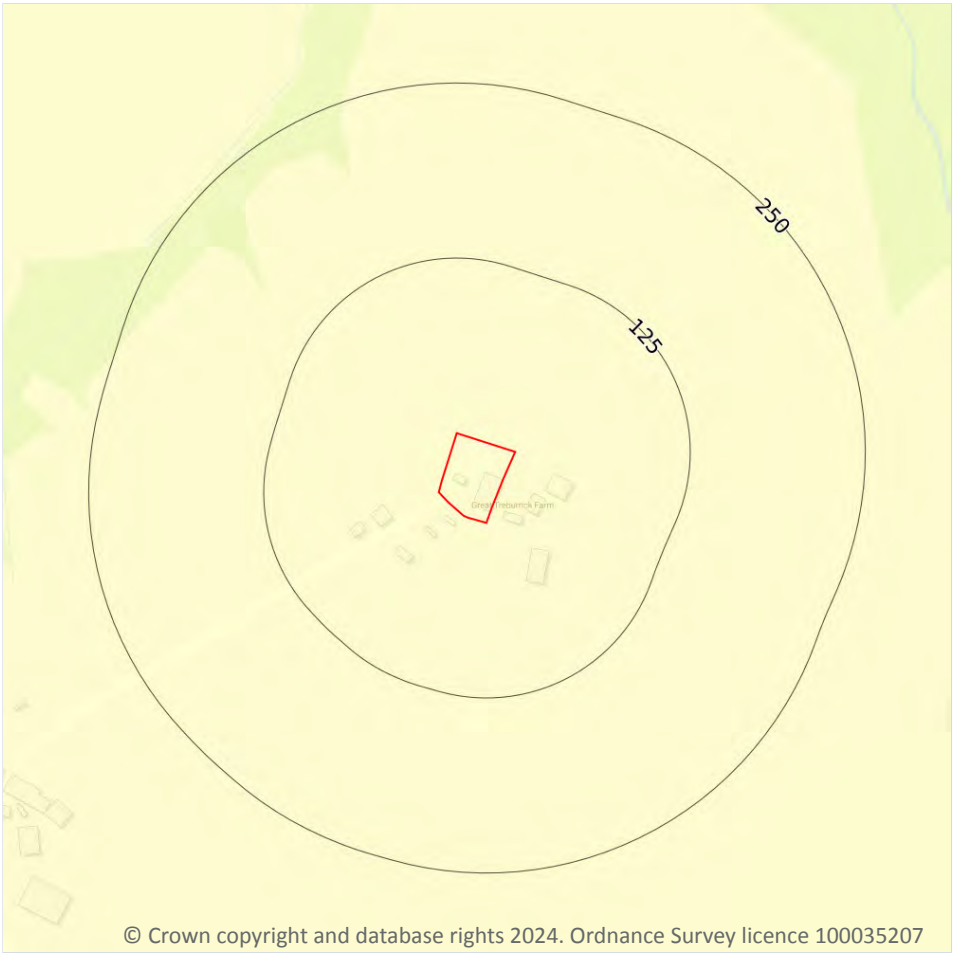
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 79 >**

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



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

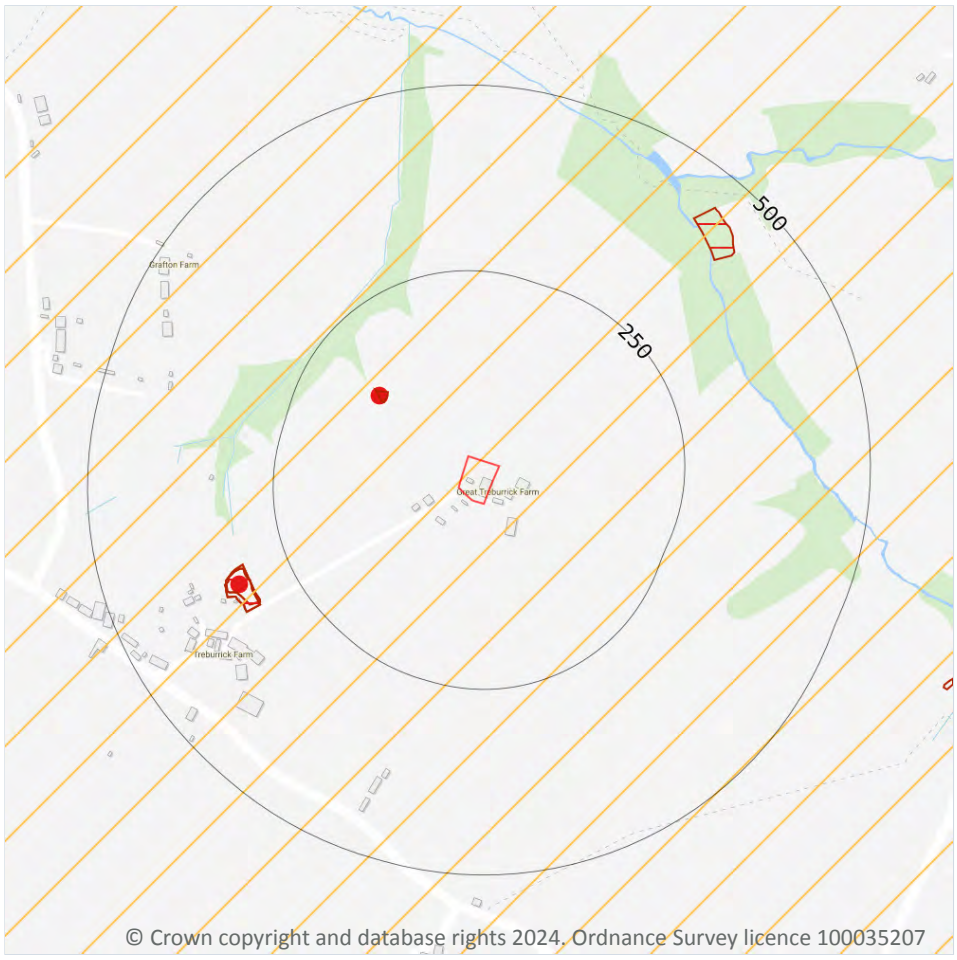
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 80 >**

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 and ground workings



Site Outline

Search buffers in metres (m)

- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining

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 BritPits

Records within 500m	2

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.

Features are displayed on the Mining and ground workings map on **page 82 >**

ID	Location	Details	Description
A	144m NW	Name: Treburrick Address: Penrose, St Ervan, PADSTOW, Cornwall Commodity: Slate Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	322m SW	Name: Treburrick Address: Penrose, St Ervan, PADSTOW, Cornwall Commodity: Slate Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	**1**

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 and ground workings map on **page 82 >**

ID	Location	Land Use	Year of mapping	Mapping scale
A	135m NW	Unspecified Old Quarry	1880	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 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.

18.4 Underground mining extents

Records within 500m	0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from 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	2

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 and ground workings map on **page 82 >**

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**Not available**	**Vein Mineral**	**B**	**Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.**
-	900m S	Not available	Vein Mineral	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

This data is sourced from the British Geological Survey.

18.7 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.

18.8 The Coal Authority non-coal mining

Records within 500m	0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 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.

18.13 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.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 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 Ground cavities and sinkholes

19.1 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.

19.2 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.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

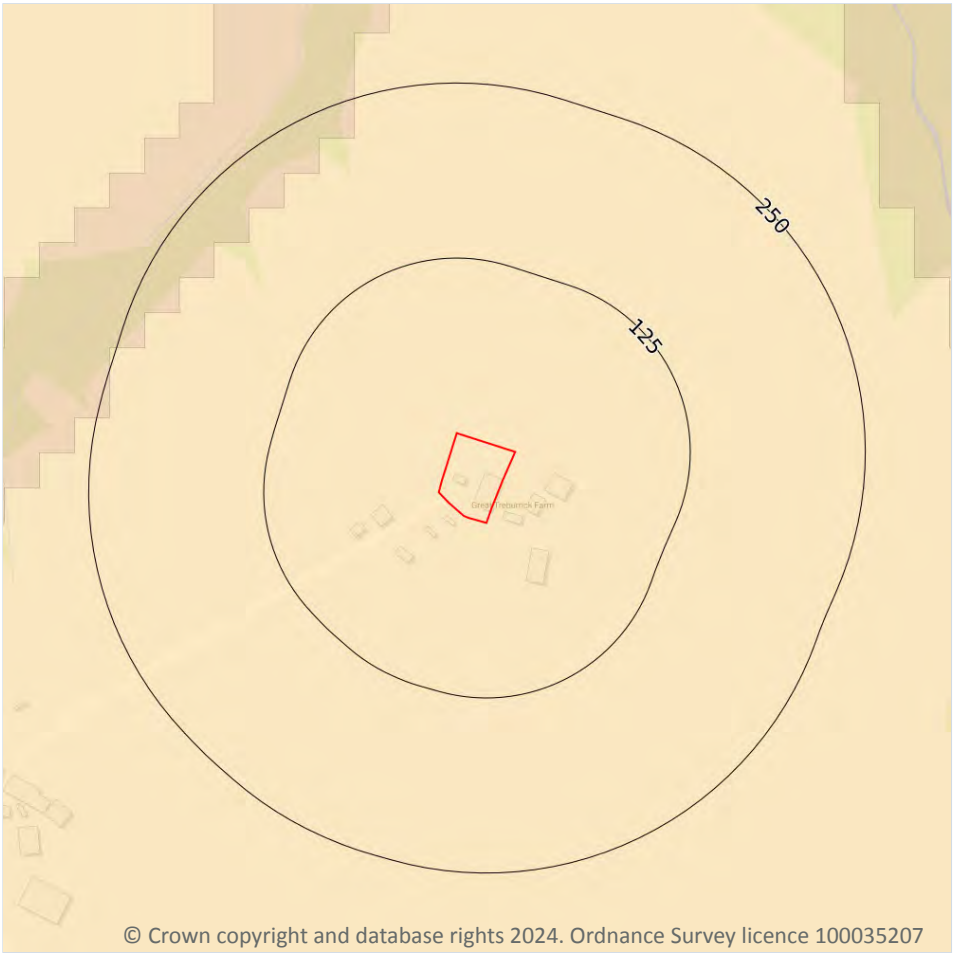
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

20 Radon



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%

20.1 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 90 >**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 3% and 5%**	**Basic**

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

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	2

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**
36m N	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.

