

BSW NEWBRIDGE ON WYE TIMBER TREATMENT PLANT

Soil and Groundwater Monitoring Plan

Carried out for:

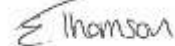
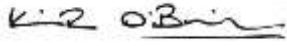
**BSW TIMBER LTD
Newbridge on Wye Sawmills
Builth Wells
Powys
LD2 3RU**

August 2020

W0023/SGWMP/01

Issue 1

W0023/SGWMP/01 – August 2020

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1. INTRODUCTION

1.1. Project Background

In May 2020 SOCOTEC UK Limited (SOCOTEC) was commissioned by BSW Timber Limited (BSW) to prepare a Soil and Groundwater Monitoring Plan (SGWMP) for the Newbridge on Wye sawmills treatment plant (the Site) at Newbridge on Wye, Powys LD2 3RU.

The sawmill is currently operated under a Local Authority Part A(2) Environmental Permit (Ref: EPR/A2/3). The activities carried out at the permitted installation are as detailed in Schedule 1, Part 2, Chapter 6, Part A(2) of the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016 No 1154) which states *“Preservation of wood and wood products with chemicals with a production capacity exceeding 75m³ per day other than exclusively treating against sapstain”*.

As per conditions 3.9.1 and 3.9.4 of the environmental permit the implementation of a Groundwater Monitoring Plan and Soil Sampling Plan is required for the installation. The monitoring plan shall detail the chemicals used at the installation over the previous 10 years identifying active ingredients hazardous to the environment and the analysis proposed to be undertaken. It shall also contain details and locations of any boreholes required to undertake the monitoring.

The permitting regulations state that Part A installations that involve the use, production or release of a relevant hazardous substance, must undertake periodic soil and groundwater monitoring, where there is a possibility of soil and/or groundwater contamination. Article 22 of the Industrial Emissions Directive and Schedule 4(1) PPC 2012 includes a requirement for a baseline report.

The purpose of the SGWMP is to detail a scheme of boreholes and soil and groundwater monitoring to establish the baseline conditions at the site prior to the timber treatment activity taking place. The findings of the soil and groundwater monitoring would be presented in a separate Site Condition Report (SCR).

At this stage, information on soil and groundwater quality is not available for the Site. It is considered that the soil and groundwater measurements required to prepare the baseline report will need to be collected from intrusive ground investigation and laboratory analysis data.

Therefore an intrusive ground investigation, and the installation of groundwater monitoring wells, will be required. However, prior to the intrusive ground investigation taking place, this soil and groundwater

monitoring plan has been prepared to define the scope of the intrusive ground investigation, monitoring and laboratory analysis.

The principal objective of the SGWMP is to review site specific information relating to the site's current operation, history, geology, hydrogeology and environmental setting, in order to locate and design sampling positions to collect the baseline soil and groundwater data.

The SGWMP will present and discuss the physical, historical and environmental setting of the site, identify relevant hazardous substances and potential environmental issues, and develop an initial Conceptual Site Model (CSM) for the purpose of geoenvironmental sampling considerations. The SGWMP includes the findings of a desk study and a site walkover survey.

2. SOURCES OF INFORMATION

The following sources of information have been used in preparation of this report:

- The British Geological Survey (BGS) website
- Groundsure : 2020 : Enviro and Geo Insight Report Ref. GS-6938344 (Appendix A)
- Groundsure : 2020 : Historical Ordnance Survey maps (Appendix B)
- The National Resource Wales website
- A site walkover undertaken on 21 August 2020.

3. SITE LOCATION AND DESCRIPTION

3.1. Site location

The Installation is located approximately 3km south of Newbridge on Wye village, within an agricultural setting. The approximate grid reference for the Installation is SO 023559, and the nearest postcode is LD2 3RT. The Installation's location is shown on the Site Location Plan Figure 1 and the existing permitted Site boundary on Figure 2.

3.2. Site Description and Reconnaissance

The Site subject to this soil and groundwater monitoring plan covers an approximate area of 0.15 hectares (ha).

SOCOTEC attended site on 21 August 2020 to carry out a site walkover survey, site walkover notes are attached in Appendix C. The site is occupied by the timber treatment building which is housed in a

1 storey warehouse. The warehouse was constructed approximately 8 years ago and was noted as being in good condition. The structure of the warehouse has a metal roof and there were no vents noted as being present. The site surfacing was recorded as being Tarmac, with two new concrete slabs located to the north and south of the building and an older worn slab in the middle of the building. There internal system drains into a sump, which is a closed loop system.

Land uses around the site as observed during the site walkover were noted as:

- North: Agricultural land
- East: Road and Haulage company
- South: Agricultural land and residential buildings
- West: Agricultural land

The closest river/surface water feature was recorded as being a tributary.

There were two transformers recorded as present outside of the building.

3.3. Site History and Previous Land Use

The historical development of the site and surrounding area has been reviewed by reference to the available Ordnance Survey historical mapping (see Appendix C) and is summarised in Table 1 below.

Table 1: Summary of Site History

DATE AND MAP SCALE	ON SITE	SURROUNDING AREA (500 m radius)
1888 1:10560 1889 1:2500	The site is situated within what is likely undeveloped farmland. The field in which most of the site is located in is approx. 250 m by 100 m. A small portion of the west part of site lies within the next field.	The Rhos-goch Wood is located approximately 350 m north of the site. The surrounding areas generally consist of large fields likely used for agricultural purposes. There are 3 smaller patches of land located next to the site on the west side which appear to be wooded areas. Between two of these wooded areas are 2 building structures both L shaped, one larger structure to the north and just below this a smaller L shaped structure. These are located approximately 100 m to the west of the site the wooded area below this is labelled as Rhos-goch. 150 m north west of site is a small building located within a field, this is not labelled.
1904 1:2500	No significant changes noted.	Only change noted is that the small building located 150 m north west of the site has now gone.

DATE AND MAP SCALE	ON SITE	SURROUNDING AREA (500 m radius)
1905 1:10560	No significant changes noted.	There now appears to be a third building located between the two wooded areas, located next to (north east) the original two buildings previously noted.
1948 1:10560	No significant changes noted.	The small wooded areas surrounding the three buildings now appear to have been cleared of trees.
1972 1:2500 1974 1:2500	No significant changes noted.	There are two ponds located approximately 230 – 240 m north of the site. A path follows the outskirts of several fields 150 m north of site, this path runs between the two ponds and continues beyond 500 m of the site. A path now appears to be leading towards the area containing the three buildings. There are now 3 small rectangular buildings located 250 m south of the site, these are labelled as Coed-yr-Ynys, there appears to be a pathway running northwards toward these buildings and then along the bottom in an eastern direction. A pond is now present approx. 175 m north west of the site.
1989 1:2500 1995 1:2500 2001 1:10000 2003 1:1250	The site now contains a small rectangular building in the north west corner, and the area is labelled a saw mill.	The surrounding area has significantly changed, immediately north of the site is a small building which appears to be attached to the site. 60 m north is a building structure labelled as WB. A large development labelled as a saw mill is now present 100 m east of the site; this consists of a large L shaped building with several smaller buildings attached on the sides, as well as conveyers and ramps and a tank. Immediately south of this are several conveyors. Several of the buildings appear to be connected via a track. Between the two original ponds 250 m north of site is now labelled as a Marsh. There are also 3 drains now labelled, 150 m north, 250 m north east and 200 m north west of site. Two areas have also changed and appear to contain tracking running 50 m west of the site to 120 m north of site as well 150 m north to 350 m north east of site. A pond is now present approx. 100 m south east of site.
2010 1:10000	No significant changes.	No significant change apart from a new building is now present approx. 250 m west of the site.
2020 1:10000	The site is now entirely occupied by a large L shaped building.	No significant changes.

4. ENVIRONMENTAL SETTING

4.1. Geology

The Groundsure Enviro and Geo Insight report and the British Geological Survey (BGS) Geology of Britain viewer 2020 shows the site to be located on the Cerig Formation (Mudstone, Burrow-mottled) described as sedimentary bedrock formed approximately 433 to 441 million years ago during the Silurian period. This formation consists predominantly of grey to green mudstones with dark borrow mottles.

Superficial deposits beneath the site and surrounding areas are recorded as Till, Devensian (Diamicton) on the BGS site, these are deposits formed up to 2 million years ago in the Quaternary period consisting of clay with sands and gravels. The permeability of the superficial deposits on site is noted in the Groundsure Insight Report to be 'low to high' with a 'mixed' flow type.

There are no records of artificial or made ground on or within 500 m of the site, however limited Made Ground is anticipated to be present on the site owing to the large developments of the saw mill both on and in the surrounding areas of the site.

There are two faults recorded within 1km of the site boundary, details of which can be found in Table 2 below.

Table 2: Faults and Coal Seams near site

Distance from site	Direction	Category Description	Feature description
289 m	SE	Fault	Fault, inferred, displacement unknown
379 m	S	Fault	Fault, inferred, displacement unknown

The BGS website includes records of historical boreholes previously extended in the area. The nearest historic borehole to the site is located 1238 m to the north east (BGS ref. SO05NW5), no details of the strata encountered were recorded for this borehole.

Although there is a lack of recent BGS borehole records located near to the site, it is likely that the general geological succession at the site will comprise of shallow depth Made Ground, which overlays a layer of Till, Devensian comprising clay with sands and gravels which in turn overlays bedrock.

4.2. Hydrogeology

The site is located on a secondary B bedrock aquifer, predominantly comprising of lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers. No other bedrock aquifers have been identified within 500 m of the site.

The Superficial Deposits underlying the site are classified as secondary undifferentiated, this is assigned where it has not been possible to attribute either category A or B to rock type, meaning that in most cases the layer in question has previously been designated as both minor and non-aquifer in different locations due to variable characteristics of the rock type. There are no known groundwater abstractions within 500 m of the site.

4.3. Hydrology, Flooding and Surface Water Abstraction

Information on the hydrological characteristics of the site are summarised in Table 3 below.

Table 3: Site Hydrological Characteristics

CHARACTERISTIC	OBSERVATIONS
Watercourse Network and Surface Water Features	There are a number of open surface water drains on and around the site (see Figure 2). The nearest watercourse is an inland river located approximately 26 m west of the site. There are a further 17 inland rivers, and 5 lakes/lochs or reservoirs located within 500m of the site. There is one river water body catchment located on site.
Flood risks	There are no flood risk zones located on or within 50 m of site, and the risk of surface water flooding is considered to be negligible, and low for groundwater flooding. No flood defences, historical flood events or areas benefitting from flood defences are listed within 250 m of the site.
Surface Water Abstractions	There are no known surface water abstractions within 500 m of the site. The nearest is located 874 m south west of the site.

4.4. Habitats and Land Uses

The Groundsure Insight Report indicates that the site is not located within an Environmentally Sensitive Area, but there are 8 Sites of Special Scientific Interest (SSSI), 1 National Nature Reserve (NNR), 3 Special Areas of Conservation (SAC) and 114 Designated Ancient Woodlands within 2 km of the site.

The nearest SSSI is Cors Y Llyn which is located 703 m south west of the site; this is also a designated NNR.

The River Wye/Afon Gwy 1092 m north west, 1388 m south east and 1610 m south east of site is recorded as being SAC.

The nearest Designated Ancient Woodland is located 434 m north of the site and is a restored ancient woodland site.

4.5. Mining, Extraction and Natural Cavities

Information on mining activities within 500 metres of the site is summarised in Table 4 below.

Table 4: Mining, Extraction and Natural Cavities on and near site

DISTANCE FROM SITE	NAME	COMMODITY	ASSESSMENT OF LIKELIHOOD
On site	Berwyn Hills	Vein Material	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
499 NW	Green Acres	Slate	NA

4.6. Nitrate Vulnerable Zones

The Nitrates Directive (91/676/EEC) requires EU Member States to identify areas where waters have nitrate concentrations of more than 50 mg/l nitrate or are thought to be at risk of nitrate contamination. These areas, and 'lands draining to' them are to be designated as Nitrate Vulnerable Zones (NVZs) within which Member States are required to establish Action Programmes in order to reduce and prevent further nitrate contamination.

The site is not situated within a Nitrate Vulnerable Zone.

4.7. Industrial Land Uses

The Groundsure Insight Report states that there are seven recent industrial land uses within 250 m of the site.

BSW Timber Group is located 18 m north west with the activity being recorded as wood products, including charcoal, paper, card and board., this is understood to be associated with the p.

There is also three conveyors noted as being 127 m east, 163 m east and 207 m north east respectively, as well as a tank 130 m north east. 238 m west of site is Autospray Newbridge on Wye Ltd which is noted as vehicle repair, testing and servicing, and 250 m south there is livestock farming under the company D J Burton.

There are three historical tanks recorded within 250 m of the site, 71 m north, 119 m north east, and 130 m north east, all of which are identified as unspecified.

There is also an electrical substation located 157 m north east of site.

4.8. Licensed Pollutant Release (Part A(2)/B), and Licensed Discharge to Controlled Waters

BSW Sawmills have a Part B permit for Timber Manufacture for the installation located 17 m north of this site.

There are nine records of licenced discharges to controlled waters located within 500 m of the site, the nearest is recorded as 139 m north, for unspecified trade discharges to the receiving water is Tributary of River Thon, the status is recorded as being revoked.

4.9. Pollution Incidents

There is one pollution incident recorded within 500 m of the site. The incident occurred in 2014 and was caused by inorganic chemicals and products, the impact to land and air is noted as being category 4 (No impact).

4.10. Potentially Infilled Land and Landfill Sites

The GeoInsight report recorded no active/ recent landfills, historic landfills or any waste sites as being present on or within 500 m of the site.

5. SUMMARY OF OPERATIONAL INSTALLATION DESIGN

The timber treatment installation comprises of two pressure treatment vessels, four treatment chemical concentrate storage tanks; two for the storage of the E9000 solution and two for the storage of Tanalith E. There are also three water storage tanks, a pressure vessel loading rail and a treated timber drying area.

The site is located within a purpose built building, which has concrete floors that are impervious to the products used, with an enclosed drainage system. The treated timber is stored in this area to drip dry and is not removed from this area until it has been designated as dry.

The main preservative used at the site is Tanalith E9000, which is a water based timber preservative containing 2-aminoethanol, (copper (II) carbonate-copper(II) hydroxide (1:1), Ethoxylated amine ,N,N-didecyl-N-Ndimethyl ammonium Carbonate; and N,N-didecyl-N, N-diethyl ammonium bicarbonate Propane-1-2-diol Propiconazole Dipropylene glycol methyl ether Tebuconazole Methyl alcohol, Methanol as active ingredients in the timber preservation.

The Tanalith E9000 and Vascol Aqua 6116 are delivered in a concentrated form and then mixed with water to the required strength prior to use. All containers used to store potentially environmentally hazardous material shall be located in a bund, the walls and base of which shall be impermeable and the base of the bunded area shall drain to a sump.

A layout of the site can be found within the site environmental permit (ref EPR/A2/3).

6. CONCEPTUAL SITE MODEL (CSM)

6.1. Potential Sources of Contamination

The potential sources of contamination identified in this report relate to the chemical treatment of timber within the treatment plant as summarised in Table 8 below.

Table 8: Potential Sources of Contamination

SITE USE/ACTIVITY AND AREA	SOURCES	CONTAMINANTS
Storage and use of Tanalith and potentially other chemical for timber treatment.	Accidental spillages or leaks from the process, storage tanks, during the delivery and transfer by mobile plant.	Tanalith ingredients; • 2-aminoethanol, • (copper (II) carbonate-copper(II) hydroxide (1:1), • Ethoxylated amine • N,N-didecyl-N-Ndimethyl ammonium Carbonate • N,N-didecyl-N • N-diethyl ammonium bicarbonate • Propane-1-2-diol • Propiconazole • Dipropylene glycol methyl ether • Tebuconazole • Methyl alcohol • Methanol

SITE USE/ACTIVITY AND AREA	SOURCES	CONTAMINANTS
Storage and use of Tanalith and potentially other chemical for timber treatment.	Accidental spillages or leaks from the process, storage tanks, during the delivery and transfer by mobile plant.	Other common chemicals associated with timber treatment; • Tebuconazole • Propiconazole • Permethrin • Copper • pH • Chemical Oxygen Demand (COD) • Didecydimethylammonium-chloride • 2-(2-Butoxyethoxy)ethanol (as diethylene glycol monobutyl ether) • 2-Aminoethanol

6.2. Potential Migration Pathways

The pathways identified within this section are limited to those which may impact on the water environment and/or environmental receptors and do not consider potential impact on human health. The following potential pathways have been identified as potential migration pathways:

- Permeable ground conditions/rainfall infiltration;
- Leaching of contaminants from soils into soil pore water and shallow groundwater;
- Downward migration of soil pore water and shallow groundwater;
- Lateral groundwater flow and infiltration through made ground; and
- Surface water runoff.

6.3. Potential Receptors

Potential receptors have been identified and categorised as follows:

- Groundwater held within either superficial or bedrock geology;
- Soils at and adjacent to the site;
- Surface Water features in near vicinity (<500 m); and
- Surrounding natural environment.

6.4. CSM Summary

The relevant pollutant linkages based on the potential sources, pathways and receptors outlined above are presented in Table 9 below.

Table 9: Source, Pathways, Receptors

SOURCE	PATHWAY	RECEPTOR
Storage and use of Tanalith and potentially other chemical for timber treatment.	Leaching and downward migration from soils through unsaturated zone into shallow groundwater	Groundwater and soil beneath the site.
	Surface water runoff	Local surface water features.
	Lateral groundwater migration through made ground and natural strata	Local surface water features. Groundwater beneath site

Since the CSM presented above is based upon desk study information it includes a series of uncertainties and assumptions, most notably:

- Ground conditions have been conceptualised based on BGS geological maps and other desk based information;
- The presence and extent of any suspected contamination is unknown in the absence of ground investigation data;
- The presence, depth and flow direction of any groundwater bodies at the site is currently unknown.

7. RATIONAL FOR THE BOREHOLE NETWORK

7.1. Objectives

The objective of groundwater monitoring borehole installation is to:

- Intercept groundwater and carry out chemical analyses of soil and groundwater samples retrieved during the boreholes installation and provide data to determine the baseline conditions;
- Demonstrate compliance with the site environmental permit, and
- Confirm the effectiveness of the pollution control measures employed on site.

7.2. Borehole Siting

The borehole locations will be based on the following considerations:

- The location of the permitted treatment facility
- An assumed groundwater flow direction of north to south
- Access, health and safety and avoiding creating potential new pathways.

Proposed location are shown on Figure 2.

7.3. Soil and Groundwater Monitoring and Sampling

The soil and groundwater analytical suites along with their limits of detection and methods are presented in Tables 10 and 11 below:

Table 10: Soil Analytical Suite

SUBSTANCE	LIMIT OF DETECTION	METHOD
Triazole- Pyrethroid Suite (inc. Tebuconazole, Propiconazole and Permethrin).	0.1 – 1.0 mg/kg	LCMS / GCMS
Copper	0.5U – 1.6M mg/kg	ICPMS
pH	n/a	pH electrode
Didecydimethylammonium-chloride	0.1 mg/kg	LCMS
2-(2-Butoxyethoxy)ethanol (as diethylene glycol monobutyl ether)	1 mg/kg	GCMS
2-Aminoethanol (as ethanolamine)	20 mg/kg	LCMS

Table 11: Groundwater Analytical Suite

SUBSTANCE	LIMIT OF DETECTION	METHOD
Triazole- Pyrethroid Suite (inc. Tebuconazole, Propiconazole and Permethrin).	0.1 – 1.0 mg/l	LCMS / GCMS
Copper and Sodium	1.0 - 10 µg/l	ICMPS
Chemical Oxygen Demand (COD)	5.0 mg/l	Colorimetric chromium oxidation based on BS6068:2.34:1988
pH	n/a	pH electrode based on BS 2690:1984:Part 109
Didecydimethylammonium-chloride	10 µg/l	LCMS
2-(2-Butoxyethoxy)ethanol (as diethylene glycol monobutyl ether)	1 mg/l	GCMS
2-Aminoethanol (as ethanolamine)	20 mg/l	LCMS

Table 12: Soil Leachate Analytical Suite

SUBSTANCE	LIMIT OF DETECTION	METHOD
Metals and semi-metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, and zinc)	0.1 – 2 µg/l	ICPMS
Cyanide (free)	0.02 µg/l	Segmented flow analysis.
Hexavalent Chromium	0.02 µg/l	Colorimetric analysis.

Soil and groundwater samples analysis will be carried out by a UKAS accredited laboratory to the relevant documented in house methods.

7.4. Sampling Methodology

It is anticipated that up to two soil samples will be retrieved from each location during trial pit and borehole installation and analysed for the suite of determinands in Table 10.

It is considered that the main pathway for contaminants entering the soil will be from accidental spillages and any contaminants will migrate downwards in the shallow topsoil and Made Ground until they encounter a cohesive barrier. It is therefore considered that a practical way of assessing any contamination, which may have occurred due to site activities, will be to sample any material within the Made Ground which overlies a cohesive material. Up to two samples collected from each location is deemed an appropriate number to identify contaminant sources and provide coverage across the site.

Once boreholes have been installed with groundwater monitoring apparatus, they will be developed and groundwater samples will be collected with well specific bailers to prevent cross-contamination. Monitoring positions will be surveyed to ordnance datum and a measurement of groundwater level and depth will be taken. Three well volume of water will be purged prior to taking a sample for analysis for the suite in Table 11.

Should groundwater not be encountered in any of the boreholes, selected soil samples will be subject to a 10:1 leachate preparation and analysis for the contaminants of concern in Table 12.

7.5. Sample Storage and Transport

Samples will be collected in suitable containers and sealed. Each sample container will be labelled with unique identifiers along with the date and time of sample collection. Samples will be maintained in chilled cool boxes during handling and transport. The samples will then be delivered to a SOCOTEC laboratory for processing and analysis within the accepted stability periods, applicable to the scheduled suite of analysis with a completed chain of custody to track the samples.

8. PROPOSED BOREHOLES

8.1. Borehole Design

Due to the potential presence of cobbles and boulders in the superficial geology, it is anticipated that the three proposed boreholes (BH1 to BH3 shown on Figure 2) will be installed using a dynamic

windowless sampling rig with rotary follow on if required, to drill to a depth of 5 m bgl where possible. This will allow the collection of representative soil and groundwater samples, other drilling methods will be employed in the case that the windowless sampling rig cannot drill to the required depths, final depths will be subject to ground and groundwater conditions encountered. The boreholes will be installed at a maximum diameter of 110 mm. On completion, a groundwater monitoring standpipe will be installed within the borehole. It is expected that this will consist of a 50 mm diameter HDPE slotted pipe with filter sock installed to intercept groundwater where encountered in a suitable response zone, and plain HDPE pipe where required. The response zone will be within a filter of non-calcareous pea gravel, with a bentonite seal between 0.5 and 1.0 m bgl. It will be completed with a suitable cover and concrete between 0.5 m bgl and ground level.

A schematic of the general design concept of the borehole is presented in Figure 3.

Borehole installation, groundwater and soils sampling will be carried out in accordance with SOCOTECs standard procedures:

- GEO-TP-121 – Sampling waters for geo-environmental testing;
- GEO-TP-070 – Stand pipes and Piezometers;
- GEO-TP-040 – Rotary Drilling; and
- GEO-TP-112 – Handling and storage of soil and water sample prior to delivery of to the chemical laboratory.

