Phase 1 Preliminary Risk Assessment

Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB

23 January 2024

Wheal Jane Consultancy

Old Mine Offices, Wheal Jane, Baldhu, Truro, Cornwall, TR3 6EE

01872 560200

www.wheal-jane-consultancy.co.uk

consultancy@wheal-jane.co.uk

22016/PH1

DOCUMENT CONTROL SHEET

Client	Andrea and Marcus Bawden
Project Title	Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB
Document Title	Phase 1 Preliminary Risk Assessment
Document No.	22016/PH1

Date	Status	Revision	Prepared By	Approved By
23 January 2024	Final	-	SLW	WJC

CONTENTS

FIGURES

TABLES

APPENDICES

EXECUTIVE SUMMARY

Objectives	
Wheal Jane Consultancy was commissioned by Andrea and Marcus Bawden to undertake an environmental risk assessment for a proposed development.	
Site Setting	
Current Use	The site is currently part of a garden area, predominantly occupied by a grassy lawn and polytunnel.
Proposed Development	It is proposed to develop the site with two residential properties, with associated access, parking, and garden areas.
History	The site was part of an open agricultural field until the time of the production of the 2023 map and 2024 aerial photography, by which time a hardstanding access track and several field boundaries were constructed. The site has been predominantly surrounded by agricultural land since the earliest maps. A handful of small quarries and a smithy were present in the surrounding area in the late 19th century. The area underwent minor residential development in the mid-20th century.
Geology	The geological map indicates that the site is underlain by the Bovisand Formation of Devonian age formed between 410.8 and 393.3 million years ago.
Controlled Waters	The site possesses a very low RoFRaS Flood Rating (Risk of Flooding from Rivers and the Sea).
Radon	The development is within an area where 10 - 30% of properties are above the action level for Radon.
Conclusions	
• The contamination risk to the site from on-site sources, including natural geology, is considered **Low.** • The contamination risk to the site from off-site sources, including contemporary trade and discharge consents, is considered **Low.** • In the absence of a significant source of contamination, it can be concluded that this site is suitable for its intended future use and that no further investigation will be required.	
Recommendations	
• Full radon protective measures are required for the proposed development 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 General

1.1.1 Wheal Jane Consultancy was commissioned by Andrea and Marcus Bawden to undertake an environmental risk assessment at the site known as 'Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB.' Wheal Jane Consultancy was formally instructed to proceed via email on the 8th January 2024.

1.1.2 This report has been prepared by Wheal Jane Consultancy 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 Wheal Jane Consultancy.

1.2 Previous Reports

1.2.1 No previous land contamination reports are known to have been commissioned for this site.

1.3 Scope and Objectives

1.3.1 The Objective of this Desk Study is to examine past and present site conditions to identify any potential risk of contamination or ground instability resulting from historical and contemporary site usage. Any recommendations for further works have been made as deemed appropriate, based upon the findings of the investigation.

1.3.2 This assessment has been undertaken with guidance from BS10175:2011+A2:2017 and the UK government Land Contamination Risk Management (LCRM) framework published October 2020 (superseding Environment Agency report CLR11), and as such represents a Phase 1 Desk Study / Preliminary Risk Assessment.

1.3.3 This report does not constitute an asbestos inspection that may fall within the 'Control of Asbestos' regulations, 2006.

1.3.4 The conclusions and recommendations of this report are valid for a period of 12 months from the date of issue. Outside of this time frame the report will require reviewing by a suitably qualified geoenvironmental engineer / environmental scientist, to ensure that the report complies with any changes to industry standards, policies and/or guidelines.

1.3.5 It is recommended that a copy of this report be submitted to the local authority for checking, prior to commissioning any further work which may be required.

1.4 Information Sources

1.4.1 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, Wheal Jane Consultancy cannot accept any responsibility for any inaccuracy of third-party information. The sources used in this assessment are listed below:

- Planning Applications PA22/04733

- Landmark Environmental Data dated 10th January 2023.
- Historic mapping dated 10th January 2023.
- Zetica Unexploded Ordnance (UXO) risk map.
- BGS sheet 346, Newquay

2 PHASE 1 PRELIMINARY RISK ASSESSMENT

2.1 Site Location and Layout

2.1.1 The site is located off the A389 approximately 8.30km northeast of Newquay. The site is approximately centred on National Grid Reference 188190, 65930.

2.1.2 The site is irregular in shape and covers an area of 0.15ha.

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

2.1.4 The current site plan is contained in Figure 2.2, to the rear of the report.

2.2 Surrounding Area

Direction	Land Use
North	Agricultural land
East	Agricultural land
South	Agricultural land
West	Residential

2.3 Site Walkover Survey

2.3.1 Wheal Jane Consultancy conducted a site walkover survey on 12th January 2024. Photographs from the walkover survey are provided in Appendix A.

2.3.2 The site is currently a residential garden area. It is predominantly occupied by a grassy lawn.

2.3.3 A polytunnel is located centrally on site, currently in use for growing produce.

2.3.4 Several field boundaries, delineated by wire fences, cross the site.

2.3.5 The eastern section of the site is occupied by an open grassy lawn.

2.3.6 Several mature fruit trees are present in the eastern section of the site.

2.3.7 The western section of the site is occupied by several garden beds, in use for growing produce.

2.3.8 Miscellaneous items associated with gardening, such as water butts and plant pots, are noted to be occasionally present on site.

2.3.9 A bunded plastic tank is present in the western section of the site. It is currently in use as a composter.

2.3.10 Access to the site is provided by a gravel track entering from the west, running past the adjacent 'Ryeland' property.

2.3.11 Topographically speaking, the site slopes gently to the north.

2.4 Proposed Development

2.4.1 It is proposed to develop the site with two residential properties, with associated access, parking, and garden areas.

2.4.2 The proposed site plan is contained in Figure 2.3, to the rear of the report.

2.5 Site History

2.5.1 Using a range of historical mapping sources, an overview of the findings relating to the site and its surroundings can be found below in Table 2.1. Where maps of similar dates are provided (eg maps with differing scales) showing similar information, they may be summarised together.

Table 2.1: Summary of Historical Site Usage

Source	On Site	Surroundings
Ordnance Survey, 1880-1881, 1:2,500	The site is occupied by open agricultural land	The site is predominantly surrounded by agricultural land. Small quarries are present 780m W and 950m N Corn mill 800m S Smithy 850m W
Ordnance Survey, 1907, 1:2,500 and 1908, 1:10,560	No significant change	No significant change
Ordnance Survey, 1962-1963, 1:10,560	No significant change	St Mawgan Airfield present 1km SW

Ordnance Survey, 1967-1972, 1:2,500	No significant change	Minor residential development in the surrounding area
Ordnance Survey, 1995, 1:2,500	No significant change	No significant change
Aerial Photo, 2001	The site is situated in an open, grassy, agricultural field. A muddy track is present in the western extent of the site.	Several detached houses are present in the immediate surrounding area. Predominantly, the site is surrounded by open agricultural land.
Ordnance Survey, 2006, 1:10,000	No significant change	No significant change
Ordnance Survey, 2016, 1:10,000	No significant change	No significant change

Ordnance Survey, 2023, 1:10,000	The eastern extent of the site has now been subdivided by a field boundary	No significant change
Aerial Photo, 2024	A hardstanding access track is present in the western extent of the site. Vegetated field boundaries are present in the eastern extent of the site. A polytunnel is also present in the eastern extent of the site.	No significant change

2.5.2 The site was part of an open agricultural field until the time of the production of the 2023 map and 2024 aerial photography, by which time a hardstanding access track and several field boundaries were constructed.

2.5.3 The site has been predominantly surrounded by agricultural land since the earliest maps. A handful of small quarries and a smithy were present in the surrounding area in the late 19th century. The area underwent minor residential development in the mid-20th century.

2.6 Geological Setting

Table 2.2: Overview of the geological setting

Geology
Reference has been made to the Published Geology (BGS sheet 346, Newquay, 1:50,000), as well as the BGS online map viewer.

Superficial Geology	The geological map shows no superficial deposits to be present on site.
Bedrock Geology	The geological map indicates that the site is underlain by the Bovisand Formation of Devonian age formed between 410.8 and 393.3 million years ago. The BGS describes this unit as "Slaty mudstone, medium to dark grey, with thin sandstone beds and sporadic thin limestone beds."
Geology from BGS Borehole Records/Previous Site Investigation Records	There is no evidence of BGS boreholes or previous intrusive ground investigations in the immediate surrounding area.
Background Estimated Soil Chemistry	- Arsenic: 45 - 60 mg/kg - Cadmium: <1.8 mg/kg - Chromium: 60 - 90 mg/kg - Lead: <100 mg/kg - Nickel: 15 - 30 mg/kg Values for arsenic exceed guideline values for residential end uses, however arsenic is typically of low bioaccessibility (see Conceptual Site Model below). The values for other metals do not exceed guideline values for commercial or residential end uses.
Radon	The property is in a Radon Affected Area, as 10-30% of properties are above the action level.

2.7 Environmental Setting

2.7.1 The table below outlines the key environmental settings relating to the site.

Table 2.3: Overview of the environmental setting

Hydrology/Surface Water	
Nearest Surface Water Feature	The nearest surface water feature is identified 66m E of the site, understood to be a pond.
OS Water Network	There are five Inland rivers present within 250m of the proposed development: 227m NE, 230m NE, 231m NE, 238m NE, 249m NE There is one pond present within 250m of the proposed development: 66m E There are no lakes or reservoirs present within 250m of the proposed development. There are no tidal rivers or streams within 250m of the proposed development.
Surface Water Abstractions	There are no active surface water abstraction licences within 1000m of the planned development.
Monitoring	There is no biological monitoring data within 500m of the site.
	No chemical monitoring data has been recorded within 500m of the site.
Hydrogeology/Groundwater	
Superficial Aquifer	There is no recorded superficial aquifer underlying the site.
Bedrock Aquifer	The Bovisand Formation bedrock is classified as a Secondary A aquifer of High Vulnerability.
Source Protection Zones	There are no source protection zones within 1000m of the site.
Groundwater Abstractions	There is one groundwater abstraction licence recorded within 1000m of the site: 669m N, General Farming and Domestic
Sensitive Land Uses	
Environmental	There is one area of Ancient Woodland within 2000m of the proposed development: 768m S, Unnamed

	There are no Areas of Adopted Green Belt, Areas of Unadopted Green Belt, Areas of Outstanding Natural Beauty, Environmentally Sensitive Areas, Forest Parks, Local Nature Reserves, Marine Nature Reserves, National Nature Reserves, National Parks, Nitrate Sensitive Areas, Nitrate Vulnerable Zones, Ramsar Sites, Sites of Special Scientific Interest, Special Areas of Conservation, Special Protection Areas or World Heritage Sites within 2000m of the site.
	The proposed development is not within an existing Nitrate Vulnerable Zone (NVZ).
Heritage/ Archaeological	The site is not within the Cornwall and West Devon Mining World Heritage Site. There are no archaeologically significant features in or around the immediate surroundings of the site.
Other Environmental Information	
Contaminated Land	No sites determined as Contaminated Land under Part 2A EPA 1990 are situated within 500m of the site.
Waste	There are no Environment Agency landfill sites within 1000m.
	There are no Environment Agency historic landfill sites within 1000m.
	There are no Licensed Waste Management/Transfer Facilities within 500m.
	One active discharge consent licence has been granted within 500m of the site: 116m W, Sewage – Treated Effluent – Land Soakaway
	There are no Red List Discharge Consent licences within 500m of the site.
Hazardous Substances	There are no Hazardous substances recorded within 2000m of the site.
Pollution Incidents	There are no recorded pollution incidents within 500m of the proposed development.
Flooding	The site possesses a very low RoFRaS Flood Rating (Risk of Flooding from Rivers and the Sea).
	The site is within 250m of a Zone 2 or Zone 3 Floodplain area: Zone 2: 166m NE Zone 3: 161m NE
	There are no groundwater flooding susceptibility areas within 50m of the proposed development.
Current Industrial Land Uses	There are no current potentially contaminative activities identified as industrial land use within 500m of the proposed development.

Historic Industrial Land Uses	There is one historic potentially contaminative activity identified by contemporary trade directory entries within 500m of the proposed development: 69m W, Lawnmowers and Garden Machinery – Sales & Service
Unexploded Ordnance (UXO)	The risk to the site and its surroundings from the presence of UXO is low (see Appendix D).
Archival Metalliferous Mining Search	A documentary mine search has not been compiled for this property.
Adjacent Planning Applications	There is no evidence of recent adjacent planning applications containing relevant ground contamination investigations.

3 PRELIMINARY CONCEPTUAL MODEL

3.1 Introduction

3.1.1 The Assessment of risk is based upon the principal of the pollutant linkage, which is described in more detail below. This assessment seeks to identify plausible pollutant linkages associated with the proposed development. Once this has been done, the resultant risk is determined based on the probability and the possible consequence of the pollutant linkages being present. As such, this qualitative risk assessment has been undertaken in accordance guidance published in Annex 4 of the National House Building Council/Environment Agency/Chartered Institute of Environmental Health R&D publication 66, Guidance for the Safe Development of Housing on Land Affected by Contamination (NHBC/EA/CIEH, 2008) which updates and supersedes CIRIA C552: Contaminated Land Risk Assessment, A Guide to Good Practice (Rudland et al., 2001).

3.1.2 A summary of the R&D66 risk classification matrix is presented below.

Table 3.1: 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

3.2 Preliminary Conceptual Site Model

3.2.1 This conceptual site model has been undertaken with due regard to guidance provided in BS10175:2011+A2:2017 and the LCRM framework. 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.

3.2.2 This definition is based on the principles of risk assessment defined as a combination of the probability (or frequency) of occurrence of a defined hazard and the magnitude (including the seriousness) of the consequences. Central to the risk assessment process is the concept of contaminant linkage, which is a linkage between a contaminant and a receptor by means of a pathway.

Table 3.2. Summary of statutory definitions relating to pollution linkage.

Statutory definitions relating to contaminant linkage.	
Contaminant	"a substance which is in, on or under the land and which has the potential to cause harm or to cause pollution of controlled waters."
Receptor	"a living organism, a group of living organisms, and ecological system or a piece of property" which meets given criteria. "controlled waters which are, or could be, polluted by a contaminant".
Pathway	"one or more routes or means by, or through, which a receptor: • is being exposed to, or affected by, a contaminant, or • could be so exposed or affected."

3.2.3 Without the presence of all three components, there is no linkage and therefore no risk. The relationship between these components is discussed below in order to identify the existence of any source-pathway-receptor linkage on the site, and hence the potential risks associated with any contamination.

Table 3.3: Identified Sources, Pathways and Receptors

Source – Pathway – Receptor Overview	
Contaminant sources	*Natural geology*
	Contemporary Trade
	Discharge Consents
Pathways	*Inhalation of dust and vapours*
	Dermal contact
	Ingestion
	Ingress into buildings
	Ground and surface waters

Receptors	*Future site users*
	Site workers
	Flora & Fauna

3.2.4 From this table, the Conceptual Site Model can be derived. It outlines the critical pollutant linkages of concern for a particular land contamination problem. The development of the CSM is a primary planning tool that is used to organise information about the site and support the decision-making process in managing potentially contaminated sites. The matrix below makes up the initial CSM based on the data and information collated during the desk study and site walkover.

3.3 Preliminary Conceptual Site Model Matrix

Table 3.4: Preliminary Conceptual Model Matrix

Preliminary Conceptual Model							
	Source(s)	**Contaminant(s)**	**Pathway(s)**	**Receptor(s)**	**Probability**	**Consequence**	**Risk Assessment**
On Site	Natural Geology	Radon gas	Ingress into proposed buildings	Future site users	High Likelihood	Medium	**High Risk** – The property is in a Higher probability radon area (10 to 30% of homes are estimated to be at or above the Action Level).
		Arsenic	Dermal contact Soil and dust ingestion and inhalation	Future site users Site workers Site flora and fauna	Unlikely	Medium	**Low Risk** – Naturally occurring levels of arsenic within the soil on site are estimated to be 45 - 60 mg/kg. Published literature (R.S. Middleton *et al*, 2017) suggest an average bioavailability of 19% for arsenic in Cornwall, therefore estimated naturally occurring arsenic levels are highly likely to be within guideline value of 37 mg/kg.
Off Site	Contemporary Trade Directory Entries & Points Of Interest	Metals Total Petroleum Hydrocarbons (TPH) Polycyclic Aromatic Hydrocarbons (PAH) Sulphates	Dermal contact Soil and dust ingestion and inhalation Ground & surface waters	Future site users Site workers Site flora and fauna	Unlikely	Medium	**Low Risk** – A single contemporary trade record is noted within 500m of the site; an inactive Lawnmowers and Garden Machinery - Sales and Serving shop, situated 69m W. Due to the local topography, distance from the site, and scarcity of contemporary trade in the area, contamination pathways are considered unlikely.

Discharge Consent Licence	Leachates Pathogens	Dermal contact Soil and dust ingestion and inhalation Ground & surface waters	Future site users Site workers Site flora and fauna	Unlikely	Medium	**Low Risk** – An active discharge consent licence for the discharge of treated effluent via a land soakaway is recorded 116m SW. Due to the local topography and distance from the site, contamination pathways are considered unlikely.