21.2 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.

21.3 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.

22 Railway infrastructure and projects

22.1 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.

22.2 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.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 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.

22.5 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.

22.6 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.

22.7 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.

22.8 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.

22.9 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.

22.10 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 ↗.

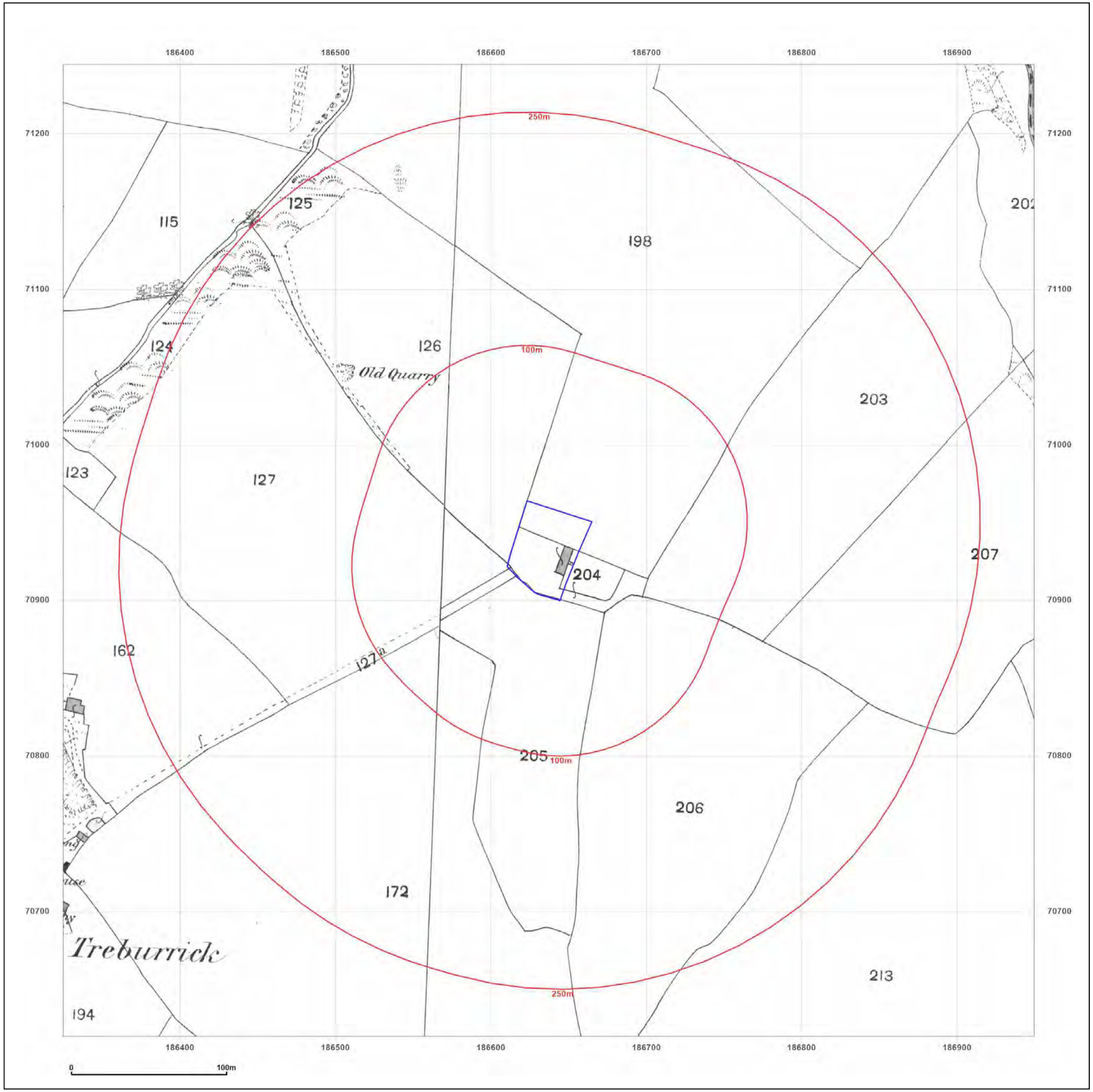
Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗.

Appendix C
Historical Maps

Plan may be provided by a third party

Ground Consultants Limited
Unit 67, Clear Space, Dunveth Business Park, West Hill, Wadebridge PL27 7FE
Tel: 01209 822922
Company Registration Number: 13561213



Groundsure INSIGHTS

Site Details:

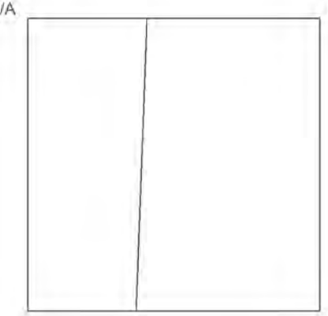
GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: County Series
Map date: **1881**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1881
Revised 1881
Edition N/A
Copyright N/A
Levelled N/A



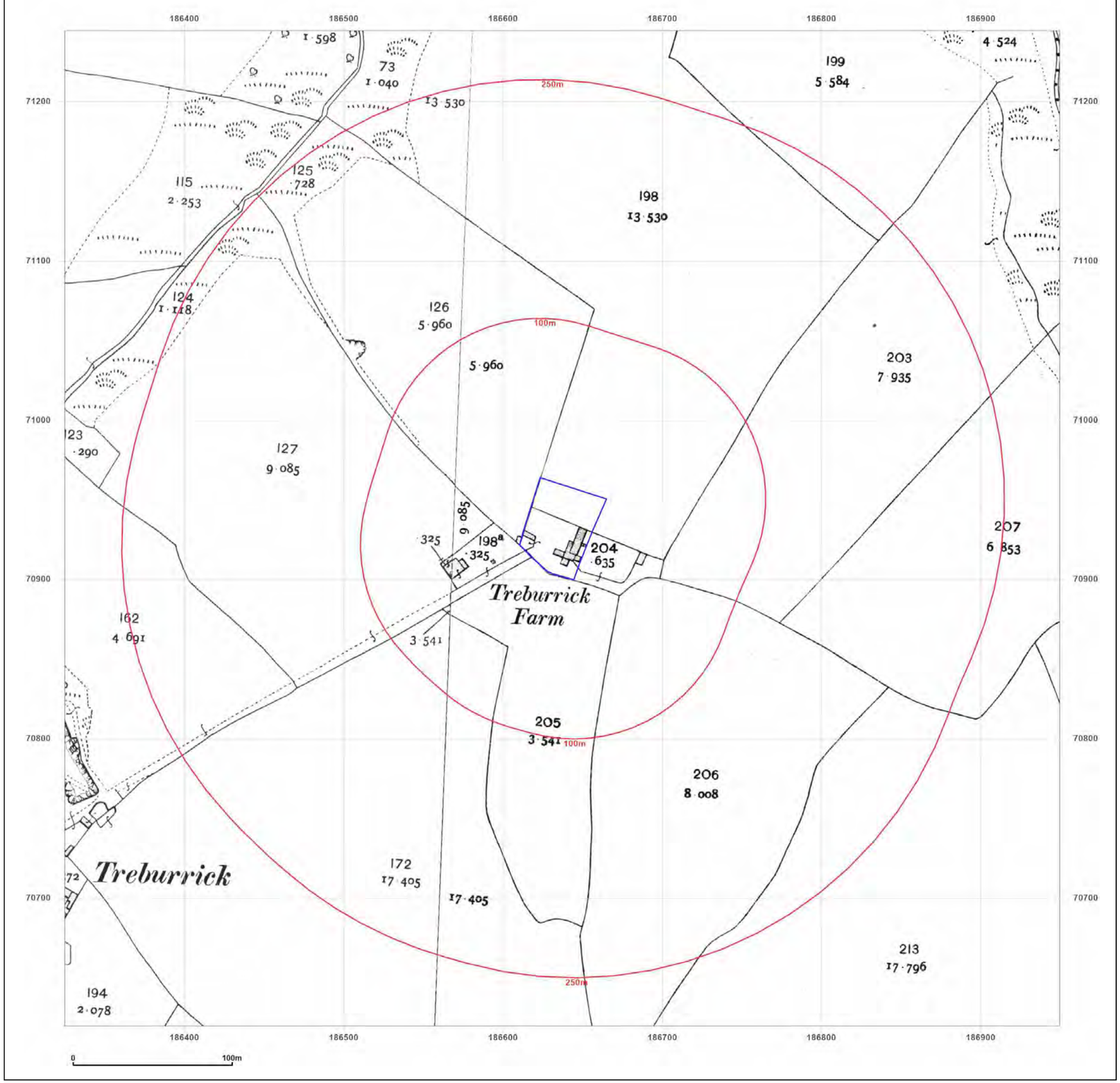
Surveyed 1881
Revised 1881
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

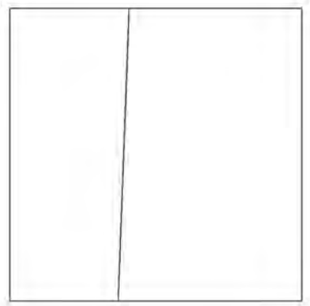
GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: County Series
Map date: **1905-1907**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

