

**PHASE I CONTAMINATION
ASSESSMENT**

**NANT COTTAGE, LOWER ROAD, COEDPOETH,
WREXHAM**

For: Mr Mark Davies

April 2016

R2259-R01-v1

DOCUMENT CONTROL SHEET

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Phase 1 – Contamination Assessment

Client: Mr Mark Davies

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LAND ADJACENT TO LOWER ROAD, COEDPOETH, WREXHAM

PHASE I CONTAMINATION ASSESSMENT

For Mark Davies

April 2016

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EXECUTIVE SUMMARY

Current Site Status	The site currently comprises an unused open field.
Proposed Site Use	Redevelopment to housing with associated landscaped areas.
Scope of Works	Stage 1 Contamination Assessment comprising site walkover and desk study review of readily available background information.
Site History	The site is mapped as being undeveloped agricultural land since 1872 onwards. The surrounding area has been historically agricultural land. Since 1991 residential dwellings are observed along Lower Road, opposite the site. The general surrounding within a radius of 1000m land was subject to extensive coal mining. Many of the shafts were disused by the late 1800s. The nearest shaft shown to the site was Talwrn Colliery 815m to the northeast. There are no indications on the historical maps of any shafts or spoil tips on the site or in the immediate vicinity. An area of extensive historical lead mining is located at Minera, about 600m to the west. No lead mining was undertaken in the immediate vicinity of the site, although Lead Wash area is located 220m to the west and a smelter was located about 500m to the north, northwest.
Site Setting	The site is located at Lower Road in Coedpoeth within a mixed rural and residential area setting.
Ground Conditions	Made ground is not anticipated to be widespread across the site. According to BGS no superficial deposits are recorded on site. Bedrock consist of the Cefn Rock - Massive, quartzose sandstone with subordinate and impersistent beds of mudstone and coal. (Westphalian) Carboniferous Age., the southwestern corner of the property may be underlain by Pennine Coal Measures Formation of Carboniferous age.
Mining	The Coal Authority Mining Report concludes that there are no coal mine entries on or in the vicinity of the site and there are no known potential risks associated with coal mining at the site.
Contamination Assessment	Natural sources of contamination on the site are deemed to be limited, although the site is within an area where some have a maximum radon potential of between 10% and 30%. Considering the lead mining activities locally, windblown fine dusts may have historically occurred from the lead mining and processing areas and resulting in potential aerial deposition of metal contaminants on the site. A small amount of cement sheeting, which may contain asbestos has been identified on the site. No other sources of contamination have been identified.
Conclusions and Recommendations	Due to potential hazard of historical aerial deposition of windblown contaminants from lead mining areas. It is recommended to excavate hand dug trial pits and to collect shallow soil samples from garden areas for laboratory testing for potential heavy metals contamination. The cement sheeting should be removed and appropriate radon protection measures provided for buildings. No further measures are required at this stage of assessment.

The executive summary should be read in conjunction with the main report.

1. Introduction

- 1.1. Planning permission (ref: COE P/2014/0331) has been granted by Wrexham County Borough Council (WCBC) permitting the construction of one detached dwelling with garage, landscaped areas, vehicular and pedestrian access on a parcel of land adjacent to Lower Road, Coedpoeth, Wrexham. Condition No11 of the outline planning permission requires a phased investigation to identify the extent of contamination and any measures required to remediate the site, including post-development monitoring.
- 1.2. Mr M. Davies instructed Smith Grant LLP (SGP) to undertake a Phase I Contamination Assessment prior to the purchase of the land in order to partially satisfy Condition No11 of the application (ref: COE P/2014/0331). A site location plan is provided below in Figure 1 and Drawing D01.
- 1.3. Site details are:

Table 1.1: Site Details

Address	Nant Cottage, Lower Road, Coedpoeth, Wrexham, LL11 3TP
National Grid Reference	328241 350898
Local Authority	Wrexham County Borough Council
Site Area	911m ²
Current Nature of Site	Undeveloped agricultural land
Site Access	Access from Lower Road, Coedpoeth
Proposed use	Detached dwelling, garage and landscaped areas
Planning Ref	COE P/2014/0331

- 1.4. This report describes the Phase I (desk study and site inspection) undertaken by SGP in accordance with the partial requirements of Condition no11 (see below) and a brief agreed with the client. The assessment methodology follows the framework described in the EA / DEFRA Contaminated Land Report 11: 'Model Procedures for the Management of Land Contamination' 2004.

Table 1.2: Planning Conditions relating to Land Contamination

Condition No11 COE P/2014/0331	No part of the development shall commence until a scheme to deal with potential contamination at the site has been submitted to and approved in writing by the Local Planning Authority. This scheme shall include a phased investigation approach to identify the extent of contamination and any measures required to remediate the site, including post-development monitoring.
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- 1.5. The study comprises a review of readily available information on the environmental setting of the site and the site's previous and current uses with respect to potential risks to the

environment or human health. This report contains a qualitative risk assessment and where appropriate and makes recommendations for intrusive investigations and remedial actions appropriate to the future use of the site.



Figure 1.1: Site Location

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2. Information Sources

2.1. A desk study review of the site and its history has been undertaken to establish the former land usage and the potential for any historically derived sources of chemical contamination.

2.2. The desk study comprises a review of the following consultations and information sources:

Table 2.1 Information Sources

date and reference	author and source	purpose and information content
Topography, geology, hydrogeology and hydrology		
Promap	Ordnance Survey (OS) Mapping,	General mapping information including structures, boundaries, ground features, water features etc at various scales
BGS map viewers: Geology of Britain Viewer Onshore GeoIndex	British Geological Survey (BGS)	Distribution of geological units at surface including drift deposits, bedrock and artificial ground, as well as, linear features and borehole database records
Groundwater Vulnerability 1:100,000 Map, Sheet 16, West Cheshire, 1994.	NRA – National Rivers Authority	General information on the vulnerability of groundwater to contamination.
BGS Hydrogeological Map of Clwyd and the Cheshire Basin 1:100,000, 1989.	British Geological Survey (BGS)	Hydrogeological characteristics of the principal formations.
Radon Affected Areas, http://www.ukradon.org/information/ukmaps	Public Health England (PHE)	Mapping defining radon affected areas in England & Wales
Historical data		
Historical Maps	Ordnance Survey	Historical mapping at 1:10,560, 1:10,000 and 1:2,500 scales from 1872 onwards; site setting mapping
Aerial / satellite photography	Various sources	Historical images of site of ca.1960 and from 2006 till 2009
Information review		
www.magic.gov.uk	DEFRA	Web-based interactive map containing information on nature conservation areas
Envirosearch Residential Report RS5407301_1_1	Landmark Information Group	Information about environmental features on site and 500m radius.
Coal Authority Mining Report 862635-99	Coal Authority	Information on past, current and future coal mining, mine entries and coal mining subsidence

2.3. Information from the above referenced sources has been utilised to develop a conceptual model of the site and source-pathway-receptor risk assessment.

2.4. Previous Site Investigations

2.4.1. SGP is unaware of any previous studies or site investigations relating to ground contamination having been undertaken at the site. A copy of Coal Authority Report (ref: 862635-99) and Envirosearch Residential Report (ref: RS5407301_1_1) have been provided by the client.

2.5. Site Inspection

2.5.1. A site inspection was carried out by C. Salwa of SGP on 1st April, 2016. The inspection comprised a site walkover over all accessible areas of the site and the immediate surrounds. A photographic record of salient features is provided in Appendix A.

3. Development History and Current Status

3.1. Historical Development

3.1.1. The history of the site has been established by reviewing the historical Ordnance Survey maps and aerial photography of the area, collected as part of the desk study information.

3.1.2. A summary of significant historical features, developments, and land uses identified is provided in Table 3.1 below. Copies of selected maps are provided in Drawings D02-D04 and aerial photograph in Drawing D05.

Table 3.1: Summary of Relevant Development History

Map	Site	Surrounds (all distances are approximate)
1872-1887 1:2,500 Drawing D02	Undeveloped agricultural land.	Immediate adjoining landuse is agricultural comprising the outskirts of the village of Coedpoeth. Minera lead mine is located 600m west of the site. An area about 500m to the northwest is known as The Smelt, presumably associated with the former presence of a lead smelter in the area. Quarry is shown approximately 400m east, southeast of the site. Talwrn Colliery, with associated shafts and spoil tips, and an adjoining smithy, lies ca. 815m to the northeast
1879 1:10,560	No significant changes	Cemetery is shown 200m north-northwest of the site.
1899 1:2,500	No significant changes	Feature named "Lead Wash" can be seen on Nant Farm 340m west of the site. The quarry to the east-southeast is named "old quarry" on the map.
1900 1:10,560	A structure can be seen along eastern border of the site. Probably stone shed for storage.	No significant changes
1912 1:2,500 Drawing D03	No significant changes	"Lead Wash" area extended, can be seen on Nant Farm 220m west of the site. Talwrn Colliery is marked as disused.
1914 1:10,560	No significant changes	"Lead Wash" is shown as "New Minera Lead Mine. Talwrn Colliery described as disused.
1938 1:10,560	No significant changes	No significant changes
ca. 1960 Aerial photo	Stone shed can be seen along the eastern border of the site and another two small	No significant changes

Map	Site	Surrounds (all distances are approximate)
	sheds, possibly, stone structures on the southern part of the site.	
1963-1964 1:10,560 Drawing 04	No significant changes	No significant changes
1974-1979 1:10,000	No significant changes	No significant changes
1976 1:10,000	No significant changes	New Minera Lead Mine described as disused. Talwrn Colliery is not shown on the map.
1976-1993 1:10,000	No significant changes	No significant changes
1987 1:10,000	No significant changes	No significant changes
1976-1991 1:10,000	No significant changes	Residential dwellings are shown at Lower Road opposite the site.
1987 1:10,000 <i>Partial</i>	No significant changes	No significant changes
2000 1:10,000	No significant changes	New Minera Lead Mine appears as reclaimed land.
2006 Satellite image	No significant changes	No significant changes
2007 1:10,000	No significant changes	No significant changes
2009 Satellite image	Stone sheds on site are not shown.	No significant changes

3.2. Present Land Condition

3.2.1. A summary of existing significant features noted during SGP's site inspection, and examination of contemporary records, is presented below.

Table 3.2: Present Land Condition

Site Description	The site lies in a predominantly residential/agricultural area, and currently is not occupied. The site consists of a rectangular parcel of land, trending approximately north-south Measuring approximately 22mx42m the site extends approximately 911m ² in area. The site is generally uneven, terraced, and mounded, and slopes towards the west from Lower Road towards the river Clywedog valley.
Access	Currently the site can be accessed on foot through broken wooden panel hoarding along the northern boundary of the site. The historical access off the Lower Road and through the existing stone wall currently is overgrown and not passable. It is proposed to reuse this access for the proposed development.

Boundaries	North: Wooden panel hoarding along boundary with neighbouring land with a residential dwelling. East: Old stone wall along the boundary with Lower Road. South: Overgrown with shrubs, trees and brambles. West: Overgrown with shrub and brambles with remnants of an old stone wall.
Structures	Currently there no structures on site but stone rubble of historical sheds probably demolished before 2009. According to the conversation with Mark Davies during site walkover, the sheds were used for log storage and animals.
Vegetation	The site is overgrown with shrubs, trees and brambles. At the time of site walkover the site was cleared up and many trees cut down.
Rights of Way	None identified.
Services and Utilities	High voltage overhead was observed along the southern boundary of the site.