4 GEOTECHNICAL RISK ASSESSMENT

4.1 Introduction

4.1.1 This risk assessment has been undertaken with due regard to the advice relating to ground instability as provided in the Department of the Environment (Welsh Offices) Planning Policy Guidance (no. 14) for "Development on Unstable Land". The guidance discusses the causes of Unstable Land and defines them as falling into one of three categories:

i. The effects of underground cavities; these may be of natural origin or due to mining or to civil engineering works.

ii. Unstable slopes; these may be natural, in both coastal and inland situations; or man-made, whether excavated, as in quarries or cuttings, or constructed, as in tips and embankments.

iii. Ground compression; this may be of natural origin due to peat, alluvial, estuarine or marine soils; or due to human activities, e.g. made ground, landfill or restored opencast mines; and ground subject to movement due to shrinking and swelling clays.

4.1.2 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.

4.1.3 The risks posed by each type of unstable ground are discussed based upon the proposed redevelopment of the site for dwellings. Table 5 below outlines the key findings.

Table 4.1: Overview of the risks posed by unstable ground

Underground Cavities
No recorded underground cavities are noted within 1000m of the proposed development.
Unstable Slopes
The site is gently sloping; the risk from unstable slopes is low.
British Geological Survey Data
Information relating to potential ground instability issues at this site has been collected from the BGS digital and hard-copy mapping. Below is the summarised information.

Natural Hazard Findings	
Hazard	**Risk Classification**
Shrink – Swell Clays	**Very Low** - Ground conditions predominantly low-plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.
Landslides	**Low** - Possibility of slope instability problems after major changes in ground conditions. Ask about implication for stability if large changes to drainage or excavations take place near to buildings. Consider possibility of trench side or slope movement during excavations, or consequence of changes to drainage. Possible increase in construction cost to remove possibility of potential slope stability problems.
Soluble Rocks	**Negligible** - Soluble rocks are either not thought to be present, or are not prone to dissolution. Dissolution features are unlikely to be present. No actions required to avoid problems due to soluble rocks. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with soluble rocks.
Compressible Deposits	**Negligible -** No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
Collapsible Deposits	**Very Low -** Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.
Running Sand	**Very Low -** No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

4.2 Groundwater

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

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Anticipated Ground Conditions

5.1.1 The anticipated ground conditions are based on the geological information available at the time of writing this report, as well as an evaluation of existing structures on site and their potential associated Made Ground.

5.1.2 It is anticipated that the site is underlain by up to 0.50m of TOPSOIL across the majority of the site with hard standing or gravel present around the existing structures.

5.1.3 It is also considered likely that material described as MADE GROUND will be present around and beneath the existing structures. This material may be granular or cohesive and will likely contain anthropogenic components of brick and concrete.

5.1.4 Any TOPSOIL, Hardstanding and/or MADE GROUND will be underlain by clayey sandy GRAVEL belonging to the Bovisand Formation.

5.2 Geotechnical Considerations

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

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

5.3 Conclusions

5.3.1 The property is in a Higher probability radon area (10 to 30% of homes are estimated to be at or above the Action Level).

5.3.2 Naturally occurring levels of arsenic within the soil on site are estimated to be 45 - 60 mg/kg. Published literature (R.S. Middleton et al, 2017) suggest an average bioavailability of 19% for arsenic in Cornwall, therefore estimated naturally occurring arsenic levels are highly likely to be within guideline value of 37 mg/kg.

5.3.3 A single contemporary trade record is noted within 500m of the site; an inactive Lawnmowers and Garden Machinery - Sales and Serving shop, situated 69m W. Due to the local topography, distance from the site, and scarcity of contemporary trade in the area, contamination pathways are considered unlikely.

5.3.4 An active discharge consent licence for the discharge of treated effluent via a land soakaway is recorded 116m SW. Due to the local topography and distance from the site, contamination pathways are considered unlikely.

5.3.5 In the absence of a significant source of contamination, it can be concluded that this site is suitable for its intended future use and that no further investigation will be required.

5.4 Recommendations

5.4.1 Full radon protective measures are required for the proposed development in-line with BRE guidelines.

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

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

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

6 REFERENCES

6.1.1 BSI (2011) BS 10175:2011 +A2:2017 Investigation of Potentially Contaminated Sites – Code of Practice. London, British Standards Institution

6.1.2 Building Research Establishment (BRE) (2007) BR211 - Radon: Guidance on Protective Measures for New Buildings. Watford, BRE

6.1.3 CIRIA (2001) CIRIA C552 - Contaminated land risk assessment: A guide to good practice. London, CIRIA

6.1.4 CIRIA (2007) CIRIA C665 – Assessing Risks Posed by Hazardous Ground Gases to Buildings. London, CIRIA

6.1.5 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

6.1.6 Department of Communities and Local Government (2012) *National Planning Policy Framework*. London, DCLG

6.1.7 UK government: Land Contamination Risk Management Framework, gov.uk, October 2020

6.1.8 Environment Agency (2004) Contaminated Land Report 11 - Model Procedures for the Management of Land Contamination. Bristol, Environment Agency

6.1.9 Environment Agency (2005) Guidance on Assessing the Risk Posed by Land Contamination and Its Remediation on Archaeological Resource Management. Bristol, EA

6.1.10 Great Britain. *Environmental Protection Act (1990)*. London, The Stationery Office

6.1.11 Great Britain. Environmental Damage (Prevention and Remediation) Regulations (2009). London, The Stationery Office

6.1.12 Great Britain. *Water Act (2003)*. London, The Stationery Office

6.1.13 Great Britain. The Water Framework Directive (Standards and Classification) Directions (England and Wales) (2015). London, The Stationery Office

6.1.14 Land Quality Press (2015) *The LQM/CIEH Suitable 4 Use Levels for Human Health Risk Assessment* (2nd Edition). Nottingham, Land Quality Press

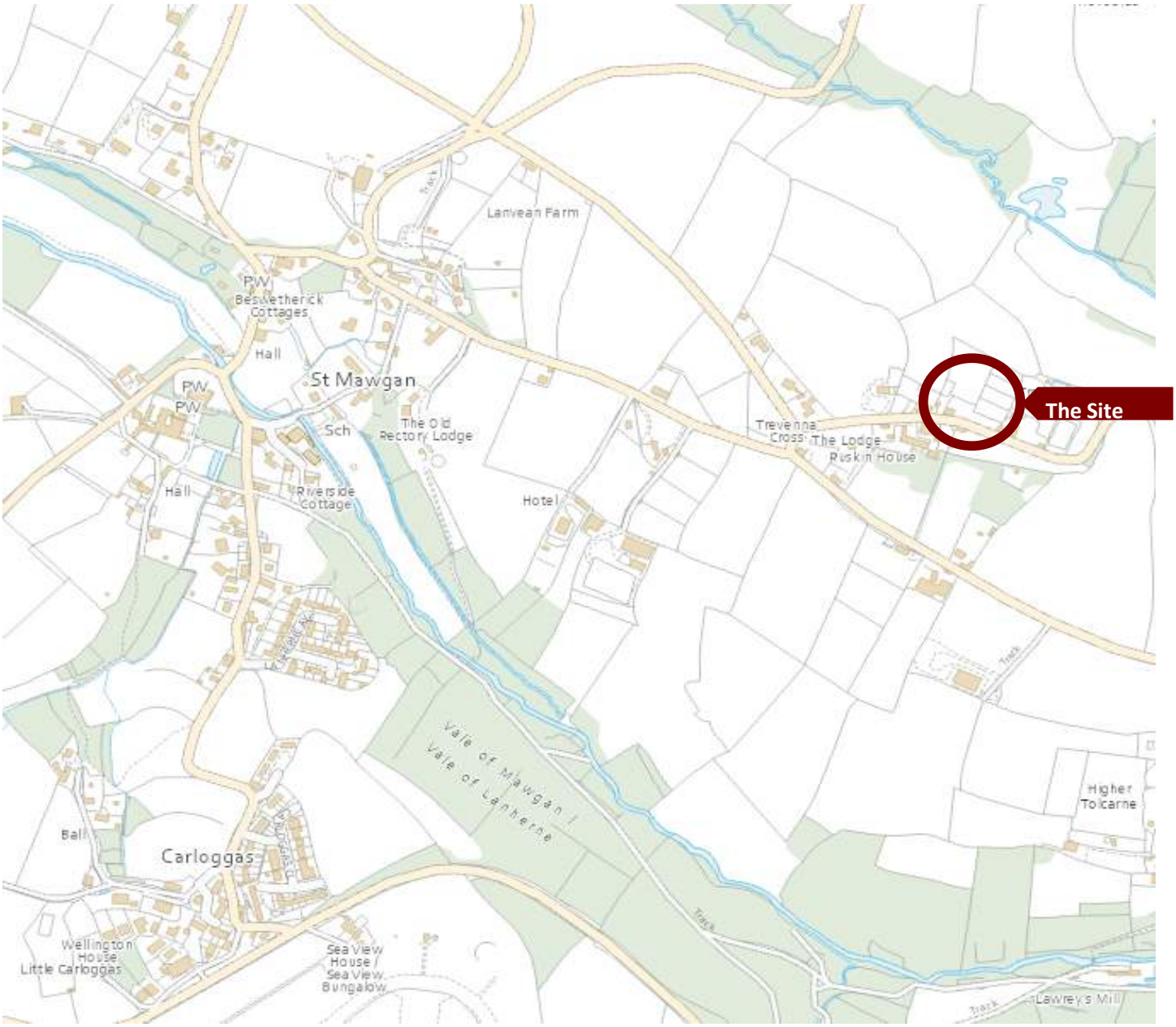
6.1.15 National House Building Council (NHBC), Environment Agency and Chartered Institute of Environmental Health (CIEH) (2008) *Research & Development Publication 66: Guidance for the Safe Development of Housing on Land Affected by Contamination*. Amersham, NHBC

6.1.16 Royal Institution of Chartered Surveyors (RICS) (2012) *Japanese Knotweed and Residential Property*. Coventry, RICS

7 NOTES

- *This report is concerned solely with the property, as defined by this report, or parts thereof examined.*
- *The report should not be used in connection with adjacent properties.*
- *The information in the Groundsure EnviroInsight and GeoInsight reports, which have been used in compiling this Phase 1 Desk Study report, is derived from a number of statutory and non-statutory sources. While every effort is made by the supplier to ensure accuracy, the supplier cannot guarantee the accuracy or completeness of such information or data, nor to identify all the factors that may be relevant.*
- *The conclusions and recommendations relate to the type and extent of development outlined in this report for this specific property only and should not be taken as suitable for any other form or extent of development on this property without further consultation with Wheal Jane Consultancy.*
- *This report is confidential to the client, the client's legal and professional advisors, and may not be reproduced or distributed without our permission other than to directly facilitate the sale or development of the property concerned.*
- *We have no liability toward any person not party to commissioning this report.*
- *Unless otherwise expressly stated, nothing in this report shall create or confer any rights or other benefits pursuant to the Contracts (Rights of Third Parties) Act 1999 in favour of any person other than the person commissioning this report.*
- *This report is not an asbestos inspection that may fall within the control of Control of Asbestos Regulations 2006.*

FIGURES:



Title: **Site Location Plan**

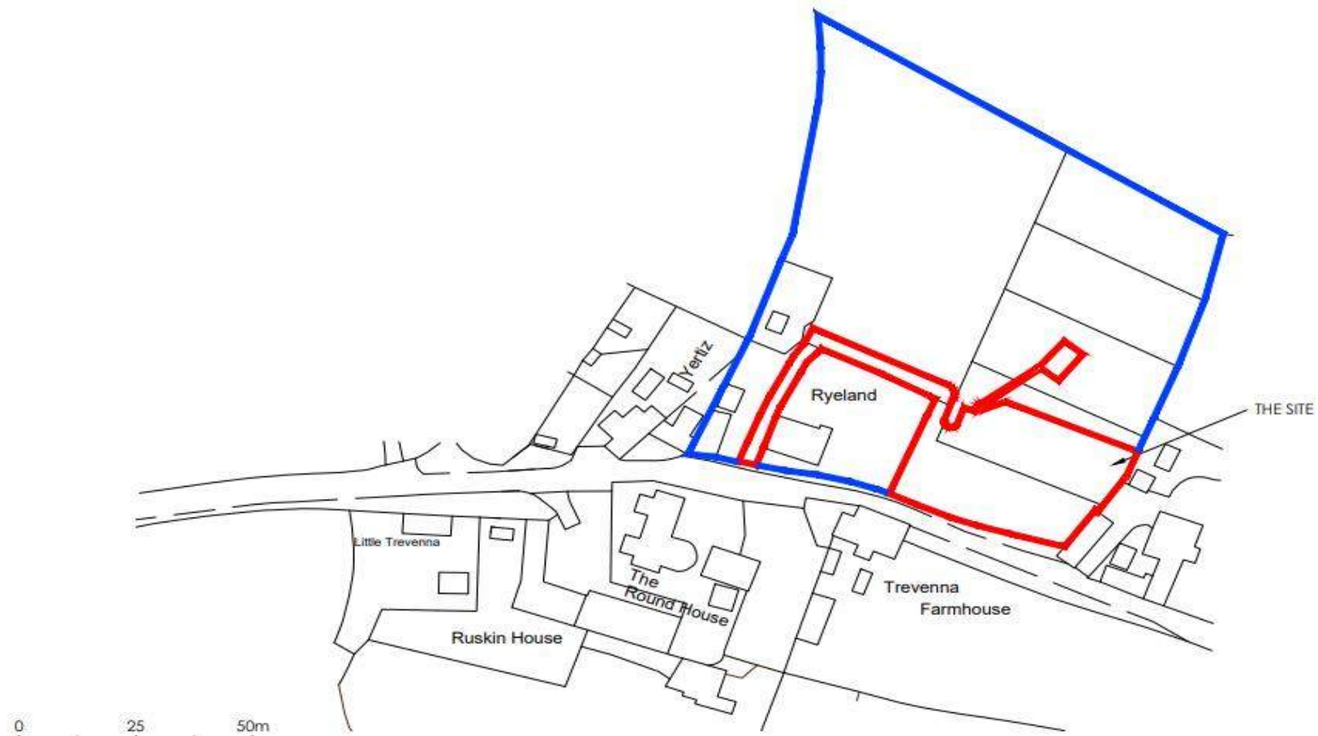
Project: **Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB**

Client: **Andrea and Marcus Bawden**

Report Title: **Phase 1 Preliminary Risk Assessment**

Date: **23/01/2024** Ref: **22016** Figure: **2.1**

WHEAL JANE CONSULTANCY
GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES



NORTH

N

Legend:

WHEAL JANE CONSULTANCY
GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

Title:

Current Site Layout

Project:

Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB

22016

Client:

Andrea and Marcus Bawden

Date:	23/01/2024
Scale:	NTS
Drawn by:	MV
Revision:	A
Figure:	2.2

LOCATION
RYELAND
St Mawgan, TR8 4HB

CLIENT
BAWDEN

DATE 13.09.2023

DRAWING TITLE
LOCATION PLAN AS EXISTING

PROJECT DESCRIPTION
2NO. NEW DWELLINGS

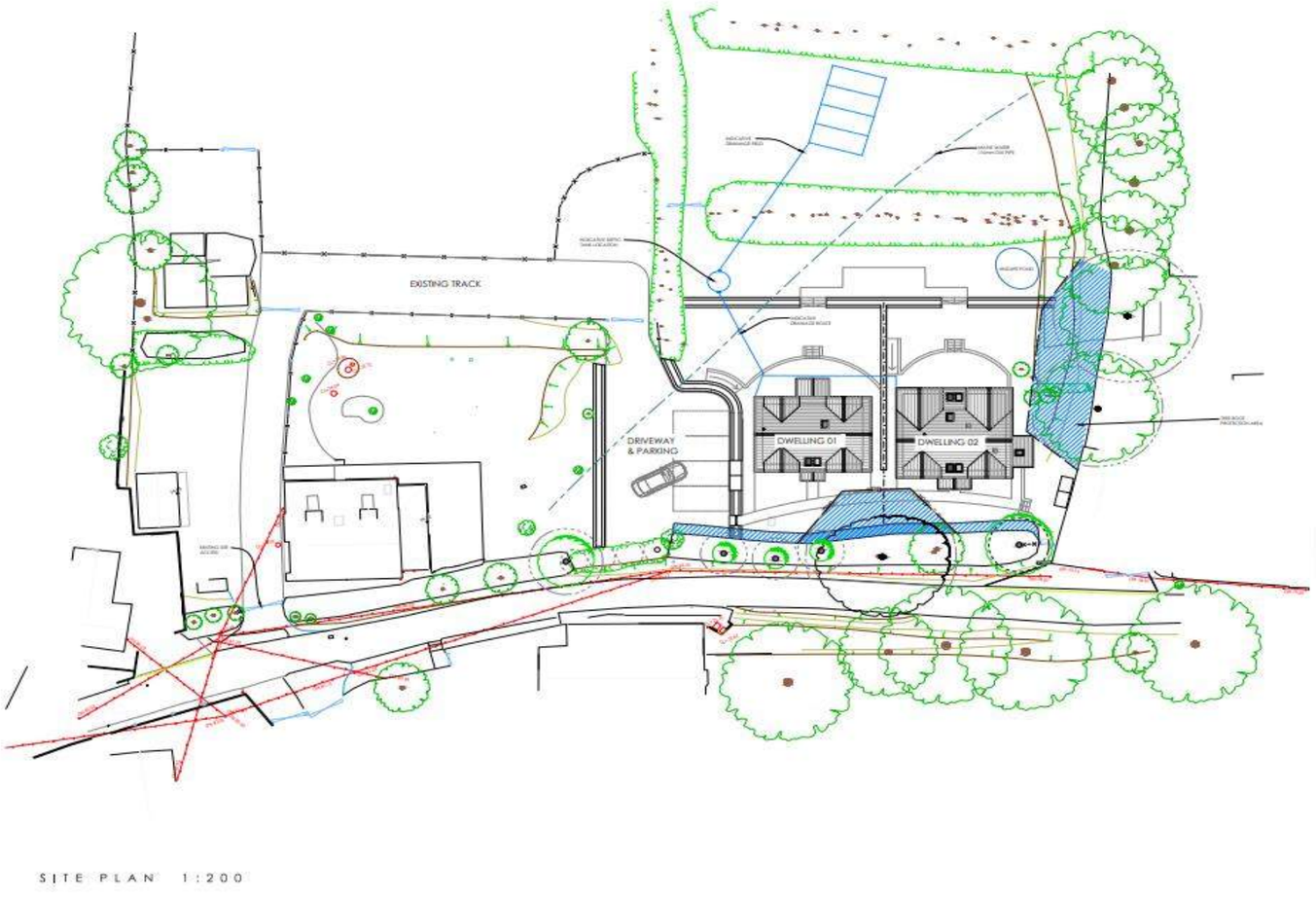
DWG NO. **020** REV. **A**

STAGE
Planning

SCALE 1:1250 @A4

DRAWN HM

ark
SUSTAINABLE ARCHITECTURE
Darbarl Unit 12, Prow Park Business Park, Treloggan Industrial Estate, Newquay, TR7 2SX
01637 850144 info@ark-designs.com www.ark-designs.com



