

HANNAH and MATTHEW REES

Land at Wenallt Road, Tonna

Site Investigation Report

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CLIENT: Hannah and Matthew Rees

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1.0 INTRODUCTION

1.1 GENERAL

Hannah and Matthew Rees are proposing to redevelop a site at Wenallt Road for residential end-use.

Intégral Géotechnique (Wales) Limited have been appointed as the Geotechnical Engineers to undertake a site investigation to enable a geotechnical and geoenvironmental appraisal of the site and provide a basis for design.

This report presents the findings of the site investigation and gives recommendations for the design of foundations, floor slabs and other geotechnical and geoenvironmental aspects of the project.

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1.2 PROPOSED DEVELOPMENT

The proposed development will comprise the demolition of the existing residential dwelling (89 Wenallt Road) and replacement with a larger residential dwelling in approximately the same footprint. An access road is proposed to be constructed from Wenallt Road curving round to the west and new parking spaces are proposed to the south-east of the new building.

Reference has been made to a Proposed Site Layout drawing by IPlan Architecture, Drawing No.: 19.202.02 dated January 2020.

1.3 SCOPE OF WORKS

The work instructed included a desk study of available information, site reconnaissance and intrusive investigation. This was followed by laboratory testing and geotechnical and geoenvironmental reporting.

The desk study comprised a review of:

1.3 SCOPE OF WORKS (CONTINUED)

- An Envirocheck Report obtained for the site
- Old Ordnance Survey maps covering the site, included within the Envirocheck Report
- A Radon Report obtained from the British Geological Survey
- A Coal Authority Mining Report
- Geological maps of the area provided by the British Geological Survey
- The Natural Resources Wales groundwater vulnerability map and aquifer database for the area

The desk study information was used to make an initial assessment of the site and to design an investigation to be carried out by Intégral Géotechnique. The site investigation was designed in accordance with BS5930:2015+A1:2020, the Code of Practice for Site Investigations, BS10175:2011+A2:2017, the code of practice for investigation of potentially contaminated sites, and 'Development of Land Affected by Contamination: A Guide for Developers' prepared by Welsh Local Government Association (WLGA)/Natural Resources Wales (NRW) Land Contamination Working Group, 2017.

The site investigation included:

- An intrusive investigation carried out during 8th February 2021 comprising four machine excavated trial pits
 - Soil infiltration undertaken within one selected trial pit
- Sampling of soils for chemical and geotechnical testing

1.4 LIMITATIONS

This document is intended to be a working document for further development in discussion with all concerned including the Local Planning Authority, Natural Resources Wales, and the NHBC as appropriate.

"Contamination" is taken throughout the report to mean the "presence of one or more potentially harmful substances as a result of human activity". The use of the term in this way does not imply that harm is being or might be caused by the contamination. It should be noted that "contamination" can have different meanings under different regulatory regimes, for example, planning, building control and Part IIA of the Environmental Protection Act 1990. Naturally elevated concentrations of potentially harmful substances may also be of concern and the significance of any that have been found is also evaluated in this report.

1.4 LIMITATIONS (CONTINUED)

It is important to recognise that there may be areas of contamination that have not been found, or that contaminants are present at concentrations above those that have been found. It is also important to recognise that contamination may be localised and that no investigation, however comprehensive, is capable of finding such occurrences other than by chance.

It should also be noted that vertical and lateral changes in ground conditions may be present between exploratory hole locations.

Access for the intrusive site investigation was slightly limited at the time due to the existing residential dwelling and associated outbuildings, however the corners of the proposed building (and infrastructure) were generally accessible.

2.0 THE SITE

2.1 SITE LOCATION AND DESCRIPTION

The site is located in Tonna, approximately 3km north-east of Neath at a National Grid Reference of 277930, 198850, see Figure 1.

The site is irregular in shape and occupies an area of approximately 0.36 hectares. The boundaries of the site are defined by a steeply northerly sloping embankment to the north, vacant vegetated land to the east and Wenallt Road to the west and south. A site plan is presented in Figure 2.

The site is situated on sloping ground that slopes down to north from an approximate elevation of 107m AOD in the south-east, sloping down towards the north to approximately 101mAOD along the northern site boundary. Much of the site appears to have been reprofiled with various banks/retaining walls and areas of level ground/hardstanding associated with the existing residential dwelling and land use.

There are a number of buildings within the site boundary. In the centre of the eastern part of the site, a two storey dwelling is present, with an outbuilding used as dog kennels located immediately east and attached to the property. Along the centre of the southern boundary, a single storey rectangular building understood to be used as kennels was present and to the north-west of it, a larger building was under construction at the time of the investigation, also understood to be used as kennels. To the east of these buildings, several concrete slabs and evidence of old walls were present, indicating that buildings were previously located in this area.

The site is predominantly grass covered, with the exception of the buildings, several concrete slabs in areas of former buildings and an area of paving slabs to the south and west of the dwelling. A small area of concrete hardstanding is present off Wenallt Road, used for car parking.

Active services are currently in use on site associated with the site's existing use as a residential property.

A cesspit is present beneath the east of the site, located to the south-east of the residential dwelling and outbuilding, with an underground pipe feeding the pit in this direction.

Dense vegetation (comprising predominantly mature trees) is present along the western, northern and eastern site boundaries. Some invasive plant species may be encountered including Japanese Knotweed. A vegetation survey of these areas is recommended.

2.1 SITE LOCATION AND DESCRIPTION (CONTINUED)

The site is classified as part of an ancient woodland.

2.2 SITE OPERATIONS

The site is currently used as a residential dwelling with several dog kennels on-site.

2.3 SURROUNDING LAND USE

The land to the north of the site is occupied by several buildings, including a residential dwelling and associated farriers including barns, yard and farmland. The site boundary is formed by a steep vegetated embankment sloping down to the north, with the dwelling and associated yard situated at a lower level than the site itself (some 5m lower).

To the south and west Wenallt Road runs along the site boundary with wooded and vacant grassed land beyond.

The land to the east of the site slopes down towards a pond in the area. The land is vacant and vegetated with abundant mature trees, and located on lower ground than the site itself. Evidence of an historic tramway is apparent with Wenallt Road crossing the area via a bridge and a valley type feature trending south-east to north-west. The ground was springing in several places in this area at the time of the investigation.

2.4 AVAILABLE SITE INVESTIGATION DATA

There is no site investigation data available to our knowledge.

3.0 SITE HISTORY

The recent history of the site has been traced with the aid of an Envirocheck Report, a copy of which is included in Appendix A. The Envirocheck Report includes the following scaled historical maps:

Map Scale	Dates
1:2,500	1878-1880, 1899, 1918-1919, 1935, 1964, 1978-1981, 1984, 1984-1991, 1993, 1993-1994 & 2000 (Aerial Photography)
1:10,560	1884, 1900, 1921, 1935-1936, 1938-1951, 1951 & 1949 (Historical Aerial Photography)
1:10,000	1964, 1973, 1983-1989, 1992, 1999, 2006, 2020

The earliest available map from 1878 indicates that the site comprised an area of woodland (mixed wood) with a road running along the southern site boundary as per the present day Wenallt Road. Immediately over the road to the south, the map indicates an area of cutting. This may represent associated earthworks/cutting for the construction of Wenallt Road or a small quarried area. To the east of the site, a tramway was shown approximately 10/15m north-east of the site, trending south-east to north-west and then in a north to south orientation to the north of the site. Over the tramway, Pen-lan-fach an assumed farm property was shown with a pond adjacent to it. A drum was indicated adjacent to the tramway some 20m north of the site. Wenallt Colliery was indicated to the east of the site, with an associated quarry/opencast mine some 60m from the site boundary immediately over the tramway. Several other quarries were shown in the surrounding area as well as localised farm properties. A large quarry labelled Cydgoed Quarry was shown 350m south-west of the site.

The 1884 larger scale map indicates that Tonna was approximately 400m north-west of the site and Aberdulais some 1000m north-west of the site. A Great Western Railway line was shown 600m north-west of the site, trending largely west-south-west to east-north-east (Vale of Neath Line). Aberdulais Works (Tin) was shown 500m north-west and also 900m north-west of the site. The River Neath and Neath Canal were shown to the north-west of the site, with the Neath Canal shown as close as 400m from the site boundary. The land surrounding the site was generally woodland with occasional quarries/old quarries within 1000m of the site.

3.0 SITE HISTORY (CONTINUED)

The next available maps from 1899 and 1900 did not show woodland within the site boundary and it is possible that the site comprised vacant land at this time. Off-site, Wenallt Colliery was labelled disused, but had expanded further east/south-east with another quarry shown in the area and two associated coal levels shown approximately 130m east and 350m east of the site and another shown 250m south-east. A shaft was indicated approximately 350m south-east of the site. A reservoir was shown 250m south-west of the site and several quarries were present some 250m south-west of the site. The Aberdulais Tin works were labelled as tin plate works.

The 1918/1919 map shows that the site comprised vacant land covered by rough pasture, confirming that the woodland had been felled. To the south of the site, a second reservoir was indicated approximately 160m south-west of the site, with both reservoirs associated with Neath R.D.C Water Works. Neath water supply pipes passed through/beneath the area of the reservoirs in a south-west to north-east direction and several sluice valves and air vales were labelled along the alignment.

The 1935 maps indicate changes to both the site and immediate surrounding area. On-site, two buildings and several boundaries were shown, with one building in the approximate position of the present residential dwelling and another small building in the west of the site. To the north of the site a dwelling was shown and to the south of the site, several (5No.) small buildings had been constructed immediately over Wenallt Road to the south. The formerly quarried/cut area was no longer shown over Wenallt Road but an embankment/cutting was depicted in the east side. Further afield, Tonna had expanded to the north-east.

No significant changes are shown on the 1938 large scale map with the exception of the demolition of Aberdulais Tin Works to the north-east (the smaller works further north-east was not shown since 1921). In addition, an isolation hospital was shown 500m north of the site.

The 1964 map shows the addition of three small building/structures in the south of the site and possible extensions to the previous buildings. The buildings over the road are numbered, therefore assumed to be residential properties. The reservoir to the south was labelled "works".

Further expansion of Tonna had occurred by the 1973 map, with residential properties shown as close as 200m north-west of the site.

3.0 SITE HISTORY (CONTINUED)

Annotation on the 1978 /1981 map indicates that the southern building within the site boundary was used as kennels. To the south of the site, only one of the residential dwellings remains (furthest east) and a small building in the west. The property boundaries were still indicated.

On the 1986 map, reconfiguration of the buildings in the south of the site has occurred such that they are as per the present day maps. A small outbuilding was shown to the east of the dwelling and a collection of buildings were shown in the south of the site.

No significant changes were shown on subsequent maps. The 1999 map shows a minor watercourse in the approximate alignment of the former tramway to the east of the site, flowing from south-east to north-west, then continuing north. A covered reservoir was indicated approximately 300m east of the site. On the same map, main roads to the west of Tonna had been reconfigured.

The most recent map from 2020 indicates no significant changes to the site and surrounding area. The reservoir to the south-west of the site is labelled as covered. It is noted that the majority of old quarries in the area are still depicted, indicating that they have not been infilled. A small building is shown over Wenallt Road in the position of former dwellings, however site walkover confirmed that it is no longer present.

Reference has been made to historic Google Earth imagery which does not indicate any notable changes to the above, and the abundance of trees in the area means changes in local features are difficult to identify.

Anecdotal evidence suggests that the residential properties located immediately south of Wenallt Road comprised prefabricated temporary properties (estimated up to 10No.) with limited services and infrastructure and were removed approximately 50 years ago.

4.0 SITE ENVIRONMENTAL SETTING

4.1 PHYSICAL SETTING

The site is located in the south-east of Tonna, on sloping ground which falls from a topographic high to the south/south-east of the site, down towards the north-west towards Tonna a topographic low. The actual site is situated at approximately 105mAOD.

A minor watercourse is present approximately 18m north-east of the site, flowing largely south-east to north-west.

4.2 GEOLOGY

The BGS 1:50,000 scale geological map of the area indicates that the site is underlain by the Brithdir Member comprising Carboniferous mudstones, siltstones and sandstones. No superficial deposits are recorded overlying the bedrock, but a layer of transported soils such as gravelly clays/clayey gravels may be anticipated.

The BGS 1:10,560 scale county map for the area (SS79NE) has also been reviewed, which indicates that, as above, the site is underlain by the Brithdir Member (sandstones, siltstone and mudstones) with areas of Brithdir sandstone indicated to the north and south of the site. The map also indicates that several coal seams are conjectured in the vicinity of the site. The Glyngwilym coal seam (2 ft) is conjectured beneath the southern part of the site, striking largely east to west. To the north of the site a thin coal seam, “believed to be the Brithdir Rider” (1ft), is indicated approximately 120m from the site and another thin coal is shown approximately 160m from the site, both striking largely west-south-west to east-north-east. Further south, The Wenallt coal seam is shown (conjectured), striking east to west approximately 170m from the site.

The above information indicates that the strata in the vicinity of the site are younging towards the south-east. A small fault is shown approximately 200m to the north-east, downthrowing to the north-east. Two larger faults are shown approximately 75m west/south-west (downthrowing to the east) and approximately 255m south-east (downthrowing to the west). The Neath Disturbance, a locally significant fault is present approximately 380m north-west of the site. As such, it is clear that the structural geology of the area is complex, with various faults and folding. Roughly 500m south-east of the site the strata are indicated to dip 4 degrees to the south. It is therefore considered that the strata beneath the site are likely to dip at shallow grade to the south, however it is noted that the available information is on the other side of a fault, so is not considered fully reliable.

Made ground may be anticipated beneath the site, to variable depths based on the site history and associated reprofiling.

4.2 GEOLOGY (CONTINUED)

A summary of the anticipated geological succession is given below in Table 1.

Table 1: Summary of Anticipated Site Geology		
Geological unit	Horizon	Description
Recent	Made ground	Various materials, possibly reworked materials.
Quaternary	Glacial Till/Head Deposits	A veneer of transported soils may be anticipated.
Carboniferous	Brithdir Member	Green-grey, lithic arenites ("Pennant sandstones") with conglomerate lenses at bases of units; thin mudstone/siltstone and seatearth interbeds and mainly thin coals.

4.3 RADON

Information with regard to Radon Protective Measures is provided within the Envirocheck Report and the BGS Report as presented in Appendix B. The reports state that the site is within a radon affected area as 3% to 5% of properties are above action level. As such, basic radon protective measures would be necessary in the construction of new buildings within the site.

4.4 COAL MINING

Coal Authority Data

A Coal Mining Report for the site has been obtained from the Coal Authority and a copy is included in Appendix C.

The Coal Authority states that the property is not within a surface area that could be affected by past underground mining.

However, the property is in an area where the Coal Authority believe there is coal at or close to the surface. This coal may have been worked at some time in the past and the presence of unrecorded workings cannot be ruled out.

The Coal Authority mining report confirms that there are no known coal mine entries within, or within 20 metres of, the site boundary.

4.4 COAL MINING (CONTINUED)

The Coal Authority states that it is not aware of any damage due to geological faults or other lines of weakness affected by coal mining.

Reference to the Coal Authority Interactive map viewer indicates that the southern portion of the site is classified as a high risk development area. The zone of high risk is limited to the conjectured outcrop of the Glyngwilym coal seam through the south of the site and therefore thought to be associated with this coal seam.

Geology

BGS data indicates that the site is underlain by the Brithdir Member (predominantly sandstone with mudstone and siltstone layers) and that no superficial deposits are mapped beneath the site. Accordingly, the depth to weathered bedrock would be anticipated to be shallow, which includes the depth to the Glyngwilym coal seam, if present along the line of conjectured outcrop. This is further confirmed by the identification of sandstone locally noted in the banks along the road alignment and exposed faces to the south of the site during the site walkover.

The 1:10,560 scale county geology map for the area (SS79NE) has also been reviewed which indicates that several coal seams are conjectured in the vicinity of the site. The Glyngwilym coal seam is conjectured beneath the southern part of the site, striking largely east to west. To the north of the site a thin coal seam, believed to be the Brithdir Rider, is indicated approximately 120m from the site and another thin coal is shown approximately 160m from the site, both striking largely west-south-west to east-north-east. Further south, The Wenallt coal seam is shown (conjectured), striking east to west.

Therefore, the site would be anticipated to be underlain by the following coal seams listed in stratigraphic order:

- Glyngwilym Coal Seam (2ft)
 - And possible associated underlying thin coal seam approximately 28ft/8.5m below
- Thin Coal - Suspected Brithdir Rider (1ft)
 - 263ft/80m below Glyngwilym coal seam
- Thin coal

The county map indicates that the Thin coal (suspected Brithdir) was worked from surface level to the north of the site, labelled “coal dug” along the conjectured outcrop.

4.4 COAL MINING (CONTINUED)

Two mine entries are located approximately 100m and 140m south-east of the site associated with Wenallt Colliery and are assumed to be targeting the Wenallt coal seam (3 to 4ft thick) further south.

Local Mineral Sites

The Envirocheck report identifies four BGS recorded mineral sites, all now ceased, within 250m of the site boundary as follows:

- Penlan-Fach – 128m east
 - Opencast mine for sandstone (Brithdir Member)
- Wenallt Colliery – 161m east
 - Underground mine for coal (Brithdir Member)
 - And opencast for sandstone 276m south-east
- Craig-Y-Tonna– 165m south
 - Opencast mine for sandstone (Brithdir Member)
- Craig-Y-Tonna– 185m west
 - Opencast mine for sandstone (Brithdir Member)

Review of the available information indicates that Wenallt Colliery to the south-east of the site comprised a medium sized opencast mine for both sandstone and coal. The associated mine entries are likely to have targeted the Wenallt coal seam located further south. Several other quarries were historically located in the vicinity of the site, relating to the extraction of sandstone (Brithdir Member).

Accordingly, it is considered that any historic mine workings associated with the Glyngwilym coal seam conjectured to outcrop through the south of the site would have been worked from surface level (crop workings, bell pits) due to the shallow strata dips in the area and negligible cover of superficial deposits. The historic maps do not show evidence of historic workings within the site area.

The Brithdir Rider coal seam would be anticipated at greater depths beneath the site, based on the General Vertical Section which indicates that the coal seam is located approximately 80m below the Glyngwilym coal seam. The thin nature (1ft) of the Brithdir Rider coal seam indicates that it is unlikely to have been worked, due to economic viability, and the vertical separation distance confirms that even if it had been worked, this would have been at depths >30m beneath the site and surrounding area.

4.4 COAL MINING (CONTINUED)

Accordingly, the desk based review indicates that the site is considered to be at low risk of past underground coal mining with the potential to lead to ground subsidence. The presence of historic crop workings (such as bell pits) are deemed unlikely based on the historic maps, but if present, would be evident during the intrusive investigation and/or subsequent development phase.

4.5 HYDROLOGY, HYDROGEOLOGY AND FLOOD RISK

A minor watercourse flows from south-east to north-west to the east of the site, along the approximate alignment of a historic tramway some 15m to 20m from the site. The water course appears to be culverted beneath a residential area of Tonna before joining the Neath Canal, adjacent to the River Neath.

The River Neath flows from east to west through Tonna, to the north-west of the site. The Neath Canal is located approximately 400m north west of the site and the River Neath is located approximately 550m from the site.

The Environment Agency groundwater vulnerability map and aquifer database classifies the bedrock beneath the site as a Secondary 'A' Aquifer. Secondary 'A' Aquifers are permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.

No superficial deposits are indicated beneath the site therefore an aquifer designation is not available for any overlying soils.

It is considered possible that any existing site drainage can act as a pathway for potential surface contaminants.

There is one recorded discharge consent within 500m of the site boundary. Listed 168m south-west, a discharge consent to land was active from 1989 to 1994 relating to reservoir overflow (Dwr Cymru Cyfyngedig).

The Envirocheck Report states that there are no groundwater abstractions within 500m of the site. The closest is 770m north-west of the site relating to Private Water Undertaking: Raw Water Supply from the River Neath to the Tennant Canal (various entries from as early as 1978).

4.5 HYDROLOGY, HYDROGEOLOGY AND FLOOD RISK (CONTINUED)

Tables 2 and 3 present a summary of the hydrological features and key hydrogeological nature of the site.

Table 2: Summary of Site Hydrology					
Feature	Distance from site	Flow	Classification	Abstraction	Discharge
Minor watercourse	18m north-east	South-east to north-west	Not known	No	River Neath/Neath Canal
River Neath and Neath Canal	Approximately 400m (453m) north-west	East to west	Not known	Yes	Swansea Bay
Surface run-off	On site	Flows into site drainage (if present)	N/A	No	Not known
Site Drainage	Possibly on-site	Not known	N/A	No	Not known

Table 3: Summary of Site Hydrogeology				
Geological Unit	Aquifer Classification	Aquifer Characteristics	Source Protection Zone	Groundwater Abstractions
Made ground/reworked ground	Not classified	Highly variable permeability and porosity. Perched water may be present with variable flow directions.	No	None
Brithdir Member	Secondary A Aquifer	Variable permeability sandstones, with thin mudstone/siltstone and thin coals	No	None

The Groundwater Vulnerability map of the area indicates the secondary bedrock aquifer to have a medium vulnerability. The pollutant speed is low with well-connected fractures.

The Natural Resources Wales Flood Risk Map as presented within the Envirocheck Report indicates that the site is not at risk of flooding from rivers or sea without defences and is outside of Zone 3.

4.5 HYDROLOGY, HYDROGEOLOGY AND FLOOD RISK (CONTINUED)

4.5 HYDROLOGY, HYDROGEOLOGY AND FLOOD RISK (CONTINUED)

The Natural Resources Wales Surface Water Flood Risk map as presented within the Envirocheck Report indicates that the site is not at risk of surface water flooding (>1000 year return).

The BGS Groundwater Flooding Susceptibility Map indicates the majority of the site, with the exception of the north-eastern part of the site, has limited potential for groundwater flooding to occur.

The site and surrounding area are not part of a source protection zone.

4.6 LANDFILL SITES

The Envirocheck Report indicates that there are no historical, local authority or BGS recorded landfill sites within 1000m of the site boundary.

Three records of potentially infilled land are identified within 250m of the site, relating to non-water features such as quarries or old gravel pits. The entries are recorded 85m east, 127m east and 182m west of the site and reference to the historic maps indicates that the entries are in positions of former quarries. The quarry to the west is now covered by residential dwellings and the quarry/mine outlines to the east are still indicated on the larger scale map and therefore are not likely to have been infilled.

4.7 POTENTIAL CONTAMINATION

Previous Uses

The various activities in the vicinity of the site which may have resulted in ground or water resource contamination on this site are listed below in Tables 4 and 5. Reference to Department of the Environment Industry Profiles has been made and a summary of the potential contaminants can be found in the tables.

Table 4: Potential Contaminants		
Land Use: Woodland until 1900's & rough pasture/vacant land until 1930's		
Material/Process	Contamination/Hazard	Evidence
Possible agricultural land	No potential contaminants	Historical Maps

4.7 POTENTIAL CONTAMINATION (CONTINUED)

Land Use: Residential dwelling with associated buildings since 1930's		
Material/Process	Contamination/Hazard	Evidence
Reprofiling of land (earthworks) - Possible Imported made ground	Metals, semi metals, non-metals, PAH, asbestos	Historical Maps/Site Walkover
Reconfiguration of buildings - Demolition and rebuild and/or extensions	Metals, semi metals, non-metals, PAH, asbestos	Historical Maps/Site Walkover
Dog Kennels	No potential contaminants	Historical Maps/Site Walkover
Residential dwelling and associated land	No potential contaminants	Historical Maps/Site Walkover

Existing Uses

The site is currently occupied by a residential dwelling in the centre with a garden to the west and dog kennels to the east of the dwelling as well as the south of the site.

Adjacent Site Uses

Table 5 : Potential Contaminants : Adjacent Site Uses		
Potential Contamination Source	Boundary	Associated Contaminants and Hazards
Residential and farriers business	Northern	Metals, semi metals, non-metals, PAH
Woodland and pond	Eastern	No Potential Contaminants
Wenallt Road and woodland/vacant land	Western and southern	No Potential Contaminants

4.8 OTHER ENVIRONMENTAL ISSUES

The site and surrounding area is classified as ancient woodland.

The Envirocheck Report indicates that there have been no pollution incidents to controlled waters recorded on site and there have been no enforcement or prohibition notices on site.

4.8 OTHER ENVIRONMENTAL ISSUES (CONTINUED)

No pollution incidents have been recorded within 250m of the site boundary, with the closest located 387m west of the site relating to the accidental spillage of crude sewage to unknown receiving waters in 1996. The incident was classified as a minor (category 3) incident.

There have been no substantiated pollution incidents registered on site or within 1000m of the site boundary.

The Envirocheck Report indicates one contemporary trade directory entry within 250m of the site, a farriers located 17m north of the site. The site walkover confirmed that the business is associated with the residential property to the north of the site and is currently operational. The residential property and yard area are located at a lower elevation to the site itself with a steeply sloping embankment along the northern site boundary.

5.0 PRELIMINARY CONCEPTUAL SITE MODEL

5.1 RISK ASSESSMENT FRAMEWORK

In order to be consistent with current UK government policies and legislation, it is necessary to identify, assess, estimate, evaluate, and take appropriate action to deal with land contamination, in accordance with the procedures specified in the Environment Agency guidance Land Contamination Risk Management (LCRM) published in October 2020. This replaces the now withdrawn 'Model Procedures for the Management of Land Contamination CLR-11' (Environment Agency 2004).

The risk assessment process is designed to provide a reasoned, structured and pragmatic mechanism for the identification of any potential human health and controlled waters risks associated with land contamination and where necessary to develop a robust remediation strategy to ensure protection of the sensitive receptors (human health of future residents, controlled waters, etc).

In accordance with LCRM, the term 'land contamination' is defined as:

- All land affected by contamination – land that might have contamination present which may, or may or may not, meet the statutory definition of contaminated land,
- Land determined as contaminated land under Part 2A of the Environmental Protection Act 1990.

LCRM provides a tiered approach to risk assessment, comprising a preliminary risk assessment (including the development of an initial conceptual site model), a generic quantitative risk assessment and a detailed quantitative risk assessment. For each tier of risk assessment, the following steps must be followed:

1. Identify the hazard - establish contaminant sources,
2. Assess the hazard – use a source-pathway-receptor linkage approach to determine if there is potential for unacceptable risk,
3. Estimate the risk – predict what degree of harm or pollution may result and how likely it is to occur, and
4. Evaluate the risk – decide whether a risk is unacceptable.

LCRM also provides definitions of the following terms:

- Hazard – a property or situation that in particular circumstances could lead to harm or pollution,

5.1 RISK ASSESSMENT FRAMEWORK (CONTINUED)

- Risk – a combination of the probability, or frequency of occurrence of a defined hazard and the magnitude of the consequences of the occurrence,
- Risk assessment – the formal process of identifying, assessing and evaluating the health and environmental risks that may be associated with a hazard,
- Risk management – the formal process to identify, assess and determine the risks, and to select and take action to mitigate them.

The three essential elements to any risk are defined by LCRM as follows:

- A contaminant, or pollutant, that is in, on, or under the land and that has the potential to cause harm, or pollution (Source)
- A route by which a receptor is, or could be affected by a contaminant (Pathway)
- A receptor, i.e. something that could be adversely affected by a contaminant, for example a person, controlled waters, an organism, an ecosystem, or Part 2A receptors such as buildings, crops or animals (Receptor).

In order for there to be a potential risk, all three of the above elements must be present. If there is a source of contamination and a receptor (for example a resident or site user), then there is only a potential risk if there is a pathway linking the two. Such an active pathway is known as a relevant pollutant linkage. It is possible for the same contaminant to be linked to a receptor via a number of pathways, and hence it is important that all relevant pollutant linkages, to both human health and controlled waters, are separately identified on a site in order that a comprehensive conceptual model can be formed and ultimately a robust remediation strategy designed.

Current practice during Generic Quantitative Risk Assessment of land affected by contamination is to use generic soil screening values based on the appropriate proposed end use. These usually comprise risk based Soil Guideline values (SGVs) or Generic Assessment Criteria (GACs) derived by the Environment Agency's Contaminated Land Exposure Assessment Model (CLEA). The SGVs and the supporting technical guidance were developed in order to assist in the assessment of long term risk to human health from the exposure to contaminated soils.

Revised Statutory Guidance, published in 2012, to support Part 2A of the Environmental Protection Act 1990, introduced a new four category system for classifying land under Part 2A. Category 1 includes land where the level of risk is clearly unacceptable and Category 4 includes land where the level of risk posed is considered to be acceptably low. Under Part 2A, land would be determined as contaminated if it falls within Categories 1 or 2.

5.1 RISK ASSESSMENT FRAMEWORK (CONTINUED)

The revised Part 2A Statutory Guidance was accompanied by an Impact Assessment that identified a role for new 'Category 4 Screening Levels' (C4SLs) that would provide a simple test for determining when land is suitable for use and definitely not contaminated land. A Policy Companion Document including the C4SLs was published in March 2014 (England) and May 2014 (Wales).

The C4SLs have been based on the CLEA methodology and derived using the CLEA model, with modified toxicological and exposure parameters. To date, C4SLs have been released for six substances (arsenic, cadmium, chromium (VI), lead, benzo(a)pyrene and benzene).

The C4SLs have been derived on the assumption that where they exist, they will be used as generic screening criteria within generic quantitative risk assessment.

Following publication of the C4SLs, Land Quality Management (LQM), in conjunction with the Chartered Institute for Environmental Health (CIEH) released Suitable 4 Use Levels (S4ULs) in January 2015.

The S4ULs have been derived in accordance with UK legislation, and using a modified version of the Environment Agency's CLEA software. As such, the S4ULs are based on the concept of minimal or tolerable risk as described in Human Health Toxicological Assessment of Contaminants in Soil (Science Report SR2, Environment Agency 2009a).

S4ULs have been derived for a wider number of substances.

In addition to the existing SGVs, C4SLs and S4ULs, Atkins ATRISK^{soil} also provide a set of Soil Screening Values. These are currently intended to be used in conjunction with SGVs, although they intend to update these values in line with the C4SLs in due course.

We have reviewed all sets of values and intend to use the most appropriate assessment criteria as Tier 1 screening values in the first instance. Where a published S4UL is available, and considered appropriate, this will be used in the first instance.

5.2 CONCEPTUAL MODEL FRAMEWORK

The preliminary stage of the risk assessment process is to develop and define a conceptual site model, based on the desk study and any existing site investigation data. This is used to establish any potential contaminant sources, identify existing and future receptors and assess if there are any potentially active pathways by which a potential risk may be present.

The preliminary conceptual site model will be developed and refined as site specific data is gathered, such as actual ground conditions and chemical data, resulting in a more robust conceptual understanding of the site.

5.3 CRITICAL SENSITIVE RECEPTOR – HUMAN HEALTH

The proposed redevelopment of the site is for a residential end use. Therefore, the critical sensitive receptor from a human health perspective is an on site residential receptor.

In accordance with S4UL/C4SL and CLEA guidance for a standard residential scenario, the critical sensitive receptor for a residential end use risk assessment is a female child, with exposure from 0 to 6 years.

The standard residential with homegrown produce end use conceptual model defined by S4UL/C4SL and CLEA is assumed to be suitable for the purposes of this assessment.

5.4 CRITICAL SENSITIVE RECEPTOR – CONTROLLED WATERS

Based on the proposed redevelopment of the site for a residential end use, and the findings of the desk study, the critical sensitive receptor from a controlled water perspective is groundwater within the Secondary 'A' Aquifer of the Brithdir Member Sandstones beneath the full site area.

By considering groundwater as the critical sensitive receptor for controlled waters, the groundwater/hydrogeological risk assessment will also be protective of the minor watercourse to the east of the site as well as the River Neath further afield to the north-west.

5.5 POTENTIAL CONTAMINANT SOURCES

The desk study, including review of the site history does not indicate significant potential for contamination with evidence suggesting that the site comprised woodland, followed by vacant land, followed by a residential property with associated outbuildings and dog kennels.

5.5 POTENTIAL CONTAMINANT SOURCES (CONTINUED)

However, the site walkover identified evidence of some reprofiling of the topography which may have involved the use of imported fill of an unknown origin as well as the historic demolition and rebuilding of buildings within the site boundary which may give rise to made ground and associated building materials/fabric.

Accordingly, the potential types of contaminants of concern are listed below:

- Metals, semi-metals, and inorganics within the shallow made ground/topsoil
- Polyaromatic hydrocarbons (PAH) within the shallow made ground/topsoil
- Asbestos within the shallow made ground/topsoil

5.6 POTENTIAL EXPOSURE PATHWAYS

Potential exposure pathways for the critical receptors (both human health and controlled waters) are listed below:

- Dermal contact with soil and/or soil derived dust
- Ingestion of soil and/or soil attached to home-grown produce
- Ingestion of home-grown produce
- Inhalation of soil derived dust
- Inhalation of vapours – indoor and outdoor air
- Leaching of contaminants from made ground to groundwater
- Transportation of contaminants within groundwater.

In addition, the following exposure pathways have also been considered:

- Ground gas generation and migration
- Building materials durability.

5.7 SUMMARY OF CONCEPTUAL EXPOSURE MODEL

A preliminary conceptual exposure model has been developed for the site. This is based on the findings of the desk study, historical review and site walk over and includes all potential sources, pathways and receptors that may be present on site. Those that have been identified as being potentially active require further investigation in the form of sampling and testing of soils and groundwater, followed by appropriate risk assessment.

The preliminary conceptual exposure model will be reviewed and refined following the completion of the site works and laboratory testing.

5.7 SUMMARY OF CONCEPTUAL EXPOSURE MODEL (CONTINUED)

The preliminary conceptual exposure model is presented below in Table 6.

Table 6: Preliminary Conceptual Exposure Model				
Source		Receptor	Pathway	Potentially Active Pathway?
Origin	Contaminant			
Topsoil/ Made Ground of unknown origin and historical reprofiling of the site and demolition of buildings.	Metals, semi-metals, non-metals, PAH, Asbestos/ACM	Resident – human health	Dermal Contact with made ground/dust	✓
			Ingestion of soil and/or soil attached to home-grown produce	✓
			Ingestion of home-grown produce	✓
			Inhalation of dust	✓
			Inhalation of vapours – indoor/outdoor	✓
	Metals, semi-metals, inorganics, PAH	Groundwater quality	Leaching from made ground	✓
	Metals, semi-metals, inorganics, PAH	Surface water quality	Transportation within groundwater	✓
Building materials/fabric	Asbestos/ACM	Resident – human health	Inhalation of fibres	✓
Made Ground of unknown origin and natural ground	Metals, semi-metals, non-metals, PAH	Building Materials Durability	Direct contact	✓
Ground Gas – organic, gas producing materials	Methane, carbon dioxide	Human health	Accumulation of gases in confined spaces, and/or migration off site, leading to asphyxiation, or risk of explosion	✓ No landfills or potentially gas producing sources within the vicinity of the. Unknown thickness of made ground beneath the site.

6.0 THE SITE INVESTIGATION

6.1 FIELDWORKS

An intrusive site investigation was designed in accordance with BS5930:2015+A1:2020, the Code of Practice for Site Investigations, BS10175:2011+A2:2017, the Code of Practice for Investigation of Potentially Contaminated Sites, and 'Development of Land Affected by Contamination: A Guide for Developers' prepared by Welsh Local Government Association (WLGA)/Natural Resources Wales (NRW) Land Contamination Working Group, 2017.

The site investigation was also designed to provide information to support and refine the preliminary conceptual site model/conceptual exposure model.

An intrusive investigation comprising four trial pits was carried out during February 2021. The trial pits were located across the site and excavated to depths of between 1.5m and 3.2m below existing ground level. The purpose of the trial pits was to understand the shallow ground conditions and allow an assessment of the most appropriate foundation type for the proposed development.

Soil infiltration testing was undertaken in one trial pit (TP01) to assess/monitor the likely permeability of the natural ground.

Representative soil samples were taken from the trial pits for laboratory chemical and geotechnical testing and placed in the appropriate sample containers deemed suitable for the analysis required. Strict protocols were adopted during this process to limit the cross contamination of samples.

The fieldworks were supervised by a qualified Geotechnical Engineer from Intégral Géotechnique (Wales) Limited who also logged the trial pits and prepared their detailed engineering logs in accordance with the requirements of BS5930:2015+A1:2020. The engineering logs provide descriptions of the materials encountered in accordance with BSEN ISO 14688-1 (2002) and 14689-1 (2003) for soils and rocks respectively.

The approximate locations of the trial pits are shown on Figure 2, while their logs are presented in Appendix D. The results of the soil infiltration tests are presented in Appendix E.

6.2 FIELD OBSERVATIONS

No visual or olfactory evidence of any contamination was observed during the excavation of the trial pits.

6.3 LABORATORY CHEMICAL TESTING

Four representative soil samples were taken from the trial pits across the site, stored at the appropriate temperature and dispatched to the laboratories of i2 Analytical for laboratory chemical testing within 24 hours.

The samples were tested for a range of contaminants that reflects the historical use of the site, the findings of the desk study and the preliminary conceptual site model/conceptual exposure model. A list of the soil testing carried out is given below:

Beryllium	Cadmium
Total Chromium	Hexavalent Chromium (VI)
Copper	Lead
Mercury	Nickel
Vanadium	Zinc
Arsenic	Boron
Selenium	Elemental Sulphur
Total Cyanide	Total Sulphate
Sulphide	Water Soluble Sulphate
pH	Monohydric Phenol
Polycyclic Aromatic Hydrocarbons (PAH)	Asbestos

The results of all the soil testing are presented in Appendix F.

6.4 LABORATORY GEOTECHNICAL TESTING

Three representative samples of natural ground were taken from selected trial pits across the site and dispatched to the laboratories of i2 Analytical to determine the Atterberg Limits of each sample to provide an indication of the volume change potential of the soils. In addition, the same three samples were analysed for water soluble sulphate and pH to aid with the determination of an appropriate classification for buried concrete.

A copy of the geotechnical test results is presented in Appendix G.

7.0 GROUND CONDITIONS

The ground conditions generally comprise a cover of made ground overlying sandy gravelly clays of glacial till overlying sandy gravels of weathered bedrock. In the north-west of the site in-situ fractured sandstone bedrock was encountered.

A summary of the ground conditions encountered beneath the site is presented below in Table 7.

Table 7 : Summary of Ground Conditions		
Depth (m)		Stratum
From	To	
GL	0.15/0.3	Topsoil/subsoil: Soft dark brown slightly gravelly sandy silty CLAY with roots and rootlets.
GL/0.3	0.7/2.0	MADE GROUND: Soft to stiff brown/dark brown locally dark grey (slightly) sandy (slightly) gravelly silty CLAY with cobbles. [Reworked Soils] <i>(Occasional clay pipe fragments, plastic fragments and plastic wrap, concrete and brick in TP03 down to 0.9m.)</i>
0.8/2.0	2.0/2.9	Firm brown and orange brown sandy gravelly silty CLAY with cobbles.
0.7/2.9	1.0/>3.2	(Medium dense) brown/grey slightly silty SAND/GRAVEL of sub-angular sandstone with cobbles.
1.0	>1.5	Very weak to weak closely fractured SANDSTONE. Recovered as gravel and cobbles. <i>(TP01 only)</i>

Some spalling of trial pit sides was observed during excavation, generally associated with the sandy gravels with depth.

7.1 TOPSOIL/SUBSOIL

Topsoil/subsoil was encountered in all locations with the exception of TP03 to depths of 0.3mbgl to the west of the existing dwelling and a thinner veneer in TP04 to the south-east of the dwelling.

7.1 TOPSOIL/SUBSOIL (CONTINUED)

Topsoil was described as soft dark brown slightly sandy gravelly silty clay with roots and rootlets, where gravel comprised sandstone and mudstone. Occasional plastic fragments were observed in TP02.

7.2 MADE GROUND

Made Ground was encountered in all four trial pit locations, extending to depths of between 0.7m and 2.0mbgl. Typically made ground comprised reworked natural soils described as largely firm (ranging from soft to stiff) brown, dark brown, locally dark grey sandy gravelly silty clay with some cobbles. Gravel and cobbles comprised sub-angular to sub-rounded sandstone.

Made ground was thickest in TP03 and in this location it was encountered immediately from ground level with no cover of topsoil/subsoil. Firm dark brown and brown slightly sandy gravelly silty clay was encountered to between 0.6m and 0.9mbgl. The made ground was locally slightly ashy and contained anthropogenic materials including occasional concrete blocks, brick and concrete fragments, clay pipe fragments and plastic fragments and plastic wrap. This was underlain by made ground comprising reworked soils as described above.

7.3 GLACIAL TILL

In locations TP03 and TP04, located to the east of the existing dwelling, firm brown and orange brown sandy gravelly clay/silts were encountered beneath the made ground extending to depths of between 2.0mbg and 2.9mbgl. The clays are interpreted to represent a cover of glacial till.

Two samples of natural glacial till were collected from depths of 0.7m and 2.5mbgl and subjected to Atterberg Limit testing. The results indicate that 37% of the sample from TP02 at 0.7m and 91% of the sample from TP03 at 2.5mbgl passed through the 0.425mm sieve and that the sample from TP02 was classed as non-plastic and the sample from TP03 exhibited a plastic limit of 16%. In accordance with NHBC chapter 4.2, these results indicate that the materials range between non-shrinkable (TP02) and low volume change potential (TP03) with a modified plasticity index of 14.56%

7.4 WEATHERED BEDROCK

Brown, silty, very sandy gravel or sand and gravel of weathered bedrock was encountered beneath either made ground (reworked soils) or glacial till clays in all locations, initiating from depths between 0.7m and 2.9mbgl.

The relative density of the materials was estimated as medium dense based on the behaviour of the soils during excavation. In all locations with the exception of TP01 the sandy gravels/sand and gravel stratum was encountered to the base of the trial pits. In TP01, sandy gravel graded into closely fractured weathered sandstone at approximately 1.0mbgl, excavated as gravel and cobbles of angular tabular sandstone below this depth. The weathered sandstone became very difficult to excavate with depth and the trial pit was terminated at 1.5mbgl due to lack of progress.

A single sample of weathered sandstone collected from TP01 at 0.7m was subjected to Atterberg Limits. The results indicate that 34% of the sample passed through the 0.425mm sieve and the material exhibited a plastic limit of 10%, indicating a modified plasticity index of 3.4% (non-shrinkable in accordance with NHBC chapter 4.2). The materials were assessed as sandy gravel in-situ and alongside the high cobble content within the materials are not considered to be cohesive in nature.

7.5 GROUNDWATER

Groundwater inflows were not encountered in the trial pits excavated to depths of between 1.5m and 3.2mbgl. In TP01 only, a minor seepage was encountered at 0.7mbgl during excavation, however this ceased as excavation continued and it was considered to represent a minor perched water table at the base of the made ground.

The groundwater conditions are based on observations made at the time of the fieldwork. It should be noted that groundwater levels may vary due to seasonal and other effects.

7.6 SOIL INFILTRATION TESTS

Infiltration testing was undertaken in TP01 with a base depth of 1.5mbgl. One cycle was undertaken and extrapolation of the results indicates an indicative soil infiltration rate of 7.8×10^{-6} m/s.

It should be noted that the results of the soakaway testing are representative of the location and depths of the tests carried out. If soakaways are proposed at the site, the Local Authority may require supplementary, location and depth specific testing to be completed when the proposed soakaway locations are known.

7.6 SOIL INFILTRATION TESTS (CONTINUED)

Follow up tests should fully comply with BRE 365, in order to confirm the suitability of the site and to satisfy the local authority.

8.0 CONTAMINATION

8.1 AVERAGING AREAS

In order to assess the laboratory test results reliably and in context, the data have been grouped into an averaging area. An averaging area (or area of interest) is that area of soil to which a receptor is exposed or which otherwise contributes to the creation of hazardous conditions. This may be an area of historical industrial usage, a soil type, or a specific proposed end use.

In the case of this analysis, the averaging area has been determined according to the proposed residential end use.

8.2 SOIL CONTAMINATION

The Suitable 4 Use Levels (S4ULs) published by LQM have been adopted as critical concentrations against which soil contaminant concentrations can be compared. In the absence of additional published S4ULs, the Category 4 Screening Levels (C4SLs) derived by DEFRA and Soil Screening Values (SSVs) derived by Atkins ATRISK^{soil} for a residential with home grown produce end use have been adopted, where considered appropriate.

The results of the testing indicate total organic carbon content (TOC) in the range of 3.2% to 5.5%. As a first tier risk assessment, the results have been compared to the respective guidelines, where applicable, for 1% soil organic matter content.

The soil test results for topsoil and made ground have been summarised and are shown in Appendix H.

8.2.1 Topsoil

The results of the laboratory testing indicate that most of the analysed chemical elements or compounds are present at concentrations below the appropriate thresholds with the exception of a single arsenic exceedance.

Within the sample collected from TP02 at 0.2mbgl, an arsenic concentration of 53mg/kg exceeds the S4UL of 37mg/kg. All other arsenic concentrations were below the S4UL.

No other elevated levels of contaminants were detected within the samples of topsoil and no asbestos was detected in any of the samples.

8.2 SOIL CONTAMINATION (CONTINUED)

8.2.2 *Made Ground*

The results of the laboratory testing on a single sample of made ground indicate that all of the analysed chemical elements or compounds are present at concentrations below the appropriate thresholds and that no asbestos was detected.

8.2.3 *In-situ Natural Ground*

No visual or olfactory evidence of contamination of the in-situ natural ground was identified during the excavation of the trial pits. At the time of writing this report no samples of natural ground had been tested. It is considered likely that concentrations of determinands within the natural ground are likely to be naturally occurring and as such, the natural ground poses no significant threat to human health or the environment.

9.0 REVISED CONCEPTUAL EXPOSURE MODEL

The preliminary conceptual exposure model has been reviewed and revised to reflect the findings of the site investigation and the results of the laboratory testing of soils. Pathways identified as a relevant pollutant linkage require appropriate risk assessment or mitigation measures (see Section 10).

Table 8: Revised Conceptual Exposure Model						
Source		Receptor	Pathway	Preliminary Active Pathway? (see Sect. 5.8)	Relevant Pollutant Linkage	Justification/ Mitigation
Origin	Contaminant					
Topsoil/ Made Ground of unknown origin and historical reprofiling of the site and demolition of buildings.	Metals, semi-metals, non-metals, PAH, Asbestos/ACM	Resident – human health	Dermal Contact with made ground/dust	✓	✓	Single elevated concentration of arsenic in topsoil. <i>Risk Assess</i>
			Ingestion of soil and/or soil attached to home-grown produce	✓	✓	
			Ingestion of home-grown produce	✓	✓	
			Inhalation of dust	✓	✓	
			Inhalation of vapours – indoor/outdoor	✓	×	No sufficiently volatile contaminants identified.
	Metals, semi-metals, inorganics, PAH	Groundwater quality	Leaching from made ground	✓	×	No elevated contaminant concentrations detected in soil samples.
	Metals, semi-metals, inorganics, PAH	Surface water quality	Transportation within groundwater	✓	×	
Building materials/fabric	Asbestos/ACM	Resident – human health	Inhalation of fibres	✓	✓/×	Not determined as part of soil testing. Resultant risk to be assessed following demolition.

9.0 REVISED CONCEPTUAL EXPOSURE MODEL (CONTINUED)

Table 8: Revised Conceptual Exposure Model						
Source		Receptor	Pathway	Preliminary Active Pathway? (see Sect. 5.8)	Relevant Pollutant Linkage	Justification/ Mitigation
Origin	Contaminant					
Made Ground of unknown origin and natural ground	Metals, semi-metals, non-metals, PAH	Building Materials Durability	Direct contact	✓	×	Made ground and natural ground will be in contact with building materials. <i>Risk Assess</i>
Ground Gas – organic, gas producing materials	Methane, carbon dioxide	Human health	Accumulation of gases in confined spaces, and/or migration off site, leading to asphyxiation, or risk of explosion	✓	×	Significant thickness of gas producing materials not encountered. No off-site sources identified. Basic radon protection required.

10.0 RISK ASSESSMENT

10.1 METHODOLOGY

The risk of pollution, health effects or environmental harm occurring as a result of ground contamination is dependent upon three principal factors:

- The scale of the contamination sources;
- The presence of sensitive “receptors”, eg Humans: health of the general public, site occupiers, redevelopment workers. Environment: flora, fauna, etc;
- The existence of migration pathways by which contaminants can reach the sensitive receptors.

This section assesses each of these factors in order to evaluate the overall level of risk and potential harm to receptors. The receptor may be human, a water resource, an eco-system or construction materials. Pathways connecting a perceived hazard to a receptor are referred to as exposure pathways.

The sources of contamination and the links connecting the hazards to the sensitive receptors will represent the basis for the risk assessment.

10.2 SOURCE-PATHWAY-RECEPTOR MODEL

The preliminary conceptual site model was based on the findings of the desk study. This was later reviewed and refined according to the findings of the site investigation, allowing for the ground conditions encountered and the results of laboratory testing of soil and groundwater. Any pathways considered to be inactive were removed from the model and all remaining potentially active pathways require risk assessment.

The pathways shown as potentially active in the Revised Conceptual Site Model in Section 9.0 above have been assessed below.

10.3 HUMAN HEALTH RISK ASSESSMENT

10.3.1 *Site in its Present Condition*

The site does not pose any risks to casual visitors or the existing residents.

10.3 HUMAN HEALTH RISK ASSESSMENT (CONTINUED)

10.3.2 Future Site Users

The contamination test results and investigation observations indicate that the contaminant levels within the made ground and topsoil beneath the site are generally within acceptable levels and it is considered that the natural ground does not present a potential risk to site end users.

A single concentration of arsenic within a sample of topsoil exceeded the guidance threshold (S4UL), however, reference to the DEFRA technical guidance on normal levels of contaminants in Welsh soil indicates that the normal background concentration (NBC) of the area is 250mg/kg (Urban 1 area).

Accordingly, the recorded concentration in a single topsoil sample beneath the site is not considered to be of significant concern given the general ambient concentrations of the area, associated with either historical land uses, natural mineralisation or naturally peaty organic rich soils.

As such, no specific mitigation measures are required, however the Local Authority may require bioaccessibility testing in order to further assess the risk to human health.

In the event that an unexpected hotspot or suspected contamination is encountered during the construction phase, this will require appropriate inspection and risk assessment to identify if any remedial measures will be required in order to protect end users.