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



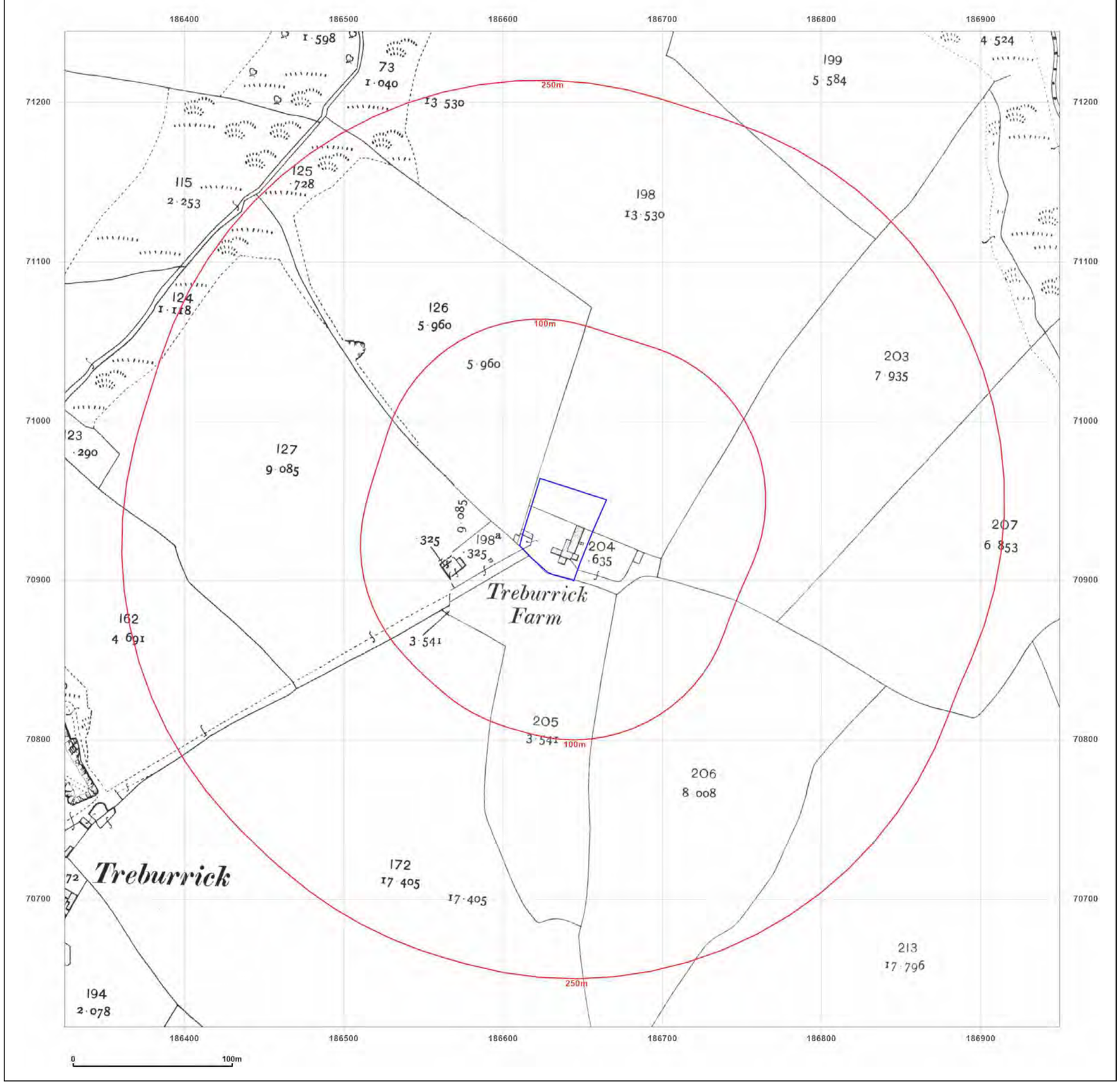
Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

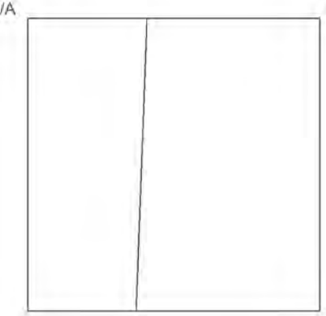
GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: County Series
Map date: **1907**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1907
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A



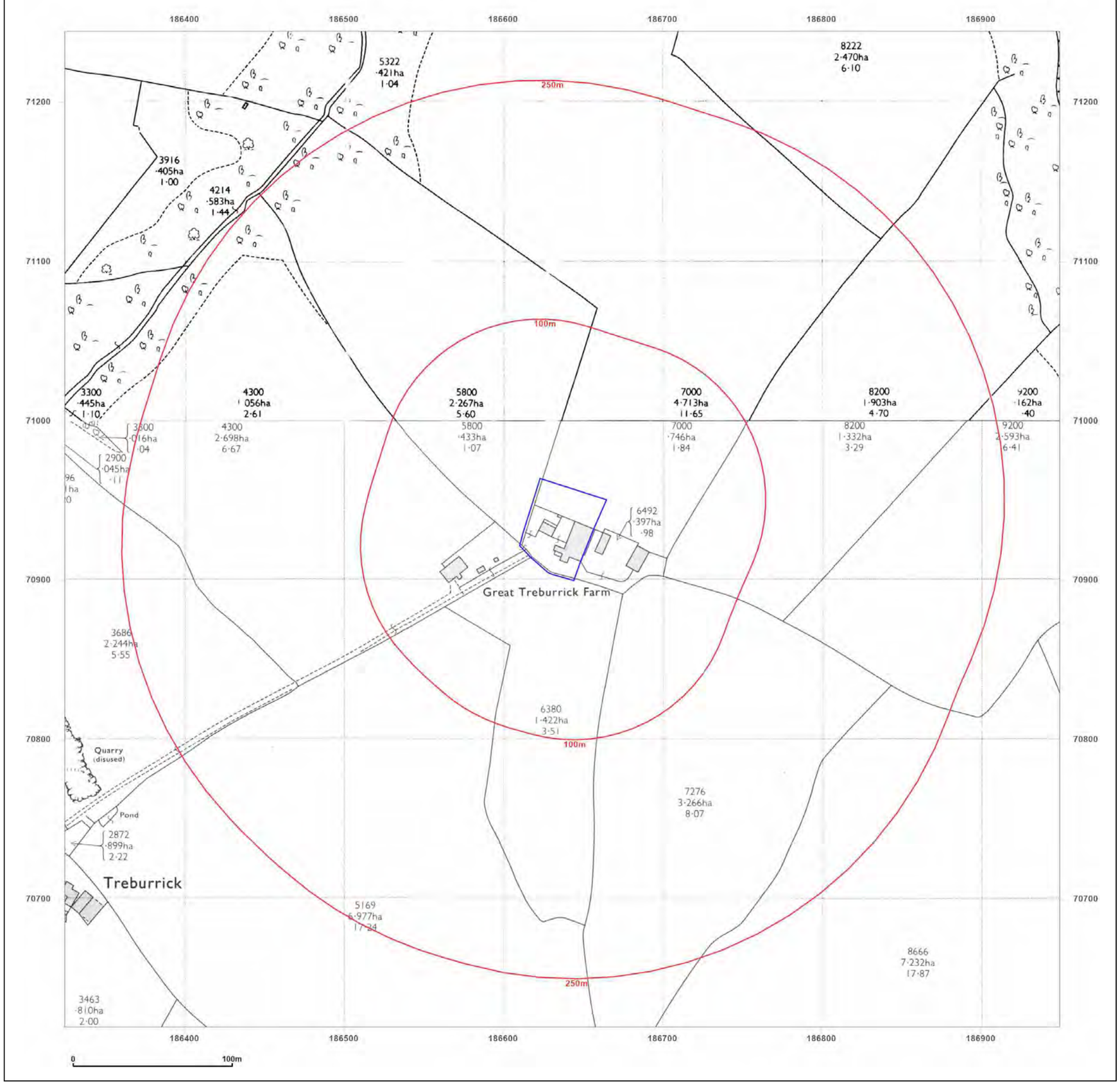
Surveyed 1907
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