SITE PLAN 1:200

N

Legend:

WHEAL JANE CONSULTANCY

GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

Title:

Proposed Site Layout

Project:

Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB

22016

Client:

Andrea and Marcus Bawden

Date:	23/01/2024
Scale:	NTS
Drawn by:	MV
Revision:	A
Figure:	2.3

APPENDICES:

A. Site Photographs

B. Environmental Data

C. Historical Maps

D. UXO Risk Map

APPENDIX A

Site Photographs

Title:	Phase 1 Walkover Photographs		
Project:	Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB		
Client:	Andrea and Marcus Bawden		
Report Title:	Phase 1 Preliminary Risk Assessment		
Date:	12/01/24	Ref: 22016	Appendix: A

WHEAL JANE CONSULTANCY
GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

Title:	Phase 1 Walkover Photographs
Project:	Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB
Client:	Andrea and Marcus Bawden
Report Title:	Phase 1 Preliminary Risk Assessment
Date:	12/01/24

WHEAL JANE CONSULTANCY
GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

Ref: 22016

Appendix: A

Title:	Phase 1 Walkover Photographs
Project:	Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB
Client:	Andrea and Marcus Bawden
Report Title:	Phase 1 Preliminary Risk Assessment
Date:	12/01/24

WHEAL JANE CONSULTANCY
GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

Ref: 22016

Appendix: A

Title:	Phase 1 Walkover Photographs		
Project:	Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB		
Client:	Andrea and Marcus Bawden		
Report Title:	Phase 1 Preliminary Risk Assessment		
Date:	12/01/24	Ref: 22016	Appendix: A

WHEAL JANE CONSULTANCY
GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

Title:	Phase 1 Walkover Photographs
Project:	Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB
Client:	Andrea and Marcus Bawden
Report Title:	Phase 1 Preliminary Risk Assessment
Date:	12/01/24

WHEAL JANE CONSULTANCY
GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

Ref: 22016

Appendix: A

Title:	Phase 1 Walkover Photographs		
Project:	Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB		
Client:	Andrea and Marcus Bawden		
Report Title:	Phase 1 Preliminary Risk Assessment		
Date:	12/01/24	Ref: 22016	Appendix: A

WHEAL JANE CONSULTANCY
GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

Title:	Phase 1 Walkover Photographs
Project:	Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB
Client:	Andrea and Marcus Bawden
Report Title:	Phase 1 Preliminary Risk Assessment
Date:	12/01/24

WHEAL JANE CONSULTANCY
GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

Ref: 22016

Appendix: A

Title:	Phase 1 Walkover Photographs
Project:	Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB
Client:	Andrea and Marcus Bawden
Report Title:	Phase 1 Preliminary Risk Assessment
Date:	12/01/24

WHEAL JANE CONSULTANCY
GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

Ref: 22016

Appendix: A

Title:	Phase 1 Walkover Photographs
Project:	Site at Ryeland, Trevenna Cross, St Mawgan, TR8 4HB
Client:	Andrea and Marcus Bawden
Report Title:	Phase 1 Preliminary Risk Assessment
Date:	12/01/24

Ref: 22016

Appendix: A

WHEAL JANE CONSULTANCY

GEOTECHNICAL, ENVIRONMENTAL & MINING SERVICES

APPENDIX B

Environmental Data

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
330593820_1_1

Customer Reference:
22016

National Grid Reference:
188190, 65930

Slice:
A

Site Area (Ha):
0.15

Search Buffer (m):
1000

Site Details:

Ryeland, Trevenna Cross
St. Mawgan
NEWQUAY
TR8 4HB

Client Details:

Ms B Halliday
Wheal Jane Consultancy
Old Mine
Wheal Jane Mine
Baldhu
Truro
Cornwall
TR3 6EE

Wheal Jane Consultancy
Geotechnical, environmental & mining services

Contents

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.
In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Copyright Notice

Natural England Copyright Notice

Scottish Natural Heritage Copyright

Ove Arup Copyright Notice

Stantec Copyright Notice

Radon Potential dataset Copyright Notice

Natural Resources Wales Copyright Notice

Report Version v53.0

Wheal Jane Consultancy
Geotechnical, environmental & mining services

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1		Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1		1		9
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 3		Yes		
Pollution Incidents to Controlled Waters	pg 4				4
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 4				2
River Quality Biology Sampling Points	pg 5				1
River Quality Chemistry Sampling Points	pg 6				1
Substantiated Pollution Incident Register					
Water Abstractions	pg 6				1 (*4)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 8	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 8	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 8		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 8		Yes	n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 9		7	3	59

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 17	2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 17				3
Potentially Infilled Land (Water)					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Wheal Jane Consultancy
Geotechnical, environmental & mining services

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 18	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 18	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 19				4
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 20	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 20	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 20		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 20	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 20	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 21	Yes		n/a	n/a
Radon Potential - Radon Affected Areas	pg 21	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures	pg 21	Yes	n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 22		1		1
Fuel Station Entries					
Points of Interest - Commercial Services					
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 22				2
Points of Interest - Public Infrastructure	pg 22				2
Points of Interest - Recreational and Environmental	pg 22				2
Gas Pipelines					
Underground Electrical Cables					

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 23				1
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (NE)	170	1	188350 66050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (N)	202	1	188200 66150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	267	1	188500 65927
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	305	1	188100 66250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (N)	354	1	188100 66300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A14NW (E)	367	1	188600 65927
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SW (E)	368	1	188600 65900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (NW)	385	1	188000 66300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A14SW (E)	418	1	188650 65900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SW (E)	473	1	188700 65850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (N)	477	1	188000 66400
1	**Discharge Consents** Operator: Chough Construction (St Mawgan) Property Type: Wooden Containers Location: Trevenna, St Mawgan, NEWQUAY, Cornwall, TR8 4HB Authority: Environment Agency, South West Region Catchment Area: Tidal Camel & Menalhyl, Cornwall Reference: NRA-SW-5746/1 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: 22nd June 1993 Revocation Date: Not Supplied Discharge Type: Sewage Effluent Discharge-Treated Effluent Discharge Environment: Land/Soakaway Receiving Water: Licence Status: Lapsed, Revoked Or Cancelled **Status:** **Not Supplied** Positional Accuracy: Located by supplier to within 100m	A13SW (W)	116	2	188040 65880
2	**Discharge Consents** Operator: Ocean Services (Sw) Limited Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: 1 & 2 Council Houses Five Lanes, St Mawgan, Newquay, Cornwall, Tr8 4ex Authority: Environment Agency, South West Region Catchment Area: Tidal Camel & Menalhyl, Cornwall Reference: Npswqd002206 Permit Version: 1 Effective Date: 6th June 2008 Issued Date: 6th June 2008 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Groundwaters Via Soakaway **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	596	2	187640 66238

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	**Discharge Consents** Operator: Cornwall Airport Limited Property Type: PRISONS/MOD SITES/PUBLIC ADMIN+DEFENCE+COMP SOCIAL SEC Location: Raf St Mawgan (Interceptor 3), Newquay, Cornwall, Tr8 4hp Authority: Environment Agency, South West Region Catchment Area: Tidal Camel & Menalhyl, Cornwall Reference: 302548 Permit Version: 1 Effective Date: 25th October 2002 Issued Date: 25th October 2002 Revocation Date: Not Supplied Discharge Type: Trade Effluent Discharge-Site Drainage Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of River Menalhyl **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	800	2	187670 65280
4	**Discharge Consents** Operator: South West Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: St Mawgan Sewage Pumping Station, St Mawgan, Cornwall Authority: Environment Agency, South West Region Catchment Area: Tidal Camel & Menalhyl, Cornwall Reference: 15/49/272/P/35 Permit Version: 1 Effective Date: 14th December 1973 Issued Date: 14th December 1973 Revocation Date: 1st October 2000 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Menalhyl **Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A12NW (W)	852	2	187300 66000
4	**Discharge Consents** Operator: South West Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: St Mawgan Pscso/Eo, St Mawgan, Newquay, Cornwall, Tr8 4er Authority: Environment Agency, South West Region Catchment Area: Tidal Camel & Menalhyl, Cornwall Reference: 301611 Permit Version: 3 Effective Date: 22nd April 2016 Issued Date: 22nd April 2016 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Menalhyl (S) **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A12NW (W)	902	2	187250 66000
4	**Discharge Consents** Operator: South West Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: St Mawgan Pscso/Eo, St Mawgan, Newquay, Cornwall, Tr8 4er Authority: Environment Agency, South West Region Catchment Area: Tidal Camel & Menalhyl, Cornwall Reference: 301611 Permit Version: 3 Effective Date: 22nd April 2016 Issued Date: 22nd April 2016 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Menalhyl (S) **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A12NW (W)	902	2	187250 66000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: South West Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: St Mawgan Pscso/Eo, St Mawgan, Newquay, Cornwall, Tr8 4er Authority: Environment Agency, South West Region Catchment Area: Tidal Camel & Menalhyl, Cornwall Reference: 301611 Permit Version: 2 Effective Date: 19th December 2013 Issued Date: 19th December 2013 Revocation Date: 21st April 2016 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: River Menalhyl (S) **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A12NW (W)	905	2	187247 66002
5	**Discharge Consents** Operator: South West Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: St Mawgan Pscso/Eo, St Mawgan, Newquay, Cornwall, Tr8 4er Authority: Environment Agency, South West Region Catchment Area: Tidal Camel & Menalhyl, Cornwall Reference: 301611 Permit Version: 2 Effective Date: 19th December 2013 Issued Date: 19th December 2013 Revocation Date: 21st April 2016 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Menalhyl (S) **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A12NW (W)	905	2	187247 66002
5	**Discharge Consents** Operator: South West Water Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: St Mawgan Pscso/Eo, St Mawgan, Newquay, Cornwall, Tr8 4er Authority: Environment Agency, South West Region Catchment Area: Tidal Camel & Menalhyl, Cornwall Reference: 301611 Permit Version: 1 Effective Date: 1st October 2000 Issued Date: 1st October 2000 Revocation Date: 18th December 2013 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Menalhyl (S) **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A12NW (W)	905	2	187247 66003
6	**Discharge Consents** Operator: Ms Susan Medder Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: The Forge Denzell Mill, St Mawgan, Newquay, Cornwall, Tr8 4hd Authority: Environment Agency, South West Region Catchment Area: Not Supplied Reference: Epreb3991nq Permit Version: 1 Effective Date: 27th October 2016 Issued Date: 27th October 2016 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Groundwater Via Infil System **Status: New issued under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	936	2	188887 66599
	Nearest Surface Water Feature	A13NE (E)	66	-	188287 65960

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Pollution Incidents to Controlled Waters** Property Type: Cattle (Dairy) Farming: Yards Location: Location Description Not Available Authority: Environment Agency, South West Region Pollutant: Animal Waste/Slurry Note: Inadequate Design/Capacity Incident Date: 7th December 1992 Incident Reference: 62005409 Catchment Area: Tidal Camel & Menalhyl, Cornwall Receiving Water: Freshwater Stream/River Cause of Incident: Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	622	2	188500 66500
8	**Pollution Incidents to Controlled Waters** Property Type: Private Sewage (Non-PLC): Pumping Station Location: Location Description Not Available Authority: Environment Agency, South West Region Pollutant: Crude Sewage Note: Natural Causes Incident Date: 5th August 1992 Incident Reference: 62005088 Catchment Area: Tidal Camel & Menalhyl, Cornwall Receiving Water: Freshwater Stream/River Cause of Incident: Other Cause Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (W)	902	2	187250 66000
8	**Pollution Incidents to Controlled Waters** Property Type: Other Location: Location Description Not Available Authority: Environment Agency, South West Region Pollutant: Other Note: Accidental Spillage/Leakage Incident Date: 4th November 1992 Incident Reference: 62005221 Catchment Area: Tidal Camel & Menalhyl, Cornwall Receiving Water: Freshwater Stream/River Cause of Incident: Collapse Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (W)	952	2	187200 66000
9	**Pollution Incidents to Controlled Waters** Property Type: Public Highway Location: Location Description Not Available Authority: Environment Agency, South West Region Pollutant: Rubble/Litter Or Solids Note: Manmade Breach/Hole Incident Date: 12th April 1995 Incident Reference: 62009431 Catchment Area: Tidal Camel & Menalhyl, Cornwall Receiving Water: Freshwater Stream/River Cause of Incident: Deliberate Action Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12SW (W)	956	2	187200 65800
	River Quality Name: Menalhyl GQA Grade: River Quality A Reach: Below St. Columb Stw-St. Mawgan Bridge Estimated Distance (km): 4 Flow Rate: Flow less than 0.62 cumecs Flow Type: River Year: 2000	A7NE (SW)	595	2	187686 65546
	River Quality Name: Menalhyl GQA Grade: River Quality A Reach: St. Mawgan Bridge-Mawgan Porth Bridge Estimated Distance (km): 2.8 Flow Rate: Flow less than 1.25 cumecs Flow Type: River Year: 2000	A12NW (W)	745	2	187406 65984

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	**River Quality Biology Sampling Points** Name: Menalhyl Reach: St. Mawgan Bridge To Mawgan Porth Bridge Estimated Distance: 2.80 Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Biology GQA Grade B - Good Year: 1995 GQA Grade: River Quality Biology GQA Grade C - Fairly Good Year: 2000 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2002 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2003 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2004 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2005 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2006 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2007 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2008 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2009 GQA Grade: River Quality Biology GQA Grade B - Good	A12NW (W)	892	2	187260 66000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	**River Quality Chemistry Sampling Points** Name: Menalhyl Reach: Below St. Columb Sewage Treatment Works To St. Mawgan Bridge Estimated Distance: 4.00 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied	A12NW (W)	882	2	187271 66004
11	**Water Abstractions** Operator: Mr W R Brewer Licence Number: 15/49/272/G/011 Permit Version: 100 Location: Higher Lanvean Farm, St Mawgan - Well Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Higher Lanvean Farm, St Mawgan, Newquay Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 31st December 1965 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18SW (N)	669	2	188000 66600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: C & J P Richardson Licence Number: 1549272G090 Permit Version: Not Supplied Location: Location Description Not Availiable Authority: Environment Agency, South West Region Abstraction: Agriculture (General) Abstraction Type: Not Supplied Source: Borehole Daily Rate (m3): 9.60 Yearly Rate (m3): 82.00 Details: Not To Exceed 15 Cubic Metres Per Day Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A25SW (NE)	1607	2	189450 66975
	Water Abstractions Operator: Messrs C & J Richardson Licence Number: 15/49/272/G/090 Permit Version: 100 Location: Higher Denzell Farm - Borehole Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Higher Denzell Farm, Mawgan-In-Pydar Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 18th August 1999 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A25SW (NE)	1610	2	189450 66980
	Water Abstractions Operator: Mr K Old Licence Number: 15/49/272/G/002 Permit Version: 100 Location: High Barn, St Mawgan - Well Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: High Barn, St Mawgan, Newquay Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 31st December 1965 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1701	2	186500 65500
	Water Abstractions Operator: R Gregor & Sons Licence Number: 15/49/272/G/082 Permit Version: 100 Location: Trevilledor Farm, St. Ervan - Well Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Trevilledor Farm, St. Ervan Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th November 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(NE)	1920	2	189000 67700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NE (NE)	0	3	188191 65927
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13NE (NE)	0	3	188191 65927
	Superficial Aquifer Designations No Data Available				
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	161	2	188290 66090
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	163	2	188285 66095
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	166	2	188315 66080
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	169	2	188275 66105
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	172	2	188270 66110
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (N)	195	2	188245 66140
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	166	2	188315 66080
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	169	2	188275 66105
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (NE)	172	2	188270 66110
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13NE (N)	249	2	188270 66190
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flood Defences None				
12	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 98.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A13NE (NE)	227	4	188319 66149
13	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 796.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A13NE (NE)	230	4	188374 66113
14	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A13NE (NE)	231	4	188343 66140
15	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 18.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A13NE (N)	231	4	188259 66174
16	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 32.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A13NE (NE)	238	4	188347 66144
17	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 368.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A13NE (NE)	238	4	188347 66144
18	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 73.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A13NE (N)	249	4	188260 66192
19	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 2	A13NE (N)	288	4	188218 66236
20	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A13NE (N)	288	4	188218 66236

