Contaminated Land
Air Quality
Environmental Audit

Partnership No: OC 300776

STAGE 1 CONTAMINATION ASSESSMENT

Former Coal Yard, Lloyds Lane, Chirk

Planning Ref. P/2017/0459

For: Messers A & B Roberts

November 2017

R2280-R01-v1

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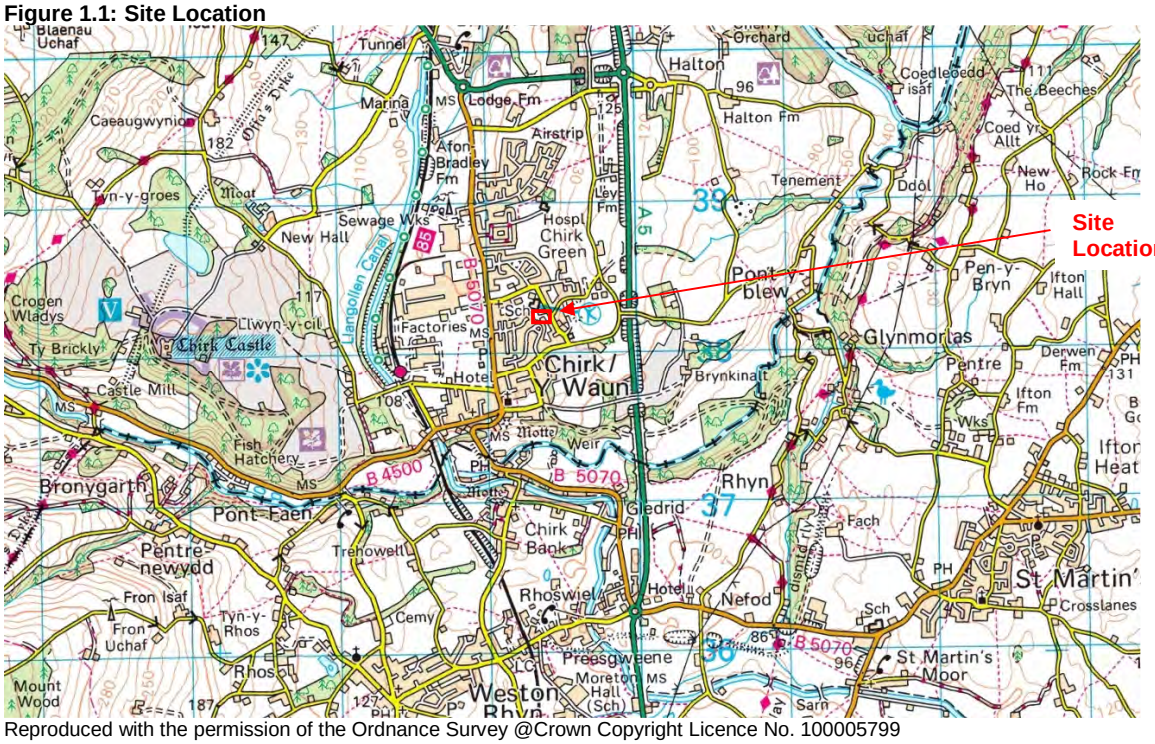
1. Introduction

1.1. Smith Grant LLP (SGP) was instructed by Messer A & B Roberts to undertake a Stage 1 Contamination Assessment for a former coal yard off Lloyds Lane, Chirk. A site location plan is provided below in Figure 1. Site details are:

Table 1.1: Site details

Address	Former Coal Yard, Lloyds Lane, Chirk, LL14 5PU
National Grid Reference	329354, 338270
Local Authority	Wrexham County Borough Council
Site Area	3,150m^2
Current Nature of Site	Vacant land
Site Access	Off Lloyds Lane
Proposed use	Erection of four pairs of semi-detached and one detached properties with private garden area and formation of vehicular access
Planning ref	P/2017/0459

Figure 1.1: Site Location



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1.2. The site presently consists of a vacant irregular shaped parcel of land with a slight slope from east to west. Several small buildings are present across the site with two stockpile areas with associated partitioning walls along the northern boundary of the site.