It is recommended that the ground beneath the existing floor slab is inspected following the demolition of the existing building to note any signs of contamination including asbestos and/or asbestos containing materials (ACM). The risk to site end users arising from any asbestos containing materials within the building fabric has not yet been determined and will require investigation following demolition.

10.3.2 Future Site Users

Normal good hygiene practices are considered adequate to protect the health and safety of redevelopment workers, and should include:

- Minimum handling of materials;
- Washing of hands prior to all meal breaks, which should be taken in a designated clean area;
- The use of standard protective clothing such as boots and overalls and gloves, where considered relevant.

10.3 HUMAN HEALTH RISK ASSESSMENT (CONTINUED)

In dry weather, inhalation of dust should be avoided preferably by the use of dust suppression techniques to minimise fugitive emissions and minimisation of exposed materials at any particular time.

During excavation, in order to prevent cross contamination of materials and for good practice, any encountered made ground arisings should be segregated from any underlying natural soils.

Additionally, a system should be established by which any 'unusual' materials that may be encountered are reported rapidly to the site management, so that the appropriate action may be taken, following specialist advice if necessary. An unusual material may be identified on site by colour, odour or physical nature.

Reference should be made to the Health and Safety Executive document "Protection of Workers and the General Public during the development of contaminated land" for detailed guidance on these matters.

10.4 RISKS TO VEGETATION

Contaminant concentrations within the made ground do not indicate the potential for adverse effects to vegetation.

The nature of the made ground in some areas may not provide a suitable growth medium for plants and vegetation, therefore where new trees or vegetation is to be planted it would be prudent to allow for a minimum 150mm thick layer of clean, inert topsoil materials to be placed in all proposed landscaped areas.

10.5 GROUNDWATER RISK ASSESSMENT

The intrusive site investigation has not identified any elevated contaminant concentrations or potentially contaminated materials considered to pose a risk to controlled waters in the near surface soils beneath the site. Alongside the site history, and identified ground conditions, the risk to controlled waters is therefore considered to be low.

10.6 GROUND GAS RISK ASSESSMENT

The intrusive investigation did not identify significant thicknesses of made ground beneath the site and no putrescible or potentially gas generating materials were noted. The site history and identified ground conditions indicate that the risk of on-site ground gas generation is considered to be low.

Off-site, the desk study has not identified any landfills or potential sources of ground gas within 250m of the site boundary, therefore the risk of off-site ground gas migration is also considered to be low.

A BGS radon report was obtained as part of the desk study. The report states that basic radon protective measures would be necessary in the construction of new buildings within the site.

10.7 RISKS TO BUILDINGS AND MATERIALS DURABILITY

10.7.1 Concrete Classification

The laboratory test results for the chemicals water soluble sulphate and pH, which may adversely affect the durability of building materials is presented in Appendix G. In addition, chemical testing on a single sample of made ground including analysis for sulphur, water soluble sulphate, total sulphate and pH and results are included in Appendix F.

Evidence to date does not indicate any specifically aggressive conditions, but it would be reasonable to expect a degree of sulphate and acidic aggressiveness from the made ground.

In accordance with BRE Digest SD1:2005 and adopting the assessment procedure specified therein for brownfield sites, the laboratory chemical test results indicate a characteristic value (taking the highest of the test results) for water soluble sulphate within both the made ground and natural ground of 120mg/l.

Using Table C2 of BRE Digest SD1:2005, this characteristic value corresponds to Design Sulphate Class DS-1.

The groundwater regime of the site has been assessed as 'mobile' and a characteristic pH value of 6.0 has been determined (adopting the lowest of the test results). The Design Sulphate Class has been modified to give a site ACEC class of AC-2z for concrete structures constructed within the made ground and natural ground beneath the site.

10.7 RISKS TO BUILDINGS AND MATERIALS DURABILITY (CONTINUED)

10.7.2 Water Services

Water supply pipes will need to be protected from any contamination present within the ground. In particular, the presence of organic contaminants (such as PAH) should be addressed when selecting pipe materials. Measures to protect the pipes will include clean backfill to trenches and possibly alternative material selection. Reference should be made to UKWIR Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites, document No. 10/WM/03/21. The final design and selection of the pipe and associated backfill should be agreed with the appropriate Regulator prior to installation.

Current test results indicate that PE or PVC pipe materials are likely to be acceptable based on negligible concentrations of PAH (with the exception of samples of topsoil). In order to comply with the UKWIR guidance, specific sampling and testing along the actual line of the proposed water supply route may need to be carried out once this has been established.

10.8 WASTE DISPOSAL

Excavated materials generated by the development may be considered as waste and subject to waste controls. Any re-use of excavated materials on-site should be undertaken in accordance with current waste and environmental legislation and which may require the production of an approved Materials Management Plan (MMP) prepared in accordance with the CL:AIRE Code of Practice.

It is recommended that a sustainable development strategy is adopted which reduces to a practicable minimum the generation of waste materials and the need for disposal to a licensed tip. Emphasis should be on recovery and re-use rather than disposal.

However, any waste or surplus materials that are generated will need to be classified in accordance with current EC regulations and Environment Agency guidance prior to disposal. It is the responsibility of the waste producer to classify the waste.

Based on the data obtained from the site investigation works, any waste materials comprising the existing made ground are likely to be classified as non-hazardous waste. The existing natural ground is likely to be classified as non-hazardous waste.

Any asbestos containing materials (ACMs) will be classified as hazardous waste.

10.8 WASTE DISPOSAL (CONTINUED)

This classification is provisional and indicative of the likely waste classification based on the data obtained to date (including chemical composition, moisture content, etc.). It also assumes that the materials tested will be representative of future generated waste.

In order to minimise disposal, the materials generated should be segregated and examined, with appropriate testing as necessary, to enable the materials to be sorted or treated into lower classifications, with the resultant benefit of potentially generating re-use rather than disposal.

Once final waste sources and volumes are known, the waste stockpile to be disposed off-site will need to be classified in accordance with Environment Agency/Natural Resources Wales Waste Classification – Guidance on the Classification and Assessment of Waste Technical Guidance WM3 (2015). This is likely to require additional sampling and testing of the generated waste materials to provide an up to date current basis for classification.

Depending on the waste classification, waste acceptance criteria (WAC) testing may be required, in order to determine which class of landfill site the waste can be sent to.

It is recommended that the results of the waste classification and any WAC test results are sent to the intended licensed waste operator prior to disposal in order to confirm their classification and acceptance.

10.9 UNCERTAINTIES

It is important to recognise that there may be areas of contamination within the site that have not been found or that contaminants may be present at concentrations above those that have been found. It is also important to recognise that contamination may be localised and that no investigation, however comprehensive, is capable of finding such occurrences, other than by chance.

The ground beneath existing buildings has not been examined, though the site history does not indicate the potential for former site uses to have caused contaminant spills and no sign of basements was noted. Some degree of made ground material should be expected beneath the existing floor slabs. It would be prudent that inspection of the exposed formation(s) is undertaken following breaking out and removal of the floor slabs to note any signs of potential contamination.

Assessment of the embankment to the north of the existing dwelling has not been undertaken as part of this investigation.

10.9 UNCERTAINTIES (CONTINUED)

In addition, any the existing retaining walls have not been assessed as part of this investigation and any that are to remain should be inspected by a suitably qualified structural engineer.

11.0 ENGINEERING CONSIDERATIONS AND RECOMMENDATIONS

11.1 DETAILS OF PROPOSED DEVELOPMENT

The proposed redevelopment is intended to comprise a larger residential dwelling in place of the existing dwelling and outbuilding in the eastern part of the site. The proposed building is proposed largely within the previous building footprint and a new access road is proposed to enter the site from the north, curving round to the west to reach a small parking area immediately south-east of the dwelling. Reference has been made to a Proposed Site Layout Drawing by Iplan Architecture Dwg No.: 19.202.02 dated January 2020.

The following recommendations are based on current site levels, based on the proposed development layout indicating minimal changes to site levels in the area of the proposed building. The recommendations should be reviewed and revised where necessary if engineered site levels are proposed to be considerably altered as part of the new development.

It should be noted that the form and stability of the slope to the north of the property has not been assessed as part of this investigation. Once proposed layouts and finished levels are confirmed, consideration should be given to the requirement for an assessment of these features. It is recommended that proposed structures maintain a minimum 5m standoff from the embankment to the north.

In addition, any existing retaining walls that are to remain should be inspected by a suitably qualified structural engineer.

11.2 SITE PREPARATION

Prior to works commencing on site, any services within the proposed development area should be identified and either diverted or protected. Any diversion works should be carried out under the supervision of, and to the specification of appropriate Statutory Authorities. The resulting excavations should be backfilled with suitable granular fill material laid and compacted to Department of Transport (DTP) Specification for Earthworks.

Prior to the demolition of the existing buildings, a building inventory and demolition strategy should be undertaken to ensure safe working methods and disposal of materials. After demolition of the buildings, all buried foundations (including infrastructure) and any other walls, buried slabs etc associated with the former building should be fully removed.

11.2 SITE PREPARATION (CONTINUED)

Any remnant structures/foundations, manholes, drainage runs and other buried structures should be demolished and removed, if no longer required.

Demolition materials should be sorted, processed and the acceptable materials crushed to an appropriate size for re-use as granular fill (<125mm maximum particle size). As detailed above, the resulting excavations should be backfilled with suitable granular fill material laid and compacted to Department of Transport (DTp) Specification for Earthworks.

A system should be established for identification and dealing with any unforeseen contamination encountered during the site works (including identification of any potential asbestos containing materials). Any contamination, or suspected contamination, should be reported to the site manager, so that appropriate action may be taken, following specialist advice if necessary.

Similarly, any encountered coal seam outcrops and/or any soft spots which may be associated with former surface crop workings should be reported to the site manager and the advice of a geotechnical engineer sought.

All exposed formations should be protected from site traffic and inclement weather in order to preserve their integrity. Any soft spots/areas should be removed and replaced with well compacted site won or imported granular fill material. The near surface soils will be susceptible to damage and softening therefore a layer of blinding concrete or granular fill should be placed following exposure.

There are a number of mature trees along the edges of the site. Allowances should be made for the removal of any associated roots that may become exposed in any proposed nearby earthworks and foundation excavations. Any such works should be conducted in accordance with the code of practice recommended by the National House Building Council (NHBC).

11.3 FOUNDATIONS AND FLOOR SLABS

The ground conditions beneath the site are characterised by a variable cover of made ground generally comprising reworked natural soils, overlying locally present firm sandy gravelly clays of glacial till overlying sandy gravels of weathered bedrock (sandstone).

Based on the findings of the investigation, the new building can be founded on mass concrete trench fill foundations, which will require nominal reinforcement if spanning different strata.

11.3 FOUNDATIONS AND FLOOR SLABS (CONTINUED)

Consideration should be given to the demolition and removal of the existing building and associated foundations which is likely to result in significant ground disturbance in the vicinity of/beneath the proposed new building, as detailed below.

Foundations should be constructed at sufficient depth so that they do not impose any load onto the adjacent steeply sloping embankment to the north. It would therefore be prudent to deepen all trench fill foundations to the granular soils/weathered sandstone bedrock.

Accordingly, it is recommended that foundations bear onto (medium dense) sandy gravels or weathered sandstone bedrock which were encountered from depths of between 0.7mbgl and 2.0mbgl. All overlying made ground/reworked soils should be fully penetrated. Firm clays were encountered to the east of the building only, from 2.0mbgl to 2.9mbgl in TP03 which will also need to be fully penetrated to reach the bearing stratum.

Any foundation bearing on a combination of differing bearing strata should be reinforced with top and bottom mesh reinforcement across the change in strata.

An allowable bearing pressure of 100kN/m² is considered appropriate for footings placed within (medium dense) sandy gravels or weathered sandstone bedrock.

At this intensity of loading, the total settlements should not exceed 25mm, and any angular distortions caused by differential movements should be less than 1:750.

Laboratory Atterberg Limits have been determined for near surface cohesive soils, indicating they range between non-shrinkable and low shrinkage potential in accordance with NHBC Chapter 4.2. Foundation formations should be kept to a minimum depth of 0.90m below finished ground levels in order to protect them from the effects of frost heave and/or thermal shrinkage.

Foundations should penetrate the founding horizon by a minimum of 200mm.

If during demolition and site clearance (involving the removal of foundations and floor slabs) significant disturbance of the shallow soil profile occurs, there may be a requirement for locally deepened foundations.

Consideration has been given to placing foundations within the firm gravelly silty clays, however this stratum was not found to be laterally extensive and due to the vicinity of the proposed building to the embankment to the north, it is recommended that foundations are deepened to the more competent and laterally extensive gravels (or sandstone bedrock).

11.3 FOUNDATIONS AND FLOOR SLABS (CONTINUED)

A preliminary coal mining risk assessment for the site indicates a low risk of shallow mine workings beneath the site, but has identified the potential for historic crop workings (mining from surface level) in the area. There was no evidence of any suspected crop workings or bell pits identified on site and within the trial pits. Nonetheless, if the depth to founding strata is found to suddenly increase, or if suspected infill material (made ground) or soft deposits are encountered during foundation construction, it is recommended that works are halted and the exposed sub formation inspected by a suitably qualified geotechnical engineer.

Remedial mitigation works would be assessed on a case by case basis, depending on the encountered ground conditions. This may comprise localised removal of the soft materials and replacement with mass concrete or alternative foundation design.

Suspended floor slab(s) are recommended for the site due to the heave potential of the low volume change potential soils and the presence of made ground.

Basic radon protection measures are required in the construction of the new dwelling.

Whilst consideration has been given to the adoption of raft foundations on engineered fill, due to the position of the proposed building near to a steeply sloping embankment to the north, the use of raft foundations are not recommended.

11.4 RETAINING WALLS

Given the sloping nature of the site, and the likely requirement for some re-profiling/cut and fill earthworks, it is likely that retaining walls may be required at the site.

For design purposes, the following shear strength parameters may be used for the design of the retaining walls:

$c' = 0 \text{ kN/m}^2$	$\phi = 25-28^\circ$ - for existing reworked soils and glacial till clays
$c' = 0 \text{ kN/m}^2$	$\phi = 30-32^\circ$ - for existing sandy gravels/sand and gravel of sandstone
$c' = 0 \text{ kN/m}^2$	$\phi = 30-32^\circ$ - for existing sandstone bedrock
$c' = 0 \text{ kN/m}^2$	$\phi = 32-35^\circ$ - for well compacted granular fill (imported)

Drainage measures should be incorporated into the design and construction of the retaining walls in order to ensure that there is no build-up of any hydrostatic water pressure behind the walls. The design and construction of the proposed retaining wall will need to consider the temporary and permanent works required on site.

11.5 EXCAVATIONS AND FORMATIONS

Shallow sandstone bedrock (excavated as gravel and cobbles) was encountered from 1.0mbgl in TP01 only in the north of the site which precluded excavation deeper than 1.5mbgl. In all other trial pits, excavations to a maximum depth of 3.2mbgl were achievable using a 6 Tonne tracked excavator. Allowances should be made for dealing with “hard-dig” and provisions should be made for hydraulic breaking equipment for demolition and removal of concrete slabs.

Groundwater inflows were not encountered during the intrusive investigation with the deepest location excavated to 3.2mbgl. A minor seepage was observed in TP01 at 0.7mbgl which ceased as excavation continued. It is considered that any groundwater inflows/seepages are likely to be slight and these together with any rainfall infiltrations should be dealt with by conventional pumping techniques.

The sides of excavations deeper than 1.0m should be supported by trench boxes, or temporarily battered at gradients of typically 30 degrees.

The exposed formations within cohesive or made ground materials will be susceptible to damage, softening and deterioration by wet weather and site traffic. They should therefore be protected by blinding concrete or a 100mm thick layer of hardcore immediately after exposure.

11.6 ACCESS ROADS AND CAR PARKING AREAS

Based on the findings of the ground investigation there is likely to be variations in the nature and strength of the in-situ materials with regard to construction of access roads.

Additionally, it is likely that the development will comprise cut and fill earthworks in the south, therefore road/parking areas are likely to be constructed on engineered fill.

Consequently, for design purposes, a range of California Bearing Ratio (CBR) values between 2% and 3% should be assumed site wide at this stage for road construction within the existing near surface cohesive materials and 4% for sandy gravels.

If the access road and car parking formations are to be within well compacted engineered fill and/or imported fill materials, then a California Bearing Ratio (CBR) value of 5% should be achievable and could be used for design purposes.

In-situ testing should be undertaken to confirm these recommendations.

11.6 ACCESS ROADS AND CAR PARKING AREAS (CONTINUED)

Contingencies should be allowed for the removal and replacement of any 'soft spots/areas' and for their replacement with well compacted imported granular materials. After proof rolling the pavement formations, any 'soft spots/areas' should be removed and replaced with well-compacted imported granular materials. Department of Transport (DTp) Type 1 Sub-Base, or similar approved, could be used and should be compacted in layers in accordance with the current DTp Specification for Highway Works.

11.7 DRAINAGE

Soil infiltration testing was undertaken in TP01 at 1.5mbgl and a soil infiltration rate of 7.8×10^{-6} m/s has been calculated.

It should be noted that the results of the soakaway testing are representative of the location and depths of the tests carried out. If soakaways are proposed at the site, the Local Authority may require supplementary, location and depth specific testing to be completed when the proposed soakaway locations are known. Follow up tests should fully comply with BRE 365, in order to confirm the suitability of the site and to satisfy the local authority.

11.8 RECOMMENDED FURTHER WORKS

Following the demolition of the existing buildings (dwelling and outbuilding) and the breaking out and removal of the floor slabs, the exposed formations should be inspected and if necessary, samples collected for chemical testing. The exposed formations/sub formations should be visually inspected for asbestos containing materials (ACM), particularly within the footprint of the existing buildings and underneath hardstanding.

APPENDIX A

ENVIROCHECK REPORT

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

272393355_1_1

Customer Reference:

12800/RAH

National Grid Reference:

277930, 198850

Slice:

A

Site Area (Ha):

0.36

Search Buffer (m):

1000

Site Details:

89, Wenallt Road

Tonna

NEATH

SA11 3QH

Client Details:

MR H Pritchard

Integral Geotechnique

Integral House

7 Beddau Way

Castlegate Business Park

Caerphilly

CF83 2AX

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Industrial Land Use	72
Sensitive Land Use	77
Data Currency	81
Data Suppliers	86
Useful Contacts	87

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.

For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 2		1		30
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 9				1
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 10		Yes		
Pollution Incidents to Controlled Waters	pg 10			2	43
Prosecutions Relating to Authorised Processes	pg 17				1
Registered Radioactive Substances					
River Quality	pg 17			1	5
River Quality Biology Sampling Points	pg 18				1
River Quality Chemistry Sampling Points	pg 19				8
Substantiated Pollution Incident Register					
Water Abstractions	pg 26				13 (*11)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 32	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 32	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 33		9	12	162

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 54	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 54		3	5	9
Potentially Infilled Land (Water)	pg 55				6
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)	pg 56				2
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)	pg 56				1
Planning Hazardous Substance Consents	pg 56				1
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 57	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 57	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 65		4	9	15
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 70	Yes	n/a	n/a	n/a
Mining Instability	pg 70	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 70	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 70		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 70	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 71		Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 71		Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 71	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures	pg 71	Yes	n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 72		1	4	9
Fuel Station Entries					
Points of Interest - Commercial Services	pg 73		3		
Points of Interest - Education and Health	pg 73				4
Points of Interest - Manufacturing and Production	pg 73		1	2	13
Points of Interest - Public Infrastructure	pg 75			1	13
Points of Interest - Recreational and Environmental	pg 76		2		4
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 77	1	12	10	26
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (W)	0	1	277934 198853
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	21	1	277950 198900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	47	1	278000 198900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (NW)	121	1	277800 198950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (W)	140	1	277750 198900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (NW)	155	1	277800 199000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	161	1	277750 198950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (N)	165	1	277900 199050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	195	1	277800 199050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	205	1	277700 198950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (N)	215	1	277934 199100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	215	1	277900 199100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	225	1	278100 199050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (N)	226	1	278000 199100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	270	1	277950 199150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	288	1	278050 199150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (NW)	300	1	277650 199050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (NE)	308	1	278100 199150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SE (NE)	353	1	278100 199200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (NE)	376	1	278150 199200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (NE)	381	1	278300 199050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	409	1	277500 199000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	444	1	277450 198950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (NE)	445	1	278200 199250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (NW)	452	1	277500 199100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12NE (W)	456	1	277450 199000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (NE)	475	1	278250 199250
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (NW)	480	1	277500 199150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SE (NE)	488	1	278200 199300
1	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Water Supply Grid Location: Tonna S.Res Chl.Overfl Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bp0203001 Permit Version: 1 Effective Date: 2nd October 1989 Issued Date: 2nd October 1989 Revocation Date: 16th March 1994 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: To Land Status: Consent expired Positional Accuracy: Located by supplier to within 100m	A13SW (SW)	168	2	277800 198700
2	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Aberdulais Ss77329900 Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bp0064311 Permit Version: 1 Effective Date: 9th October 1987 Issued Date: 9th October 1987 Revocation Date: 28th August 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath - Tidal Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A12NE (W)	582	2	277320 199000
2	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Farrit Sewer Overflow (Swo 6a) Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bp0056501 Permit Version: 3 Effective Date: 30th June 1992 Issued Date: 30th June 1992 Revocation Date: 31st August 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: Consent expired Positional Accuracy: Located by supplier to within 100m	A12NE (W)	601	2	277300 199000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Farrit Sewer Overflow (Swo 6a) Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bp0056501 Permit Version: 2 Effective Date: 30th July 1991 Issued Date: 30th July 1991 Revocation Date: 29th June 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A12NE (W)	601	2	277300 199000
2	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Farrit Sewer Overflow (Swo 6a) Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bp0056501 Permit Version: 1 Effective Date: 10th November 1987 Issued Date: 10th November 1987 Revocation Date: 29th July 1991 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A12NE (W)	601	2	277300 199000
2	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Farrit Sewer Overflow (Swo 6a) Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bw2901901 Permit Version: 1 Effective Date: 8th November 1972 Issued Date: 8th November 1972 Revocation Date: 21st December 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: Consent expired Positional Accuracy: Located by supplier to within 100m	A12NE (W)	601	2	277300 199000
2	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Swo. Point X. D/S Weir Tonn Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bb4000511 Permit Version: 1 Effective Date: 8th November 1972 Issued Date: 8th November 1972 Revocation Date: 16th December 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A12NE (W)	605	2	277290 198970

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Park Street Cso Park Street Tonna, In Road S/O 73 Park St, Neath, Sa11 3jq Authority: Natural Resources Wales Catchment Area: NEATH - CONF WITH NEDD FECHAN AND MELLTE TO TL Reference: Bp0353901 Permit Version: 2 Effective Date: 6th February 2020 Issued Date: 6th February 2020 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Of The Neath Canal Status: Effective Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	583	2	277465 199269
3	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Park Street Cso Park Street Tonna, Park Street, Neath Authority: Natural Resources Wales Catchment Area: NEATH - CONF WITH NEDD FECHAN AND MELLTE TO TL Reference: Bp0353901 Permit Version: 1 Effective Date: 31st March 2006 Issued Date: 31st March 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib Of Neath Canal Status: Effective Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	591	2	277444 199257
3	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Park Street Cso Park Street Tonna, Park Street, Neath Authority: Natural Resources Wales Catchment Area: NEATH - CONF WITH NEDD FECHAN AND MELLTE TO TL Reference: Bp0353901 Permit Version: 1 Effective Date: 31st March 2006 Issued Date: 31st March 2006 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib Of Neath Canal Status: Effective Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	591	2	277444 199257
4	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: 73 Park St/Dulais Fach Rd Tonna Npt, 73 Park Street/Dulais Fach Road, Tonna, Neath, Neath Port Talbot Authority: Natural Resources Wales Catchment Area: NEATH - CONF WITH NEDD FECHAN AND MELLTE TO TL Reference: Bp0064310 Permit Version: 2 Effective Date: 31st March 2008 Issued Date: 7th March 2005 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Neath Status: Effective Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	616	2	277340 199150

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: 73 Park St/Dulais Fach Rd Tonna Npt, 73 Park Street/Dulais Fach Road, Tonna, Neath, Neath Port Talbot Authority: Natural Resources Wales Catchment Area: NEATH - CONF WITH NEDD FECHAN AND MELLTE TO TL Reference: Bp0064310 Permit Version: 2 Effective Date: 31st March 2008 Issued Date: 7th March 2005 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Neath Status: Effective Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	616	2	277340 199150
4	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: 73 Park St/Dulais Fach Rd Tonna Npt, 73 Park Street/Dulais Fach Road, Tonna, Neath, Neath Port Talbot Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bp0064310 Permit Version: 1 Effective Date: 9th October 1987 Issued Date: 9th October 1987 Revocation Date: 30th March 2008 Discharge Type: Unspecified Discharge: Freshwater Stream/River Environment: Receiving Water: River Neath - Tidal Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	616	2	277340 199150
4	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Calor Gas Works Overflow (Swo) Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bw2902301 Permit Version: 1 Effective Date: 8th November 1972 Issued Date: 8th November 1972 Revocation Date: 21st December 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	621	2	277320 199120
4	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Tonna Sewer Overflow (Swo 5d) Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bw2902001 Permit Version: 1 Effective Date: 8th November 1972 Issued Date: 8th November 1972 Revocation Date: 21st December 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	621	2	277330 199140

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Swo. Point Y.D/S Weir Tonna Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bb4000512 Permit Version: 1 Effective Date: 8th November 1972 Issued Date: 8th November 1972 Revocation Date: 16th December 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	639	2	277310 199140
5	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Cso 48 Neath River Bridge Adj Calor, Adj To Calor Gas, Tonna, Neath, Sa10 8ep Authority: Natural Resources Wales Catchment Area: NEATH - CONF WITH NEDD FECHAN AND MELLTE TO TL Reference: Bp0316601 Permit Version: 2 Effective Date: 11th October 2019 Issued Date: 11th October 2019 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Neath Status: Effective Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	649	2	277322 199185
5	Discharge Consents Operator: Site Manager Property Type: Not Supplied Location: Calor Gas Ops Centre Aberdulais, Calor Gas Operations Centre, Neath, Neath Port Talbot Cbc, Sa10 8er Authority: Natural Resources Wales Catchment Area: NEATH - CONF WITH NEDD FECHAN AND MELLTE TO TL Reference: Bp0299601 Permit Version: 1 Effective Date: 20th August 2002 Issued Date: 20th August 2002 Revocation Date: Not Supplied Discharge Type: Trade Discharges - Site Drainage Discharge: Freshwater Stream/River Environment: Receiving Water: Afon Nedd Status: Effective Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	659	2	277321 199203
5	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Cso 48 Neath River Bridge Adj Calor, Near River Bridge, Cso 48, Adjacent Calor Gas, Neath Authority: Natural Resources Wales Catchment Area: NEATH - CONF WITH NEDD FECHAN AND MELLTE TO TL Reference: Bp0316601 Permit Version: 1 Effective Date: 31st March 2004 Issued Date: 31st March 2004 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Neath Status: Effective Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	668	2	277316 199212

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Cso 48 Neath River Bridge Adj Calor, Near River Bridge, Cso 48, Adjacent Calor Gas, Neath Authority: Natural Resources Wales Catchment Area: NEATH - CONF WITH NEDD FECHAN AND MELLTE TO TL Reference: Bp0316601 Permit Version: 1 Effective Date: 31st March 2004 Issued Date: 31st March 2004 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Neath Status: Effective Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	668	2	277316 199212
5	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Dulais Fach Road Swo.5b At Riv Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bw2900101 Permit Version: 1 Effective Date: 20th October 1989 Issued Date: 20th October 1989 Revocation Date: 14th March 1994 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	672	2	277310 199210
6	Discharge Consents Operator: Symons T J Property Type: Domestic Property (Single) Location: Brynchwyth Farm Fairyland Road Tonn, Fairyland Road Tonna Neath. Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bp0143601 Permit Version: 1 Effective Date: 5th September 1989 Issued Date: 5th September 1989 Revocation Date: 10th October 1994 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: To Land Status: Consent expired Positional Accuracy: Located by supplier to within 100m	A14SE (E)	726	2	278700 198700
7	Discharge Consents Operator: Site Manager Property Type: Not Supplied Location: Calor Gas Ops Centre Aberdulais, Calor Gas Operations Centre, Neath, Neath Port Talbot Cbc Authority: Natural Resources Wales Catchment Area: NEATH - CONF WITH NEDD FECHAN AND MELLTE TO TL Reference: Bp0299501 Permit Version: 1 Effective Date: 20th August 2002 Issued Date: 20th August 2002 Revocation Date: Not Supplied Discharge Type: Trade Discharges - Site Drainage (Contam Surface Water, Not Waste Site) Discharge: Freshwater Stream/River Environment: Receiving Water: Afon Nedd Status: Effective Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	727	2	277255 199225

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	Discharge Consents Operator: Site Manager Property Type: Wholesale Distribution Fuels & Metals Location: Calor Gas Ops Centre Aberdulais, Calor Gas Operations Centre, Neath, Neath Port Talbot Cbc Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bp0299501 Permit Version: 1 Effective Date: 20th August 2002 Issued Date: 20th August 2002 Revocation Date: Not Supplied Discharge Type: Trade Discharges - Site Drainage (Contam Surface Water, Not Tips) Discharge: Freshwater Stream/River Environment: Receiving Water: Afon Nedd Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	727	2	277255 199225
8	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Aberdulais Ss77119893 Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bp0064312 Permit Version: 1 Effective Date: 9th October 1987 Issued Date: 9th October 1987 Revocation Date: 28th August 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath - Tidal Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A12NW (W)	778	2	277110 198930
8	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Canal Side Sewer Overflow Swo Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bw2901801 Permit Version: 1 Effective Date: 8th November 1972 Issued Date: 8th November 1972 Revocation Date: 21st December 1992 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Neath Status: Consent expired Positional Accuracy: Located by supplier to within 100m	A12NW (W)	785	2	277100 198900
9	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Cso Outside Visitor Centre, Aberdulais, Outside Aberdulais Tin Works Visitor Centre, Main Rd (A4109), Neath, Sa10 8eu Authority: Natural Resources Wales Catchment Area: DULAIS - HEADWATERS TO CONFLUENCE WITH RIVER NEATH Reference: Bp0316401 Permit Version: 2 Effective Date: 18th September 2019 Issued Date: 18th September 2019 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Dulais Status: Effective Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	872	2	277204 199408

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Cso 17 Under Old Rd Brdge Abridulais, Cso 17 Under Old Road Bridge, Abridulais, Neath, Wales Authority: Natural Resources Wales Catchment Area: DULAIS - HEADWATERS TO CONFLUENCE WITH RIVER NEATH Reference: Bp0316401 Permit Version: 1 Effective Date: 31st March 2004 Issued Date: 31st March 2004 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Dulais Status: Effective Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	872	2	277204 199408
9	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: Cso 17 Under Old Rd Brdge Abridulais, Cso 17 Under Old Road Bridge, Abridulais, Neath, Wales Authority: Natural Resources Wales Catchment Area: DULAIS - HEADWATERS TO CONFLUENCE WITH RIVER NEATH Reference: Bp0316401 Permit Version: 1 Effective Date: 31st March 2004 Issued Date: 31st March 2004 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Dulais Status: Effective Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	872	2	277204 199408
9	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Sewers - Water Company Location: A'Dulais Maesgwyn Sw05a Authority: Natural Resources Wales Catchment Area: River Neath Reference: Bw2900201 Permit Version: 1 Effective Date: 17th June 1963 Issued Date: 17th June 1963 Revocation Date: 14th March 1994 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Dulais Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	878	2	277190 199400
10	Discharge Consents Operator: Murphy J Cable Contractors & Civil Engineers Property Type: Insulated Wires & Cables Location: Canal Side Neath West Glamorga, Neath, Neath Port Talbot, Wales Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: Bb4028001 Permit Version: 1 Effective Date: 6th October 1978 Issued Date: 6th October 1978 Revocation Date: 31st October 1996 Discharge Type: Unspecified Discharge: Freshwater Stream/River Environment: Receiving Water: Canal Side Neath Status: Lapsed (under Environment Act 1995, Schedule 23) Positional Accuracy: Located by supplier to within 10m	A12NW (W)	910	2	277028 199169
11	Local Authority Pollution Prevention and Controls Name: Calor Gas Ltd Location: Customer Operations Centre, Scapa Works, Abridulais, Neath, SA10 8ER Authority: Neath Port Talbot County Borough Council, Environmental Health Department Permit Reference: E3/1/111 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/23 Coating of metal and plastic Status: Authorised Positional Accuracy: Manually positioned to the address or location	A12NE (NW)	607	3	277370 199184

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Nearest Surface Water Feature	A13NE (NE)	18	-	277970 198888
12	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Heol Dyddwr, Tonna, NEATH Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Accidental Spillage/Leakage Incident Date: 6th August 1996 Incident Reference: 29467 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NE (W)	387	4	277500 198900
13	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Outside The Whitting Pub In Park Street, TONNA Authority: Environment Agency, Welsh Region Pollutant: Light Oil Note: Deliberate Incident Date: 10th March 1997 Incident Reference: 31497 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Direct Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	452	4	277500 199100
14	Pollution Incidents to Controlled Waters Property Type: Not Given Location: At Calor Gas Pool Authority: Environment Agency, Welsh Region Pollutant: Mining Water Note: Weather Incident Date: 12th February 1997 Incident Reference: 31146 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NE (W)	504	4	277400 199000
15	Pollution Incidents to Controlled Waters Property Type: Process Location: Lower End Of, Calor Works, ABERDULAI Authority: Environment Agency, Welsh Region Pollutant: Sewage Sludge Note: Not Supplied Incident Date: 11th February 1992 Incident Reference: 2990 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	540	4	277400 199100
16	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Below Gas, Depot, ABERDULAI Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Not Supplied Incident Date: 17th July 1995 Incident Reference: 25115 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 1 - Major Incident Positional Accuracy: Located by supplier to within 100m	A12NE (W)	600	4	277300 198995

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	Pollution Incidents to Controlled Waters Property Type: Not Given Location: 100 Yards Below, Calor Gas Depot Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Mechanical Failure Incident Date: 8th August 1994 Incident Reference: 20741 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Natural Causes Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NE (W)	601	4	277300 199000
17	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Sewerage Location: Aberdulais Bridge, Calor Gas Works Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Deliberate Act Incident Date: 14th December 1991 Incident Reference: 1664 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Direct Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NE (W)	632	4	277300 199100
18	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Canal Side, ABERDULAIS Authority: Environment Agency, Welsh Region Pollutant: Oils - Diesel (Including Agricultural) Note: Poor Management; Neath Canal Overflow Incident Date: 20th November 1998 Incident Reference: 37271 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	633	4	277350 199200
18	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Storm Overflow Location: Left Bank 10, Yards Down Stream Of Road, ABERDULAIS Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Accidental Spillage/Leakage Incident Date: 9th March 1992 Incident Reference: 3930 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	669	4	277305 199195
18	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Storm Overflow Location: Aberdulais Just, Below Road Bridge Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Accidental Spillage/Leakage Incident Date: 9th March 1992 Incident Reference: 3930 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	673	4	277300 199195
18	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Storm Overflow Location: Aberdulais, 15 Yards Down, TONNA Authority: Environment Agency, Welsh Region Pollutant: Coal Solids Note: Accidental Spillage/Leakage Incident Date: 25th February 1992 Incident Reference: 3797 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	675	4	277300 199200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	Pollution Incidents to Controlled Waters Property Type: Not Given Location: ABERDULAI Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Neglect Incident Date: 17th April 1996 Incident Reference: 28262 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Direct Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	652	4	277400 199300
20	Pollution Incidents to Controlled Waters Property Type: Not Given Location: ABERDULAI Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Weather Incident Date: 17th May 1996 Incident Reference: 28575 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (NW)	762	4	277200 199195
20	Pollution Incidents to Controlled Waters Property Type: Abandoned mine Location: ABERDULAI Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Weather Incident Date: 17th May 1996 Incident Reference: 28575 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	764	4	277200 199200
21	Pollution Incidents to Controlled Waters Property Type: Road Location: Confluence Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Poor Operational Practise Incident Date: 29th March 1995 Incident Reference: 23285 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Direct Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	793	4	277300 199400
22	Pollution Incidents to Controlled Waters Property Type: Not Given Location: National Trust Land At, ABERDULAI Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: River Dulais; Run-Off Incident Date: 17th June 1997 Incident Reference: 32750 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Weather Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	806	4	277205 199295
22	Pollution Incidents to Controlled Waters Property Type: Not Given Location: At Treforgan Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: River Dulais; Run-Off Incident Date: 17th June 1997 Incident Reference: 32750 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Weather Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	810	4	277200 199295

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Near Mcalpines Site, ABERDULAI Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Natural Causes Incident Date: 15th May 1996 Incident Reference: 28319 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Natural Causes Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	813	4	277200 199300
23	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Mcalpines, Lagoon Authority: Environment Agency, Welsh Region Pollutant: Algae Note: Poor Operational Practise Incident Date: 25th May 1995 Incident Reference: 24223 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Effluent Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	823	4	277380 199520
24	Pollution Incidents to Controlled Waters Property Type: Not Given Location: From Bellamy Homes Development Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: Tributary Of Neath Canal; Effluent Quality Incident Date: 23rd October 1997 Incident Reference: 33985 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Poor Management Control Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12SW (W)	824	4	277100 198600
25	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Aberdulais Falls Authority: Environment Agency, Welsh Region Pollutant: Coal Solids Note: Not Supplied Incident Date: 19th February 1996 Incident Reference: 27430 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	828	4	277250 199395
26	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Aberdulais Falls Authority: Environment Agency, Welsh Region Pollutant: Coal Solids Note: Not Supplied Incident Date: 19th February 1996 Incident Reference: 27430 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	832	4	277250 199400
26	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Along Property By Falls Authority: Environment Agency, Welsh Region Pollutant: Coal Solids Note: Not Supplied Incident Date: 4th March 1997 Incident Reference: 31465 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	842	4	277220 199380

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
26	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Not Supplied Incident Date: 4th June 1996 Incident Reference: 28657 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	863	4	277205 199395
26	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Adjacent To A465 By, Afon Dulais Falls Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Blocked Sewer Incident Date: 30th June 1996 Incident Reference: 29016 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	867	4	277205 199400
26	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Below, Aberdulais Falls Authority: Environment Agency, Welsh Region Pollutant: Agricultural: Silage Liquor Note: Not Supplied Incident Date: 1st April 1992 Incident Reference: 3687 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	867	4	277200 199395
26	Pollution Incidents to Controlled Waters Property Type: Water Company Sewage: Storm Overflow Location: Adjacent To, A465 By Afon, Dulais Falls Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Blocked Sewer Incident Date: 30th June 1996 Incident Reference: 29016 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	870	4	277200 199400
26	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Between Waterfalls And, Enterprise Zone Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Not Supplied Incident Date: 4th June 1996 Incident Reference: 28657 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	870	4	277205 199405
26	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Under A465 Roadbridge At, Aberdulais Falls Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Blocked Sewer Incident Date: 30th June 1996 Incident Reference: 29016 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	874	4	277200 199405

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
26	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: Unknown; River Dulais Incident Date: 17th August 1998 Incident Reference: 36551 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	877	4	277195 199405
26	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Dulais Falls Authority: Environment Agency, Welsh Region Pollutant: Unknown Note: Unknown; River Dulais Incident Date: 4th July 1998 Incident Reference: 36337 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	902	4	277200 199450
27	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Under Road Bridge At, ABERDULAI Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Blockage Incident Date: 23rd April 1997 Incident Reference: 32175 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (W)	853	4	277100 199195
27	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Canalside, Aberdulais, NEATH Authority: Environment Agency, Welsh Region Pollutant: Miscellaneous - Vehicle Washings And De Waxing Note: Not Supplied Incident Date: 23rd April 1992 Incident Reference: 4284 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	855	4	277100 199200
28	Pollution Incidents to Controlled Waters Property Type: Road Location: ABERDULAI Authority: Environment Agency, Welsh Region Pollutant: Contaminated Groundwater Note: Poor Operational Practise Incident Date: 7th October 1994 Incident Reference: 21656 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leachate Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	861	4	277300 199500
29	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Rhys Farm, Site Bank Quay Authority: Environment Agency, Welsh Region Pollutant: Mining Water Note: Vandalism Incident Date: 12th May 1996 Incident Reference: 28290 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	862	4	278500 199545

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
29	Pollution Incidents to Controlled Waters Property Type: Abandoned mine Location: Rhys Farm, Sluice Gate Authority: Environment Agency, Welsh Region Pollutant: Mining Water Note: Vandalism Incident Date: 12th May 1996 Incident Reference: 28290 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	865	4	278500 199550
30	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Through Tonna-Turn Down, Dc/Ww Entry-Under Railway, Over Canal Authority: Environment Agency, Welsh Region Pollutant: Natural Foam Note: River Neath; Direct Introduction Incident Date: 24th February 1998 Incident Reference: 34832 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Deliberate Act Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NW (W)	885	4	277000 198900
31	Pollution Incidents to Controlled Waters Property Type: Not Given Location: RIVERSIDE Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Not Supplied Incident Date: 14th October 1991 Incident Reference: 1581 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A12NW (W)	895	4	277000 199000
32	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Natural Foam Note: Not Supplied Incident Date: 28th November 1996 Incident Reference: 30662 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	899	4	277100 199300
33	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Aberdulais Falls Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: River Dulais; Overflow Incident Date: 18th December 1997 Incident Reference: 34381 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Weather Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	927	4	277205 199495
33	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: River Dulais Incident Date: 21st November 1997 Incident Reference: 34364 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	931	4	277200 199495

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	Pollution Incidents to Controlled Waters Property Type: Road Location: From Old Esso, ABERDULAIS Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Inadequate Design/Capacity Incident Date: 19th October 1994 Incident Reference: 21588 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Leachate Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	934	4	277200 199500
34	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Aberdulais Falls, ABERDULAIS Authority: Environment Agency, Welsh Region Pollutant: Road Run-Off Note: Weather Incident Date: 15th October 1996 Incident Reference: 30257 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Natural Causes Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	951	4	277100 199400
35	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Millards Road, Canal Office-Safeway., Near Arch To Bridge Authority: Environment Agency, Welsh Region Pollutant: Oils - Diesel (Including Agricultural) Note: Unnamed Tributary Of Neath Cannal Incident Date: 10th November 1997 Incident Reference: 34379 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A11SE (W)	996	4	276900 198700
35	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Millards Road, Canal Office-Safeway., Near Arch To Bridge Authority: Environment Agency, Welsh Region Pollutant: Light Oil Note: Unnamed Tributary Of Neath Cannal Incident Date: 10th November 1997 Incident Reference: 34379 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A11SE (W)	997	4	276900 198695
36	Prosecutions Relating to Authorised Processes Location: Canalside, NEATH, West Glamorgan, SA10 8ET Prosecution Text: Site Under Waste Management Licence Was Left Unsecured Prosecution Act: Epa90 S33(6) Hearing Date: 10th June 2002 Verdict: Guilty Fine: 750 Costs: 580 Positional Accuracy: Manually positioned to the road within the address or location	A17SW (NW)	824	4	277137 199207
	River Quality Name: Neath Canal GQA Grade: River Quality C Reach: Aberdulais Aqueduct - Abergarwed Weir Estimated Distance (km): 6.5 Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A13NW (N)	264	4	277875 199148

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	River Quality Name: Neath GQA Grade: River Quality A Reach: Tidal Limit Aberdul'S-Conf.Dulais Estimated Distance 5.5 (km): Flow Rate: Flow less than 10 cumecs Flow Type: River Year: 2000	A18SW (N)	514	4	277722 199366
	River Quality Name: Neath GQA Grade: River Quality B Reach: Conf.Dulais-Conf.Abergarwed Canal Weir Estimated Distance 6.2 (km): Flow Rate: Flow less than 10 cumecs Flow Type: River Year: 2000	A18SW (N)	515	4	277866 199400
	River Quality Name: Neath Canal GQA Grade: River Quality D Reach: Conf.Neath - Aberdulais Aqueduct Estimated Distance 8 (km): Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A12NE (W)	570	4	277341 199033
	River Quality Name: Dulais GQA Grade: River Quality B Reach: Conf.Neath - Cilfrew Gauging Station Estimated Distance 1.7 (km): Flow Rate: Flow less than 2.5 cumecs Flow Type: River Year: 2000	A12NE (W)	570	4	277341 199033
	River Quality Name: Port Tennant Canal GQA Grade: River Quality B Reach: Neath Abbey - Conf.Neath Estimated Distance 4 (km): Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A17SE (NW)	618	4	277372 199206
37	River Quality Biology Sampling Points Name: Neath Reach: Tidal Limit Aberdul'S To Confluence River Dulais Estimated Distance: 5.50 Positional Accuracy: Located by supplier to within 100m Year: 1990 GQA Grade: River Quality Biology GQA Grade B - Good Year: 1995 GQA Grade: River Quality Biology GQA Grade A - Very Good Year: 2000 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2002 GQA Grade: River Quality Biology GQA Grade Not Supplied Year: 2003 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2004 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2005 GQA Grade: River Quality Biology GQA Grade B - Good Year: 2006 GQA Grade: River Quality Biology GQA Grade A - Very Good Year: 2007 GQA Grade: River Quality Biology GQA Grade A - Very Good Year: 2008 GQA Grade: River Quality Biology GQA Grade A - Very Good Year: 2009 GQA Grade: River Quality Biology GQA Grade B - Good	A17SE (NW)	730	4	277300 199300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	River Quality Chemistry Sampling Points Name: Neath Canal Reach: Aberdulais Aqueduct To Abergarwed Weir Estimated Distance: 6.50 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade D - Fair Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade E - Poor Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade E - Poor Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade E - Poor Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade E - Poor Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade C - Fairly Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade C - Fairly Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade C - Fairly Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade D - Fair Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade D - Fair Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade D - Fair Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied	A17SE (NW)	608	4	277436 199274

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	River Quality Chemistry Sampling Points Name: Neath Reach: Tidal Limit Aberdul'S To Confluence River Dulais Estimated Distance: 5.50 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied	A12NE (W)	617	4	277286 199009

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	River Quality Chemistry Sampling Points Name: Neath Reach: Confluence River Dulais To Confluence Abergarwed Canal Weir Estimated Distance: 6.20 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied	A17SE (NW)	793	4	277394 199493

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	River Quality Chemistry Sampling Points Name: Neath Reach: Neath Canal Weir To Cwmgwrach Sewage Treatment Works Outlet Estimated Distance: 6.30 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied	A17SE (NW)	793	4	277394 199493

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	River Quality Chemistry Sampling Points Name: Neath Reach: Cwmgwrach Sewage Treatment Works Outlet To Confluence River Nedd Fechan Estimated Distance: 4.90 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied	A17SE (NW)	793	4	277394 199493

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	River Quality Chemistry Sampling Points Name: Mellte Reach: Confluence River Neath To Confluence River Hepste Estimated Distance: 3.70 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade C - Fairly Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied	A17SE (NW)	793	4	277394 199493

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
41	River Quality Chemistry Sampling Points Name: Dulais Reach: Confluence River Neath To Cilfrew Gauging Station Estimated Distance: 1.70 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied	A17SW (NW)	873	4	277201 199406

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
41	River Quality Chemistry Sampling Points Name: Dulais Reach: Cilfrew Gs To Tributary Crynant Sewage Treatment Works (Ty'N Y Cwm) Estimated Distance: 4.00 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade B - Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied	A17SW (NW)	873	4	277201 199406
42	Water Abstractions Operator: Port Tennant Co Ltd Licence Number: 21/58/74/0001 Permit Version: 102 Location: River Neath To Tennant Canal At Aberdulais Authority: Natural Resources Wales Abstraction: Private Water Undertaking: Raw Water Supply Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Port Tennant Canal Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	770	2	277280 199340

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	Water Abstractions Operator: Port Tennant Co Ltd Licence Number: 21/58/74/0001 Permit Version: 102 Location: River Neath To Tennant Canal At Aberdulais Authority: Natural Resources Wales Abstraction: Private Water Undertaking: Raw Water Supply Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Tennant Canal Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	770	2	277280 199340
42	Water Abstractions Operator: Port Tennant Co. Ltd Licence Number: 21/58/74/0001 Permit Version: 101 Location: River Neath To Tennant Canal At Aberdulais Authority: Environment Agency, Welsh Region Abstraction: Private Water Undertaking: Raw Water Supply Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Tennant Canal Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th December 2003 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	770	4	277280 199340
42	Water Abstractions Operator: Port Tennant Co. Ltd Licence Number: 21/58/74/0001 Permit Version: 100 Location: River Neath To Tennant Canal At Aberdulais Authority: Environment Agency, Welsh Region Abstraction: Private Water Undertaking: Raw Water Supply Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: River Neath To Tennant Canal At Aberdulais Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 3rd January 1978 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	770	4	277280 199340
42	Water Abstractions Operator: Port Tennant Co Ltd Licence Number: 21/58/74/0001 Permit Version: 103 Location: River Neath To Tennant Canal At Aberdulais Authority: Natural Resources Wales Abstraction: Private Water Undertaking: Raw Water Supply Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 04 January Authorised End: 03 July Permit Start Date: 24th September 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	789	2	277239 199316

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	Water Abstractions Operator: Port Tennant Co Ltd Licence Number: 21/58/74/0001 Permit Version: 103 Location: River Neath To Tennant Canal At Aberdulais Authority: Natural Resources Wales Abstraction: Private Water Undertaking: Raw Water Supply Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 24th September 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	789	2	277239 199316
42	Water Abstractions Operator: Port Tennant Co Ltd Licence Number: 21/58/74/0001 Permit Version: 103 Location: River Neath To Tennant Canal At Aberdulais Authority: Natural Resources Wales Abstraction: Private Water Undertaking: Raw Water Supply Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Tennant Canal Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 24th September 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	789	2	277239 199316
42	Water Abstractions Operator: Port Tennant Co Ltd Licence Number: 21/58/74/0001 Permit Version: Not Supplied Location: Tennant Canal, The Royal British Legion, Canal Side, Aberdulais, Neath, Neath Port Talbot, SA10 8ET Authority: Natural Resources Wales Abstraction: Private Water Undertaking: Raw Water Supply Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	789	2	277239 199316
43	Water Abstractions Operator: Alfred McAlpine Construction Ltd Licence Number: 21/58/72/0032 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, Welsh Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: River Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Inland Water Afon Nedd Neath West Glam Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	839	4	277240 199400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
44	Water Abstractions Operator: Neath Canal Navigation Licence Number: 21/58/72/0035 Permit Version: 2 Location: River Neath At Tonna Lock Authority: Natural Resources Wales Abstraction: Private Water Undertaking: Transfer between sources Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 6th February 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A12SW (W)	914	2	276970 198830
45	Water Abstractions Operator: Neath Canal Navigation Licence Number: 21/58/72/0007 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, Welsh Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: River Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Stream At Lock House; Tonna To Neath Can Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A12SW (W)	918	4	276970 198770
46	Water Abstractions Operator: Neath Canal Navigation Licence Number: 21/58/72/0007 Permit Version: 101 Location: Inland Water River Neath In The Community Of Tonna Authority: Environment Agency, Welsh Region Abstraction: Private Water Undertaking: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2005 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A11SE (W)	985	4	276900 198820
46	Water Abstractions Operator: Neath Canal Navigation Licence Number: 21/58/72/0007 Permit Version: 100 Location: Inland Water River Neath In The Community Of Tonna Authority: Environment Agency, Welsh Region Abstraction: Private Water Supply: General Use (High Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: River Neath Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 1994 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A11SE (W)	985	4	276900 198820