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 758.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A13NE (N)	294	4	188219 66241
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 28.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A19SW (NE)	556	4	188587 66360
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 44.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A19SW (NE)	577	4	188615 66362
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 28.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A19SW (NE)	612	4	188655 66373
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 264.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A19SW (NE)	612	4	188655 66373
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 474.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A7NE (SW)	621	4	187664 65532
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1006.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Menalhyl Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A7NE (SW)	625	4	187705 65480
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 437.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Menalhyl Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8NW (S)	698	4	187945 65253
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8NW (S)	698	4	187945 65253

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 133.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SW (S)	704	4	187945 65247
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 95.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A12NW (W)	720	4	187436 66024
32	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 52.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A12SW (W)	721	4	187428 65900
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 136.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A14SE (E)	736	4	188967 65871
34	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 228.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Menalhyl Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SE (S)	737	4	188344 65174
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 50.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SE (S)	738	4	188341 65172
36	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 19.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A14SE (E)	754	4	188987 65909
37	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 157.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A14SE (E)	754	4	188987 65909
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 37.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SW (S)	756	4	188044 65165

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 54.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A12NW (W)	757	4	187392 65937
40	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 12.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A14SE (E)	758	4	188970 65748
41	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 28.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A14SE (E)	758	4	188971 65749
42	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 47.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A14SE (E)	769	4	188980 65739
43	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 58.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 2	A14SE (E)	769	4	188980 65739
44	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 189.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 2	A8SE (S)	774	4	188404 65149
45	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 736.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SE (S)	776	4	188381 65141
46	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SW (S)	785	4	188029 65138
47	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SW (S)	790	4	188028 65134

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
48	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 62.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A12NW (W)	790	4	187361 65981
49	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 98.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 2	A8SW (S)	793	4	188026 65130
50	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 100.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SW (S)	793	4	188026 65130
51	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 91.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A9SW (SE)	793	4	188597 65204
52	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 53.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A17NE (NW)	802	4	187729 66625
53	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 544.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A14SE (E)	806	4	189012 65718
54	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 2	A14SE (E)	806	4	189012 65718
55	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 69.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A12NW (W)	817	4	187340 66038
56	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 40.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Menalhyl Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A9SW (SE)	844	4	188555 65127

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
57	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A17NE (NW)	847	4	187670 66640
58	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 32.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A17NE (NW)	847	4	187670 66640
59	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 392.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A19SE (NE)	851	4	188871 66489
60	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 556.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A17NE (NW)	851	4	187666 66642
61	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 560.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A17NE (NW)	851	4	187666 66642
62	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 213.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A19SE (NE)	851	4	188871 66489
63	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 149.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A17NE (NW)	855	4	187692 66664
64	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 985.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Menalhyl Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A12NW (W)	860	4	187289 65935
65	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 25.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A12NW (W)	860	4	187289 65935

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
66	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 419.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A12SW (W)	868	4	187281 65910
67	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 36.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Menalhyl Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A9SW (SE)	878	4	188587 65104
68	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 2	A9SW (SE)	878	4	188587 65104
69	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 2	A9SW (SE)	879	4	188586 65102
70	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 114.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SW (S)	885	4	187992 65044
71	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 334.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A12NW (W)	887	4	187271 66051
72	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 42.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 2	A9SW (SE)	888	4	188580 65090
73	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 285.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Menalhyl Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A9SW (SE)	905	4	188621 65091
74	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 26.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 2	A9SW (SE)	905	4	188621 65091

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
75	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 3.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A17NE (NW)	912	4	187784 66781
76	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 379.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 2	A9SW (SE)	923	4	188617 65068
77	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 53.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A19NW (NE)	941	4	188850 66641
78	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 47.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SW (S)	992	4	187982 64936
79	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 88.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A8SW (S)	992	4	187982 64936
80	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 333.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Gannel Porth and Menalhyl Primacy: 1	A19NE (NE)	993	4	188881 66684

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Restormel Borough Council - Has no landfill data to supply		0	5	188191 65927
	Local Authority Landfill Coverage Name: Cornwall County Council - Had landfill data but passed it to the relevant environment agency		0	6	188191 65927
81	**Potentially Infilled Land (Non-Water)** Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1974	A7NE (SW)	716	-	187776 65310
82	**Potentially Infilled Land (Non-Water)** Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1974	A12SW (W)	778	-	187401 65706
83	**Potentially Infilled Land (Non-Water)** Bearing Ref: S Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1974	A8SW (S)	974	-	188016 64947

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Lower Devonian Rocks (Undifferentiated)	A13NE (NE)	0	1	188191 65927
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 45 - 60 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NE (NE)	0	1	188191 65927
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 60 - 120 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NE (N)	49	1	188191 66000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NE (NE)	187	1	188312 66107
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 60 - 120 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NE (NE)	245	1	188360 66145
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 45 - 60 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14NW (E)	321	1	188544 66000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 45 - 60 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A7NE (SW)	699	1	187658 65420

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 60 - 120 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14SE (E)	768	1	189000 65889
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 35 - 45 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14SE (E)	784	1	189000 65762
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 60 - 120 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14SE (E)	810	1	189000 65663
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 45 - 60 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A8SE (S)	944	1	188500 65000
84	**BGS Recorded Mineral Sites** Site Name: Carloggas Location: St Mawgan, Newquay, Cornwall Source: British Geological Survey, National Geoscience Information Service Reference: 83707 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Devonian Geology: Dartmouth Group Commodity: Slate Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	722	1	187769 65307
85	**BGS Recorded Mineral Sites** Site Name: St Mawgan Location: St Mawgan, Newquay, Cornwall Source: British Geological Survey, National Geoscience Information Service Reference: 83735 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Devonian Geology: Meadfoot Group Commodity: Slate Positional Accuracy: Located by supplier to within 10m	A12SW (W)	789	1	187388 65712

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
86	**BGS Recorded Mineral Sites** Site Name: New Farm Location: St Mawgan, Newquay, Cornwall Source: British Geological Survey, National Geoscience Information Service Reference: 83727 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Devonian Geology: Staddon Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A18NW (N)	968	1	187925 66890
87	**BGS Recorded Mineral Sites** Site Name: Carnanton Location: St Mawgan, Newquay, Cornwall Source: British Geological Survey, National Geoscience Information Service Reference: 83708 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Devonian Geology: Dartmouth Group Commodity: Slate Positional Accuracy: Located by supplier to within 10m	A8SW (S)	986	1	187997 64939
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	188191 65927
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	188191 65927
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	161	1	188272 66098
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	188191 65927
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	161	1	188272 66098
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	188191 65927
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	188191 65927
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	161	1	188272 66098
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	182	1	188229 66129
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	188191 65927
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	161	1	188272 66098

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	188191 65927
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Higher probability radon area (10 to 30% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	188191 65927
	Radon Potential - Radon Protection Measures Protection Measure: Full radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	188191 65927

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
88	**Contemporary Trade Directory Entries** Name: Cutting Edge Garden Machinery Services Location: Trevenna Yard,Trevenna Cross, St. Mawgan, Newquay, Cornwall, TR8 4HB Classification: Lawnmowers & Garden Machinery - Sales & Service **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A13SW (W)	69	-	188082 65904
89	**Contemporary Trade Directory Entries** Name: Michell Location: St. Mawgan, Newquay, Cornwall, TR8 4EW Classification: Electrical Engineers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A12SW (W)	889	-	187276 65748
90	**Points of Interest - Manufacturing and Production** Name: D W Barker Location: Higher Lanvean Farm, St. Mawgan, Newquay, TR8 4HE Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A18NW (N)	829	7	187958 66755
91	**Points of Interest - Manufacturing and Production** Name: P Lobb Location: (Lobb) Trembleath Farm, St. Columb, TR9 6DP Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A9NE (SE)	960	7	188931 65259
92	**Points of Interest - Public Infrastructure** Name: Burial Ground Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	956	7	187196 65835
92	**Points of Interest - Public Infrastructure** Name: Burial Ground Location: TR8 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	961	7	187191 65838
93	**Points of Interest - Recreational and Environmental** Name: Play Area Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	813	7	187336 65931
93	**Points of Interest - Recreational and Environmental** Name: Play Area Location: TR8 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	823	7	187326 65930

Sensitive Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
94	**Ancient Woodland** Name: Not Supplied Reference: 1417732 Area(m²): 195596.91 Type: Ancient and Semi-Natural Woodland	A8SE (S)	768	8	188280 65134

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Carrick District Council (now part of Cornwall Council) - Environmental Health Department	April 2009	
North Cornwall District Council (now part of Cornwall Council) - Environmental Health Department	August 2009	
Environment Agency - Head Office	November 2023	Annually
Cornwall Council - Environmental Health Department	October 2017	Annually
Restormel Borough Council (now part of Cornwall Council) - Environmental Health Department	September 2008	Not Applicable
Discharge Consents		
Environment Agency - South West Region	October 2023	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - South West Region	March 2013	
Integrated Pollution Controls		
Environment Agency - South West Region	January 2009	
Integrated Pollution Prevention And Control		
Environment Agency - South West Region	January 2023	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Fowey Port Health Authority	August 2008	Variable
North Cornwall District Council (now part of Cornwall Council) - Environmental Health Department	December 2008	Not Applicable
Carrick District Council (now part of Cornwall Council) - Environmental Health Department	July 2008	Not Applicable
Restormel Borough Council (now part of Cornwall Council) - Environmental Health Department	July 2009	Not Applicable
Cornwall Council - Environmental Health Department	September 2014	Variable
Local Authority Pollution Prevention and Controls		
Fowey Port Health Authority	August 2008	Not Applicable
North Cornwall District Council (now part of Cornwall Council) - Environmental Health Department	December 2008	Not Applicable
Carrick District Council (now part of Cornwall Council) - Environmental Health Department	July 2008	Not Applicable
Restormel Borough Council (now part of Cornwall Council) - Environmental Health Department	July 2009	Not Applicable
Cornwall Council - Environmental Health Department	September 2014	Annually
Local Authority Pollution Prevention and Control Enforcements		
Fowey Port Health Authority	August 2008	Variable
North Cornwall District Council (now part of Cornwall Council) - Environmental Health Department	December 2008	Not Applicable
Carrick District Council (now part of Cornwall Council) - Environmental Health Department	July 2008	Not Applicable
Restormel Borough Council (now part of Cornwall Council) - Environmental Health Department	July 2009	Not Applicable
Cornwall Council - Environmental Health Department	September 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	November 2023	
Pollution Incidents to Controlled Waters		
Environment Agency - South West Region	September 1999	
Prosecutions Relating to Authorised Processes		
Environment Agency - South West Region	July 2015	
Prosecutions Relating to Controlled Waters		
Environment Agency - South West Region	March 2013	
Registered Radioactive Substances		
Environment Agency - South West Region	June 2016	As notified
Environment Agency - Head Office	May 2023	Quarterly
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	April 2012	

Data Currency

Agency & Hydrological	Version	Update Cycle
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	April 2012	
Substantiated Pollution Incident Register		
Environment Agency - South West Region - Cornwall Area	October 2023	Quarterly
Environment Agency - South West Region - Devon and Cornwall Area	October 2023	Quarterly
Water Abstractions		
Environment Agency - South West Region	October 2023	Quarterly
Water Industry Act Referrals		
Environment Agency - South West Region	October 2017	
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	As notified
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	As notified
Source Protection Zones		
Environment Agency - Head Office	September 2022	Bi-Annually
Extreme Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	August 2023	Quarterly
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	August 2023	Quarterly
Areas Benefiting from Flood Defences		
Environment Agency - Head Office	February 2023	Quarterly
Flood Water Storage Areas		
Environment Agency - Head Office	August 2023	Quarterly
Flood Defences		
Environment Agency - Head Office	August 2022	Quarterly
OS Water Network Lines		
Ordnance Survey	October 2023	Quarterly
Surface Water 1 in 30 year Flood Extent		
Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Extent		
Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Extent		
Environment Agency - Head Office	May 2018	Annually
Surface Water Suitability		
Environment Agency - Head Office	February 2016	Annually
BGS Groundwater Flooding Susceptibility		
British Geological Survey - National Geoscience Information Service	May 2013	As notified

Data Currency

Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	November 2002	As notified
Historical Landfill Sites		
Environment Agency - Head Office	July 2023	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - South West Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - South West Region - Cornwall Area	July 2023	Quarterly
Environment Agency - South West Region - Devon and Cornwall Area	July 2023	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - South West Region - Cornwall Area	January 2023	Quarterly
Environment Agency - South West Region - Devon and Cornwall Area	January 2023	Quarterly
Local Authority Landfill Coverage		
Carrick District Council (now part of Cornwall Council) - Environmental Health Department	February 2003	Not Applicable
Cornwall County Council (now part of Cornwall Council)	February 2003	Not Applicable
North Cornwall District Council (now part of Cornwall Council)	February 2003	Not Applicable
Restormel Borough Council (now part of Cornwall Council) - Environmental Health Department	February 2003	Not Applicable
Local Authority Recorded Landfill Sites		
Carrick District Council (now part of Cornwall Council) - Environmental Health Department	October 2018	
Cornwall County Council (now part of Cornwall Council)	October 2018	
North Cornwall District Council (now part of Cornwall Council)	October 2018	
Restormel Borough Council (now part of Cornwall Council) - Environmental Health Department	October 2018	
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	
Registered Landfill Sites		
Environment Agency - South West Region - Cornwall Area	March 2006	Not Applicable
Environment Agency - South West Region - Devon and Cornwall Area	March 2006	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - South West Region - Cornwall Area	April 2018	
Environment Agency - South West Region - Devon and Cornwall Area	April 2018	
Registered Waste Treatment or Disposal Sites		
Environment Agency - South West Region - Cornwall Area	June 2015	
Environment Agency - South West Region - Devon and Cornwall Area	June 2015	

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	March 2023	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements		
Cornwall County Council (now part of Cornwall Council)	January 2009	Annual Rolling Update
North Cornwall District Council (now part of Cornwall Council) - Planning Department	January 2009	Not Applicable
Carrick District Council (now part of Cornwall Council) - Development Control	May 2009	Not Applicable
Cornwall Council - Planning Department	May 2023	Variable
Restormel Borough Council (now part of Cornwall Council)	October 2008	Not Applicable
Planning Hazardous Substance Consents		
Cornwall County Council (now part of Cornwall Council)	January 2009	Annual Rolling Update
North Cornwall District Council (now part of Cornwall Council) - Planning Department	January 2009	Not Applicable
Carrick District Council (now part of Cornwall Council) - Development Control	May 2009	Not Applicable
Cornwall Council - Planning Department	May 2016	Variable
Restormel Borough Council (now part of Cornwall Council)	October 2008	Not Applicable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology		
British Geological Survey - National Geoscience Information Service	January 2009	As notified
BGS Estimated Soil Chemistry		
British Geological Survey - National Geoscience Information Service	December 2015	As notified
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	June 2023	Bi-Annually
CBSCB Compensation District		
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	
Cheshire Brine Subsidence Compensation Board (CBSCB)	November 2020	As notified
Coal Mining Affected Areas		
The Coal Authority - Property Searches	February 2023	Annual Rolling Update
Mining Instability		
Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain		
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Radon Potential - Radon Affected Areas		
British Geological Survey - National Geoscience Information Service	October 2023	Annually
Radon Potential - Radon Protection Measures		
British Geological Survey - National Geoscience Information Service	October 2023	Annually

Data Currency

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	October 2023	Quarterly
Fuel Station Entries Catalist Ltd - Experian	November 2023	Quarterly
Gas Pipelines National Grid	October 2021	Bi-Annually
Points of Interest - Commercial Services PointX	December 2023	Quarterly
Points of Interest - Education and Health PointX	December 2023	Quarterly
Points of Interest - Manufacturing and Production PointX	December 2023	Quarterly
Points of Interest - Public Infrastructure PointX	December 2023	Quarterly
Points of Interest - Recreational and Environmental PointX	December 2023	Quarterly
Underground Electrical Cables National Grid	February 2023	Bi-Annually