3.3. Historical Summary

3.3.1. The site is mapped as being undeveloped agricultural land since 1872 onwards

3.3.2. The surrounding area has been historically agricultural land. Since 1991 residential dwellings are observed along Lower Road, opposite the site.

3.3.3. The general surrounding within a radius of 1000m land was subject to extensive coal mining. Many of the shafts were disused by the late 1800s. The nearest shaft / spoil tip shown to the site was Talwrn Colliery 815m to the northeast. There are no indications on the historical maps of any shafts or spoil tips on the site or in the immediate vicinity.

3.3.4. An area of extensive historical lead mining is located at Minera, about 600m to the west. No lead mining was undertaken in the immediate vicinity of the site, although Lead Wash area is located 220m to the west and a smelter was located about 500m to the north-northwest.

3.3.5. A cemetery is located ca. 200m north-northwest from the site since 1899.

3.4. Adequacy of Information

3.4.1. Whilst there are some gaps in the historical map coverage it is considered that the available mapping and other information provides adequate coverage of site and its immediate surroundings to inform the assessment of potential ground contamination.

4. Site Characterisation

4.1. The environmental setting of the site is described in Table 4.1 below:

Table 4.1: Environmental Setting

Site Setting	The site is located at Lower Road in Coedpoeth within a mixed rural and residential area setting. There are residential low-rise dwellings with associated gardens to the east of Lower Road. To the west of Lower Road the area is undeveloped land with occasional buildings and sheds. The site access is off Lower Road to the west via a gate.
Topography	The site is shown by Ordnance Survey mapping to be located at between about 225m on the northeast corner and 215m aod on the southwest corner, sloping from Lower Road on the northeast to the southwest. This is consistent with the presence of River Clywedog valley west of the site.
Ground Conditions / Geology	Reference to published geological information on the area indicates the following: • Made ground is not anticipated to be widespread across the site. • According to BGS no superficial deposits are recorded on site. • Cefn Rock - Massive, quartzose sandstone with subordinate and impersistent beds of mudstone and coal. (Westphalian) Carboniferous Age. • Southwestern corner of the property may be underlain by Pennine Coal Measures Formation of Carboniferous age. An inferred fault trending north-south is indicated on BGS map.
Hydrogeology / Groundwater	According to NRA Groundwater Vulnerability Map the area is underlain by Minor Aquifer (variably permeable) of fractured or potentially fractured rocks. According to BGS Hydrogeological Map the area is underlain by the Coal Measures shales and sandstones with very low primary permeabilities. However, water occurs in the sandstones in joints and fractures.
Hydrology / Drainage	The site appeared to be relatively free draining at the time of the visit which took place in dry weather. No storm drains were evident on the site itself. Storm water is likely to either free drain through the soils or surface run-off. No surface watercourses are located in the immediate vicinity of the site The nearest surface watercourse is the River Clywedog that flows towards the southeast, approximately 90m to the west of the site. The drainage is westwards towards the River Clywedog.
Radon	The maps provided by Public Health England show the site to be within an area of elevated radon potential where some homes have a maximum radon potential of between 10% and 30 %.
Ecology and Conservation	No invasive plants noted. No other features identified.
Mining	The Coal Authority Mining Report concludes that there are no coal mine entries on or in the vicinity of the site and there are no known potential risks associated with coal mining at the site

Landfilling	There is no indication of any excavation or landfilling activities having taken place on either the site or in the immediate close proximity. Natural strata are expected to be present at shallow depth. Reference to historical maps indicates there is historical landfill 400m to the east, southeast of the site. The landfill is a historical quarry. It is unlikely that any contamination path exists between the landfill and the site. No other landfills were identified according to Envirosearch Report.
Industrial Land use	According to the Envirosearch Report the site is located within an agricultural-residential area with no industrial activities in the immediate vicinity.
Risk of Gaseous Contamination	Following the guidance given in the paper "A pragmatic approach to ground gas risk assessment for the 21st Century" Card and Wilson, 2011 and the CIRIA Report 665 the provisional assessment of the ground gas impacting the site establishes the following: • No credible sources or pathways for landfill gas migration from an off site landfill have been identified. • The site has not been a registered landfill • The Made Ground is not expected to be 5m deep or an average of 3m of thickness • The site is not located on a carbonate rich rock that can produce carbon dioxide • Radon protection measures are recommended for the site • The site does not lie on a potential naturally organic soil or humic or degradable Made Ground soil As such it is considered that gas monitoring is not required at the site.
Potentially Sensitive Land Uses	The site is not located in close proximity to any environmentally sensitive land uses.

4.2. Mining

4.2.1. The site is partially underlain by Coal Measures and accordingly a Coal Authority Mining Report was obtained to determine whether the site is located in an area which is likely to be impacted by historical coal mining. The report concludes that there are no coal mine entries on or in the vicinity of the site and there are no known potential risks associated with coal mining at the site.

4.2.2. The key findings of the Coal Authority Report are paraphrased below and detailed in Appendix C.

Table 4.3: Summary of Coal Authority report

Issue	Summary
Past underground mining	The property is not within the zone of likely physical influence on the surface from past underground coal workings.
Present underground mining	The property is not within the zone of likely physical influence on the surface from any present underground coal workings.

Issue	Summary
Future underground mining	The property is not within a geographical area for which a licence to extract coal by underground methods is awaiting determination by the Coal Authority neither a license has been granted. The property is not within the zone of likely physical influence at the surface from plans of future workings.
Mine entries	There is no knowledge of any mine entries within, or within 20m of, the boundary of the property.
Coal mining geology	There are no records of any fault or other line of weakness at the surface as having affected the stability of the property.
Opencast coal mining	The property is not located within the geographical boundary of past, present or future opencast site.
Subsidence	The records do not disclose any damage notice or claim having been given, made or pursued in respect of the property since 1 January 1984.

5. Preliminary Conceptual Model and Risk Assessment

5.1. Methodology

5.1.1. Information from the desk study has been used to identify the likely source-pathway-target relationships that may exist at the site during and following the proposed development. Principal factors that may determine potential sources of contaminants at the site, receptor vulnerability and potential pathways have been identified and each assessed in turn to derive a Conceptual Site Model (CSM).

5.2. Site Source Risk Assessment

5.2.1. The historical mapping, satellite imagery and observations during the site inspection indicate the site to have remained undeveloped from 1872 onwards. No built development apart from sheds or industrial activities have been identified as occurring on the site.

5.2.2. Natural sources of contamination on the site are deemed to be limited, although the site is within an area where some have a maximum radon potential of between 10% and 30%.

5.2.3. Made Ground is not anticipated to be widespread across the site.

5.2.4. The site is located at Lower Road in Coedpoeth within a mixed rural and residential area setting.

5.3. Off-Site Sources & Migration Pathways

5.3.1. The historical mapping indicate location of the New Minera Lead Mine approximately 600m west and northwest of the site, and mine's lead wash area about 220m west of the site.

5.3.2. In accord to the information obtained from available sources on internet (WCBC) the mine was shut down in 1914 and the land reclaimed in 2000 approximately according to the historical mapping.

5.3.3. Free internet available sources indicate contamination with lead and zinc in proximity of former mine of Minera.

5.3.4. A lead smelter is understood to have been located about 500m north, northwest of the site in the 1800s.

5.3.5. There is information on local press available online about contamination of heavy metals between 500m and 600m north, northwest of the site at Smelter Road and Smelt Lane.

5.3.6. Historical landfill is located approximately 400m eastward of the site. The landfill is a former quarry. It is likely to contain inert or potentially contaminative materials. The presence of infilled

land does not necessarily mean there is any cause for concern considering the distance to the site.

5.4. Potential contamination migration towards the site

5.4.1. Windblow of fine dusts may have historically occurred from the lead mining and processing areas resulting in potential aerial deposition of contaminants over a wide area, potentially including the site. No sources of current migration of contamination onto the site have been identified.

5.5. Human Health Risk Assessment

5.5.1. Potential hazards posed by the site:

- No hazards have been identified from outside the site

5.5.2. Potential hazards from outside the site:

- Toxic levels to humans of cadmium, zinc, lead, chromium and copper within the near surface soils;
- Potential toxic levels to plants of zinc within near-surface soils;
- Radon gas migrating from the ground.

5.6. Potential Receptors

5.6.1. The proposed use of the site is housing with associated landscaped areas; this is regarded as being potentially sensitive with respect to ground contamination. The principal vulnerable receptors under the proposed development and use of the site are therefore considered to be future occupants, in particular infants and children, who are more sensitive to the potential effects of common ground contaminants, particularly lead.

5.6.2. Other potential vulnerable receptors will be construction workers who may be exposed to likely contaminants during preparatory and construction works.

5.6.3. The following receptors with regard to the environment and controlled waters have been identified at the site:

- Controlled Waters – the River Clywedog 90m to the west of the site (Receiving Stream).
- Controlled Waters – the Secondary A aquifer beneath the site.

5.7. Pathways

5.7.1. If the soils on the site are found to be contaminated the future residents may be exposed to such contaminants via direct contact, ingestion or inhalation of soils and dust. Future residents may also be exposed to the inhalation of radon gas via migration into buildings from the underlying natural geology.

5.7.2. Windblown contaminants presumably affect much wider area. The minerals, galena and sphalerite, are sulphides of very low solubility. Even if soils on the site are impacted, these are not likely to result in a potential pollution source in the wide local context.

5.8. Site Conceptual Model

5.8.1. Potential pollution linkages between the identified contamination sources and existing and future receptors are summarised in Table 5.1 below:

Table 5.1: Conceptual Site Model

Receptor	Source / Contaminant	Pathway / Exposure	Pollutant Linkage (in absence of mitigation)	Further Investigation
1. Humans – construction workers / future maintenance engineers	Metals / metalloids / asbestos / PAHs	Dermal contact / ingestion / inhalation – short term exposure	Unlikely – made ground is not anticipated to be present on the site with the exception of the constructed access road. Possibility of metal impact through windblown dust.	Site investigation including shallow soil sampling to determine the shallow metal content of garden soils
2. Humans – future site visitors / workers	Metals / metalloids / asbestos / PAHs	Dermal contact / ingestion / inhalation	Unlikely – made ground is not anticipated to be present on the site with the exception of the constructed access road. Possibility of metal impact through windblown dust.	Site investigation including shallow soil sampling to determine the shallow metal content of garden soils
	Ground gas (methane, carbon dioxide)	Accumulation within voids, confined spaces and service runs	Very unlikely – no sources identified	No action required
	Radon gas from natural ground	Accumulation within voids, confined spaces and service runs	Possible – site is identified as being within an area where between 10% and 30% of homes are above the radon action level.	Full radon protection measures are required within new buildings and extensions.
3. Property / services	Ground gas (methane, carbon dioxide)	Accumulation within voids, confined spaces and service runs	Very Unlikely – no sources identified	No action required
	pH, sulphate	Chemical attack of buried concrete and plastic materials	Unlikely – made ground or material with high sulphate concentrations not anticipated	The foundation designer should be consulted on any requirements for pH or sulphate testing.
4. Vegetation / landscaping	Leachable metals / metalloids may be present within made ground / natural soils	Plant uptake	Unlikely – made ground is not anticipated to be present on the site. Possibility of metal impact through windblown dust.	Site investigation including shallow soil sampling to determine the shallow metal content of garden soils
5. Ecosystems / protected species & habitats n/a – no ecosystems / protected habitats in immediate vicinity				
6. Surface waters (River Clywedog to the west)	Leachable metals / metalloids	Migration via shallow groundwater / surface water run-off into downgradient stream	Unlikely – Significant mobile contamination on the site considered unlikely	No action required
7. Groundwater – Potential aquifer within bedrock	Leachable metals / metalloids	Migration via saturated zone	Unlikely – significant mobile contamination on site considered unlikely.	No action required.