The above standard procedures have been devised with regard to relevant industry, national and international standards, such as BS10175:2011 and BS5930:2015.

The boreholes arising will be logged in accordance with BS EN ISO 14688-1 (2015 for soils), and augmented by BS 5930:2015.

9. BASELINE REPORTING

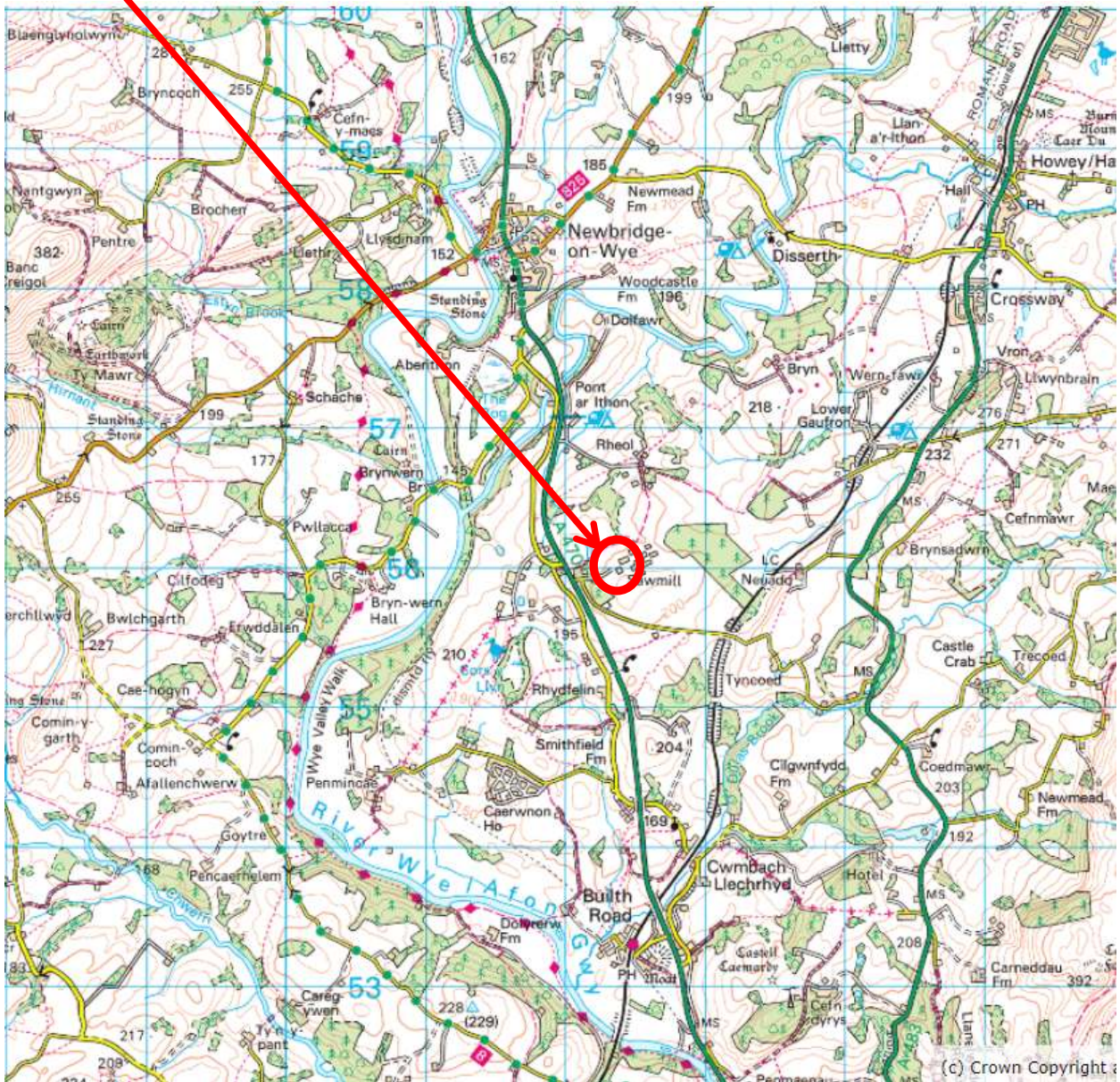
The environmental monitoring data and results will be reported to Powys County Council within in one month of the results being received from the laboratory. The baseline report will provide details on:

- When the sampling was undertaken;
- Relevant observations taken during the field visit;
- The number of samples taken;
- Any changes to the sampling / monitoring strategy;
- Laboratory analysis certificates;
- A summary of baseline soil and groundwater data.

FIGURES AND DRAWINGS

Site Location

The Site



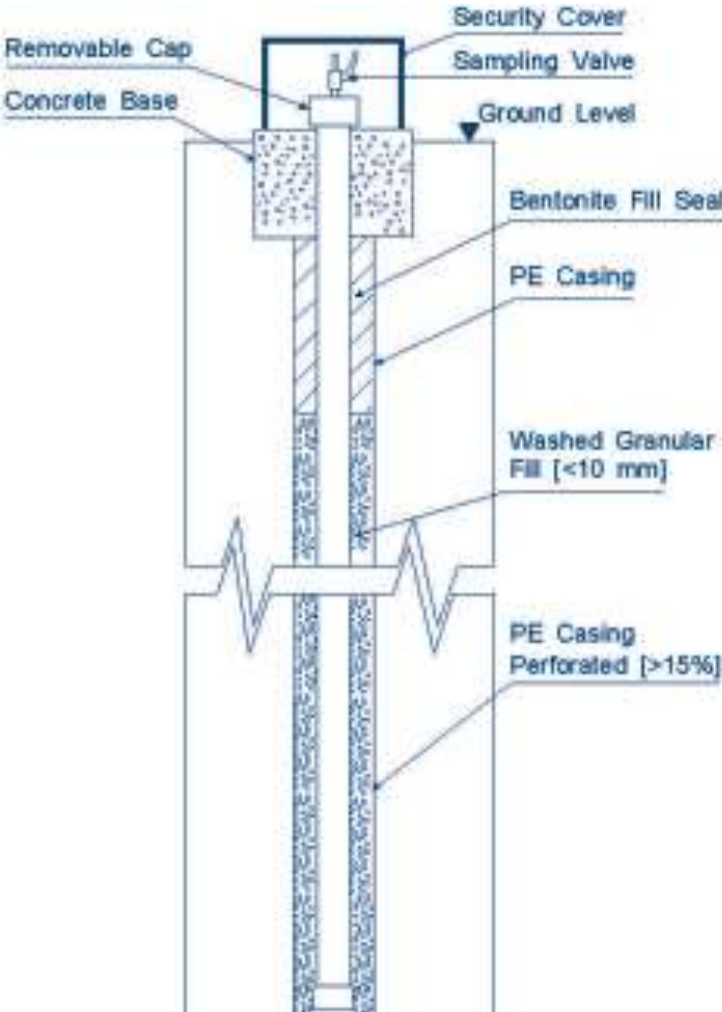
Notes: Not to scale	Project BSW Sawmills – Newbridge on Wye Project No. W6040 Carried out for BSW Sawmills Ltd	Figure 1
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Site Address:
BSW Timber
Newbridge on Wye, Builth Wells, Powys LD2 3RU
Contact Wayne Bridges



Title	Proposed Borehole Locations	
Project	Newbridge Sawmills Treatment Facility	
Client	BSW Timber	
Key	BH1 ⊙ Groundwater and soil sample location subject to suitable service clearance Permit Site Boundary Drain / Stream	
Scale	NTS	
		
Project No W0023	Drawing Number Figure 2	

Schematic of Borehole Design



Notes: Not to scale	Project BSW Sawmills Ltd Project No. W0023 Carried out for BSW Sawmills Ltd	Figure 3
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APPENDIX A

Enviro and Geo Insight Report

B S W SAWMILLS LTD, NEWBRIDGE SAW MILL, NEWBRIDGE-ON-WYE, BUILTH WELLS, LD2 3RU

Order Details

Date: 04/08/2020
Your ref: W5086
Our Ref: GS-6938344
Client: SOCOTEC UK Limited

Site Details

Location: 302397 255969
Area: 0.15 ha
Authority: [Powys County Council](#)



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Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

p.13

groundsure.com/insightuserguide

Contact us with any questions at:

info@groundsure.com

08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	Historical industrial land uses	0	0	0	0	-
15	1.2	<u>Historical tanks</u>	0	0	3	0	-
15	1.3	<u>Historical energy features</u>	0	0	1	0	-
15	1.4	Historical petrol stations	0	0	0	0	-
16	1.5	Historical garages	0	0	0	0	-
16	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
17	2.1	Historical industrial land uses	0	0	0	0	-
18	2.2	<u>Historical tanks</u>	0	0	4	0	-
18	2.3	<u>Historical energy features</u>	0	0	1	0	-
18	2.4	Historical petrol stations	0	0	0	0	-
19	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
20	3.1	Active or recent landfill	0	0	0	0	-
20	3.2	Historical landfill (BGS records)	0	0	0	0	-
21	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
21	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
21	3.5	Historical waste sites	0	0	0	0	-
21	3.6	Licensed waste sites	0	0	0	0	-
21	3.7	<u>Waste exemptions</u>	0	0	7	0	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
23	4.1	<u>Recent industrial land uses</u>	0	1	6	-	-
24	4.2	Current or recent petrol stations	0	0	0	0	-
24	4.3	Electricity cables	0	0	0	0	-
24	4.4	Gas pipelines	0	0	0	0	-
25	4.5	Sites determined as Contaminated Land	0	0	0	0	-



25	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
25	4.7	Regulated explosive sites	0	0	0	0	-
25	4.8	Hazardous substance storage/usage	0	0	0	0	-
25	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
26	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
26	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	1	0	0	-
26	4.12	Radioactive Substance Authorisations	0	0	0	0	-
26	4.13	<u>Licensed Discharges to controlled waters</u>	0	0	2	7	-
28	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
28	4.15	Pollutant release to public sewer	0	0	0	0	-
28	4.16	List 1 Dangerous Substances	0	0	0	0	-
28	4.17	List 2 Dangerous Substances	0	0	0	0	-
29	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	0	1	-
29	4.19	Pollution inventory substances	0	0	0	0	-
29	4.20	Pollution inventory waste transfers	0	0	0	0	-
29	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
30	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
32	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
33	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
34	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
34	5.5	Groundwater vulnerability- local information	None (within 0m)				
35	5.6	Groundwater abstractions	0	0	0	0	0
36	5.7	<u>Surface water abstractions</u>	0	0	0	0	1
36	5.8	Potable abstractions	0	0	0	0	0
36	5.9	Source Protection Zones	0	0	0	0	-
36	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
38	6.1	<u>Water Network (OS MasterMap)</u>	0	1	22	-	-



40	6.2	<u>Surface water features</u>	0	1	11	-	-
41	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
41	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
41	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
43	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	None (within 50m)				
43	7.2	Historical Flood Events	0	0	0	-	-
43	7.3	Flood Defences	0	0	0	-	-
43	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
44	7.5	Flood Storage Areas	0	0	0	-	-
45	7.6	Flood Zone 2	None (within 50m)				
45	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
46	8.1	Surface water flooding	Negligible (within 50m)				
Page	Section	Groundwater flooding					
47	9.1	<u>Groundwater flooding</u>	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
48	10.1	<u>Sites of Special Scientific Interest (SSSI)</u>	0	0	0	0	8
49	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
49	10.3	<u>Special Areas of Conservation (SAC)</u>	0	0	0	0	3
51	10.4	Special Protection Areas (SPA)	0	0	0	0	0
51	10.5	<u>National Nature Reserves (NNR)</u>	0	0	0	0	1
52	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
52	10.7	<u>Designated Ancient Woodland</u>	0	0	0	4	110
56	10.8	Biosphere Reserves	0	0	0	0	0
56	10.9	Forest Parks	0	0	0	0	0
57	10.10	Marine Conservation Zones	0	0	0	0	0
57	10.11	Green Belt	0	0	0	0	0
57	10.12	Proposed Ramsar sites	0	0	0	0	0



57	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
57	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
58	10.15	Nitrate Sensitive Areas	0	0	0	0	0
58	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
59	10.17	SSSI Impact Risk Zones	0	-	-	-	-
59	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
60	11.1	World Heritage Sites	0	0	0	-	-
60	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
60	11.3	National Parks	0	0	0	-	-
60	11.4	Listed Buildings	0	0	0	-	-
61	11.5	Conservation Areas	0	0	0	-	-
61	11.6	Scheduled Ancient Monuments	0	0	0	-	-
61	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
62	12.1	<u>Agricultural Land Classification</u>	Grade 3b (within 250m)				
63	12.2	Open Access Land	0	0	0	-	-
63	12.3	Tree Felling Licences	0	0	0	-	-
63	12.4	Environmental Stewardship Schemes	0	0	0	-	-
63	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
64	13.1	Priority Habitat Inventory	0	0	0	-	-
64	13.2	Habitat Networks	0	0	0	-	-
64	13.3	Open Mosaic Habitat	0	0	0	-	-
64	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
65	14.1	<u>10k Availability</u>	Identified (within 500m)				
66	14.2	Artificial and made ground (10k)	0	0	0	0	-
67	14.3	Superficial geology (10k)	0	0	0	0	-

67	14.4	Landslip (10k)	0	0	0	0	-
68	14.5	Bedrock geology (10k)	0	0	0	0	-
68	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
69	15.1	<u>50k Availability</u>	Identified (within 500m)				
70	15.2	Artificial and made ground (50k)	0	0	0	0	-
70	15.3	Artificial ground permeability (50k)	0	0	-	-	-
71	15.4	<u>Superficial geology (50k)</u>	1	0	0	1	-
72	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
72	15.6	Landslip (50k)	0	0	0	0	-
72	15.7	Landslip permeability (50k)	None (within 50m)				
73	15.8	<u>Bedrock geology (50k)</u>	1	0	0	2	-
74	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
74	15.10	<u>Bedrock faults and other linear features (50k)</u>	0	0	0	2	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
75	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
76	17.1	<u>Shrink swell clays</u>	Very low (within 50m)				
77	17.2	<u>Running sands</u>	Very low (within 50m)				
78	17.3	<u>Compressible deposits</u>	Negligible (within 50m)				
79	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
80	17.5	<u>Landslides</u>	Very low (within 50m)				
81	17.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
82	18.1	Natural cavities	0	0	0	0	-
83	18.2	<u>BritPits</u>	0	0	0	1	-
83	18.3	Surface ground workings	0	0	0	-	-
83	18.4	Underground workings	0	0	0	0	0
83	18.5	Historical Mineral Planning Areas	0	0	0	0	-



84	18.6	<u>Non-coal mining</u>	1	0	0	0	1
84	18.7	Mining cavities	0	0	0	0	0
84	18.8	JPB mining areas	None (within 0m)				
85	18.9	Coal mining	None (within 0m)				
85	18.10	Brine areas	None (within 0m)				
85	18.11	Gypsum areas	None (within 0m)				
85	18.12	Tin mining	None (within 0m)				
85	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
86	19.1	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
87	20.1	<u>BGS Estimated Background Soil Chemistry</u>	1	2	-	-	-
87	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
87	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
88	21.1	Underground railways (London)	0	0	0	-	-
88	21.2	Underground railways (Non-London)	0	0	0	-	-
88	21.3	Railway tunnels	0	0	0	-	-
88	21.4	Historical railway and tunnel features	0	0	0	-	-
88	21.5	Royal Mail tunnels	0	0	0	-	-
89	21.6	Historical railways	0	0	0	-	-
89	21.7	Railways	0	0	0	-	-
89	21.8	Crossrail 1	0	0	0	0	-
89	21.9	Crossrail 2	0	0	0	0	-
89	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 07/05/2018

Site Area: 0.15ha



Recent site history - 2016 aerial photograph



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Capture Date: 30/05/2016

Site Area: 0.15ha



Recent site history - 2013 aerial photograph



Capture Date: 04/06/2013

Site Area: 0.15ha



Recent site history - 2009 aerial photograph

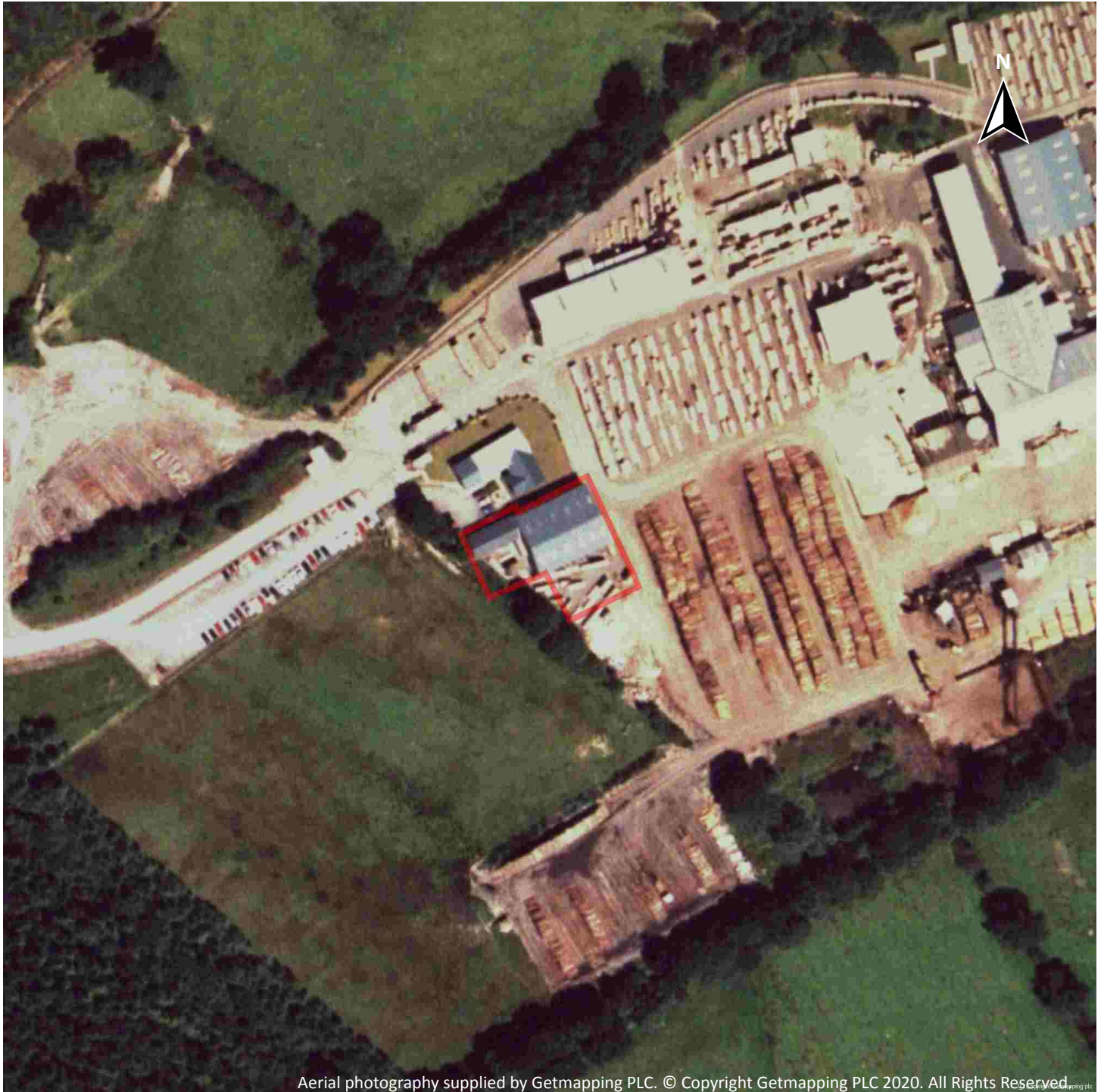


Capture Date: 12/09/2009

Site Area: 0.15ha



Recent site history - 2000 aerial photograph



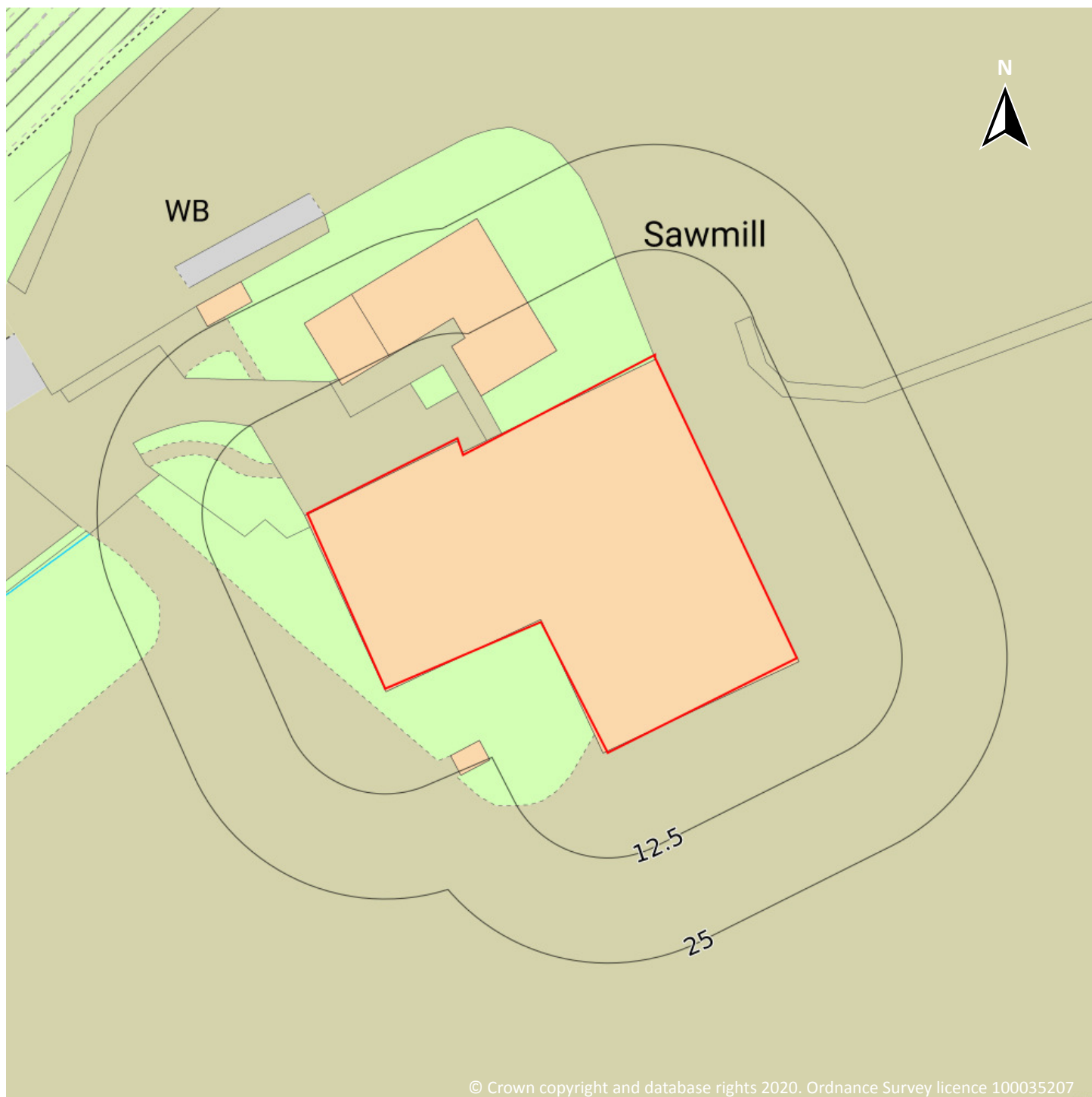
Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2020. All Rights Reserved.