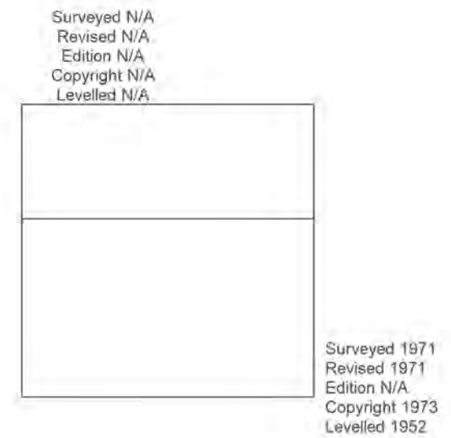
Map Name: National Grid

Map date: **1971-1973**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

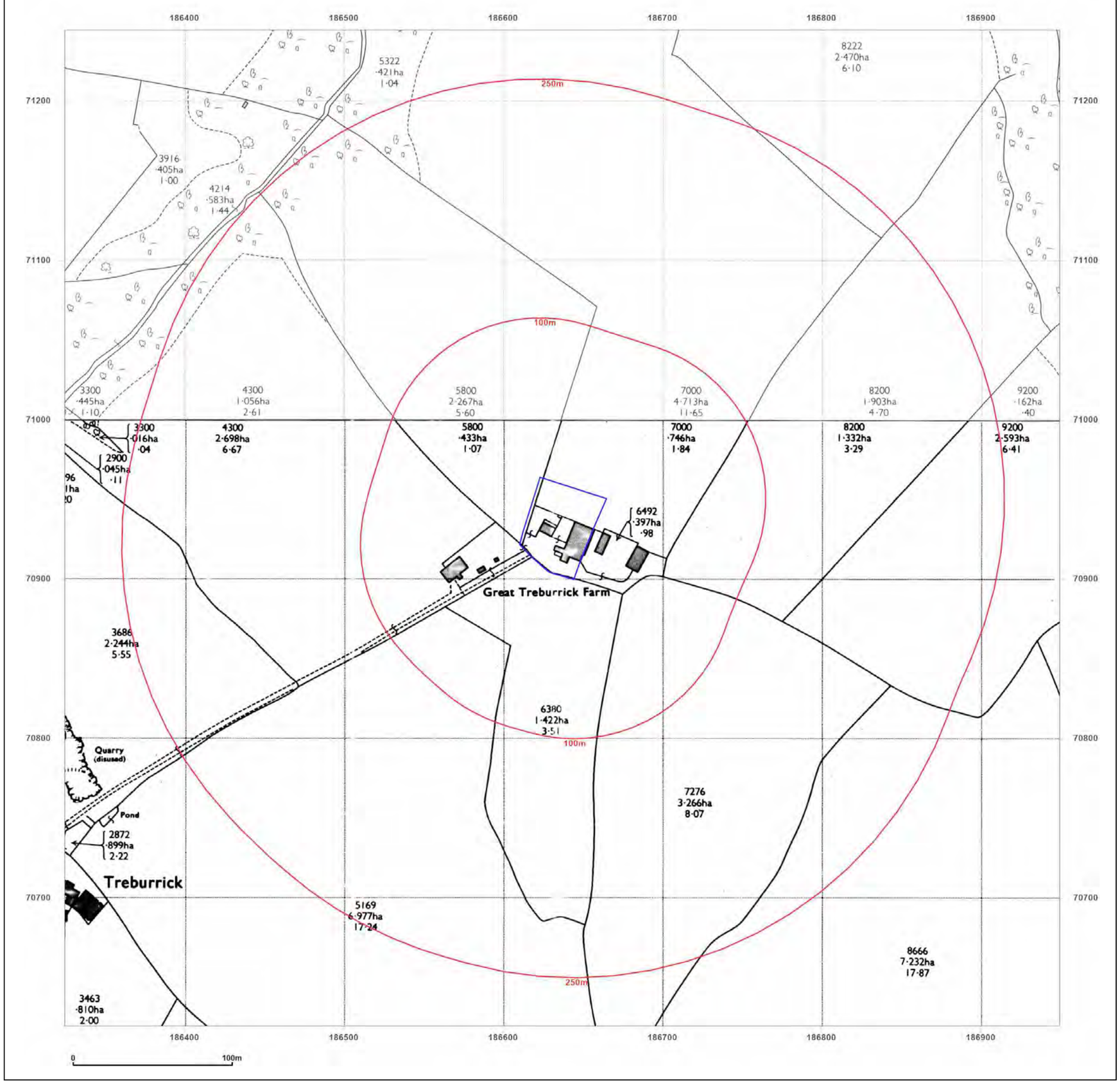


Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: National Grid

Map date: **1972-1973**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1972
Revised 1972
Edition N/A
Copyright 1973
Levelled 1952

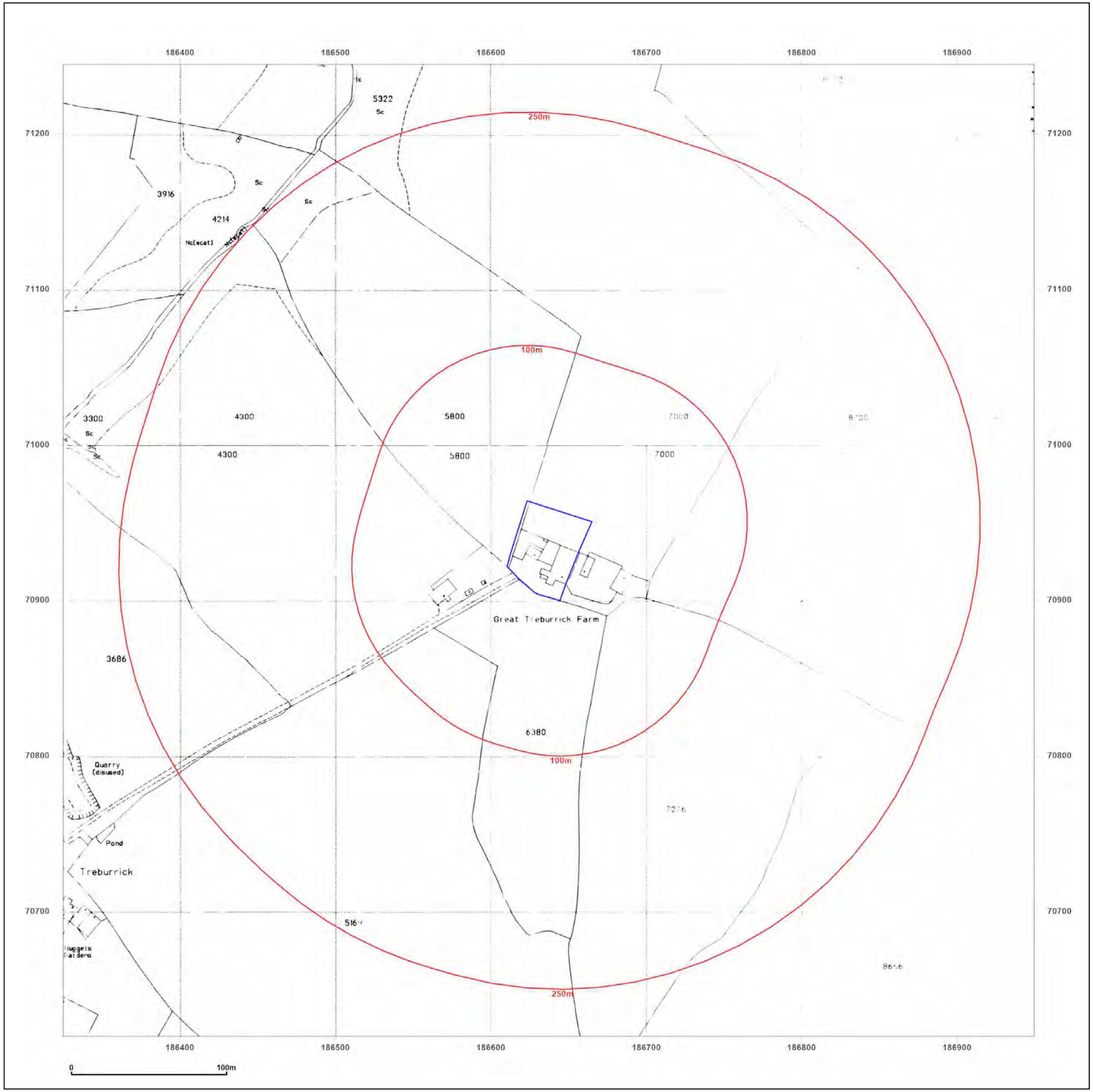
Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: National Grid