6. Conclusions and Recommendations

6.1. Conclusions

- 6.1.1. The historical mapping, satellite imagery and observations during the site inspection indicate the site to have remained undeveloped from 1872 onwards.
- 6.1.2. No built development or industrial activities have been identified as occurring on the site apart from stone sheds, currently demolished. A small pile of residual cement sheeting may contain asbestos. Made ground is not anticipated to have considerable thickness at the site.
- 6.1.3. Natural sources of contamination on the site are deemed to be limited, although the site is within an area where some have a maximum radon potential of between 10% and 30%.
- 6.1.4. The surrounding land is a mix of residential and agricultural use. Historically there is the Minera Lead Mine approximately 600m west and northwest of the site, and mine's lead wash area about 220m to the west of the site. The mine was shut down in 1914. A lead smelter is understood to have been located about 500m north, northwest of the site in 1800s.
- 6.1.5. Considering the lead mining and processing activities locally, aerial deposition of fine dusts may have historically occurred from the lead mining areas and resulting in potential aerial deposition of contaminants on the site.
- 6.1.6. No sources of current migration of contamination onto the site have been identified.
- 6.1.7. Historical landfill located approximately 400m eastward of the site is deemed very unlikely to pose a risk to the site as well as historical Talwrn colliery located about 815m northeast of the site. However radon ingress into dwellings is also a potential hazard.
- 6.1.8. The Coal Authority Mining Report concludes that there are no coal mine entries on or in the vicinity of the site and there are no known potential risks associated with coal mining at the site.
- 6.1.9. The site is therefore currently assessed as posing a potential low to moderate hazard from potentially toxic levels of heavy metals. If present, these are only considered likely to impact particularly sensitive receptors (infants, children and fetuses).

6.2. Recommendations

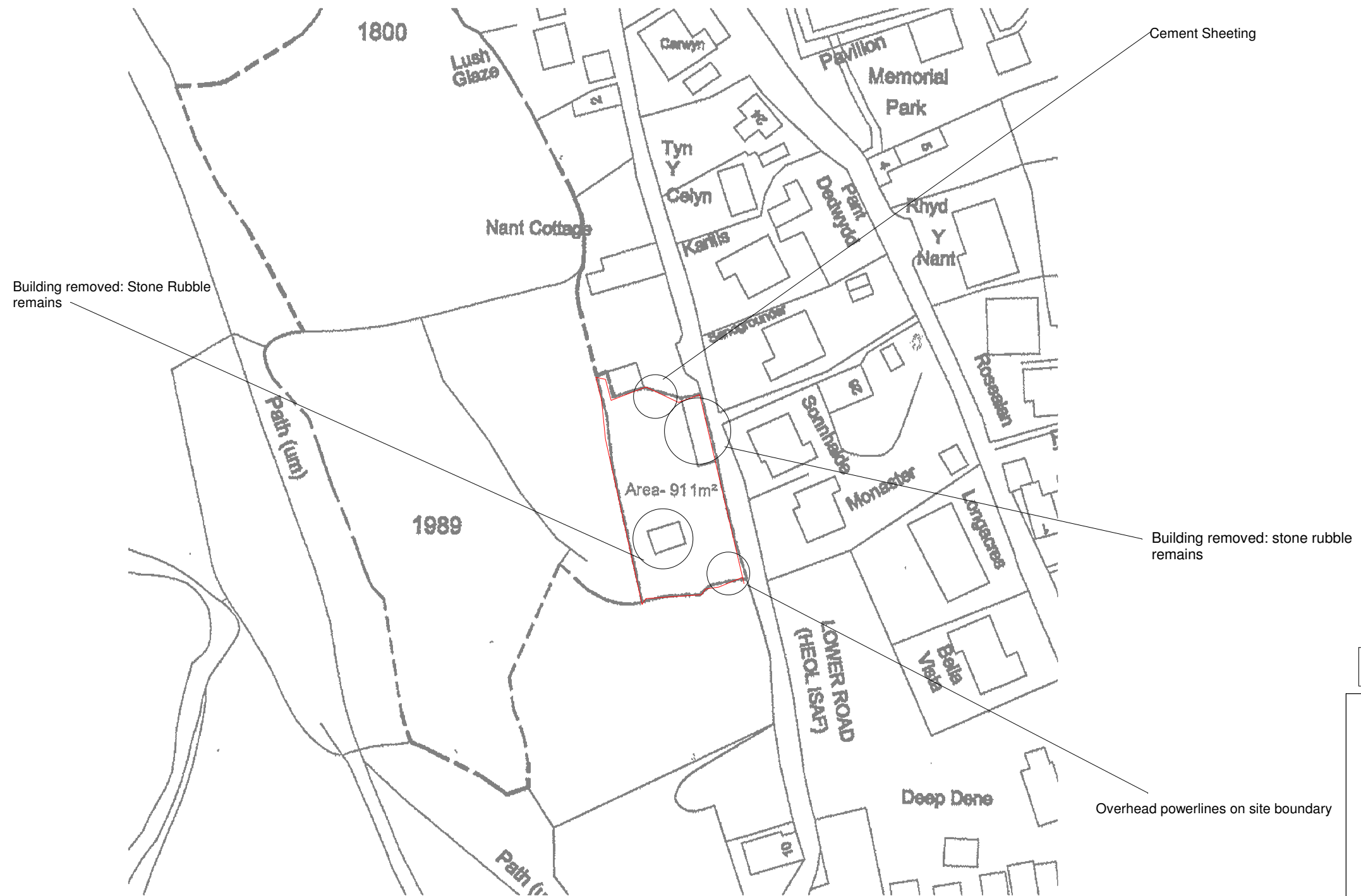
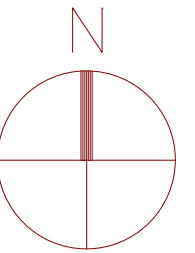
- 6.2.1. Due to potential hazard of historical aerial deposition of windblown contaminants from lead mining and processing areas. It is recommended to excavate hand dug trial pits and to collect shallow soil samples for laboratory testing for potential heavy metals contamination (lead, cadmium & zinc).

- 6.2.2. If substantial regrading of the site, or building up of levels is required, then, as an alternative only soils which will make up the final upper 600mm of future garden areas could be tested in stockpile, or following placement. The former is recommended so that provision for accommodation of 600mm thickness of soils form an alternative source can be made at an early stage if required.
- 6.2.3. The cement sheeting waste on the site should be assumed to contain asbestos (unless testing demonstrates otherwise). And should be removed to a suitable permitted waste disposal facility before works commence on the site.
- 6.2.4. Full radon protection measures should be provided for the planned dwelling.
- 6.2.5. No further measures are required at this stage of assessment.

Limitations

- 6.2.6. SGP reserves the right to alter any of the foregoing information in the event of new information being disclosed or provided and in the light of changes to legislation, guidelines and responses by the statutory and regulatory authorities.
- 6.2.7. This report partially reviews and relies upon information provided by others. Smith Grant LLP accepts no responsibility for advice given on the basis of incorrect factual information provided to it. It was not possible to carry out an inspection of the internal parts of the site; therefore conclusions drawn from observations of the current status of the site should be treated with caution.
- 6.2.8. This report has been prepared by Smith Grant LLP, for the sole and exclusive use of Mr Mark Davies. The benefit of this report may not be assigned to any other party without the prior agreement in writing of Smith Grant LLP. Reasonable skill, care and diligence have been exercised within the timescale and budget available, and in accordance with the technical requirements of the brief.
- 6.2.9. Notwithstanding the efforts made by the professional team in undertaking the assessment and preparing this report, it is possible that other ground conditions and contamination as yet undetected may exist. Reliance on the findings of this report must therefore be limited accordingly. Such reliance must be based on the whole report and not on extracts which may lead to incomplete or incorrect conclusions when taken out of context.

DRAWINGS



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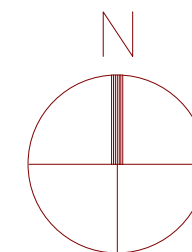
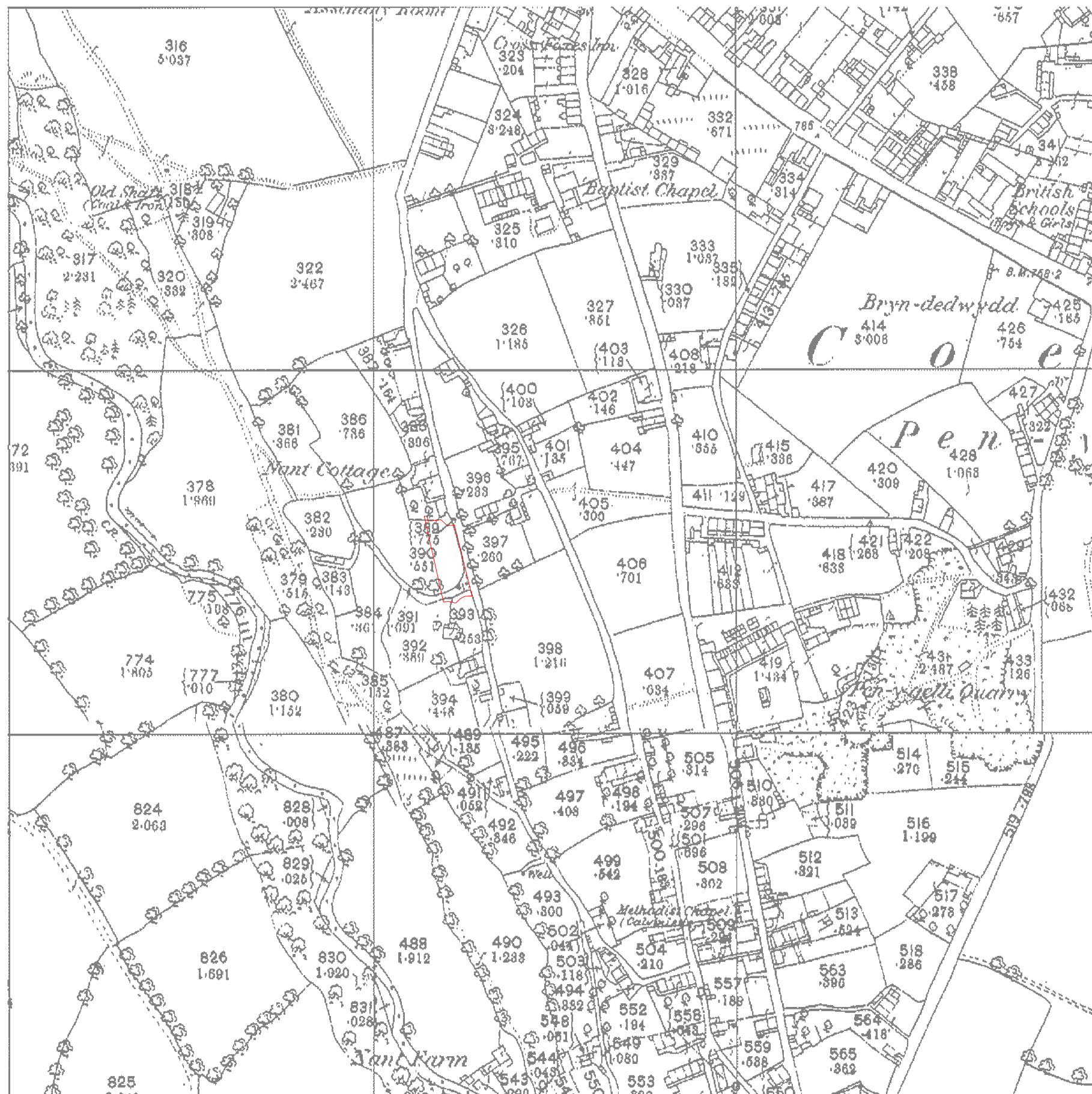
Project:
Lower Road,
Coedpoeth