1.3. This report has been produced to identify potential constraints to redevelopment associated with ground conditions at the site and within the surrounding environs. The report describes the

findings of Stage 1 Ground Contamination Assessment (desk study) and site inspection undertaken by SGP to identify the previous and current uses of the site and surrounding area and the potential contaminants that may be present.

1.4. The report methodology follows the framework described in the EA / DEFRA Contaminated Land Report 11: 'Model Procedures for the Management of Land Contamination 2004'. This report contains a qualitative risk assessment and where appropriate makes recommendations for further investigations appropriate to the current and future development.

1.5. This report has been produced in order to partially satisfy Condition 6 of the approved Planning Consent for the construction of residential properties (ref. P/2017/0459) which specifically relates to Land Contamination. The condition is worded as follows:

Condition 7	*No development shall take place until a phased site investigation of the nature and extent of contamination has been carried out and submitted to and approved in writing by the Local Planning Authority. If any contamination is found during the site investigation, no part of the development shall commence until a scheme specifying the measures that will be taken to remediate the site to render it suitable for the development hereby permitted has been submitted to and approved in writing by the local planning authority. The site shall thereafter be remediated in accordance with the approved scheme. If during the course of development any contamination is found that has not been identified in the site investigation, no further development shall take place on those parts of the site where that contamination has been found until an additional scheme of remediation has been submitted to and approved in writing by the local planning authority for those parts of the site. The relevant parts of the site shall thereafter be remediated in accordance with the additional scheme of remediation.*

2. Information Sources

2.1. The principle sources of information consulted in the preparation of this report include:

Table 2.1 Information Sources

date and reference	author and source	purpose and information content
Topography, geology, hydrogeology and hydrology		
https://www.ordnancesurvey.co.uk/osmaps/	Ordnance Survey (OS), Explorer Map, 1: 10,000	general mapping information including structures, boundaries, ground features, water features etc
http://mapapps.bgs.ac.uk, http://mapapps2.bgs.ac.uk accessed August 2017	British Geological Survey (BGS)	distribution of geological units at surface and depth and borehole database records
http://www.ukradon.org accessed August 2017	Public Health England (PHE)	mapping identifying required radon protective measures in England & Wales
Historical data		
144249272_1_1 Purchased October 2017 And Envirocheck Viewer (online app)	Envirocheck: Landmark Information Group	historical mapping at 1:10,560, 1:10,000 and 1:2,500 scales from 1873-1875 onwards; site setting mapping
Aerial/satellite photography accessed October 2016	Various sources	Historical images of site from 2006, 2007, 2009 and 2015
Information review		
Envirocheck Report 144249272_1_1 Purchased October 2017	Envirocheck: Landmark Information Group	general information on source protection zones, flood risk zones, pollution hazards, current and historical landfills, water quality information
www.magic.gov.uk accessed August 2017	DEFRA	web-based interactive map containing information on nature conservation areas

2.2. Previous Site Investigations

2.2.1. SGP understand that no previous geo-environmental/geo-technical site investigation has taken place at the site.

2.2.2. A preliminary ecological appraisal and bat survey undertaken by Gerald Longley Ecological Consultants and a stage 1 tree survey & preliminary arboricultural plans undertaken by Tree Solutions Ltd are known to have been undertaken at the site.

2.3. Site Inspection

2.3.1. A preliminary site inspection of the site was carried out by Phillip Magraw (Consultant) of SGP on 1st November 2017. The inspection comprised a walkover 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 Uses

3.1.1. 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 D01-D05.