Capture Date: 18/07/2000

Site Area: 0.15ha



OS MasterMap site plan



Site Area: 0.15ha

1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical tanks
- Historical energy features

1.1 Historical industrial land uses

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.



1.2 Historical tanks

Records within 500m

3

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

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

ID	Location	Land use	Dates present	Group ID
1	71m N	Unspecified Tank	1989	151753
A	119m NE	Unspecified Tank	1993	151750
A	130m NE	Unspecified Tank	1989 - 1993	165446

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

1

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

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

ID	Location	Land use	Dates present	Group ID
A	157m NE	Electricity Substation	1989	86360

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

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



This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

0

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

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

2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical tanks
- Historical energy features

2.1 Historical industrial land uses

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

4

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

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

ID	Location	Land Use	Date	Group ID
1	71m N	Unspecified Tank	1989	151753
A	119m NE	Unspecified Tank	1993	151750
A	130m NE	Unspecified Tank	1989	165446
A	130m NE	Unspecified Tank	1993	165446

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

1

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

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

ID	Location	Land Use	Date	Group ID
A	157m NE	Electricity Substation	1989	86360

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



— Site Outline
Search buffers in metres (m)
● Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m**0**

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m**0**

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

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

3.5 Historical waste sites

Records within 500m**0**

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

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

3.6 Licensed waste sites

Records within 500m**0**

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

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

3.7 Waste exemptions

Records within 500m**7**

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

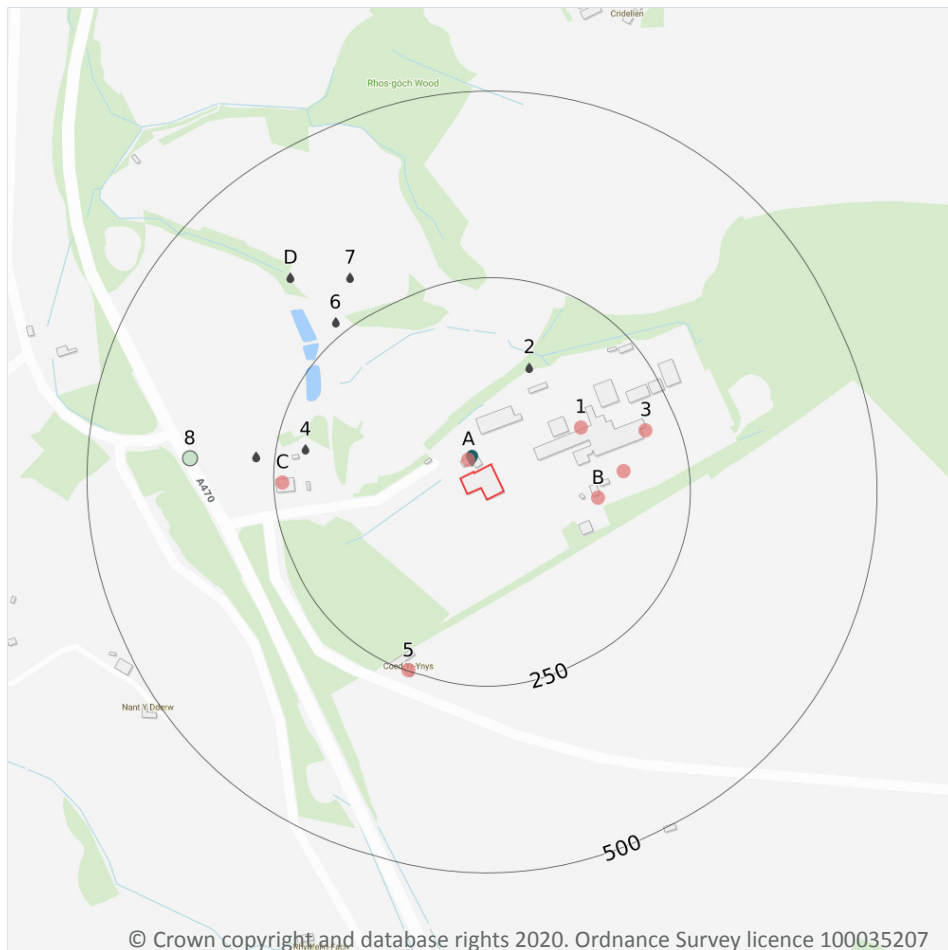
Features are displayed on the Waste and landfill map on **page 20**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	235m W	Green Acres Cwmbach Builth Wells Powys LD23RU	NRW- WME004890	Disposing of waste exemption	On a farm	Burning waste in the open
A	235m W	GDA & AR Powell, Craig Goch Fawr, Newbridge-on- Wye, Builth Wells, Powys, LD23RU	NRW- WME025855	Using waste exemption	On a farm	Use of waste for a specified purpose
A	235m W	GDA & AR Powell, Craig Goch Fawr, Newbridge-on- Wye, Builth Wells, Powys, LD23RU	NRW- WME025855	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	235m W	GDA & AR Powell, Craig Goch Fawr, Newbridge-on- Wye, Builth Wells, Powys, LD23RU	NRW- WME025855	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
A	235m W	GDA & AR Powell, Craig Goch Fawr, Newbridge-on- Wye, Builth Wells, Powys, LD23RU	NRW- WME025855	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
A	235m W	GDA & AR Powell, Craig Goch Fawr, Newbridge-on- Wye, Builth Wells, Powys, LD23RU	NRW- WME025855	Disposing of waste exemption	On a farm	Burning waste in the open
A	235m W	GDA & AR Powell, Craig Goch Fawr, Newbridge-on- Wye, Builth Wells, Powys, LD23RU	NRW- WME025855	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

7

Current potentially contaminative industrial sites.

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

ID	Location	Company	Address	Activity	Category
A	18m NW	B S W Timber Group	Newbridge-on-Wye, Builth Wells, Powys, LD2 3RU	Wood Products Including Charcoal, Paper, Card and Board	Industrial Products
B	127m E	Conveyor	Powys, LD2	Conveyors	Industrial Features



ID	Location	Company	Address	Activity	Category
1	130m NE	Tank	Powys, LD2	Tanks (Generic)	Industrial Features
B	163m E	Conveyor	Powys, LD2	Conveyors	Industrial Features
3	207m NE	Conveyor	Powys, LD2	Conveyors	Industrial Features
C	238m W	Autospray Newbridge on Wye Ltd	Fir Tree Garage, Newbridge-on-Wye, Builth Wells, Powys, LD2 3RU	Vehicle Repair, Testing and Servicing	Repair and Servicing
5	250m S	D J Bufton	Coed yr Ynis, Builth Road, Builth Wells, Powys, LD2 3RT	Livestock Farming	Farming

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0
----------------------------	----------

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0
----------------------------	----------

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0
----------------------------	----------

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m

0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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

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

Records within 500m

1

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

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

ID	Location	Address	Details	
A	17m N	B S W Sawmills, Newbridge On Wye, Llandrindod Wells, Powys, LD2 3RU	Process: Timber Manufacture Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m

9

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

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



ID	Location	Address	Details	
2	139m N	NEWBRIDGE-ON-WYE NR BUILTH WELLS, NEWBRIDGE-ON-WYE NR BUILTH WEL, NR BUILTH WELLS, NR BUILTH	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AW4001201 Permit Version: 2 Receiving Water: TRIBUTORY OF RIVER ITHON	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 22/11/1996 Effective Date: 23/11/1996 Revocation Date: 07/06/2001
4	211m W	BSW SAWMILLS NEWBRIDGE-ON-WYE NR BU, BSW SAWMILLS NEWBRIDGE-ON-WYE NR, NEWBRIDGE-ON-WYE NR BUILTH WELLS, NR BUILTH WELLS	Effluent Type: UNSPECIFIED Permit Number: AN0058302 Permit Version: 1 Receiving Water: ITHON TRIBUTARY	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/03/1988 Effective Date: 25/03/1988 Revocation Date: 12/12/1994
6	267m NW	NEWBRIDGE-ON-WYE NR BUILTH WELLS, NEWBRIDGE-ON-WYE NR BUILTH WEL, NR BUILTH WELLS, NR BUILTH	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AW4001201 Permit Version: 1 Receiving Water: TRIBUTORY OF RIVER ITHON	Status: REVOKED - UNSPECIFIED Issue date: 02/10/1980 Effective Date: 02/10/1980 Revocation Date: 22/11/1996
C	275m W	Fir Tree Garage, Newbridge-On-Wye, Builth Wells, Powys, LD2 3RU	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PP3626XY Permit Version: 0 Receiving Water: UNAMED TRIB OF RIVER ITHON	Status: Effective Issue date: 28/11/2011 Effective Date: 28/11/2011 Revocation Date: -
C	275m W	FIR TREE GARAGE, NEWBRIDGE-ON-WYE, BUILTH WELLS, POWYS, LD2 3RU	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRPP3626XY Permit Version: 1 Receiving Water: UNAMED TRIB OF RIVER ITHON	Status: NEW ISSUED UNDER EPR 2010 Issue date: 28/11/2011 Effective Date: 28/11/2011 Revocation Date: -
C	275m W	FIR TREE GARAGE, NEWBRIDGE-ON-WYE, BUILTH WELLS, POWYS, LD2 3RU	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRPP3626XY Permit Version: 1 Receiving Water: UNAMED TRIB OF RIVER ITHON	Status: NEW ISSUED UNDER EPR 2010 Issue date: 28/11/2011 Effective Date: 28/11/2011 Revocation Date: -
7	306m NW	Bsw Sawmills Ltd Newbridge On Wye, Bsw Sawmills Ltd, Newbridge On Wye, Builth Wells, LD2 3RU	Effluent Type: SEWAGE & TRADE COMBINED - UNSPECIFIED Permit Number: AN0032601 Permit Version: 0 Receiving Water: TRIB OF RIVER ITHON	Status: Effective Issue date: 31/10/2000 Effective Date: 11/01/2000 Revocation Date: -



ID	Location	Address	Details	
D	352m NW	NEWBRIDGE-ON-WYE WESTERN SOFTWOODS, NEWBRIDGE-ON- WYE WESTERN SOFTWOO, WESTERN SOFTWOODS	Effluent Type: UNSPECIFIED Permit Number: AN0032601 Permit Version: 1 Receiving Water: ITHON	Status: REVOKED - UNSPECIFIED Issue date: 30/11/1987 Effective Date: 30/11/1987 Revocation Date: 30/11/1987
D	352m NW	NEWBRIDGE-ON-WYE WESTERN SOFTWOODS, NEWBRIDGE-ON- WYE WESTERN SOFTWOO, WESTERN SOFTWOODS	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AN0032601 Permit Version: 2 Receiving Water: ITHON	Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Issue date: 01/12/1987 Effective Date: 01/12/1987 Revocation Date: 14/12/2000

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0
----------------------------	----------

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

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

4.15 Pollutant release to public sewer

Records within 500m	0
----------------------------	----------

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0
----------------------------	----------

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0
----------------------------	----------

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

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



4.18 Pollution Incidents (EA/NRW)

Records within 500m

1

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

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

ID	Location	Details	
8	363m W	Incident Date: 27/02/2014 Incident Identification: 1212532 Pollutant: Inorganic Chemicals/Products Pollutant Description: Other Inorganic Chemical or Product	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m

0

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

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

4.20 Pollution inventory waste transfers

Records within 500m

0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m

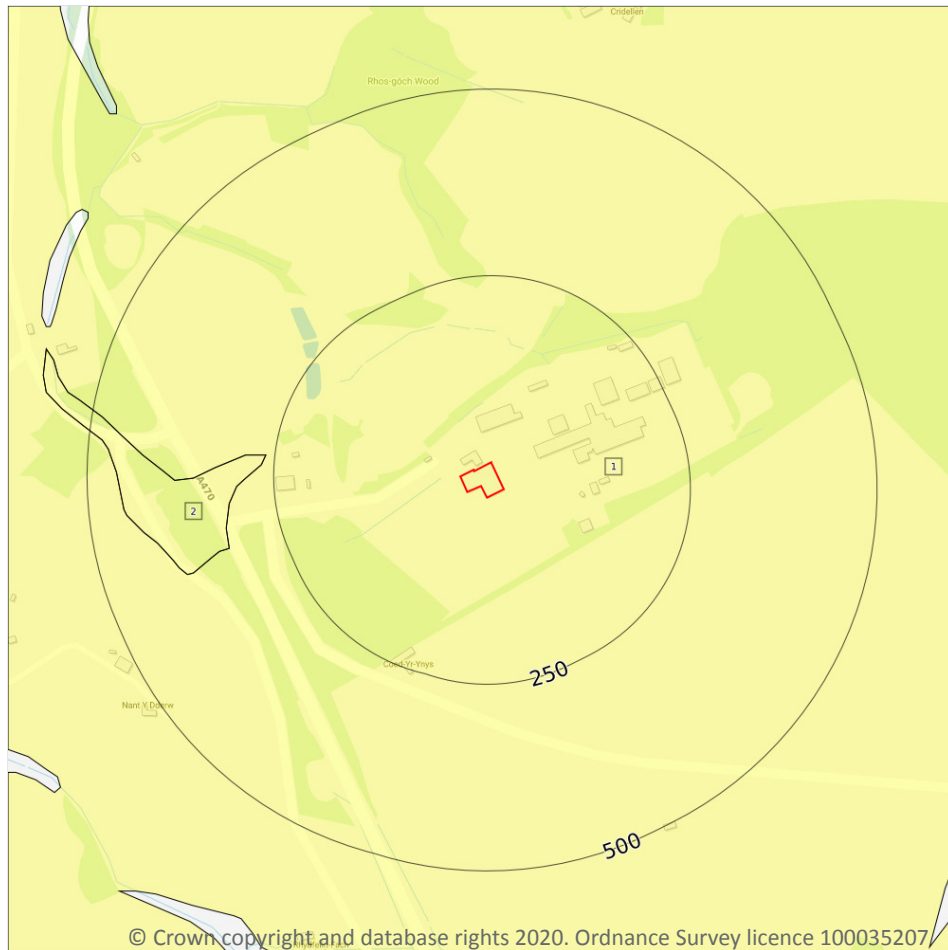
0

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

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



5 Hydrogeology - Superficial aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

2

Aquifer status of groundwater held within superficial geology.

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

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	262m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type



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



Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

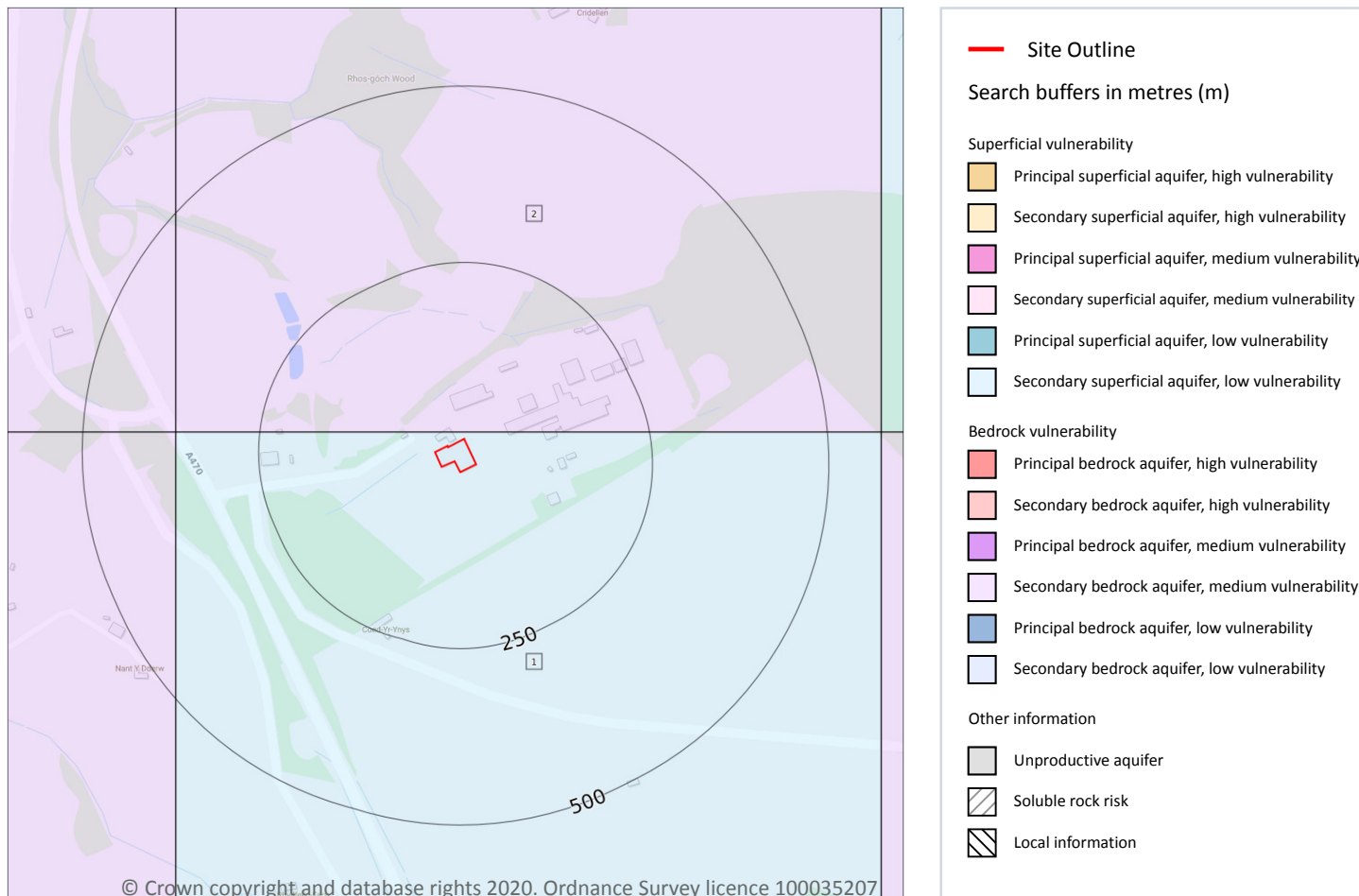
Features are displayed on the Bedrock aquifer map on **page 32**

ID	Location	Designation	Description
1	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers

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



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

2

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

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

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

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
2	9m N	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
------------------------	----------

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

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

5.5 Groundwater vulnerability- local information

Records on site	0
------------------------	----------

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

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

Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)**
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

0

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

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

5.7 Surface water abstractions

Records within 2000m

1

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

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

ID	Location	Details	
-	873m SW	Status: Active Licence No: 19/55/5/0027 Details: Unknown (Impounding) - Direct Source: - Point: - Data Type: Point Name: - Easting: 301568 Northing: 255620	Annual Volume (m ³): 0 Max Daily Volume (m ³): - Original Application No: - Original Start Date: Feb 14 2003 12:00AM Expiry Date: - Issue No: - Version Start Date: - Version End Date: -

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

5.8 Potable abstractions

Records within 2000m

0

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

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

5.9 Source Protection Zones

Records within 500m

0

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

0

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



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



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

23

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

Features are displayed on the Hydrology map on **page 38**

ID	Location	Type of water feature	Ground level	Permanence	Name
B	26m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
C	67m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	153m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	153m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	157m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	158m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	158m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	159m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	159m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	160m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	167m N	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	175m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	180m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	180m N	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
A	181m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	195m N	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	195m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	196m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	198m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	205m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	223m NW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	229m NE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	249m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

12

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

Features are displayed on the Hydrology map on **page 38**

This data is sourced from the Ordnance Survey.



6.3 WFD Surface water body catchments

Records on site

1

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

Features are displayed on the Hydrology map on **page 38**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River WB catchment	Ithon - conf Camddwr Bk to conf R Wye	GB109055042270	Ithon	Wye MC

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

6.4 WFD Surface water bodies

Records identified

1

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

Features are displayed on the Hydrology map on **page 38**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	1106m NW	River	Ithon - conf Camddwr Bk to conf R Wye	GB109055042270	Moderate	Good	Moderate	2016

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

6.5 WFD Groundwater bodies

Records on site

1

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on **page 38**



ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
1	On site	Wye Uplands Lower Palaeozoic	GB40902G205100	Poor	Poor	Good	2016

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



7 River and coastal flooding

7.1 Risk of Flooding from Rivers and Sea (RoFRaS)

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance).