Data Currency

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	October 2023	Bi-Annually
Areas of Adopted Green Belt		
Carrick District Council (now part of Cornwall Council) - Development Control	August 2023	Quarterly
Cornwall Council - Planning Department	August 2023	Quarterly
North Cornwall District Council (now part of Cornwall Council)	August 2023	Quarterly
Restormel Borough Council (now part of Cornwall Council)	August 2023	Quarterly
Areas of Unadopted Green Belt		
Carrick District Council (now part of Cornwall Council) - Development Control	August 2023	Quarterly
Cornwall Council - Planning Department	August 2023	Quarterly
North Cornwall District Council (now part of Cornwall Council)	August 2023	Quarterly
Restormel Borough Council (now part of Cornwall Council)	August 2023	Quarterly
Areas of Outstanding Natural Beauty		
Natural England	November 2023	Bi-Annually
Environmentally Sensitive Areas		
Natural England	August 2023	
Forest Parks		
Forestry Commission	May 2023	Not Applicable
Local Nature Reserves		
Natural England	August 2023	Bi-Annually
Marine Nature Reserves		
Natural England	October 2023	Bi-Annually
National Nature Reserves		
Natural England	August 2023	Bi-Annually
National Parks		
Natural England	February 2018	Bi-Annually
Nitrate Sensitive Areas		
Natural England	April 2023	Not Applicable
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	April 2016	
Environment Agency - Head Office	March 2023	Bi-Annually
Ramsar Sites		
Natural England	October 2023	Bi-Annually
Sites of Special Scientific Interest		
Natural England	November 2023	Bi-Annually
Special Areas of Conservation		
Natural England	October 2023	Bi-Annually
Special Protection Areas		
Natural England	October 2023	Bi-Annually

Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
Environment Agency	Environment Agency
Scottish Environment Protection Agency	SEPA Scottish Environment Protection Agency
The Coal Authority	The Coal Authority
British Geological Survey	British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	Cyfoeth Naturiol Cymru Natural Resources Wales
Scottish Natural Heritage	SCOTTISH NATURAL HERITAGE
Natural England	NATURAL ENGLAND
Public Health England	Public Health England
Ove Arup	ARUP
Stantec UK Ltd	Stantec

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	**Restormel Borough Council (now part of Cornwall Council) - Environmental Health Department** County Hall, Treyew Road, Truro, Cornwall, TR1 3AY	Telephone: 0300 1234 100 Email: enquiries@cornwall.gov.uk Website: www.cornwall.gov.uk
6	**Cornwall County Council (now part of Cornwall Council)** County Hall, Treyew Road, Truro, Cornwall, TR1 3AY	Telephone: 0300 1234 100 Email: enquiries@cornwall.gov.uk Website: www.cornwall.gov.uk
7	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
8	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

APPENDIX C

Historical Maps

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

Gravel Pit
Sand Pit
Other Pits
Quarry
Shingle
Orchard
Osiers
Reeds
Marsh
Mixed Wood
Deciduous
Brushwood
Fir
Furze
Rough Pasture
Arrow denotes flow of water
Trigonometrical Station
Site of Antiquities
Bench Mark
Pump, Guide Post, Signal Post
Well, Spring, Boundary Post
285 Surface Level
Sketched Contour
Instrumental Contour
Main Roads
Fenced
Un-Fenced
Minor Roads
Fenced
Un-Fenced
Sunken Road
Raised Road
Road over Railway
Railway over River
Railway over Road
Level Crossing
Road over River or Canal
Road over Stream
Road over Stream
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy.
County Borough Boundary (England)
Co. Burgh Bdy.
County Burgh Boundary (Scotland)
R.D. Bdy.
Rural District Boundary
Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Pylon
Electricity Transmission Line
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

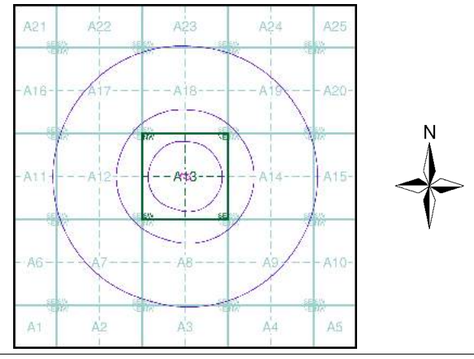
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Mud
Sand
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

Wheal Jane Consultancy
Geotechnical, environmental & mining services

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cornwall & Isles Of Scilly	1:10,560	1888	2
Cornwall & Isles Of Scilly	1:10,560	1907 - 1908	3
Ordnance Survey Plan	1:10,000	1962 - 1963	4
Ordnance Survey Plan	1:10,000	1974	5
10K Raster Mapping	1:10,000	2000	6
10K Raster Mapping	1:10,000	2006	7
VectorMap Local	1:10,000	2023	8

Historical Map - Slice A



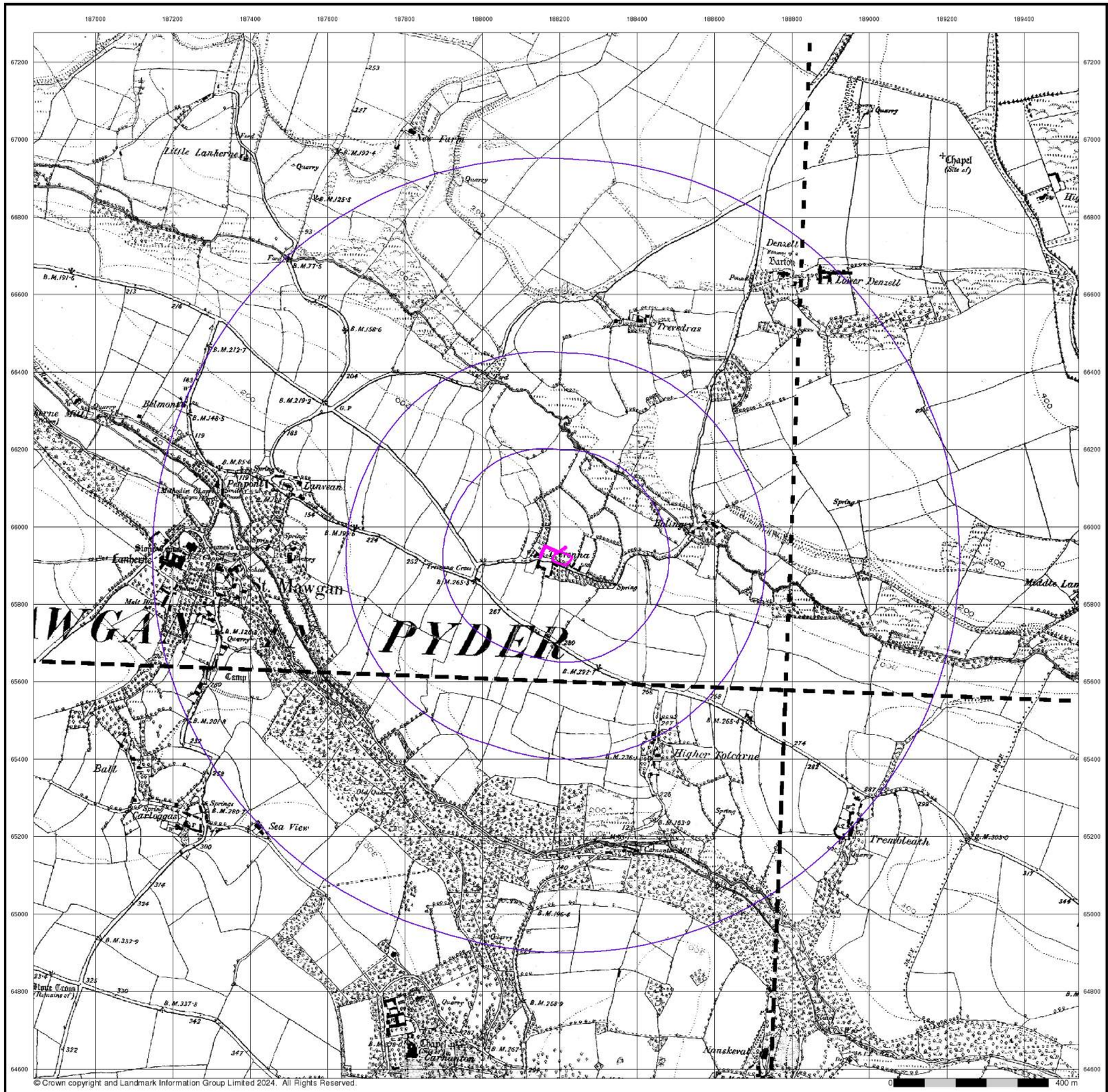
Order Details

Order Number: 330593820_1_1
Customer Ref: 22016
National Grid Reference: 188190, 65930
Slice: A
Site Area (Ha): 0.15
Search Buffer (m): 1000

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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



Wheal Jane Consultancy
Geotechnical, environmental & mining services

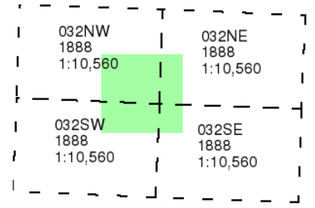
Cornwall & Isles Of Scilly

Published 1888

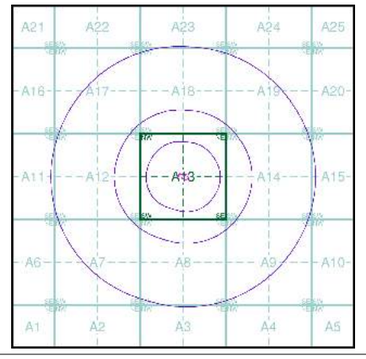
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	1000

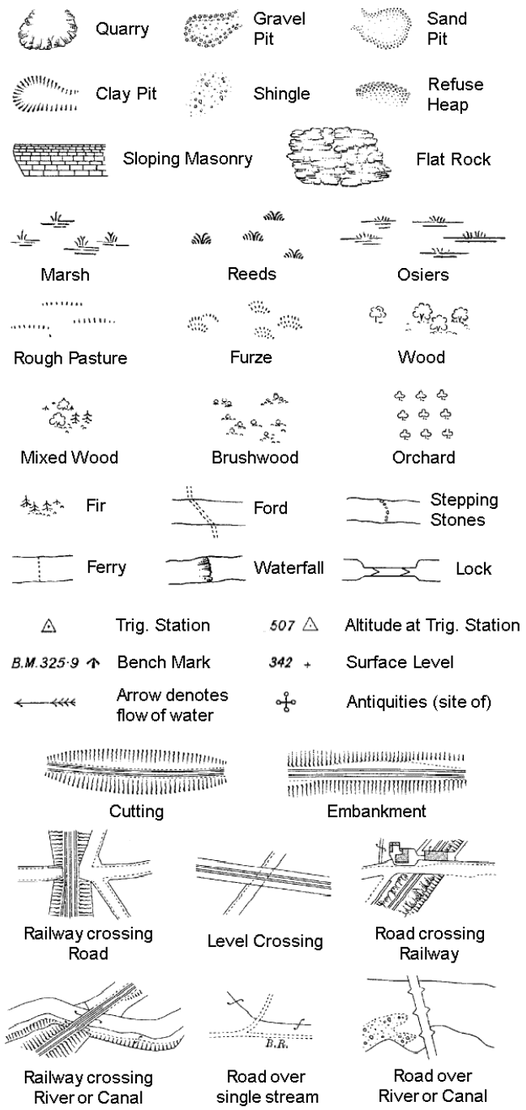
Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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

Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

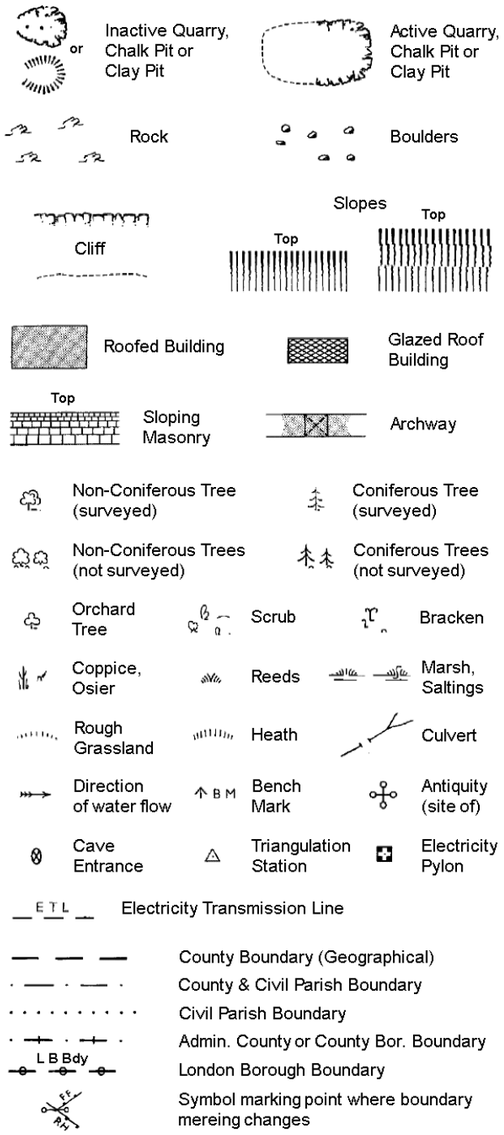
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

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



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

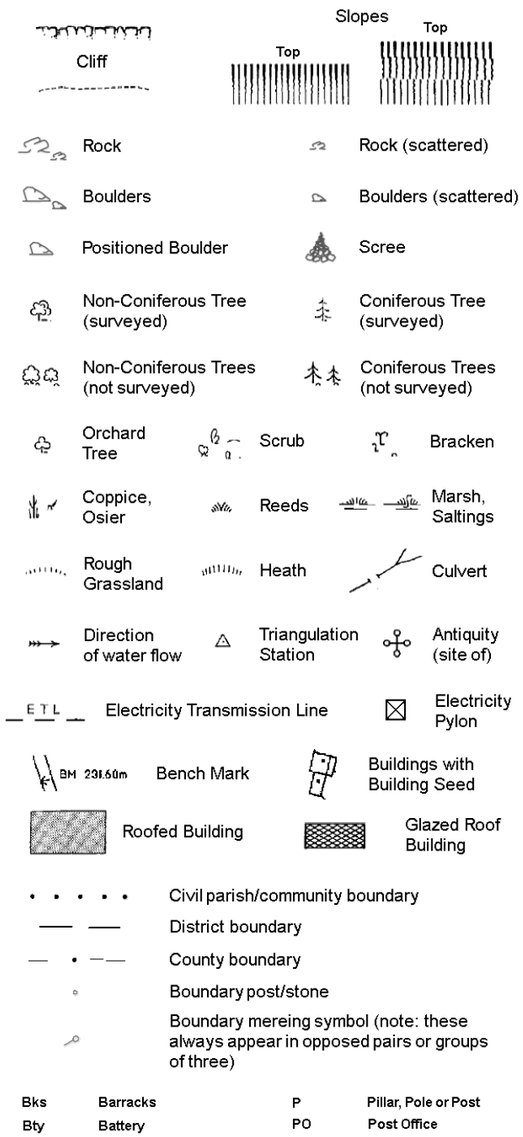
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

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



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

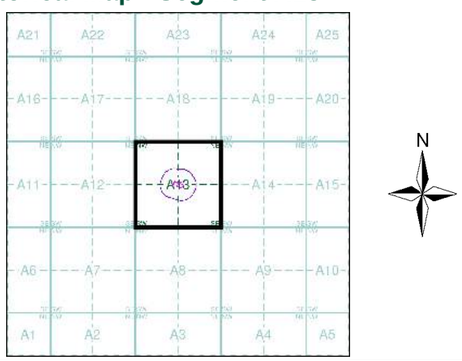
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

Wheal Jane Consultancy
Geotechnical, environmental & mining services

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cornwall & Isles Of Scilly	1:2,500	1881	2
Cornwall & Isles Of Scilly	1:2,500	1907	3
Ordnance Survey Plan	1:2,500	1972	4
Additional SIMs	1:2,500	1983	5
Additional SIMs	1:2,500	1993	6
Large-Scale National Grid Data	1:2,500	1995	7
Historical Aerial Photography	1:2,500	2001	8