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: National Trust Licence Number: 21/58/73/0014 Permit Version: 100 Location: Afon Dulais At Aberdulais Falls Authority: Environment Agency, Welsh Region Abstraction: Production Of Energy: Hydroelectric Power Generation Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Afon Dulais At Aberdulais Falls Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17NW (NW)	1005	4	277150 199550
	Water Abstractions Operator: The National Trust Licence Number: Wa/058/0073/001 Permit Version: 2 Location: Afon Dulais Authority: Natural Resources Wales Abstraction: Production Of Energy: Hydroelectric Power Generation Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Aberdulais, Neath, Glamorgan Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 28th March 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17NW (NW)	1013	2	277152 199564
	Water Abstractions Operator: The National Trust Licence Number: Wa/058/0073/001 Permit Version: Not Supplied Location: Aberdulais Falls Hep, The National Trust, Aberdulais Falls, Aberdulais, Neath, Neath Port Talbot, Sa10 8eu Authority: Natural Resources Wales Abstraction: Production Of Energy: Hydroelectric Power Generation Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17NW (NW)	1013	2	277152 199564
	Water Abstractions Operator: The National Trust Licence Number: Wa/058/0073/001 Permit Version: 1 Location: Afon Dulais At Aberdulais Falls Authority: Environment Agency, Welsh Region Abstraction: Production Of Energy: Hydroelectric Power Generation Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Aberdulais, Neath, Glamorgan Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st June 2011 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17NW (NW)	1053	4	277159 199630

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Neath Golf Club Licence Number: 21/58/74/0018 Permit Version: 100 Location: Spring 2 Authority: Environment Agency, Welsh Region Abstraction: Golf Courses: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Spring 2 Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 1st April 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A16SW (W)	1675	4	276320 199460
	Water Abstractions Operator: Neath Golf Club Licence Number: 21/58/74/0018 Permit Version: 100 Location: Spring 1 Authority: Environment Agency, Welsh Region Abstraction: Golf Courses: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Spring 1 Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 1st April 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1785	4	276150 199280
	Water Abstractions Operator: Neath Canal Navigation Licence Number: 21/58/72/0007 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, Welsh Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: River Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Stream At Ynysnedd; Clyne To Neath Canal Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A25SE (NE)	1849	4	279500 199900
	Water Abstractions Operator: Jones And Jones Renewables Ltd Licence Number: Wa/058/0074/008 Permit Version: 2 Location: Tan Y Rhiw Farm Authority: Natural Resources Wales Abstraction: Production Of Energy: Hydroelectric Power Generation Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 6th March 2015 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1857	2	277815 200740

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Jones And Jones Renewables Ltd Licence Number: Wa/058/0074/008 Permit Version: 1 Location: Tan Y Rhiw Farm Authority: Natural Resources Wales Abstraction: Production Of Energy: Hydroelectric Power Generation Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 5th November 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1857	2	277815 200740
	Water Abstractions Operator: Kevin Jones Jones And Jones Renewables Ltd Licence Number: Wa/058/0074/008 Permit Version: Not Supplied Location: Not Supplied Authority: Natural Resources Wales Abstraction: Production Of Energy: Hydroelectric Power Generation Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1857	2	277815 200740
	Water Abstractions Operator: Kevin Jones Jones And Jones Renewables Ltd Licence Number: Wa/058/0074/009 Permit Version: Not Supplied Location: Not Supplied Authority: Natural Resources Wales Abstraction: Production Of Energy: Hydroelectric Power Generation Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1857	2	277815 200740
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: <40% Superficial Patchiness: <90% Superficial Thickness: 3-10m Superficial Recharge: No Data	A13SW (W)	0	2	277934 198853
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13SW (W)	0	2	277934 198853
	Superficial Aquifer Designations No Data Available				
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 33.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NE (NE)	18	5	277966 198892
48	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 190.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NE (NE)	18	5	277970 198888
49	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 12.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NE (N)	34	5	277952 198913
50	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 200.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NE (N)	41	5	277941 198919
51	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 101.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SE (E)	144	5	278125 198797
52	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SE (E)	144	5	278125 198797
53	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 53.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NE (N)	228	5	277968 199106
54	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 125.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SE (E)	230	5	278213 198793

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
55	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 66.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SE (E)	241	5	278224 198801
56	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 300.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13NW (N)	255	5	277924 199138
57	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 0.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SW (SW)	267	5	277650 198721
58	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 73.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SW (SW)	268	5	277650 198721
59	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 15.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A13SW (SW)	268	5	277650 198721
60	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SW (SW)	279	5	277640 198716
61	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 246.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SW (SW)	280	5	277634 198724
62	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SW (W)	294	5	277602 198771
63	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 245.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SE (SE)	294	5	278248 198699

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
64	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 41.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A13SW (W)	295	5	277600 198778
65	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 15.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SW (E)	306	5	278290 198808
66	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 515.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Neath Canal Catchment Name: Neath Primacy: 1	A12NE (NW)	453	5	277479 199063
67	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 217.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18SW (NW)	457	5	277654 199268
68	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 290.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14NW (NE)	512	5	278420 199105
69	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 205.6 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SE (W)	518	5	277408 198648
70	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 233.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8NE (S)	539	5	277996 198293
71	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 281.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SW (SE)	540	5	278477 198607
72	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 32.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8NE (S)	544	5	278021 198289

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
73	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 225.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14NW (E)	545	5	278507 198989
74	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 572.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Nedd Catchment Name: Neath Primacy: 1	A12NE (W)	559	5	277345 199006
75	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 5.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Neath Canal Catchment Name: Neath Primacy: 1	A17SE (NW)	604	5	277436 199268
76	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 170.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Neath Canal Catchment Name: Neath Primacy: 1	A17SE (NW)	608	5	277435 199274
77	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 652.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Neath Canal Catchment Name: Neath Primacy: 1	A18SE (N)	612	5	278106 199471
78	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 32.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	616	5	278457 198435
79	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 10.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	617	5	278441 198414
80	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	617	5	278441 198414
81	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A9NW (SE)	619	5	278448 198420

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
82	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 8.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	622	5	278438 198405
83	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 7.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A9NW (SE)	622	5	278438 198405
84	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 7.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	629	5	278440 198396
85	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 8.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A9NW (SE)	629	5	278440 198396
86	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 87.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	630	5	278471 198430
87	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 233.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	630	5	278471 198430
88	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	631	5	278437 198390
89	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	634	5	278432 198382
90	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 82.7 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7NE (SW)	635	5	277359 198493

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
91	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 134.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	636	5	278430 198377
92	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 185.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A9NW (SE)	636	5	278448 198395
93	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 134.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Nedd Catchment Name: Neath Primacy: 1	A18SE (N)	642	5	278046 199514
94	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 400.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Nedd Catchment Name: Neath Primacy: 1	A18SE (N)	642	5	278036 199516
95	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 43.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18SE (N)	642	5	278036 199516
96	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 11.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18SW (N)	644	5	277868 199528
97	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 515.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Neath Canal Catchment Name: Neath Primacy: 1	A18NW (N)	654	5	277867 199537
98	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 30.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NW (W)	657	5	277228 198891
99	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 197.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18SE (NE)	661	5	278206 199490

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
100	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 28.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	664	5	277839 198178
101	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 192.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Neath Canal Catchment Name: Neath Primacy: 1	A12NW (W)	669	5	277218 198920
102	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 248.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14NW (NE)	670	5	278586 199130
103	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 24.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SW (NE)	679	5	278369 199416
104	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 92.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SE (SW)	682	5	277286 198523
105	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 313.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	683	5	278364 198263
106	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 67.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	683	5	278364 198263
107	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 55.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18NE (N)	684	5	278047 199557
108	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 103.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Nedd Catchment Name: Neath Primacy: 1	A18SE (N)	686	5	278168 199531

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
109	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 45.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Mosshouse Wood Reservoir Catchment Name: Neath Primacy: 1	A8SW (S)	689	5	277822 198155
110	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 105.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Tennant Canal Catchment Name: Neath Primacy: 2	A17SE (NW)	700	5	277361 199329
111	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 11.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Tennant Canal Catchment Name: Neath Primacy: 2	A17SE (NW)	701	5	277357 199325
112	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 103.0 Watercourse Level: suspendedOrElevated Permanent: True Watercourse Name: Tennant Canal Catchment Name: Neath Primacy: 2	A17SE (NW)	705	5	277348 199319
113	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 0.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	712	5	278553 198402
114	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 85.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SW (W)	724	5	277216 198573
115	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 178.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Nedd Catchment Name: Neath Primacy: 1	A18SE (NE)	727	5	278272 199533
116	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 17.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18SE (NE)	727	5	278272 199533
117	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 152.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Mosshouse Wood Reservoir Catchment Name: Neath Primacy: 1	A8SW (S)	732	5	277803 198113

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
118	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 61.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Mosshouse Wood Reservoir Catchment Name: Neath Primacy: 1	A8SW (S)	732	5	277803 198113
119	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 245.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18NE (N)	740	5	278060 199612
120	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 64.4 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18NE (NE)	741	5	278270 199550
121	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.9 Watercourse Level: Underground Permanent: True Watercourse Name: Tennant Canal Catchment Name: Neath Primacy: 2	A17SE (NW)	743	5	277392 199423
122	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 13.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Tennant Canal Catchment Name: Neath Primacy: 2	A17SE (NW)	744	5	277393 199427
123	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 80.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A9NW (SE)	748	5	278417 198221
124	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 27.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	748	5	278417 198221
125	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 26.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Tennant Canal Catchment Name: Neath Primacy: 2	A17SW (NW)	753	5	277255 199274
126	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 268.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	753	5	277873 198085

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
127	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 5.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	754	5	277858 198087
128	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 522.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Nedd Catchment Name: Neath Primacy: 1	A18NW (N)	755	5	277644 199594
129	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 23.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18NW (N)	755	5	277644 199594
130	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 30.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Dulais Catchment Name: Neath Primacy: 1	A17SE (NW)	755	5	277267 199296
131	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 1.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	757	5	277862 198083
132	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 27.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	759	5	277862 198081
133	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 40.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	759	5	278513 198285
134	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 406.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Tennant Canal Catchment Name: Neath Primacy: 2	A17SW (NW)	767	5	277231 199263
135	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 67.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Tennant Canal Catchment Name: Neath Primacy: 2	A17SW (NW)	767	5	277231 199263

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
136	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 60.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	767	5	278489 198253
137	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 12.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NW (SE)	769	5	278443 198214
138	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 619.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7NW (SW)	771	5	277247 198416
139	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 116.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9NE (SE)	776	5	278666 198458
140	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 56.4 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18NW (N)	777	5	277645 199618
141	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SW (W)	782	5	277141 198608
142	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 122.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	782	5	277875 198057
143	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 178.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	782	5	277875 198057
144	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 105.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SW (W)	783	5	277140 198609

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
145	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 439.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Dulais Catchment Name: Neath Primacy: 1	A17SW (NW)	784	5	277249 199322
146	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7NE (SW)	784	5	277373 198253
147	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 210.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A19SW (NE)	786	5	278566 199374
148	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 80.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Nedd Catchment Name: Neath Primacy: 1	A12NW (W)	786	5	277100 198908
149	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 58.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NW (W)	786	5	277100 198908
150	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 10.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	791	5	278745 198608
151	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 26.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	800	5	278755 198612
152	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 143.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	805	5	278291 199611
153	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 104.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	805	5	278291 199611

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
154	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 174.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SE (S)	806	5	278144 198041
155	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 43.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SE (S)	806	5	278144 198041
156	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 217.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SE (S)	809	5	278106 198031
157	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 15.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	817	5	278777 198625
158	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 34.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A19SW (NE)	819	5	278521 199470
159	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 10.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	822	5	278786 198641
160	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18NW (N)	823	5	277661 199672
161	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 7.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	829	5	278790 198632
162	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 39.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SW (W)	831	5	277070 198686

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
163	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NW (NW)	833	5	277122 199195
164	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 394.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Nedd Catchment Name: Neath Primacy: 1	A19NW (NE)	836	5	278449 199552
165	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	836	5	278449 199552
166	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 261.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A14SE (E)	837	5	278798 198632
167	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 32.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Mosshouse Wood Reservoir Catchment Name: Neath Primacy: 1	A8SW (S)	843	5	277680 198024
168	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 55.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Mosshouse Wood Reservoir Catchment Name: Neath Primacy: 1	A8SW (S)	843	5	277680 198024
169	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 142.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Neath Canal Catchment Name: Neath Primacy: 1	A12SW (W)	844	5	277040 198846
170	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 23.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A12SW (W)	844	5	277040 198846
171	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 38.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A19SW (NE)	845	5	278521 199505

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
172	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 14.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	845	5	278445 199566
173	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	845	5	278420 199584
174	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 153.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SE (NE)	848	5	278664 199349
175	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 12.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SW (W)	848	5	277047 198718
176	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 79.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7SE (SW)	851	5	277589 198046
177	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 90.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7SE (SW)	851	5	277593 198044
178	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 12.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A12NW (W)	854	5	277030 198866
179	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 257.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	855	5	278444 199580
180	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	855	5	278435 199585

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
181	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 16.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SW (W)	855	5	277039 198728
182	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 542.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Neath Canal Catchment Name: Neath Primacy: 1	A19NW (NE)	856	5	278502 199537
183	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	856	5	277934 197978
184	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 110.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	856	5	277934 197978
185	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 126.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Nedd Catchment Name: Neath Primacy: 1	A12NW (W)	859	5	277025 198878
186	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	866	5	277721 197991
187	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 108.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SW (W)	868	5	277024 198732
188	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 16.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	876	5	277727 197980
189	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 126.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7SE (SW)	880	5	277511 198047

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
190	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7SE (SW)	880	5	277511 198047
191	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 380.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A7SE (SW)	883	5	277507 198046
192	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7SE (SW)	883	5	277507 198046
193	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 89.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	886	5	277738 197968
194	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 275.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7SE (SW)	887	5	277502 198044
195	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7SE (SW)	887	5	277502 198044
196	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 54.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A7SE (SW)	888	5	277501 198044
197	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 44.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	896	5	278429 199638
198	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 200.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	896	5	278431 199638

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
199	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 336.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	903	5	278358 199686
200	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 82.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	903	5	278358 199686
201	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SE (S)	910	5	278029 197923
202	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 161.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SE (S)	911	5	278041 197922
203	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SE (S)	912	5	278032 197921
204	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 126.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SE (S)	913	5	278033 197920
205	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 42.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	918	5	277804 197926
206	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.4 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	918	5	277804 197926
207	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 49.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	921	5	277808 197922

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
208	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 90.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SW (W)	932	5	276977 198640
209	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 49.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	932	5	277881 197906
210	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 41.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	935	5	278440 199677
211	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 126.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SE (NE)	937	5	278765 199356
212	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 84.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A9SW (S)	937	5	278288 197945
213	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 99.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SW (W)	941	5	276964 198659
214	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 54.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	942	5	278308 199752
215	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 113.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A18NE (N)	950	5	278013 199828
216	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 318.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SW (S)	956	5	277837 197885

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
217	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 17.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12SW (W)	957	5	276930 198773
218	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 357.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SE (S)	958	5	278266 197916
219	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 118.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19NW (NE)	962	5	278441 199708
220	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 86.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A8SE (S)	964	5	278221 197897
221	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A8SE (S)	964	5	278221 197897
222	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 231.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 2	A8SW (S)	970	5	277930 197863
223	OS Water Network Lines Watercourse Form: Canal Watercourse Length: 79.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Neath Canal Catchment Name: Neath Primacy: 1	A11SE (W)	972	5	276915 198780
224	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A11SE (W)	972	5	276913 198819
225	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 14.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A11SE (W)	972	5	276913 198820

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
226	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 32.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A12NW (W)	974	5	276967 199188
227	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 202.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Nedd Catchment Name: Neath Primacy: 1	A11SE (W)	977	5	276907 198833
228	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 65.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SE (NE)	979	5	278830 199329
229	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 37.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Neath Primacy: 1	A19SE (NE)	993	5	278760 199463

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Neath Port Talbot County Borough Council - Has supplied landfill data		0	3	277934 198853
230	Potentially Infilled Land (Non-Water) Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13SE (E)	85	-	278065 198802
231	Potentially Infilled Land (Non-Water) Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13NE (E)	127	-	278107 198867
232	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13NW (W)	182	-	277713 198922
233	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13NW (W)	264	-	277635 198945
234	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A12NE (W)	310	-	277584 198937
235	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13SW (SW)	343	-	277652 198595
236	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A8NW (SW)	368	-	277712 198519
237	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A8NW (SW)	390	-	277696 198503
238	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A7NE (SW)	591	-	277458 198439
239	Potentially Infilled Land (Non-Water) Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A7NE (SW)	707	-	277372 198361
240	Potentially Infilled Land (Non-Water) Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9NW (SE)	731	-	278597 198430
241	Potentially Infilled Land (Non-Water) Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9NW (SE)	732	-	278535 198348
242	Potentially Infilled Land (Non-Water) Bearing Ref: S Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A8SE (S)	741	-	278090 198098
243	Potentially Infilled Land (Non-Water) Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9SW (SE)	770	-	278348 198152
244	Potentially Infilled Land (Non-Water) Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9SW (SE)	797	-	278331 198114
245	Potentially Infilled Land (Non-Water) Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9SW (SE)	798	-	278384 198141

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
246	Potentially Infilled Land (Non-Water) Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A14NE (E)	897	-	278866 199000
247	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A12NE (NW)	504	-	277440 199098
248	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A12SE (W)	549	-	277374 198648
249	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A12SW (W)	787	-	277163 198538
250	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A19NW (NE)	881	-	278485 199582
251	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A19NW (NE)	897	-	278540 199557
252	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A9NE (SE)	965	-	278873 198452

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
253	Control of Major Accident Hazards Sites (COMAH) Name: Calor Gas Limited Location: Scapa Works, Aberdulais, Neath, West Glamorgan, SA10 8ER Reference: Not Supplied Type: Upper Tier Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (NW)	614	6	277367 199193
253	Control of Major Accident Hazards Sites (COMAH) Name: Calor Transport Depot Location: Baglan Road, NEATH, West Glamorgan, SA10 8ER Reference: Not Supplied Type: Lower Tier Status: Record Ceased To Be Supplied Under COMAH Regulations Positional Accuracy: Automatically positioned to the address	A12NE (NW)	614	6	277367 199193
254	Notification of Installations Handling Hazardous Substances (NIHHS) Name: Calor Gas Limited Location: Aberdulais, NEATH, West Glamorgan, SA10 8ER Status: Not Active Positional Accuracy: Automatically positioned to the address	A12NE (NW)	608	6	277372 199188
255	Planning Hazardous Substance Consents Name: Calor Gas Ltd Location: Scapa Works, Aberdulais, NEATH, West Glamorgan, SA10 8ER Authority: Neath Port Talbot County Borough Council, Planning Department Application Ref: Phs 001 Hazardous: Liquefied extremely flammable gas (including LPG) and natural gas (whether liquefied or not) Substance: liquefied or not Maximum Quantity: 0 Application date: Not Supplied Decision: Deemed Consent Granted Positional Accuracy: Automatically positioned to the address	A12NE (NW)	614	7	277367 199192

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: South Wales Upper Coal Measures Formation	A13SW (W)	0	1	277934 198853
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SW (W)	0	1	277934 198853
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 45 - 60 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SW (S)	0	1	277933 198836
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 45 - 60 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NW (N)	115	1	277934 199000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13NW (N)	119	1	277926 199003
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (S)	161	1	277937 198670
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NW (NW)	161	1	277823 199025

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A13SE (S)	207	1	277954 198625
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A13NW (N)	208	1	277864 199090
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A13NW (NW)	222	1	277710 199000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A13SE (SE)	302	1	278154 198579
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12SE (W)	384	1	277500 198853
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A12NE (W)	396	1	277500 198955

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 1.8 - 2.2 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12NE (W)	409	1	277500 199000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A12NE (W)	411	1	277478 198922
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium 1.8 - 2.2 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12NE (W)	412	1	277500 199008
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12NE (W)	434	1	277474 199000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12SE (W)	478	1	277428 198709
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 1.8 - 2.2 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12NE (NW)	488	1	277439 199059

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A12NE (W)	517	1	277382 198984
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12NE (W)	530	1	277373 199000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12NE (W)	541	1	277343 198863
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A12NE (W)	550	1	277350 198988
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A7NE (SW)	567	1	277500 198431
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18SE (N)	598	1	278066 199467

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A18SE (N)	629	1	278123 199485
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18SE (N)	647	1	278057 199518
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A9NW (SE)	688	1	278480 198353
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A7NE (SW)	693	1	277300 198478
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium 1.8 - 2.2 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A12NW (W)	695	1	277204 199000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18NE (N)	704	1	278167 199550

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A8SW (S)	708	1	277815 198136
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12NW (W)	710	1	277176 198915
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A18NW (N)	768	1	277646 199608
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A17NE (NW)	785	1	277513 199566
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A17NE (NW)	791	1	277588 199610
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18NW (N)	806	1	277657 199652

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 1.8 - 2.2 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12NW (W)	824	1	277072 199000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A7SE (SW)	849	1	277515 198080
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium 1.8 - 2.2 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A17SW (NW)	855	1	277174 199338
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A17SE (NW)	863	1	277297 199500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A19NW (NE)	882	1	278350 199667
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A8SW (S)	887	1	277688 197977

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A8SW (S)	890	1	277662 197980
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 35 - 45 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A9NE (SE)	893	1	278736 198347
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12NW (W)	895	1	277000 199000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A7SE (SW)	904	1	277500 198026
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium 1.8 - 2.2 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A17SW (NW)	924	1	277139 199409
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A7SE (SW)	936	1	277500 199409

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 45 - 60 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 30 - 45 mg/kg Concentration:	A17SW (W)	947	1	277000 199198
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A17SW (W)	959	1	277000 199230
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 35 - 45 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A9SE (SE)	988	1	278705 198154
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic 25 - 35 mg/kg Concentration: Cadmium 2.2 - 3.0 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A7SE (SW)	994	1	277394 197980
256	BGS Recorded Mineral Sites Site Name: Penlan-Fach Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154301 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NE (E)	128	1	278108 198868
257	BGS Recorded Mineral Sites Site Name: Wenallt Colliery Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154279 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SE (E)	161	1	278141 198788

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
258	BGS Recorded Mineral Sites Site Name: Craig-Y-Tonna Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154300 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13SW (S)	165	1	277871 198676
259	BGS Recorded Mineral Sites Site Name: Craig-Y-Tonna Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154299 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NW (W)	185	1	277709 198918
260	BGS Recorded Mineral Sites Site Name: Cyngloed Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154392 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	263	1	277756 198616
261	BGS Recorded Mineral Sites Site Name: Craig-Y-Tonna Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154298 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NW (W)	270	1	277630 198952
262	BGS Recorded Mineral Sites Site Name: Wenallt Colliery Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154280 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	276	1	278203 198661
263	BGS Recorded Mineral Sites Site Name: Wenallt Colliery Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154278 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A14SW (E)	320	1	278305 198813

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
264	BGS Recorded Mineral Sites Site Name: Cyngloed Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154435 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	365	1	277642 198575
265	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154400 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	381	1	278253 198560
266	BGS Recorded Mineral Sites Site Name: Cyngloed Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154434 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	396	1	277706 198491
267	BGS Recorded Mineral Sites Site Name: Cyngloed Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154436 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	407	1	277532 198646
268	BGS Recorded Mineral Sites Site Name: Bryn-Chwyth Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154281 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SW (E)	490	1	278476 198826
269	BGS Recorded Mineral Sites Site Name: Cydgoed Quarry Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 14832 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	508	1	277515 198500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
270	BGS Recorded Mineral Sites Site Name: Cyngoed Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154391 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	530	1	277424 198588
271	BGS Recorded Mineral Sites Site Name: Mosshouse Wood Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154393 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SW (S)	680	1	277782 198169
272	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154396 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	729	1	278591 198426
273	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154397 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	731	1	278530 198344
274	BGS Recorded Mineral Sites Site Name: Mosshouse Wood Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154398 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SE (S)	741	1	278091 198098
275	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154450 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	765	1	278662 198474

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
276	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154395 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SE (SE)	770	1	278692 198526
277	BGS Recorded Mineral Sites Site Name: Dan-Y-Lan Farm Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154449 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	778	1	277379 198256
278	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154437 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	793	1	278390 198149
279	BGS Recorded Mineral Sites Site Name: Wenallt Wood Location: Aberdulais, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154294 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	826	1	278682 199280
280	BGS Recorded Mineral Sites Site Name: Mosshouse Wood Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154394 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SW (S)	872	1	277729 197983
281	BGS Recorded Mineral Sites Site Name: Mosshouse Wood Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154399 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A9SW (S)	901	1	278285 197982

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
282	BGS Recorded Mineral Sites Site Name: Wenallt Wood Location: Aberdulais, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154295 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A14NE (E)	904	1	278874 199001
283	BGS Recorded Mineral Sites Site Name: Cefn-Yr-Alt Location: Aberdulais, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154302 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A18NW (N)	986	1	277734 199856
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13SW (W)	0	8	277934 198853
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13SW (W)	0	-	277934 198853
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	244	1	278226 198788
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	222	1	277757 198665
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	234	1	278191 198718
	Potential for Compressible Ground Stability Hazards Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	244	1	278226 198788
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	0	1	277934 198845

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	111	1	277934 198992
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	142	1	277932 198692
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	212	1	277952 198620
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	244	1	278226 198788
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	154	1	277903 199040
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	222	1	277757 198665
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	234	1	278191 198718
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	244	1	278226 198788
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	180	1	277935 198653
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	212	1	277952 198620
	Radon Potential - Radon Affected Areas Affected Area: The property is an Intermediate probability radon area (3 to 5% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
	Radon Potential - Radon Protection Measures Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
284	Contemporary Trade Directory Entries Name: D W Rees Location: 87, Wenallt Road, Tonna, Neath, SA11 3QH Classification: Farriers Status: Active Positional Accuracy: Automatically positioned to the address	A13NW (N)	17	-	277926 198894
285	Contemporary Trade Directory Entries Name: The Glamorgan Cleaning Co Location: 22, Heol y Graig, Tonna, Neath, West Glamorgan, SA11 3LZ Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (N)	278	-	278003 199153
286	Contemporary Trade Directory Entries Name: K & L Patio Centre Location: Heol Y Glo, Tonna, Neath, West Glamorgan, SA11 3NJ Classification: Garden Ornament Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A18SE (NE)	393	-	278109 199240
287	Contemporary Trade Directory Entries Name: D N Patterson & Son Location: Tonna Uchaf, Tonna, Neath, West Glamorgan, SA11 3LJ Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	403	-	277954 199284
288	Contemporary Trade Directory Entries Name: Tonna Car Sales Location: Tonna Uchaf, Tonna, Neath, West Glamorgan, SA11 3LJ Classification: Car Dealers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A18SE (NE)	496	-	278146 199336
289	Contemporary Trade Directory Entries Name: D E Davies Location: Wenallt Rd, Tonna, Neath, West Glamorgan, SA11 3HQ Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A12SE (W)	503	-	277381 198837
290	Contemporary Trade Directory Entries Name: Tonna Hospital Location: Tonna Uchaf, Tonna, Neath, West Glamorgan, SA11 3LX Classification: Hospitals Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SE (N)	524	-	278035 199396
291	Contemporary Trade Directory Entries Name: The Dust Doctors Location: 24, Brunel Close, Tonna, Neath, West Glamorgan, SA11 3JY Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (NW)	557	-	277638 199374
291	Contemporary Trade Directory Entries Name: L M Plumbing & Heating Services Location: 32, Brunel Close, Tonna, Neath, West Glamorgan, SA11 3JY Classification: Boilers - Servicing, Replacements & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (NW)	586	-	277632 199404
292	Contemporary Trade Directory Entries Name: Calor Gas Ltd Location: Scapa Works, Aberdulais, Neath, SA10 8ER Classification: Gas Suppliers Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (NW)	614	-	277367 199193
292	Contemporary Trade Directory Entries Name: Calor Gas Ltd Location: Scapa Works, Aberdulais, Neath, SA10 8ER Classification: Gas Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (NW)	614	-	277367 199193
293	Contemporary Trade Directory Entries Name: Taylors Of Martley Plc Location: Canal Side, Aberdulais, Neath, West Glamorgan, SA10 8ET Classification: Distribution Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SW (NW)	747	-	277254 199263

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
294	Contemporary Trade Directory Entries Name: Jonrho Location: 25, Canal Side, Aberdulais, Neath, West Glamorgan, SA10 8ET Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	869	-	277068 199160
294	Contemporary Trade Directory Entries Name: Jonrho Location: 25, Canal Side, Aberdulais, Neath, West Glamorgan, SA10 8ET Classification: Cleaning Services - Domestic Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	869	-	277068 199160
295	Points of Interest - Commercial Services Name: D W Rees Location: 87 Wenallt Road, Tonna, Neath, SA11 3QH Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A13NW (N)	16	9	277926 198893
295	Points of Interest - Commercial Services Name: D W Rees Location: 87 Wenallt Road, Tonna, Neath, SA11 3QH Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A13NW (N)	17	9	277926 198894
295	Points of Interest - Commercial Services Name: David W Rees Location: 87 Wenallt Road, Tonna, Neath, SA11 3QH Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A13NW (N)	17	9	277926 198894
296	Points of Interest - Education and Health Name: Tonna Hospital Location: Tonna Hospital, Tonna Uchaf, Tonna, Neath, SA11 3LX Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A18SE (N)	523	9	278034 199396
296	Points of Interest - Education and Health Name: Tonna Hospital Resource Centre Location: Tonna Uchaf, Tonna, Neath, SA11 3LX Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A18SE (N)	524	9	278035 199396
296	Points of Interest - Education and Health Name: Tonna Hospital Location: Tonna Hospital, Tonna Uchaf, Tonna, Neath, SA11 3LX Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A18SE (N)	524	9	278035 199396
296	Points of Interest - Education and Health Name: Tonna Hospital Location: Tonna Hospital, Tonna Uchaf, Tonna, Neath, SA11 3LX Category: Health Practitioners and Establishments Class Code: Hospitals Positional Accuracy: Positioned to address or location	A18SE (N)	524	9	278035 199396
297	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	166	9	277783 198715
298	Points of Interest - Manufacturing and Production Name: Shaft Location: SA11 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A13SE (SE)	380	9	278249 198557
298	Points of Interest - Manufacturing and Production Name: Shaft Location: SA11 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A13SE (SE)	389	9	278257 198553

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
299	Points of Interest - Manufacturing and Production Name: Tank Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12NE (NW)	514	9	277442 199123
299	Points of Interest - Manufacturing and Production Name: Tank Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12NE (NW)	526	9	277438 199139
299	Points of Interest - Manufacturing and Production Name: Tank Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12NE (NW)	532	9	277434 199144
299	Points of Interest - Manufacturing and Production Name: Tank Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12NE (NW)	536	9	277431 199148
299	Points of Interest - Manufacturing and Production Name: Tank Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12NE (NW)	542	9	277428 199154
299	Points of Interest - Manufacturing and Production Name: Tank Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12NE (NW)	547	9	277425 199159
299	Points of Interest - Manufacturing and Production Name: Tank Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	549	9	277366 199040
299	Points of Interest - Manufacturing and Production Name: Tanks Location: SA10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12NE (NW)	558	9	277415 199164
299	Points of Interest - Manufacturing and Production Name: Works Location: SA10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (NW)	582	9	277363 199120
299	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (NW)	583	9	277363 199122
300	Points of Interest - Manufacturing and Production Name: Sheep Dip Location: SA11 Category: Farming Class Code: Sheep Dips and Washes Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	521	9	278355 198464
301	Points of Interest - Manufacturing and Production Name: Tank Location: SA11 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	545	9	277976 199425

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
302	Points of Interest - Manufacturing and Production Name: Cydgoed Quarry (Disused) Location: SA11 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	587	9	277470 198432
303	Points of Interest - Public Infrastructure Name: Bus Depot Location: SA11 Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to an adjacent address or location	A18SE (NE)	405	9	278176 199218
304	Points of Interest - Public Infrastructure Name: Sluice Location: SA10 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	643	9	277908 199528
304	Points of Interest - Public Infrastructure Name: Sluice Location: SA10 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18NW (N)	658	9	277913 199543
305	Points of Interest - Public Infrastructure Name: Weir Location: SA11 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	759	9	277870 198080
305	Points of Interest - Public Infrastructure Name: Weir Location: SA11 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	759	9	277871 198080
306	Points of Interest - Public Infrastructure Name: Sluice Location: SA10 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	774	9	277405 199477
307	Points of Interest - Public Infrastructure Name: Weir Location: SA10 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A17SW (NW)	777	9	277257 199321
307	Points of Interest - Public Infrastructure Name: Weir Location: SA10 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A17SW (NW)	779	9	277257 199323
308	Points of Interest - Public Infrastructure Name: Sluice Location: SA10 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	843	9	277041 198864
308	Points of Interest - Public Infrastructure Name: Sluice Location: SA11 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	847	9	277037 198841
309	Points of Interest - Public Infrastructure Name: Sluice Location: SA11 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	857	9	277740 197997

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
309	Points of Interest - Public Infrastructure Name: Sluice Location: SA11 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	858	9	277731 197997
310	Points of Interest - Public Infrastructure Name: Graveyard Location: SA10 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A17NE (NW)	908	9	277390 199634
311	Points of Interest - Public Infrastructure Name: Sluice Location: SA11 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	942	9	276944 198796
312	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13NE (N)	200	9	277985 199077
312	Points of Interest - Recreational and Environmental Name: Playground Location: (Dan-Y-Bryn), SA11 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A13NE (N)	234	9	278025 199102
313	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	657	9	277239 198728
313	Points of Interest - Recreational and Environmental Name: Playground Location: School Road, SA11 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A12SW (W)	667	9	277231 198721
314	Points of Interest - Recreational and Environmental Name: Picnic Area Location: Nr Fairyland Road, SA11 Category: Recreational Class Code: Picnic Areas Positional Accuracy: Positioned to an adjacent address or location	A7SE (SW)	957	9	277299 198089
315	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17NE (NW)	959	9	277471 199741

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
316	Ancient Woodland Name: Not Supplied Reference: 22314 Area(m²): 12462.84 Type: Restored Ancient Woodland Site	A13SW (S)	0	2	277931 198841
317	Ancient Woodland Name: Not Supplied Reference: 10795 Area(m²): 16083.17 Type: Restored Ancient Woodland Site	A13SE (SE)	10	2	277987 198822
318	Ancient Woodland Name: Not Supplied Reference: 22316 Area(m²): 1796.71 Type: Restored Ancient Woodland Site	A13NE (N)	34	2	277943 198912
319	Ancient Woodland Name: Not Supplied Reference: 10796 Area(m²): 111027.83 Type: Restored Ancient Woodland Site	A13NE (N)	35	2	277946 198913
320	Ancient Woodland Name: Not Supplied Reference: 22313 Area(m²): 2415.15 Type: Restored Ancient Woodland Site	A13NE (E)	98	2	278082 198869
321	Ancient Woodland Name: Not Supplied Reference: 16556 Area(m²): 1385.41 Type: Ancient and Semi-Natural Woodland	A13SW (SW)	106	2	277795 198791
322	Ancient Woodland Name: Not Supplied Reference: 10795 Area(m²): 74063.71 Type: Restored Ancient Woodland Site	A13SW (W)	148	2	277750 198790
323	Ancient Woodland Name: Not Supplied Reference: 41592 Area(m²): 2281.32 Type: Plantation on Ancient Woodland	A13SW (SW)	154	2	277852 198692
324	Ancient Woodland Name: Not Supplied Reference: 40378 Area(m²): 26259.45 Type: Plantation on Ancient Woodland	A13SW (S)	155	2	277869 198682
325	Ancient Woodland Name: Not Supplied Reference: 22317 Area(m²): 1258.67 Type: Restored Ancient Woodland Site	A13NW (N)	160	2	277934 199042
326	Ancient Woodland Name: Not Supplied Reference: 40379 Area(m²): 17865.41 Type: Plantation on Ancient Woodland	A13NE (NE)	170	2	278100 198972
327	Ancient Woodland Name: Not Supplied Reference: 10795 Area(m²): 26006.18 Type: Restored Ancient Woodland Site	A13SE (SE)	178	2	278033 198660
328	Ancient Woodland Name: Not Supplied Reference: 40378 Area(m²): 28530.42 Type: Plantation on Ancient Woodland	A13SE (SE)	224	2	278177 198714
329	Ancient Woodland Name: Not Supplied Reference: 22312 Area(m²): 20025.12 Type: Restored Ancient Woodland Site	A13SW (W)	267	2	277644 198734

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
330	Ancient Woodland Name: Not Supplied Reference: 16555 Area(m²): 1118.33 Type: Ancient and Semi-Natural Woodland	A8NW (S)	397	2	277787 198457
331	Ancient Woodland Name: Not Supplied Reference: 18314 Area(m²): 26419.66 Type: Ancient and Semi-Natural Woodland	A12NE (W)	408	2	277512 199027
332	Ancient Woodland Name: Not Supplied Reference: 43007 Area(m²): 3056.25 Type: Plantation on Ancient Woodland	A14SW (SE)	438	2	278345 198580
333	Ancient Woodland Name: Not Supplied Reference: 22315 Area(m²): 11180.2 Type: Restored Ancient Woodland Site	A14SW (E)	446	2	278431 198850
334	Ancient Woodland Name: Not Supplied Reference: 10094 Area(m²): 3799.32 Type: Ancient and Semi-Natural Woodland	A14SW (SE)	457	2	278398 198635
335	Ancient Woodland Name: Not Supplied Reference: 10795 Area(m²): 13.31 Type: Restored Ancient Woodland Site	A14SW (SE)	457	2	278398 198635
336	Ancient Woodland Name: Not Supplied Reference: 22318 Area(m²): 9708.04 Type: Restored Ancient Woodland Site	A14NW (NE)	480	2	278361 199141
337	Ancient Woodland Name: Not Supplied Reference: 9410 Area(m²): 28262.95 Type: Ancient and Semi-Natural Woodland	A14NW (E)	482	2	278464 198892
338	Ancient Woodland Name: Not Supplied Reference: 10796 Area(m²): 4.73 Type: Restored Ancient Woodland Site	A14NW (NE)	484	2	278370 199133
339	Ancient Woodland Name: Not Supplied Reference: 23157 Area(m²): 5329.41 Type: Restored Ancient Woodland Site	A8NE (S)	521	2	277987 198310
340	Ancient Woodland Name: Not Supplied Reference: 10338 Area(m²): 87777.27 Type: Restored Ancient Woodland Site	A8NE (S)	526	2	277989 198305
341	Ancient Woodland Name: Not Supplied Reference: 40181 Area(m²): 22456.93 Type: Plantation on Ancient Woodland	A8NE (S)	529	2	278007 198303
342	Ancient Woodland Name: Not Supplied Reference: 22319 Area(m²): 2793.85 Type: Restored Ancient Woodland Site	A19SW (NE)	560	2	278368 199258
343	Ancient Woodland Name: Not Supplied Reference: 23158 Area(m²): 9951.04 Type: Restored Ancient Woodland Site	A8NW (SW)	577	2	277642 198321

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
344	Ancient Woodland Name: Not Supplied Reference: 18312 Area(m²): 9021.86 Type: Ancient and Semi-Natural Woodland	A12SE (SW)	582	2	277381 198558
345	Ancient Woodland Name: Not Supplied Reference: 22323 Area(m²): 59605.94 Type: Restored Ancient Woodland Site	A18SE (N)	588	2	278079 199454
346	Ancient Woodland Name: Not Supplied Reference: 18317 Area(m²): 12755.31 Type: Ancient and Semi-Natural Woodland	A17SE (NW)	644	2	277465 199357
347	Ancient Woodland Name: Not Supplied Reference: 22322 Area(m²): 1536.78 Type: Restored Ancient Woodland Site	A18SE (N)	650	2	278082 199516
348	Ancient Woodland Name: Not Supplied Reference: 10798 Area(m²): 8795.69 Type: Restored Ancient Woodland Site	A18SE (N)	654	2	278049 199526
349	Ancient Woodland Name: Not Supplied Reference: 16558 Area(m²): 1653.2 Type: Ancient and Semi-Natural Woodland	A18NE (N)	679	2	277953 199561
350	Ancient Woodland Name: Not Supplied Reference: 40380 Area(m²): 2354.33 Type: Plantation on Ancient Woodland	A18NE (N)	690	2	277954 199572
351	Ancient Woodland Name: Not Supplied Reference: 7981 Area(m²): 45856.13 Type: Ancient and Semi-Natural Woodland	A14NW (NE)	693	2	278588 199174
352	Ancient Woodland Name: Not Supplied Reference: 41593 Area(m²): 9240.96 Type: Plantation on Ancient Woodland	A18NW (N)	710	2	277875 199594
353	Ancient Woodland Name: Not Supplied Reference: 22320 Area(m²): 7949.85 Type: Restored Ancient Woodland Site	A19SW (NE)	711	2	278404 199429
354	Ancient Woodland Name: Not Supplied Reference: 48030 Area(m²): 1053.91 Type: Ancient Woodland Site of Unknown Category	A18NE (N)	716	2	278203 199550
355	Ancient Woodland Name: Not Supplied Reference: 22324 Area(m²): 5407.62 Type: Restored Ancient Woodland Site	A18NE (N)	739	2	278138 199595
356	Ancient Woodland Name: Not Supplied Reference: 40950 Area(m²): 3281.7 Type: Plantation on Ancient Woodland	A19SW (NE)	750	2	278564 199320
357	Ancient Woodland Name: Not Supplied Reference: 40523 Area(m²): 187110.77 Type: Plantation on Ancient Woodland	A8SW (S)	818	2	277617 198071

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
358	Ancient Woodland Name: Not Supplied Reference: 21389 Area(m²): 1393.18 Type: Restored Ancient Woodland Site	A8SE (S)	885	2	277978 197947
359	Ancient Woodland Name: Not Supplied Reference: 12797 Area(m²): 6041.32 Type: Ancient and Semi-Natural Woodland	A19SE (NE)	896	2	278765 199275
360	Ancient Woodland Name: Not Supplied Reference: 16557 Area(m²): 3133.63 Type: Ancient and Semi-Natural Woodland	A14NE (E)	915	2	278858 199105
361	Ancient Woodland Name: Not Supplied Reference: 10343 Area(m²): 167788.65 Type: Restored Ancient Woodland Site	A19SE (NE)	930	2	278794 199292
362	Ancient Woodland Name: Not Supplied Reference: 10797 Area(m²): 37585.84 Type: Restored Ancient Woodland Site	A14NE (E)	950	2	278886 199132
363	Ancient Woodland Name: Not Supplied Reference: 16559 Area(m²): 15109.06 Type: Ancient and Semi-Natural Woodland	A19NW (NE)	965	2	278436 199715
364	Ancient Woodland Name: Not Supplied Reference: 22321 Area(m²): 9797.26 Type: Restored Ancient Woodland Site	A19SE (NE)	983	2	278705 199515

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices City and County of Swansea - Environmental Health Department Natural Resources Wales Neath Port Talbot County Borough Council - Environmental Health Department	January 2015 June 2020 March 2015	Annual Rolling Update Annually Annual Rolling Update
Discharge Consents Environment Agency - Welsh Region Natural Resources Wales	August 2014 November 2020	Quarterly Quarterly
Enforcement and Prohibition Notices Environment Agency - Welsh Region	March 2013	Annual Rolling Update
Integrated Pollution Controls Environment Agency - Welsh Region	October 2008	Variable
Integrated Pollution Prevention And Control Natural Resources Wales Environment Agency - Welsh Region	December 2020 October 2020	Quarterly Quarterly
Local Authority Integrated Pollution Prevention And Control Swansea Bay Port Health Authority Neath Port Talbot County Borough Council - Environmental Health Department City and County of Swansea - Environmental Health Department	April 2014 August 2012 June 2014	Variable Variable Variable
Local Authority Pollution Prevention and Controls Swansea Bay Port Health Authority City and County of Swansea - Environmental Health Department Neath Port Talbot County Borough Council - Environmental Health Department	April 2014 June 2014 March 2014	Annually Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Swansea Bay Port Health Authority City and County of Swansea - Environmental Health Department Neath Port Talbot County Borough Council - Environmental Health Department	April 2014 June 2014 March 2014	Variable Variable Variable
Nearest Surface Water Feature Ordnance Survey	October 2020	
Pollution Incidents to Controlled Waters Environment Agency - Welsh Region	December 1998	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - Welsh Region Natural Resources Wales	March 2013 March 2013	Annual Rolling Update Annual Rolling Update
Prosecutions Relating to Controlled Waters Environment Agency - Welsh Region Natural Resources Wales	March 2013 March 2013	Annual Rolling Update Annual Rolling Update
Registered Radioactive Substances Natural Resources Wales Environment Agency - Welsh Region	January 2015 June 2016	Annually
River Quality Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register Natural Resources Wales Environment Agency Wales - South West Area	November 2020 October 2020	Quarterly Quarterly
Water Abstractions Environment Agency - Welsh Region Natural Resources Wales	January 2021 November 2020	Quarterly Quarterly

Agency & Hydrological	Version	Update Cycle
Water Industry Act Referrals Natural Resources Wales Environment Agency - Welsh Region	November 2020 October 2017	Quarterly Quarterly
Groundwater Vulnerability Map Natural Resources Wales	June 2018	As notified
Bedrock Aquifer Designations Natural Resources Wales	January 2018	Annually
Superficial Aquifer Designations Natural Resources Wales	January 2018	Annually
Source Protection Zones Natural Resources Wales	November 2016	Annual Rolling Update
Extreme Flooding from Rivers or Sea without Defences Natural Resources Wales	August 2018	Quarterly
Flooding from Rivers or Sea without Defences Natural Resources Wales	September 2020	Quarterly
Areas Benefiting from Flood Defences Natural Resources Wales	November 2019	Quarterly
Flood Water Storage Areas Natural Resources Wales	August 2019	Quarterly
Flood Defences Natural Resources Wales	November 2019	Quarterly
OS Water Network Lines Ordnance Survey	September 2020	Quarterly
Surface Water 1 in 30 year Flood Extent Natural Resources Wales	October 2013	Annually
Surface Water 1 in 100 year Flood Extent Natural Resources Wales	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent Natural Resources Wales	October 2013	Annually
Surface Water Suitability Natural Resources Wales	October 2013	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Natural Resources Wales	July 2017	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Welsh Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency Wales - South West Area Natural Resources Wales	October 2020 October 2020	Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Natural Resources Wales Environment Agency Wales - South West Area	November 2020 October 2020	Quarterly Quarterly
Local Authority Landfill Coverage City and County of Swansea - Environmental Health Department Neath Port Talbot County Borough Council - Environmental Health Department	May 2000 May 2000	Not Applicable Not Applicable
Local Authority Recorded Landfill Sites City and County of Swansea - Environmental Health Department Neath Port Talbot County Borough Council - Environmental Health Department	May 2000 September 2003	Not Applicable Not Applicable
Potentially Infilled Land (Non-Water) Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water) Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites Environment Agency Wales - South West Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency Wales - South West Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency Wales - South West Area	March 2003	Not Applicable
Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements City and County of Swansea - Planning Department Neath Port Talbot County Borough Council - Planning Department	January 2016 October 2015	Variable Variable
Planning Hazardous Substance Consents City and County of Swansea - Planning Department Neath Port Talbot County Borough Council - Planning Department	January 2016 October 2015	Variable Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2020	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually
Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	October 2020	Quarterly
Fuel Station Entries Catalist Ltd - Experian	September 2020	Quarterly
Gas Pipelines National Grid	January 2021	
Points of Interest - Commercial Services PointX	December 2020	Quarterly
Points of Interest - Education and Health PointX	December 2020	Quarterly
Points of Interest - Manufacturing and Production PointX	December 2020	Quarterly
Points of Interest - Public Infrastructure PointX	December 2020	Quarterly
Points of Interest - Recreational and Environmental PointX	December 2020	Quarterly
Underground Electrical Cables National Grid	August 2020	

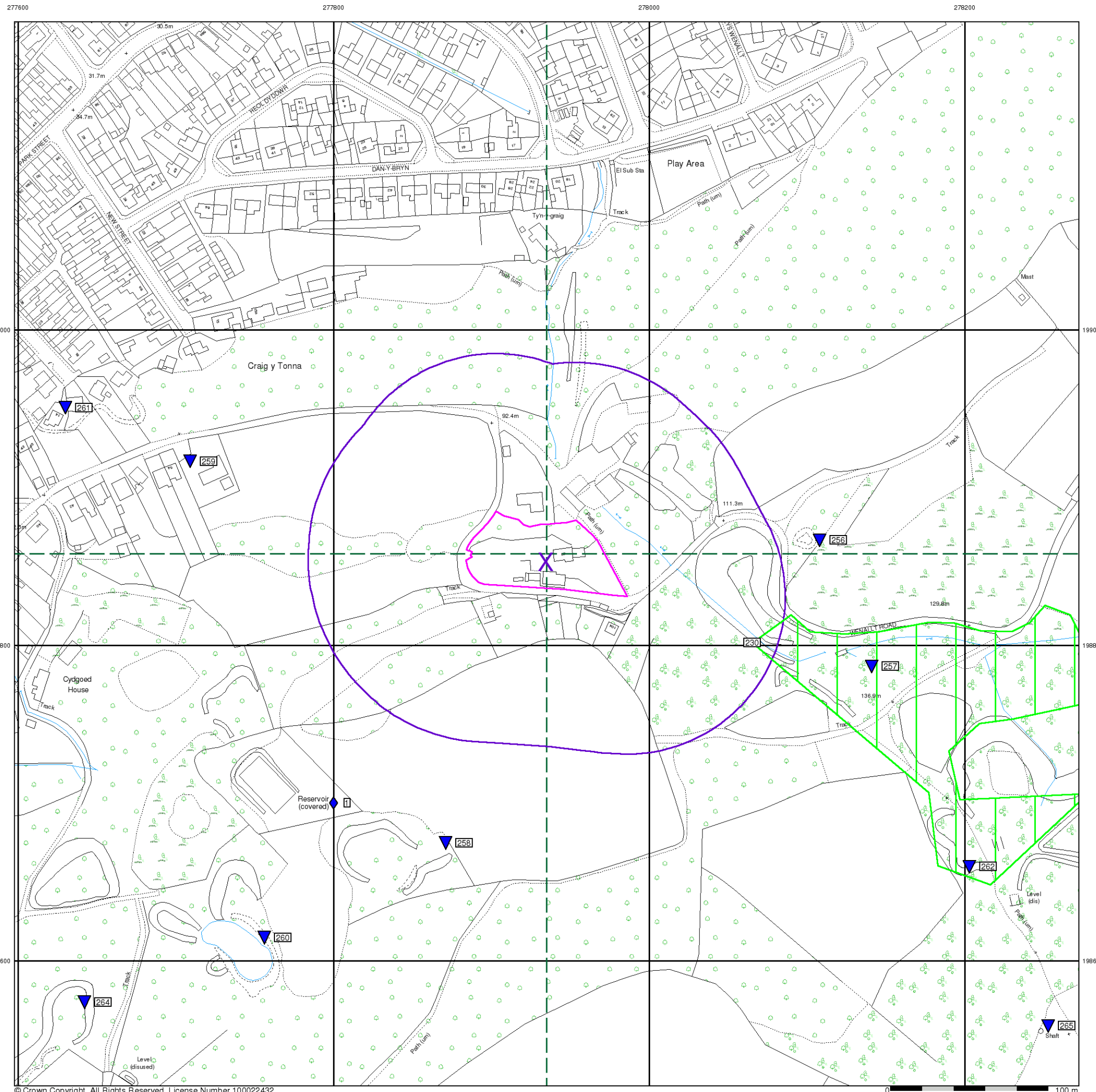
Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural Resources Wales	August 2018	Bi-Annually
Areas of Adopted Green Belt City and County of Swansea Neath Port Talbot County Borough Council - Planning Services	June 2020 June 2020	As notified As notified
Areas of Unadopted Green Belt City and County of Swansea Neath Port Talbot County Borough Council - Planning Services	June 2020 June 2020	As notified As notified
Areas of Outstanding Natural Beauty Natural Resources Wales	June 2019	Bi-Annually
Environmentally Sensitive Areas The National Assembly for Wales - GI Services (Department of Planning & Countryside)	January 2017	
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves City and County of Swansea Neath Port Talbot County Borough Council	August 2018 August 2018	Bi-Annually Bi-Annually
Marine Nature Reserves Natural Resources Wales	August 2018	Bi-Annually
National Nature Reserves Natural Resources Wales	June 2019	Bi-Annually
National Parks Natural Resources Wales	August 2018	Annually
Nitrate Vulnerable Zones Natural Resources Wales The National Assembly for Wales - GI Services (Department of Planning & Countryside)	July 2019 October 2005	Bi-Annually
Ramsar Sites Natural Resources Wales	July 2019	Bi-Annually
Sites of Special Scientific Interest Natural Resources Wales	March 2020	Bi-Annually
Special Areas of Conservation Natural Resources Wales	August 2020	Bi-Annually
Special Protection Areas Natural Resources Wales	August 2018	Bi-Annually

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	 Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Natural Resources Wales Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP	Telephone: 0300 065 3000 Email: enquiries@naturalresourceswales.gov.uk
3	Neath Port Talbot County Borough Council - Environmental Health Department Room 322, Neath Civic Centre, Neath, West Glamorgan, SA11 3QZ	Telephone: 01639 763333 Fax: 01693 763444 Website: www.neath-porttalbot.gov.uk
4	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
5	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	Health and Safety Executive 5S.2 Redgrave Court, Merton Road, Bootle, L20 7HS	Website: www.hse.gov.uk
7	Neath Port Talbot County Borough Council - Planning Department Port Talbot Civic Centre, Port Talbot, SA13 1PJ	Telephone: 01639 763333 Fax: 01639 763444 Website: www.neath-porttalbot.gov.uk
8	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
9	PointX 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

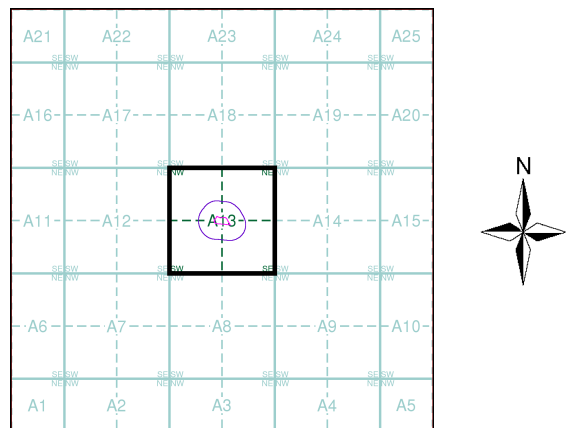
Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.