Map date: **1995**

Scale: 1:2,500

Printed at: 1:2,500

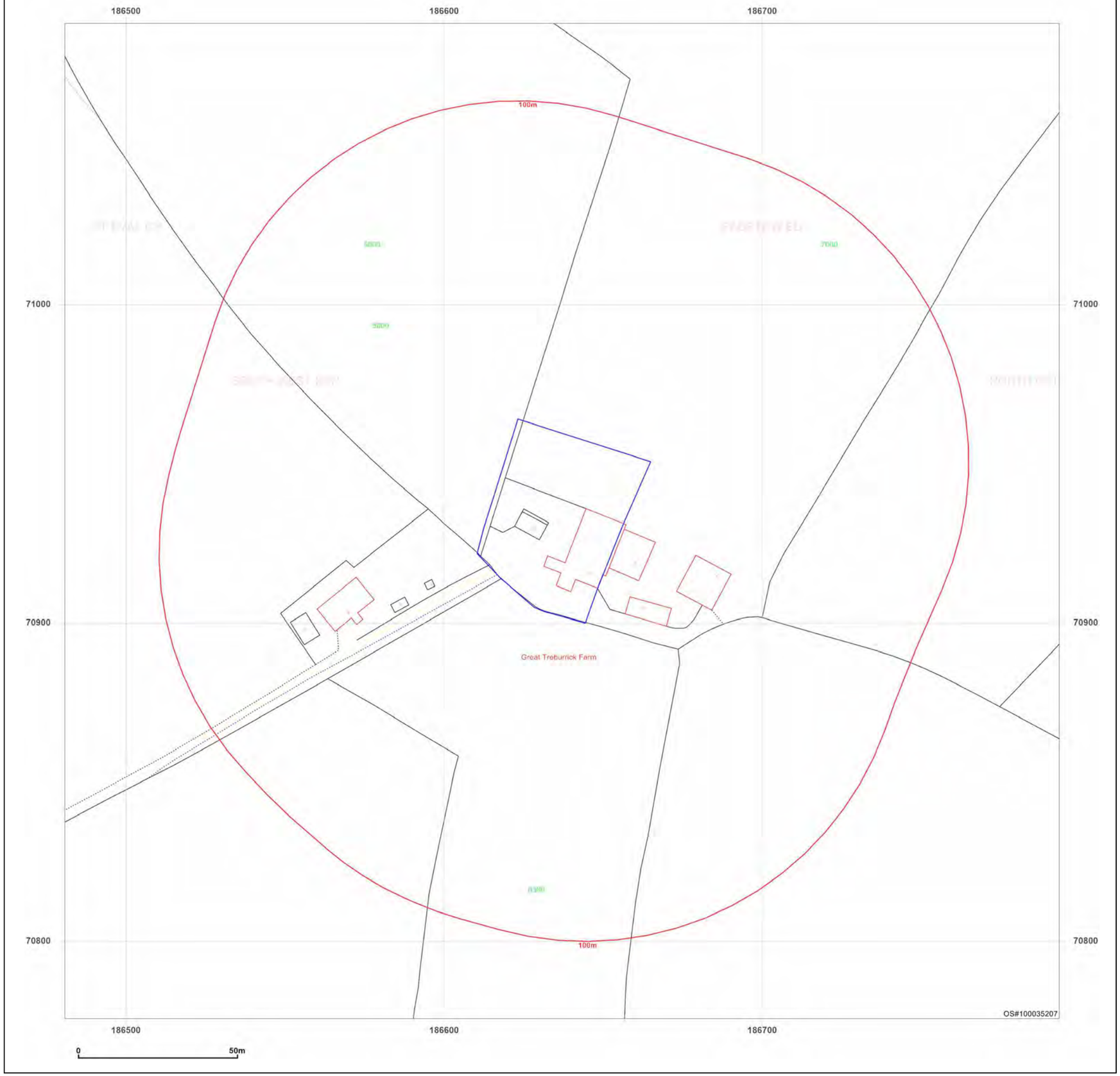
N
W E
S

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

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

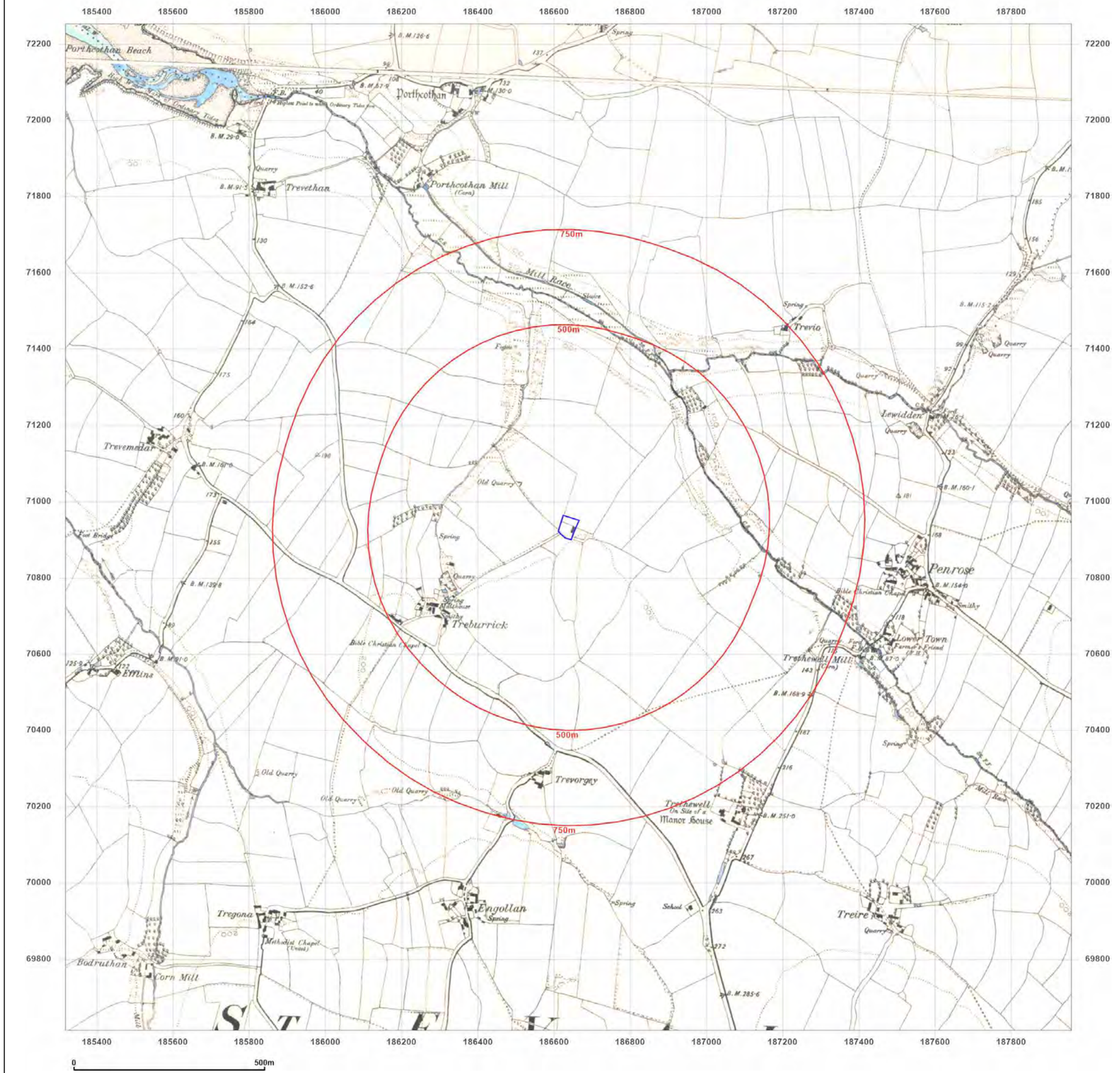
N
W E
S

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: County Series

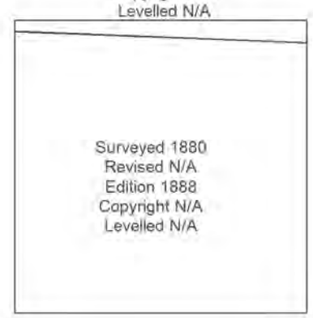
Map date: **1888**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1880
Revised N/A
Edition 1888
Copyright N/A
Levelled N/A