Drawing:
Site Location & Features

Drawn: BJT	Checked: CS
---------------	----------------

Date: 05/04/2016	Scale:
---------------------	--------

Job No: R2259	Drg No: D01
------------------	----------------



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Smith Grant LLP
Station House, Station Road
Ruabon, Wrexham LL14 6DL

Tel: 01978 822367
Fax: 01978 8247182

www.smithgrant.co.uk
email: consult@smithgrant.co.uk

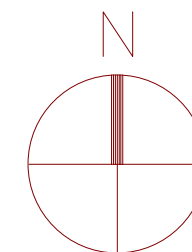
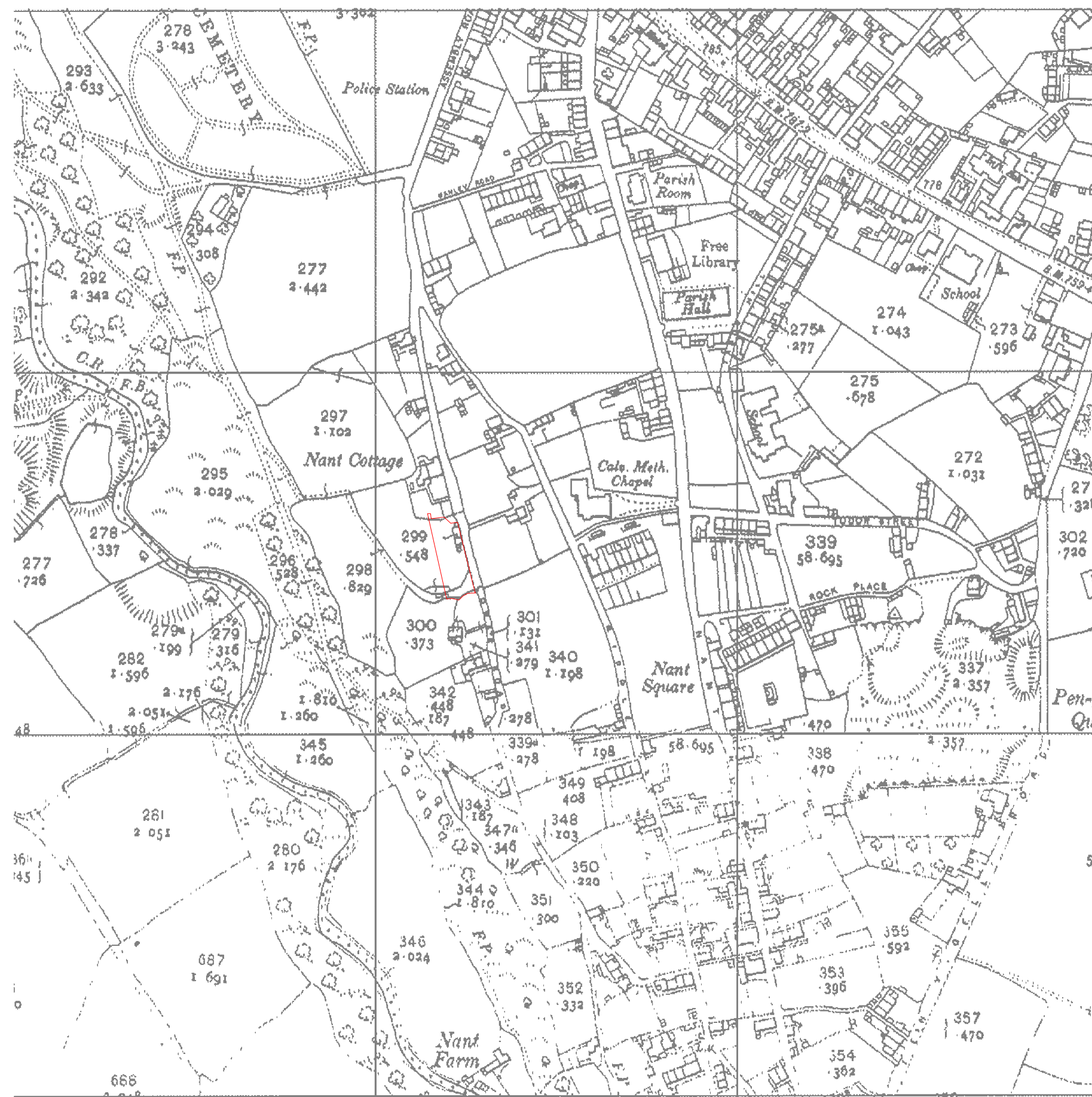
Project:
Lower Road,
Coedpoeth

Drawing:
Historical Plan 1872-1887

Drawn: BJT
Checked: CS

Date: 05/04/2016
Scale: 1:2,500

Job No: R2259
Drg No: D02



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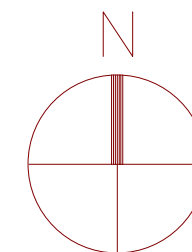
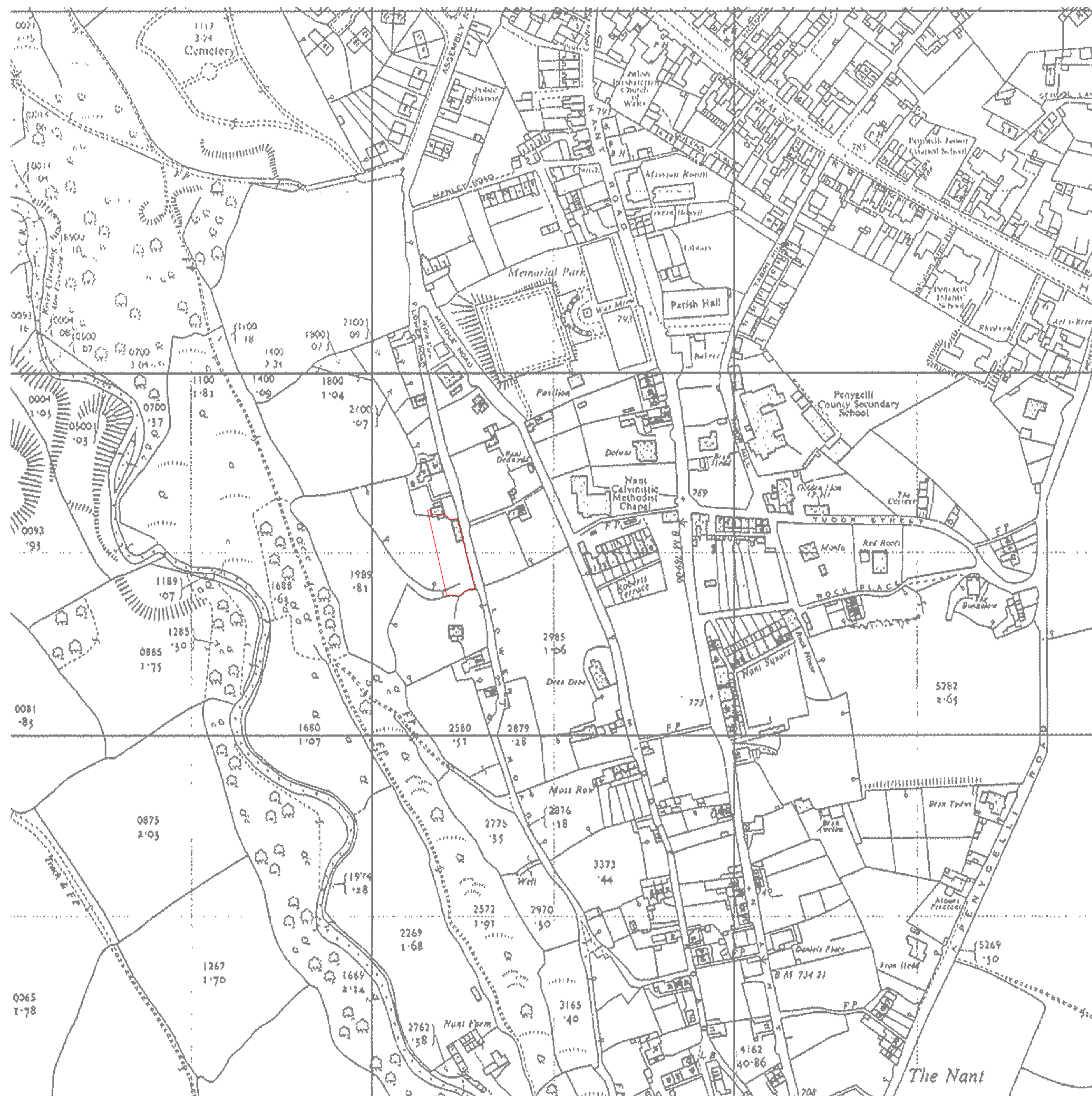
Tel: 01978 822367
Fax: 01978 8247182

www.smithgrant.co.uk
email: consult@smithgrant.co.uk

Project:
Lower Road,
Coedpoeth

Drawing:
1912 Historical Plan

Drawn: BJT	Checked: CS
Date: 05/04/2016	Scale: 1:2,500
Job No: R2259	Drg No: D03



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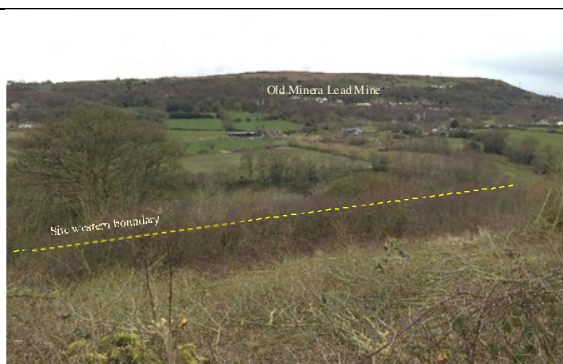
www.smithgrant.co.uk
email: consult@smithgrant.co.uk

Project:	
Lower Road, Coedpoeth	
Drawing:	
Historical Plan 1963-1964	
Drawn:	Checked:
BJT	CS
Date:	Scale:
05/04/2016	1:2,500
Job No:	Drg No:
R2259	D04