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

7.2 Historical Flood Events

Records within 250m

0

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

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

7.3 Flood Defences

Records within 250m

0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

7.5 Flood Storage Areas

Records within 250m

0

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

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

Records within 50m

0

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

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

8 Surface water flooding

8.1 Surface water flooding

Highest risk on site

Negligible

Highest risk within 50m

Negligible

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

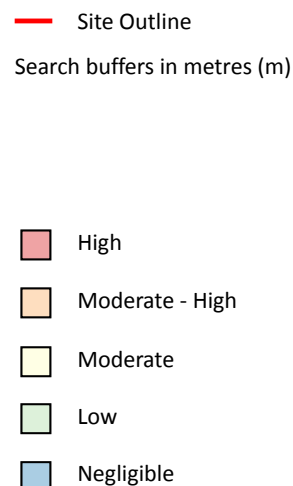
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site. The table below shows the maximum flood depths for a range of return periods for the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

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

This data is sourced from Ambiental Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

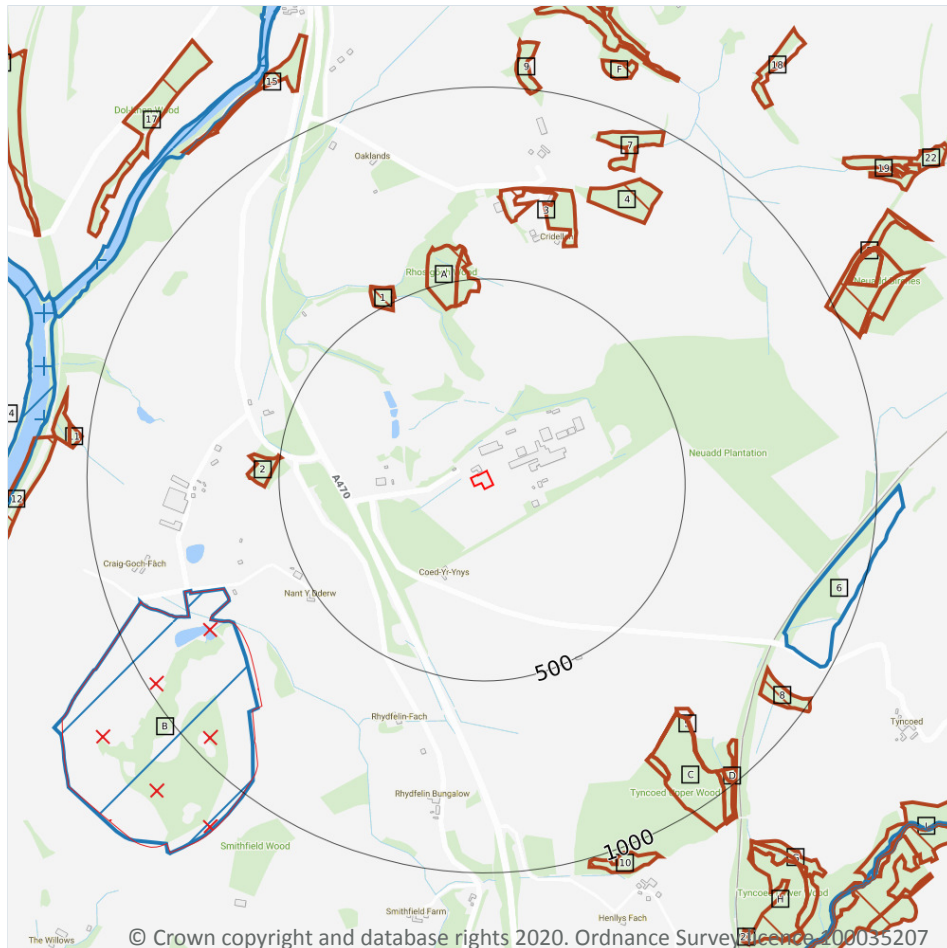
Low

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

Features are displayed on the Groundwater flooding map on **page 47**

This data is sourced from Ambient Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- + Special Areas of Conservation (SAC)
- X National Nature Reserves (NNR)
- / Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

8

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

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

ID	Location	Name	Data source
B	703m SW	Cors Y Llyn	Natural Resources Wales



ID	Location	Name	Data source
6	850m SE	Neuadd And Tylelo Mires	Natural Resources Wales
13	1092m NW	River Ithon	Natural Resources Wales
16	1108m W	River Wye (Upper Wye) / Afon Gwy (Gwy Uchaf)	Natural Resources Wales
K	1388m SE	River Wye (Tributaries) / Afon Gwy (Isafonydd)	Natural Resources Wales
-	1451m E	Neuadd And Tylelo Mires	Natural Resources Wales
-	1491m NW	Rhagnentydd Gwy Uchaf / Upper Wye Tributaries	Natural Resources Wales
-	1551m NW	Aberithon And Bedw Turbaries	Natural Resources Wales

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m

3

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

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

ID	Location	Name	Features of interest	Habitat description	Data source
14	1092m NW	River Wye / Afon Gwy (Wales)	Estuaries; Intertidal mudflats and sandflats; Atlantic salt meadows; Rivers with floating vegetation often dominated by water-crowfoot; Dry heaths; Very wet mires often identified by an unstable `quaking` surface; Caves not open to the public; Mixed woodland on base-rich soils associated with rocky slopes; Western acidic oak woodland; Bog woodland; Alder woodland on floodplains; Sea lamprey; Brook lamprey; River lamprey; Allis shad; Twaite shad; Atlantic salmon; Bullhead; Freshwater pearl mussel; White-clawed (or Atlantic stream) crayfish; Lesser horseshoe bat; Greater horseshoe bat; Otter.	Improved grassland; Salt marshes, Salt pastures, Salt steppes; Heath, Scrub, Maquis and Garrigue, Phygrana; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Dry grassland, Steppes; Inland rocks, Scree, Sands, Permanent Snow and ice; Humid grassland, Mesophile grassland; Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Bogs, Marshes, Water fringed vegetation, Fens	Natural Resources Wales
K	1388m SE	River Wye / Afon Gwy (Wales)	Estuaries; Intertidal mudflats and sandflats; Atlantic salt meadows; Rivers with floating vegetation often dominated by water-crowfoot; Dry heaths; Very wet mires often identified by an unstable `quaking` surface; Caves not open to the public; Mixed woodland on base-rich soils associated with rocky slopes; Western acidic oak woodland; Bog woodland; Alder woodland on floodplains; Sea lamprey; Brook lamprey; River lamprey; Allis shad; Twaite shad; Atlantic salmon; Bullhead; Freshwater pearl mussel; White-clawed (or Atlantic stream) crayfish; Lesser horseshoe bat; Greater horseshoe bat; Otter.	Improved grassland; Salt marshes, Salt pastures, Salt steppes; Heath, Scrub, Maquis and Garrigue, Phygrana; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Dry grassland, Steppes; Inland rocks, Scree, Sands, Permanent Snow and ice; Humid grassland, Mesophile grassland; Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Bogs, Marshes, Water fringed vegetation, Fens	Natural Resources Wales



ID	Location	Name	Features of interest	Habitat description	Data source
-	1610m SE	River Wye / Afon Gwy (Wales)	Estuaries; Intertidal mudflats and sandflats; Atlantic salt meadows; Rivers with floating vegetation often dominated by water-crowfoot; Dry heaths; Very wet mires often identified by an unstable `quaking` surface; Caves not open to the public; Mixed woodland on base-rich soils associated with rocky slopes; Western acidic oak woodland; Bog woodland; Alder woodland on floodplains; Sea lamprey; Brook lamprey; River lamprey; Allis shad; Twaite shad; Atlantic salmon; Bullhead; Freshwater pearl mussel; White-clawed (or Atlantic stream) crayfish; Lesser horseshoe bat; Greater horseshoe bat; Otter.	Improved grassland; Salt marshes, Salt pastures, Salt steppes; Heath, Scrub, Maquis and Garrigue, Phygrana; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Dry grassland, Steppes; Inland rocks, Scree, Sands, Permanent Snow and ice; Humid grassland, Mesophile grassland; Inland water bodies (Standing water, Running water); Broad-leaved deciduous woodland; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Bogs, Marshes, Water fringed vegetation, Fens	Natural Resources Wales

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0
-----------------------------	----------

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	1
-----------------------------	----------

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

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

ID	Location	Name	Data source
B	703m SW	CORS Y LLYN	Natural Resources Wales

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



10.6 Local Nature Reserves (LNR)

Records within 2000m

0

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

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

10.7 Designated Ancient Woodland

Records within 2000m

114

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

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

ID	Location	Name	Woodland Type
A	434m N	Unknown	Restored Ancient Woodland Site
A	437m N	Unknown	Restored Ancient Woodland Site
1	481m NW	Unknown	Ancient Semi Natural Woodland
2	497m W	Unknown	Ancient Semi Natural Woodland
3	618m N	Unknown	Ancient Semi Natural Woodland
4	751m N	Unknown	Ancient Semi Natural Woodland
5	754m SE	Unknown	Ancient Woodland Site of Unknown Category
C	764m SE	Unknown	Ancient Woodland Site of Unknown Category
C	816m SE	Unknown	Ancient Woodland Site of Unknown Category
7	852m NE	Unknown	Ancient Semi Natural Woodland
8	861m SE	Unknown	Ancient Semi Natural Woodland
D	911m SE	Unknown	Ancient Semi Natural Woodland
D	947m SE	Unknown	Ancient Semi Natural Woodland
E	982m NE	Unknown	Plantation on Ancient Woodland Site
9	989m N	Unknown	Ancient Semi Natural Woodland
E	991m NE	Unknown	Plantation on Ancient Woodland Site



ID	Location	Name	Woodland Type
10	1005m S	Unknown	Ancient Woodland Site of Unknown Category
11	1019m W	Unknown	Ancient Semi Natural Woodland
E	1030m E	Unknown	Plantation on Ancient Woodland Site
12	1049m W	Unknown	Ancient Semi Natural Woodland
E	1064m NE	Unknown	Plantation on Ancient Woodland Site
F	1076m N	Unknown	Ancient Semi Natural Woodland
15	1105m NW	Unknown	Restored Ancient Woodland Site
F	1131m NE	Unknown	Ancient Semi Natural Woodland
F	1140m N	Unknown	Ancient Semi Natural Woodland
G	1146m SE	Unknown	Ancient Semi Natural Woodland
G	1147m SE	Unknown	Ancient Semi Natural Woodland
17	1162m NW	Unknown	Restored Ancient Woodland Site
H	1166m SE	Unknown	Plantation on Ancient Woodland Site
18	1192m NE	Unknown	Ancient Semi Natural Woodland
19	1228m NE	Unknown	Ancient Semi Natural Woodland
H	1266m SE	Unknown	Plantation on Ancient Woodland Site
20	1290m NW	Unknown	Restored Ancient Woodland Site
21	1331m SE	Unknown	Ancient Semi Natural Woodland
I	1350m SE	Unknown	Ancient Semi Natural Woodland
-	1362m W	Unknown	Ancient Semi Natural Woodland
22	1363m NE	Unknown	Ancient Semi Natural Woodland
-	1381m N	Unknown	Ancient Semi Natural Woodland
-	1397m S	Unknown	Ancient Semi Natural Woodland
I	1398m SE	Unknown	Ancient Semi Natural Woodland
H	1400m SE	Unknown	Ancient Semi Natural Woodland
H	1402m SE	Unknown	Plantation on Ancient Woodland Site
-	1412m W	Unknown	Ancient Semi Natural Woodland
-	1417m W	Unknown	Ancient Semi Natural Woodland

ID	Location	Name	Woodland Type
-	1440m NE	Unknown	Ancient Semi Natural Woodland
H	1454m SE	Unknown	Ancient Semi Natural Woodland
-	1458m S	Unknown	Ancient Semi Natural Woodland
L	1458m SE	Unknown	Plantation on Ancient Woodland Site
-	1459m W	Unknown	Ancient Semi Natural Woodland
H	1463m SE	Unknown	Ancient Semi Natural Woodland
-	1464m W	Unknown	Ancient Semi Natural Woodland
-	1473m SE	Unknown	Plantation on Ancient Woodland Site
I	1481m SE	Unknown	Plantation on Ancient Woodland Site
-	1482m SW	Unknown	Ancient Semi Natural Woodland
-	1491m SE	Unknown	Ancient Semi Natural Woodland
-	1494m W	Unknown	Plantation on Ancient Woodland Site
-	1496m S	Unknown	Ancient Semi Natural Woodland
H	1508m SE	Unknown	Ancient Semi Natural Woodland
-	1512m W	Unknown	Ancient Semi Natural Woodland
-	1518m W	Unknown	Ancient Semi Natural Woodland
-	1522m S	Unknown	Plantation on Ancient Woodland Site
-	1524m SE	Unknown	Plantation on Ancient Woodland Site
-	1549m E	Unknown	Ancient Woodland Site of Unknown Category
-	1555m SE	Unknown	Ancient Semi Natural Woodland
-	1565m SE	Unknown	Plantation on Ancient Woodland Site
-	1575m SE	Unknown	Plantation on Ancient Woodland Site
-	1578m N	Unknown	Ancient Semi Natural Woodland
-	1588m SW	Unknown	Ancient Semi Natural Woodland
-	1598m N	Unknown	Ancient Semi Natural Woodland
-	1610m N	Unknown	Ancient Semi Natural Woodland
-	1616m NE	Unknown	Ancient Semi Natural Woodland
-	1630m E	Unknown	Ancient Semi Natural Woodland

ID	Location	Name	Woodland Type
-	1633m E	Unknown	Restored Ancient Woodland Site
-	1638m S	Unknown	Plantation on Ancient Woodland Site
-	1639m NE	Unknown	Ancient Semi Natural Woodland
-	1649m E	Unknown	Ancient Woodland Site of Unknown Category
-	1652m S	Unknown	Ancient Semi Natural Woodland
-	1654m SW	Unknown	Plantation on Ancient Woodland Site
-	1658m NE	Unknown	Ancient Semi Natural Woodland
-	1658m SE	Unknown	Ancient Semi Natural Woodland
-	1681m N	Unknown	Restored Ancient Woodland Site
-	1684m N	Unknown	Restored Ancient Woodland Site
-	1691m E	Unknown	Plantation on Ancient Woodland Site
-	1715m N	Unknown	Ancient Semi Natural Woodland
-	1719m W	Unknown	Plantation on Ancient Woodland Site
-	1753m NE	Unknown	Ancient Semi Natural Woodland
-	1754m SW	Unknown	Ancient Semi Natural Woodland
-	1801m SE	Unknown	Plantation on Ancient Woodland Site
-	1803m N	Unknown	Restored Ancient Woodland Site
-	1830m NE	Unknown	Ancient Semi Natural Woodland
-	1869m SE	Unknown	Ancient Semi Natural Woodland
-	1870m NW	Unknown	Ancient Semi Natural Woodland
-	1871m SE	Unknown	Ancient Semi Natural Woodland
-	1876m NE	Unknown	Plantation on Ancient Woodland Site
-	1879m N	Unknown	Restored Ancient Woodland Site
-	1884m E	Unknown	Ancient Semi Natural Woodland
-	1885m NW	Unknown	Restored Ancient Woodland Site
-	1897m E	Unknown	Plantation on Ancient Woodland Site
-	1910m SE	Unknown	Ancient Semi Natural Woodland
-	1911m S	Unknown	Plantation on Ancient Woodland Site

ID	Location	Name	Woodland Type
-	1912m SE	Unknown	Restored Ancient Woodland Site
-	1915m NE	Unknown	Ancient Semi Natural Woodland
-	1916m NW	Unknown	Restored Ancient Woodland Site
-	1917m W	Unknown	Restored Ancient Woodland Site
-	1941m NE	Unknown	Ancient Semi Natural Woodland
-	1944m NE	Unknown	Ancient Woodland Site of Unknown Category
-	1946m E	Unknown	Plantation on Ancient Woodland Site
-	1953m NE	Unknown	Ancient Semi Natural Woodland
-	1957m E	Unknown	Plantation on Ancient Woodland Site
-	1972m E	Unknown	Ancient Semi Natural Woodland
-	1972m SE	Unknown	Plantation on Ancient Woodland Site
-	1973m W	Unknown	Ancient Semi Natural Woodland
-	1986m SE	Unknown	Ancient Semi Natural Woodland
-	1993m W	Unknown	Plantation on Ancient Woodland Site

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

10.8 Biosphere Reserves

Records within 2000m

0

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

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

10.9 Forest Parks

Records within 2000m

0

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

This data is sourced from the Forestry Commission.



10.10 Marine Conservation Zones

Records within 2000m

0

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

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

10.11 Green Belt

Records within 2000m

0

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

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.



10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

0

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

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



SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0
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Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0
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Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

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

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

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

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

11.3 National Parks

Records within 250m

0

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

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

11.4 Listed Buildings

Records within 250m

0

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



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

11.5 Conservation Areas

Records within 250m

0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m

0

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

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

11.7 Registered Parks and Gardens

Records within 250m

0

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

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



12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Timber felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m

1

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

Features are displayed on the Agricultural designations map on **page 62**

ID	Location	Classification	Description
1	On site	Grade 3b	Moderate quality agricultural land

This data is sourced from Natural Resources Wales.

12.2 Open Access Land

Records within 250m

0

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

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

12.3 Tree Felling Licences

Records within 250m

0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

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

This data is sourced from Natural England.

13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m

0

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

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

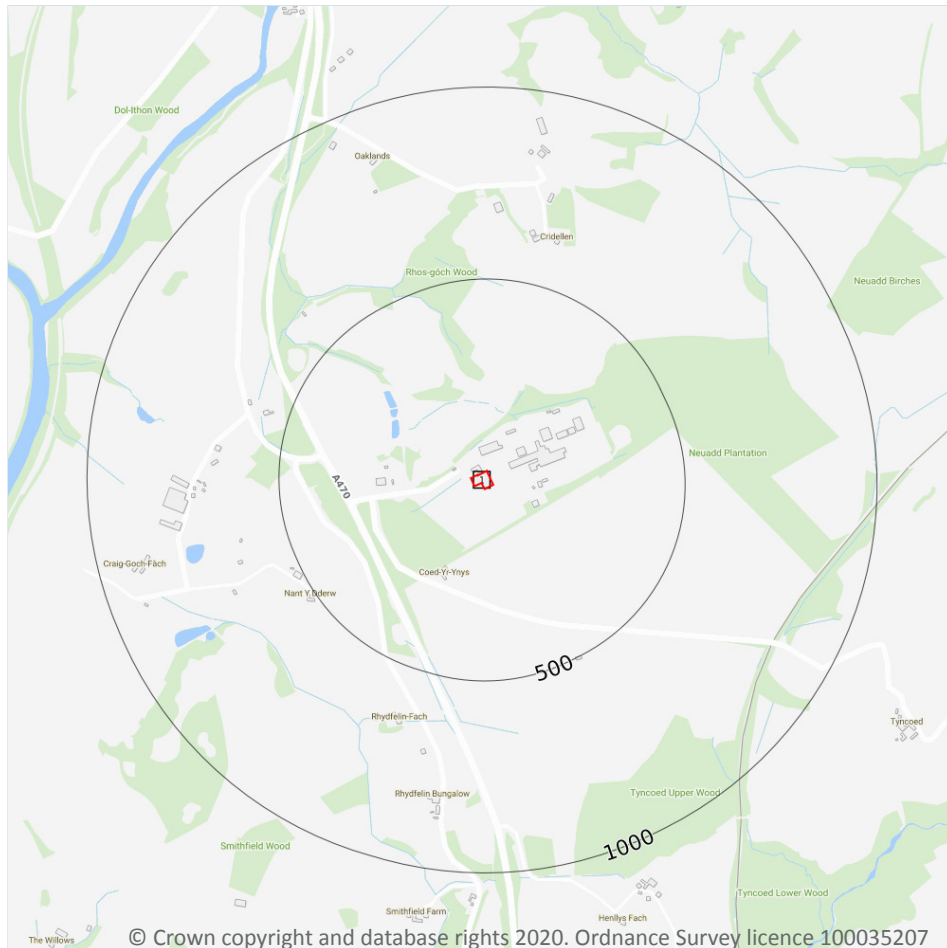
0

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

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

1

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

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 65**

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

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

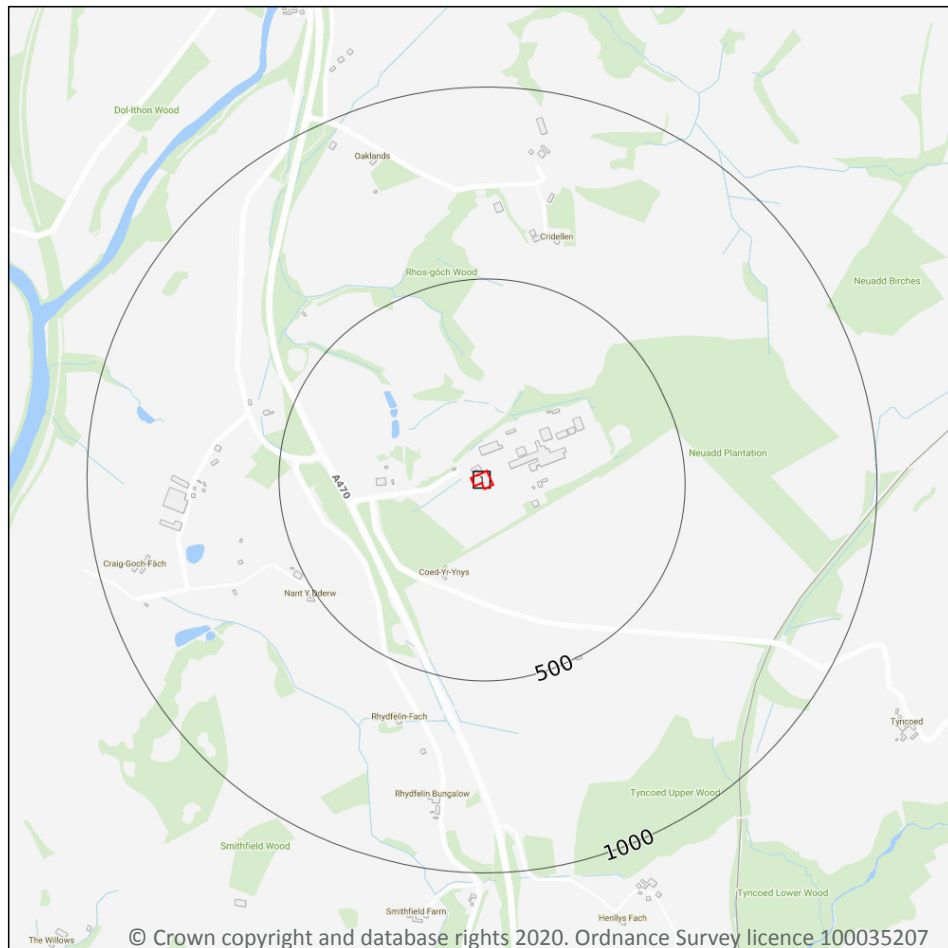
0

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

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 69**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW196_builth_wells_v4

This data is sourced from the British Geological Survey.



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

15.2 Artificial and made ground (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

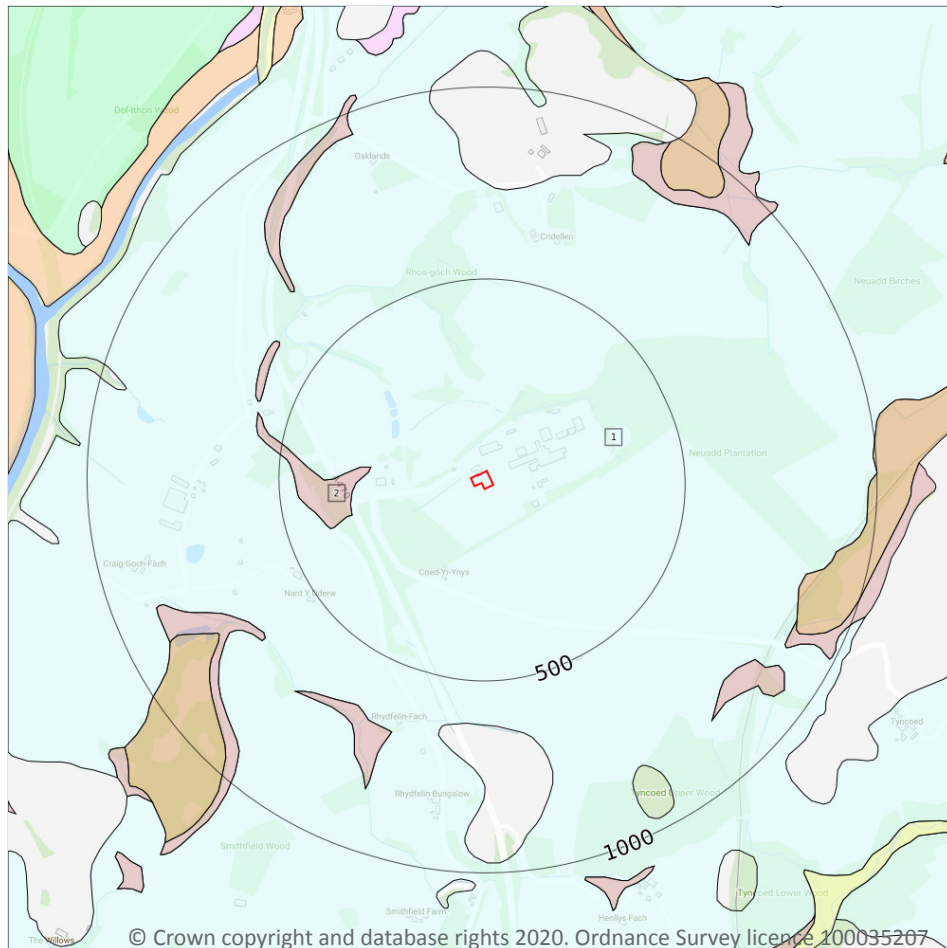
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m

2

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 71**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON
2	262m W	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.