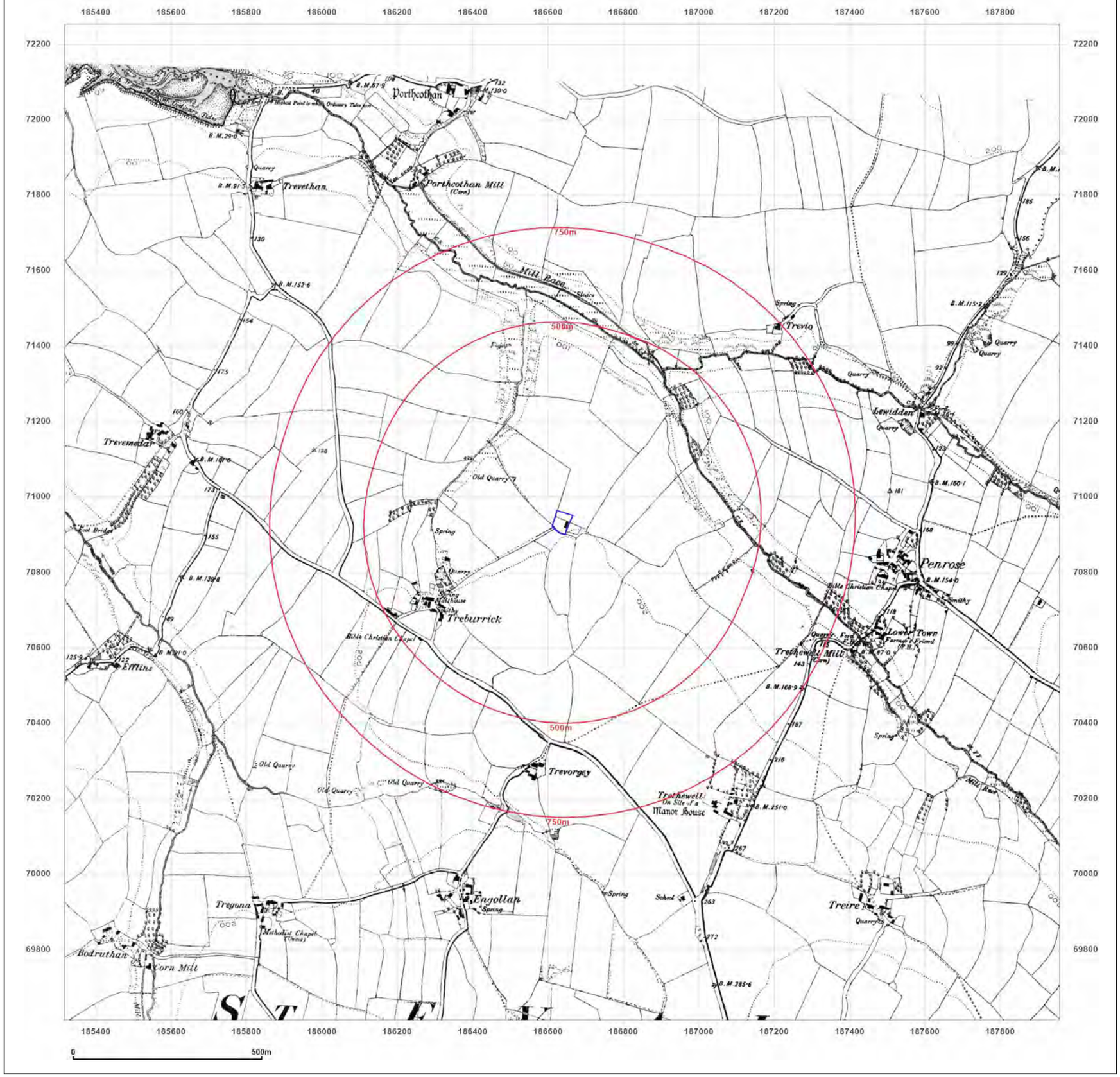


Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: County Series

Map date: **1888**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

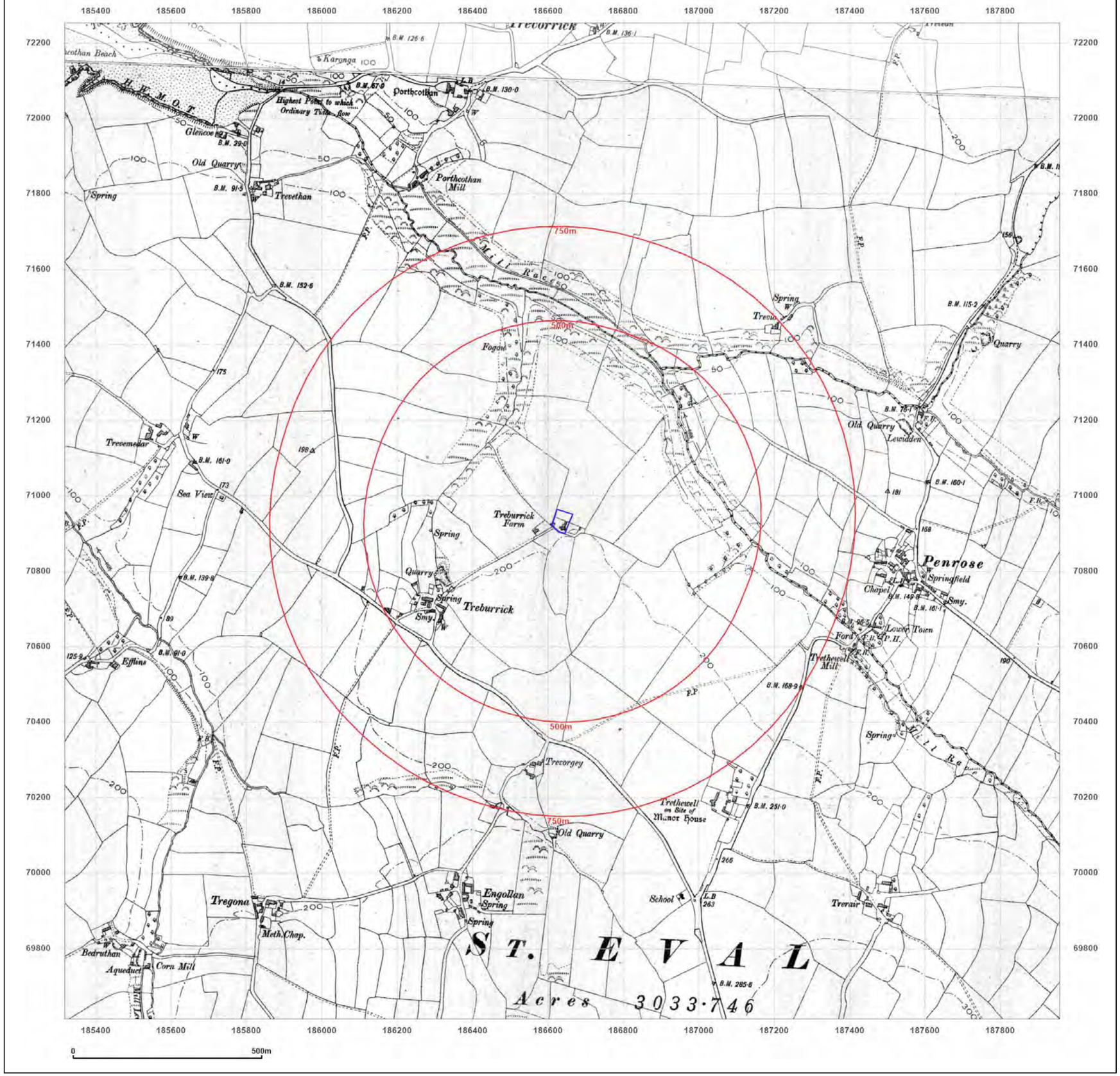
Surveyed 1879
Revised N/A
Edition 1888
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: County Series

Map date: **1907-1908**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1879
Revised 1908
Edition 1908
Copyright N/A
Levelled N/A

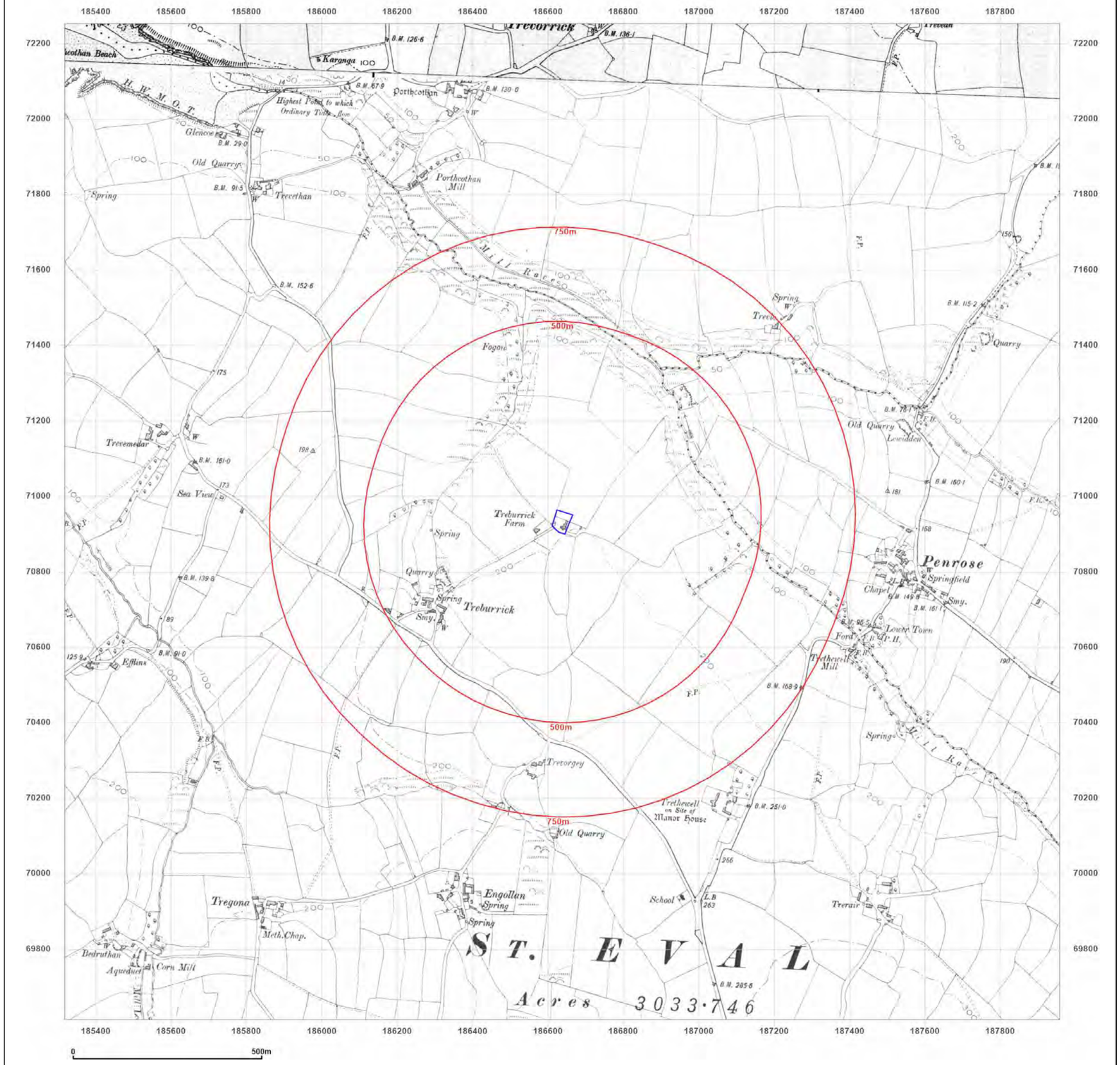
Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: County Series

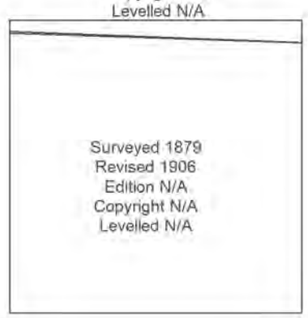
Map date: **1906-1908**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1879
Revised 1905
Edition 1908
Copyright N/A
Levelled N/A