Intégral Géotechnique

- General**
 - Specified Site
 - Specified Buffer(s)
 - Several of Types at Location
 - Contaminated Land Register Entry or Notice (Location)
 - Discharge Consent
 - Enforcement or Prohibition Notice
 - Integrated Pollution Control
 - Integrated Pollution Prevention Control
 - Local Authority Integrated Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control Enforcement
 - Pollution Incident to Controlled Waters
 - Prosecution Relating to Authorised Processes
 - Prosecution Relating to Controlled Waters
 - Registered Radioactive Substance
 - River Network or Water Feature
 - River Quality Sampling Point
 - Substantiated Pollution Incident Register
 - Water Abstraction
 - Water Industry Act Referral
- Agency and Hydrological**
 - Contaminated Land Register Entry or Notice (Location)
 - Discharge Consent
 - Enforcement or Prohibition Notice
 - Integrated Pollution Control
 - Integrated Pollution Prevention Control
 - Local Authority Integrated Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control Enforcement
 - Pollution Incident to Controlled Waters
 - Prosecution Relating to Authorised Processes
 - Prosecution Relating to Controlled Waters
 - Registered Radioactive Substance
 - River Network or Water Feature
 - River Quality Sampling Point
 - Substantiated Pollution Incident Register
 - Water Abstraction
 - Water Industry Act Referral
- Waste**
 - BGS Recorded Landfill Site (Location)
 - BGS Recorded Landfill Site
 - EA Historic Landfill (Buffered Point)
 - EA Historic Landfill (Polygon)
 - Integrated Pollution Control Registered Waste Site
 - Licensed Waste Management Facility (Landfill Boundary)
 - Licensed Waste Management Facility (Location)
 - Local Authority Recorded Landfill Site (Location)
 - Local Authority Recorded Landfill Site
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Registered Landfill Site
 - Registered Landfill Site (Location)
 - Registered Landfill Site (Point Buffered to 100m)
 - Registered Landfill Site (Point Buffered to 250m)
 - Registered Waste Transfer Site (Location)
 - Registered Waste Transfer Site
 - Registered Waste Treatment or Disposal Site (Location)
 - Registered Waste Treatment or Disposal Site
- Hazardous Substances**
 - COMAH Site
 - Explosive Site
 - NIHHS Site
 - Planning Hazardous Substance Consent
 - Planning Hazardous Substance Enforcement
- Geological**
 - BGS Recorded Mineral Site

Site Sensitivity Map - Segment A13



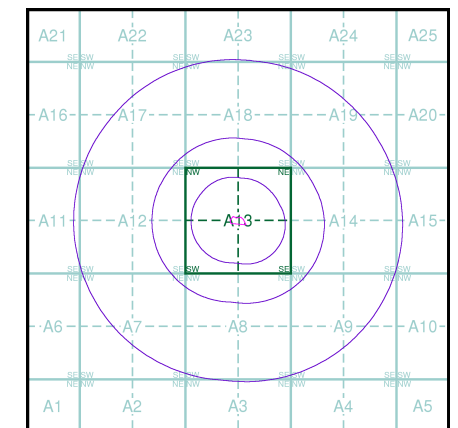
Order Details
Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Plot Buffer (m): 100

Site Details
89, Wenallt Road, Tonna, NEATH, SA11 3QH

Intégral Géotechnique

- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Map ID
 - Several of Type at Location
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice (Location)
 - Contaminated Land Register Entry or Notice
 - Discharge Consent
 - Enforcement or Prohibition Notice
 - Integrated Pollution Control
 - Integrated Pollution Prevention Control
 - Local Authority Integrated Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control
 - Local Authority Pollution Prevention and Control Enforcement
 - Pollution Incident to Controlled Waters
 - Prosecution Relating to Authorised Processes
 - Prosecution Relating to Controlled Waters
 - Registered Radioactive Substance
 - River Network or Water Feature
 - River Quality Sampling Point
 - Substantiated Pollution Incident Register
 - Water Abstraction
 - Water Industry Act Referral
- Hazardous Substances**
- COMAH Site
 - Explosive Site
 - NIHHS Site
 - Planning Hazardous Substance Consent
 - Planning Hazardous Substance Enforcement
 - BGS Recorded Mineral Site
- Waste**
- BGS Recorded Landfill Site (Location)
 - BGS Recorded Landfill Site
 - EA Historic Landfill (Buffered Point)
 - EA Historic Landfill (Polygon)
 - Integrated Pollution Control Registered Waste Site
 - Licensed Waste Management Facility (Landfill Boundary)
 - Licensed Waste Management Facility (Location)
 - Local Authority Recorded Landfill Site (Location)
 - Local Authority Recorded Landfill Site
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Non-water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Potentially Infilled Land (Water)
 - Registered Landfill Site (Location)
 - Registered Landfill Site (Point Buffered to 100m)
 - Registered Landfill Site (Point Buffered to 250m)
 - Registered Waste Transfer Site (Location)
 - Registered Waste Transfer Site
 - Registered Waste Treatment or Disposal Site (Location)
 - Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
INFORMATION GROUP

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

Intégral Géotechnique

Industrial Land Use Map

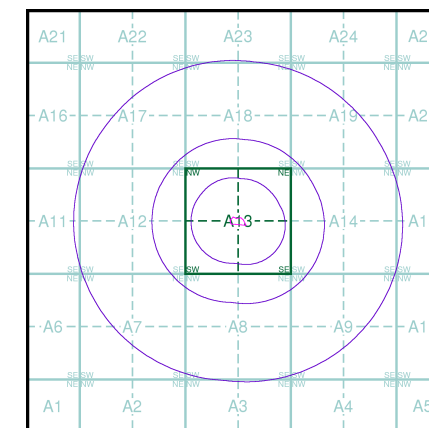
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



Order Details

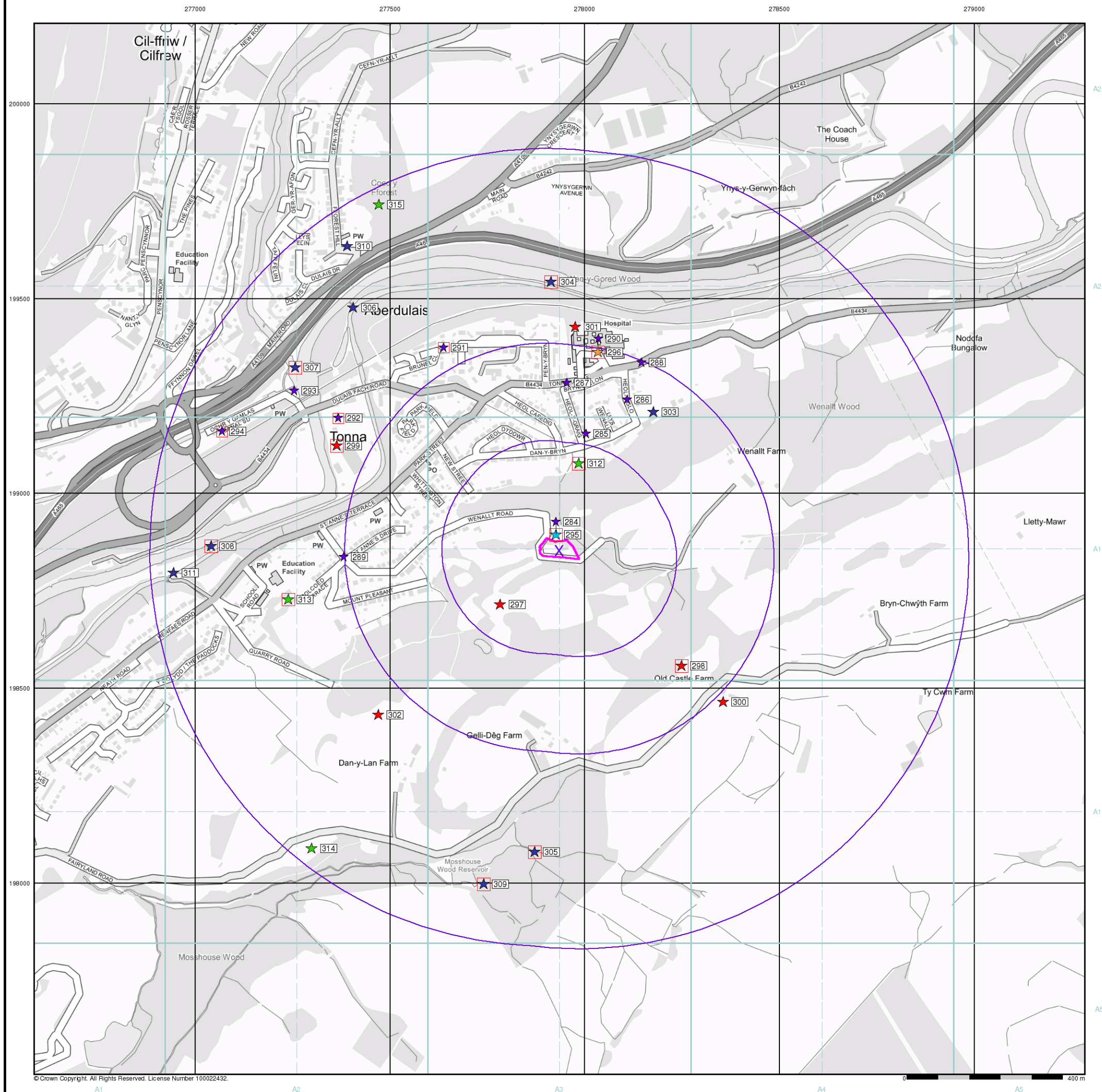
Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

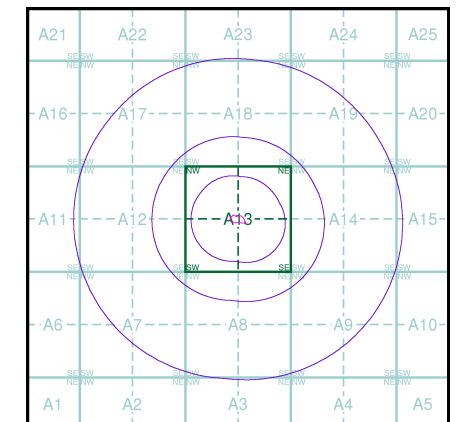
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Intégral Géotechnique

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

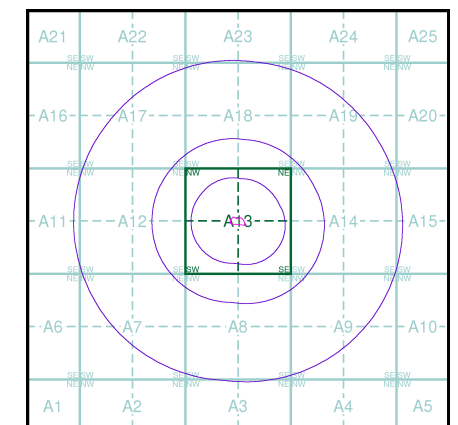
OS Water Network Data

- | | |
|--------------|-------------------------|
| Canal | Drain |
| Reservoir | Other |
| Foreshore | Lake |
| Marsh | Transfer |
| Tidal River | Lock Or Flight Of Locks |
| Inland River | Sea |

Contours (height in meters)

- Standard Contour 105 100 95
- Master Contour 105 100 95
- Spot Height 167.3
- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

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Intégral Géotechnique

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Risk of Flooding from Surface Water

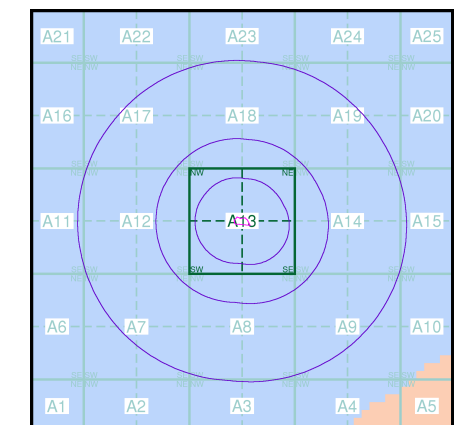
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

E/NRW Suitability Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

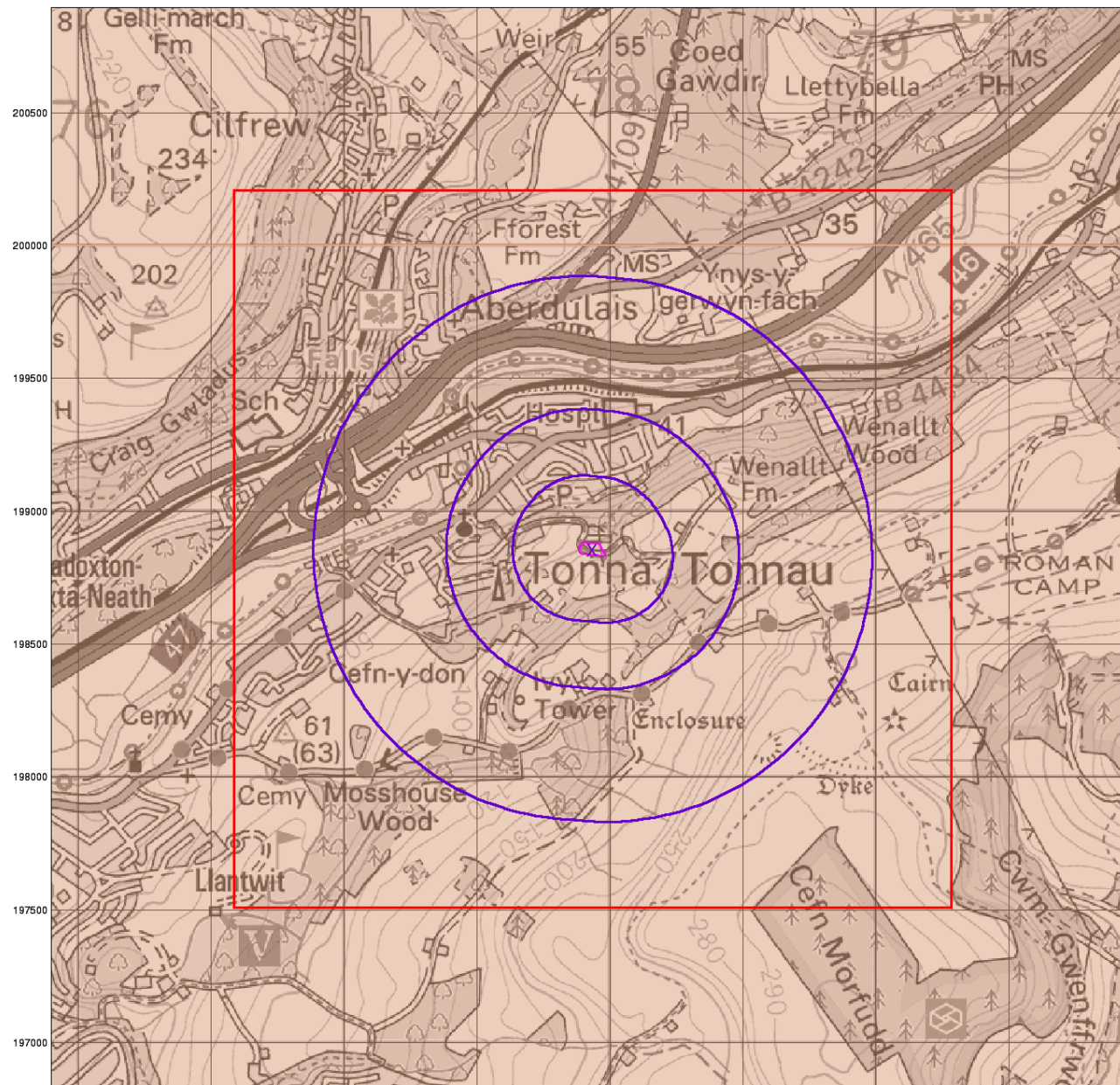
Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

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276000 276500 277000 277500 278000 278500 279000 279500



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0 1 km

Intégral Géotechnique

Bedrock Aquifer Designation

General

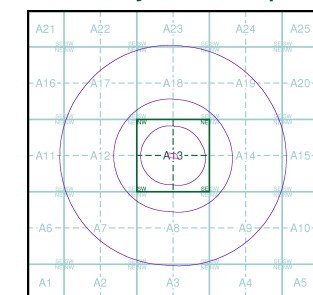
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

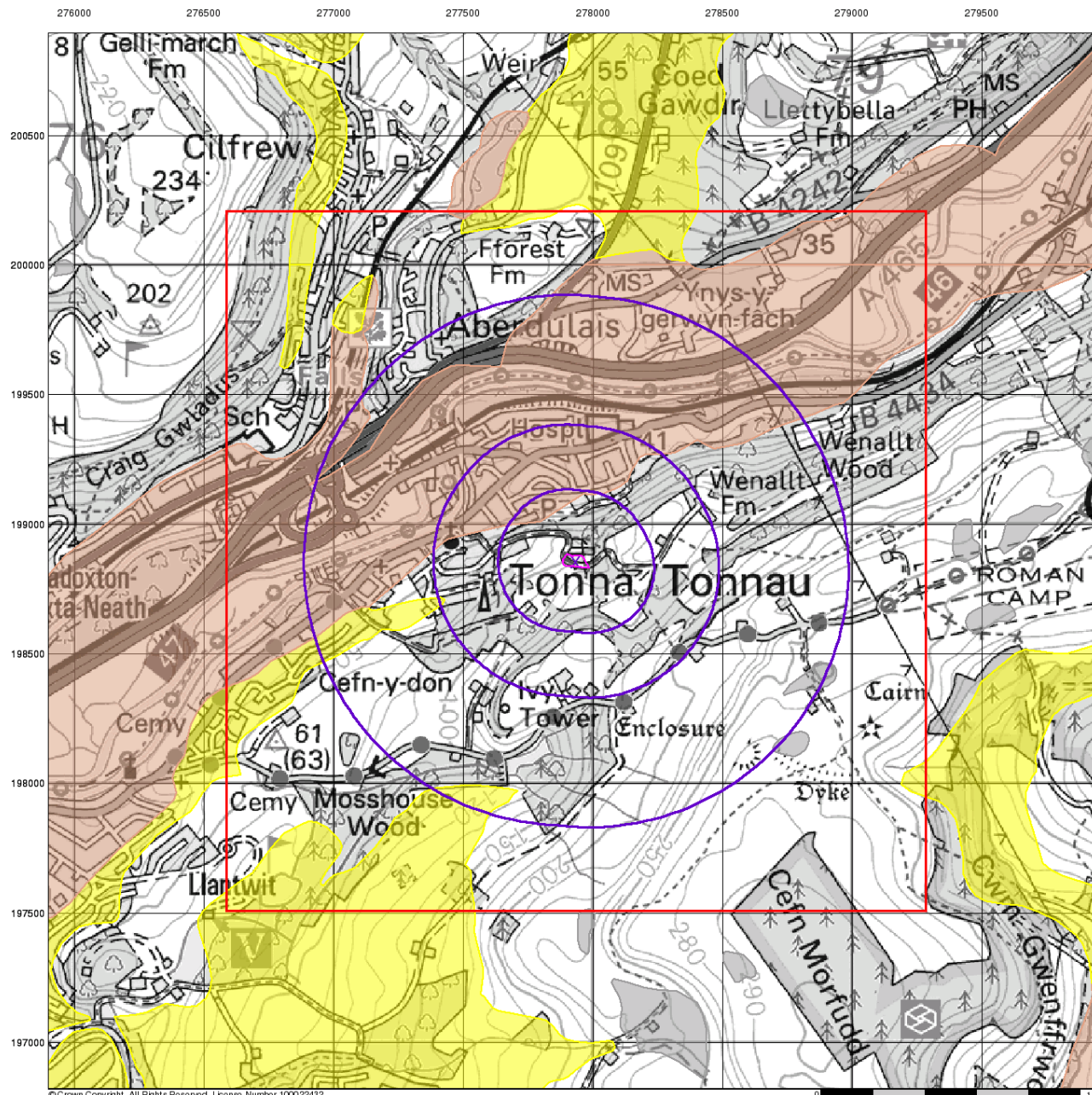
Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

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0 1 km

Intégral Géotechnique

Superficial Aquifer Designation

General

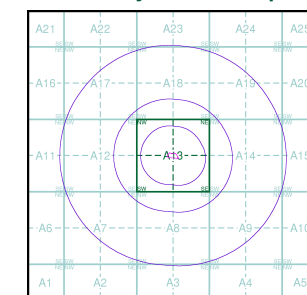
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

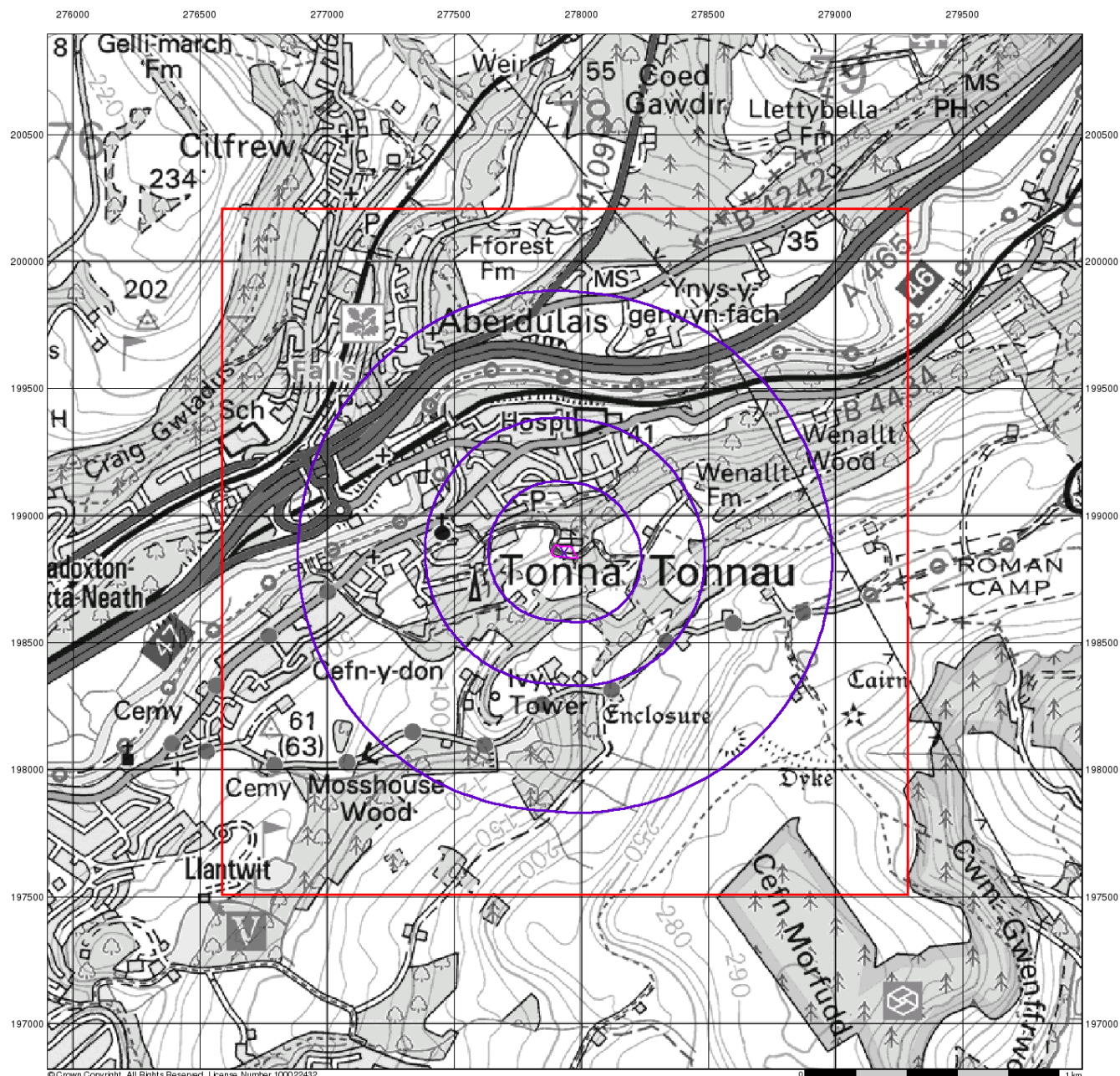
Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

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Intégral Géotechnique

Source Protection Zones

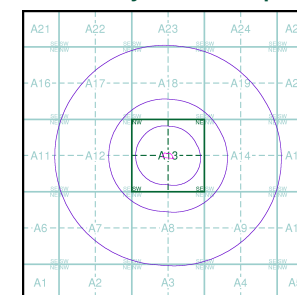
General

- ◇ Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Slice
- B Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- ▨ Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- ▨ Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- ▨ Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 272393355_1_1
 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
 Search Buffer (m): 1000

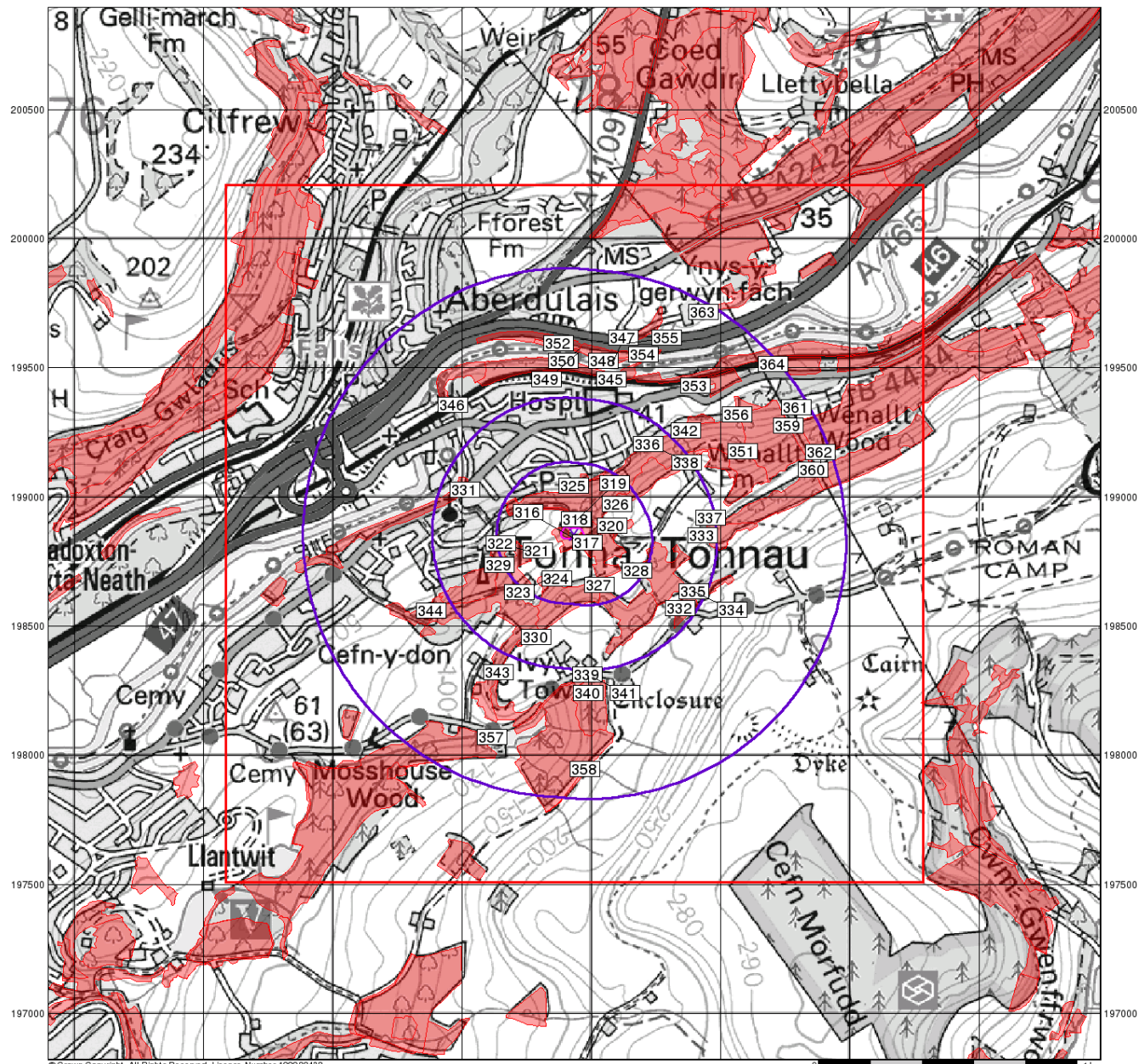
Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
 INFORMATION GROUP

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 Web: www.envirocheck.co.uk

276000 276500 277000 277500 278000 278500 279000 279500



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0 1 km

Intégral Géotechnique

Sensitive Land Uses

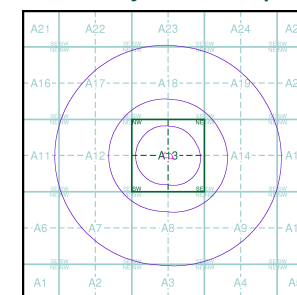
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

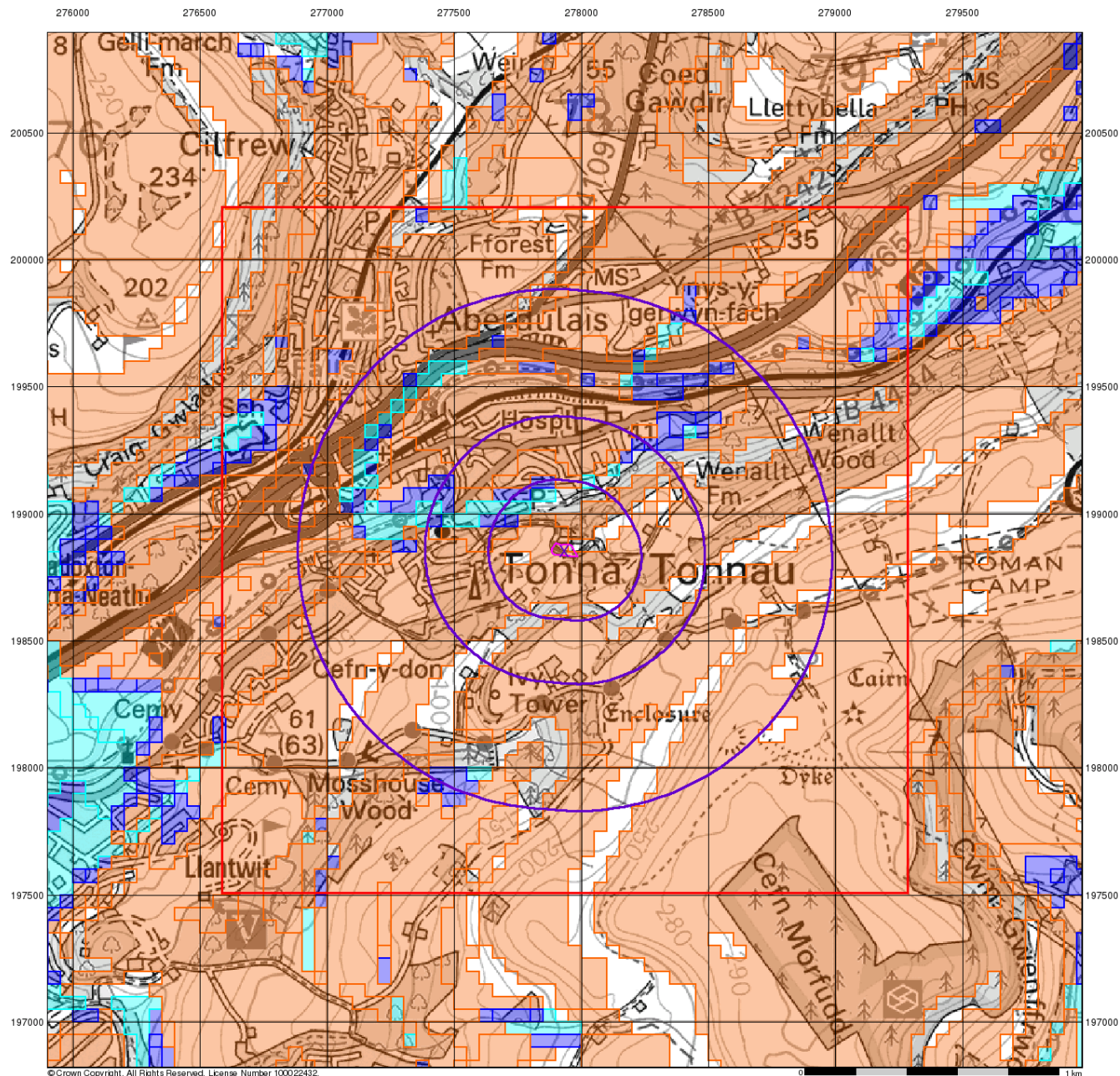
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 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
 Search Buffer (m): 1000

Site Details

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Intégral Géotechnique

BGS Flood GFS Data

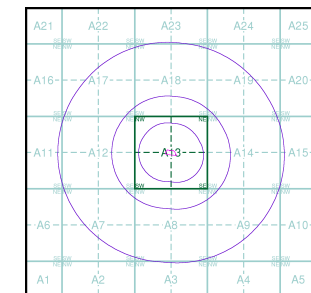
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 272393355_1_1
 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
 Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

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

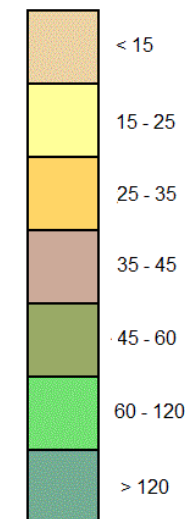
Intégral Géotechnique

General

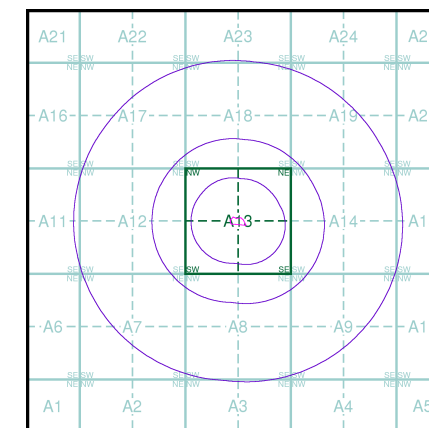
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg



Estimated Soil Chemistry Arsenic - Slice A



Order Details

Order Details: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

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

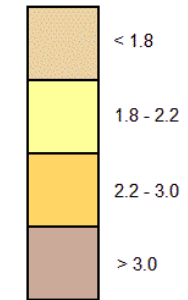
Intégral Géotechnique

General

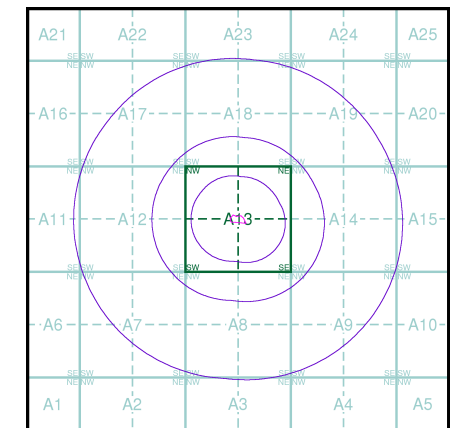
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg



Estimated Soil Chemistry Cadmium - Slice A



Order Details

Order Details: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
INFORMATION GROUP

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

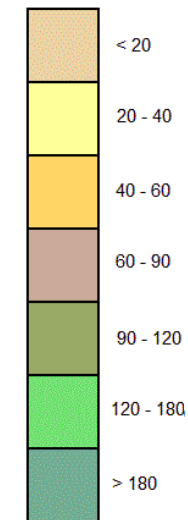
Intégral Géotechnique

General

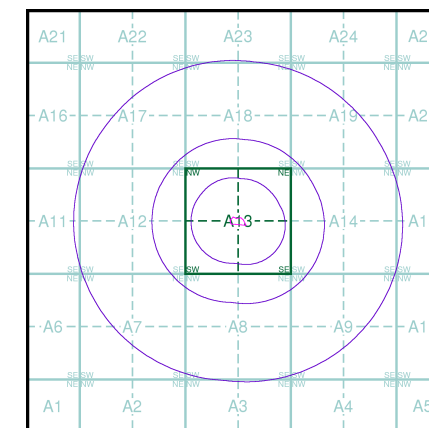
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg



Estimated Soil Chemistry Chromium - Slice A



Order Details

Order Details: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
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Fax: 0844 844 9951
Web: www.envirocheck.co.uk



General

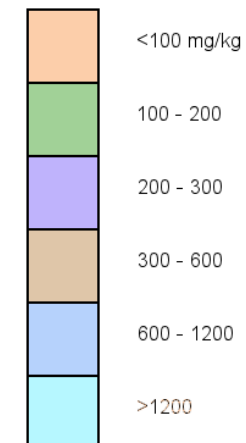
 Specified Site

 Specified Buffer(s)

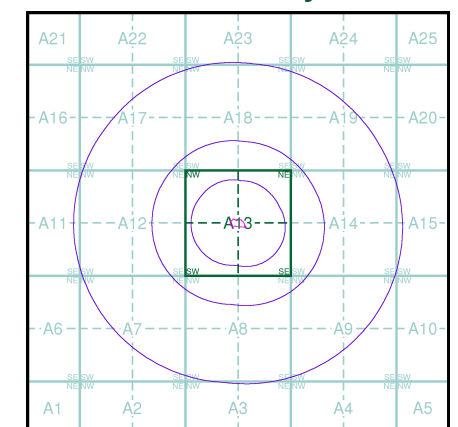
X Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg



Estimated Soil Chemistry Lead - Slice A



Order Details

Order Details: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

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Web: www.envirocheck.co.uk

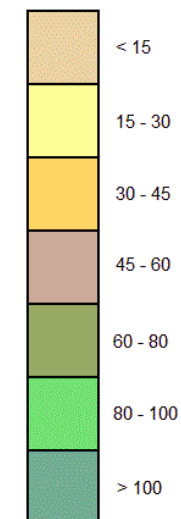
Intégral Géotechnique

General

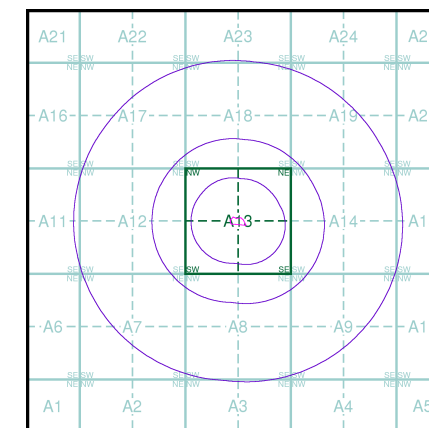
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg



Estimated Soil Chemistry Nickel - Slice A



Order Details

Order Details: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
INFORMATION GROUP

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

Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice

Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment

A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant

A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

Client Details

MR H Pritchard, Integral Geotechnique, Integral House, 7 Beddau Way, Castlegate Business Park, Caerphilly, CF83 2AX

Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198860
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Full Terms and Conditions can be found on the following link:
<http://www.landmarkinfo.co.uk/Terms/Show/515>

Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	MGR	Made Ground (Undivided)	Artificial Deposit	Not Supplied - Holocene
	WGR	Worked Ground (Undivided)	Void	Not Supplied - Holocene
	LSGR	Landscaped Ground (Undivided)	Artificially Modified Ground	Not Supplied - Holocene
	SLIP	Landslide Deposit	Unknown/Unclassified Entry	Not Supplied - Quaternary

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	GFSD	Glaciofluvial Sheet Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	HMGDD	Hummocky (Moundy) Glacial Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	TILLD	Till, Devensian	Diamicton	Not Supplied - Devensian
	GFDUD	Glaciofluvial Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	PEAT	Peat	Peat	Not Supplied - Quaternary
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	BD	Brithdir Member	Sandstone	Not Supplied - Westphalian
	BD	Brithdir Member	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	H	Hughes Member	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	H	Hughes Member	Sandstone	Not Supplied - Westphalian
	SW	Swansea Member	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	SW	Swansea Member	Sandstone	Not Supplied - Westphalian
	RA	Rhondda Member	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	RA	Rhondda Member	Sandstone	Not Supplied - Westphalian
		Rock Segments		
		Faults		

Intégral Géotechnique

Geology 1:50,000 Maps

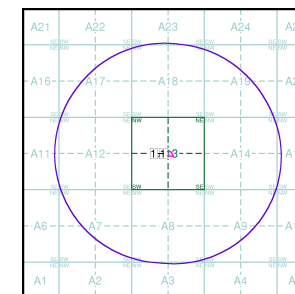
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID: 1
Map Sheet No: 247
Map Name: Swansea
Map Date: 2011
Bedrock Geology: Available
Superficial Geology: Available
Artificial Geology: Available
Faults: Not Supplied
Landslip: Available
Rock Segments: Not Supplied

Geology 1:50,000 Maps - Slice A

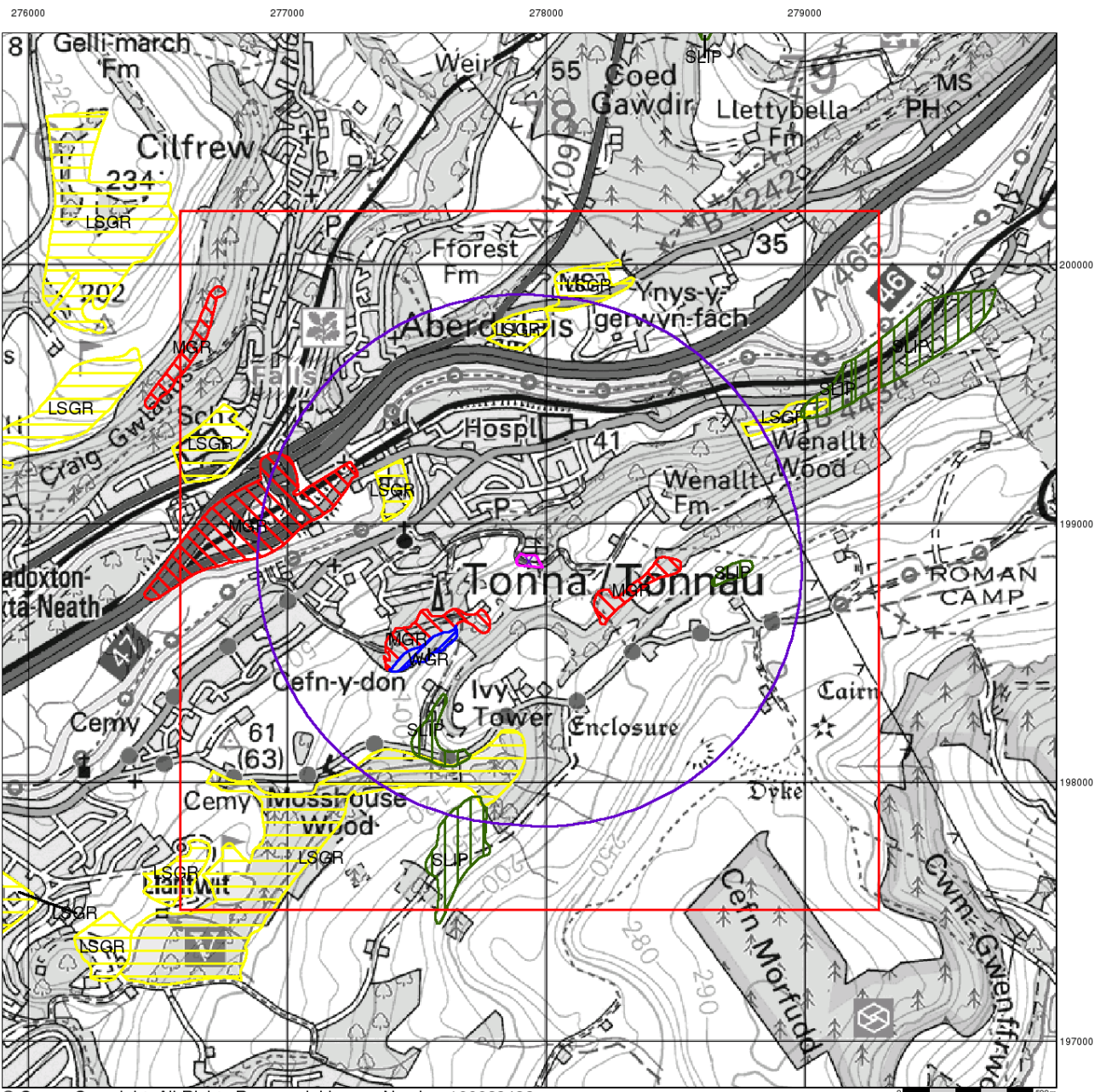


Order Details:

Order Number: 272393355_1_1
Customer Reference: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details:

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Intégral Géotechnique

Artificial Ground and Landslip

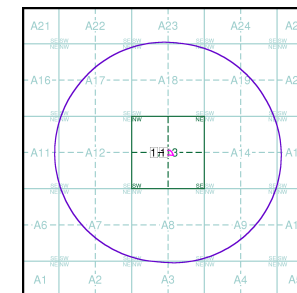
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A



Order Details:

Order Number: 272393355_1_1
Customer Reference: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details:

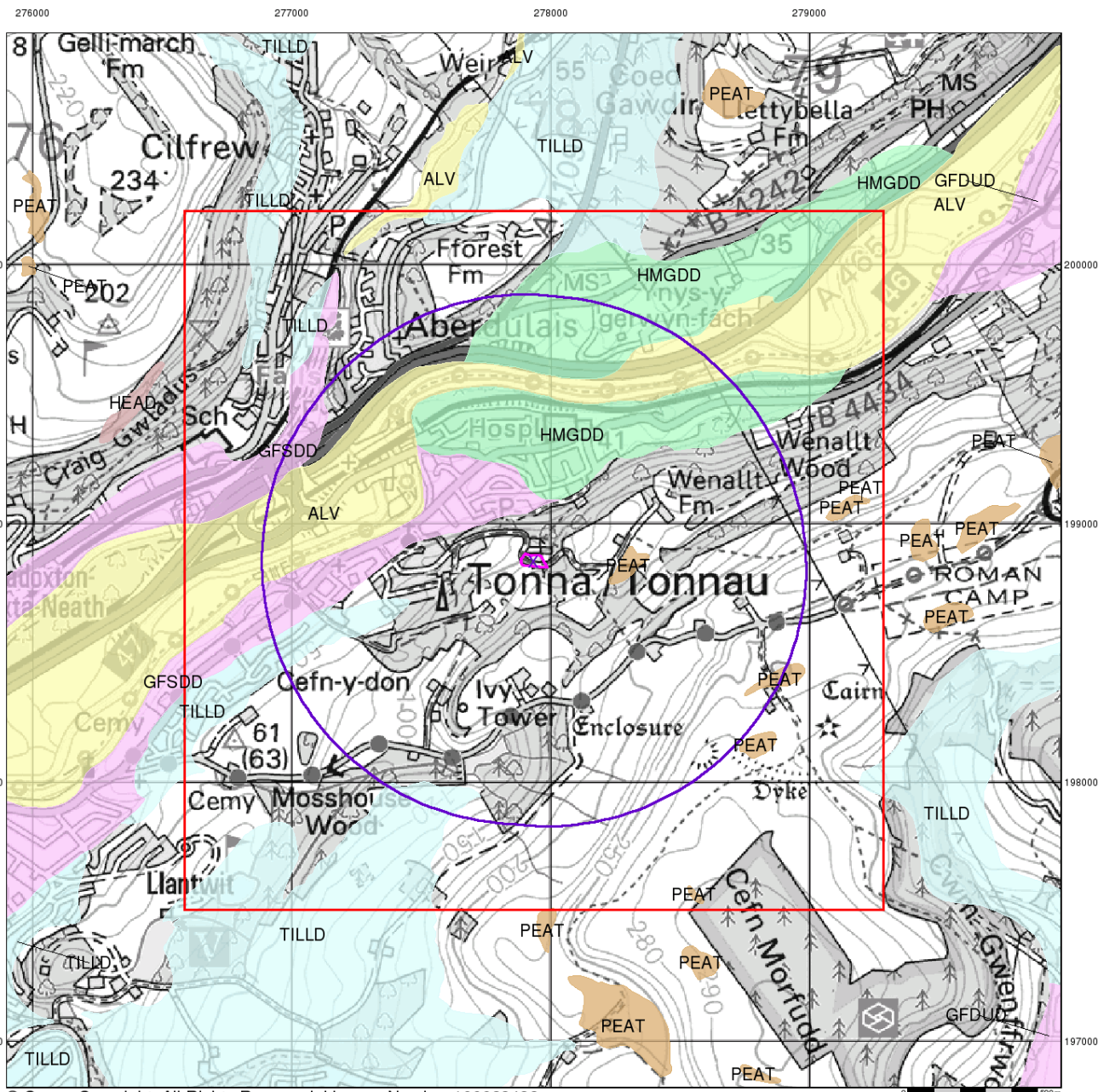
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Intégral Géotechnique

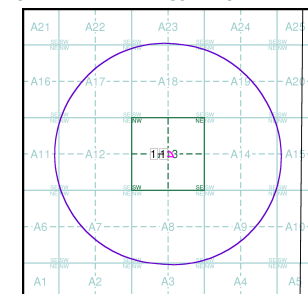
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



Order Details:

Order Number: 272393355_1_1
Customer Reference: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details:

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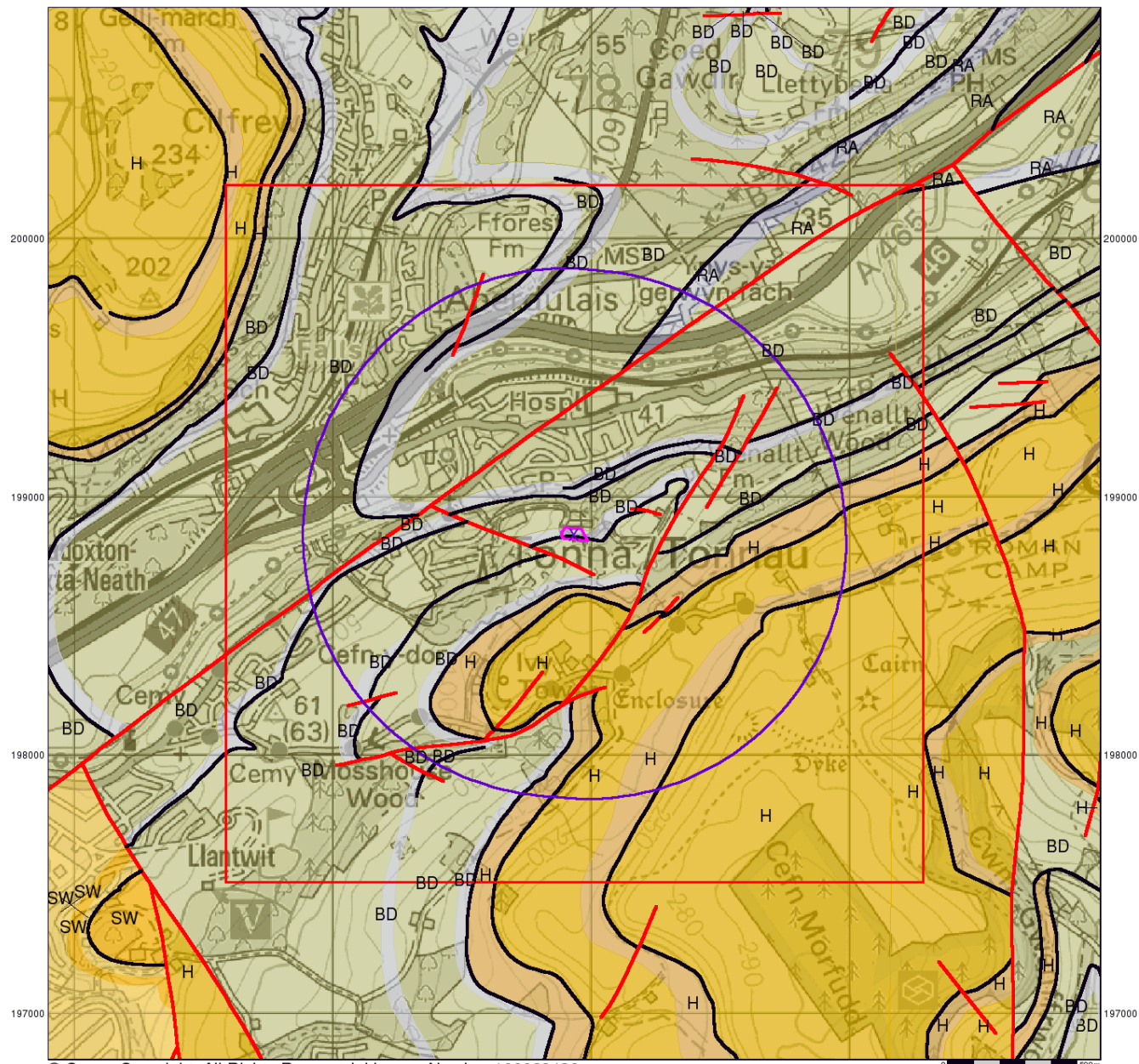
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276000 277000 278000 279000



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Intégral Géotechnique

Bedrock and Faults

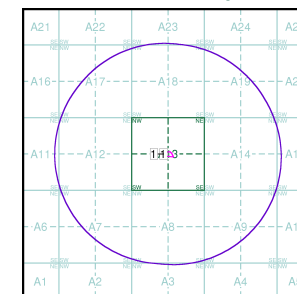
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



Order Details:

Order Number: 272393355_1_1
Customer Reference: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details:

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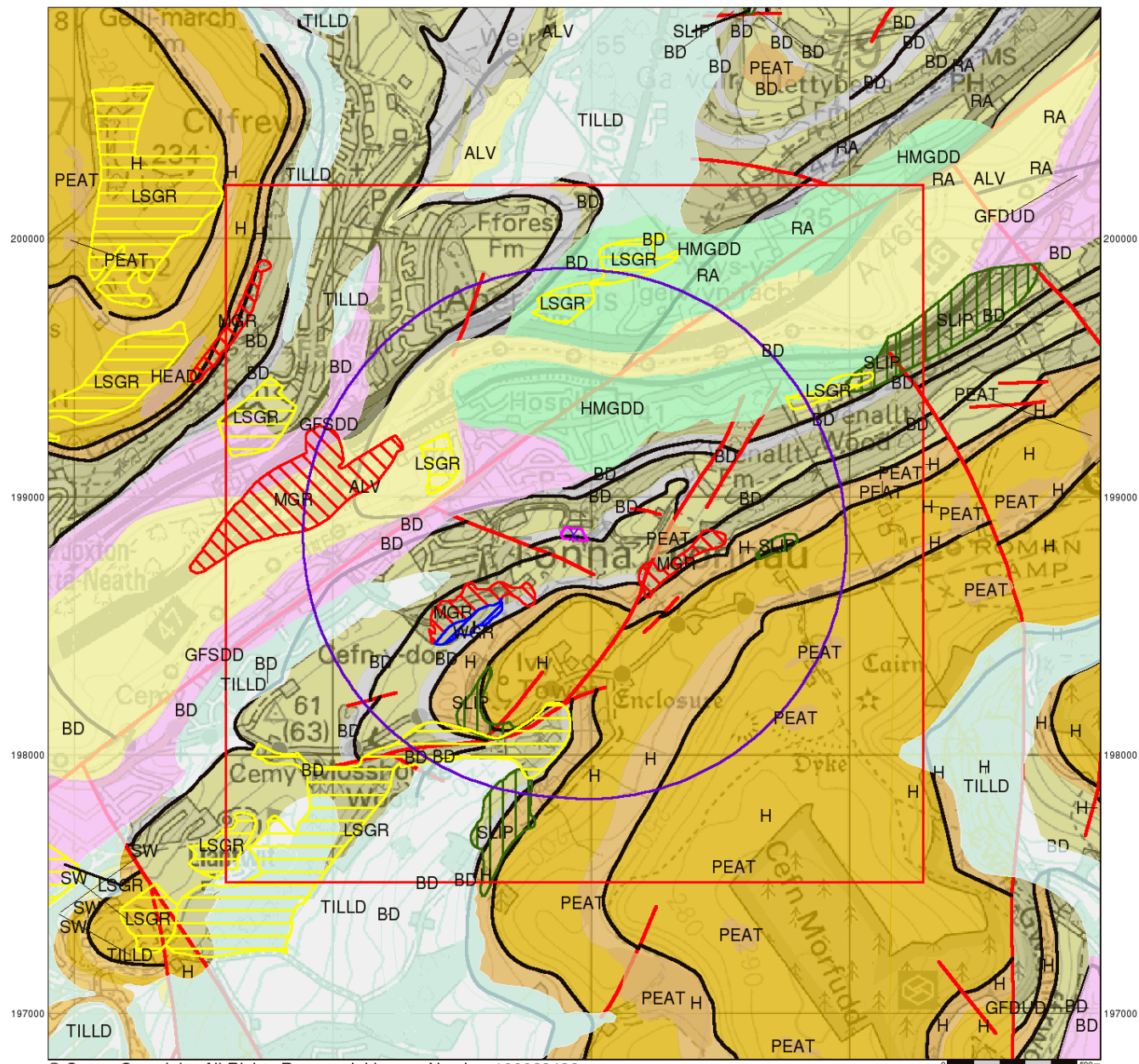
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276000 277000 278000 279000



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Intégral Géotechnique

Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

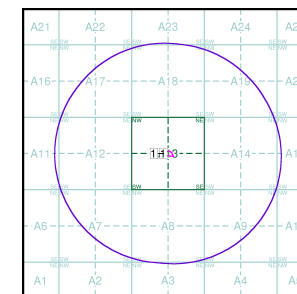
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number: 272393355_1_1
Customer Reference: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details:

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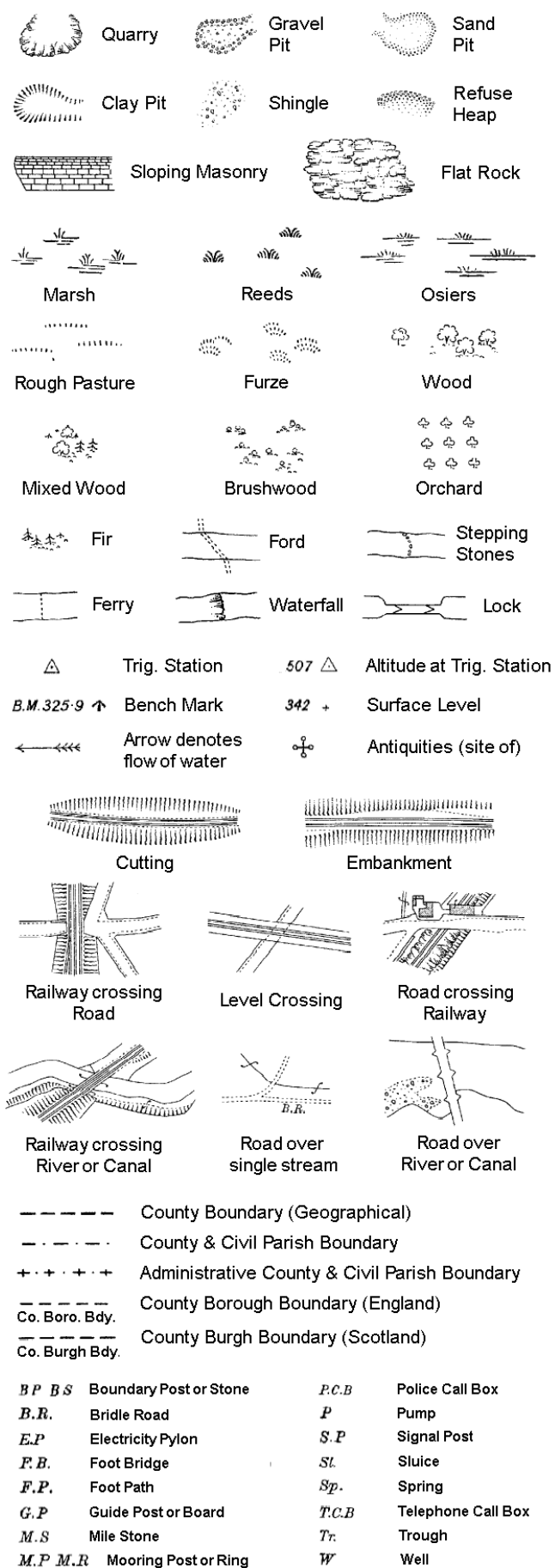
Tel: 0844 844 9952
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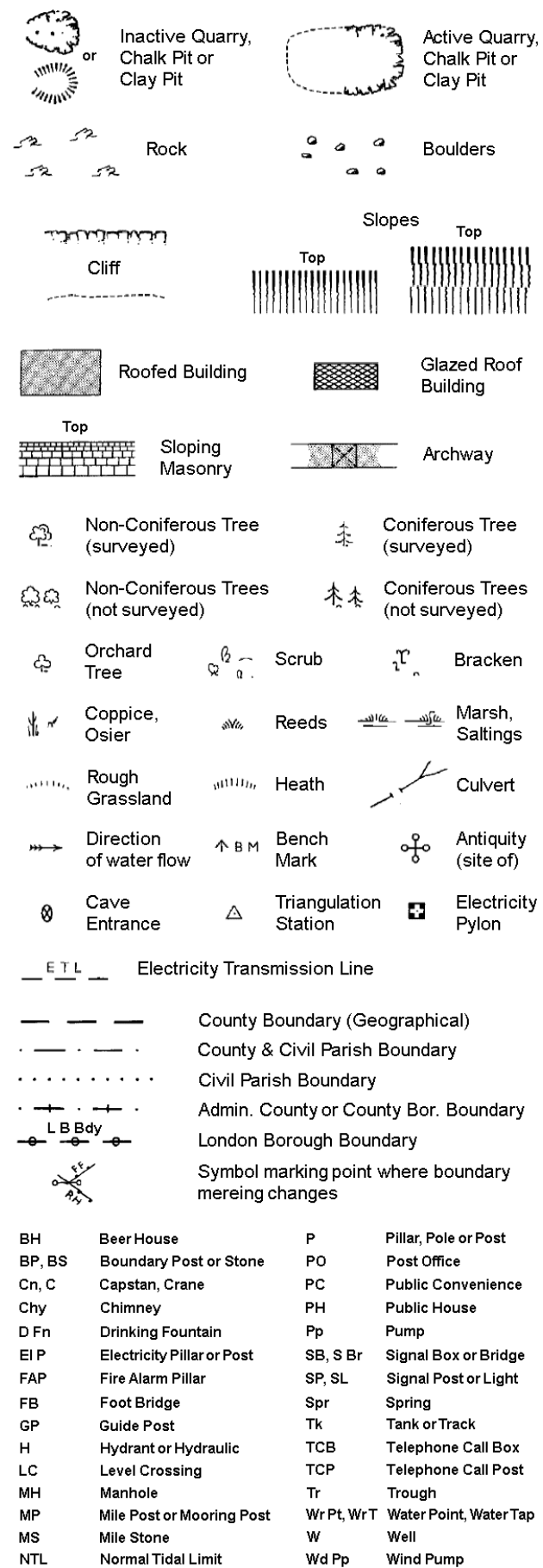
Page 5 of 5

Historical Mapping Legends

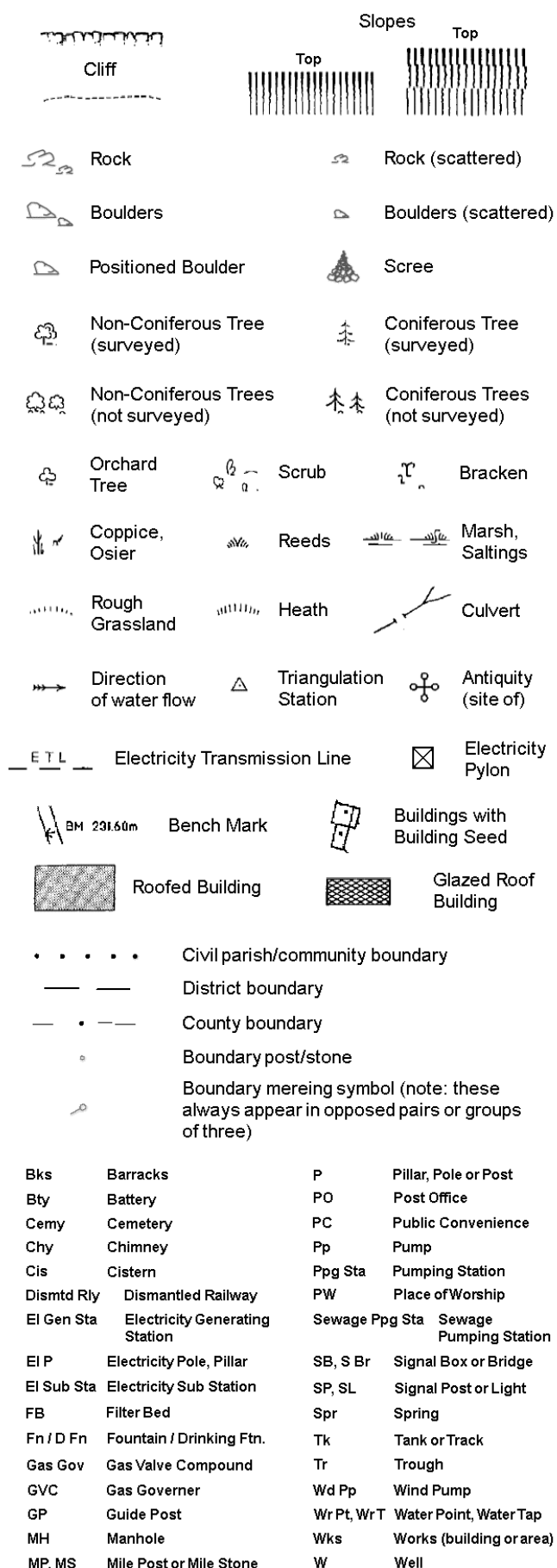
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



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



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

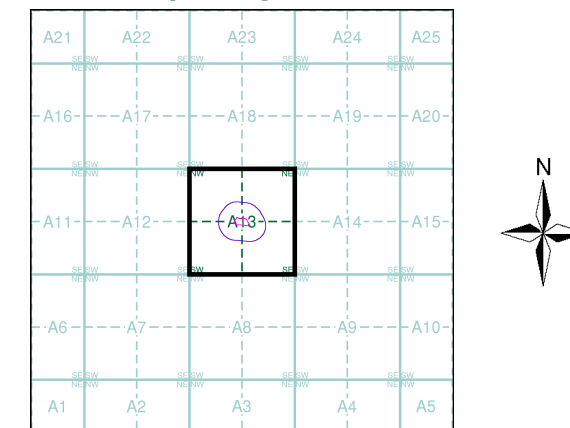


Intégral Géotechnique

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:2,500	1878 - 1880	2
Glamorganshire	1:2,500	1899	3
Glamorganshire	1:2,500	1918 - 1919	4
Glamorganshire	1:2,500	1935	5
Ordnance Survey Plan	1:2,500	1964	6
Additional SIMs	1:2,500	1978 - 1981	7
Ordnance Survey Plan	1:2,500	1984	8
Additional SIMs	1:2,500	1984 - 1991	9
Large-Scale National Grid Data	1:2,500	1993	10
Large-Scale National Grid Data	1:2,500	1993 - 1994	11
Historical Aerial Photography	1:2,500	2000	12

Historical Map - Segment A13



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 100

Site Details

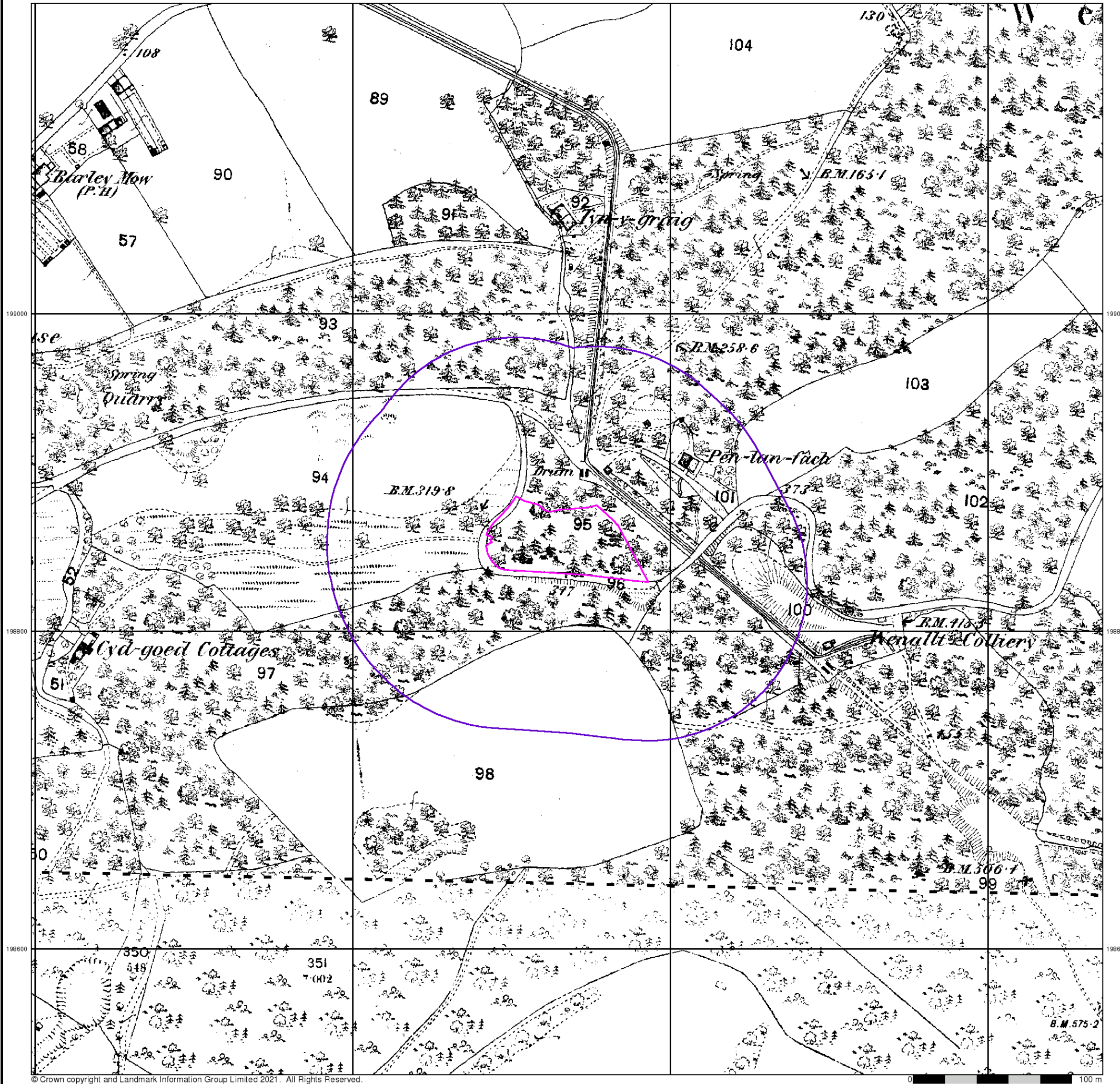
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0 100 m

Intégral Géotechnique

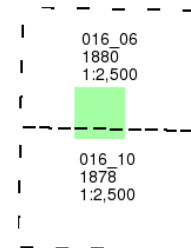
Glamorganshire

Published 1878 - 1880

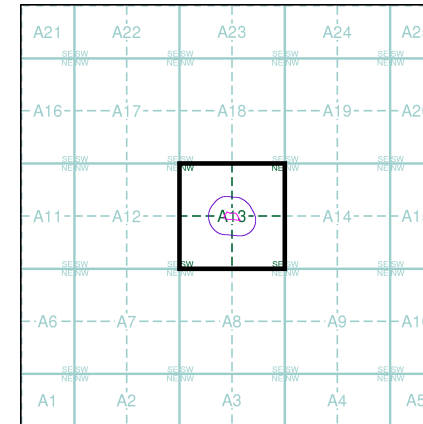
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
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Search Buffer (m): 100

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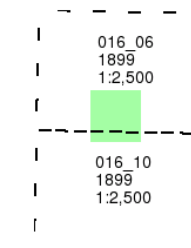
Glamorganshire

Published 1899

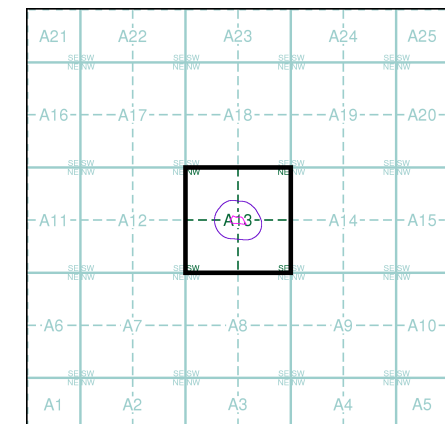
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

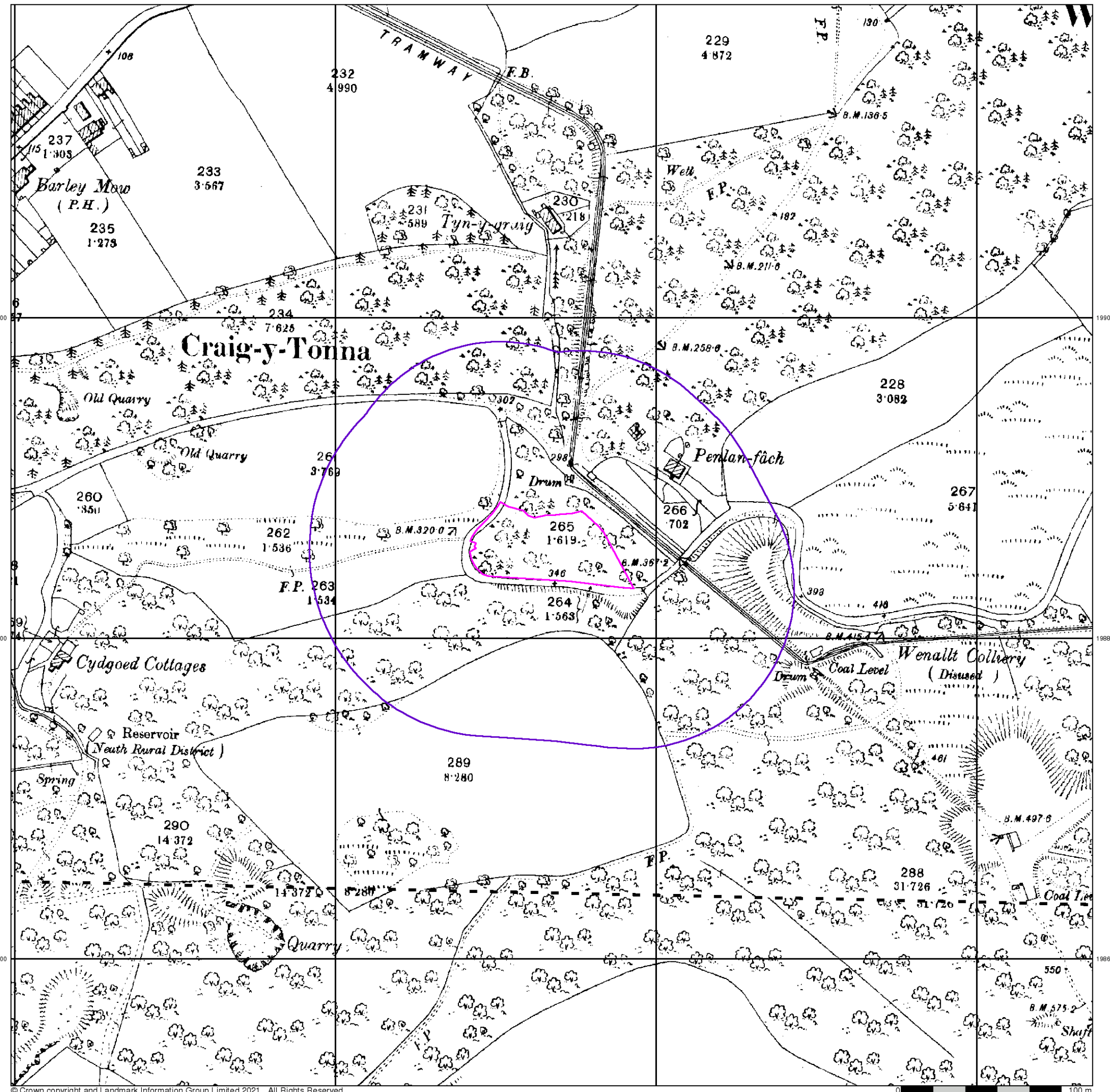
Order Number: 272393355_1_1
 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
 Search Buffer (m): 100

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Intégral Géotechnique

Glamorganshire

Published 1918 - 1919

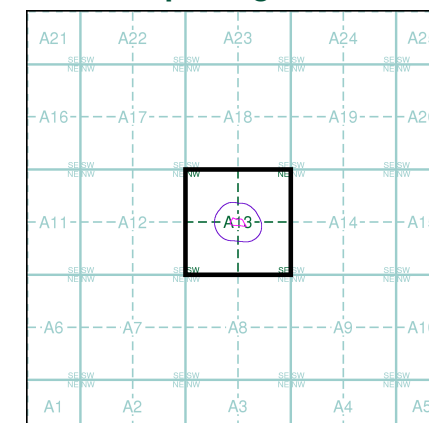
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

016_06
1919
1:2,500
016_10
1918
1:2,500

Historical Map - Segment A13



Order Details

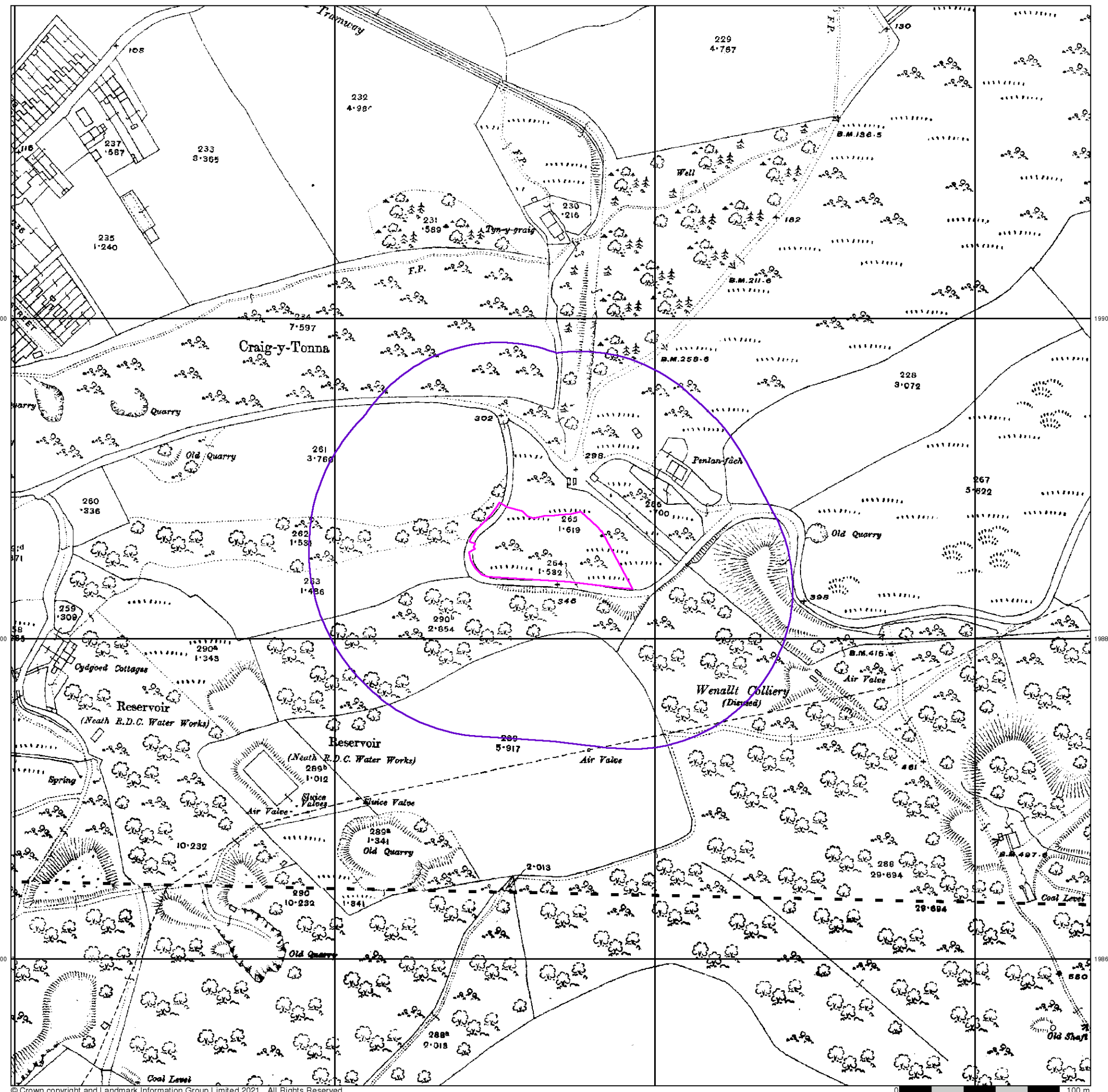
Order Number: 272393355_1_1
 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
 Search Buffer (m): 100

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Intégral Géotechnique

Glamorganshire

Published 1935

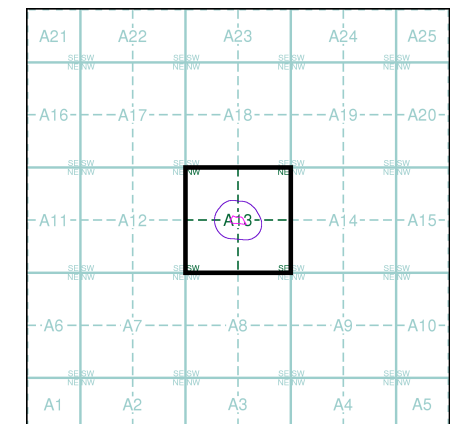
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

016_06
1935
1:2,500
016_10
1935
1:2,500

Historical Map - Segment A13



Order Details

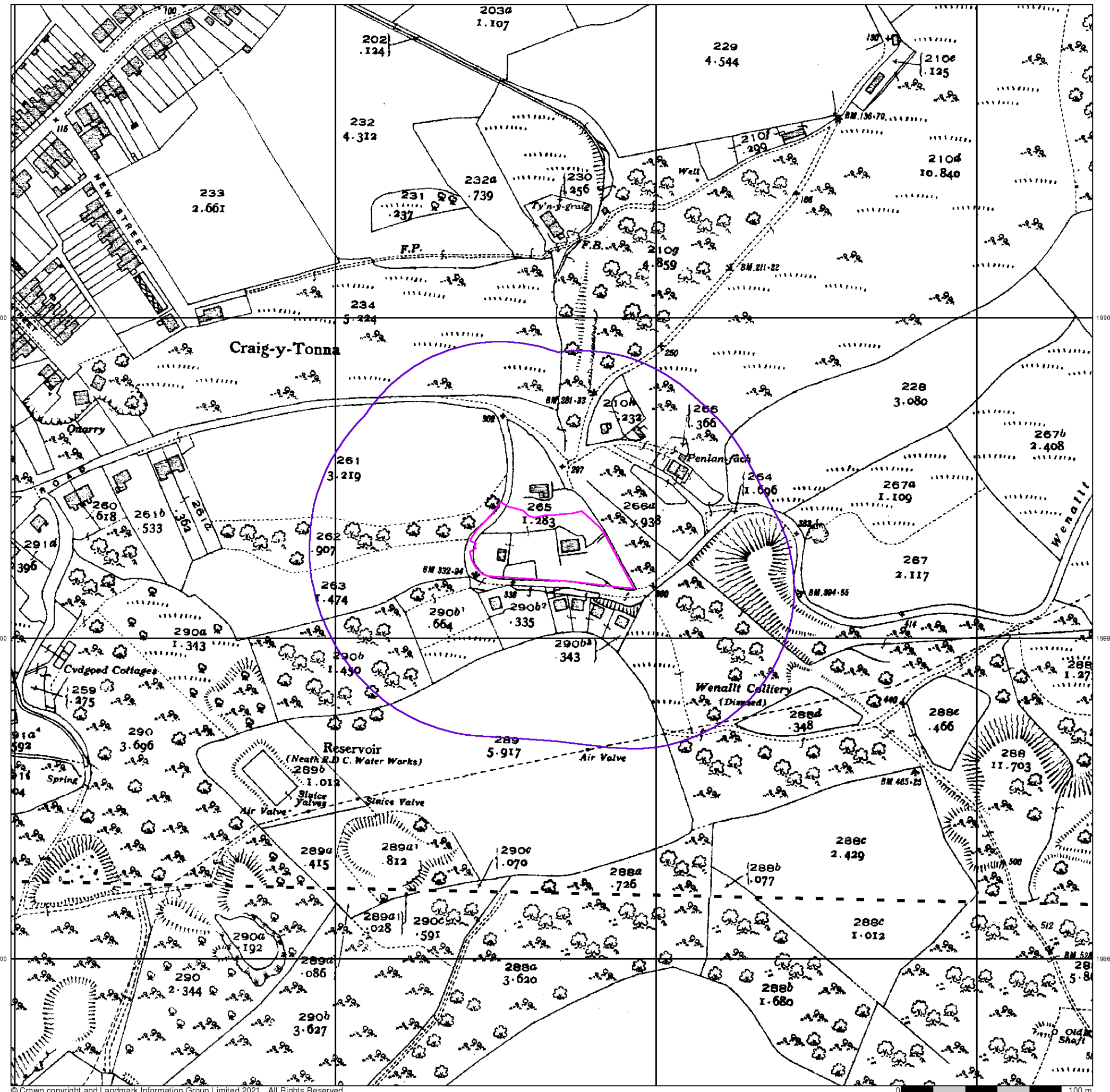
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Ordnance Survey Plan

Published 1964

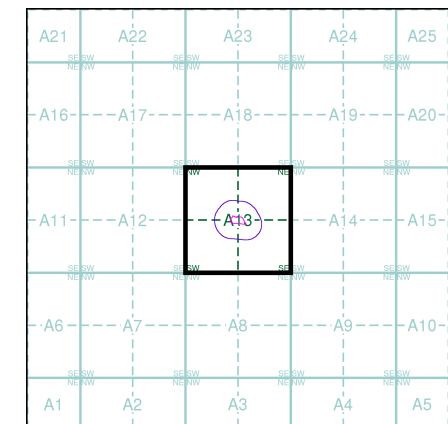
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

SS7799 1964 12,500	SS7899 1964 12,500
SS7798 1964 12,500	SS7898 1964 12,500

Historical Map - Segment A13



Order Details

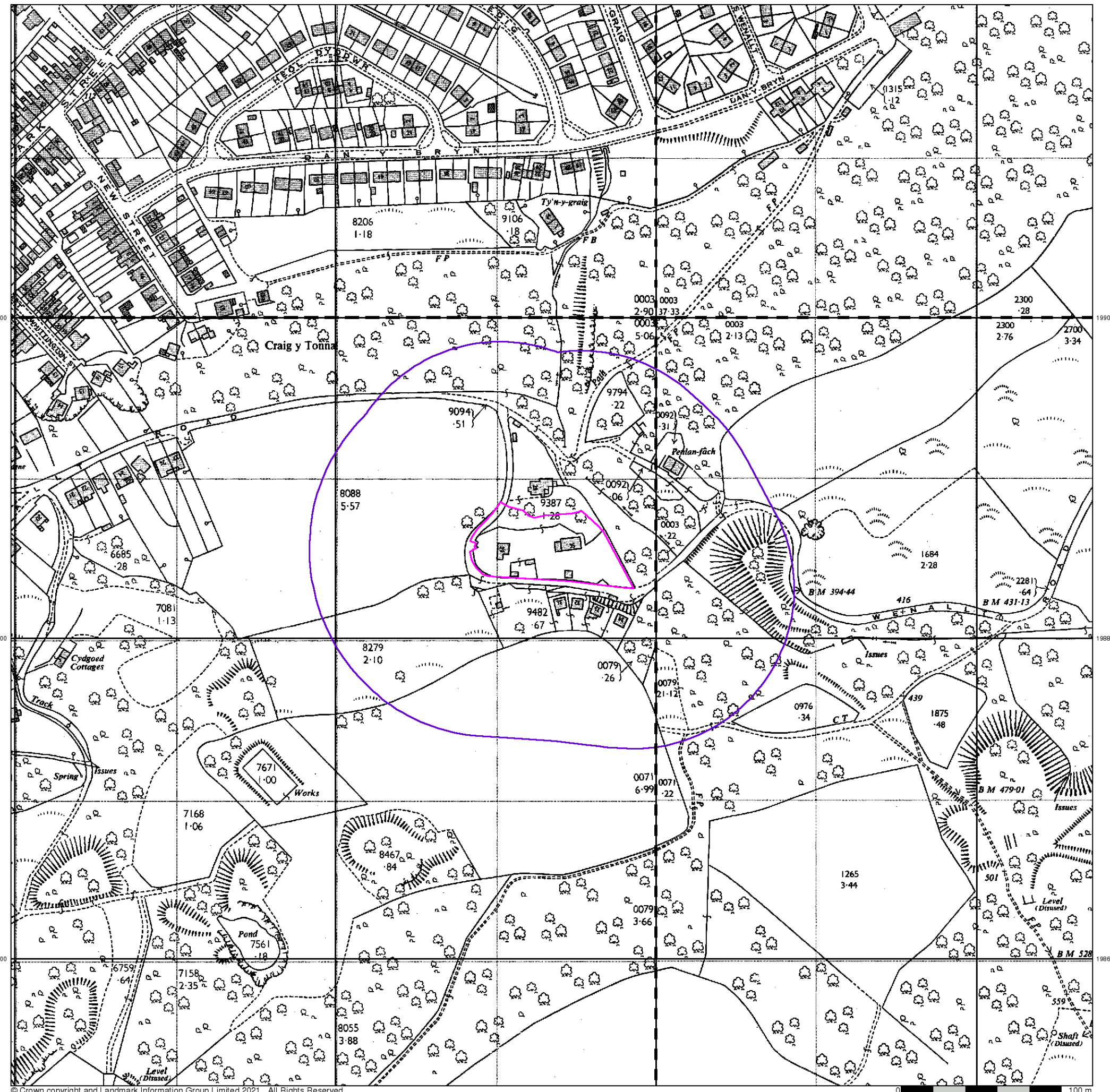
Order Number: 272393355_1_1
 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
 Search Buffer (m): 100

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Intégral Géotechnique

Additional SIMs

Published 1978 - 1981

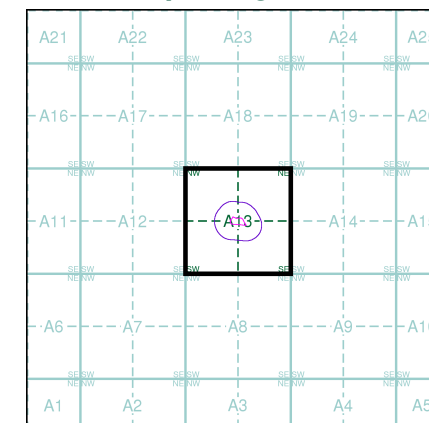
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

SS7799 1978 12,500	SS7899 1978 12,500
SS7798 1981 12,500	

Historical Map - Segment A13



Order Details

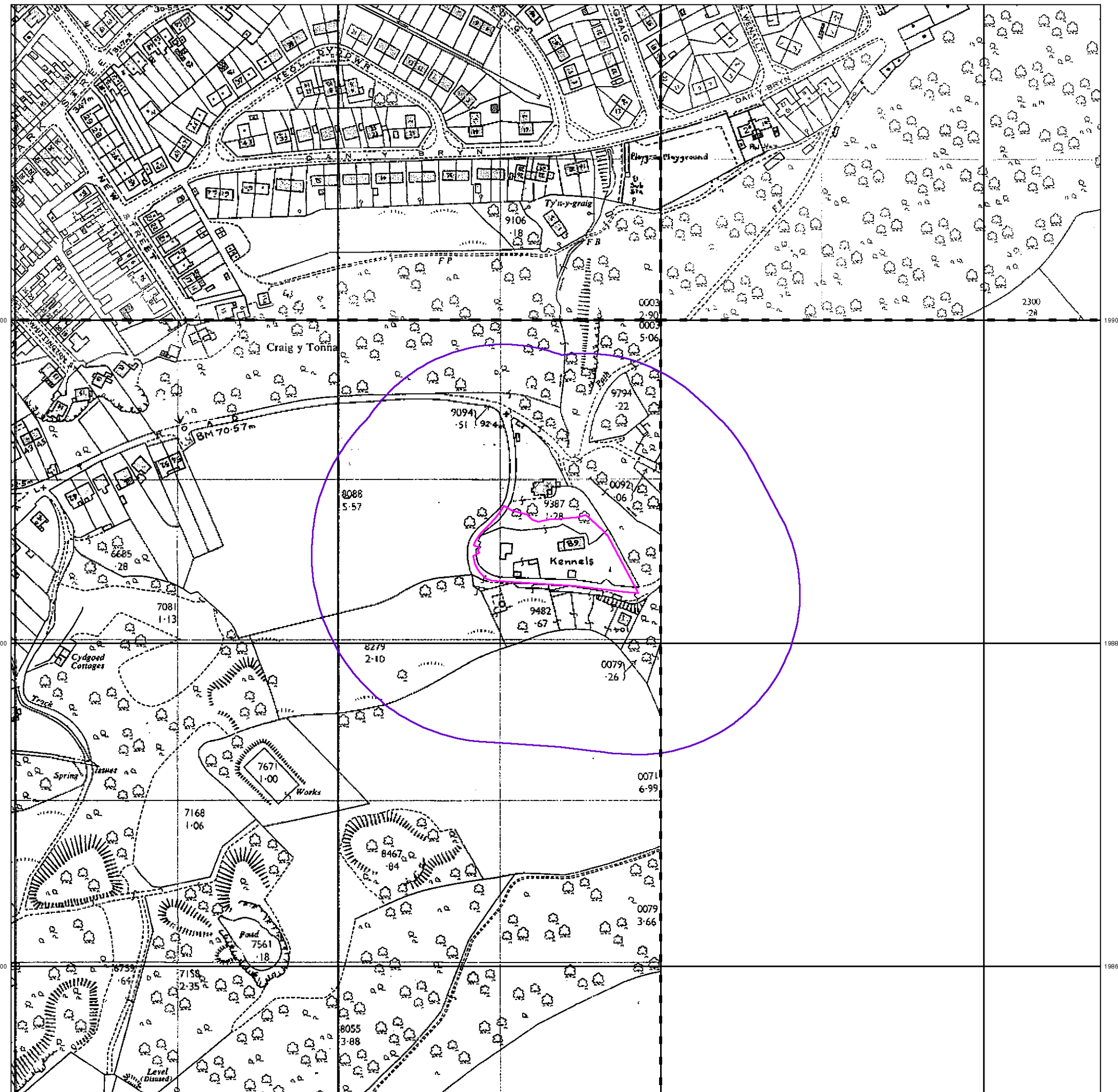
Order Number: 272393355_1_1
 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
 Search Buffer (m): 100