Historical Map - Segment A13



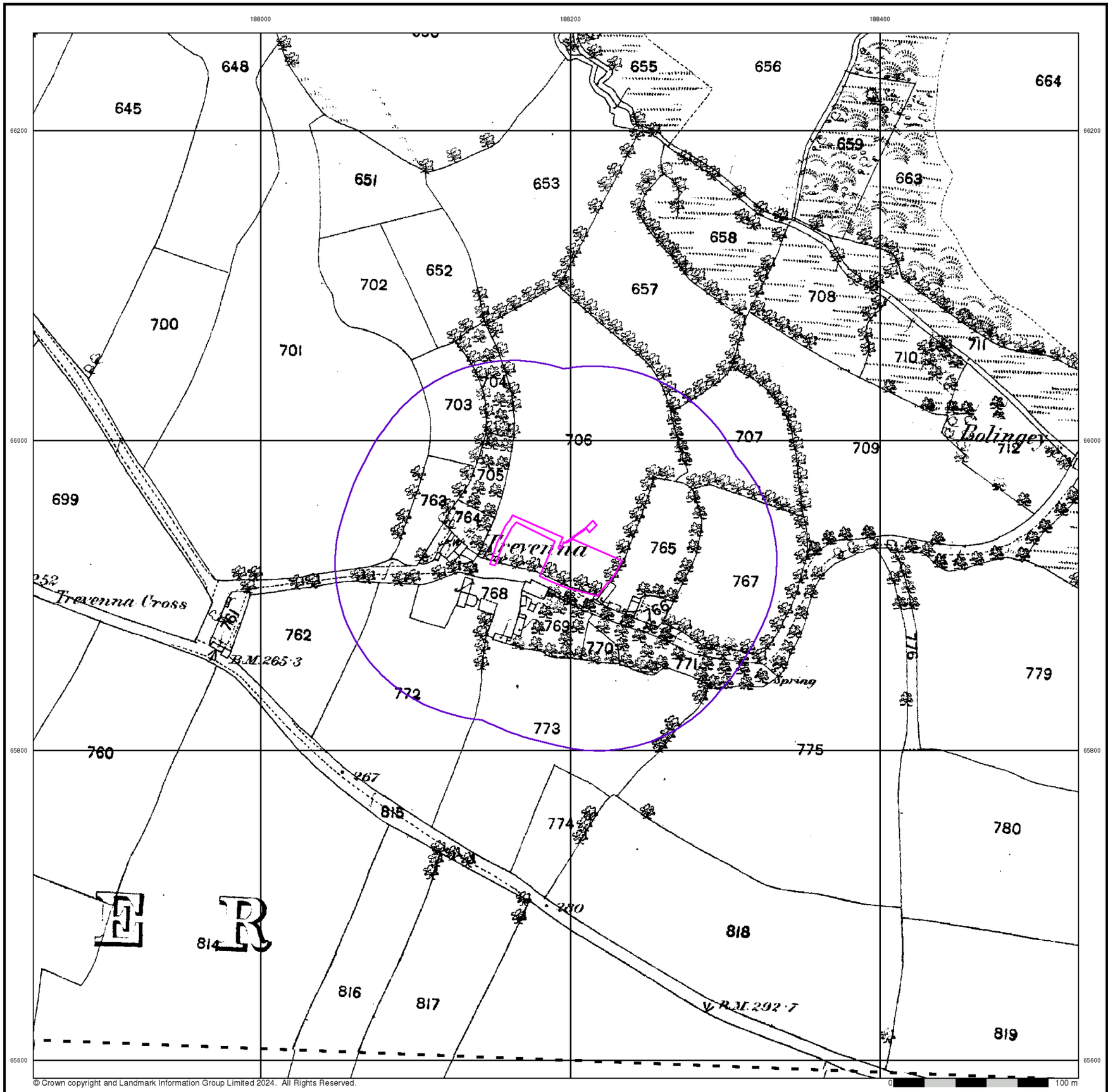
Order Details

Order Number: 330593820_1_1
Customer Ref: 22016
National Grid Reference: 188190, 65930
Slice: A
Site Area (Ha): 0.15
Search Buffer (m): 100

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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



Wheal Jane Consultancy
Geotechnical, environmental & mining services

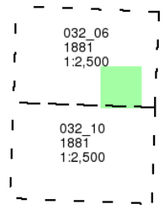
Cornwall & Isles Of Scilly

Published 1881

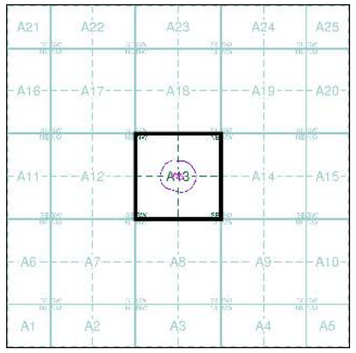
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



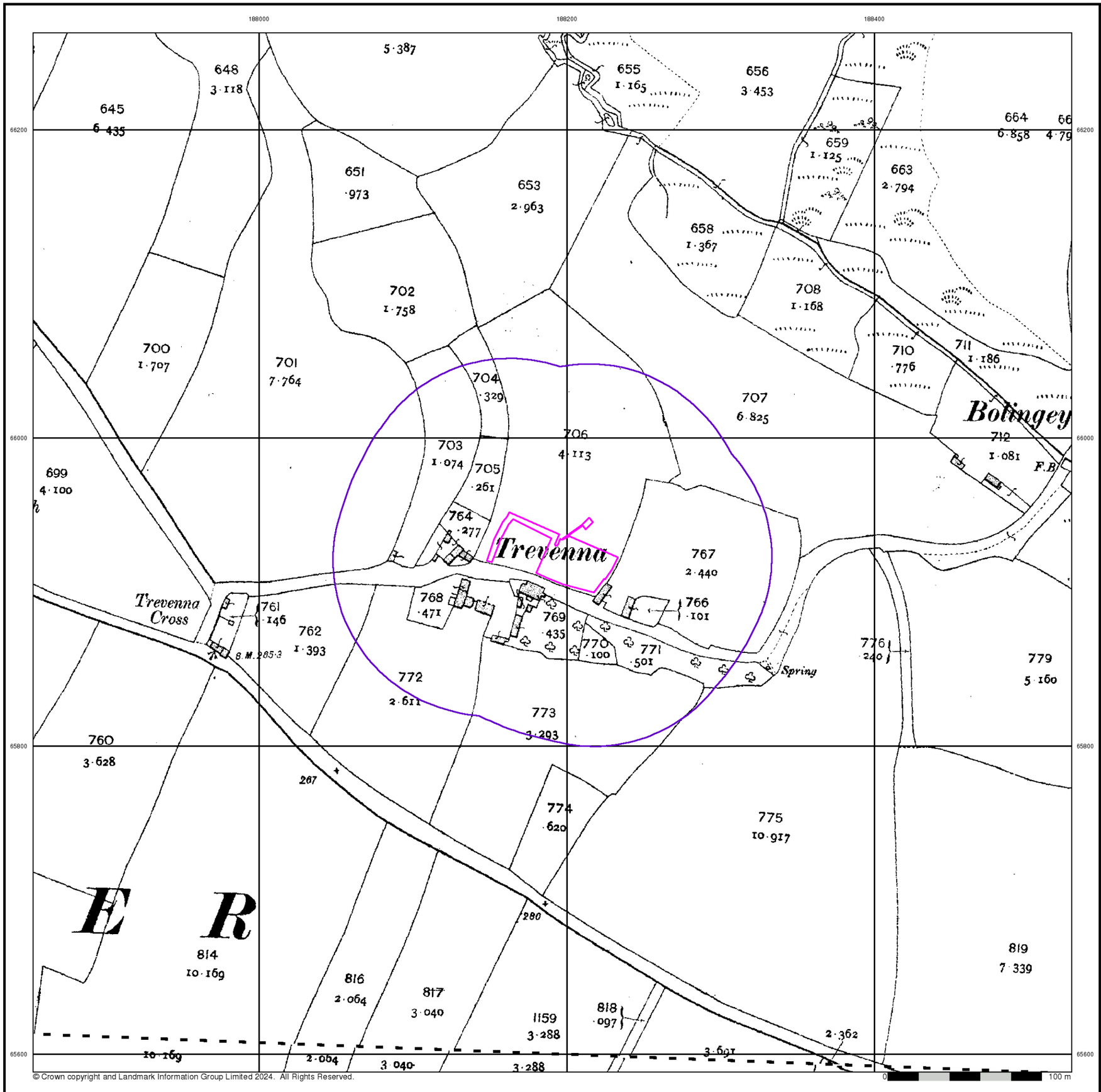
Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	100

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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



0 100 m

Wheal Jane Consultancy
Geotechnical, environmental & mining services

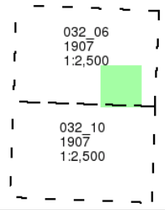
Cornwall & Isles Of Scilly

Published 1907

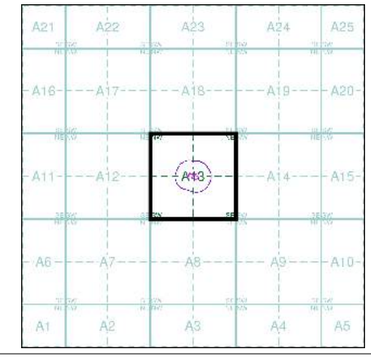
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



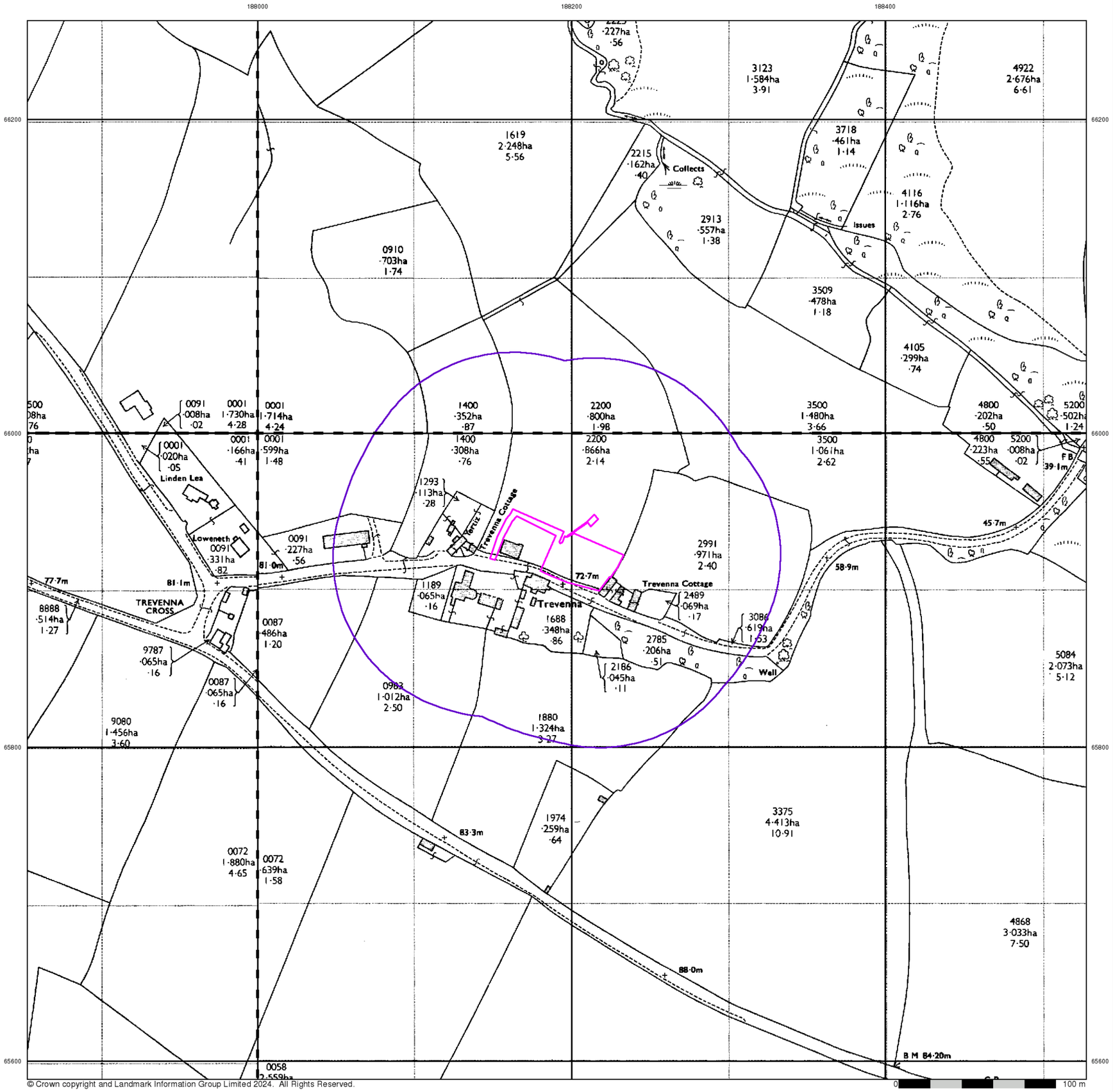
Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	100

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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



Wheal Jane Consultancy
Geotechnical, environmental & mining services

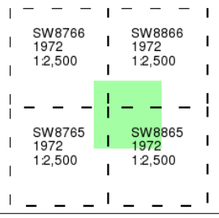
Ordnance Survey Plan

Published 1972

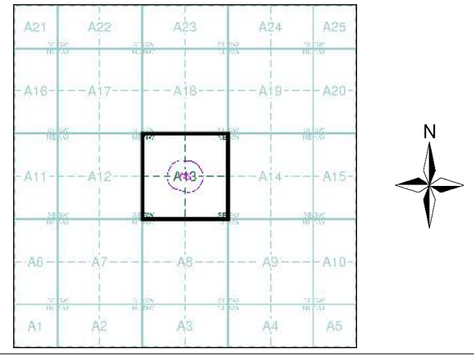
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

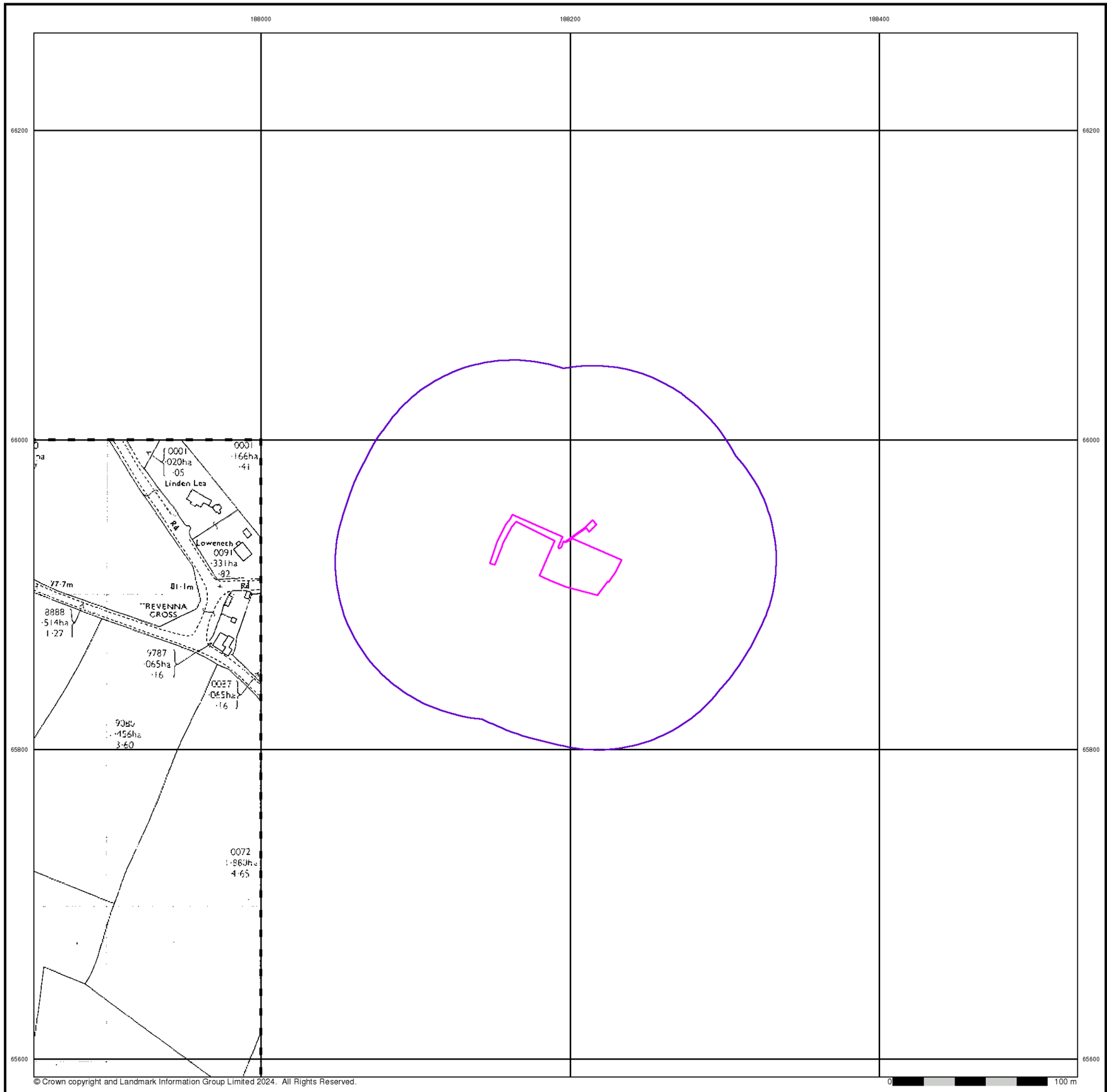


Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	100

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB



0 100 m

Wheal Jane Consultancy
Geotechnical, environmental & mining services

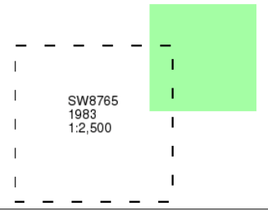
Additional SIMs

Published 1983

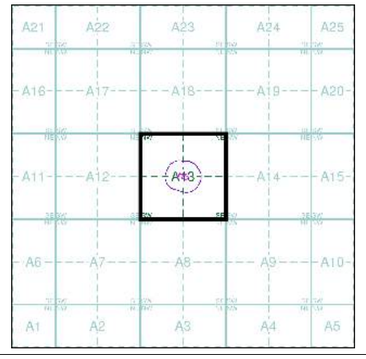
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