Table 3.1: Summary of Relevant Development History

Map	Site	Surrounds
1873 1: 2,500	The site consists of open field with field boundaries crossing the site with trees indicated along the boundaries. The site is bound to the north east by a road. (See Drawing D01)	The site is immediately surrounded by open field agricultural land with the exception of the road which runs north-northwest to south-southeast along the north-east boundary of the site. Adjacent to the road, an individual house is mapped approximately 40m to the north east of the site and four terraced buildings approximately 100m to the south east of the site. A Methodist Chapel is mapped approximately 250m north west of the site at Plas-y-waen and Chirk Green Farm mapped approximately 250m north east of the site. A potential tramway terminates approximately 200m south east of the site travelling south west to north east associated with shafts and a quarry at Bryn-Kinallt Colliery (approximately 600m north east of the site). The Village of Chirk is located approximately 500m south west of the site.
1879 1:10,560	No significant changes to the site	No significant changes to surrounding environment.

1899 1:2,500	No significant changes to the site (See Drawing D02)	A row of four terraced houses with associated gardens are now mapped approximately 10m east of the site. A row of terraced house with associated gardens are now mapped approximately 150m south east of the site. Several rows of terraced houses with associated gardens are now mapped approximately 250m north east of the site, immediately south of Chirk Green Farm. The shaft and quarry previously mapped at 600m north east of the site is now labelled 'old shafts'. The potential tramway terminal and associated tramline has now been removed. The location has now been mapped with a tramway terminating 250m south east of the site with an associated tramline running south east to north west. Approximately 10m north west of the tramway terminal 2 buildings labelled as 'Smithy' are now mapped. Immediately adjacent to the north east of the tramway terminal, an approximately 25,000m^2 area is now mapped as a quarry labelled 'Brynkinallt Colliery' with associated buildings and shafts labelled 'shaft (coal)'.
1900 1:10,560	No significant changes to the site	No significant changes to surrounding environment
1902 1:10,560	No significant changes to the site	No significant changes to surrounding environment
1912 1:2,500	No significant changes to the site (See Drawing D03)	The quarry at Brynkinallt Colliery now covers a larger area of approximately 45,000m^2 having expanded eastwards.
1914 1:10,560	No significant changes to the site	No significant changes to surrounding environment

1954 1:10,560 & 1954 1:10,000	No significant changes to the site	A house has now been built immediately adjacent to the eastern boundary of the site. The open field adjacent to western boundary of the site now appears to be a garden with two outbuildings (approximately 50m west of the site) associated with houses built approximately 250m west of the site. A housing development has now been mapped approximately 50m south of the site extending approximately 300m south with associated roads linked to Chirk village. The Brynkinhallt Colliery is now mapped as disused.
1961 1:2,500	Two buildings are now mapped on the site on the northern boundary and enclosed areas of unknown use marked out on the south-east and west parts of the site (See Drawing D04)	The house mapped on the eastern boundary of the site is now labelled 'Ingleby'. The field immediately south of the site now has a building centrally located labelled 'Beverley'. The outbuildings approximately 50m west of the site are now labelled 'nursery'. Two houses with associated gardens surrounding have now been mapped approximately 200m west of the site labelled 'castlewood' and 'Hillman House'.
1973 1:2,500	No significant changes to the site (See Drawing D05)	The open field to the north of the site is now labelled 'Ceirog School' with associated school buildings, a pond and a tennis court mapped. The disused quarry at approximately 250m south east of the site is now predominantly mapped as open field labelled 'shafts (disused)'. Significant residential development has taken place in the greater area beyond the site to the north, south and west.
1979 1:10,000	No significant changes to the site	No significant changes to surrounding environment

1961 - 1984 1:2,500	No significant changes to the site	No significant changes to surrounding environment
1984 - 1991 1:2,500	No significant changes to the site	No significant changes to surrounding environment
1990 - 1992 1:2,500	A small building appears at the centre of the site and the site is now labelled 'depot'	No significant changes to surrounding environment
1993 – 1995 1:10,000	No significant changes to the site	No significant changes to surrounding environment
1994 1:2,500	No significant changes to the site	No significant changes to surrounding environment
1996 1:2,500	No significant changes to the site (See Drawing D06)	An open field is now mapped as residential development approximately 100m north east of the site
2000 1:10,000	No significant changes to the site	No significant changes to surrounding environment
2001 Satellite Imagery	No significant changes to the site	No significant changes to surrounding environment
2006 1:10,000	No significant changes to the site	Residential development and associated roads are mapped to the immediate west of the site. The disused quarry at approximately 250m south east of the site is now mapped as wooded vegetation with associated paths.
2017 1:10,000	No significant changes to the site	Residential development and an associated road are mapped to the immediate south of the site.