Site Details

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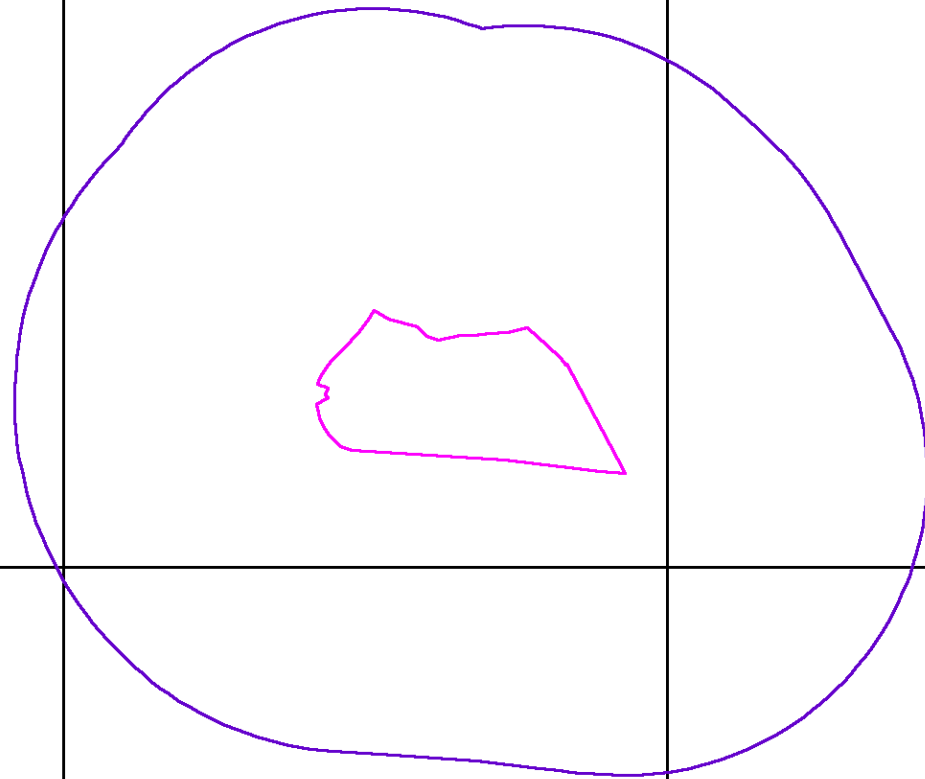
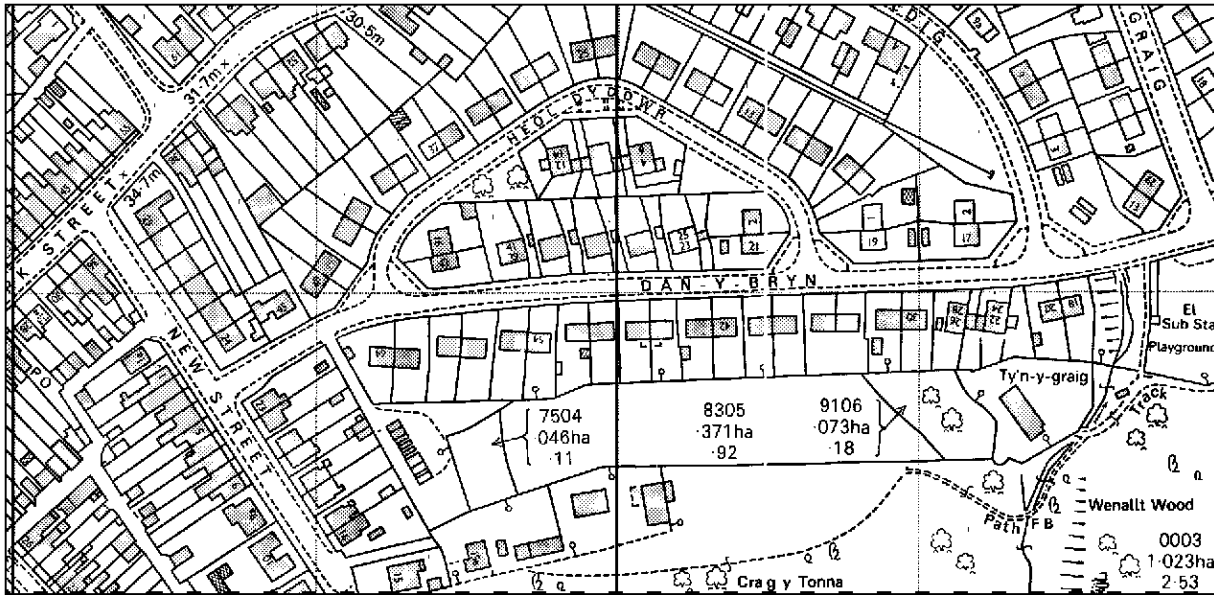


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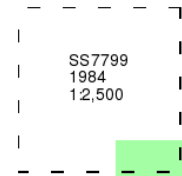
Ordnance Survey Plan

Published 1984

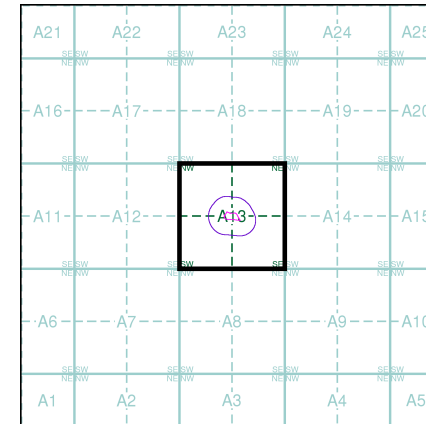
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 100

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Intégral Géotechnique

Additional SIMs

Published 1984 - 1991

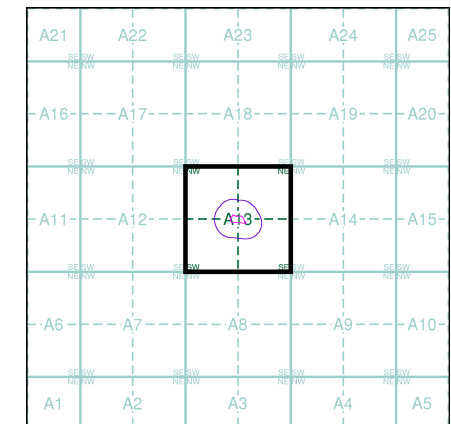
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

SS7799 1984 12,500	SS7899 1991 12,500
SS7798 1986 12,500	

Historical Map - Segment A13



Order Details

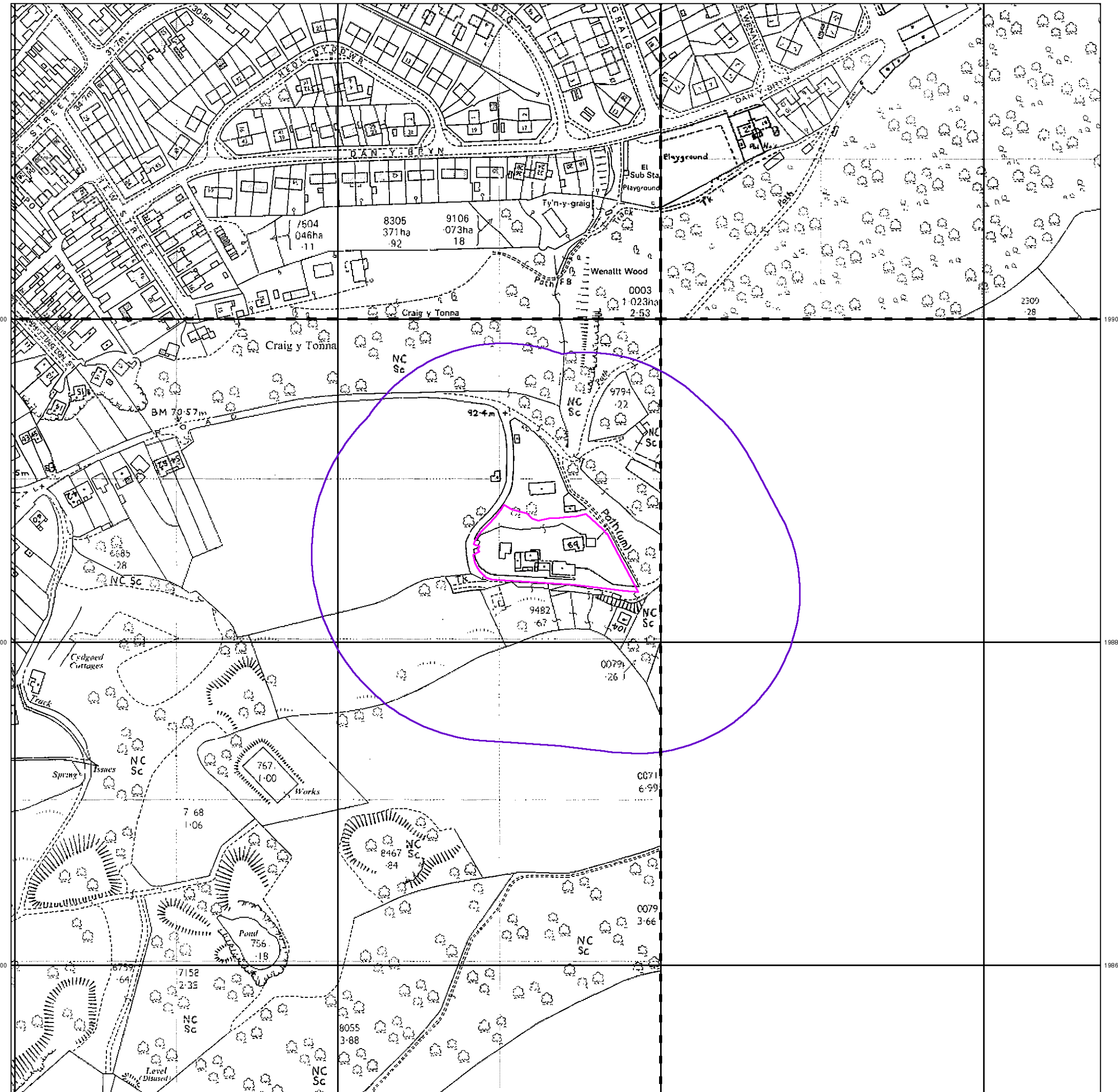
Order Number: 272393355_1_1
 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
 Search Buffer (m): 100

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Intégral Géotechnique

Large-Scale National Grid Data

Published 1993

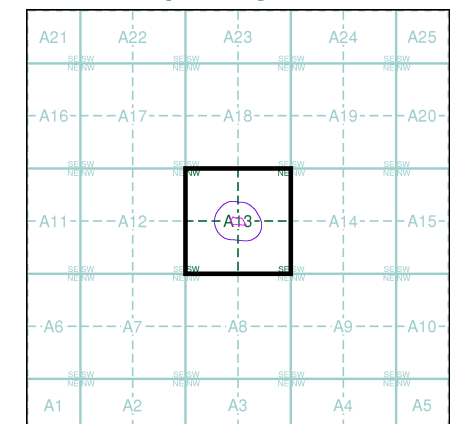
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

SS7799 1993 12,500	SS7899 1993 12,500
SS7798 1993 12,500	SS7898 1993 12,500

Historical Map - Segment A13



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 100

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
INFORMATION GROUP

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

Intégral Géotechnique

Large-Scale National Grid Data

Published 1993 - 1994

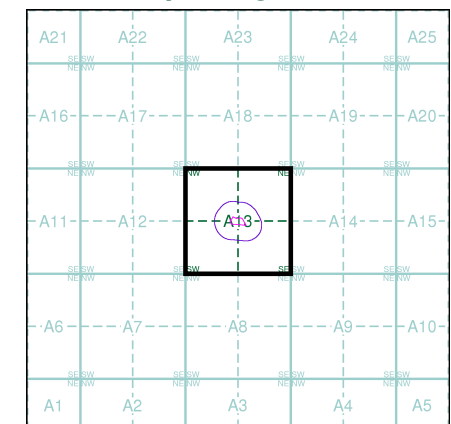
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

SS7799 1994 12,500	SS7899 1993 12,500
SS7798 1993 12,500	SS7898 1993 12,500

Historical Map - Segment A13



Order Details

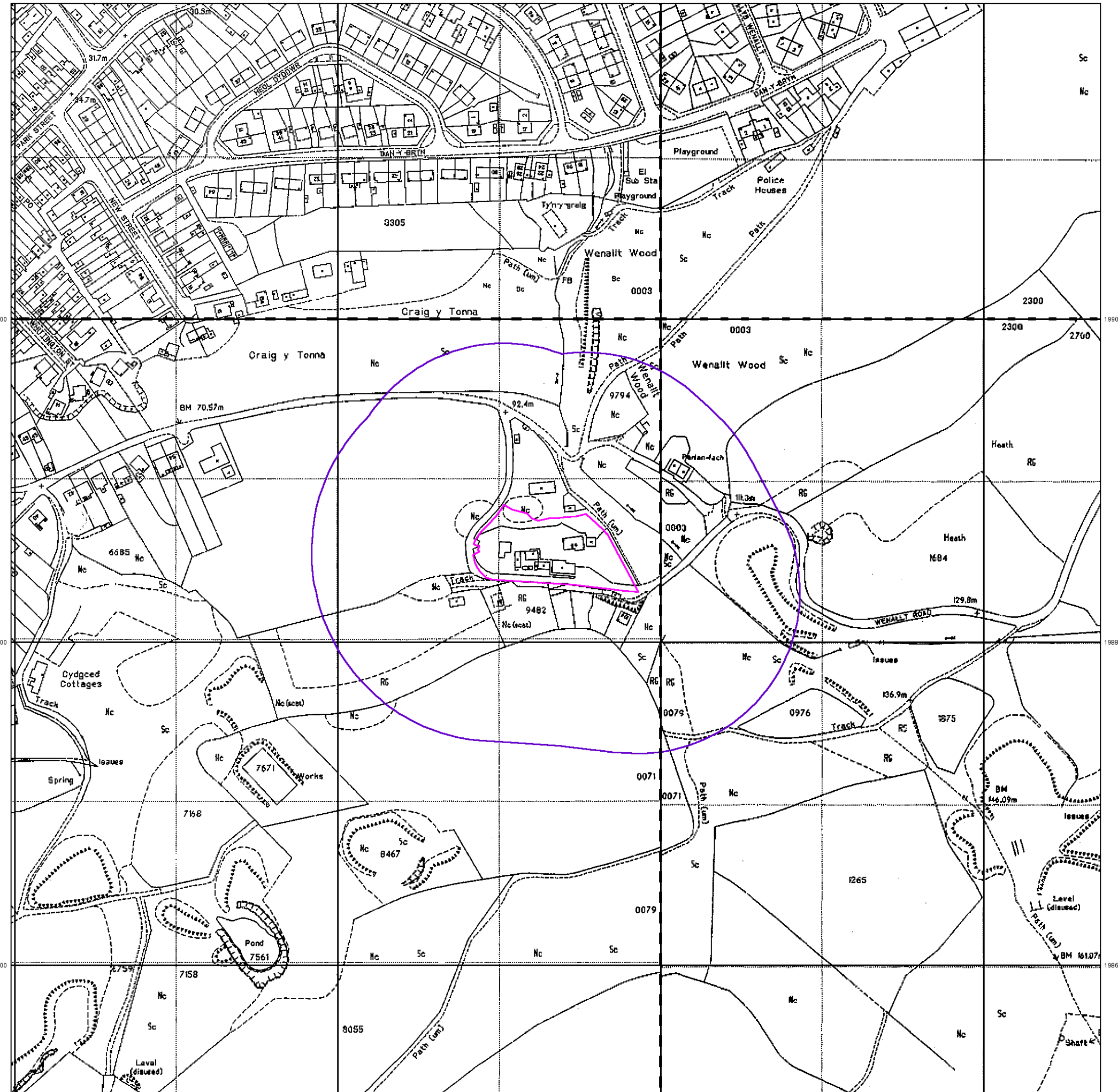
Order Number: 272393355_1_1
 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
 Search Buffer (m): 100

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
 INFORMATION GROUP

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



277600

277800

278000

278200

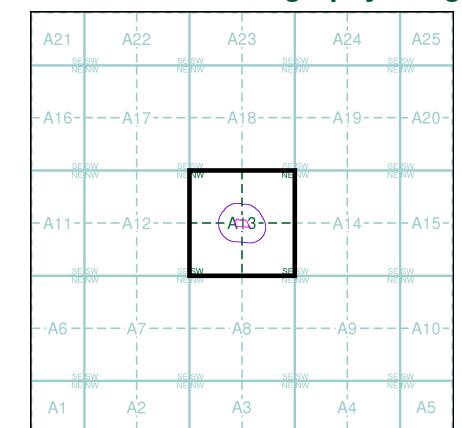
Intégral Géotechnique

Historical Aerial Photography

Published 2000

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

Historical Aerial Photography - Segment A13



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 100

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
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Historical Mapping Legends

Ordnance Survey County Series 1:10,560

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

Ordnance Survey Plan 1:10,000

	Chalk Pit, Clay Pit or Quarry		Gravel Pit
	Sand Pit		Disused Pit or Quarry
	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
	Coniferous Trees		Non-Coniferous Trees
	Orchard		Scrub
	Bracken		Heath
	Marsh		Reeds
	Building		Glasshouse
	Sloping Masonry		Pylon
	Cutting		Embankment
	Road Under		Road Over
	Level Crossing		Foot Bridge
	Standard Gauge Multiple Track		Standard Gauge Single Track
	Siding, Tramway or Mineral Line		Narrow Gauge
	Geographical County		Administrative County, County Borough or County of City
	Municipal Borough, Urban or Rural District, Burgh or District Council		Borough, Burgh or County Constituency
	Civil Parish		
	BP, BS Boundary Post or Stone		Police Station
	Church		Post Office
	Club House		Public Convenience
	Fire Engine Station		Public House
	Foot Bridge		Signal Box
	Fountain		Spring
	Guide Post		Telephone Call Box
	Mile Post		Telephone Call Post
	Mile Stone		Well

1:10,000 Raster Mapping

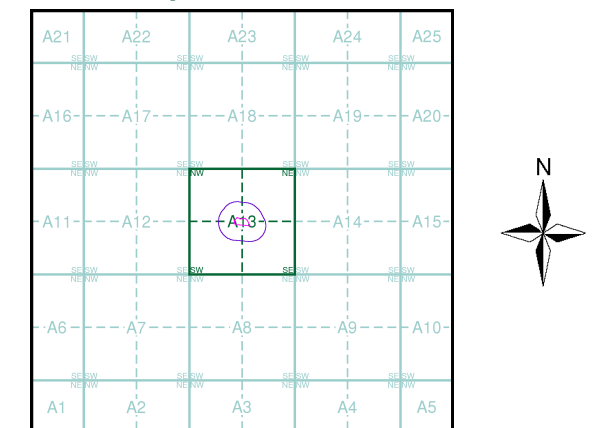
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil,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

Intégral Géotechnique

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:10,560	1884	2
Glamorganshire	1:10,560	1900	3
Glamorganshire	1:10,560	1921	4
Glamorganshire	1:10,560	1935 - 1936	5
Glamorganshire	1:10,560	1938 - 1951	6
Historical Aerial Photography	1:10,560	1949	7
Glamorganshire	1:10,560	1951	8
Ordnance Survey Plan	1:10,000	1964	9
Ordnance Survey Plan	1:10,000	1973	10
Ordnance Survey Plan	1:10,000	1983 - 1989	11
Ordnance Survey Plan	1:10,000	1992	12
10K Raster Mapping	1:10,000	1999	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2020	15

Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

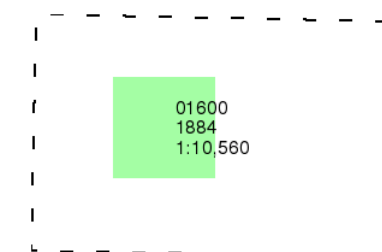
89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
INFORMATION GROUP

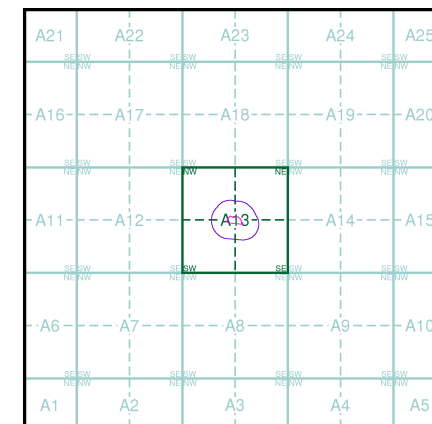
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

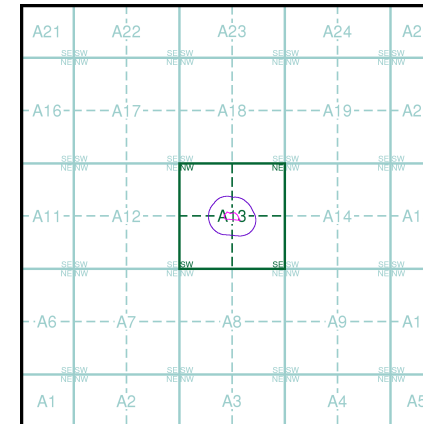
89, Wenallt Road, Tonna, NEATH, SA11 3QH

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

Map Name(s) and Date(s)

016NW 1900 1:10,560	016NE 1900 1:10,560
016SW 1900 1:10,560	016SE 1900 1:10,560

Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

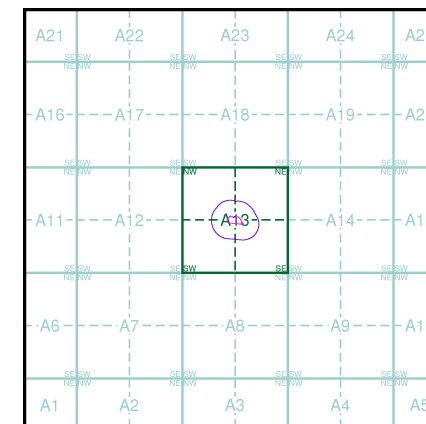


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

016NW 1921 1:10,560	016NE 1921 1:10,560
016SW 1921 1:10,560	016SE 1921 1:10,560

Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

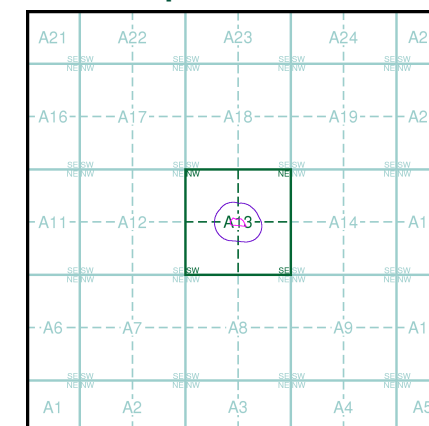
89, Wenallt Road, Tonna, NEATH, SA11 3QH

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

Map Name(s) and Date(s)

016NW
1935
1:10,560
016SW
1936
1:10,560

Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

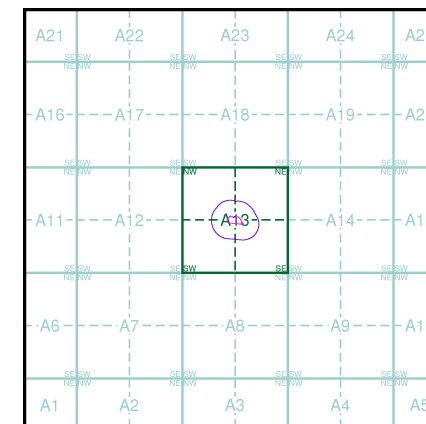
89, Wenallt Road, Tonna, NEATH, SA11 3QH

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

Map Name(s) and Date(s)

016NW 1951 1:10,560	016NE 1951 1:10,560
016SW 1938 1:10,560	016SE 1951 1:10,560

Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Historical Aerial Photography

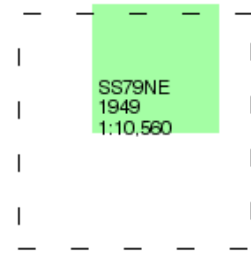
Published 1949

Source map scale - 1:10,560

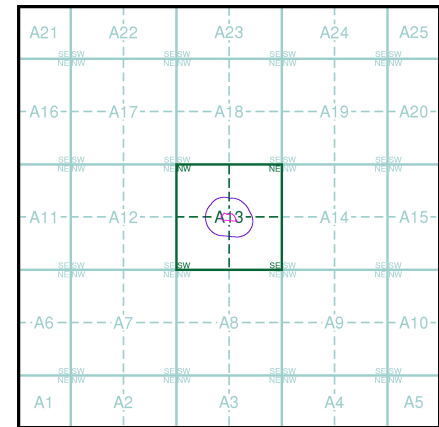
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



Order Details

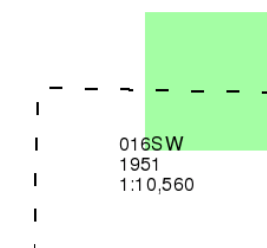
Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

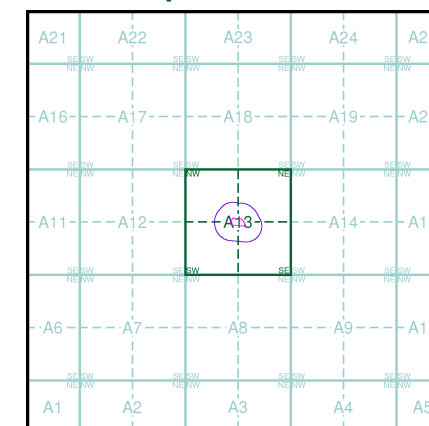
89, Wenallt Road, Tonna, NEATH, SA11 3QH

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Ordnance Survey Plan

Published 1964

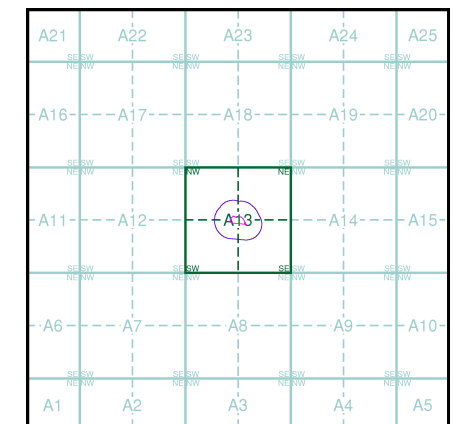
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SN70SE
1964
1:10,560
SS79NE
1964
1:10,560

Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

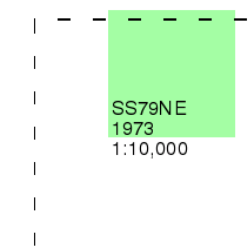
Ordnance Survey Plan

Published 1973

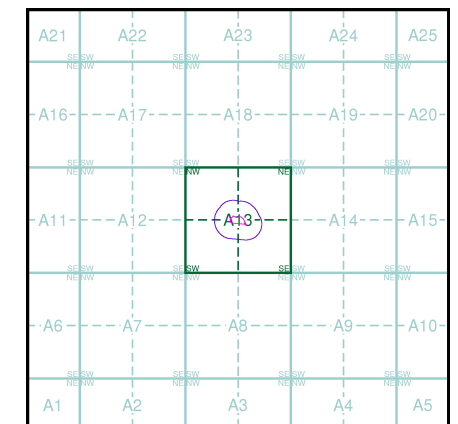
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH



Ordnance Survey Plan

Published 1983 - 1989

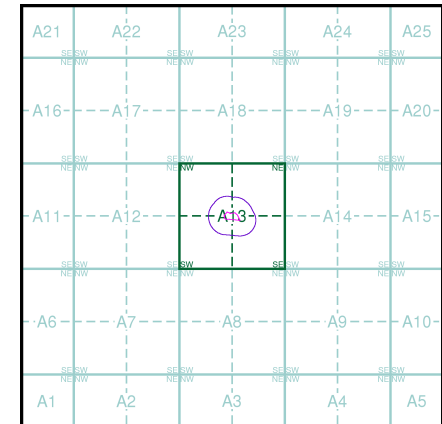
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SN70SE
1989
1:10,000
SS79NE
1983
1:10,000

Historical Map - Slice A



Order Details

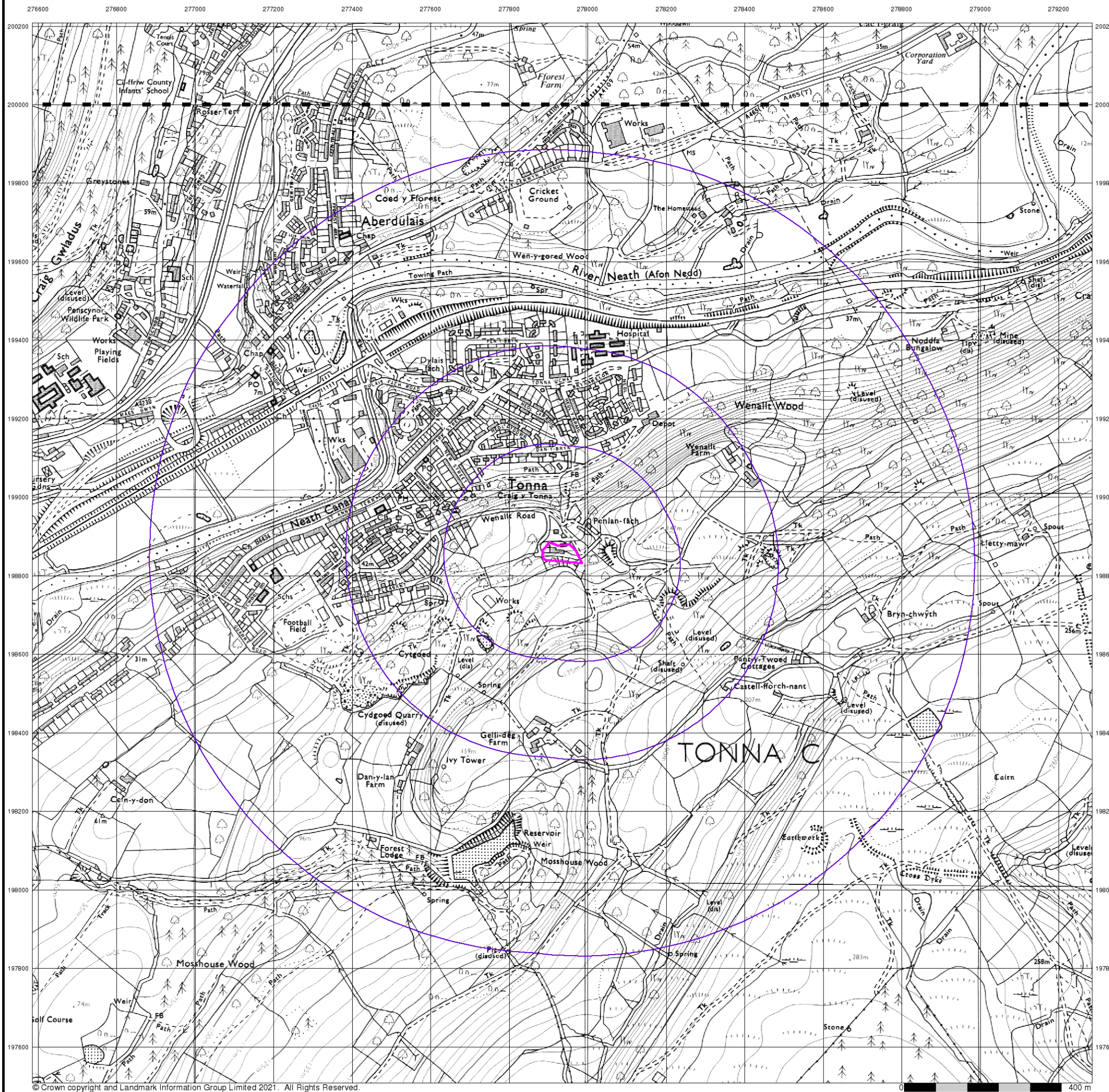
Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH



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



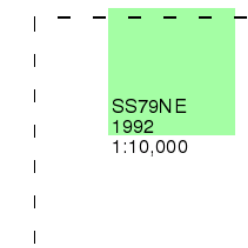
Ordnance Survey Plan

Published 1992

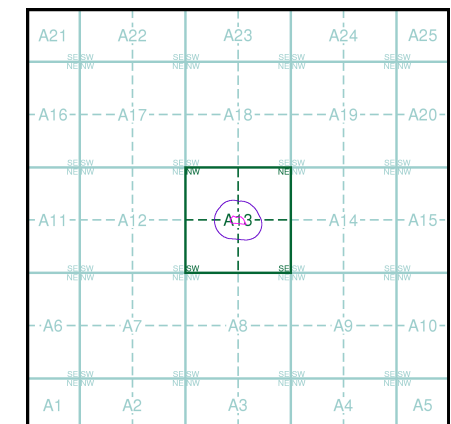
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

10k Raster Mapping

Published 1999

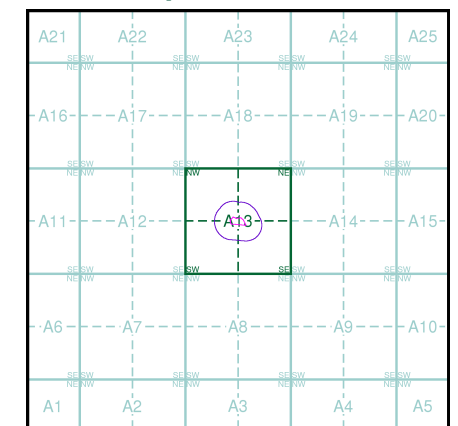
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SN70SE
1999
1:10,000
SS79NE
1999
1:10,000

Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

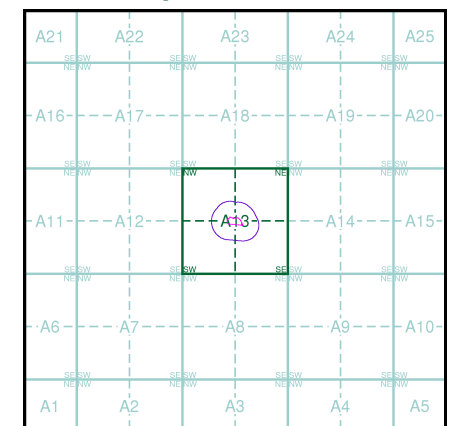
89, Wenallt Road, Tonna, NEATH, SA11 3QH

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

Map Name(s) and Date(s)

SN70SE
2006
1:10,000
SS79NE
2006
1:10,000

Historical Map - Slice A



Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH



VectorMap Local

Published 2020

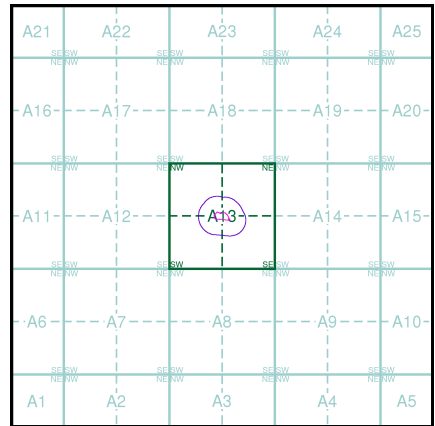
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SN70SE	2020	Variable
SS79NE	2020	Variable

Historical Map - Slice A



Order Details

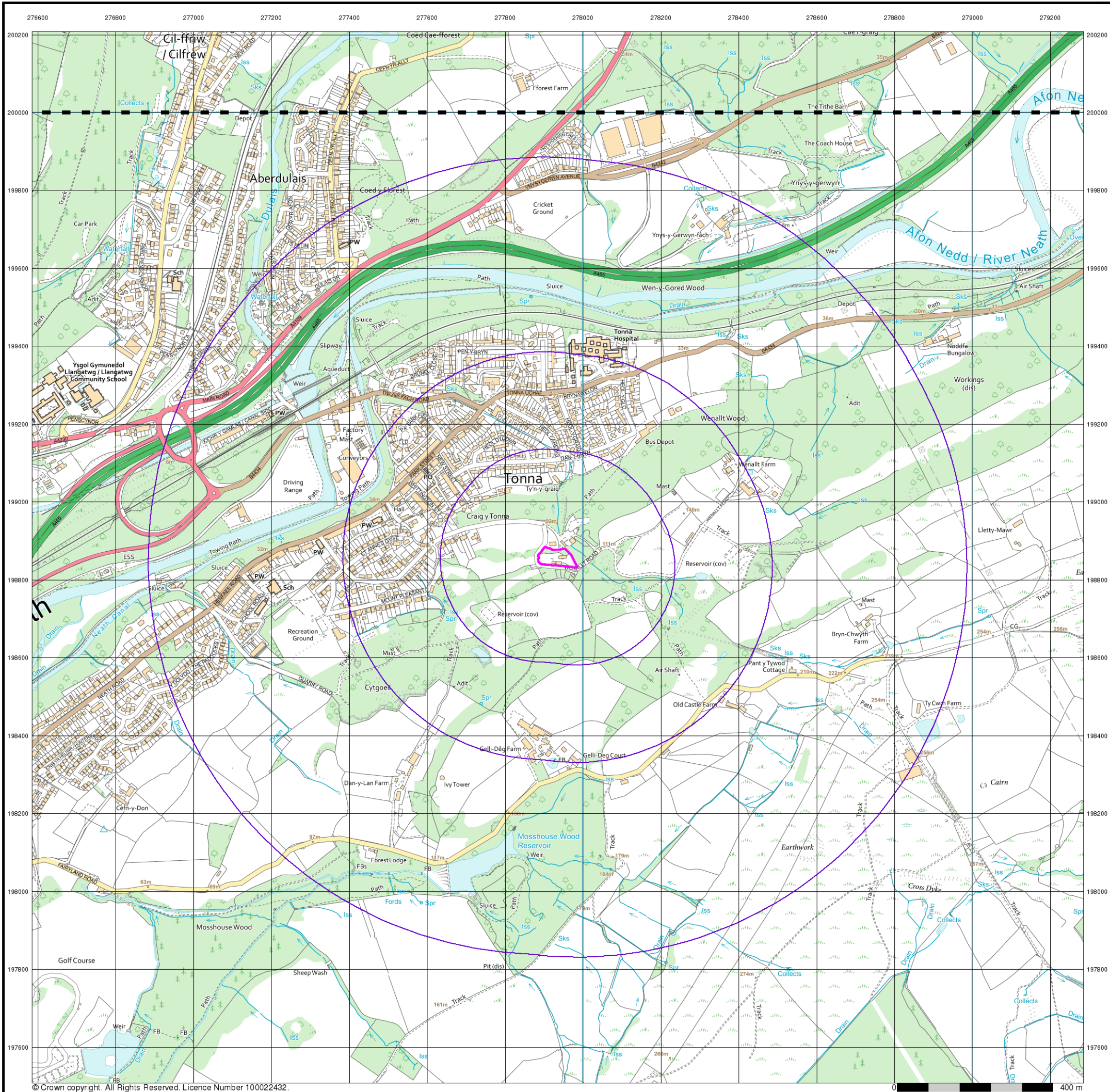
Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH



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



Envirocheck[®] Report:

Mining and Ground Stability Datasheet

Order Details:

Order Number:

272393355_1_1

Customer Reference:

12800/RAH

National Grid Reference:

277930, 198850

Slice:

A

Site Area (Ha):

0.36

Search Buffer (m):

1000

Site Details:

89, Wenallt Road

Tonna

NEATH

SA11 3QH

Client Details:

MR H Pritchard

Integral Geotechnique

Integral House

7 Beddau Way

Castlegate Business Park

Caerphilly

CF83 2AX

Report Section and Details	Page Number
Summary	-
The Summary section provides an overview of the data contained within the report, detailing the number of data set features or the existence of a data set in relation to the buffer selected. For ease of reference, the report is broken down into 4 sections of data; Mining and Natural Cavities Data, Historical Land Use Information (1:2,500), Historical Land Use Information (1:10,000) and Ground Stability Data (1:50,000).	
Mining and Natural Cavities Data	1
The Mining and Natural Cavities Data section features data sets related to the existence of mining areas and their potential hazards; and details of naturally formed cavities. Data sets within this section are not plotted, with the exception of BGS Recorded Mineral Sites and Potential Mining Areas which feature on the Historical Land Use Information (1:10,000) map.	
Historical Land Use Information (1:2,500)	10
The Historical Land Use Information (1:2,500) section contains data captured from analysis carried out by Landmark of 1:1,250 and 1:2,500 scale historical Ordnance Survey mapping, identifying areas where, historically, the land uses were potentially contaminative. For the purpose of this Envirocheck module, only historical data relating to mining and ground stability has been included and plotted on the corresponding Historical Land Use Information (1:2,500) map. This section also includes the Subterranean Features data set, which details various man-made and man-used underground spaces obtained from the Subterranea Britannica society.	
Historical Land Use Information (1:10,000)	12
The Historical Land Use (1:10,000) section covers data captured from the systematic analysis carried out by Landmark of 1:10, 560 and 1:10,000 scale historical Ordnance Survey mapping dating back to the mid-19th century, identifying potentially contaminative past industrial land uses. For the purpose of this Envirocheck module, only data relating to mining and ground stability has been included and plotted on the accompanying Historical Land Use Information (1:10,000) map.	
Ground Stability Data (1:50,000)	16
The Ground Stability (1:50,000) section includes the BGS Geosure data suite, reporting features to 250m and plotted onto 3 separate maps. Also reported is brine subsidence, brine mining and salt mining data sets, of which Brine Pumping and Salt Mining Related Features are plotted, and subsidence insurance claims and insurance investigations data, which is not plotted.	
Historical Map List	18
The Historical Map List section details the historical mapping that has been analysed for your site, in relation to the Historical Land Use Information sections.	
Data Currency	19
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The brine subsidence data relating to the Droitwich area as provided in this report is derived from JPB studies and physical monitoring undertaken annually over more than 35 years. For more detailed interpretation contact enquiries@jpb.co.uk. JPB retain the copyright and intellectual rights to this data and accept no liability for any loss or damage, including in direct or consequential loss, arising from the use of this data.

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Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
Mining and Natural Cavities Data					
BGS Recorded Mineral Sites	pg 1		4	9	15
Coal Mining Affected Areas	pg 5	Yes	n/a	n/a	n/a
Man Made Mining Cavities					
Mining Instability	pg 5	Yes	n/a	n/a	n/a
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential Mining Areas	pg 5	1	11	2	16
Historical Land Use Information (1:2,500)					
Extractive Industries or Potential Excavations from 1855-1909 (100m)	pg 10		4	n/a	n/a
Extractive Industries or Potential Excavations from 1893-1915 (100m)	pg 10		2	n/a	n/a
Extractive Industries or Potential Excavations from 1906-1937 (100m)	pg 10		2	n/a	n/a
Extractive Industries or Potential Excavations from 1924-1949 (100m)	pg 10		2	n/a	n/a
Extractive Industries or Potential Excavations from 1950-1980 (100m)	pg 11		1	n/a	n/a
Subterranean Features (100m)				n/a	n/a
Historical Land Use Information (1:10,000)					
Air Shafts	pg 12			1	
Disturbed Ground					
General Quarrying	pg 12		5	5	8
Heap, unknown constituents	pg 12				2
Mineral Railway	pg 13		1	1	4
Mining & quarrying general	pg 13			1	4
Mining of coal & lignite	pg 13		1	2	6
Quarrying of sand & clay, operation of sand & gravel pits					
Former Marshes					
Potentially Infilled Land (Non-Water)	pg 13		3	5	9
Potentially Infilled Land (Water)	pg 14				6
Ground Stability Data (1:50,000)					
CBSCB Compensation District			n/a	n/a	n/a
Brine Pumping Related Features					
Brine Subsidence Solution Area					
Potential for Collapsible Ground Stability Hazards	pg 16	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 16	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 16	Yes		n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 16	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 16	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 16	Yes	Yes	n/a	n/a
Salt Mining Related Features					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	BGS Recorded Mineral Sites Site Name: Penlan-Fach Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154301 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NE (E)	128	1	278108 198868
2	BGS Recorded Mineral Sites Site Name: Wenallt Colliery Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154279 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SE (E)	161	1	278141 198788
3	BGS Recorded Mineral Sites Site Name: Craig-Y-Tonna Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154300 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13SW (S)	165	1	277871 198676
4	BGS Recorded Mineral Sites Site Name: Craig-Y-Tonna Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154299 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NW (W)	185	1	277709 198918
5	BGS Recorded Mineral Sites Site Name: Cyngod Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154392 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	263	1	277756 198616
6	BGS Recorded Mineral Sites Site Name: Craig-Y-Tonna Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154298 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NW (W)	270	1	277630 198952

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	BGS Recorded Mineral Sites Site Name: Wenallt Colliery Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154280 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	276	1	278203 198661
8	BGS Recorded Mineral Sites Site Name: Wenallt Colliery Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154278 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A14SW (E)	320	1	278305 198813
9	BGS Recorded Mineral Sites Site Name: Cyngloed Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154435 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	365	1	277642 198575
10	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154400 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	381	1	278253 198560
11	BGS Recorded Mineral Sites Site Name: Cyngloed Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154434 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	396	1	277706 198491
12	BGS Recorded Mineral Sites Site Name: Cyngloed Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154436 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	407	1	277532 198646

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	BGS Recorded Mineral Sites Site Name: Bryn-Chwyth Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154281 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SW (E)	490	1	278476 198826
14	BGS Recorded Mineral Sites Site Name: Cydgoed Quarry Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 14832 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	508	1	277515 198500
15	BGS Recorded Mineral Sites Site Name: Cyngloed Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154391 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	530	1	277424 198588
16	BGS Recorded Mineral Sites Site Name: Mosshouse Wood Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154393 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SW (S)	680	1	277782 198169
17	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154396 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	729	1	278591 198426
18	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154397 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	731	1	278530 198344

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	BGS Recorded Mineral Sites Site Name: Mosshouse Wood Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154398 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SE (S)	741	1	278091 198098
20	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154450 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	765	1	278662 198474
21	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154395 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SE (SE)	770	1	278692 198526
22	BGS Recorded Mineral Sites Site Name: Dan-Y-Lan Farm Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154449 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	778	1	277379 198256
23	BGS Recorded Mineral Sites Site Name: Castell-Fforch-Nant Location: Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154437 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	793	1	278390 198149
24	BGS Recorded Mineral Sites Site Name: Wenallt Wood Location: Aberdulais, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154294 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	826	1	278682 199280

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
25	BGS Recorded Mineral Sites Site Name: Mosshouse Wood Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154394 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SW (S)	872	1	277729 197983
26	BGS Recorded Mineral Sites Site Name: Mosshouse Wood Location: Tonna, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154399 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A9SW (S)	901	1	278285 197982
27	BGS Recorded Mineral Sites Site Name: Wenallt Wood Location: Aberdulais, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154295 Type: Underground Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Hughes Member Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A14NE (E)	904	1	278874 199001
28	BGS Recorded Mineral Sites Site Name: Cefn-Yr-Alt Location: Aberdulais, Neath, West Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 154302 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Brithdir Member Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A18NW (N)	986	1	277734 199856
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13SW (W)	0	2	277934 198853
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13SW (W)	0	3	277934 198853
	Non Coal Mining Areas of Great Britain No Hazard				
29	Potential Mining Areas Name: Ynisneath Ceased Operation: 1852 Commodity: Coal; Wenallt Reference: 10966 Alternate: Kidcoed (Cydcoed) Name/Mine: Middle Alternate: New Name/Mine: Waingradog Alternate: Not Supplied Custodian:	A13SW (W)	0	4	277934 198853

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
30	Potential Mining Areas Name: Bryngwyn Ceased Operation: 1921 Commodity: Coal; Wenallt Rider; Wenallt Reference: 8323 Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Not Supplied	A13SE (E)	89	4	278075 198850
31	Potential Mining Areas Name: Wenallt Ceased Operation: 1895 Commodity: Coal; Wenallt Reference: 3349 Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Not Supplied	A13SE (E)	89	4	278075 198850
32	Potential Mining Areas Name: Wenallt Ceased Operation: Not Supplied Commodity: Coal; Wenallt; Glyngwilym Reference: Not Supplied Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Graigola Merthyr Colliery Co. Ltd., Cambrian Place, Swansea.	A13SE (E)	89	4	278075 198850
33	Potential Mining Areas Name: Wenallt (Lletty Mawr) Ceased Operation: 1884 Commodity: Coal; Wenallt or Hughes Reference: Not Supplied Alternate: Not Supplied Name/Mine: Not Supplied Custodian: E. Evans Bevan, High Street, Neath.	A13SE (E)	89	4	278075 198850
34	Potential Mining Areas Name: Wenallt Glyngwilym Ceased Operation: 1923 Commodity: Coal; Glyngwilym Reference: 8158 Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Not Supplied	A13SE (E)	89	4	278075 198850
35	Potential Mining Areas Name: Wenallt Ceased Operation: 1873 Commodity: Coal; Wenallt Reference: 10974 Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Not Supplied	A13SE (E)	89	4	278075 198850
36	Potential Mining Areas Name: Dan-y-Lan Ceased Operation: Not Supplied Commodity: Coal; Hughes Reference: Not Supplied Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Bassett and Walker, Charles Street, Cardiff.	A13SW (S)	192	4	277930 198641
37	Potential Mining Areas Name: Castle Old Ceased Operation: 1913 Commodity: Coal; Probably Wenallt Reference: Not Supplied Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Branfill and Haines, 9 Picton Place, Swansea.	A13SW (S)	192	4	277930 198641
38	Potential Mining Areas Name: Castle Old or Dan-y-Lan Ceased Operation: 1925 Commodity: Coal; Wenallt Reference: 8392 Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Not Supplied	A13SW (S)	192	4	277930 198641