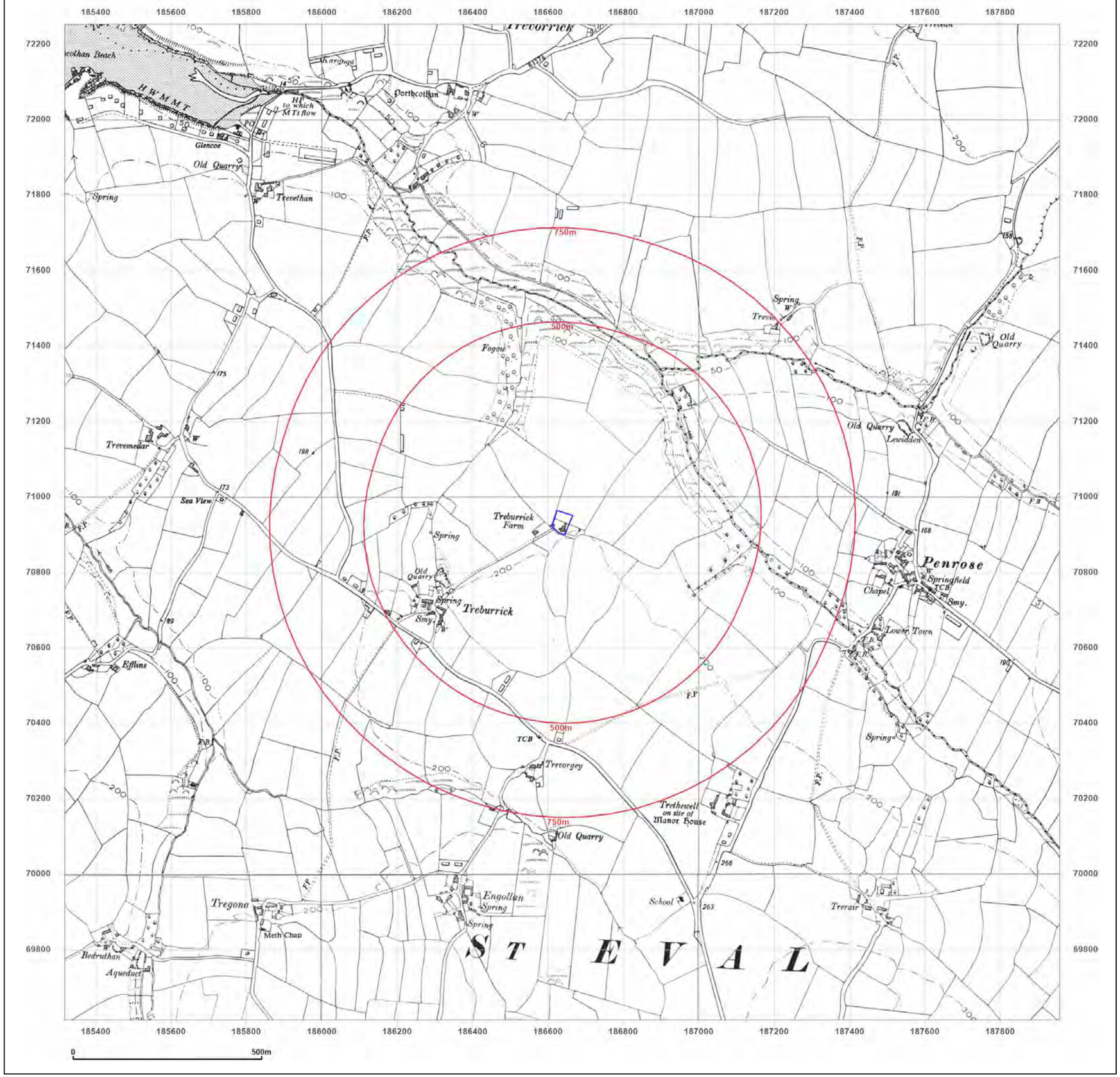


Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: Provisional
Map date: **1958-1962**
Scale: 1:10,560
Printed at: 1:10,560

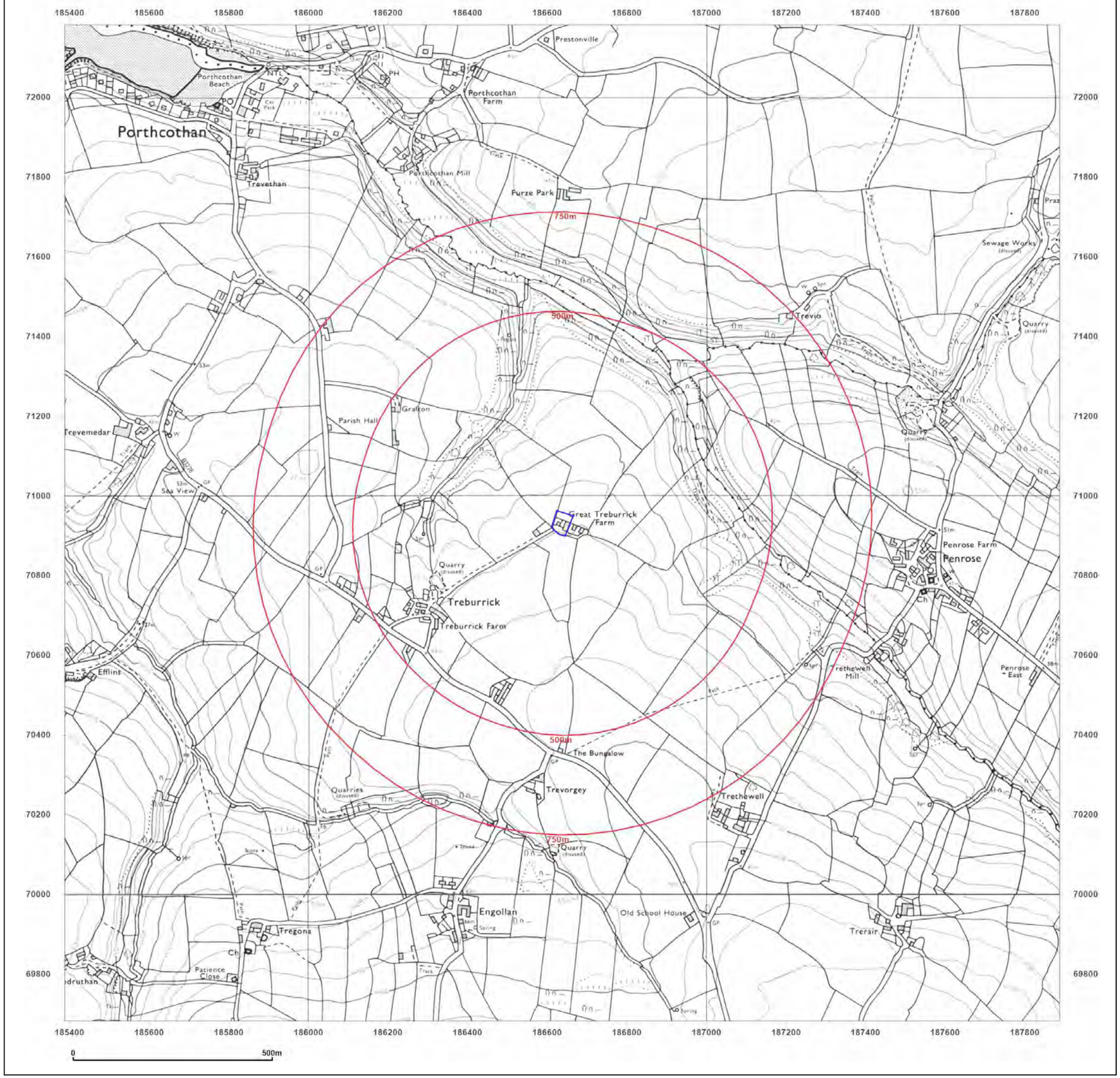
N
W E
S

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: National Grid

Map date: **1974-1976**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Surveyed 1972
Revised 1976
Edition N/A
Copyright 1976
Levelled N/A

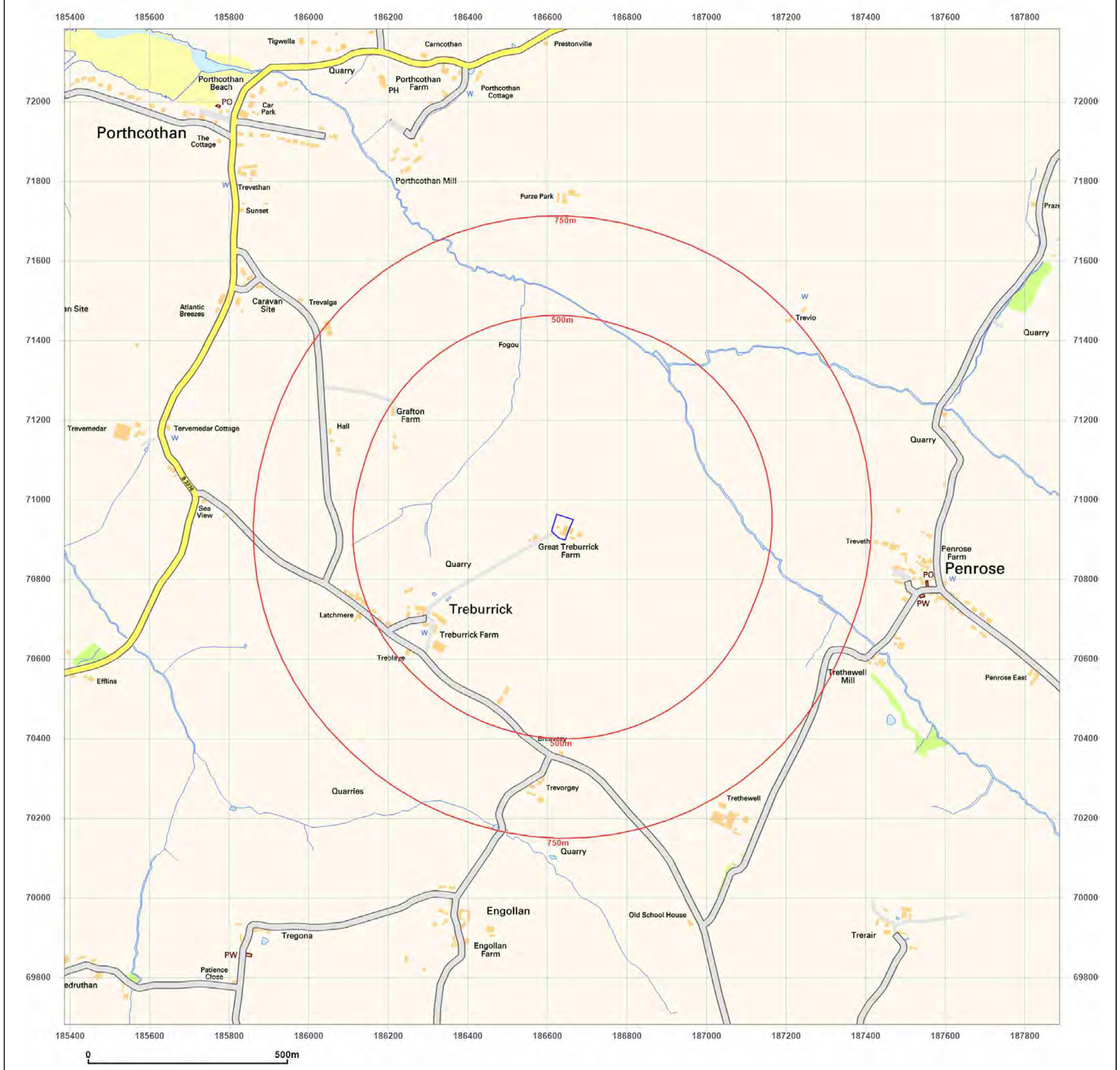
Surveyed 1973
Revised 1974
Edition N/A
Copyright 1974
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