3.1.2. Whilst there are some gaps in the historical map coverage it is considered that the available information provides adequate coverage of the development history of the site and its immediate surroundings.

3.2. Current land condition

3.2.1. A photographic record of the site inspection is provided in Appendix A. A summary of existing significant features noted during SGP's inspection, and examination of contemporary records is presented below.

Table 3.2: Present Land Condition

Site Description	The site comprises of a vacant parcel of land which forms a slight plateau in the east and low area in the west. Disused buildings (former garages/workshops) are present on the northern boundary and southern boundary; the site surface is covered by a gravel of mixed stone on the eastern

	portion of the site and an area of concrete hardstanding to the west.
Access	Access to the site is currently off Lloyds Lane through a gated entrance.
Boundaries	**North:** wire fence and vegetation extending onto Ysgol Y Waun Primary School. **East:** brick wall, wire fence and hedgerow extending onto residential property and gateway to Lloyd's Lane. **South:** wire fence, partly railway sleeper walls and hedgerow with mature trees extending onto neighbouring residential properties **West:** wire fence, partly railway sleeper walls and hedgerow with mature trees extending onto neighbouring residential properties
Drainage	The site surface does not appear to be free draining with a large proportion of hard-standing (western portion of the site and buildings). Drainage is likely to be through the infiltration into the shallow ground at the western boundary or during periods of extensive precipitation surface run-off in a westerly direction.
Rights of Way	No rights of way are mapped as crossing the site.
Structures	There are 6 buildings currently at the site, on the northern boundary from east to west is a small garage at the site entrance, a larger garage with an associated workshop and a small fuel storage building associated with the larger garage. Along the southern boundary from west to east is a small storage garage, a larger garage and a small office building. The buildings are all of different construction including sheet metal and concrete. Possible asbestos cement roof sheeting was observed on the small garage at the site entrance and the western wall of the small storage garage on the southern boundary.
Services and Utilities	No service plans have been obtained as part of this report and SGP have not carried out a comprehensive search for services and utilities. A telegraph pole is located off 5m of the northeast corner of the site with the overhead line extending to the south-southeast.
Industrial Land Use	The storage of coal took place on the site. Anecdotally, minor vehicle repair works were carried out in the various garages. A bunded diesel tank was present on site, alongside various small containers of oil and cleaning solutions. The wider land use was predominantly agricultural land which has subsequently become residential. The only exception to this is the Brynkinhallt colliery to the south east of the site.
Topography Surfaces / Vegetation	The site comprises of an area of hardstanding with placed gravel to the east which is occupied by derelict detached buildings along the north and south boundaries. The placed gravel material forms a raised area to the east which falls gently to the hardstanding in the west and appears to be comprised of gravels of stone Exposed soils consist of dark sandy silty clayey soil with no observable inclusions; the soils were widely vegetated. Anecdotal information from the site owner is that rubble was imported for placement in the east of the site.