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	Potential Mining Areas Name: Crystal Old Ceased Operation: Not Supplied Commodity: Coal; Hughes Reference: Not Supplied Alternate: Not Supplied Name/Mine: Custodian: Bassett and Walker, Charles Street, Cardiff.	A13SW (S)	192	4	277930 198641
40	Potential Mining Areas Name: Wenallt Merthyr Ceased Operation: 1892 Commodity: Coal; Wenallt Reference: 2705 Alternate: Not Supplied Name/Mine: Custodian: Not Supplied	A13SE (SE)	211	4	278070 198638
41	Potential Mining Areas Name: Wenallt Ceased Operation: 1927 Commodity: Coal; Wenallt Reference: 8956 Alternate: Not Supplied Name/Mine: Custodian: Not Supplied	A14SW (E)	491	4	278477 198842
42	Potential Mining Areas Name: Lletty-Mawr Ceased Operation: 1909 Commodity: Coal; Wenallt Reference: 5518 Alternate: Not Supplied Name/Mine: Custodian: Not Supplied	A14SW (E)	491	4	278477 198842
43	Potential Mining Areas Name: Brynchwyth Ceased Operation: 1927 Commodity: Coal; Mountain Reference: 9494 Alternate: Not Supplied Name/Mine: Custodian: Not Supplied	A14SW (SE)	527	4	278472 198629
44	Potential Mining Areas Name: Llantwit Lower Ceased Operation: Not Supplied Commodity: Coal Reference: Not Supplied Alternate: Not Supplied Name/Mine: Custodian: Not Supplied	A14SW (SE)	527	4	278472 198629
45	Potential Mining Areas Name: Brynrugos Ceased Operation: 1925 Commodity: Coal; Mountain Reference: 8208 Alternate: Not Supplied Name/Mine: Custodian: Not Supplied	A14SW (SE)	527	4	278472 198629
46	Potential Mining Areas Name: Oaklands and Tonyrhondda Ceased Operation: 1928 Commodity: Coal; Mountain Reference: 9795 Alternate: Not Supplied Name/Mine: Custodian: Not Supplied	A14SW (SE)	527	4	278472 198629
47	Potential Mining Areas Name: Llantwit Upper Ceased Operation: 1907 Commodity: Coal; Mountain Reference: 5137 Alternate: Not Supplied Name/Mine: Custodian: Not Supplied	A14SW (SE)	527	4	278472 198629

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
48	Potential Mining Areas Name: Pantycoed; probably known also as Tan-y-Graig Ceased Operation: 1907 Commodity: Coal; Graig-isaf Reference: 5158 Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Not Supplied	A14NW (E)	534	4	278481 199031
49	Potential Mining Areas Name: Pantycoed Ceased Operation: 1907 Commodity: Coal; Graig-Isaf Reference: Not Supplied Alternate: Not Supplied Name/Mine: Not Supplied Custodian: John Jenkins, Church Place, Neath.	A14NW (E)	534	4	278481 199031
50	Potential Mining Areas Name: Aberdylais Ceased Operation: 1891 Commodity: Coal; Five Feet; Six Feet Reference: Not Supplied Alternate: Not Supplied Name/Mine: Not Supplied Custodian: H. Lynch Blossie, Worcester Chambers, Swansea.	A18SE (N)	561	4	277947 199445
51	Potential Mining Areas Name: Aberdylais Ceased Operation: 1877 Commodity: Coal; Resolven Rider Reference: Not Supplied Alternate: Not Supplied Name/Mine: Not Supplied Custodian: (i) Forster Brown and Rees, Guildhall Chambers, Cardiff. (ii) S. Cym Jones and Arnold, Great Western Chambers, Neath.	A18SE (N)	561	4	277947 199445
52	Potential Mining Areas Name: Aberdylais Ceased Operation: 1891 Commodity: Coal and Fireclay; Werngorad Reference: 2974 Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Not Supplied	A18SE (N)	561	4	277947 199445
53	Potential Mining Areas Name: Aberdylais Ceased Operation: Not Supplied Commodity: Coal; Graig or Cwm-Derwyn Reference: Not Supplied Alternate: Not Supplied Name/Mine: Not Supplied Custodian: T.H.E. Morgan, Mineral Offices, Resolven, Neath.	A18SE (N)	561	4	277947 199445
54	Potential Mining Areas Name: Aberdylais Ceased Operation: 1877 Commodity: Coal; Resolven Rider Reference: 10970 Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Not Supplied	A18SE (N)	561	4	277947 199445
55	Potential Mining Areas Name: Wen-y-Gored Ceased Operation: Not Supplied Commodity: Coal Reference: Not Supplied Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Not Supplied	A18SW (NW)	606	4	277685 199451
56	Potential Mining Areas Name: Wenallt Merthyr or Forest New Ceased Operation: 1888 Commodity: Coal; Wenallt Reference: 2254 Alternate: Not Supplied Name/Mine: Not Supplied Custodian: Not Supplied	A9NW (SE)	771	4	278464 198227

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
57	Potential Mining Areas Name: Brynau (Brynna) Ceased Operation: Not Supplied Commodity: Coal; Hughes Reference: Not Supplied Alternate Name/Mine: Not Supplied Custodian: Bassett and Walker, Charles Street, Cardiff.	A3NW (S)	997	4	277913 197837
58	Potential Mining Areas Name: Brynau Old Ceased Operation: 1780 Commodity: Coal; Wenallt Reference: Not Supplied Alternate Name/Mine: Not Supplied Custodian: John Jenkins, Church Place, Neath.	A3NW (S)	997	4	277913 197837

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
59	Extractive Industries or Potential Excavations from 1855-1909 Use: Unspecified Pit First Map Published 1880 Date: Last Map Published Not Applicable Date:	A13SE (SE)	7	-	277966 198823
60	Extractive Industries or Potential Excavations from 1855-1909 Use: Wenallt Colliery First Map Published 1880 Date: Last Map Published Not Applicable Date:	A13SE (E)	31	-	278014 198844
61	Extractive Industries or Potential Excavations from 1855-1909 Use: Unspecified Deposited Material First Map Published 1880 Date: Last Map Published Not Applicable Date:	A13SE (E)	55	-	278039 198843
62	Extractive Industries or Potential Excavations from 1855-1909 Use: Railway Embankment First Map Published 1880 Date: Last Map Published Not Applicable Date:	A13SE (E)	100	-	278079 198797
63	Extractive Industries or Potential Excavations from 1893-1915 Use: Unspecified Pit First Map Published 1899 Date: Last Map Published Not Applicable Date:	A13SE (SE)	4	-	277957 198830
64	Extractive Industries or Potential Excavations from 1893-1915 Use: Wenallt Colliery (Disused) First Map Published 1899 Date: Last Map Published Not Applicable Date:	A13SE (E)	41	-	278023 198846
65	Extractive Industries or Potential Excavations from 1893-1915 Use: Unspecified Deposited Material First Map Published 1899 Date: Last Map Published Not Applicable Date:	A13SE (E)	50	-	278033 198846
66	Extractive Industries or Potential Excavations from 1906-1937 Use: Wenallt Colliery (Disused) First Map Published 1919 Date: Last Map Published Not Applicable Date:	A13SE (E)	38	-	278021 198846
67	Extractive Industries or Potential Excavations from 1906-1937 Use: Unspecified Deposited Material First Map Published 1919 Date: Last Map Published Not Applicable Date:	A13SE (E)	38	-	278021 198846
68	Extractive Industries or Potential Excavations from 1924-1949 Use: Wenallt Colliery (Disused) First Map Published 1935 Date: Last Map Published Not Applicable Date:	A13SE (E)	37	-	278020 198847
69	Extractive Industries or Potential Excavations from 1924-1949 Use: Unspecified Deposited Material First Map Published 1935 Date: Last Map Published Not Applicable Date:	A13SE (E)	51	-	278036 198845

Historical Land Use Information (1:2,500)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
70	Extractive Industries or Potential Excavations from 1950-1980 Use: Unspecified Deposited Material First Map Published 1964 Date: Last Map Published N/A Date:	A13SE (E)	48	-	278033 198851

Historical Land Use Information (1:10,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
71	Air Shafts Use: Not Supplied Date of Mapping: 1921 - 1964	A8NW (SW)	368	-	277712 198519
72	General Quarrying Use: Not Supplied Date of Mapping: 1921	A13NE (E)	127	-	278107 198867
73	General Quarrying Use: Not Supplied Date of Mapping: 1921	A13SW (S)	158	-	277877 198683
74	General Quarrying Use: Not Supplied Date of Mapping: 1921	A13NW (W)	182	-	277713 198922
74	General Quarrying Use: Not Supplied Date of Mapping: 1921 - 1964	A13NW (W)	225	-	277677 198948
75	General Quarrying Use: Not Supplied Date of Mapping: 1900 - 1921	A13SW (SW)	218	-	277764 198665
76	General Quarrying Use: Not Supplied Date of Mapping: 1884 - 1921	A13NW (W)	264	-	277635 198945
77	General Quarrying Use: Not Supplied Date of Mapping: 1921 - 1964	A12NE (W)	310	-	277584 198937
78	General Quarrying Use: Not Supplied Date of Mapping: 1884 - 1921	A13SW (SW)	343	-	277652 198595
79	General Quarrying Use: Not Supplied Date of Mapping: 1900 - 1964	A14SW (E)	413	-	278398 198856
80	General Quarrying Use: Not Supplied Date of Mapping: 1884 - 1921	A12SE (SW)	423	-	277515 198645
81	General Quarrying Use: Not Supplied Date of Mapping: 1900	A12SE (SW)	529	-	277424 198590
82	General Quarrying Use: Not Supplied Date of Mapping: 1900	A8SW (S)	680	-	277784 198168
83	General Quarrying Use: Not Supplied Date of Mapping: 1900	A9NW (SE)	731	-	278597 198430
84	General Quarrying Use: Not Supplied Date of Mapping: 1900	A8SE (S)	741	-	278090 198098
85	General Quarrying Use: Not Supplied Date of Mapping: 1884	A9NE (SE)	758	-	278652 198470
86	General Quarrying Use: Not Supplied Date of Mapping: 1884	A14SE (SE)	779	-	278705 198530
87	General Quarrying Use: Not Supplied Date of Mapping: 1900	A8SW (S)	870	-	277730 197985
88	General Quarrying Use: Not Supplied Date of Mapping: 1935 - 1964	A18NW (N)	949	-	277699 199812
89	Heap, unknown constituents Use: Not Supplied Date of Mapping: 1900 - 1921	A17SE (NW)	707	-	277349 199325
90	Heap, unknown constituents Use: Not Supplied Date of Mapping: 1921	A17SW (NW)	809	-	277182 199261

Historical Land Use Information (1:10,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
91	Mineral Railway Use: Not Supplied Date of Mapping: 1884 - 1900	A13NE (NE)	16	-	277965 198890
92	Mineral Railway Use: Not Supplied Date of Mapping: 1900	A14NW (E)	454	-	278438 198873
93	Mineral Railway Use: Not Supplied Date of Mapping: 1884 - 1964	A12NE (W)	536	-	277375 199029
94	Mineral Railway Use: Not Supplied Date of Mapping: 1935	A7NE (SW)	717	-	277422 198300
95	Mineral Railway Use: Not Supplied Date of Mapping: 1900	A17NE (NW)	828	-	277457 199582
96	Mineral Railway Use: Not Supplied Date of Mapping: 1921	A19SE (NE)	870	-	278728 199288
97	Mining & quarrying general Use: Not Supplied Date of Mapping: 1884 - 1900	A13SE (SE)	377	-	278249 198561
98	Mining & quarrying general Use: Not Supplied Date of Mapping: 1935	A9SW (SE)	770	-	278348 198152
98	Mining & quarrying general Use: Not Supplied Date of Mapping: 1884	A9SW (SE)	797	-	278331 198114
99	Mining & quarrying general Use: Not Supplied Date of Mapping: 1884	A9SW (SE)	798	-	278384 198141
100	Mining & quarrying general Use: Not Supplied Date of Mapping: 1884	A9SW (S)	913	-	278285 197969
101	Mining of coal & lignite Use: Not Supplied Date of Mapping: 1884 - 1900	A13SE (E)	32	-	278015 198844
102	Mining of coal & lignite Use: Not Supplied Date of Mapping: 1921	A13SW (SW)	362	-	277670 198555
103	Mining of coal & lignite Use: Not Supplied Date of Mapping: 1921	A8NW (SW)	390	-	277696 198503
104	Mining of coal & lignite Use: Not Supplied Date of Mapping: 1935	A7NE (SW)	707	-	277372 198361
105	Mining of coal & lignite Use: Not Supplied Date of Mapping: 1900	A9NW (SE)	732	-	278535 198348
106	Mining of coal & lignite Use: Not Supplied Date of Mapping: 1935 - 1964	A9NE (SE)	755	-	278655 198482
107	Mining of coal & lignite Use: Not Supplied Date of Mapping: 1884 - 1900	A18NW (NW)	780	-	277616 199610
108	Mining of coal & lignite Use: Not Supplied Date of Mapping: 1921	A19SE (NE)	831	-	278685 199284
109	Mining of coal & lignite Use: Not Supplied Date of Mapping: 1900 - 1921	A14NE (E)	879	-	278843 199022
110	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13SE (E)	85	-	278065 198802

Historical Land Use Information (1:10,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
111	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13NE (E)	127	-	278107 198867
112	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13NW (W)	182	-	277713 198922
113	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13NW (W)	264	-	277635 198945
114	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A12NE (W)	310	-	277584 198937
115	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A13SW (SW)	343	-	277652 198595
116	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A8NW (SW)	368	-	277712 198519
117	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A8NW (SW)	390	-	277696 198503
118	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A7NE (SW)	591	-	277458 198439
119	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A7NE (SW)	707	-	277372 198361
120	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9NW (SE)	731	-	278597 198430
121	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9NW (SE)	732	-	278535 198348
122	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A8SE (S)	741	-	278090 198098
123	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9SW (SE)	770	-	278348 198152
124	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9SW (SE)	797	-	278331 198114
125	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A9SW (SE)	798	-	278384 198141
126	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A14NE (E)	897	-	278866 199000
127	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A12NE (NW)	504	-	277440 199098
128	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A12SE (W)	549	-	277374 198648
129	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A12SW (W)	787	-	277163 198538
130	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A19NW (NE)	881	-	278485 199582
131	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A19NW (NE)	897	-	278540 199557

Historical Land Use Information (1:10,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
132	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1964	A9NE (SE)	965	-	278873 198452

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	CBSCB Compensation District The site does not fall within the brine compensation area.				
	Brine Subsidence Solution Area The site does not fall within the brine subsidence solution area.				
133	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	244	1	278226 198788
134	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	222	1	277757 198665
135	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	234	1	278191 198718
136	Potential for Compressible Ground Stability Hazards Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	244	1	278226 198788
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
137	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
138	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	0	1	277934 198845
139	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	111	1	277934 198992
140	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	142	1	277932 198692
141	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	212	1	277952 198620
142	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	244	1	278226 198788
143	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	154	1	277903 199040
144	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	222	1	277757 198665
145	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	234	1	278191 198718
146	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	244	1	278226 198788
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
147	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	180	1	277935 198653

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	277934 198853
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	212	1	277952 198620

The following mapping has been analysed for Historical Land Use Information (1:2,500):

1:2,500	Mapsheet	Published Date
Glamorganshire	016_10	1878
Glamorganshire	016_06	1880
Glamorganshire	016_06	1899
Glamorganshire	016_10	1899
Glamorganshire	016_10	1918
Glamorganshire	016_06	1919
Glamorganshire	016_06	1935
Glamorganshire	016_10	1935
Ordnance Survey Plan	SS7798	1964
Ordnance Survey Plan	SS7799	1964
Ordnance Survey Plan	SS7898	1964
Ordnance Survey Plan	SS7899	1964

The following mapping has been analysed for Historical Land Use Information (1:10,000):

1:10,560	Mapsheet	Published Date
Glamorganshire	016_00	1884
Glamorganshire	016_NE	1900
Glamorganshire	016_NW	1900
Glamorganshire	016_SE	1900
Glamorganshire	016_SW	1900
Glamorganshire	016_NE	1921
Glamorganshire	016_NW	1921
Glamorganshire	016_SE	1921
Glamorganshire	016_SW	1921
Glamorganshire	016_NW	1935
Glamorganshire	016_SW	1935
Glamorganshire	016_NE	1951
Glamorganshire	016_SE	1951
Ordnance Survey Plan	SN70SE	1964
Ordnance Survey Plan	SS79NE	1964
1:10,000	Mapsheet	Published Date
Ordnance Survey Plan	SN70SE	1989
Ordnance Survey Plan	SS79NE	1992

Mining and Cavities Data	Version	Update Cycle
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2020	Bi-Annually
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Man Made Mining Cavities Stantec UK Ltd	November 2020	Bi-Annually
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Natural Cavities Stantec UK Ltd	November 2020	Bi-Annually
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Historical Land Use Information (1:2,500)	Version	Update Cycle
Subterranean Features Landmark Information Group Limited	February 2020	Bi-Annually
Ground Stability Data (1:50,000)	Version	Update Cycle
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Brine Subsidence Solution Area Johnson Poole & Bloomer	December 2020	Annual Rolling Update

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
British Geological Survey	 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
The Coal Authority	 The Coal Authority
Ove Arup	
Stantec UK Ltd	
Wardell Armstrong	 wardell armstrong your earth our world
Johnson Poole & Bloomer	

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
3	Ove Arup & Partners Central Square, Forth Street, Newcastle upon Tyne, Tyne and Wear, NE1 3PL	Telephone: 0191 261 6080 Fax: 0191 261 7879
4	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9960 Fax: 0844 844 9951 Email: customerservice@promap.co.uk Website: www.landmarkinfo.co.uk
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Historical Land Use Information (1:10,000)

General

- Specified Site Specified Buffer(s) Bearing Reference Point Map ID
Several of Type at Location

Potentially Contaminative Industrial Uses (Past Land Uses - Mining)

	Point	Line	Polygon
Air Shafts			
Disturbed Ground			
General Quarrying			
Heap, unknown constituents			
Mineral Railway			
Mining and Quarrying General			
Mining of Coal & Lignite			
Quarrying of Sand and Clay, Operation of Sand and Gravel Pits			

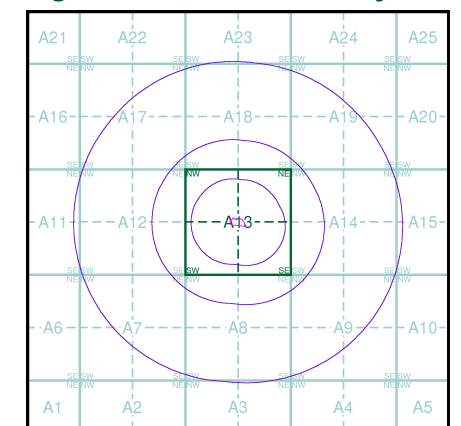
Historical Land Use

	Point	Line	Polygon
Potentially Infilled Land (Non-Water)			
Potentially Infilled Land (Water)			
Former Marsh			

Mining Data

- Potential Mining Area
BGS Recorded Mineral Site

Mining and Ground Stability - Slice A



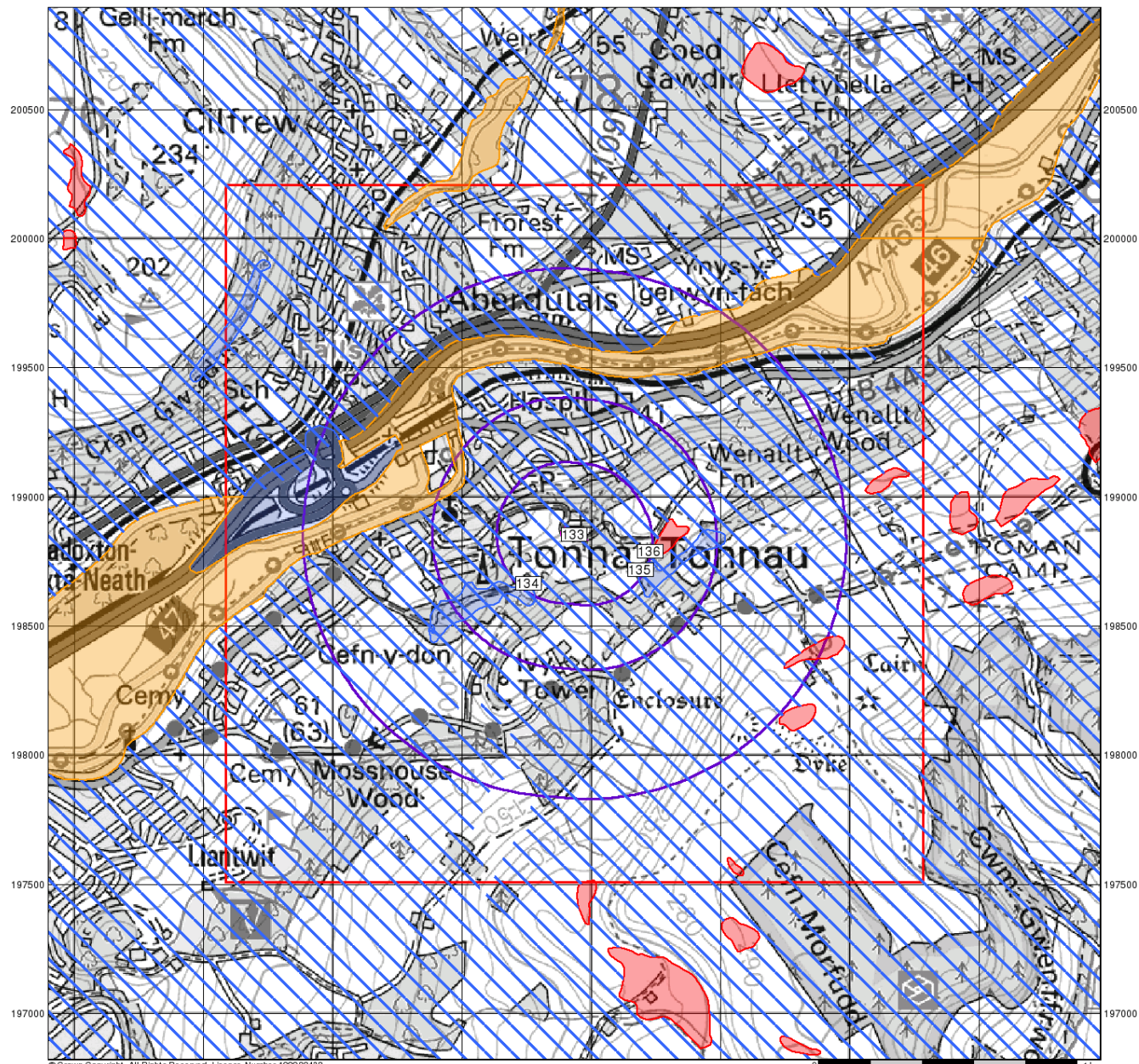
Order Details

Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

276000 276500 277000 277500 278000 278500 279000 279500



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Intégral Géotechnique

Ground Stability Data (1:50,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Potential for Compressible Ground Stability Hazards

- High
- Moderate
- Low
- Very Low

Potential for Collapsible Ground Stability Hazards

- High
- Moderate
- Low
- Very Low

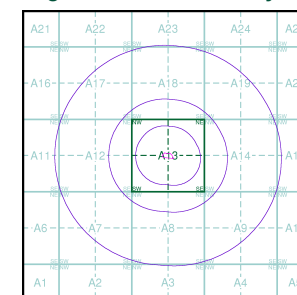
Brine Pumping and Salt Mining

Brine Pumping Related Feature

Salt Mining Related Feature

- | Point | Polygon |
|-------|---------|
| ▲ | ▢ |
| ▲ | ▢ |

Mining and Ground Stability - Slice A



Order Details

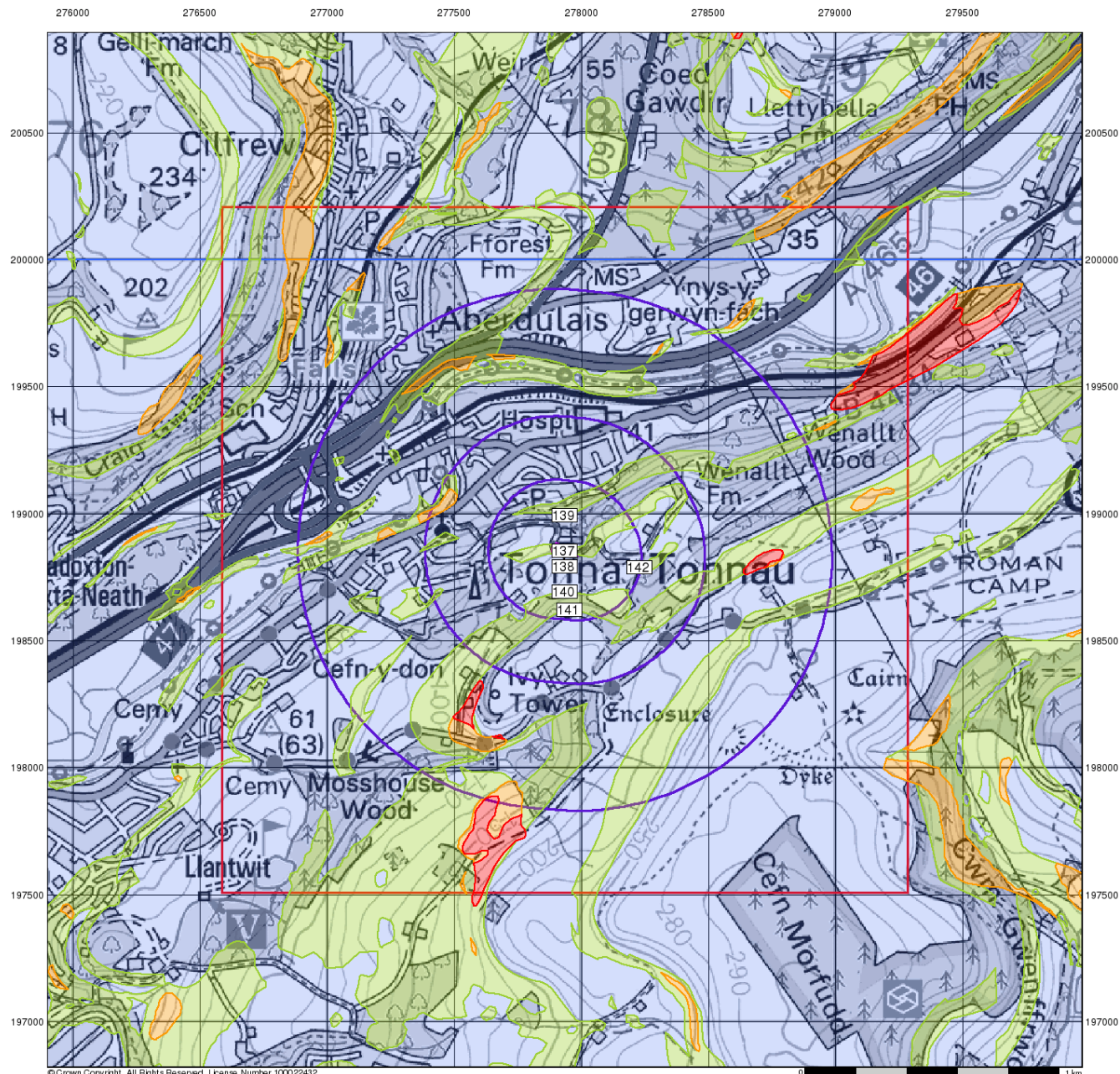
Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
INFORMATION GROUP

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



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0 1 km

Intégral Géotechnique

Ground Stability Data (1:50,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

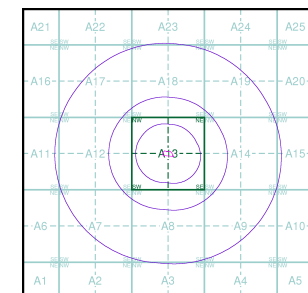
Potential for Landslide Ground Stability Hazards

- High
- Moderate
- Low
- Very Low

Potential for Ground Dissolution Stability Hazards

- High
- Moderate
- Low
- Very Low

Mining and Ground Stability - Slice A



Order Details

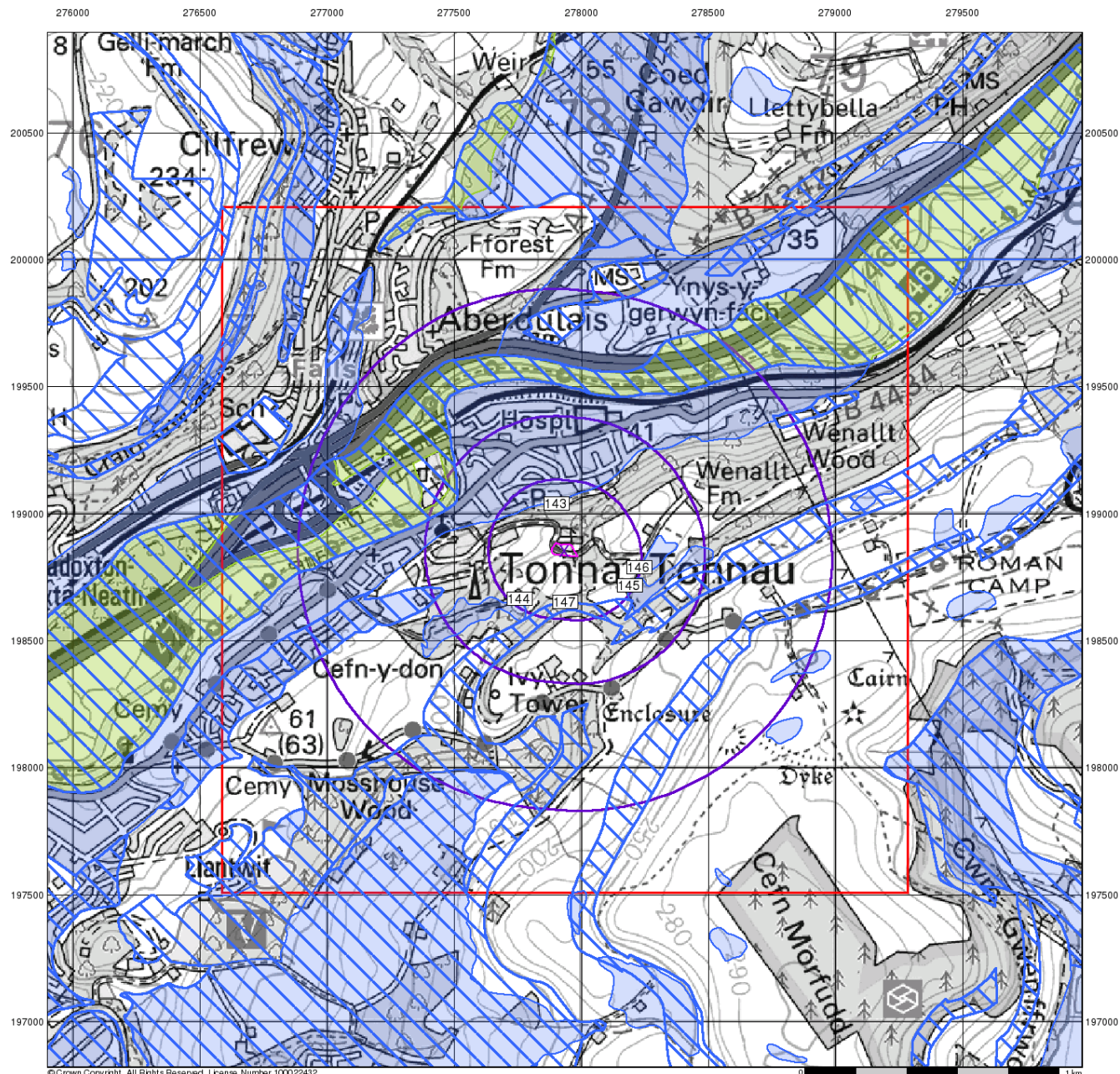
Order Number: 272393355_1_1
 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
 Search Buffer (m): 1000

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
 INFORMATION GROUP

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



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Intégral Géotechnique

Ground Stability Data (1:50,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

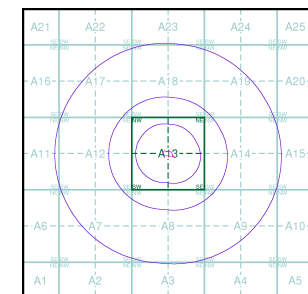
Potential for Running Sand Ground Stability Hazards

- High
- Low
- Moderate
- Very Low

Potential for Shrinking or Swelling Clay Ground Stability Hazards

- High
- Low
- Moderate
- Very Low

Mining and Ground Stability - Slice A



Order Details

Order Number: 272393355_1_1
 Customer Ref: 12800/RAH
 National Grid Reference: 277930, 198850
 Slice: A
 Site Area (Ha): 0.36
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Intégral Géotechnique

Historical Land Use Information (1:2,500)

General

- Specified Site Specified Buffer(s) Bearing Reference Point Map ID
Several of Type at Location

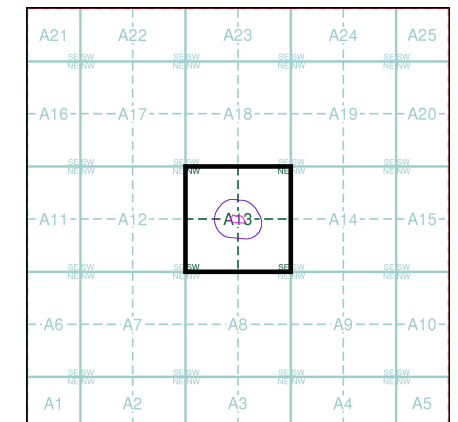
Potentially Contaminative Industrial Uses (Extractive Industries Activity)

	Point	Line	Polygon
Extractive Industries Activity from 1855 - 1909	▲	—	■
Extractive Industries Activity from 1893 - 1915	▲	—	■
Extractive Industries Activity from 1906 - 1937	▲	—	■
Extractive Industries Activity from 1924 - 1949	▲	—	■
Extractive Industries Activity from 1950 - 1980	▲	—	■

Subterranean Features

	Point	Line	Polygon
Subterranean Features	▼	---	■

Mining and Ground Stability - Segment A13



Order Details

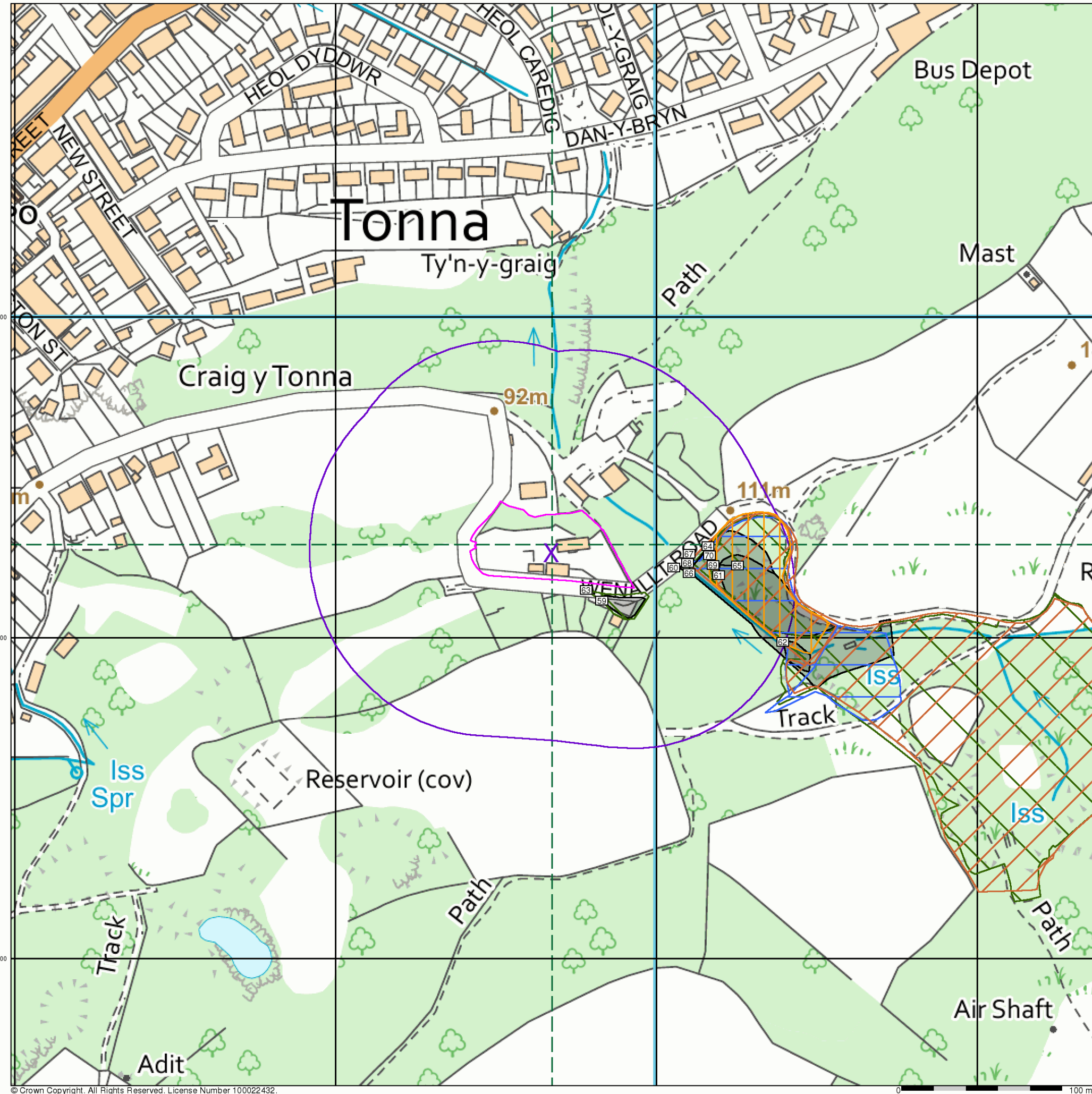
Order Number: 272393355_1_1
Customer Ref: 12800/RAH
National Grid Reference: 277930, 198850
Slice: A
Site Area (Ha): 0.36
Plot Buffer (m): 100

Site Details

89, Wenallt Road, Tonna, NEATH, SA11 3QH

Landmark
INFORMATION GROUP

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APPENDIX B

BGS RADON REPORT

Rebecca Hitt
Intégral Géotechnique (Wales) Limited.
Intégral House,
7 Beddau Way.
Castlegate Business Park,
Caerphilly,
CF83 2AX

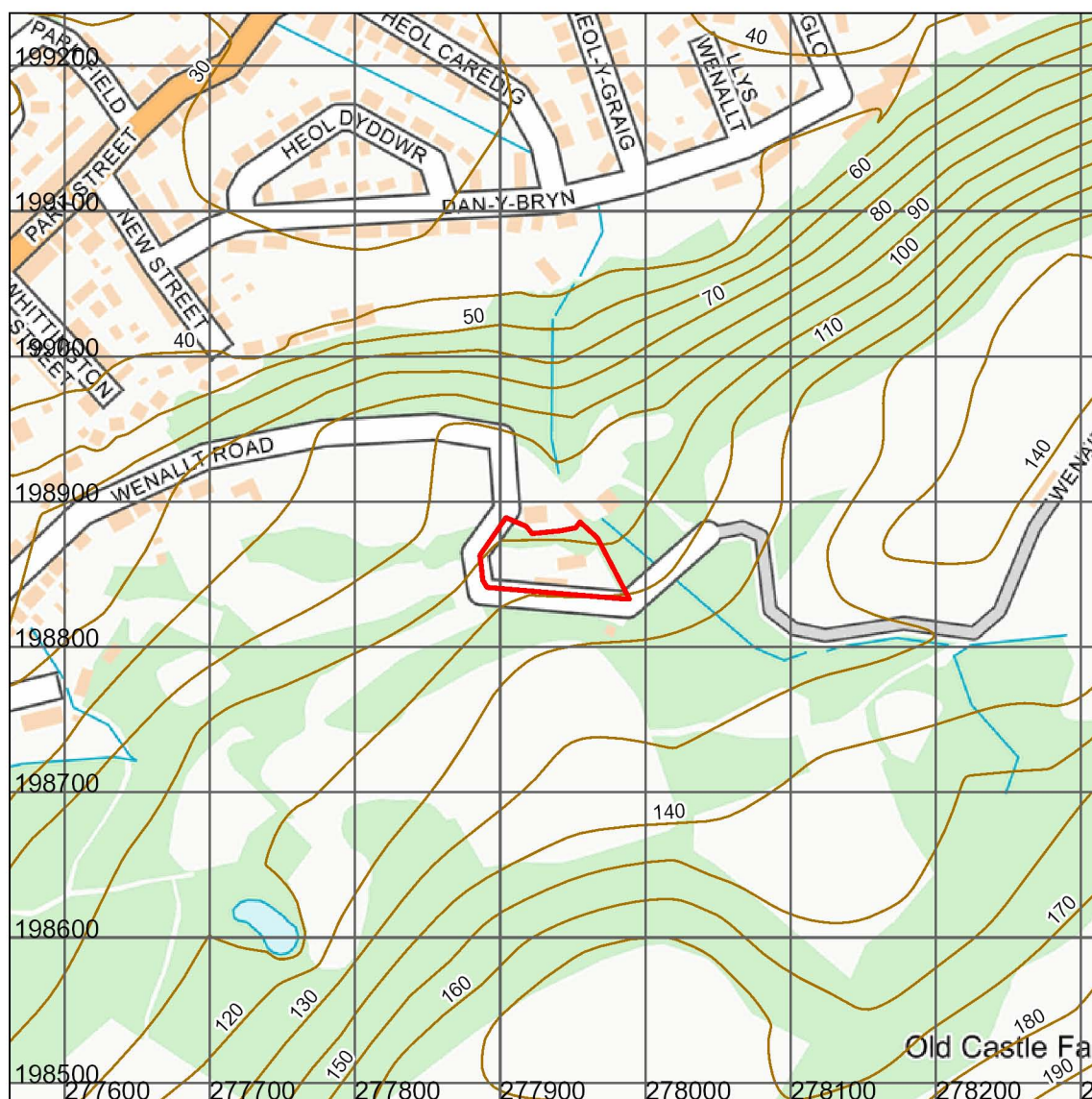
Radon Report

Advisory report on the requirement for radon protective measures in new buildings, conversions and extensions to existing buildings. The report also indicates whether a site is located within a radon Affected Area

Report Id: *BGS_314821/19502*

Client reference: 12800/RAH

Search location



Contains OS data © Crown Copyright and database right 2021. OS OpenMap Local: Scale: 1:5 000 (1cm = 50 m)

Search location indicated in red

*This report describes a site located at National Grid Reference 277938, 198861.
Note that for sites of irregular shape, this point may lie outside the site boundary.
Where the client has submitted a site plan the assessment will be based on the area given.*

Radon Report: UK

When extensions are made to existing buildings in high radon areas, or new buildings are constructed in these areas, the Building Regulations for England, Wales, Scotland and Northern Ireland require that protective measures are taken against radon entering the building.

This report provides information on whether radon protective measures are required. Depending on the probability of buildings having high radon levels, the Regulations may require either:

1. No protective measures
2. Basic protective measures
3. Full protective measures

This is an advisory report on the requirement for radon protective measures in new buildings, conversions and extensions. The report also indicates whether a site is located within a radon Affected Area

Requirement for radon protective measures

The determination below follows advice in *BR211 Radon: Guidance on protective measures for new buildings (2015 edition)*, which also provides guidance on what to do if the result indicates that protective measures are required.

Is the property in an area where radon protective measures are required for new buildings or extensions to existing ones as described in publication BR211 (2015 edition) Radon: Guidance on protective measures for new buildings?

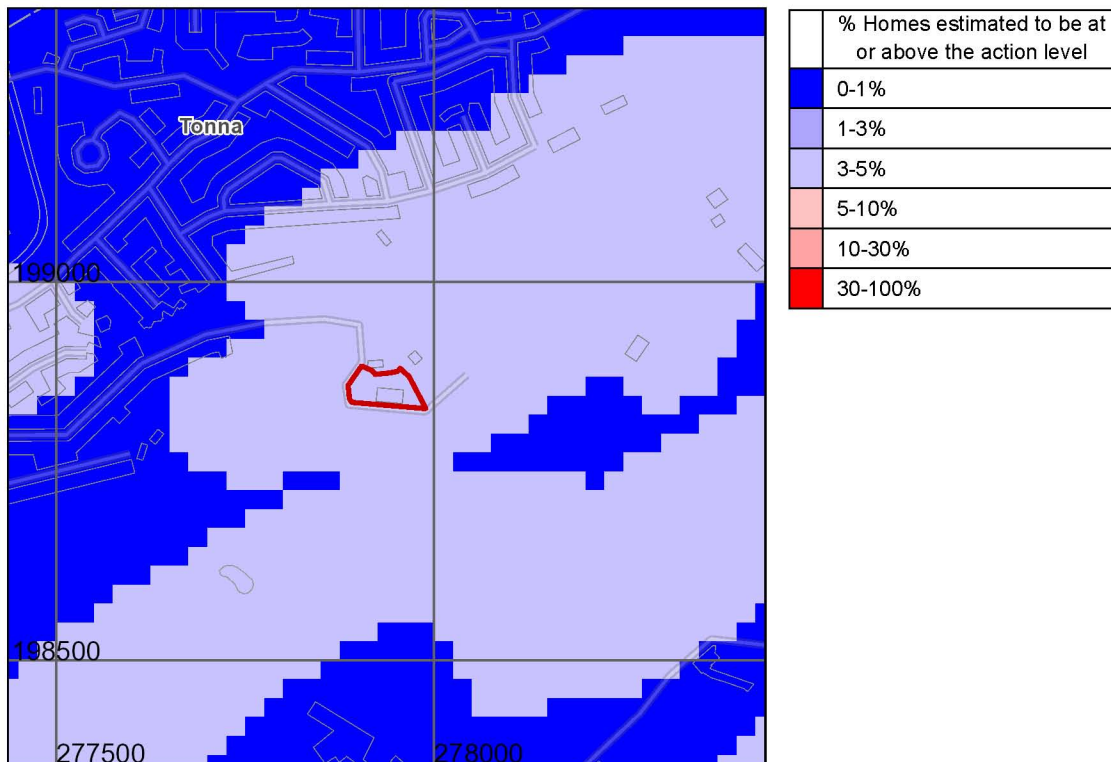
BASIC RADON PROTECTIVE MEASURES ARE REQUIRED FOR THE REPORT AREA.

More details of the protective measures required are available in *BR211 Radon: Guidance on protective measures for new buildings (2015 Edition)*. Additional information and guidance is available from the Building Research Establishment website (<http://www.bre.co.uk/radon/>).

Whether or not the radon level in a building is above or below the radon Action Level can only be established by having the building tested. The PHE provides a radon testing service which can be accessed at www.ukradon.org or by telephone (01235 822622).

If you require further information or guidance, you should contact your local authority building control officer or approved inspector.

Radon Affected Area



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Scale: 1:10 000 (1cm = 100 m)

Search area indicated in red

Is the property in a radon Affected Area as defined by Public Health England (PHE) and if so what percentage of homes are estimated to be above the Action Level? **YES**

Additional Information

THE PROPERTY IS IN A RADON AFFECTED AREA WHERE 3 TO 5% OF HOMES ARE ESTIMATED TO BE AT OR ABOVE THE ACTION LEVEL.

PHE recommends a radon 'Action Level' of 200 Becquerels per cubic metre of air (Bq m^{-3}) for the annual average of the radon gas concentration in a home. Where 1% or more of homes are estimated to exceed the Action Level the area should be regarded as a radon Affected Area.

This report informs you whether the property is in a radon Affected Area and the percentage of homes that are estimated to be at or above the radon Action Level at this location. Being in an Affected Area does not necessarily mean there is a radon problem in the property; the only way to find out whether the radon level is above or below the Action Level is to carry out a radon measurement.

PHE advises that radon gas should be measured in all properties within radon Affected Areas and that homes with radon levels above the Action Level (200 Bq m⁻³) should be remediated. Householders with levels between the Target Level (100 Bq m⁻³) and Action Level should seriously consider reducing their radon level, especially if they are at greater risk, such as if they are current or ex smokers. Whether or not a home is in fact above or below the Action Level or Target Level can only be established by having the building tested. PHE provides a validated radon testing service which can be accessed at www.ukradon.org.

The information in this report provides an answer to one of the standard legal enquiries on house purchase in England and Wales, known as Law Society CON29 Enquiries of the Local Authority (2016); 3.14 Radon Gas: Do records indicate that the property is in a “Radon Affected Area” as identified by PHE. The data can also be used to advise house buyers and sellers in Scotland and Northern Ireland.

If you are buying a new build property in a Radon Affected Area, you should ask the builder whether radon protective measures were incorporated in the construction of the property.

If you are buying a currently occupied property in a radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were above the radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and if the results of re-testing confirmed the effectiveness of the measures.

Further information on radon is available from PHE at www.ukradon.org.

What is radon?

Radon is a naturally occurring radioactive gas, which is produced by the radioactive decay of radium which, in turn, is derived from the radioactive decay of uranium. Uranium is found in small quantities in all soils and rocks, although the amount varies from place to place. Radon released from rocks and soils is quickly diluted in the atmosphere. Concentrations in the open air are normally very low and do not present a hazard. Radon that enters enclosed spaces such as some buildings (particularly basements), caves, mines, and tunnels may reach high concentrations in some circumstances. The construction method and degree of ventilation will influence radon levels in individual buildings. A person's exposure to radon will also vary according to how particular buildings and spaces are used.

Inhalation of the radioactive decay products of radon gas increases the chance of developing lung cancer. If individuals are exposed to high concentrations for significant periods of time, there may be cause for concern. In order to limit the risk to individuals, the Government has adopted an Action Level for radon in homes of 200 becquerels per cubic metre (Bq m^{-3}). The Government advises householders that, where the radon level exceeds the Action Level, measures should be taken to reduce the concentration.

Radon in workplaces

The Ionising Radiation Regulations, 1999, require employers to take action when radon is present above a defined level in the workplace. Advice may be obtained from your local Health and Safety Executive Area Office or the Environmental Health Department of your local authority. The BRE publishes a guide (BR293): **Radon in the workplace**. BRE publications may be obtained from the BRE Bookshop, Tel: 01923 664262, email: bookshop@bre.co.uk website: www.brebookshop.com

Contact Details

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Tel: 0115 9363143
Email: enquiries@bgs.ac.uk

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Lyell Centre
Research Avenue South
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Email: enquiry@bgs.ac.uk

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- The data, information and related records supplied in this Report by BGS can only be indicative and should not be taken as a substitute for specialist interpretations, professional advice and/or detailed site investigations. You must seek professional advice before making technical interpretations on the basis of the materials provided.
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- Raw data may have been transcribed from analogue to digital format, or may have been acquired by means of automated measuring techniques. Although such processes are subjected to quality control to ensure reliability where possible, some raw data may have been processed without human intervention and may in consequence contain undetected errors.
- Detail, which is clearly defined and accurately depicted on large-scale maps, may be lost when small-scale maps are derived from them.
- Although samples and records are maintained with all reasonable care, there may be some deterioration in the long term.
- The most appropriate techniques for copying original records are used, but there may be some loss of detail and dimensional distortion when such records are copied.
- Data may be compiled from the disparate sources of information at BGS's disposal, including material donated to BGS by third parties, and may not originally have been subject to any verification or other quality control process.
- Data, information and related records, which have been donated to BGS, have been produced for a specific purpose, and that may affect the type and completeness of the data recorded and any interpretation. The nature and purpose of data collection, and the age of the resultant material may render it unsuitable for certain applications/uses. You must verify the suitability of the material for your intended usage.
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- The topography shown on any map extracts is based on the latest OS mapping and is not necessarily the same as that used in the original compilation of the BGS geological map, and to which the geological linework available at that time was fitted.
- Note that for some sites, the latest available records may be historical in nature, and while every effort is made to place the analysis in a modern geological context, it is possible in some cases that the detailed geology at a site may differ from that described.