15.5 Superficial permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

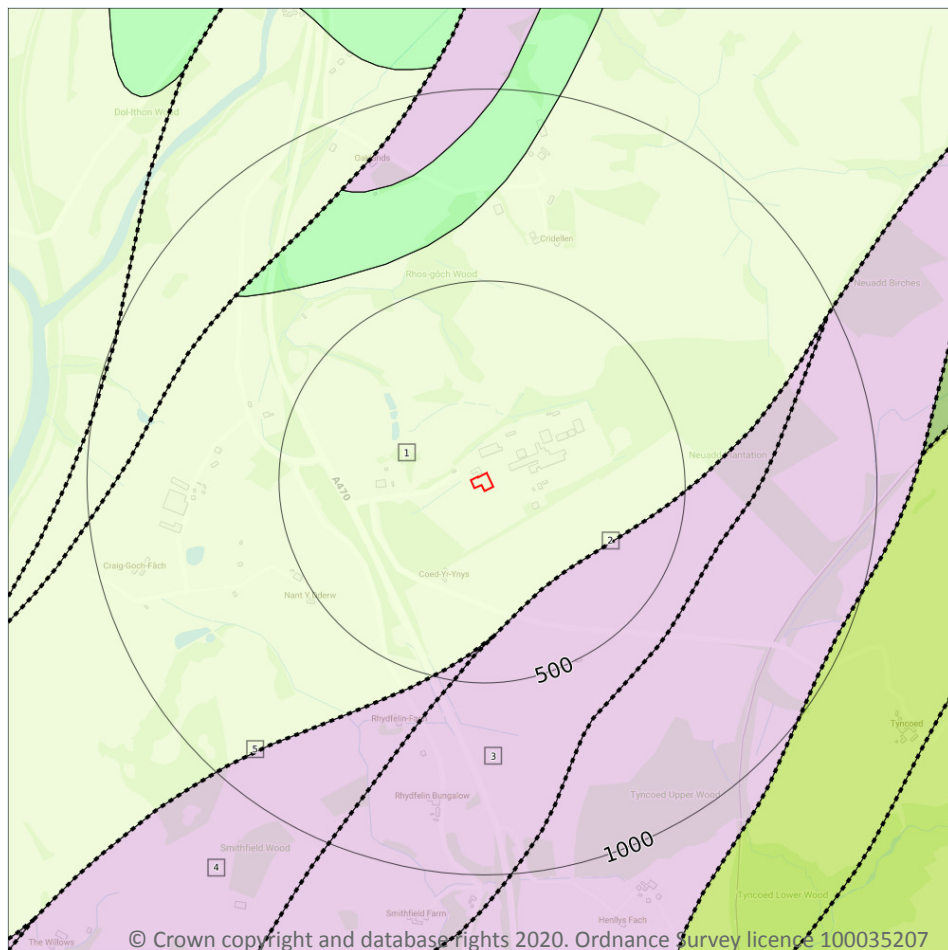
Records within 50m

0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m

3

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 73**

ID	Location	LEX Code	Description	Rock age
1	On site	CER-MBMT	CERIG FORMATION - MUDSTONE, BURROW-MOTTLED	AERONIAN
3	289m SE	BMD-MHLM	BUILTH MUDSTONES FORMATION - MUDSTONE AND LAMINATED HEMIPELAGIC MUDSTONE, INTERBEDDED	-
4	379m S	BMD-MHLM	BUILTH MUDSTONES FORMATION - MUDSTONE AND LAMINATED HEMIPELAGIC MUDSTONE, INTERBEDDED	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

2

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 73**

ID	Location	Category	Description
2	289m SE	FAULT	Fault, inferred, displacement unknown
5	379m S	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.



16 Boreholes

16.1 BGS Boreholes

Records within 250m

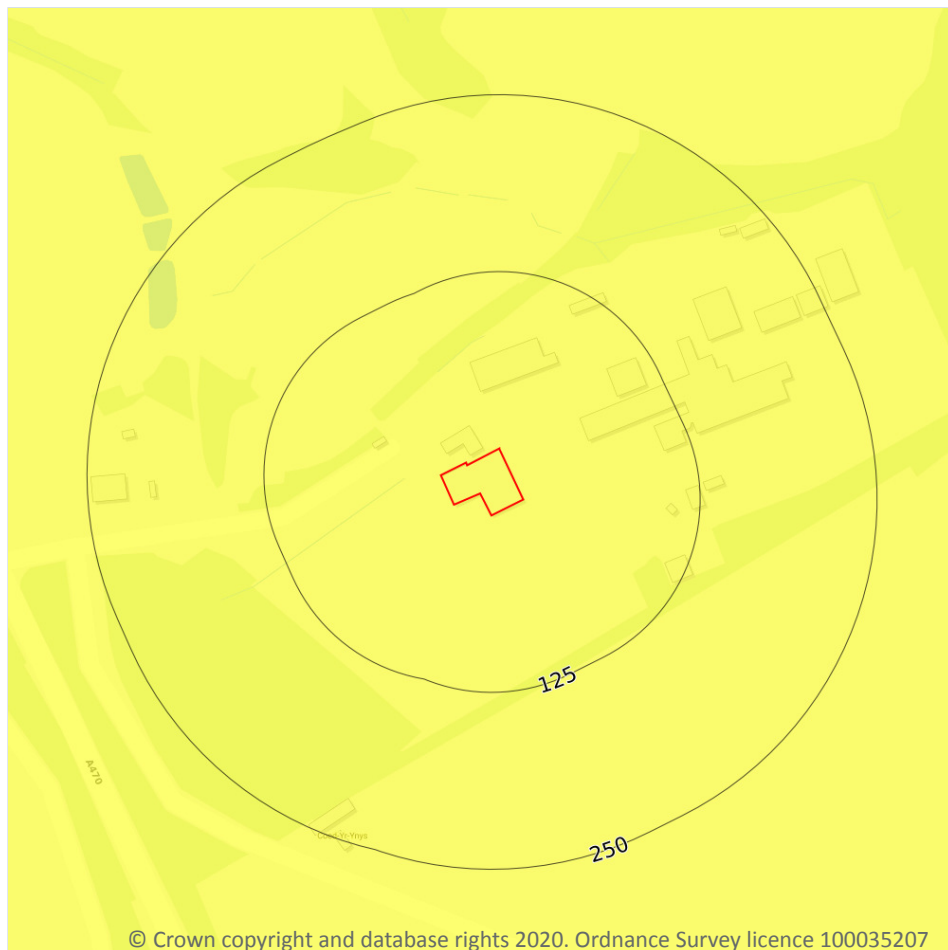
0

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

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.1 Shrink swell clays

Records within 50m

1

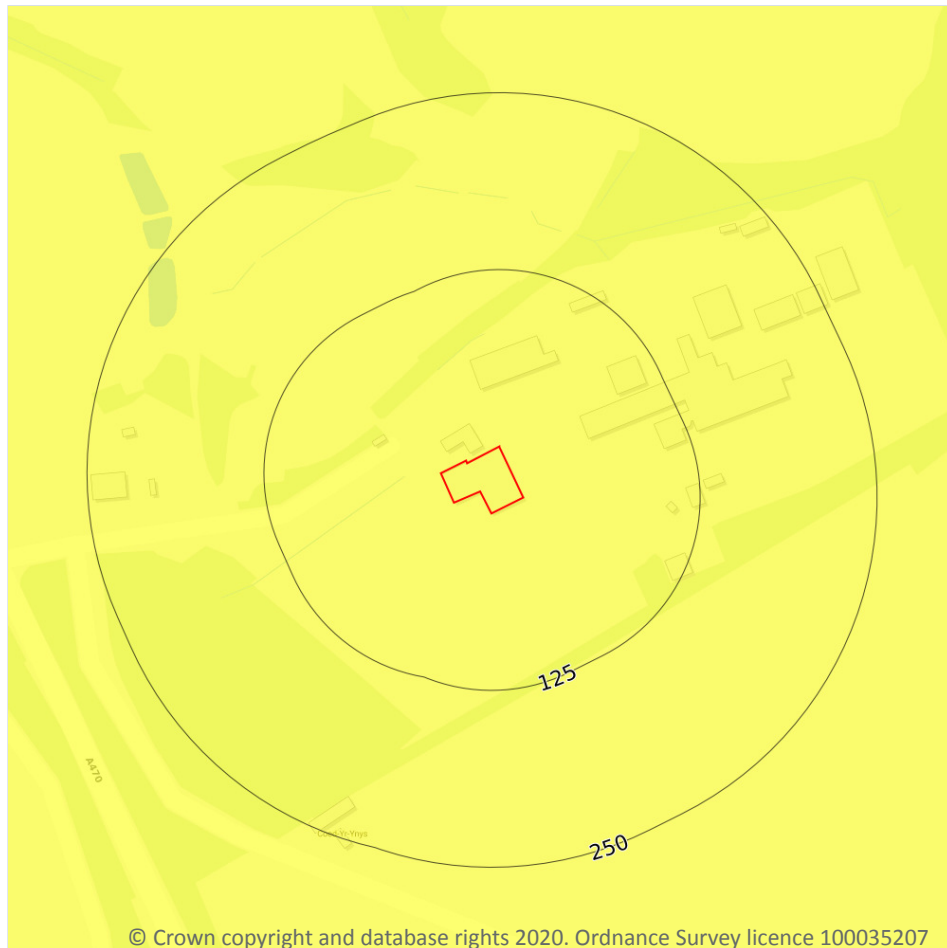
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 76**

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



— Site Outline
Search buffers in metres (m)

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

17.2 Running sands

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Running sands map on **page 77**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.3 Compressible deposits

Records within 50m

1

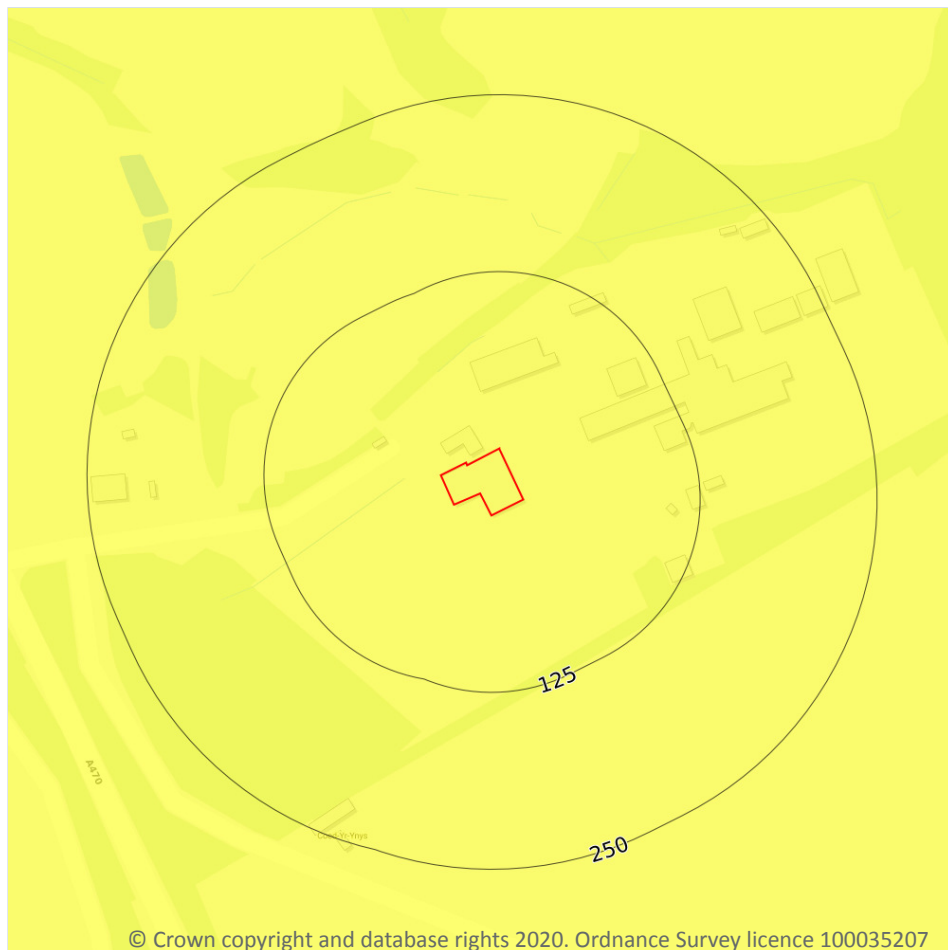
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

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

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

1

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

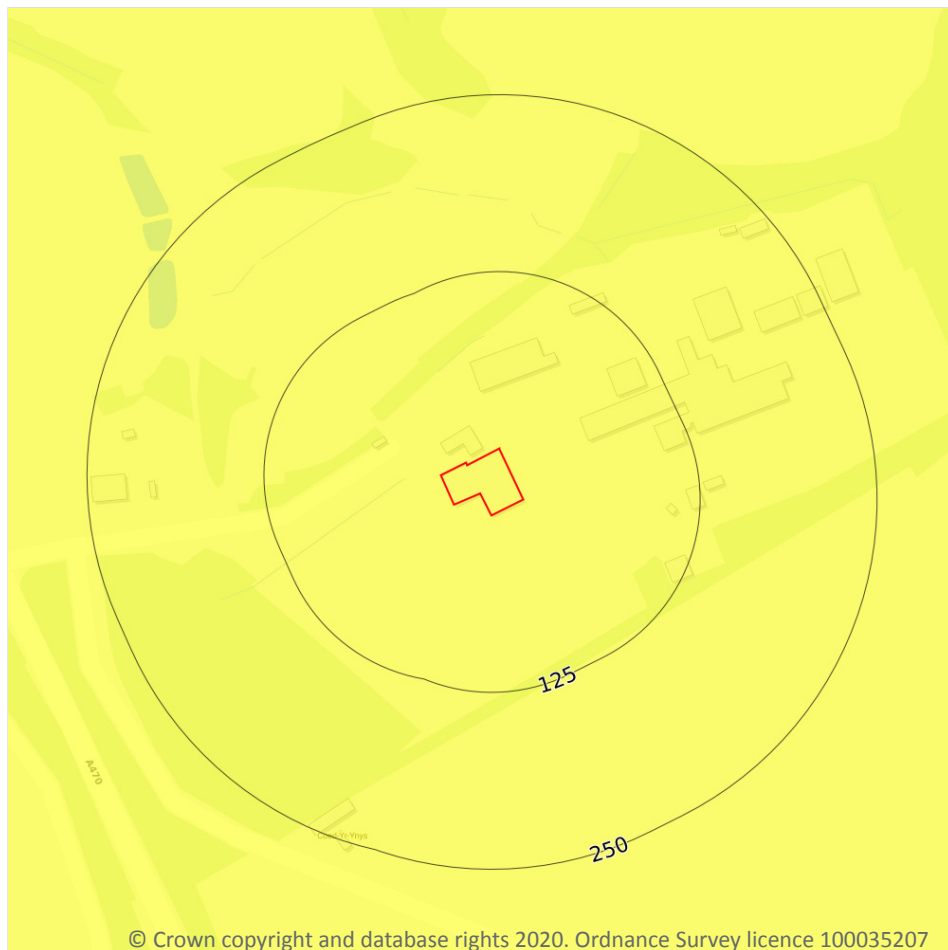
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 79**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

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17.5 Landslides

Records within 50m

1

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

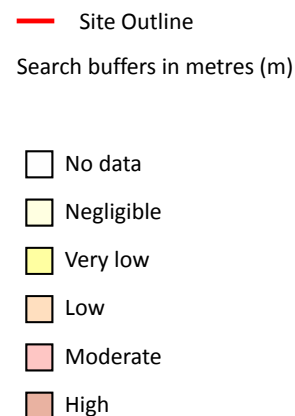
Features are displayed on the Natural ground subsidence - Landslides map on **page 80**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

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

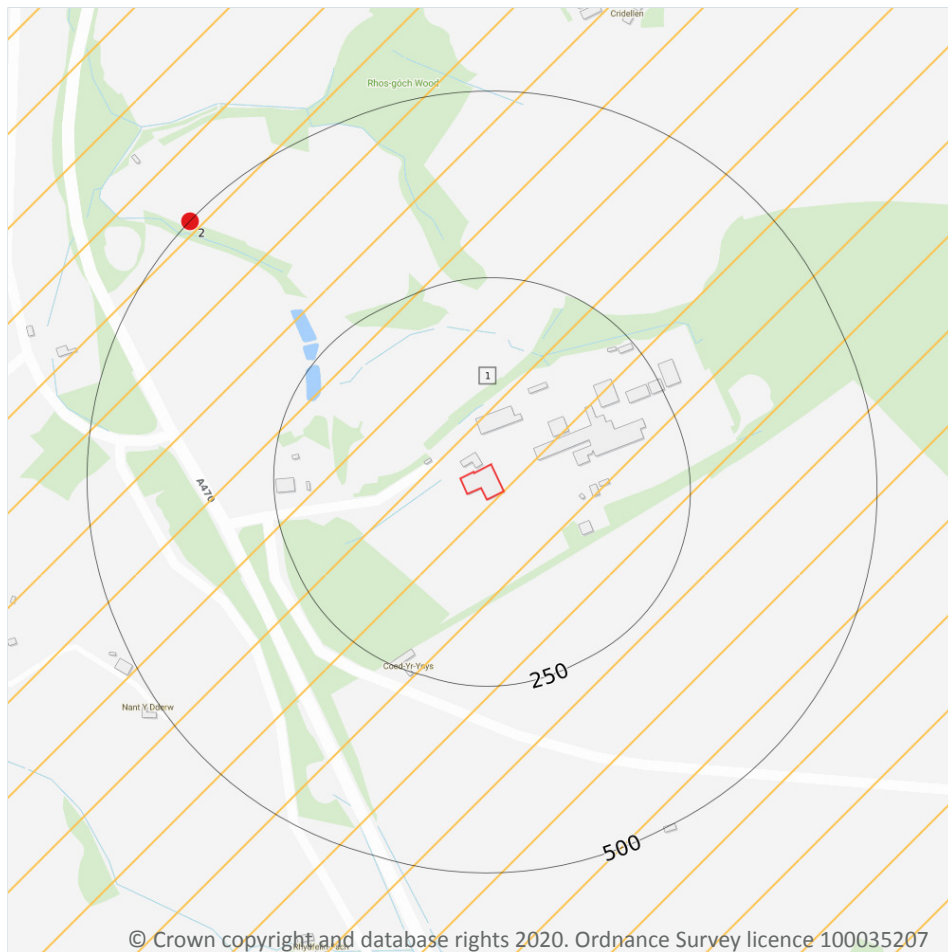
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 81**

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

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m

0

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

This data is sourced from Peter Brett Associates (PBA).

18.2 BritPits

Records within 500m

1

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 82**

ID	Location	Details	Description
2	499m NW	Name: Green Acres Address: Newbridge on Wye, LLANDRINDOD WELLS, Powys Commodity: Slate Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Type: Ceased Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

0

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

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m

0

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

This data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

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

This data is sourced from the British Geological Survey.



18.6 Non-coal mining

Records within 1000m

2

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 82**

ID	Location	Name	Commodity	Class	Likelihood
1	On site	Berwyn Hills	Vein Mineral	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
-	943m S	Berwyn Hills	Vein Mineral	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m

0

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

This data is sourced from Peter Brett Associates (PBA).

18.8 JPB mining areas

Records on site

0

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

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	0
-----------------	---

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

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0
-----------------	---

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

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

18.11 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

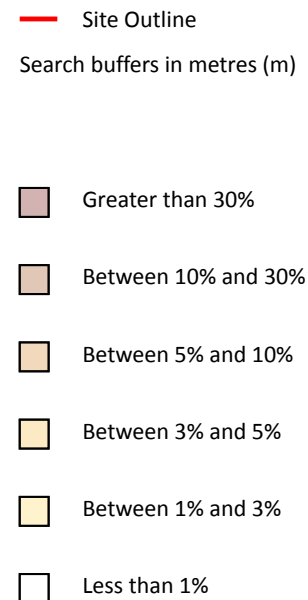
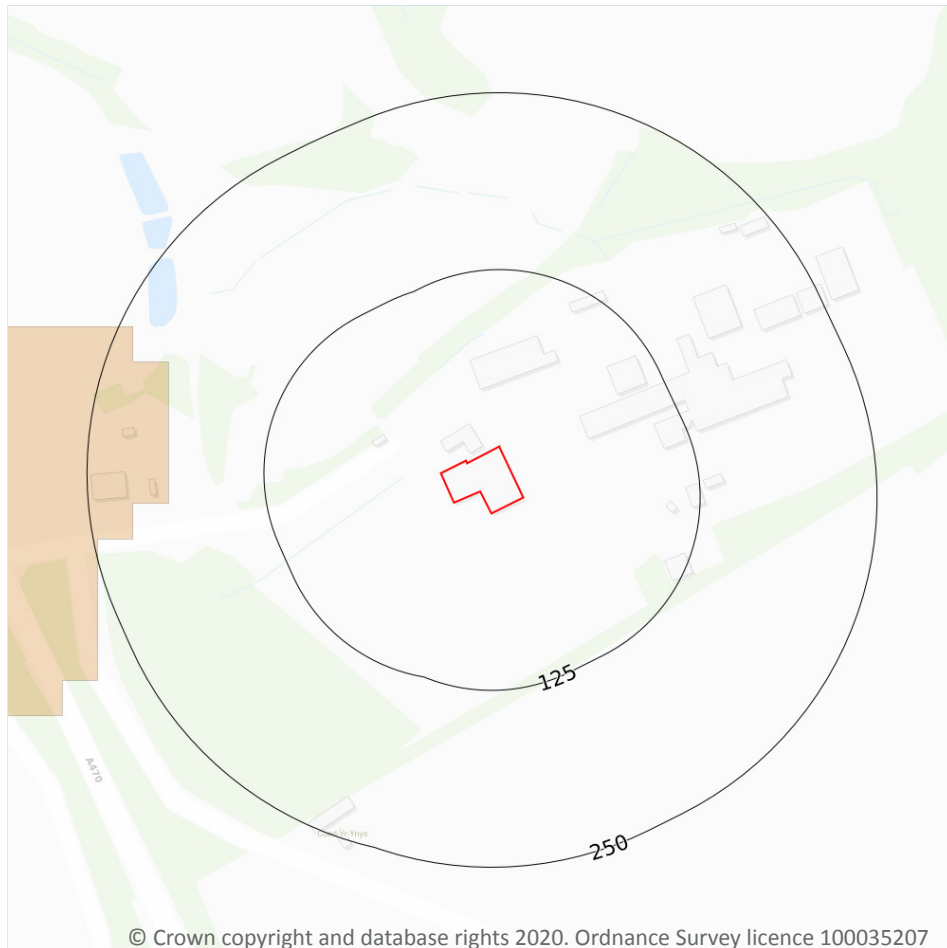
18.13 Clay mining

Records on site	0
-----------------	---

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

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

19 Radon



19.1 Radon

Records on site

1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 86**

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

This data is sourced from the British Geological Survey and Public Health England.