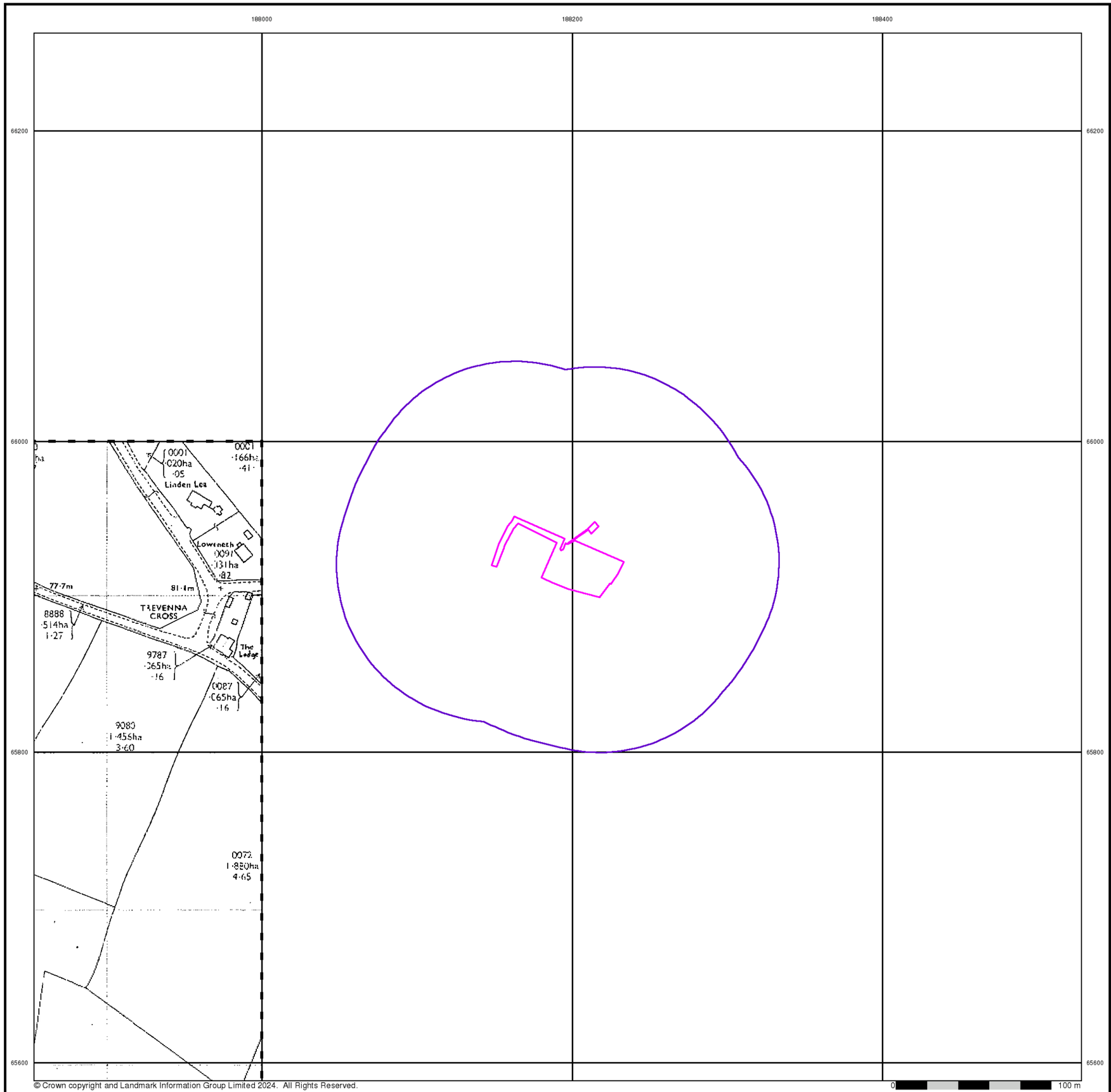
Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	100

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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



Wheal Jane Consultancy
Geotechnical, environmental & mining services

Additional SIMs

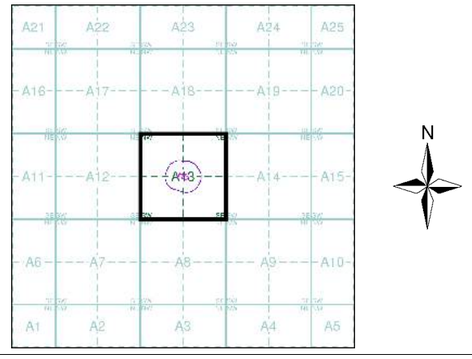
Published 1993

Source map scale - 1:2,500

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

Map Name(s) and Date(s)

Historical Map - Segment A13



Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	100

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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

Wheal Jane Consultancy
Geotechnical, environmental & mining services

Large-Scale National Grid Data

Published 1995

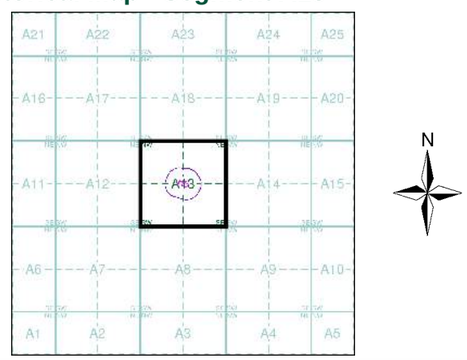
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SW8766 1995 1:2,500	SW8866 1995 1:2,500
SW8765 1995 1:2,500	SW8865 1995 1:2,500

Historical Map - Segment A13



Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	100

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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

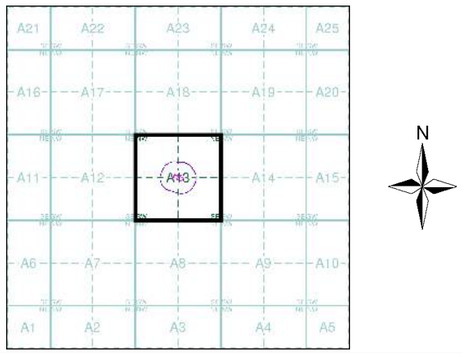
Wheal Jane Consultancy
Geotechnical, environmental & mining services

Historical Aerial Photography

Published 2001

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A13

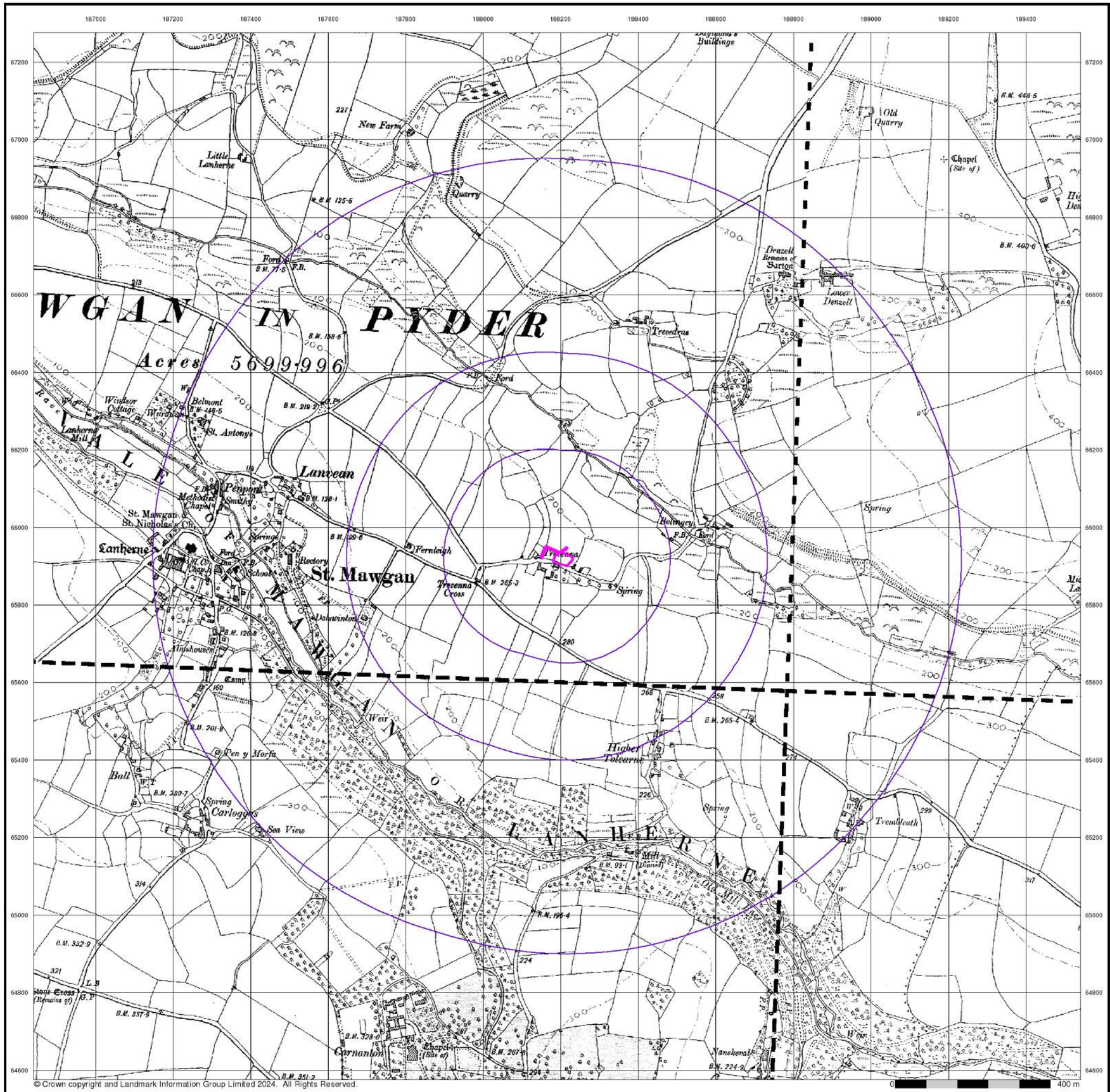


Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	100

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB



Wheal Jane Consultancy

Geotechnical, environmental & mining services

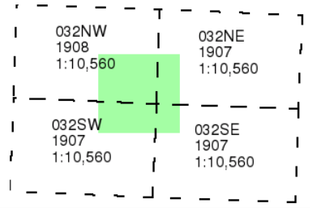
Cornwall & Isles Of Scilly

Published 1907 - 1908

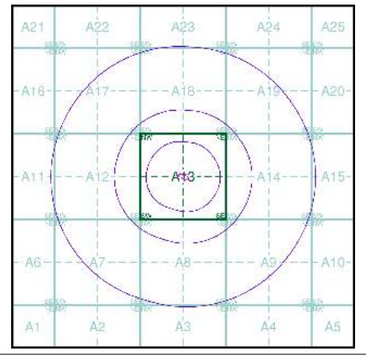
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

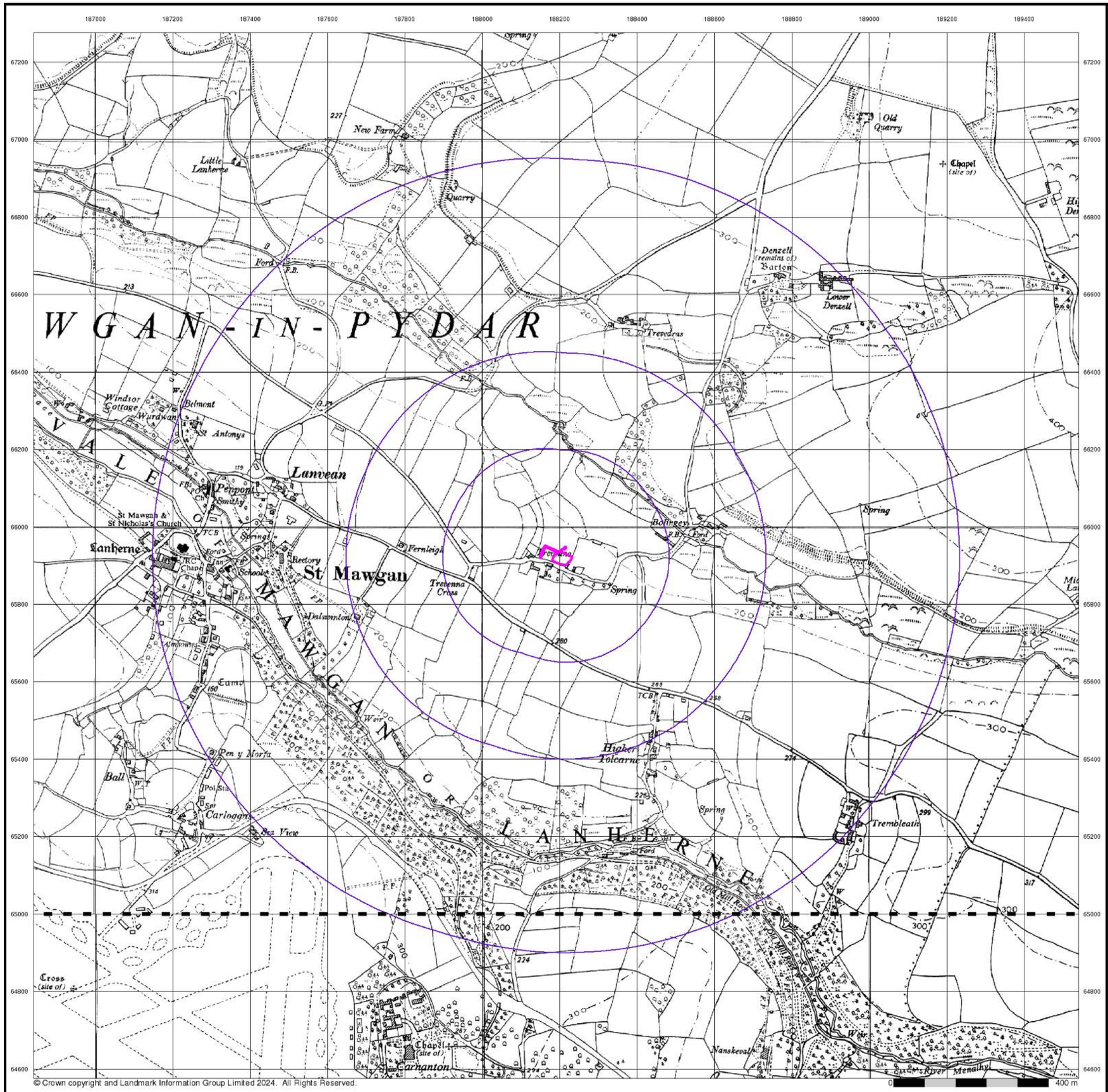
Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	1000

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

Landmark INFORMATION GROUP

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



Wheal Jane Consultancy
Geotechnical, environmental & mining services

Ordnance Survey Plan

Published 1962 - 1963

Source map scale - 1:10,000

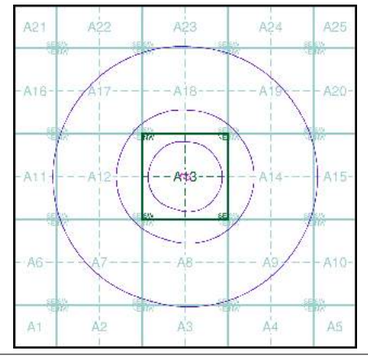
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