APPENDIX A

Photographic Record

Site Walkover Photo log. Lower Road, Coedpoeth – 01.04.2016



1. View west from Lower Road; brambles along western boundary and Minera Lead Mine in the background.



2. Overgrown site access from Lower Road.



3. Stone wall along the eastern boundary.



4. Temporary access to the site through a wooden hoarding from the north.



5. View southeast towards eastern boundary from centre of the site.



6. View northwest towards northern boundary from centre of the site.



7. View towards south from the north.
Central part of the plot.



8. Stone rubbles of an old shed existing in
the central part of the site.



9. View southeast from the southern part of
the site.



10. View towards west from the central part
of the site.



11. View north from the central part of the
site.



12. Fibre cement roofing sheet used as
provisional hoarding on the northern
boundary.

APPENDIX B

Coal Authority Report

The Coal Authority,
Mining Reports Office,
200 ICHFIELD LANE,
BERRY HILL,
MANSFIELD,
NOTTINGHAMSHIRE,
NG18 4RG
Telephone: 0845 762 6848
DX 716176 MANSFIELD 5

The COAL AUTHORITY



The Coal Authority	
Cost	£16.17
Plus V.A.T.	£2.83
Total Received	£19.00
V.A.T. Reg Number	589 585 068

STANLEY WILLIAMS & CO.,
SOLICITORS,
DX 26652 WREXHAM

This matter is being dealt with by Stephen Richardson

Our Ref: 862635-99

Your Ref: S PC RANGLES

Date: 15 July 1999

RECEIVED

10 JUL 1999

Dear Sir,

Coal Mining Report NANT COTTAGE, LOWER ROAD, COEDPOETH, WREXHAM, CLWYD, LL11 3TP

I refer to the enquiry dated 14th July 1999 in connection with the above.

This report is based on and limited to the records in the possession of The Coal Authority at the time the search is answered.

Past Underground Mining

According to the records in our possession, the property is not within the zone of likely physical influence on the surface from past underground coal workings.

However you may wish to know that the property is in an area where coal is believed to exist at or close to the surface that may have been worked at some time in the past.

Present Underground Mining

The property is not within the zone of likely physical influence on the surface from any present underground coal workings.

Future Underground Mining

The property is not within a geographical area for which a licence to extract coal by underground methods is awaiting determination by the Coal Authority.

The property is not within a geographical area for which a licence to extract coal by underground methods has been granted.

The property is not within the zone of likely physical influence at the surface from plans of future workings in our possession.

However reserves of coal exist in the locality which could be worked at some time in the future subject to feasibility, licences, and planning consents.



Crown Copyright. Quoted scale is approximate.

SCALE: 1:2500

This map is reproduced from the Ordnance Survey material by The Coal Authority [or division thereof] with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number: AL51060A001.

This is a plan of the boundaries of the property in respect of which this report has been prepared. It is the responsibility of the user to ensure that the boundaries shown correspond with those of the property.

APPROXIMATE POSITION OF ENQUIRY BOUNDARY SHOWN



We have no record of any notice of the risk of the land being affected by subsidence being given under S.46 of the Coal Mining Subsidence Act 1991.

Shafts and Adits

We have no knowledge of any mine entries within, or within 20 metres of, the boundary of the property.

Surface Geology

Records in our possession do not disclose any fault or other line of weakness at the surface as having affected the stability of the property.

Past Opencast Mining

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

Present Opencast Mining

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

Future Opencast Mining

The property is not within 800 metres of the geographical boundary of an opencast site for which a licence to extract coal by opencast methods is awaiting determination.

Subsidence

The records in our possession do not disclose any damage notice or claim having been given, made or pursued in respect of the property since 1 January 1984.

The records in our possession do not disclose any current "Stop Notice" affecting the property.

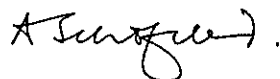
The records in our possession do not show any request having been made to execute preventative works under S.33 of the Coal Mining Subsidence Act 1991.

Additional Remarks

These replies are prepared in accordance with the Law Society's Guidance Notes 1998.

We acknowledge the receipt of your remittance in payment of our fee.

Yours faithfully



Albert Schofield

Director of Operations

APPENDIX C

Envirosearch Residential Report

Supplied By:



A report on the site history and other environmental factors affecting:

Nant Cottage, Lower Road, Coedpoeth, Wrexham, Clwyd LL11 3TP
National Grid Reference (site): 328230 350950

Report Reference
RS5407301_1_1

Date
26 July 2004

Prepared For
Geoffrey Morris Ashton, 39 King Street, Wrexham LL11 1HR

Customer Reference
MD_ESR

A Landmark Information Group Product

Incorporating optional contaminated land insurance from



Recommended by
The Society of Licensed Conveyancers





in association with



Professional Opinion on environmental risk

PASSED

In the professional opinion of Wilbourn Associates the level of environmental risk associated with the information disclosed in the Envirosearch Residential report RS5407301_1_1 dated 26 July 2004 for

**Nant Cottage, Lower Road
Coedpoeth
Wrexham
Clwyd
LL11 3TP**

- 1) is unlikely to have an adverse effect on the value of the property as compared to similar properties in similar locations or on its use as a domestic dwelling;
- 2) is not such that the property would be designated "contaminated land" within the meaning of Part IIA of the Environmental Protection Act 1990.

This professional opinion does not extend to Parts 3 and 4 of the associated Envirosearch Residential report and should always be read in conjunction with the full text of that report. No physical site inspection or survey has been carried out or is proposed.

**Philip E. Wilbourn BSc FRICS
Chartered Environmental Surveyor**



This professional opinion forms part of the Envirosearch Residential report and is subject to the associated Terms and Conditions of Business in force from time to time. Further information on the datasets examined in formulating this professional opinion is included in the Envirosearch Residential Practitioner Guide.

OTHER FACTORS: Please note that Parts 3 and 4 of the associated Envirosearch Residential report disclose:

- 3.1 An area which may be affected by coal mining activity
- 3.3 An area of Subsidence Hazard
- 3.4 a) An area affected by radon
- 3.4 b) An area where basic radon protective measures should be installed

A client may want these matters to be investigated before proceeding further. Please refer to the relevant section in the report.



INSURANCE cover for loss of value and any costs arising out of unknown and unforeseen risks is **RECOMMENDED**. Please refer to the insurance section at the rear of the associated Envirosearch Residential report for further details.

CONTENTS OF THE REPORT - *The Report is divided into five sections***Maps**

The accurate large-scale Ordnance Survey map confirms the location of the subject property. Please note any descriptive text that may be relevant. The second Location Map is a street map of the neighbourhood, showing 25, 250 and 500 metre radii centred on the property. The Information Map shows the location of any features reported under parts 1, 2.2, 2.3, 4.3 and 4.4. The Flood Map shows flood data up to a radius of 500 metres.

Enquiries and Replies

Main report findings, with information covering three distinct bands of 25 metres, 250 metres and 500 metres. Part 1 of the report provides information up to 500 metres. Part 2 provides information up to 250 metres. Part 3 and Part 4 provide information on an area within 25 metres of the centre of the search unless otherwise stated. The identification of an environmental factor in the report does not necessarily mean that it poses any direct or indirect threat to the subject property.

Useful Contacts

Contact details of useful organisations that should be able to provide further information.

Please contact our helpdesk on 01392 441723 or email helpline@landmark-information.co.uk if you require assistance.

Useful Information

This provides a short guide to assist anyone reading the report to understand the information it contains. Detailed guidance notes are contained in the Practitioner Guide which is available free of charge. Please contact your agent or email helpline@landmark-information.co.uk to obtain a copy.

Insurance

Information on the Envirosearch Residential Insurance option, including a proposal form together with details of cover and pricing.

Houses registered between 1 April 1999 - 31 December 2002 and covered by the NHBC Buildmark scheme probably have insurance against certain costs if contamination occurs within ten years of their construction. From 1 January 2003, NHBC will only provide this cover if building control has been carried out by NHBC Building Control Services Limited. However, insurance covering unknown and unforeseen contamination risks is always recommended by Landmark. Please refer to the Insurance section for information on the Envirosearch Residential Insurance policy from AIG, including a proposal form and details of cover and pricing.