4. Site Characterisation

4.1. Present land condition

Table 4.1: Environmental Setting

Surrounding Land use	The site is located within the Chirk Green area of the village of Chirk off Lloyds Lane with a predominantly residential surround. The immediate surrounds are residential to the south, east and west. To the immediate north of the site is a school with associated sports fields.
Topography	The east of the site is a slight raised level plateau before gently sloping to the west. The western boundary is estimated to lie approximately 1m lower than the eastern boundary at the entrance on Lloyds Lane.
Natural Conditions / Geology	Made Ground Fill material has been placed to the east of the site to create a gentle slope across the site. Fill material consists of gravel of stones from builder's yards. No degradable or potentially polluting wastes were observed at the the surface of the site. Superficial Deposits Devensian Diamicton Till is mapped as underlying the extent of the site. Bedrock Deposits Pennine Lower Coal Measures Formation and Pennine Middle Coal Measures Formation of mudstone, siltstone and sandstone which may consist of interbedded grey mudstone, siltstone, pale grey sandstone and coal seams with a bed of mudstone containing marine fossils at the base and several fossil-bearing mudstones. Faults A fault is found approximately 300m to the south east of the site. BH Records The nearest BGS recorded borehole records to the site is located approximately 250m to the southeast (ref. SJ23NE10) which reported conglomerate to 0.6m bgl and 'Red ground' to 1.82m bgl, 'Grey measures' to 6.09m bgl and interbedded coal, fireclay, grey sandstone and shale to a depth of 70.2m bgl.
Hydrogeology / Groundwater	Aquifer Designation Up to date hydrogeological mapping has not been identified, however historical mapping by the national rivers authority (NRA) shows the site as lying within a minor aquifer area with drift deposits of low but variable permeability. Protection/Abstraction Classification No significant groundwater abstraction points are likely to be present within the area around the site as no major aquifer are located within the surroundings of the site.
Hydrology / Drainage	The nearest surface watercourse is the River Ceirog located approximately 200m to the south.

	The majority of the site is covered by hardstanding and granular fill; therefore, drainage will be predominantly via runoff to the west into the adjacent soils.
Flood Risk	The Envirocheck report identifies the site to have limited potential for groundwater flooding to occur. The Envirocheck Flood Map shows the site at no risk of flooding from rivers or sea to occur and to be at no risk from flooding events from surface waters.
Radon	The Envirocheck report and BGS mapping reports identifies the site as being located within an area where 10-30% of homes are affected by the ingress of radon. This classification require that full radon protection measures are installed within new permanent buildings or extensions.
Ecology and Conservation	The site is not located within an area of ecological concern but in terms of conservation is located within the zone of a world heritage site (Pontcysllte Aquaduct and Canal).
Mining	No mining activities have been identified as having taken place on the site through the reviewed historical mapping and Envirocheck Report, however a number of coal shafts have been identified within the surrounding land. The Envirocheck report identifies the Brynkinhalt Colliery and Chirk Green as areas of deep coal excavation. These two locations are the location identified in the historical mapping. The Coal Authority Interactive map identifies the nearest mine entry to the site as two mine entries as the Chirk Green/ former Brynkinhalt Colliery site at approximately 250m south east of the site. The Coal Authority Non-Residential Mining Report (ref 51001683589001) identifies no potential of hazards relating to coal mining at the site.
Excavation and Land filling	Historical mapping does not suggest that excavation or landfilling has taken place on the site. The Site Sensitivity Map within the Envirocheck report identifies the Chirk Green (former Brynkinhalt Colliery Site) area at approximately 100m east of the site at its closest point mapped as 'Potentially Infilled Land (non-water)'. No historical landfills or current landfills are located within 0.5km of the site according to the Envirocheck Report (data supplied by Wrexham County Borough Council, Oswestry Borough Council and Shropshire County Council).

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

5.2.1. The historical mapping indicates that the site was occupied by two buildings from 1961, followed by the mapping of a third building in 1990-1992 which remain to the present day, this is understood to be the existing buildings on site.

5.2.2. Anecdotal information provided by the client suggested that minor infrequent vehicle repairs were undertaken on site and a small bunded fuel storage tank is present on site.

5.2.3. The earliest recorded site buildings were constructed at a time during the widespread use of asbestos as a building material, therefore buildings on site have the potential to contain asbestos containing material (ACMs). Cement sheeting was observed within the roof of the garage at the site entrance at the north east of the site and the western wall of the garage in the south west of the site suggesting it could have been present within other structures on the site.