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

3

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

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

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



21 Railway infrastructure and projects

21.1 Underground railways (London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m

0

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

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m

0

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



This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m	0
---------------------	---

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

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	0
---------------------	---

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

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	0
---------------------	---

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

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	0
---------------------	---

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	0
---------------------	---

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

This data is sourced from HS2 Ltd.



Data providers

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

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APPENDIX B

OUNDSURE HISTORICAL ORDANANCE SURVEY MAPS

Site Details:

B S W SAWMILLS LTD,
NEWBRIDGE SAW MILL,
NEWBRIDGE-ON-WYE, BUILTH
WELLS, LD2 3RU

Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: County Series

Map date: 1905

Scale: 1:10,560

Printed at: 1:10,560



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

Surveyed 1887
Revised 1902
Edition 1905
Copyright N/A
Levelled N/A

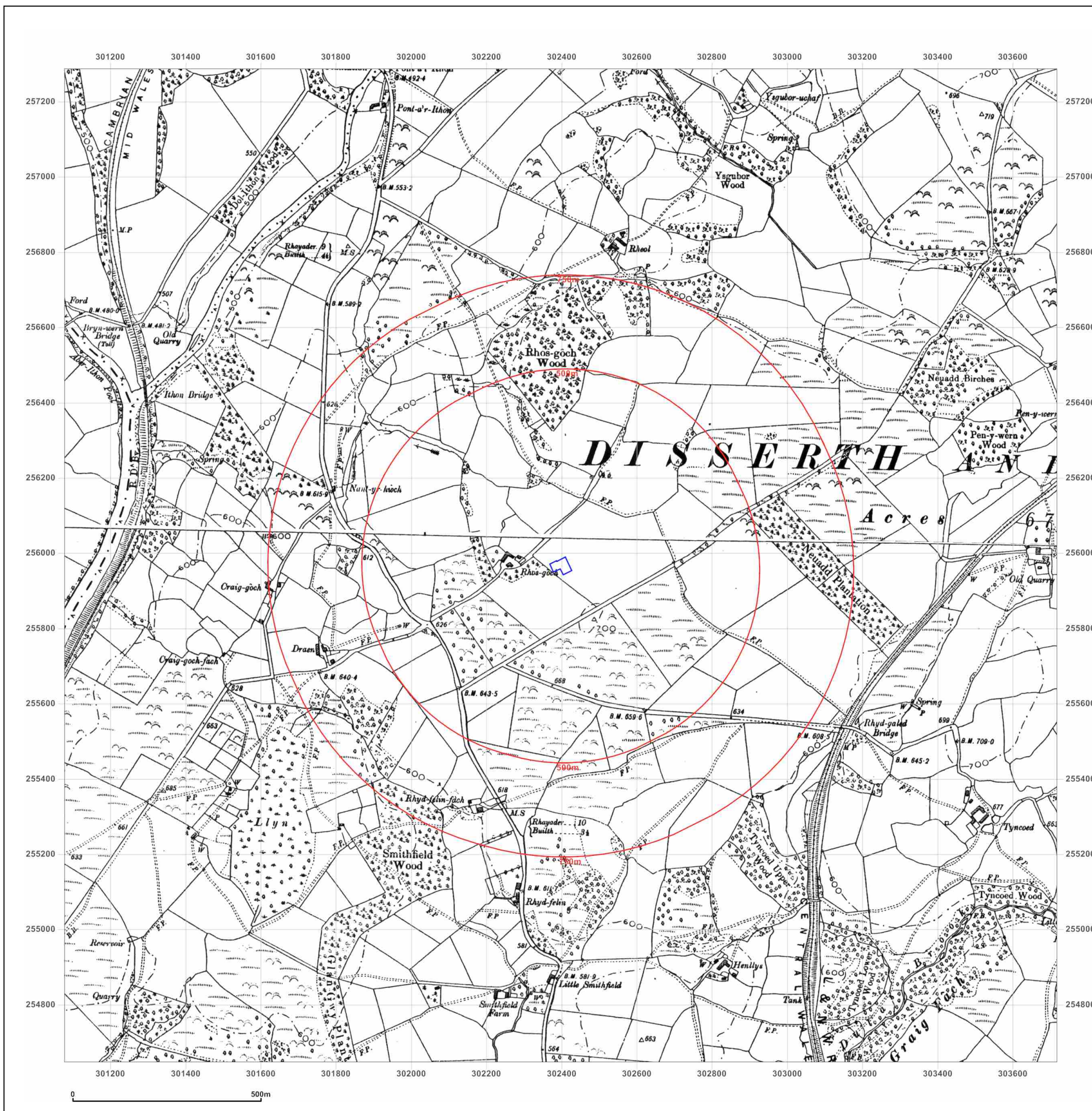


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Production date: 04 August 2020

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



Site Details:

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NEWBRIDGE-ON-WYE, BUILTH
WELLS, LD2 3RU

Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: County Series

Map date: 1905

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1888
Revised 1905
Edition 1905
Copyright N/A
Levelled N/A

Surveyed 1887
Revised 1905
Edition 1905
Copyright N/A
Levelled N/A

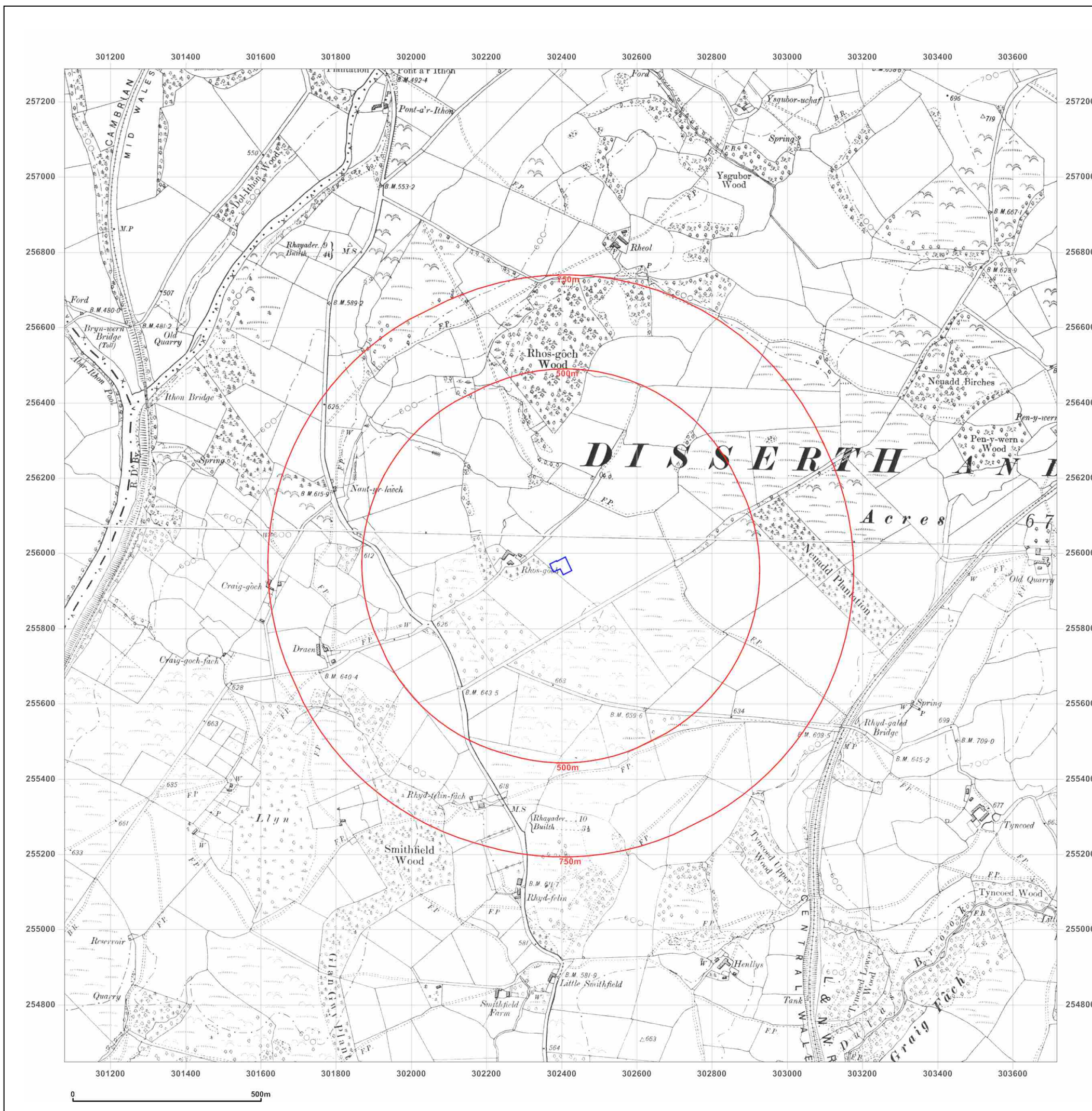


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NEWBRIDGE-ON-WYE, BUILTH
WELLS, LD2 3RU

Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: County Series

Map date: 1948

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1888
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1887
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A

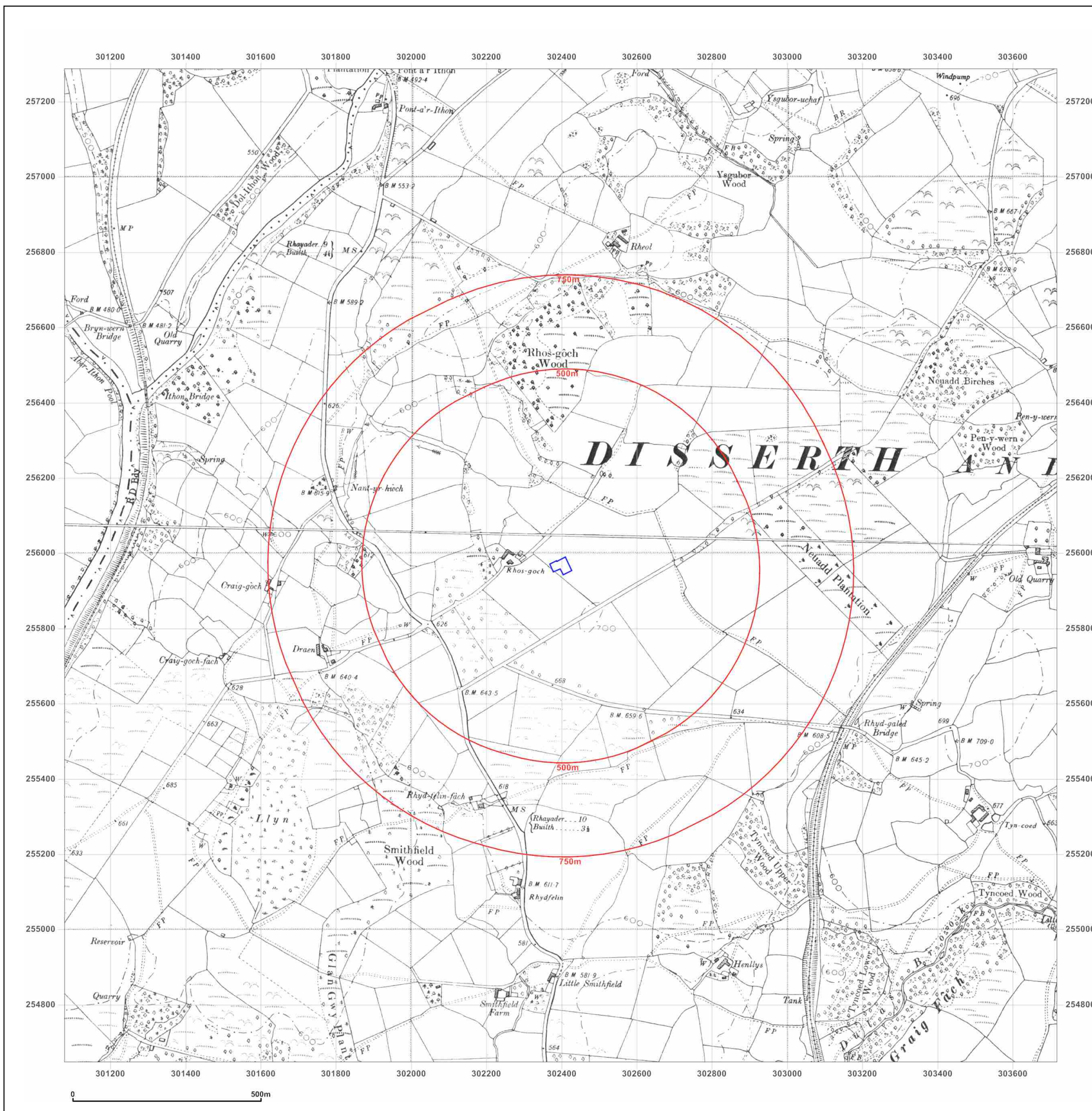


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WELLS, LD2 3RU

Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: Provisional

Map date: 1948

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1948
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A

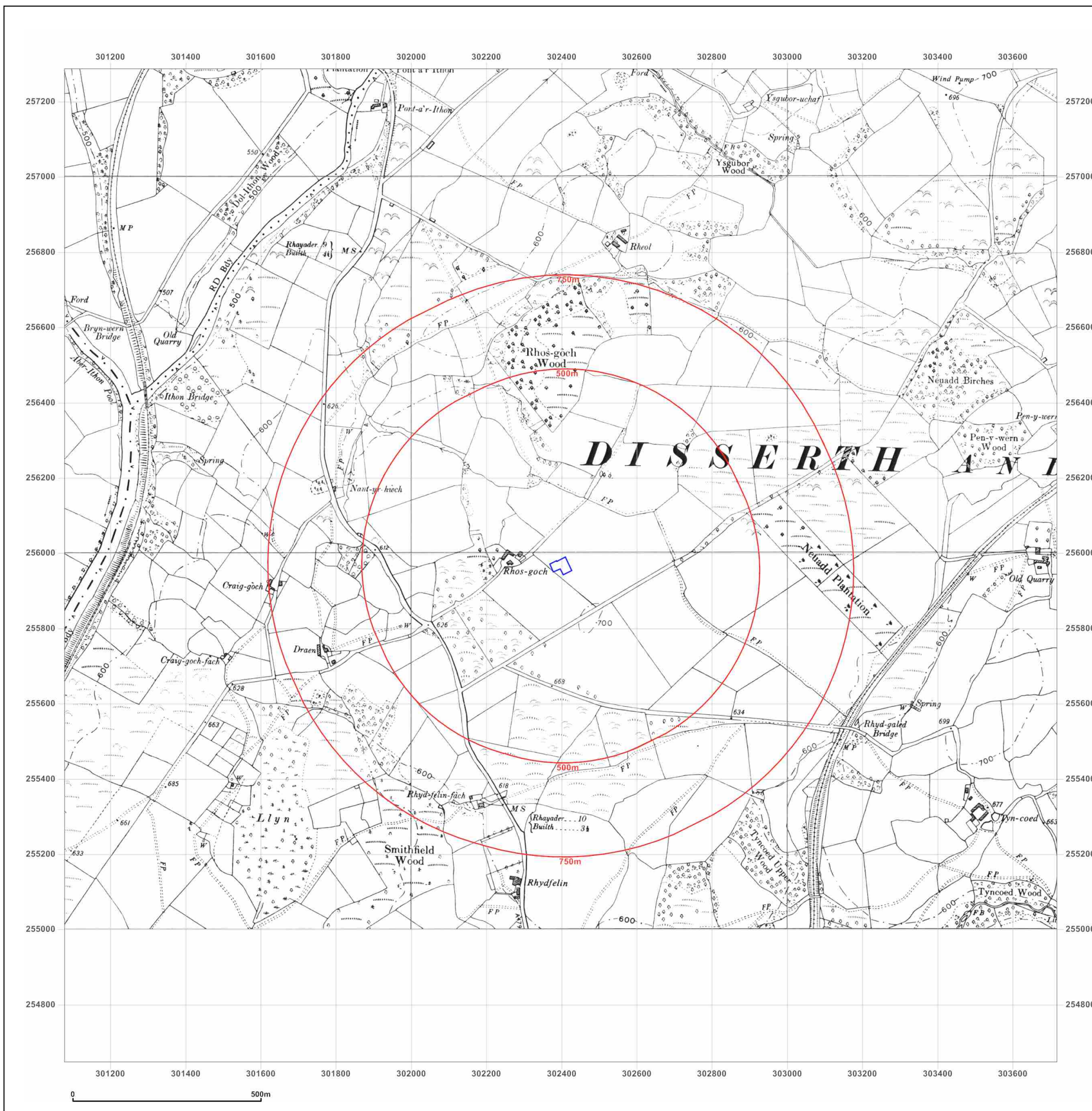


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NEWBRIDGE-ON-WYE, BUILTH
WELLS, LD2 3RU

Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: National Grid

Map date: 1977-1980

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1973
Revised 1977
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1973
Revised 1979
Edition N/A
Copyright 1980
Levelled 1975

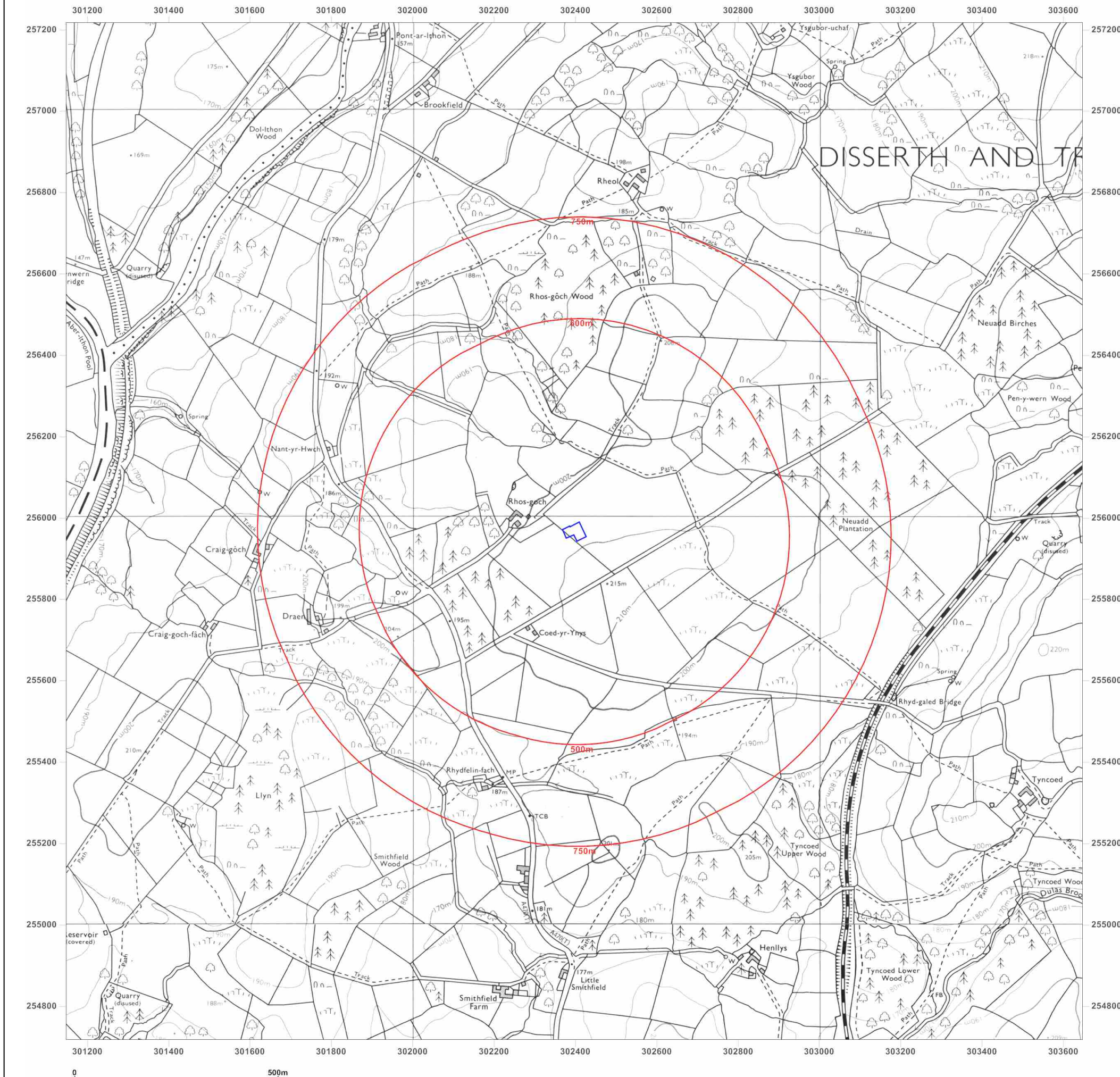


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Site Details:

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NEWBRIDGE-ON-WYE, BUILTH
WELLS, LD2 3RU

Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000



2001

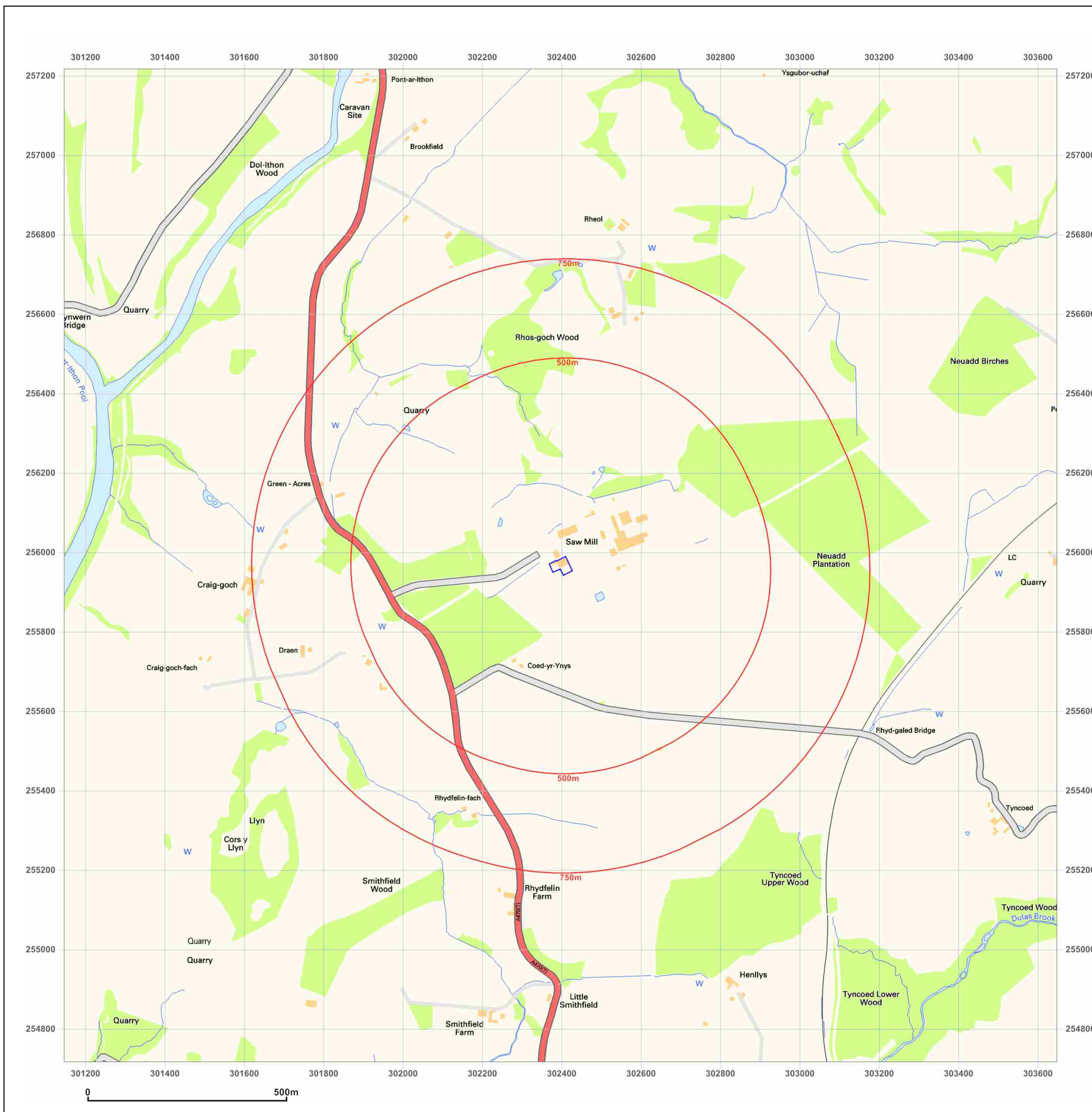


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Site Details:

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NEWBRIDGE SAW MILL,
NEWBRIDGE-ON-WYE, BUILTH
WELLS, LD2 3RU

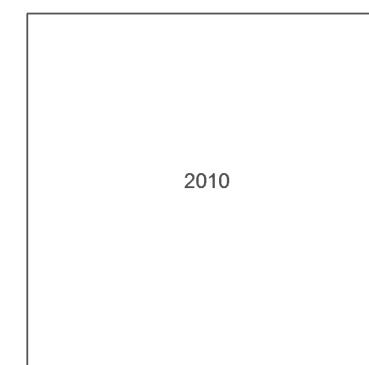
Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

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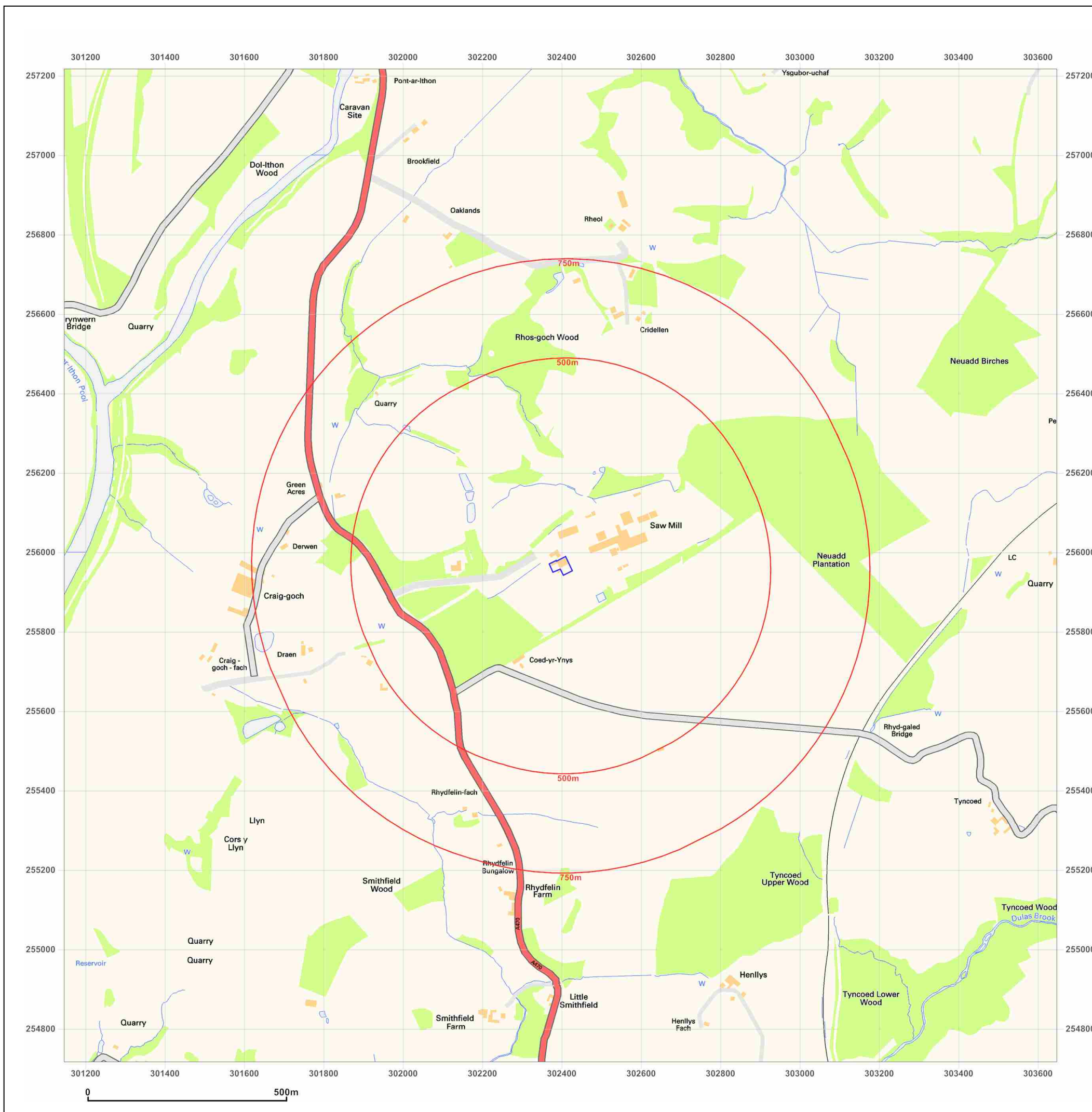


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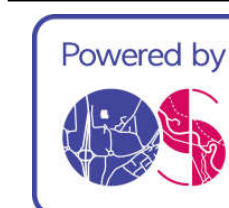
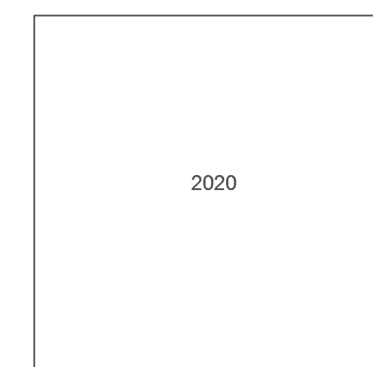
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Grid Ref: 302397, 255967

Map Name: National Grid

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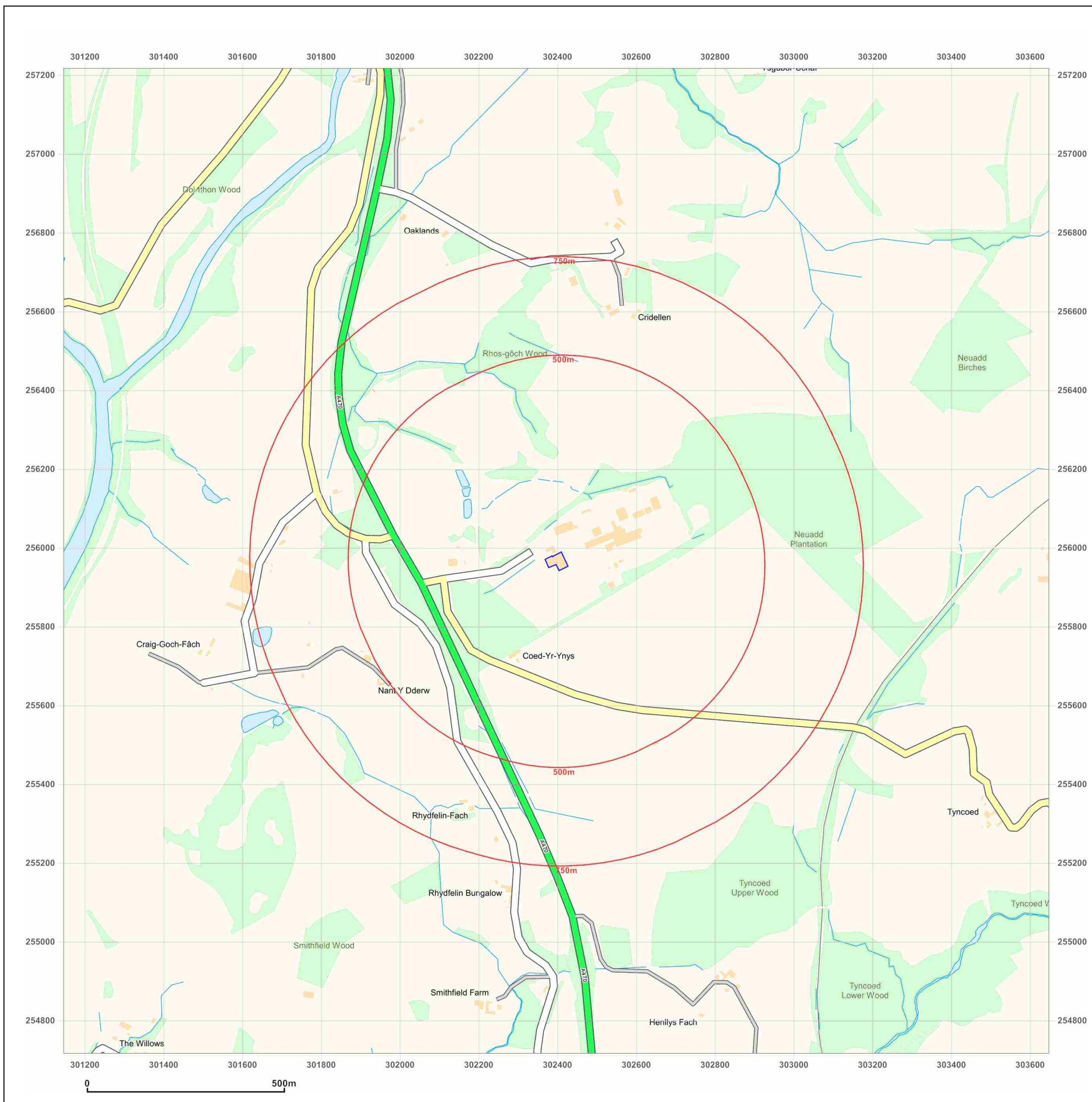


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Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: County Series

Map date: 1889

Scale: 1:2,500

Printed at: 1:2,500



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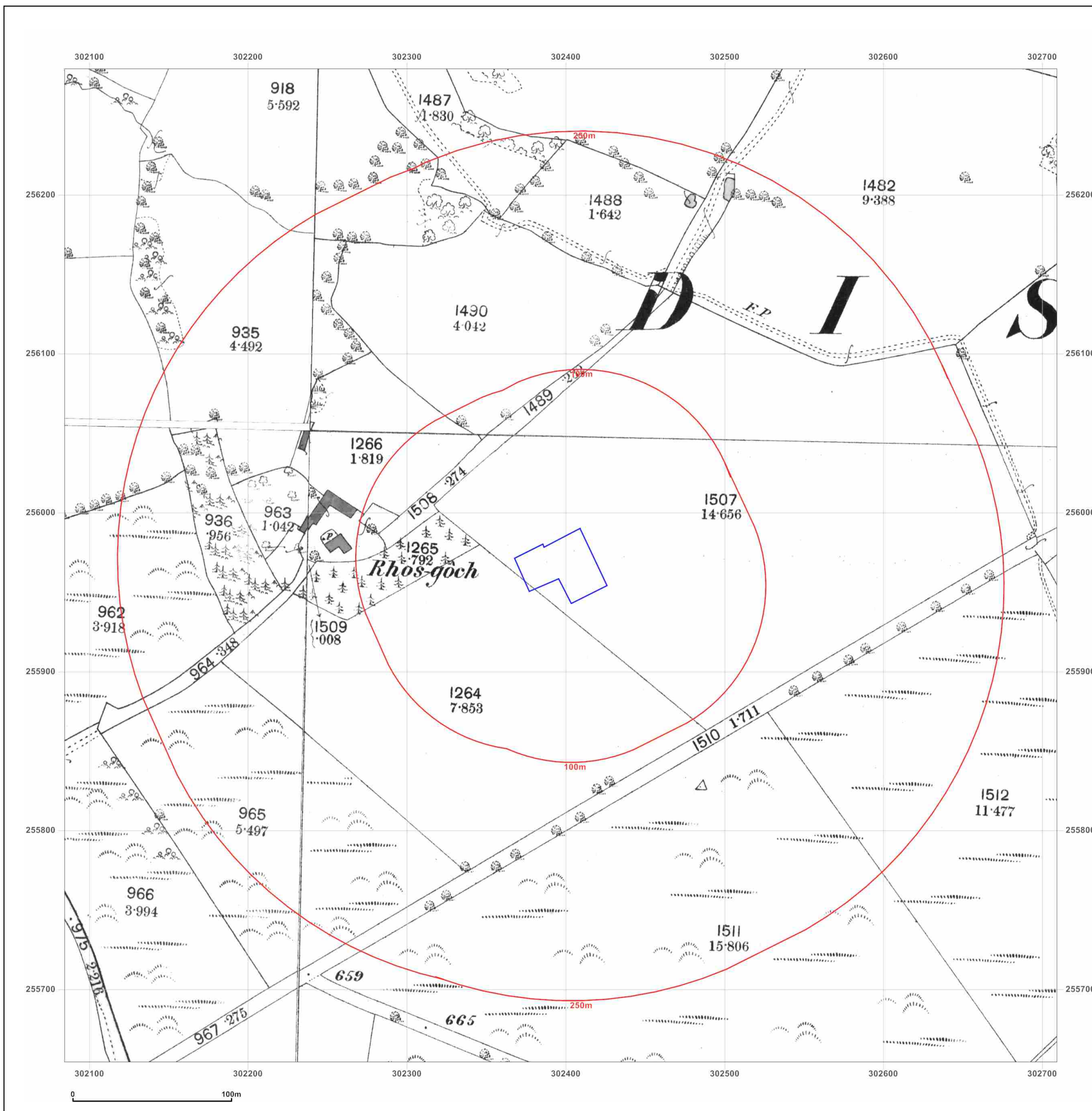


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Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: County Series

Map date: 1904

Scale: 1:2,500

Printed at: 1:2,500



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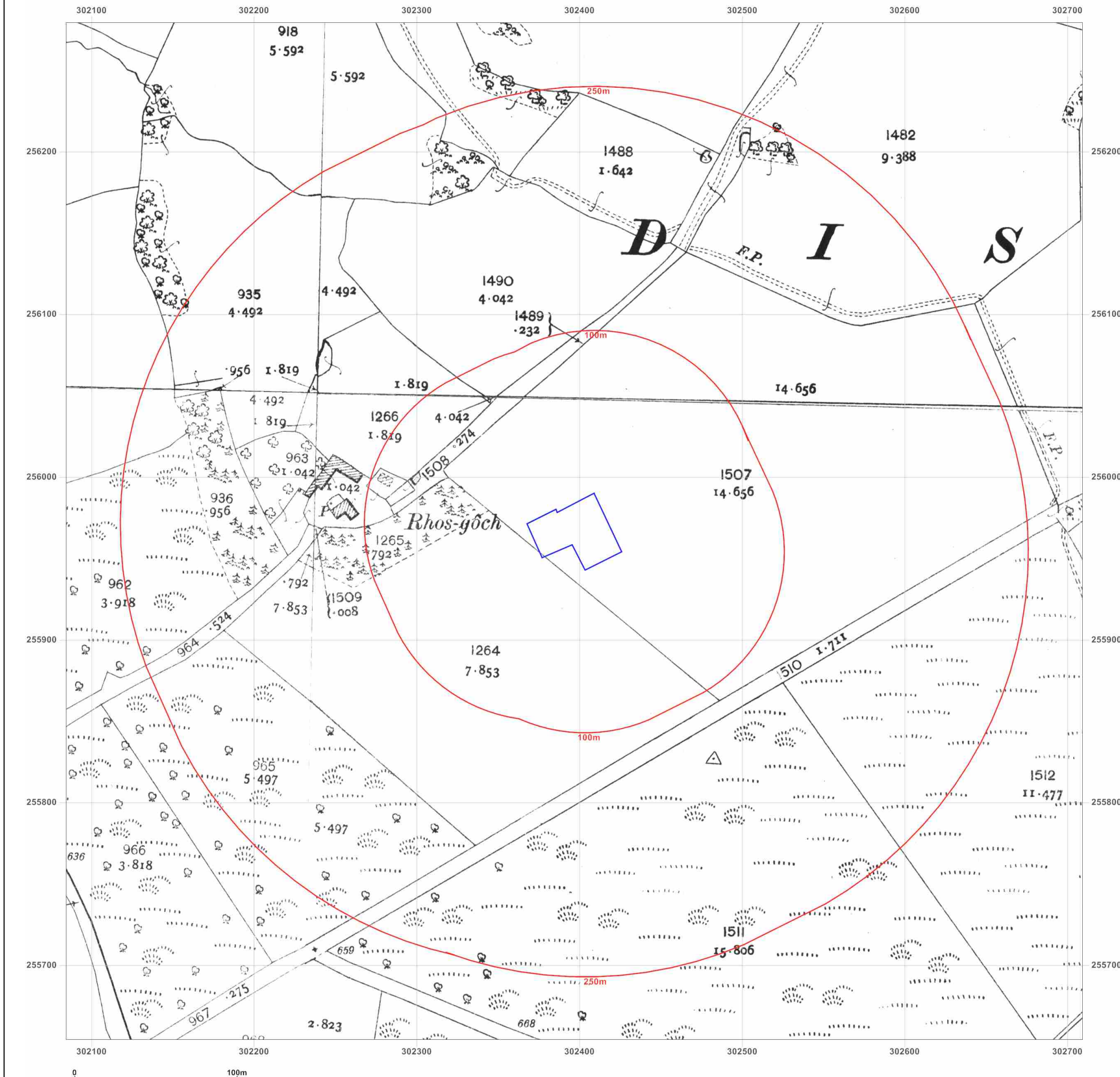


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Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: National Grid

Map date: 1972

Scale: 1:2,500

Printed at: 1:2,500



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Levelled 1952

Surveyed 1972
Revised 1972
Edition N/A
Copyright 1974
Levelled 1971

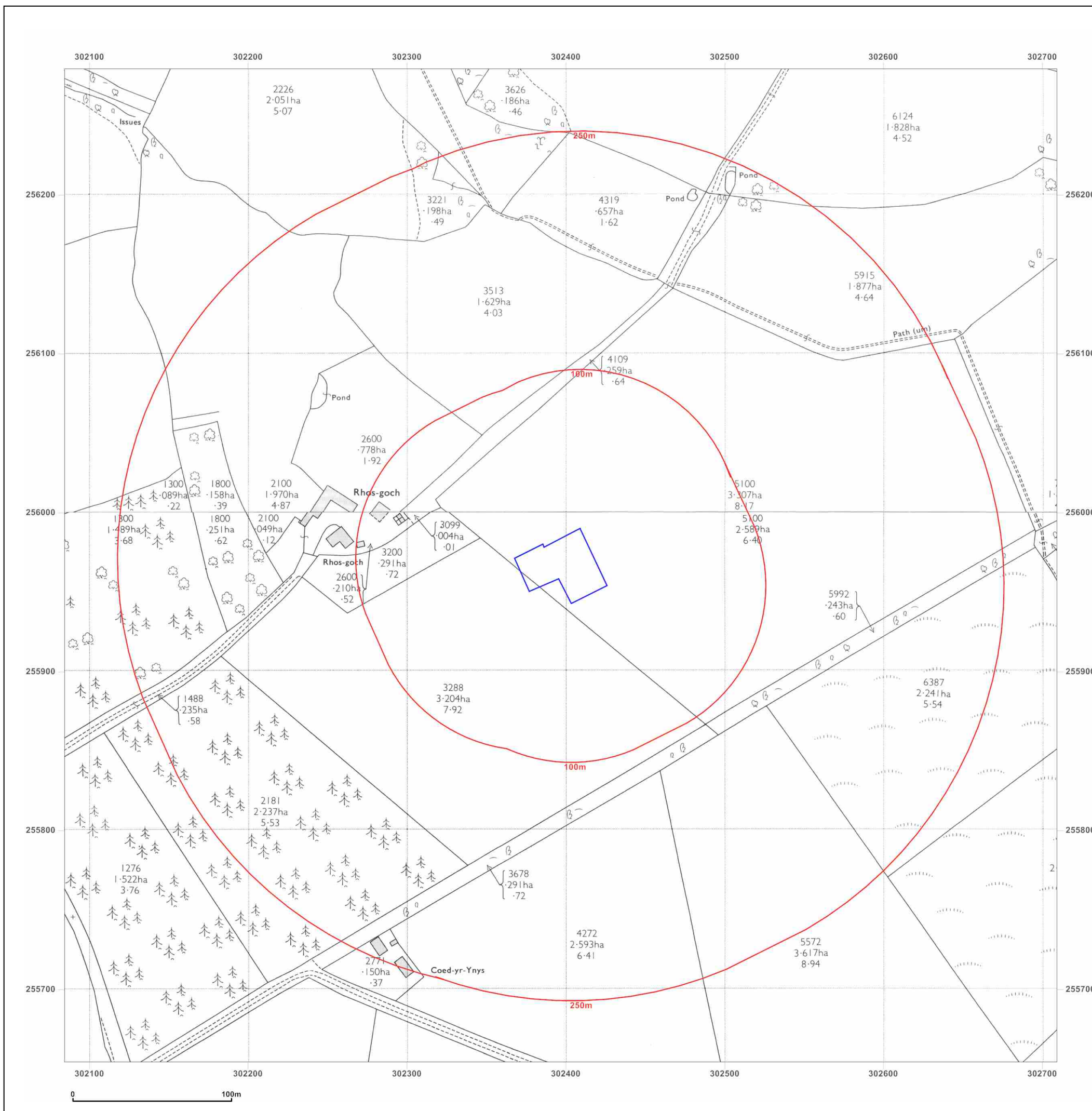


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Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: National Grid