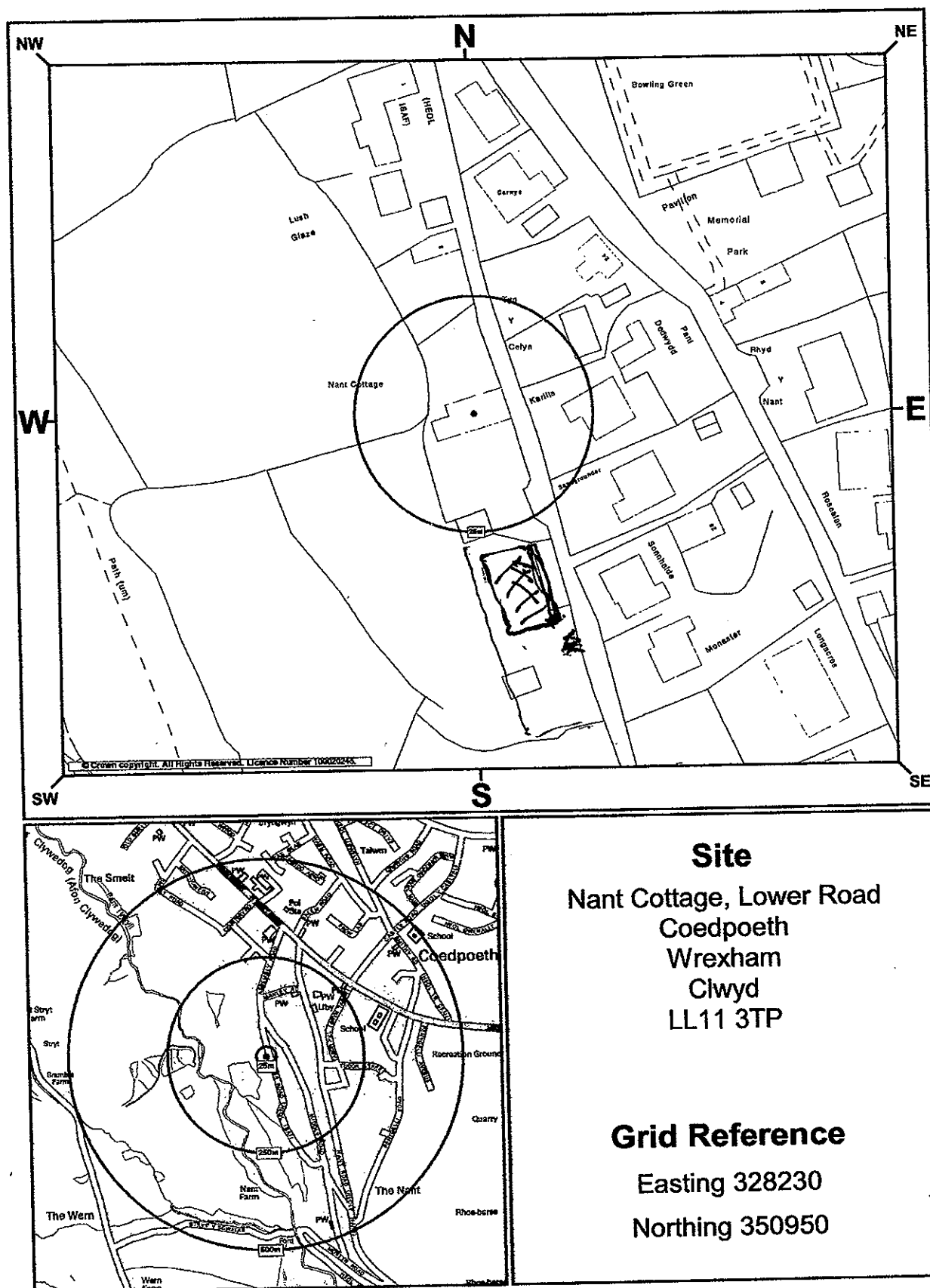
THE PURPOSE AND SCOPE OF THE REPORT

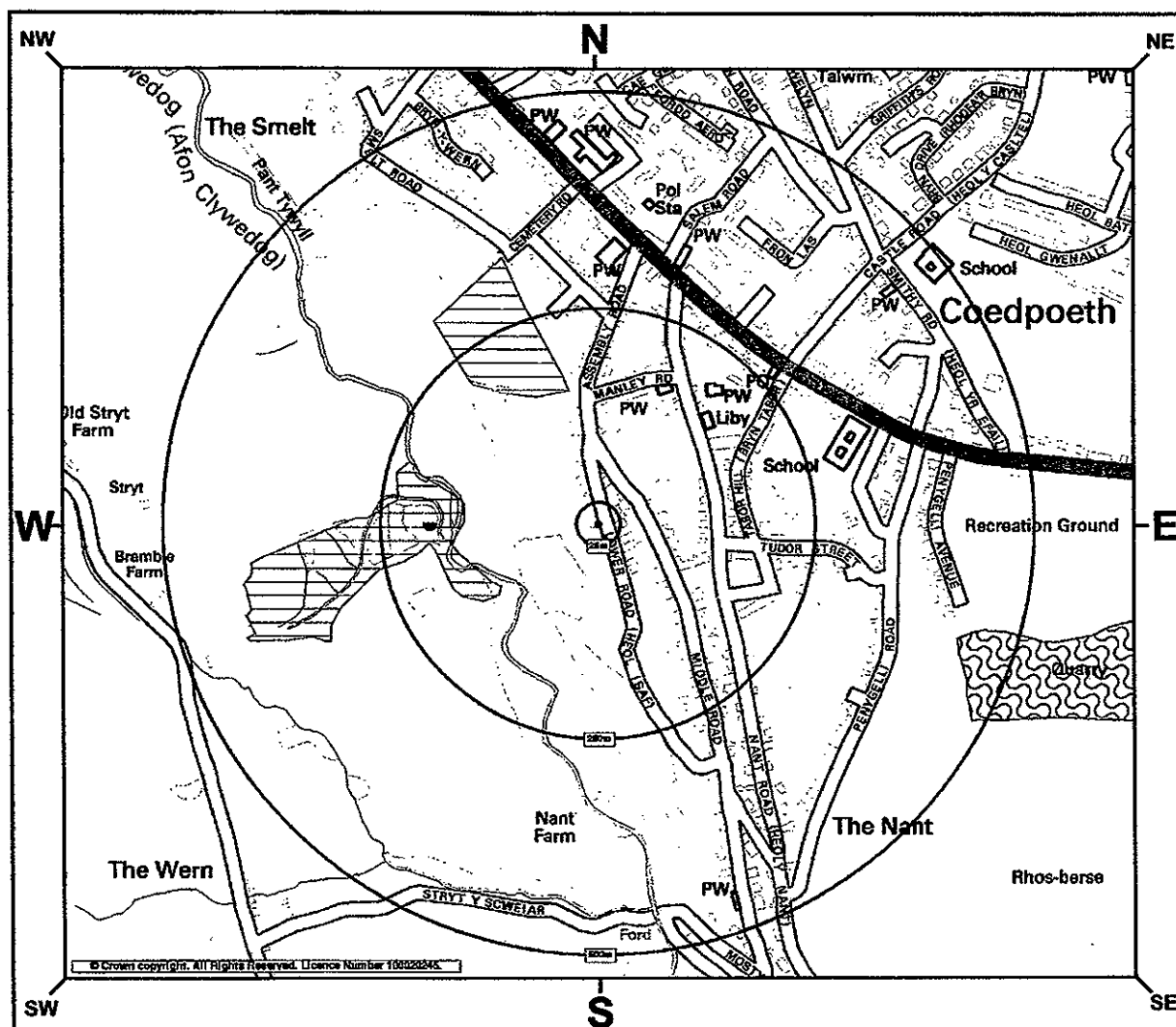
The report is designed to satisfy the concerns raised by the Law Society warning card and has been prepared to assist conveyancing professionals who may be advising clients when they sell or buy a property, obtain a mortgage, seek further mortgage advice, or commence any building works. It is designed to bring information to their attention and help them decide whether they need to seek any further specialist advice. As the report is so detailed, this information can cause concern, but professional advisors will see that further action is suggested on all issues that have been identified.

LIMITATIONS

This report has been published by Landmark Information Group Limited ("Landmark") and is supplied subject to our Terms and Conditions of Business, which will have been brought to your attention. It has been prepared on the understanding that it is to be used for an individual residential property transaction and should not be used or relied upon in a commercial property transaction. This report is neither a guarantee of the physical condition of the subject property nor a substitute for any physical investigation or inspection. The information in Envirosearch Residential is derived from a number of statutory and non-statutory sources (see The Practitioner Guide for details). Whilst every effort is made to ensure the details in the report are correct, Landmark cannot guarantee the accuracy or completeness of such information or data, nor identify all the factors that may be relevant. If you are a private individual using this report Landmark recommends that you discuss its contents in full with your professional advisor. NHBC has not itself investigated this site nor evaluated the findings of this particular report. The NHBC statement of approval is confined to the information base used by Landmark to create the report. The methodology for risk assessment and the conclusions drawn therefrom are the responsibility of Wilbourn Associates.

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KEY			
General		Part 2	
• Centre of Search	Q1.2 Waste Transfer, Treatment or Disposal Site	Q2.2 Potentially Contaminative Use (Point Feature)	
○ Search Radii	Q1.2 Point Location of Waste Transfer, Treatment or Disposal Site	Q2.2 Potentially Contaminative Use (Line Feature)	
Part 1		Q2.2 Potentially Contaminative Use (Area Feature)	
Q1.1a Potential Landfill Buffer	Q1.3a Discharge Consent	Q2.3 Potentially Infilled Land (Point Feature)	
Q1.1a Registered Landfill Site	Q1.3b Radioactive Substance	Q2.3 Potentially Infilled Land (Line Feature)	
Q1.1b BGS Recorded Landfill Site	Q1.3c Industrial Process	Q2.3 Potentially Infilled Land (Area Feature)	
Q1.1b Point Location of BGS Recorded Landfill Site	Q1.4 Regulated Air Pollution	Q2.4 Historical Tank or Energy Facility	
Q1.1c Licensed Waste Management Facility (Landfill)	Q1.5 Storage of Hazardous Substance	Part 4	
Q1.1c Licensed Waste Management Facility (Locations)	Q1.6 Enforcement, Prohibition or Prosecution	Q4.3 Mast or Pylon	
Q1.1d Local Authority Recorded Landfill Site	Q1.7 Contaminated Land Register Entry or Notice	Q4.3 Overhead Transmission Line	
Q1.1d Point Location of Local Authority Recorded Landfill Site	Q1.7 Point Location of Contaminated Land Register Entry or Notice	Q4.4 Telecommunication Base Station	
(Please refer to the Useful Information Section)			



The Replies in Part 4 (Sections 4.1 and 4.2) relate only to the area within 25 metres of the centre of the search. This map shows flood data out to a search radius of 500 metres.

Part 1- Standard Environmental Enquiries - Search Radius 500 metres
1.1 a) Does the relevant environment agency have records of any registered landfill sites?

0-25m	No
25-250m	No
250-500m	No

Comments
None

b) Are there any BGS recorded landfill sites?

0-25m	No
25-250m	No
250-500m	No

Comments
None

c) Are there any Licensed Waste Management Facilities?

0-25m	No
25-250m	No
250-500m	No

Comments
None

d) Are there any Local Authority recorded landfill sites?

0-25m	No
25-250m	No
250-500m	Yes

Local Authority Recorded Landfill Sites

Rhosberse/Pengelli Avenue, Coedpoeth, Wrexham, Reference: 6955/0070, Last Reported Status: Closed, Positional Accuracy: Positioned by the supplier, Boundary Quality: Good

Bearing	E	250-500m
Contact		1

Comments

The Map indicates the site location. The fact that landfill is identified does not necessarily mean there is cause for concern. For a particular site the relevant local authority may be able to provide further information about the site history, the nature of the waste, presence of landfill gas, pollution incidents, residual contamination and remedial measures. If the property is situated on or adjacent to the site, you may wish to find out about any planning, building or other restrictions.

The following list shows if local authorities covering the area of search have made landfill data available.

Local Authority Landfill Coverage

Wrexham County Borough Council, - Has supplied landfill data

Contact	1
---------	----------

Comments

From the information above regarding the availability of Local Authority Recorded Landfill data you may wish to contact one or more of the authorities for further information.

1.2 Does the relevant environment agency have records of any registered waste transfer, treatment or disposal sites?

0-25m	No
25-250m	No
250-500m	No

Comments
None

Part 1- Standard Environmental Enquiries - Search Radius 500 metres
1.3 a) Has the relevant environment agency consented to any discharges?

0-25m	No
25-250m	No
250-500m	No

Comments
None

b) Has the relevant environment agency registered/authorised the keeping/disposal of any radioactive substances?

0-25m	No
25-250m	No
250-500m	No

Comments
None

c) Has the relevant environment agency authorised any industrial processes?

0-25m	No
25-250m	No
250-500m	No

Comments
None

1.4 Are there any sites that are permitted to release discharges into the air?

0-25m	No
25-250m	No
250-500m	No

Comments
None

1.5 Are there any sites authorised by the Local Authority or Health and Safety Executive to store hazardous substances?

0-25m	No
25-250m	No
250-500m	No

Comments
None

1.6 Does the relevant environment agency or Local Authority have records of any enforcements, prohibitions, or prosecutions relating to enquiries 1.1 to 1.5?

0-25m	No
25-250m	No
250-500m	No

Comments
None

1.7 Does the Local Authority have any Contaminated Land Register Entries and Notices?

0-25m	No
25-250m	No
250-500m	No

Comments
None

Part 2- Other Records Showing Land Use - Search Radius 250 metres
2.1 Are there any potentially contaminative industrial sites identified from current published surveys?

0-25m	No
25-250m	Yes

Contemporary Trade Directory Entries

Tony Harrison, Tudor Street, Coedpoeth, Wrexham, : Garage Services, Status: Active, Positional Accuracy: Automatically positioned to the address	Bearing	E	25-250m
--	---------	---	---------

Comments

Industrial sites are not shown on the Map attached to this report. A site may be potentially contaminative or may have produced contamination in the ground. The presence of a site does not necessarily mean there is cause for concern. We regret we have no other information than the details and descriptions given in this report.

2.2 Are there any potentially contaminative industrial sites identified from analysis of selected 1:10,000 scale and 1:10,560 scale historical Ordnance Survey maps?