SW86NE
1963
1:10,560

SW86SE
1962
1:10,560

Historical Map - Slice A



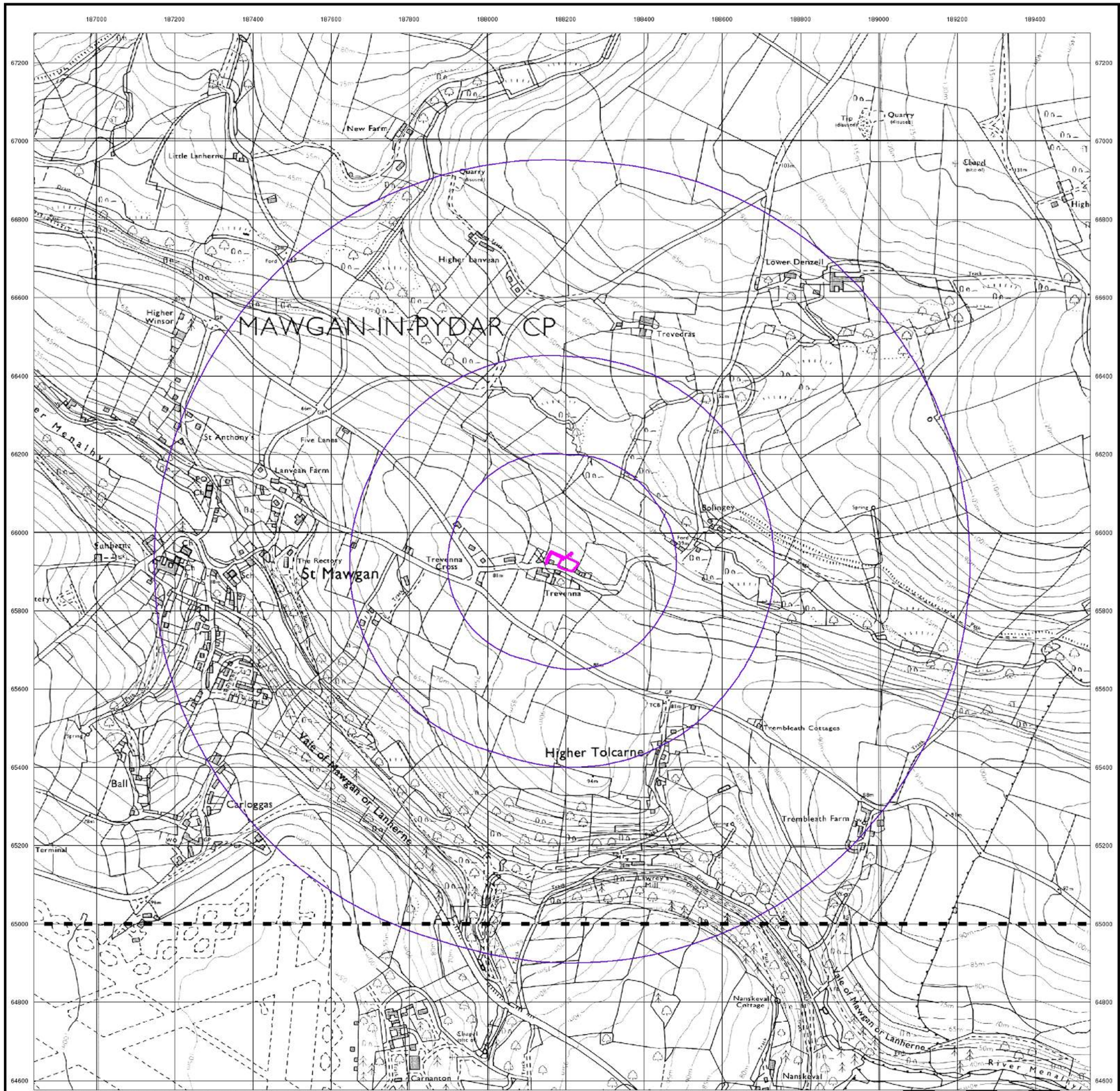
Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	1000

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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



Wheal Jane Consultancy
Geotechnical, environmental & mining services

Ordnance Survey Plan

Published 1974

Source map scale - 1:10,000

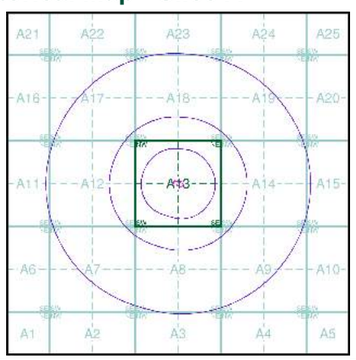
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

SW86NE
1974
1:10,000

SW86SE
1974
1:10,000

Historical Map - Slice A



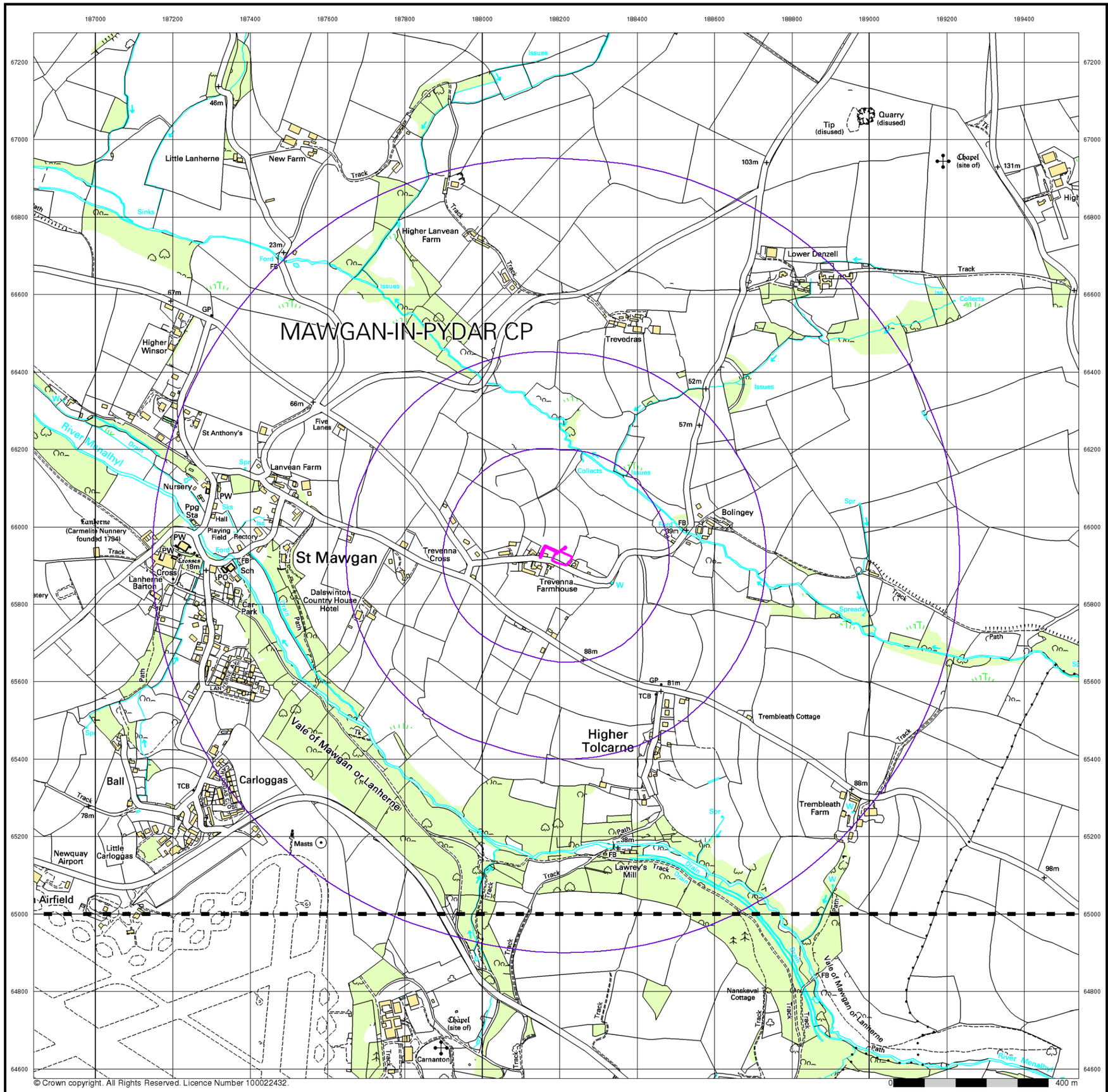
Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	1000

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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



Wheal Jane Consultancy
Geotechnical, environmental & mining services

10k Raster Mapping

Published 2000

Source map scale - 1:10,000

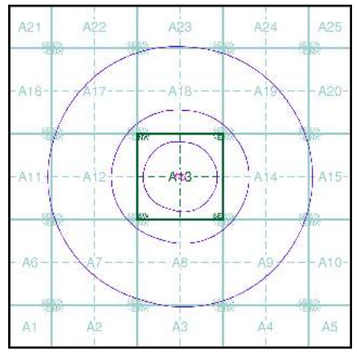
The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

SW86NE
2000
1:10,000

SW86SE
2000
1:10,000

Historical Map - Slice A

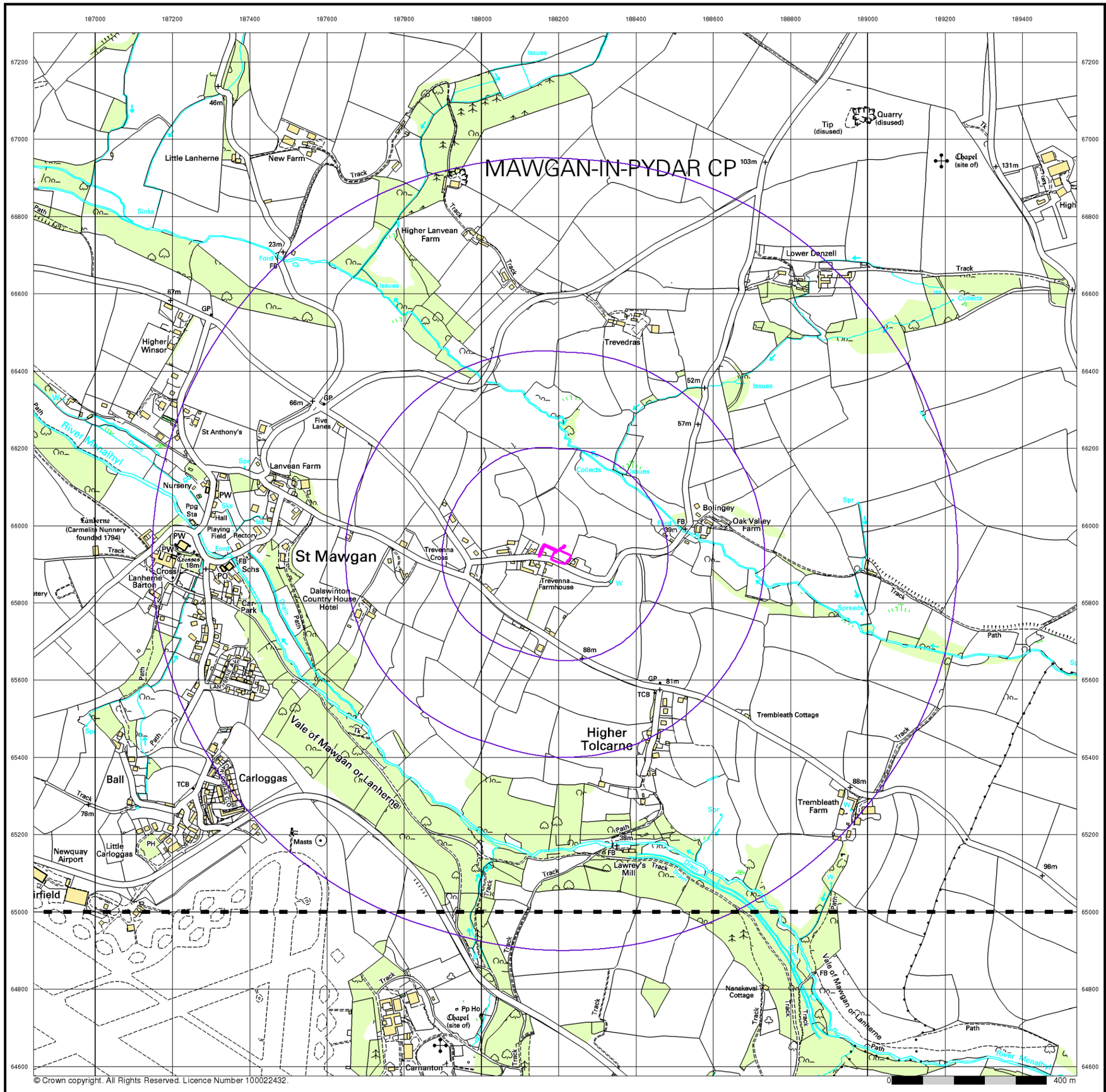


Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	1000

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB



0 400 m

Wheal Jane Consultancy
Geotechnical, environmental & mining services

10k Raster Mapping

Published 2006

Source map scale - 1:10,000

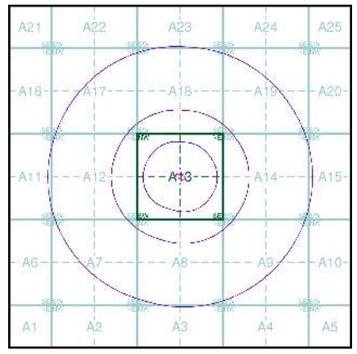
The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

SW86NE
2006
1:10,000

SW86SE
2006
1:10,000

Historical Map - Slice A



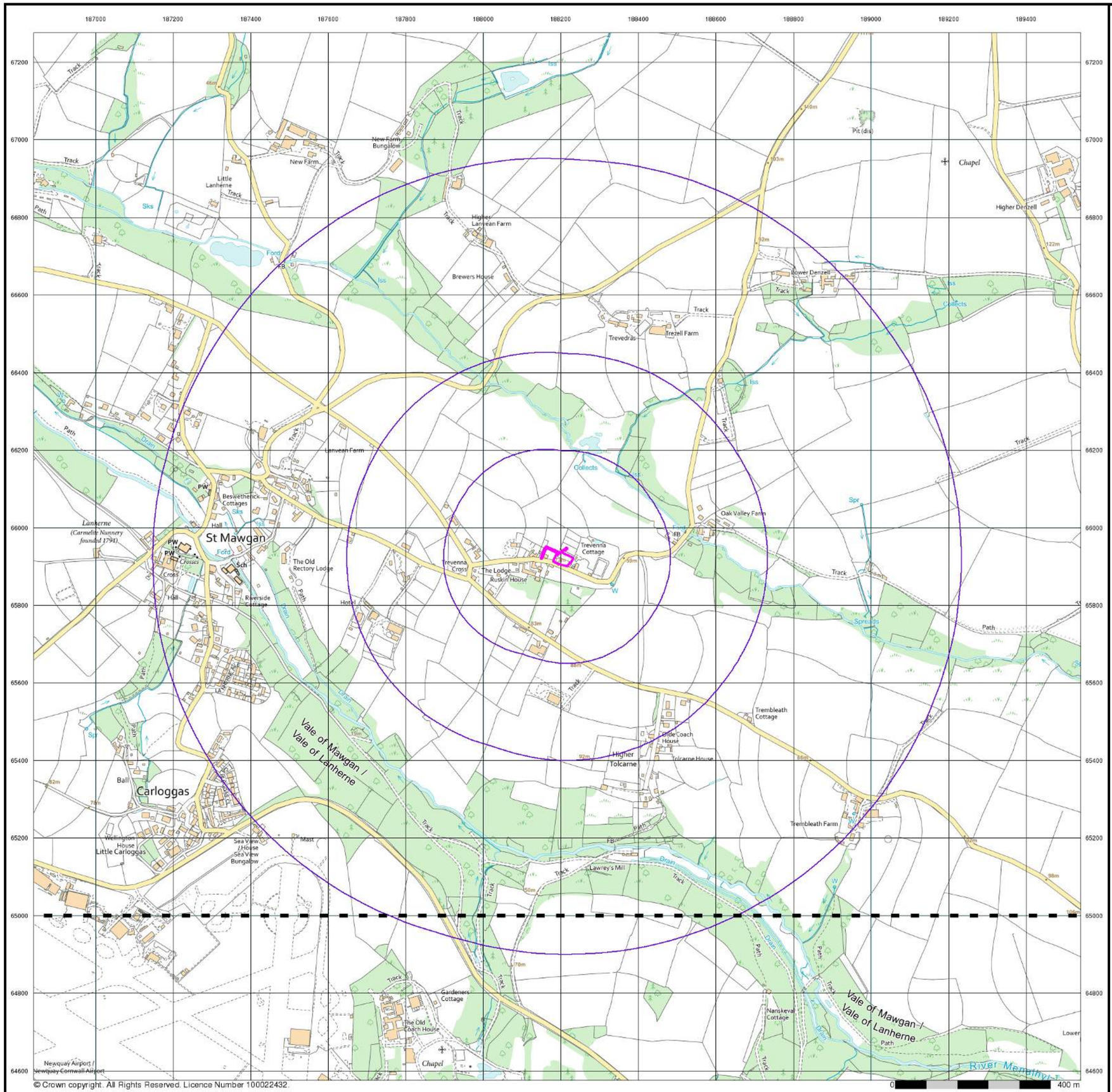
Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	1000

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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



Wheal Jane Consultancy
Geotechnical, environmental & mining services

VectorMap Local

Published 2023

Source map scale - 1:10,000

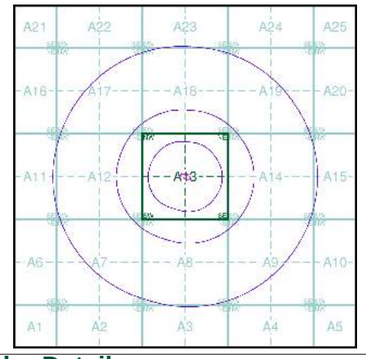
VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

SW86NE
2023
Variable

SW86SE
2023
Variable

Historical Map - Slice A



Order Details

Order Number:	330593820_1_1
Customer Ref:	22016
National Grid Reference:	188190, 65930
Slice:	A
Site Area (Ha):	0.15
Search Buffer (m):	1000

Site Details

Ryeland, Trevenna Cross, St. Mawgan, NEWQUAY, TR8 4HB

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

APPENDIX D

UXO Risk Map

UNEXPLODED BOMB RISK MAP

SITE LOCATION

Map Centre: 188131,65936

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.

The Phased Approach to Land Contamination

As set out in Contaminated Land Report 11 - Model Procedures for the Management of Land Contamination. Environment Agency Guidelines