Map date: 1973-1974

Scale: 1:2,500

Printed at: 1:2,500



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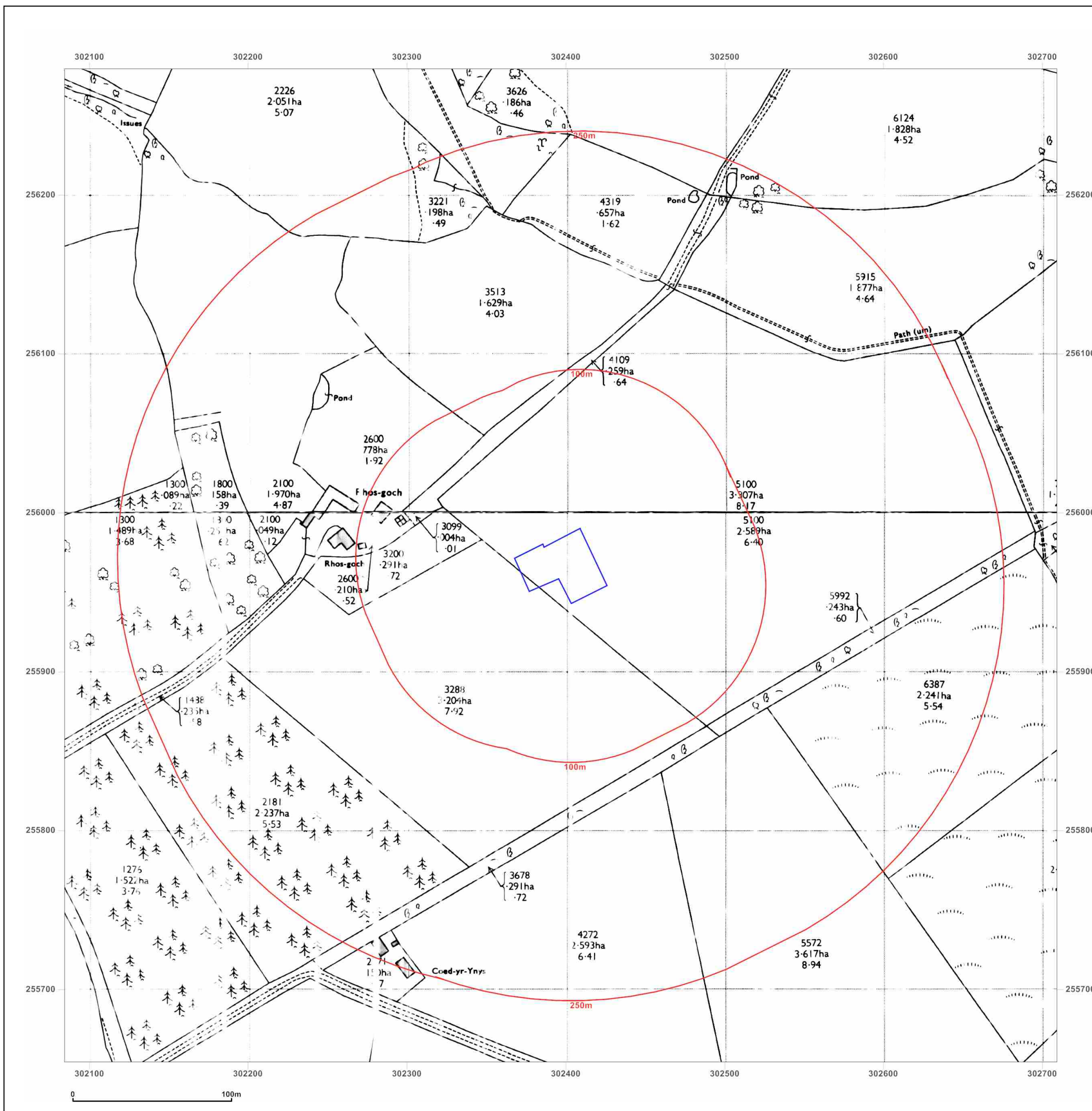


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Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: National Grid

Map date: 1989

Scale: 1:2,500

Printed at: 1:2,500



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

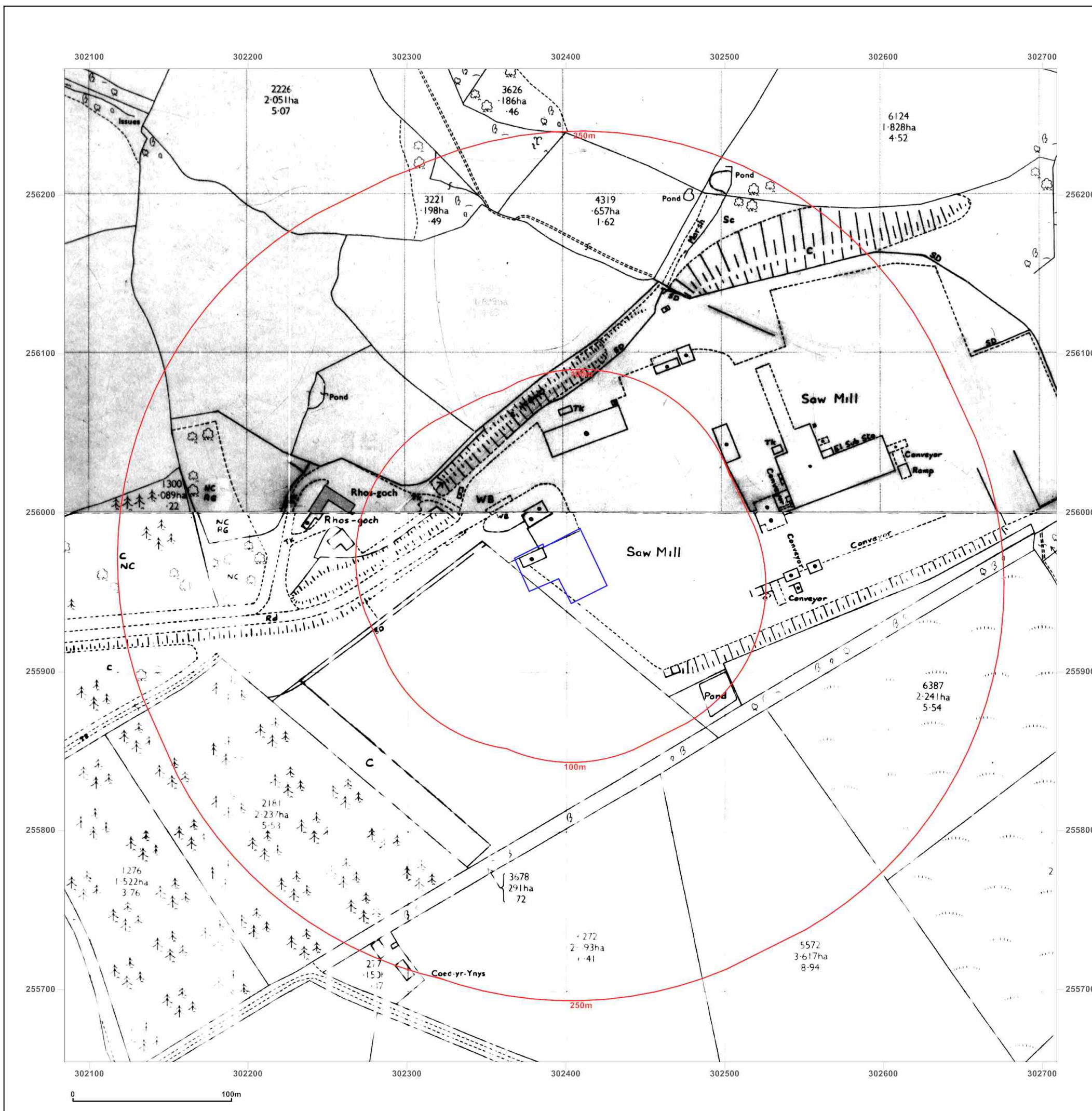


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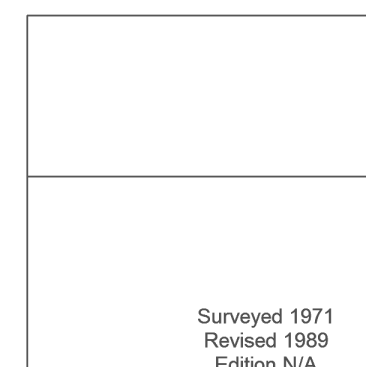
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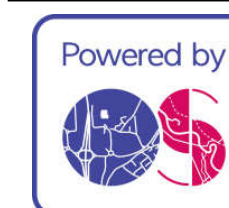
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Surveyed 1971
Revised 1989
Edition N/A
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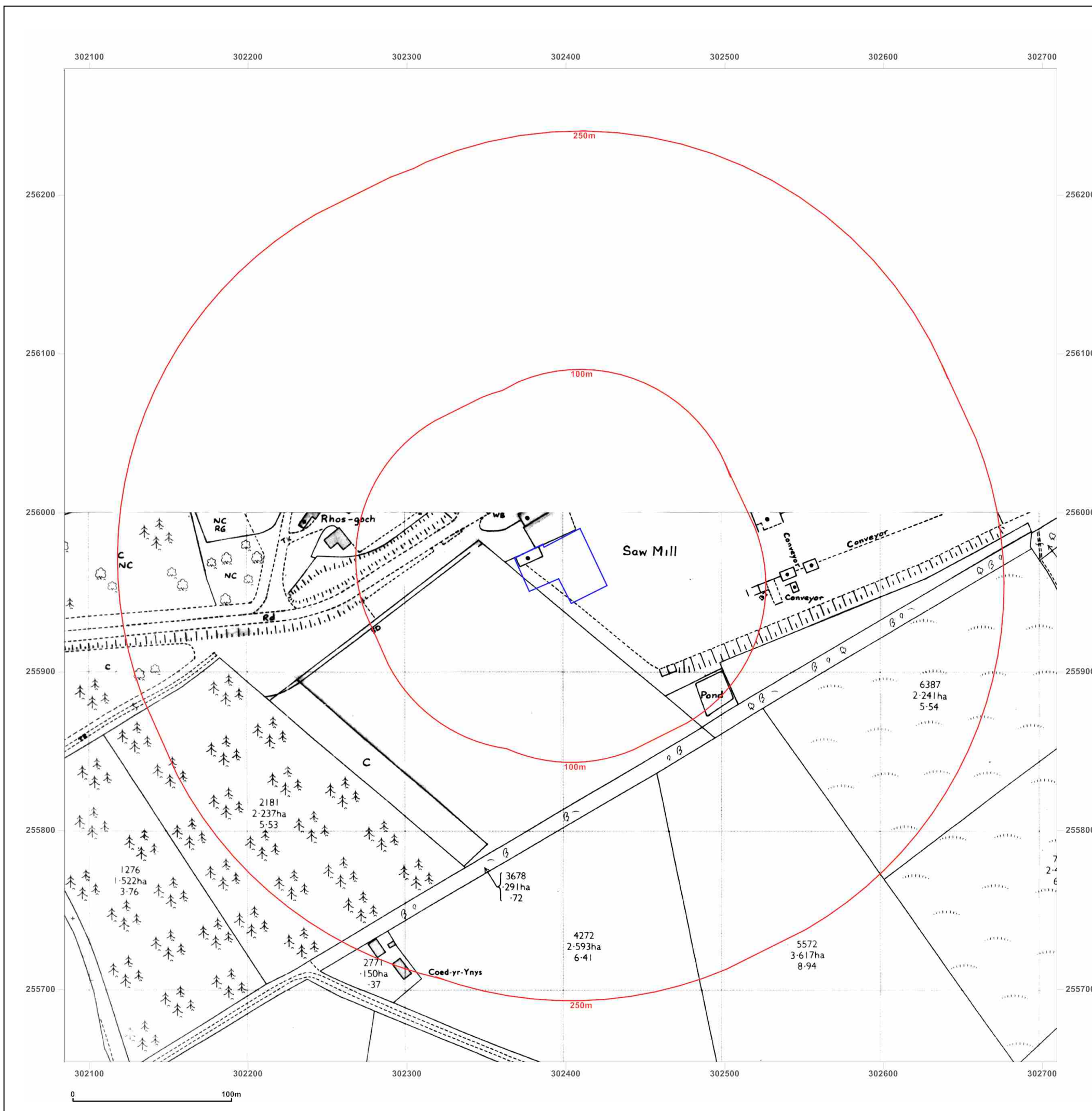


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Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: National Grid

Map date: 1993-1995

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1952
Revised 1993
Edition N/A
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Levelled 1952

Surveyed 1995
Revised N/A
Edition N/A
Copyright 1995
Levelled N/A

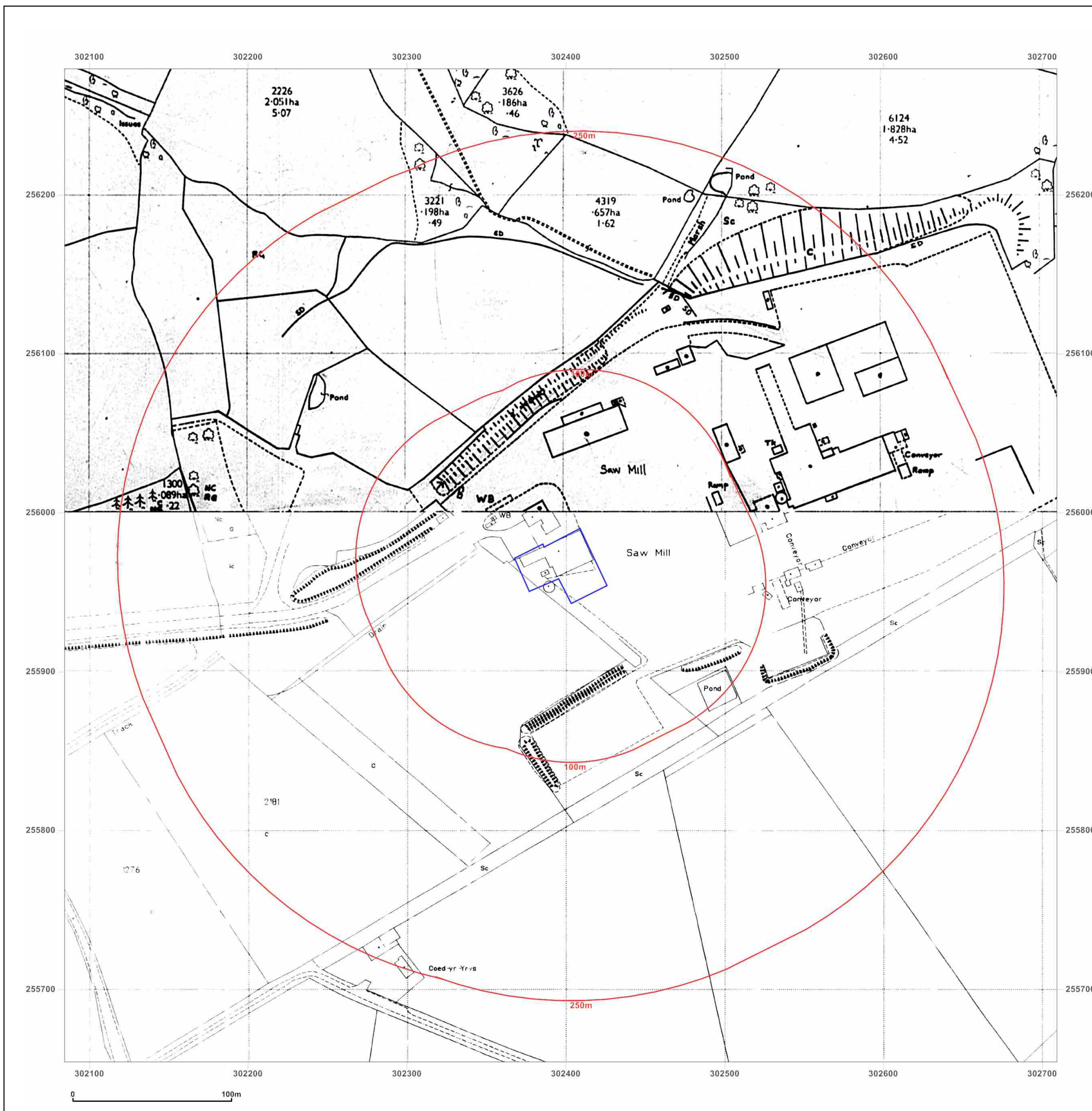


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Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

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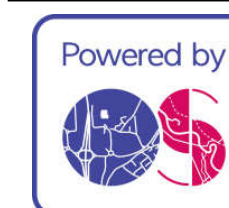
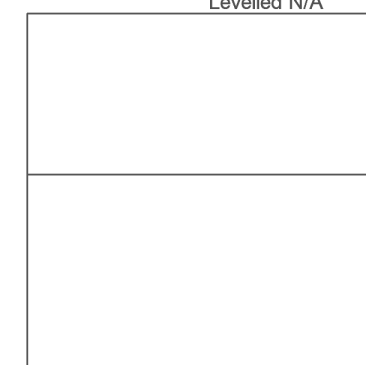
Map date: 1995

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Printed at: 1:2,500



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Revised N/A
Edition N/A
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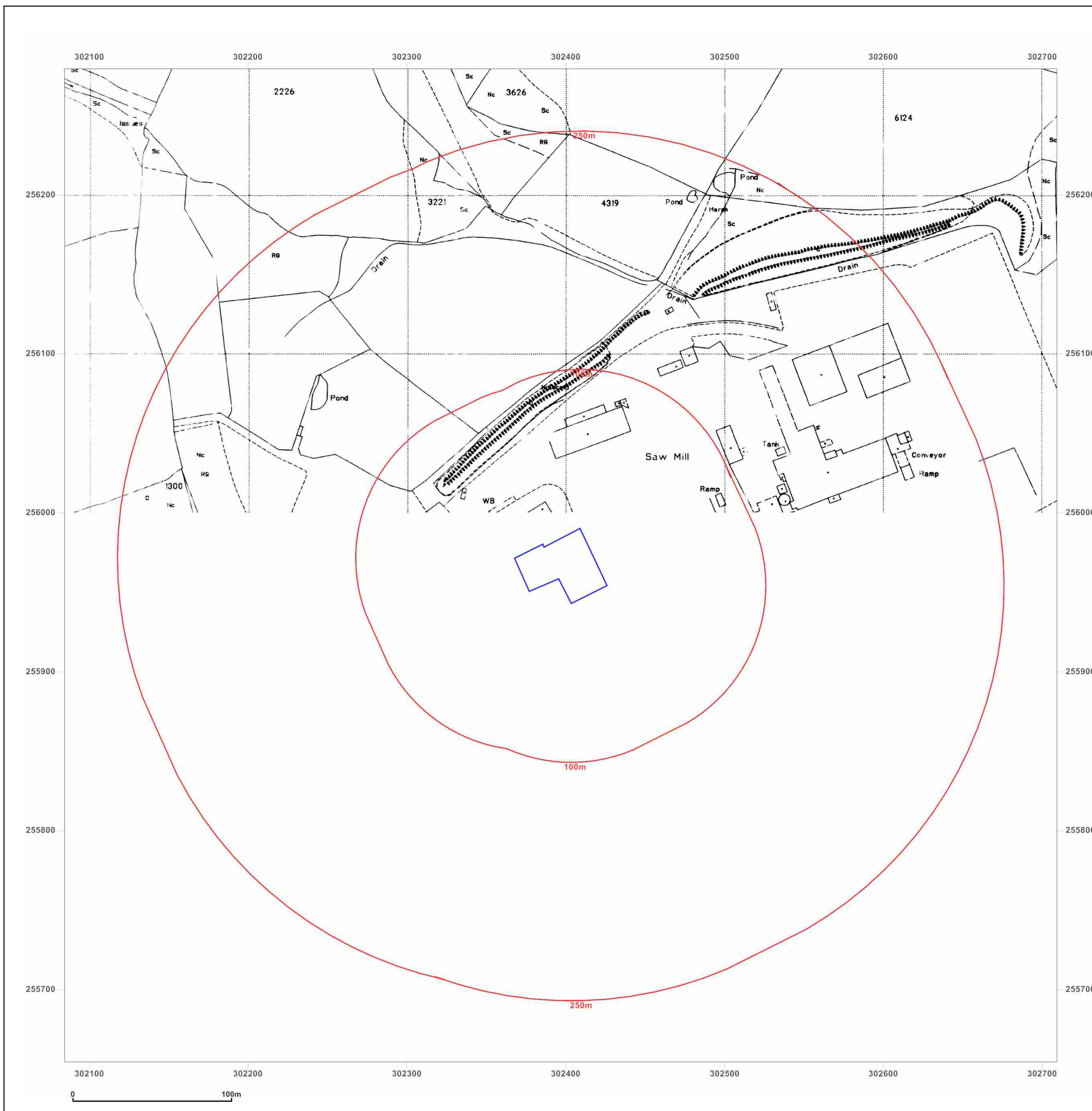


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Client Ref: W5086
Report Ref: GS-6938343
Grid Ref: 302397, 255967

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



2003



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APPENDIX C

SITE WALKOVER REPORT

REFERENCES	
Project No.	W0023
Site Address	BSW Newbridge
Date of Visit	21 AUGUST 2020
Prepared by	Ellena Thomson
SITE – GENERAL	
Plan of site	Permitted area within the wider BSW timber mill
Site size (area) : % building, % hardstanding, % open space / other	100% building with hard standing in the permitted area
Current use (occupants and operations)	Treatment plant for timber with style loaders
SITE – BUILDINGS	
Age of building(s)	8 years
Building appearance: no. of storeys, basement, roofing type, chimneys / stacks?, car park, service areas	1 storey warehouse with metal roofing and no chimneys
Tanks: location (internal / external : above or below ground), age / condition, size / capacity, type, bunding (condition), refuelling point, evidence of stains / spills	Storage tanks inside sump
Heating : electric/gas/oil	Electric
Chemical storage : drums, other chemical stores	Chemical treatment with in the treatment building
Gas control measures (e.g. vents, cowls, monitoring / alarms)	None observed
Other evidence of industrial activity	Wider site is the BSW Saw Mill
Asbestos / deleterious materials – any asbestos surveys?, removal programmes?	None observed
Electrical equipment / Transformers – check for PCBs? Backup power supplies (generators)	2 transformers outside of the building. No overhead lines.

SITE – EXTERNAL	
Site surfacing : type (asphalt/concrete etc.), staining, weathering, subsidence, repairs. Landscaped areas.	Tarmac with 2 new concrete slabs to the north and south of the building and a worn older slab in the middle of the building.
Drainage : interceptors, disposal of storm water / waste water, mains water supply?	Internal drainage into sump, closed loop. Rainwater collection outside of the building.
Site topography – flat / sloping?, level compared to surroundings, evidence of filling or raising, earthworks?	Slopes to the south
Vehicle maintenance : washdown areas, workshops, refuelling points	Yes, to the north of the treatment building
Waste : skips / compounds, any hazardous waste? Burning grounds or incinerators	Commercial waste from site offices, canteens and saw mill, not stored near the treatment plant.
Sub-stations : age, condition, transformers, operator, servicing?	8 years, good condition
Trees – effects on buildings, condition, species and height	Landscaping
Sloping ground – any indication of instability (cracks in ground, bulges, leaning trees, walls or poles), rotational slip scars.	Site slopes down to the south, no cracks tears or slips.
Ecological features of note – Burrows, bats, nest sites, designated preservation areas	None observed
Other features of note within site	All internal drainage goes back into the sump. External drainage slopes to the south.

SURROUNDING LAND USES	
General site context – industrial, commercial, urban, agricultural etc.	Agricultural
Land use – north (give distances)	Agricultural land
Land use – south (give distances)	Agricultural land and residential buildings
Land use – east (give distances)	Road and haulage company
Land use – west (give distances)	Agricultural land
Nearby (<500m) sources of pollution – landfills, filling stations, industrial activity.	None observed
Nearby river / surface water features – culverted, banks, flood plain. If visible, condition of watercourse	Tributary stream only
Adjacent geotechnical features of note – cuttings, quarries, embankments, slopes (particularly if failed), major excavations, deep basements, sources of vibrations (railway or heavy machinery)	None observed
Other features of note adjacent to site	None observed