5.2.4. The site is located within an area where 10-30% (Envirocheck Report/BGS mapping) of homes lie above the Radon Action Level. Therefore, there will be a requirement for full radon protection measures to be installed within new dwellings.

5.3. Off-Site Sources

5.3.1. The surrounding land has been historically undeveloped with the exception of the Brynkinhalt Colliery with associated shafts and open pit mining at approximately 200m to the south east of the site. The Coal Authority report generated for the site indicates no risk from mine gas at the site associated with shallow mineworkings or mine entries.

5.4. Potential Receptors

5.4.1. The proposed use of the site for residential development which is considered to be of high sensitivity with respect to human health.

5.4.2. The principal vulnerable receptors for the existing and proposed use will be:

- construction workers who may be exposed to contaminants during preparatory and construction/refurbishment works;
- future residents and site visitors, primarily assumed to be residents including infants

and children;

- future maintenance workers;
- buildings / structures.

5.4.3. The surrounding area consists of residential housing fronting the site on all boundaries with the exception of Ysgol Y Waun Primary School to the North.

5.5. Human Health Risk Assessment

5.5.1. The potential for significant contamination to be present that may pose an acute risk to construction workers during the development is considered very low. Similarly, future maintenance workers are unlikely to be exposed to materials with the potential to cause health impacts.

5.5.2. The small garage at the site entrance in the northeast of the site and the western wall of the small garage to the southwest of the site has been observed to contain possible asbestos cement roof sheets which suggests that possible asbestos containing materials may have been present across other parts of the site. The potential therefore remains for residual fibres to be present in surface soils, particularly if any ACM present was in a friable state or uncontrolled removal was carried out.

5.5.3. The site is located within an area where 10-30% (Envirocheck/BGS Mapping) of homes are above Radon Action Levels. Full radon protection measures are required in the construction of new dwelling or extensions for this classification.

5.6. Buildings & Structures

5.6.1. An assessment of ground stability has not been carried out as part of the investigation. Conditions which present a significant risk of aggressive ground with respect to construction materials (contamination or naturally elevated concentrations of substances which can attack concrete or polymers) are not considered likely to exist, although ground conditions will require confirmation to allow design of any planned redevelopment.

5.7. Controlled Waters Risk Assessment

5.7.1. The site is in an area of low environmental sensitivity as far as groundwater is concerned with the underlying bedrock of Lower Pennine Coal Measures supporting a Secondary A aquifer, although this is not located within a water abstraction zone and substantial protection to the aquifer will be afforded by the mapped low-permeability drift deposits. The nearest mapped surface watercourse is the River Ceirog located approximately 200m to the south.

5.7.2. Perched water may be present within any made ground present or within granular horizons which may be present. The mapped presence of glacial till across the site is anticipated to significantly inhibit infiltration into the underlying bedrock aquifer.

5.7.3. Flow to the nearest surface watercourse is probably via a combination of infiltration, surface run-off or preferential flow paths such as surface water drains, however no such pollution sources have been determined as being present on the site.

5.7.4. No viable pollution sources have been identified and the site is considered to be of very low sensitivity with regards to risk to controlled waters, particularly given the context of the site.