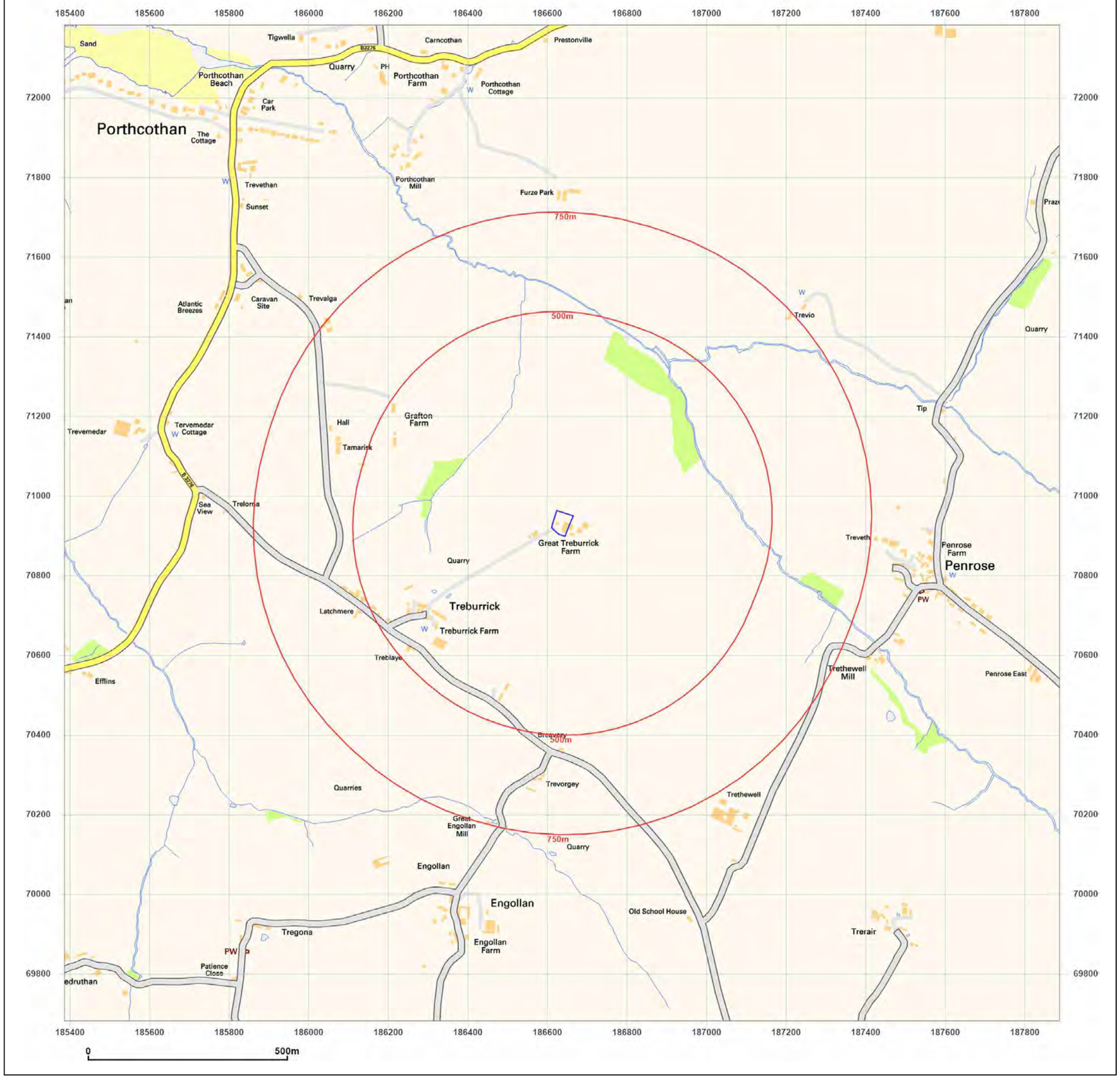
N
W E
S

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Groundsure INSIGHTS

Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

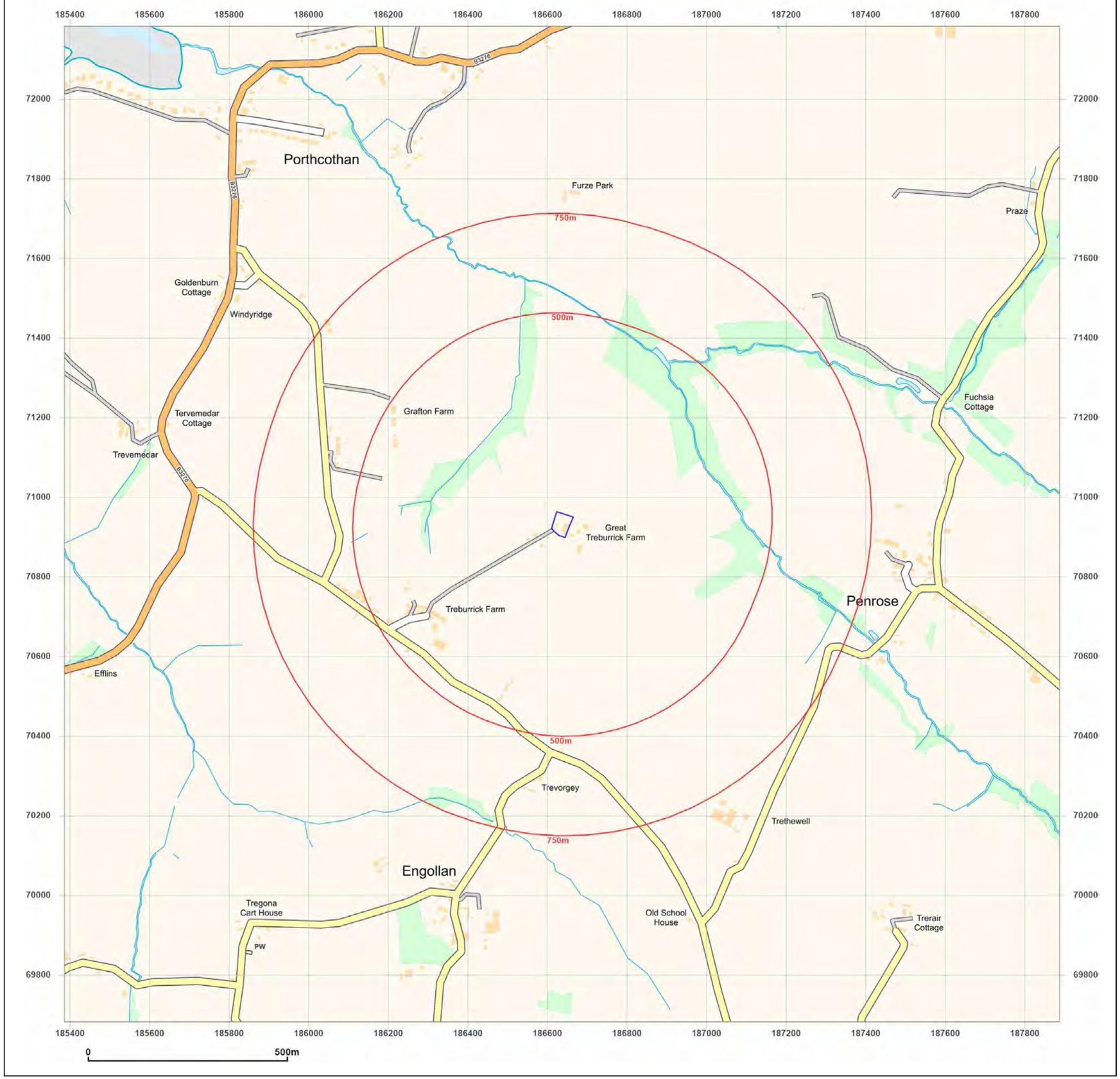
N
W E
S

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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



Site Details:

GREAT TREBURRICK FARM,
TREBURRICK, ST EVAL,
WADEBRIDGE, CORNWALL,
PL27 7UR

Client Ref: 24632
Report Ref: GS-7CI-96B-359-8GI
Grid Ref: 186637, 70932

Map Name: National Grid

Map date: **2024**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 28 February 2024

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

Appendix D
UXO Report

Plan may be provided by a third party

Ground Consultants Limited
Unit 67, Clear Space, Dunveth Business Park, West Hill, Wadebridge PL27 7FE
Tel: 01209 822922
Company Registration Number: 13561213

UNEXPLODED BOMB RISK MAP

SITE LOCATION

Location: PL27 7UR,
Map Centre: 186275,70712

This map principally indicates a hazard from Unexploded Bombs (UXB) due to WWII bombardment. Other sources of Unexploded Ordnance (UXO) may be present. It should be noted that this map does not represent UXO risk and should not be reported as such when reproduced.

LEGEND

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

Miltary | **Industry** | **UXO find** | **Other**
Transport | **Docks** | **Luftwaffe targets**
Utilities | **Bombing decoy** | **Airfields**

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

This map indicates the potential for UXBs to be present because of World War Two (WWII) bombing. It can be incorporated into a technical report, such as a Phase 1 Desk Study, or similar document as an indication of the potential for UXO encounter on a Site. Other sources of UXO may also be indicated, although note that these are not comprehensive and more detailed research is required to confirm their presence.

What if my Site is in a moderate or high density area?

We typically recommend that a detailed UXO desk study and risk assessment is undertaken for sites in an area with a moderate or high bombing density.
Additionally, if your site is in close proximity to a strategic target, military establishment, airfield or bombing decoy, then additional detailed research is recommended.

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

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

If you are unsure whether other sources of UXO may be present, you can request one of our pre-desk study assessments (PDSA) by emailing a site boundary and location to uxo@zetica.com.

You should never plan site work or undertake a risk assessment using these maps alone. More detail is required, to include an assessment of the likelihood of a source of UXO hazard from other military activity not reflected on these maps.

If I have any questions, who do I contact?

tel: +44 (0) 1993 886682 **email:** uxo@zetica.com **web:** www.zeticauxo.com

The information in this UXB risk map is derived from a range of sources and should be used with the accompanying notes on our website.