0-25m	No
25-250m	Yes

Potentially Contaminative Industrial Uses (Past Land Use)

Mining & quarrying general, Date of mapping: 1900-1963	Bearing	SW	133m
--	---------	----	------

Cemetery or Graveyard, Date of mapping: 1900-1991	Bearing	N	158m
---	---------	---	------

Comments

The Map indicates the location of potentially contaminative industrial past land uses with the relevant date of mapping. Any features identified have been obtained from the examination of Ordnance Survey maps dating back into the 19th Century. Old industrial sites may be potentially contaminative or may have produced contamination in the ground. The presence of a site does not necessarily mean there is any cause for concern. Refer to the Useful Information section for further information. If you wish to examine the Ordnance Survey maps these are normally available for public inspection at the local archive or local major library. Alternatively extracts of editions of Ordnance Survey Maps are available on www.old-maps.co.uk

2.3 Are there any areas of potentially infilled land identified from analysis of 1:10,000 scale and 1:10,560 scale historical Ordnance Survey maps?

0-25m	No
25-250m	Yes

Potentially Infilled Land (Water)

Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1963	Bearing	W	194m
---	---------	---	------

Comments

The Map indicates the location of areas of potentially infilled land that may not be identifiable on current maps or visible on site. Any features identified have been obtained from the examination of Ordnance Survey maps dating back into the 19th Century. If an area of land has been filled it may contain inert or potentially contaminative materials. The presence of an area of potentially infilled land does not necessarily mean there is any cause for concern. Refer to the Useful Information section for further information. If you wish to examine the Ordnance Survey maps these are normally available for public inspection at the local archive or local major library. Alternatively extracts of editions of Ordnance Survey Maps are available on www.old-maps.co.uk. If the property is on or adjacent to an area of potentially infilled land you may wish to discuss this with your surveyor or other professional advisor.

2.4 Are there any Historical Tanks and Energy Facilities identified from analysis of selected 1:2,500 scale and 1:1,250 scale historical Ordnance Survey maps?

0-25m	No
25-250m	No

Comments

None

Part 3- Mining, Subsidence and Radon

- 3.1 Is the area within 25 metres of the centre of the search in an area that may be affected by past, current or proposed underground or surface coal mining activity?**

Yes**Comments**

The property is 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.

- 3.2 What is the risk of ground subsidence relating to shallow mining in the area within 250 metres of the centre of the search?**

Low**Comments**

The British Geological Survey has assessed the area of search as having a low likelihood of property damage from subsidence relating to shallow mining. Further action is unlikely to be required. Nevertheless, surveyors should remain aware that locally uncharted mine workings may be present.

- 3.3 What is the risk of natural ground subsidence in the area within 250 metres of the centre of the search?**

Moderate-High**Comments**

The British Geological Survey has assessed the area of search as having a moderate to high likelihood of property damage from subsidence. The likely risk does not necessarily mean there is cause for concern. Inspection of the site may be required to ascertain the specific ground type on which the property is built. A house buyers survey is advised to test for signs of property damage that may relate to such natural ground conditions. The proximity of trees and areas where trees have been removed should also be considered.

- 3.4 a) Is the area within 25 metres of the centre of the search in a radon affected area?**

Yes**Comments**

The property is in an area where the National Radiological Protection Board (NRPB) have identified that more than 1% of properties are likely to be above the Action Level for Radon gas. This does not necessarily mean that the property is affected or that there is cause for concern. However, if you are concerned about Radon gas you may obtain a Postcode Sector based Radon assessment from the NRPB. This costs 21.68 pounds including VAT and can be completed in only a few days. The NRPB can also arrange for individual homes to be monitored. Monitoring individual homes takes approximately 5 months and costs 36.19 pounds including VAT. You should contact the NRPB if you wish to find out more about Radon, or if you wish to have a Postcode Sector assessment or have the property monitored.

- b) What level of radon protective measures for new dwellings or extensions to existing ones is required for the area within 25 metres of the centre of the search ?**

Basic**Comments**

For new dwelling or extensions to existing ones ensure the basic level of protection has been installed, or contact the British Geological Survey, who can undertake a detailed property specific search for the cost of 80 pounds excluding VAT.

Part 4- Flooding and Overhead Transmission Lines**4.1 Is the area within 25 metres of the centre of the search in an indicative coastal floodplain?****No****Comments**

The Environment Agency has assessed the area within 25 metres of the centre of the search as not being within a natural indicative coastal floodplain. This position is confirmed by the flood map included at the beginning of this report. You should remain aware that localised flooding can still be possible. If you are concerned about flooding the Environment Agency should be contacted for further information.

4.2 Is the area within 25 metres of the centre of the search in a natural indicative river floodplain?**No****Comments**

The Environment Agency has assessed the area within 25 metres of the centre of the search as not being within a natural indicative river floodplain. This position is confirmed by the flood map included at the beginning of this report. You should remain aware that localised flooding, for example from minor rivers and streams, may still be possible. If you are concerned about flooding the Environment Agency should be contacted for further information.

4.3 Are there any overhead transmission lines, masts or pylons identified on Ordnance Survey digital maps within 250 metres of the centre of the search?**No****Comments**

None

4.4 Are there any actual or currently proposed telecommunication base stations within 250 metres of the centre of the search?**No****Comments**

Although no base stations have been identified from the site clearance database, it should be noted that only base stations that have a power level of above 17 dBW and/or are greater than 30 metres in height and are not confidential have been searched. Further information specifically in relation to mobile phone base stations can be found at <http://www.sitefinder.radio.gov.uk>

Contact 1

Wrexham County Borough Council
Po Box 1284, Guildhall, Wrexham, Clwyd LL11 1AY
Telephone 01978 292000 Fax 01978 292502

Other Contacts

The Coal Authority - Mining Report Service
200 Lichfield Lane, Mansfield, Nottinghamshire NG18 4RG
Telephone 0845 7626848 DX 716176 Mansfield 5
Email thecoalauthority@coal.gov.uk

National Radiological Protection Board
Chilton, Didcot, Oxfordshire OX11 0RQ
Telephone 01235 831600 Fax 01235 833891

Aon Limited - Envirosearch Residential Insurance Services
Roydsbeck House, Lower Wortley, Leeds LS12 6AB
Telephone 0845 601 4109

Wilbourn Associates
Bridge House, Bridge Street, Sheffield S3 8NS
Website www.environmental-surveyors.com

Envirosearch Residential
Imperial House, 21-25 North Street, Bromley BR1 1SS
Telephone 0870 606 1700
Email helpdesk@homecheck.co.uk
Website www.landmarkinfo.co.uk

The Landmark website contains links to many of our data suppliers which may be of use.

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

Envirosearch Incorporates Information from



The following explanatory notes may be of assistance to users of the Envirosearch Residential report. Practitioners are reminded that full guidance notes are contained in the Practitioners Guide.

Professional Opinion

A Professional Opinion in relation to Part IIA of the Environmental Protection Act 1990 is provided by Wilbourn Associates, a Chartered Environmental Surveyor. In many cases the report will be PASSED without referral however, in some cases, entries that may be of concern are revealed by the search, in which case the report is REFERRED free of charge for more detailed consideration, although this will not include a physical site inspection. After such referral the report may be PASSED or suggestions made of some FURTHER ACTION that could be taken, in the form of questions to ask of the appropriate authorities. When responses to these questions are received it is the responsibility of the client and their professional advisors to decide if they are happy to proceed.

The Professional Opinion page also notes positive responses from Part 3 and 4 of the report for easy reference. These parts are not included in the Professional Opinion risk model but should be taken into consideration by the client or practitioner.

Location Maps

The large scale Ordnance Survey location map may show features which are not necessarily otherwise included in the Envirosearch Residential report. You are advised to supplement the information contained in the report with the descriptive text shown on the map.

Part 1

Question 1.1 a

At present no complete national dataset exists for landfill site boundaries, therefore, a point grid reference, provided by the data supplier, is used for some landfill sites. The point grid references supplied provide only an approximate position, and can vary from the site entrance to the centre of the site. A point cannot properly define landfill boundaries therefore Landmark constructs a 250 metre "buffer" zone around the point to warn of the possible presence of landfill. The "buffer" zone is shown on the map as an orange hatched area. It may be helpful to note that the actual distance between the centre of the search and the landfill point provided by the data supplier is reported in the Enquiries and Replies section. For further information regarding landfill sites identified in the report, please contact the relevant agency or authority referenced in the Useful Contacts section. Where actual boundaries are available the landfill site area is shown on the map as a red hatched polygon.

You should note that landfills identified in this section may have a corresponding entry under Section 1.1c. However, due to limitations of the positional accuracy as explained above, these sites may not be coincidental when shown on the map.

Question 1.1 b

The BGS hold records of over 3,000 landfill sites that accepted waste prior to the Control of Pollution Act (COPA) 1974. These were not subject to any strict regulation or monitoring.

Question 1.1 c

Licensed waste management facilities cover current or recently current consents issued for landfill sites, waste transfer, treatment or disposal sites by the Environment Agency, under Section 64 of the Environmental Protection Act 1990 (Part II) and prescribed by Regulation 10 of SI No. 1056 of the Waste Management Licensing Regulations 1994.

Question 1.1 d

Local Authority landfill data are sourced from individual local authorities that were able to provide information on sites operating prior to the introduction of the Control of Pollution Act (COPA) in 1974.

Appropriate authorities are listed with an indication of whether or not they were able to make landfill data available. Details of any records identified are disclosed. You should note the following:

- a) if the response to 1.1d advises that the local authority 'Had landfill data but passed it to the relevant environment agency' it does not necessarily mean that local authority landfill data is now included in questions 1.1a and 1.1c.
- b) if no data has been made available, for all or part of the search area, you should be aware that a negative response to question 1.1d does not necessarily confirm that no local authority landfills exist.

Question 1.3 a

Identified discharge consents could be for storm water discharges, soakaways or septic tanks.

Question 1.3 b

If a radioactive substance licence has been identified the consent band will be given under enquiries and replies. Consents fall into one of four bands:

- | | |
|--------------|--|
| Band 1 and 2 | Nuclear licensed sites authorised by the Nuclear Installations Inspectorate e.g. nuclear power stations |
| Band 3 | Site registered/authorised to accumulate and dispose of radioactive materials, only non-nuclear operations are carried out on site e.g. hospitals |
| Band 4 | Sites registered to keep and use radioactive material e.g. laboratories, universities, commercial premises using appliances such as monitoring equipment, alarm systems, tritium lighting etc. |

Question 1.3 c

Authorisations for industrial processes may be for organic or inorganic chemical processes.

Part 2**Questions 2.2, 2.3 and 2.4**

The information provided in these questions relate to categories of potentially contaminative land uses that have been identified by the analysis of selected Ordnance Survey historical mapping. The published date (range of dates) of the map(s) and the distance from the centre of search to the nearest point of the feature is given. Further details of the extent of the site or its activities are not available. Should you wish to examine the Ordnance Survey maps these are normally available for public inspection at the local archive or local major library. Alternatively, extracts of editions of Ordnance Survey maps are available on www.old-maps.co.uk

Question 2.3

Potentially infilled land has been identified when a 'cavity' (a hole made by an extractive industry or natural occurrence e.g. pond) was indicated on an historic map but there was no evidence of its existence in the last available map for the area. No details of what may have been used to fill the cavity or exactly when or if it was filled are available from the mapping.