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**Report issued by
BGS Enquiry Service**

APPENDIX C

COAL AUTHORITY MINING REPORT



The Coal
Authority

CON29M

coal mining report

89, WENALLT ROAD, TONNA, NEATH, NEATH PORT TALBOT, SA11 3QH



Known or potential coal mining risks

Past underground coal mining	Page 4
Future underground coal mining	Page 4
Mine entries	Page 5



Further action

No further reports from the Coal Authority are required. Further information on any next steps can be found in our Professional opinion.

For more information on our reports please visit
www.groundstability.com



Professional opinion

According to the official mining information records held by the Coal Authority at the time of this search, evidence of, or the potential for, coal mining related features have been identified. In view of the coal mining circumstances we would recommend that any planned or future development should follow detailed technical advice before beginning work on site. Please see **page 3** for further details on **Future development**.

Your reference: **272393355_2**
Our reference: **51002348617001**
Date: **28 January 2021**

Client name:
NLIS Hub

If you require any further assistance please
contact our experts on:
0345 762 6848
groundstability@coal.gov.uk

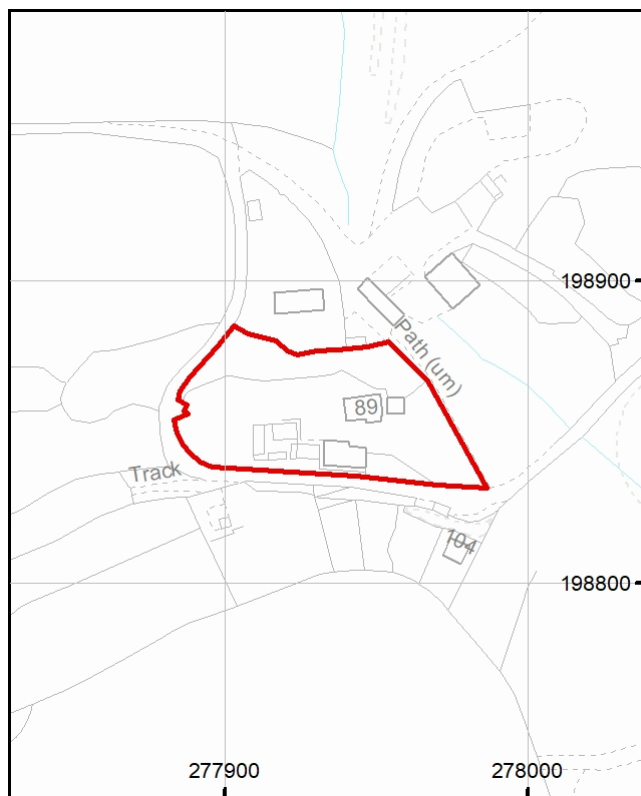


The Law
Society

Enquiry boundary

Key

Approximate position of enquiry boundary shown



We can confirm that the location is
on the coalfield



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This report is prepared in accordance with the latest Law Society's Guidance Notes 2018, the User Guide 2018 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.



Accessibility

If you would like this information in an alternative format, please contact our communications team on 0345 762 6848 or email communications@coal.gov.uk.

Professional opinion



Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed.

If you are looking to develop, or undertake works, within a coal mining development high risk area your Local Authority planning department may require a Coal Mining Risk Assessment to be undertaken by a qualified mining geologist or engineer. Should you require any additional information then please contact the Coal Authority on **0345 762 6848** or email **cmra@coal.gov.uk**.

Detailed findings

Information provided by the Coal Authority in this report is compiled in response to the Law Society's CON29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL.

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1 Past underground coal mining

The property is not within a surface area that could be affected by any past recorded underground coal mining.

However the property is in an area where the Coal Authority believes there is coal at or close to the surface. This coal may have been worked at some time in the past. The potential presence of coal workings at or close to the surface should be considered, particularly prior to any site works or future development activity, as ground movement could still be a risk. Your attention is drawn to the Professional opinion sections of the report.

2 Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3 Future underground coal mining

The property is not in an area where the Coal Authority has received an application for, and is currently considering whether to grant a licence to remove or work coal by underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

4 Mine entries

There are no recorded coal mine entries known to the Coal Authority within, or within 20 metres, of the boundary of the property.

This information is based on the information that the Coal Authority has at the time of this enquiry.

Based on the Coal Authority's knowledge of the mining circumstances at the time of this enquiry, there may be unrecorded mine entries in the local area that do not appear on Coal Authority records.

5 Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6 Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

7 Present opencast coal mining

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

8 Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9 Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

10 Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11 Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.

12 Withdrawal of support

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

13 Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

14 Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Statutory cover



Coal mining subsidence

In the unlikely event of any coal mining related subsidence damage, the Coal Authority or the mine operator has a duty to take remedial action in respect of subsidence caused by the withdrawal of support from land or property in connection with lawful coal mining operations.

When the works are the responsibility of the Coal Authority, our dedicated public safety and subsidence team will manage the claim. The house or land owner ("the owner") is covered for these works under the terms of the Coal Mining Subsidence Act 1991 (as amended by the Coal Industry Act 1994). Please note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

If you believe your land or property is suffering from coal mining subsidence damage and you need more information on what to do next, please use the following link to our website which sets out what your rights are and what you need to consider before making a claim.

www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form



Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call **01623 646 333**. Further information can be found on our website: www.gov.uk/coalauthority.

Glossary



Key terms

adit - horizontal or sloped entrance to a mine

coal mining subsidence - ground movement caused by the removal of coal by underground mining

Coal Mining Subsidence Act 1991 - the Act setting out the duties of the Coal Authority to repair damage caused by coal mining subsidence

coal mining subsidence damage - damage to land, buildings or structures caused by the removal of coal by underground mining

coal seams - bed of coal of varying thickness

future opencast coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal from the surface

future underground coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal underground. Although it is unlikely, remaining coal reserves could create a possibility for future mining, which would be licensed by the Coal Authority

mine entries - collective name for shafts and adits

payments to owners of former copyhold land - historically, copyhold land gave rights to coal to the copyholder. Legislation was set up to allow others to work this coal, but they had to issue a notice and pay compensation if a copyholder came forward

shaft - vertical entry into a mine

site investigation - investigations of coal mining risks carried out with the Coal Authority's permission

stop notice - a delay to repairs because further coal mining subsidence damage may occur and it would be unwise to carry out permanent repairs

subsidence claim - a formal notice of subsidence damage to the Coal Authority since it was established on 31 October 1994

withdrawal of support - a historic notice informing landowners that the coal beneath their property was going to be worked

working facilities orders - a court order which gave permission, restricted or prevented coal mine workings

APPENDIX D

TRIAL PIT LOGS

 Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com			Project Name: Wenallt Road, Tonna			Project No.: 12800		Trial Pit No.: TP01 Sheet 1 of 1	
Location: Neath			Client: Matthew and Hannah Rees			Logged By: RAH		Scale 1:25	
Equipment: 6 tonne tracked excavator.			Coordinates:			Dimensions 2.00m			
Date Excavated: 08/02/2021			Level:			Depth : 1.50m 0.70m			
Samples & In-situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description			
Depth (m)	Type	Results							
0.10	ES					Grass over, soft dark brown slightly gravelly sandy silty CLAY with roots and rootlets. Gravel comprises fine to coarse sub-angular to angular sandstone and mudstone. (Topsoil/subsoil)			
			0.30			MADE GROUND: Firm to stiff brown sandy gravelly silty CLAY with low boulder content. Gravel comprises fine to coarse sub-rounded to angular sandstone. Boulders are up to 0.6m x 0.3m x 0.4m of sandstone. (Reworked Soils)			
			0.70			Occasional up to cobble sized lens of firm to stiff black/dark grey clay (reworked weathered mudstone/coal).			
0.80	D					(Medium dense) brown silty very sandy GRAVEL of fine to coarse sub-angular to angular sandstone with high cobble content. Cobbles are typically 200mm and blocky/tabular. (Weathered Sandstone)			
			1.00			Recovered as: Brown slightly silty sandy GRAVEL and COBBLES of sub-angular to angular tabular sandstone.			
						Probable sandstone with sandy matrix in-situ. (Weathered Sandstone)			
			1.50			<i>Excavation becoming difficult with depth.</i> End of Trialpit at 1.50 m			
Remarks: 1. Trial pit excavation terminated at 1.5mbgl - Bedrock. 2. Soakaway test undertaken.						Groundwater: Groundwater not encountered. Minor seepage at 0.7m, ceased as excavation continued.		Key: D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil sample W - Water sample	
						Stability: Some spalling observed.			

 Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com			Project Name: Wenallt Road, Tonna			Project No.: 12800		Trial Pit No.: TP02 Sheet 1 of 1	
Location: Neath			Client: Matthew and Hannah Rees			Logged By: RAH		Scale 1:25	
Equipment: 6 tonne tracked excavator.			Coordinates:			Dimensions 2.50m			
Date Excavated: 08/02/2021			Level:			Depth : 2.60m 0.70m			
Samples & In-situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description			
Depth (m)	Type	Results							
0.20	ES		0.30			Grass over, soft brown slightly sandy slightly gravelly silty CLAY with occasional roots and rootlets. Gravel comprises fine to coarse sub-angular sandstone. Contains occasional plastic fragments. (Topsoil/subsoil)			
0.70	D					Extends to between 0.25m and 0.3mbgl. MADE GROUND: Firm orange brown, brown and dark grey brown sandy gravelly silty CLAY. Gravel comprises fine to coarse sub-angular to angular sandstone and occasional mudstone. (Reworked Soils) Localised lens of dark grey to black clay (reworked weathered mudstone/coal). Occasional roots present down to 0.6mbgl.			
			1.50			(Medium dense) brown slightly silty SAND and GRAVEL with medium cobble content. Gravel and cobbles comprises sub-rounded to angular sandstone.			
			2.00			(Medium dense) brown slightly silty sandy GRAVEL with medium cobble content and low boulder content. Gravel, cobbles and boulders are of sub-rounded to angular sandstone. Boulders up to 0.4m x 0.4m x 0.2m. Excavator scratching towards base.			
			2.60			End of Trialpit at 2.60 m			
Remarks: 1. Trial pit excavation terminated at 2.6mbgl - Target depth reached and excavator struggling to continue.			Groundwater: Groundwater not encountered.			Key: D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil sample W - Water sample			
			Stability: Spalling observed with depth.						

 Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com			Project Name: Wenallt Road, Tonna			Project No.: 12800		Trial Pit No.: TP03 Sheet 1 of 1	
Location: Neath			Client: Matthew and Hannah Rees			Logged By: RAH		Scale 1:25	
Equipment: 6 tonne tracked excavator.			Coordinates:			Dimensions 2.60m			
Date Excavated: 08/02/2021			Level:			Depth : 3.20m 0.70m			
Samples & In-situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description			
Depth (m)	Type	Results							
0.40	ES					Grass over, MADE GROUND: Firm, dark brown and brown slightly sandy gravelly silty CLAY with occasional rootlets. Gravel is of sandstone, concrete and brick. Contains occasional clay pipe fragments, plastic fragments and plastic wrap. Occasional concrete block up to 0.4m x 0.3m x 0.1m. Very locally slightly ashy. Extends to between 0.6m and 0.9mbgl. <i>Plastic drain pipe trending NE to SW.</i>			
			0.90			MADE GROUND: Firm brown and dark brown slightly gravelly slightly sandy silty CLAY with occasional roots. Gravel comprises fine to coarse sub-angular to rounded sandstone. (Reworked Soils)			
			2.00			Firm brown, orange brown and locally dark grey sandy gravelly silty CLAY. Gravel comprises fine to coarse sub-angular to angular sandstone. Black areas are suspected manganese staining.			
2.50	D								
			2.90			(Medium dense) brown silty very sandy GRAVEL of fine to coarse sub-angular to angular sandstone with low cobble content. (Weathered Sandstone)			
			3.20			End of Trialpit at 3.20 m			
Remarks: 1. Trial pit excavation terminated at 3.2mbgl - Target depth reached.			Groundwater: Groundwater not encountered.			Key: D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil sample W - Water sample			
			Stability: Sides stable.						

 Intégral House, 7 Beddau Way Castlegate Business Park Caerphilly CF83 2AX Tel. 029 20807991 Fax. 029 20862176 mail@integralgeotec.com			Project Name: Wenallt Road, Tonna			Project No.: 12800		Trial Pit No.: TP04 Sheet 1 of 1	
Location: Neath			Client: Matthew and Hannah Rees			Logged By: RAH		Scale 1:25	
Equipment: 6 tonne tracked excavator.			Coordinates:			Dimensions 2.60m			
Date Excavated: 08/02/2021			Level:			Depth : 2.60m 0.70m			
Samples & In-situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description			
Depth (m)	Type	Results							
0.10	ES		0.15		 Grass over, soft dark brown slightly sandy gravelly silty CLAY with occasional rootlets and occasional charcoal fragments. Gravel comprises fine to medium sub-angular sandstone. (Topsoil/subsoil)  MADE GROUND: Soft to firm brown slightly sandy gravelly silty CLAY with low cobble content and occasional wood/tree branch. Gravel and cobbles comprise fine to coarse sub-rounded to angular sandstone. (Reworked Soils) Extends to between 0.7m and 0.8mbgl.				
			0.80		 Firm orange brown and light brown slightly sandy slightly gravelly silty CLAY with low cobble content. Gravel and cobbles comprise fine to coarse sub-angular to angular sandstone. Occasional roots present at surface (0.8mbgl)	1			
			1.40		 Firm, locally soft, brown mottled grey sandy gravelly silty CLAY with low cobble content. Gravel and cobbles comprise fine to coarse sub-angular to angular sandstone. Damp.				
			2.00		 (Medium dense) Brown/grey slightly silty SAND and GRAVEL. Gravel comprises fine to medium sub-rounded to angular sandstone. ...Coarsening with depth. Locally dark grey. Excavator starting to scratch towards base.	2			
			2.60		End of Trialpit at 2.60 m				
						3			
						4			
						5			
Remarks: 1. Trial pit excavation terminated at 2.6mbgl - Target depth reached.			Groundwater: Groundwater not encountered.			Key: D - Small disturbed sample B - Bulk disturbed sample ES - Environmental soil sample W - Water sample			
			Stability: Some spalling observed.						

APPENDIX E

SOIL INFILTRATION TEST RESULTS

BRE365 SOIL INFILTRATION RATE TEST - TP01

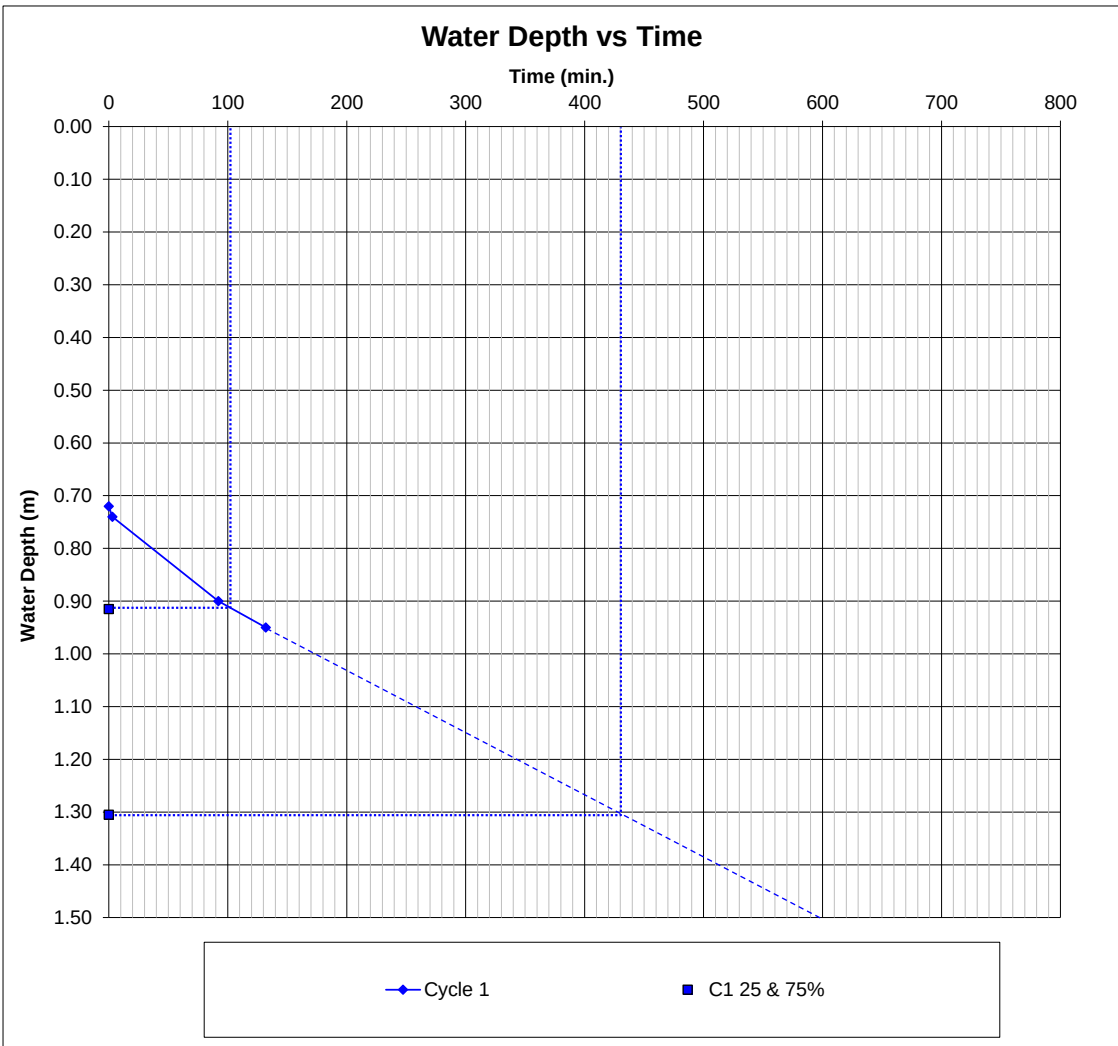
12800 Wenallt Road, Tonna

Trial Pit Information	
Length (m)	2.00
Width (m)	0.70
Depth (m)	1.50
Groundwater	Dry
Weather Conditions	Overcast
Date	08-Feb-21

Cycle 1		Cycle 2		Cycle 3	
Time (min)	Depth (m)	Time (min)	Depth (m)	Time (min)	Depth (m)
0	0.72				
3	0.74				
92	0.90				
132	0.95				

Remarks

Final Excavation Depth (m)	Cycle 1	Cycle 2	Cycle 3
At end of testing cycle	1.50		
Water Depths (m)			
Water depth at start of test	0.72		
Water depth at end of test	0.95		
Effective depth (measured)	0.23		
% Effective storage depth	0.29		
Effective Storage Depths (m)			
Effective storage depth (100%)	0.78		
Effective storage depth (75%)	0.59		
Effective storage depth (50%)	0.39		
Effective storage depth (25%)	0.20		
Outflow Time (min)			
Time for measured outflow	132		
Time for 100% outflow	600		
Time for 75-25% outflow	330		
Volume of Outflow (m³)			
Over measured effective depth	0.32		
Over 100% effective depth	1.09		
From 75% - 25% effective depth	0.55		
Surface Area (m²)			
For 100% effective storage	5.61		
For 50% effective storage	3.51		
Over measured depth	2.64		
Soil Infiltration Rate (m/s)	Cycle 1	Cycle 2	Cycle 3
Over 100% effective depth	5.4E-06		
Over measured depth	1.5E-05		
Over 75% - 25% effective depth	7.9E-06		



Design Soil Infiltration Rate: 7.8E-06 m/s

APPENDIX F

LABORATORY CHEMICAL TEST RESULTS (SOILS)

Rebecca Hitt
Integral Geotechnique
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7 Beddau Way
Castlegate Business Park
CF83 2AX

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f: 02920862176
e: rebecca@integralgeotec.com

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 21-55927

Project / Site name:	Wenallt Road, Tonna	Samples received on:	10/02/2021
Your job number:	12800	Samples instructed on/ Analysis started on:	10/02/2021
Your order number:	12800	Analysis completed by:	18/02/2021
Report Issue Number:	1	Report issued on:	18/02/2021
Samples Analysed:	4 soil samples		

Signed: 

Zina Abdul Razzak
Senior Quality Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-55927
Project / Site name: Wenallt Road, Tonna
Your Order No: 12800

Lab Sample Number				1765236	1765237	1765238	1765239
Sample Reference				TP01	TP02	TP03	TP04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	0.50	0.10
Date Sampled				08/02/2021	08/02/2021	08/02/2021	08/02/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	17	10	15
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.6	7.2	8.1	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1
Total Sulphate as SO ₄	mg/kg	50	MCERTS	720	960	440	450
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.011	0.01	0.012	0.015
Sulphide	mg/kg	1	MCERTS	3.1	< 1.0	< 1.0	46
Total Sulphur	mg/kg	50	MCERTS	600	630	310	460
Total Organic Carbon (TOC)	%	0.1	MCERTS	5	5.5	3.2	4.7
Loss on Ignition @ 450oC	%	0.2	MCERTS	9.8	14.5	8.5	8.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	-------	-------	-------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.26
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.21
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.48	< 0.05	2.8
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.24
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.84	< 0.05	3.2
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.66	< 0.05	2.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.54	< 0.05	1.1
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.81	< 0.05	1.6
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.79	< 0.05	1.7
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.31	< 0.05	0.51
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.49	< 0.05	1.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.28	< 0.05	0.73
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.22
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.36	< 0.05	0.74

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	5.56	< 0.80	16.8
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	28	53	31	32
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.55	0.7	0.81	0.73
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.6	0.7	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	2.7	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	19	17	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	42	130	60	67
Lead (aqua regia extractable)	mg/kg	1	MCERTS	66	98	52	130
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	24	33	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	1	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	30	31	27	31

Analytical Report Number: 21-55927
 Project / Site name: Wenallt Road, Tonna
 Your Order No: 12800

Lab Sample Number				1765236	1765237	1765238	1765239
Sample Reference				TP01	TP02	TP03	TP04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	0.50	0.10
Date Sampled				08/02/2021	08/02/2021	08/02/2021	08/02/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	140	580	170	200

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-55927
Project / Site name: Wenallt Road, Tonna

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1765236	TP01	None Supplied	0.1	Brown loam and clay with gravel and vegetation.
1765237	TP02	None Supplied	0.2	Brown loam and clay with gravel and vegetation.
1765238	TP03	None Supplied	0.5	Brown loam and clay with gravel and vegetation.
1765239	TP04	None Supplied	0.1	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 21-55927
Project / Site name: Wenallt Road, Tonna

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS



Analytical Report Number : 21-55927
Project / Site name: Wenallt Road, Tonna

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
----------------------	-------------------------------	-----------------------------	---------------	--------------------	----------------------

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
 For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
 Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

APPENDIX G

LABORATORY GEOTECHNICAL TEST RESULTS



TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client: Integral Geotechnique
Client Address: Integral House, 7 Beddau Way,
Castlegate Business Park, CF83 2AX

Client Reference: 12800
Job Number: 21-56360
Date Sampled: 08/02/2021
Date Received: 10/02/2021
Date Tested: 17/02/2021
Sampled By: Client - RAH

Contact: Rebecca Hitt
Site Address: Wenauilt Road, Tonna

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

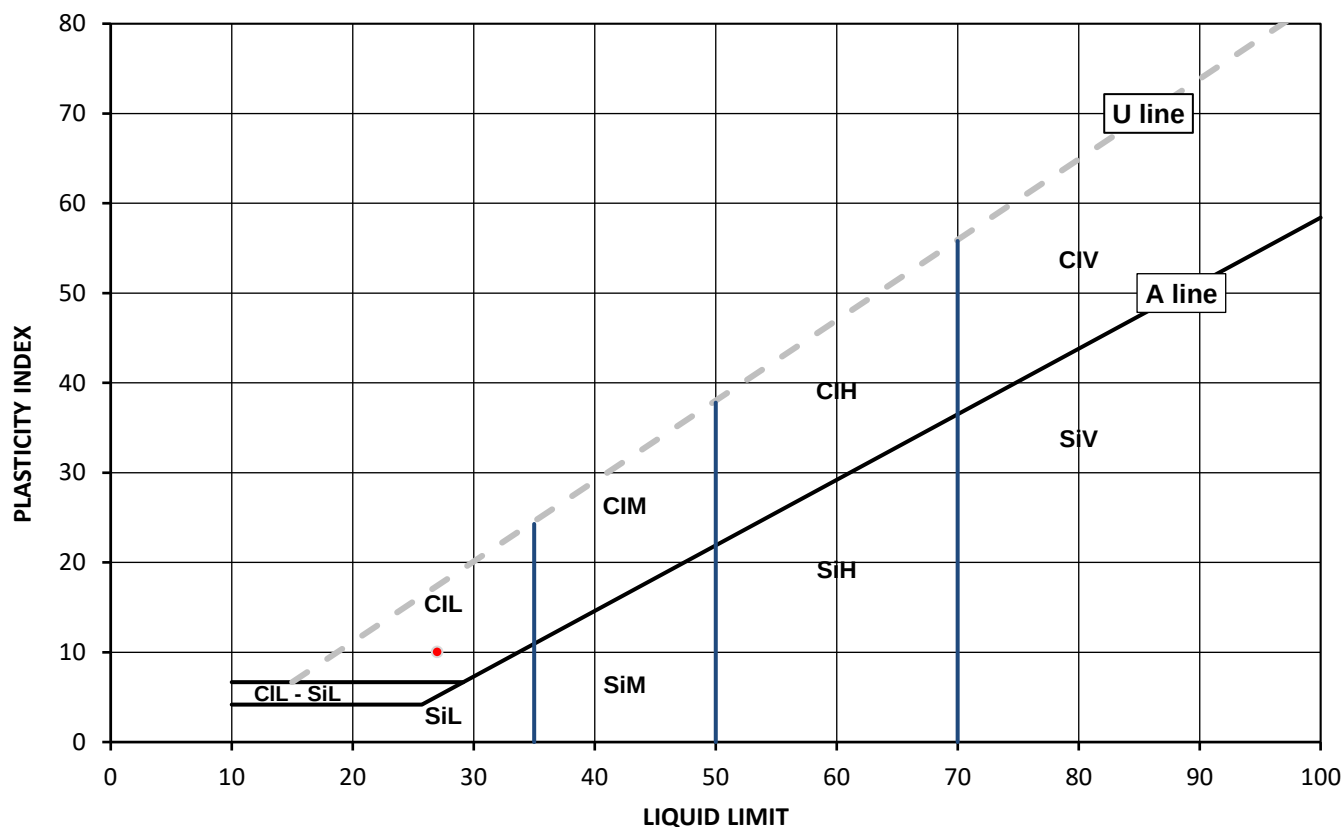
Test Results:

Laboratory Reference: 1767551
Hole No.: TP01
Sample Reference: Not Given
Soil Description: Dark brown very gravelly very sandy CLAY

Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
9.4	27	17	10	34



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Szczepan Bielatowicz

Page 1 of 1

Date Reported: 23/02/2021

GF 232.10



TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: Integral Geotechnique
Client Address: Integral House, 7 Beddau Way,
Castlegate Business Park, CF83 2AX

Client Reference: 12800
Job Number: 21-56360
Date Sampled: 08/02/2021
Date Received: 10/02/2021
Date Tested: 17/02/2021
Sampled By: Client - RAH

Contact: Rebecca Hitt
Site Address: Wenauilt Road, Tonna

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

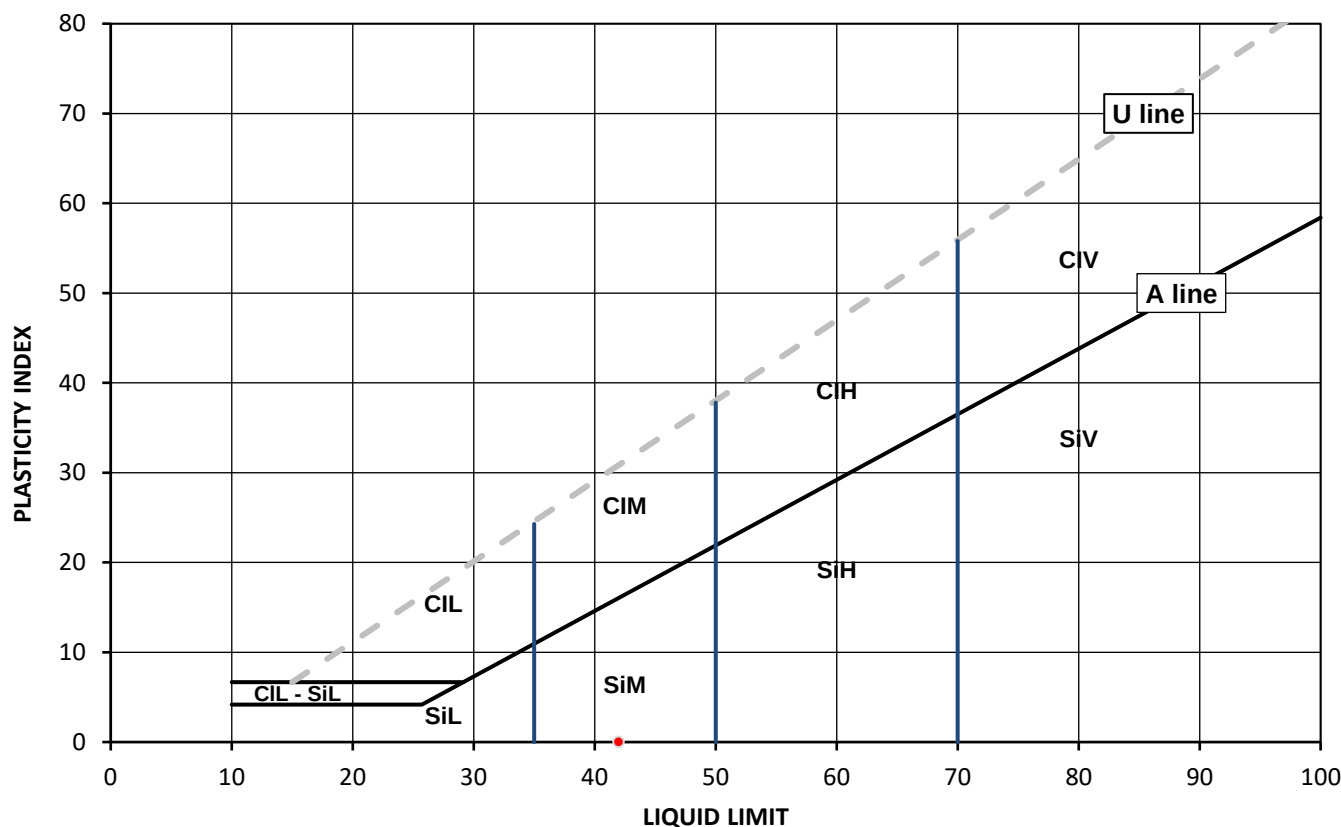
Test Results:

Laboratory Reference: 1767552
Hole No.: TP02
Sample Reference: Not Given
Soil Description: Dark brown gravelly slightly clayey SILT

Depth Top [m]: 0.70
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
22	42	NP	NP	37



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks: NP - non plastic

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Szczepan Bielatowicz

Page 1 of 1

Date Reported: 23/02/2021

GF 236.10



TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: Integral Geotechnique
Client Address: Integral House, 7 Beddau Way,
Castlegate Business Park, CF83 2AX

Client Reference: 12800
Job Number: 21-56360
Date Sampled: 08/02/2021
Date Received: 10/02/2021
Date Tested: 17/02/2021
Sampled By: Client - RAH

Contact: Rebecca Hitt
Site Address: Wenauilt Road, Tonna

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

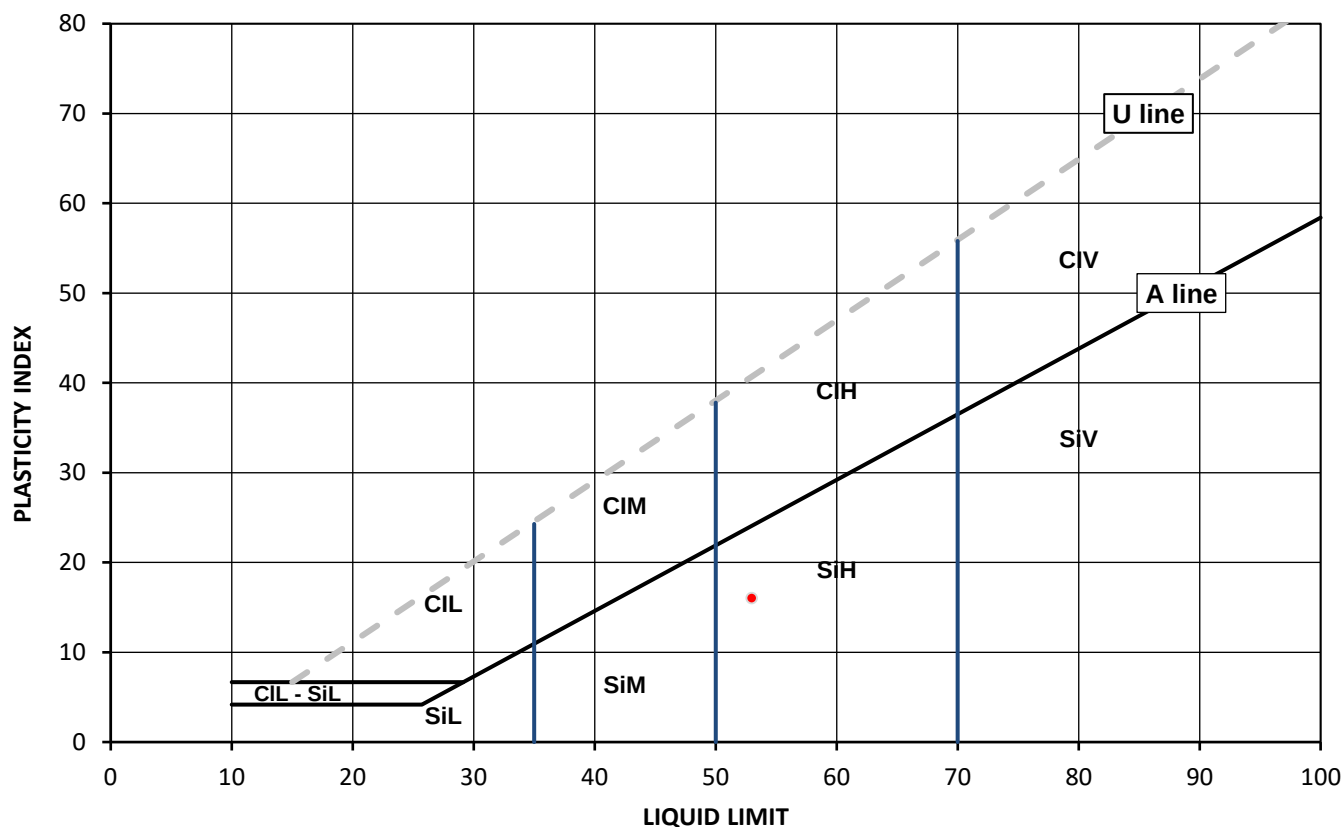
Test Results:

Laboratory Reference: 1767553
Hole No.: TP03
Sample Reference: Not Given
Soil Description: Dark brown slightly gravelly slightly sandy silty CLAY

Depth Top [m]: 2.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	53	37	16	91



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

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Szczepan Bielatowicz



4041

Client: Integral Geotechnique
 Client Address: Integral House, 7 Beddau Way,
 Castlegate Business Park, CF83 2AX

Contact: Rebecca Hitt
 Site Address: Wenauilt Road, Tonna

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

SUMMARY REPORT

Summary of Classification Test Results

Tested in Accordance with:

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN
 17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test),
 Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

i2 Analytical Ltd
 Unit 8 Harrowden Road
 Brackmills Industrial Estate
 Northampton NN4 7EB



Environmental Science

Client Reference: 12800
 Job Number: 21-56360
 Date Sampled: 08/02/2021
 Date Received: 10/02/2021
 Date Tested: 17/02/2021
 Sampled By: Client - RAH

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m				%	%	%	%	%	%	Mg/m3	Mg/m3	Mg/m3	%		
1767551	TP01	Not Given	0.80	Not Given	D	Dark brown very gravelly very sandy CLAY	Atterberg 1 Point	9.4		34	27	17	10						
1767552	TP02	Not Given	0.70	Not Given	D	Dark brown gravelly slightly clayey SILT	Atterberg 4 Point	22		37	42	NP	NP						
1767553	TP03	Not Given	2.50	Not Given	D	Dark brown slightly gravelly slightly sandy silty CLAY	Atterberg 4 Point	32		91	53	37	16						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Szczepan Bielatowicz
 PL Deputy of Head of Geotechnical Section
 for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number : 21-56368

Project / Site name:	Wenauilt Rd, Tonna	Samples received on:	10/02/2021
Your job number:	12800	Samples instructed on/ Analysis started on:	10/02/2021
Your order number:	12800	Analysis completed by:	19/02/2021
Report Issue Number:	1	Report issued on:	19/02/2021
Samples Analysed:	3 soil samples		

Signed: *Karolina Marek*

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-56368
 Project / Site name: Wenault Rd, Tonna
 Your Order No: 12800

Lab Sample Number				1767617	1767618	1767619
Sample Reference				TP01	TP02	TP03
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.80	0.70	2.50
Date Sampled				08/02/2021	08/02/2021	08/02/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6	16	21
Total mass of sample received	kg	0.001	NONE	0.7	0.7	0.7

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.3	6.1	6.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0084	0.012	0.12

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-56368
Project / Site name: Wenaulit Rd, Tonna

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1767617	TP01	None Supplied	0.8	Brown loam and sand with vegetation and gravel.
1767618	TP02	None Supplied	0.7	Brown loam and sand with vegetation and gravel.
1767619	TP03	None Supplied	2.5	Brown loam and clay with vegetation and gravel

Analytical Report Number : 21-56368
Project / Site name: Wenault Rd, Tonna

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

APPENDIX H

SUMMARY OF CHEMICAL TEST RESULTS – TOPSOIL AND MADE GROUND

SUMMARY OF LABORATORY SOIL TEST RESULTS

METALS AND SEMI-METALS

Job No.: 12800
Site: Wenallt Road, Tonna
Soil Type: Topsoil/Made Ground
Soil Organic Matter: 1%

No.	Location	Depth (m)	Arsenic (mg/kg)	Boron (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (Elemental) (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
1	TP01	0.10	28	0.5	0.55	< 0.2	25	< 4.0	42	66	< 0.3	23	< 1.0	30	140
2	TP02	0.20	53	0.6	0.7	2.7	19	< 4.0	130	98	< 0.3	24	< 1.0	31	580
3	TP03	0.50	31	0.7	0.81	< 0.2	17	< 4.0	60	52	< 0.3	33	1	27	170
4	TP04	0.10	32	0.7	0.73	< 0.2	18	< 4.0	67	130	< 0.3	24	< 1.0	31	200
Screening Criteria Value			37.0	290.0	1.7	11.0	-	6.0	2400.0	200.0	1.2	130.0	250.0	410.0	3700.0
Source of Screening Criteria Value			S4UL	S4UL	S4UL	S4UL	-	S4UL	S4UL	C4SL	S4UL	S4UL	S4UL	S4UL	S4UL

SUMMARY OF LABORATORY SOIL TEST RESULTS

INORGANIC CHEMICALS & OTHERS

Job No.: 12800
Site: Wenallt Road, Tonna
Soil Type: Topsoil/Made Ground
Soil Organic Matter: 1%

No.	Location	Depth (m)	Cyanide (mg/kg)	Loss on ignition, dried solids (%)	Moisture content at 30 C (%)	Phenol (mg/kg)	pH (pH units)	Water Soluble Sulphate (g/l)	Sulphate Total as SO4 (mg/kg)	Sulphide (mg/kg)	Total Sulphur (mg/kg)	TOC by Ignition in O2 (%)	Equivalent SOM (%)	Asbestos in Soil	Asbestos Quantification (%)
1	TP01	0.10	< 1	9.80	21.00	< 1.0	6.60	0.01	720.00	3.10	600.00	5.00	8.60	Not-detected	-
2	TP02	0.20	< 1	14.50	17.00	< 1.0	7.20	0.01	960.00	< 1.0	630.00	5.50	9.46	Not-detected	-
3	TP03	0.50	< 1	8.50	10.00	< 1.0	8.10	0.01	440.00	< 1.0	310.00	3.20	5.50	Not-detected	-
4	TP04	0.10	< 1	8.30	15.00	< 1.0	8.40	0.02	450.00	46.00	460.00	4.70	8.08	Not-detected	-
Screening Criteria Value			34.0	-	-	120.0	-	-	-	-	-	-	-	-	0.001
Source of Screening Criteria Value			ATRISK	-	-	S4UL	-	-	-	-	-	-	-	-	IOM

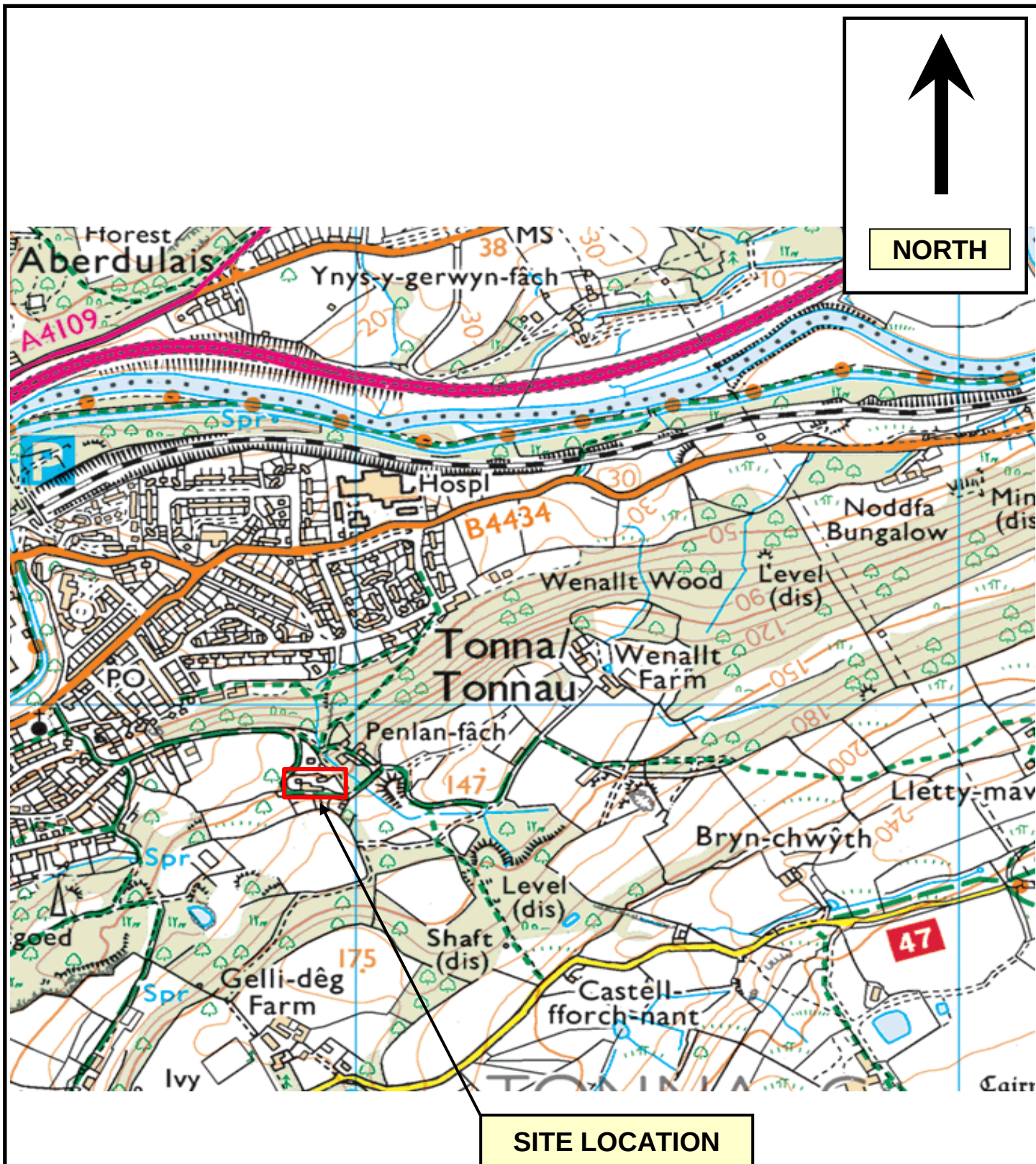
SUMMARY OF LABORATORY SOIL TEST RESULTS

POLYAROMATIC HYDROCARBONS (PAH)

Job No.: 12800
Site: Wenallt Road, Tonna
Soil Type: Topsoil/Made Ground
Soil Organic Matter: 1%

No.	Location	Depth (m)	Acenaphthene (mg/kg)	Acenaphthylene (mg/kg)	Anthracene (mg/kg)	Benzo(a)anthracene (mg/kg)	Benzo(a)pyrene (mg/kg)	Benzo(b)fluoranthene (mg/kg)	Benzo(ghi)perylene (mg/kg)	Benzo(k)fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo(ah)anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno(123cd)pyrene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)	Pyrene (mg/kg)
1	TP01	0.10	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2	TP02	0.20	< 0.05	< 0.05	< 0.05	0.54	0.49	0.79	0.36	0.31	0.81	< 0.05	0.84	< 0.05	0.28	< 0.05	0.48	0.66
3	TP03	0.50	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4	TP04	0.10	0.26	< 0.05	0.24	1.1	1.1	1.7	0.74	0.51	1.6	0.22	3.2	0.21	0.73	< 0.05	2.8	2.4
Screening Criteria Value			210.0	170.0	2400.0	7.2	2.2	2.6	320.0	77.0	15.0	0.2	280.0	170.0	27.0	2.3	95.0	620.0
Source of Screening Criteria Value			S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL

FIGURES



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Figure 1 - Site Location

12800 - Wenallt Road Tonna

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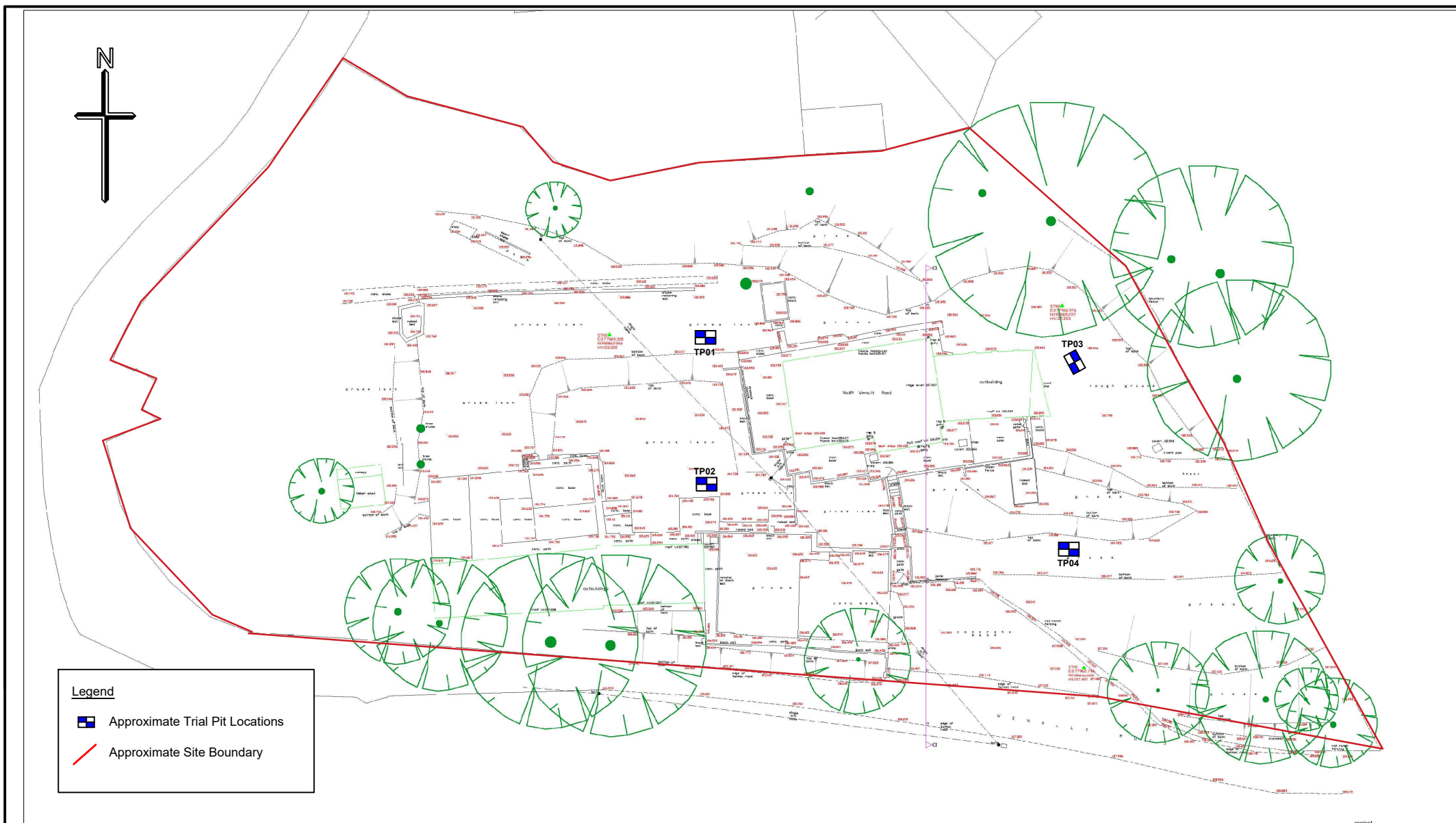


Figure 2: Site Plan

Project: Wenallt Road, Tonna

Client: Hannah and Matthew Rees

Job No.: 12800

Scale: NTS

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