Question 2.4

The information provided in this section relates to the point location of historical tanks and energy facilities identified from the text on Ordnance Survey 1:1250 and 1:2500 scale mapping published between 1943 and 1996, based upon a predetermined list of abbreviations, e.g. El Sub (Electricity Sub-station) and FStn (Filling Station). The position of the point has been located at the centre of the identified text so that it would be within approximately 30 metres of the feature it was describing.

The features themselves are related to energy and petroleum storage and cover the following: tanks, petrol storage, potential tanks (at depot etc.), electricity sub stations and related features, gas and gas monitoring related features, oil related features and miscellaneous power features.

NB: It should be noted that the Ordnance Survey abbreviation for tank (tk) is the same as that for tracks. Therefore some of the captured text may relate to tracks and not tanks when the exact nature of the feature is not clear from the mapping.

Part 3**Question 3.3**

This question relates to the risk from natural subsidence. The report shows the highest hazard identified from the five BGS Geo-Hazard datasets, which are: Swelling Clay Subsidence Hazards, Landslip Subsidence Hazards, Gulls and Cambering Subsidence Hazards, Ground Dissolution Subsidence Hazards and Compressible Ground Subsidence Hazards.

Part 4**Question 4.3**

This question identifies the following features taken from Ordnance Survey Land-Line mapping: aerial ropeway, chairlift, high voltage electricity transmission lines, pipelines (suspended), ski lifts, electricity pylon, flare stack, lighting tower, radio mast. You should note that the information given in this section of the report relates only to that information shown on the Ordnance Survey map. Not all features may have been identified by the Ordnance Survey and therefore some information may not appear in the report.

Question 4.4

This question identifies telecommunication base stations from the site clearance register maintained by the Radio Communication Agency. It covers stations that are not confidential, have a power level of above 17dBW or are greater than 30 metres in height. Both actual and currently proposed sites are included. Base stations are not necessarily a free standing mast but might equally consist of an antenna attached to an existing building or other structure.

General

If, after reading the details in the Enquiries and Replies section regarding the sites identified in the report, you still require further information, please contact the relevant agency or authority indicated in the Useful Contacts section quoting the corresponding reference given in the text of the report.

The contacts in the Useful Contacts section may be able to provide further information relating to items identified in the report, however they are not in a position to advise how these might affect the value of a property. The findings of the report should be discussed with your professional advisor.

Landmark Information Group has arranged for you to have access to the exclusive Envirosearch Residential Insurance Policy from AIG Europe (UK) Limited, part of one of the World's largest insurance groups. The policy is integral to, and provided only in conjunction with, this Envirosearch Residential Report.

The Envirosearch Residential Insurance Policy is easy to arrange and represents inexpensive yet comprehensive insurance offering protection to the homebuyer or homeowner against the risks of becoming liable for costs associated with contamination present on their land

For as little as the equivalent of £5 per year the policy offers the following unrivalled benefits:

A. Extensive Liability Cover

- Against any costs in respect of contamination, already existing and in the ground at the time of purchase of the property, that you are legally obligated to pay, including any liability under Part IIA of the Environmental Protection Act 1990 (and any subsequent amendments) which may arise at any stage of the regulatory process.
- Against any legal expenses that might be incurred, including specialist advice, and the costs involved in repairing any structural damage caused by the contamination or the remedial works, to your own or any adjacent properties.
- Against any claims brought against you for Third Party bodily injury as a result of the contamination.

Up to a limit of £350,000 (depending on the Option you choose) in respect of any one claim, for **10 years** after the date you exchange contracts for your new property or initiate the insurance on your existing property.

B. Loss of value up to £100,000 (again depending on the Option chosen)

- As an added benefit, the policy will also cover you if you sell the property within the 10 year period and the price you are able to obtain is reduced **SOLELY** due to remediation works that have been carried out or are due to be carried out under a statutory notice.
- It will **NOT** cover:
 - Contamination from any source within your boundary that has been identified in the Envirosearch Residential Report and where the source of the contamination is situated within the 25 metre buffer shown in this report.
 - Pollution conditions within the 25 metre buffer identified within the report or on an adjoining property if you know about them and could reasonably expect that such conditions could give rise to a claim under this insurance.
 - Any criminal fines or penalties incurred.
 - Contamination resulting from known underground tanks.
 - Contamination resulting from the existence of asbestos material or lead based paint within any building.
 - Contamination which first occurs after the date of purchase.

There are other conditions and exclusions which are explained in the insurance policy which will be sent to you when you purchase the cover and which can be viewed on the Landmark website at <http://www.landmark-information.co.uk/insurance.htm>

The cost of this valuable cover is based on the amount of cover you choose to buy, starting at a single premium, to cover the whole 10 years, of £50.00, including Insurance Premium Tax. The options are:

Option	Overall Limit of Liability	Loss of Value sub limit	Premium
Option 1	£150,000.00	£50,000.00	£50.00
Option 2	£250,000.00	£100,000.00	£60.50
Option 3	£350,000.00	£100,000.00	£64.70

In each case there is an Excess of £1,000 each claim.

What do you need to do to obtain this valuable protection?

- You can phone the toll free number **0845 601 4109** between 9am and 5pm, Monday to Friday, to purchase the cover by telephone, charging the premium to your credit, debit or Switch card.
- You can complete the enclosed application, and send it with your cheque for the appropriate premium to the address shown on the tear off slip.

In either case, you do not need to take any action until you have exchanged contracts in respect of the purchase of the property.

The Envirosearch Residential Insurance service is operated on behalf of Landmark Information Group Ltd by Aon Limited, a member of GISC.

THESE PAGES DO NOT INCLUDE ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF THE ENVIROSEARCH RESIDENTIAL POLICY AND ARE NOT INTENDED TO BE RELIED UPON BY POTENTIAL INSUREDS. THE ENVIROSEARCH RESIDENTIAL POLICY AND SCHEDULE NEED TO BE READ TOGETHER IN ORDER TO ESTABLISH THE FULL TERMS AND CONDITIONS OF THE POLICY.

- Q1 What am I actually covered for?** A1 - You will be covered for unknown and unidentified historical pollution at your property existing prior to your purchase that results in clean up costs that you are required to incur, including any related professional fees. Furthermore, cover is provided at the time you sell your property, for any decrease in value resulting from historical pollution.
- Q2 Can I get a higher limit of cover, or extend the period beyond 10 years?** A2 - Not under this scheme, which is for a fixed period at the limits of cover you choose.
- Q3 If I sell the property, does the insurance cover transfer to the new owner?** A3 - No, this insurance is specific to you, and the survey report you have obtained.
- Q4 What level of cover should I buy?** A4 - It is very difficult to try to estimate the costs of cleaning up any contaminated land before the event.
- Q5 Can I get cover for possible contamination that shows up in the Envirosearch Residential Report?** A5 - No. This scheme is not intended to insure against known hazards on your property. You are however covered under this scheme for contamination sources that have been identified outside the 25 metre buffer shown in the report.
- Q6 My Survey Report shows an existing source of potential contamination close by. Am I covered if I am legally liable to investigate and, if necessary, clean up?** A6 - Yes, provided the cause of the pollution on the Survey Report is not within the 25 metre buffer shown in this report, and the contamination already existed in the land at the time of purchase.
- Q7 My new property is close to a facility where toxins and contaminants are known to have been stored. Am I covered if any of these get on to my land?** A7 - Yes, so long as the Survey Report does not show that this facility ever occupied part of the 25 metre buffer identified in the report and that the contamination was there prior to the inception date.
- Q8 Am I covered if my own heating oil or septic tanks rupture or burst, and I have to clean up the land?** A8 - No
- Q9 If there was a source of contamination on my land that was NOT shown in the report, am I still covered?** A9 - Yes, provided all the other terms and conditions of the insurance are met.

What do I need to do next? - Once you have exchanged contracts, either phone 0845 601 4109 to purchase the cover via credit card, or tear off the slip below and send it with your cheque for the premium due for the chosen level of cover, made payable to Aon Limited, to:

Envirosearch Residential
Aon Limited
Roydsbeck House
Lower Wortley
Leeds LS12 6AB

AIG
EUROPE

AON
Insure your vision

Name of Insured

Contact Name
(if different than the insured, e.g. Referring solicitor)

Address of Insured Property:

Nant Cottage, Lower Road
Coedpoeth
Wrexham
Clwyd

Contact Address:
(if not insured property)

I confirm this relates to the property I have purchased. ☐

Post Code: LL11 3TP

Please Tick the Option you require:

Post Code:

Property Purchase Date:

Option 1 ☐ Premium £50.00

Option 2 ☐ Premium £60.50

Option 3 ☐ Premium £64.70

The Amount of your Cheque:

£

We would wish to provide you with details of other products relating to your new home. Please tick this box if you DO NOT want to receive these details. ☐

If the policy document needs to be sent to an address other than the insured address, please complete the contact address details.

Please use BLOCK CAPITALS when filling in this form. Thank You.



Residential Properties Order Form

Version: December 2003

FACSIMILE: 01392 441775
EMAIL: orders@landmarkinfo.co.uk

Landmark Information Group
5 - 7 Abbey Court, Eagle Way, Exeter, EX2 7HY
DX 149460 Exeter 23

Section 1 – Order Details:	
The SINGLE RESIDENTIAL plot is: *If your site is commercial please call Customer Services on 01392 441723 for a quote for a commercial search	
Address	
Postcode* (essential)	

* IF YOU DO NOT KNOW THE POSTCODE, PLEASE CALL THE ROYAL MAIL POSTCODE LINE on 08457 111222

Section 2 – Reports Required:			
I would like to order the following <i>residential</i> reports:			
Envirosearch Residential (£39)	Yes	No	(circle as appropriate)
Plansearch Residential (£30)	Yes	No	(circle as appropriate)
Combined Envirosearch Residential & Plansearch Residential (£39 + £20 = £59)	Yes	No	(circle as appropriate)

Section 3 – Enclosures:	
A Plan *** of the property is attached:	Yes No (circle as appropriate)

*** NOTE: IF THE PROPERTY IS A NEW DEVELOPMENT THE DEVELOPER'S PLAN AND LAND REGISTRY PLAN SHOULD BE SUBMITTED TO AID US IN PROPERTY IDENTIFICATION. IF IN DOUBT PLEASE CALL US FOR CLARIFICATION.

Section 4 – Your Details:	
Please send the report(s) to:	
Name:	Reference:
Firm:	Document Exchange:
Address:	Telephone:
	Facsimile:
Postcode:	Email:

Section 5 – Cheque Payments:	
When enclosing payment with the order, please complete the following details:	
Bank Name:	
Account No:	Sort Code:
Cheque amount: £	Cheque No.:

Section 6 – Delivery:

PLEASE SEND REPORT BY - circle as appropriate: **Email** or **Post** or **DX**
(If you do not circle an option we will assume post/DX delivery.)
I hereby confirm that I / we have read and accepted the Landmark Information Group Ltd. Terms and Conditions.

Signature _____ Date _____
For enquiries please contact Customer Services on: 01392 441723
Registered Office: 5-7 Abbey Court, Eagle Way, Exeter, EX2 7HY. Registration Number 2892803 VAT no.634509735