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

Hazardous Source		Receptor	Pathway	Risk Assessment			Notes
Origin	**Contaminant**			**Consequence**	**Probability**	**Risk**	
Shallow soils / fill materials	Asbestos, metals and PAHs in made ground/imported fill materials and older tarmac, localised hydrocarbons resulting from leaks or spills of oil and fuels	Future site occupants, visitors and neighbours	direct contact / dust & soil ingestion and inhalation	severe	possible	**moderate**	Detailed composition and contamination status is currently unconfirmed. ***Investigation to confirm the shallow ground conditions and sampling of the made ground to determine that concentrations of contaminants do not pose a risk to future site occupants.***
		Construction workers / maintenance workers	direct contact / dust & soil ingestion and inhalation	severe	Possible	**moderate**	Detailed composition and contamination status is currently unconfirmed but exposure frequency and duration, and sensitivity of receptors is less than residents. ***Investigation to confirm the shallow ground conditions and sampling of the made ground to determine that concentrations of contaminants do not pose a risk to future site occupants.***
		Groundwater / surface waters	leaching and infiltration through unsaturated zone, surface run-off into surface water drains	medium	very unlikely	**very low**	Run-off from the site into surface water drains and vertical migration of leachable metals/organics which may be present within the made ground is considered to be negligible. ***Investigation to confirm the shallow ground conditions underlying the site.***
	pH and sulphate	Property / Services	Chemical attack of buried concrete and plastic materials	medium	Very unlikely	**Very low**	Depth and composition of made ground is currently unknown and may contain contaminants at unacceptable concentrations for residential use. ***Investigation to confirm the shallow ground conditions and sampling of the made ground to determine that sulphate and pH concentrations to determine the potential for chemical attack of buried concrete.***

Hazardous Source		Receptor	Pathway	Risk Assessment			Notes
Origin	**Contaminant**			**Consequence**	**Probability**	**Risk**	
mine workings/underlying geology	Ground gases (CH_4, CO_2), radon	future site users / unventilated voids in future buildings	inhalation risk	severe	possible	**moderate**	No evidence of shallow mineworkings or mine entries have been recorded below the site, no landfills or other potentially viable sources of hazardous ground gas have been identified. The site is located with an area where 10-30% of homes are above the Radon Action Level. ***Full radon protection measures are required.***

Note: Risk Assessment based on guidance provided in CIRIA 552, 2001, 'Contaminated Land Risk Assessment: Guide to Good Practice'

6. Conclusions and Recommendations

6.1. Conclusions

6.1.1. The site is occupied by a coal yard with associated buildings which was first mapped in 1961. Prior to 1961, the site is mapped as open field alongside a road to the east of the site. The site doesn't appear to have changed since 1961 with the exception of a small building mapped at a central south location from 1990-1992 onwards. The site has remained this way to the present day with some of the buildings now derelict with the building in the south east of the site, the only building which appears to still be in regular use.

6.1.2. Anecdotal information from the current site owner suggests occasional use of the site for vehicle repairs has taken place and that inert fill materials comprising rubble has been imported for placement in the east of the site to level the former vehicular access areas and protect the site surface. The immediate surrounding land consists of residential development and prior to this was open fields, the only exception to this was the Brynkinalt Colliery 200m to the south east of the site which consisted of an open pit coal quarry and shafts.

6.1.3. Contamination that may pose a significant constraint to the proposed residential development is not expected and the former use of the site is not likely to have resulted in any significant pollution sources. However, the presence of asbestos fibres or other contaminants within the imported fill material, or the existence of minor, localised contamination from spills or leaks of fuel and lubricants cannot be discounted. Two of the remaining buildings have been observed to potentially contain asbestos cement sheeting.

6.1.4. The site is located approximately 200m from the former Brynkinalt Colliery which has subsequently been infilled, the contents of which is unknown. If the contents of the infilled Brnykinalt Colliery quarry area presented a gas generation potential, the risk of lateral ground gas migration to the site is considered negligible due to the distance for migration. The site is however located within an area requiring full radon protection measures in all new buildings or extensions.

6.1.5. No contaminants are likely to be present on the site with the potential to impact controlled waters, but the site is assessed as posing a moderate risk to human health associated with land contamination due to the presence of suspected asbestos concrete within two of the buildings and the potential for asbestos to be have historically been present across other areas of the site.

6.2. Recommendations

6.2.1. An asbestos survey and removal of confirmed ACM will be required on the site buildings in advance of any demolition,

6.2.2. Due to the potential for contaminants to exist within the made ground observed at the surface, it is recommended that shallow soil / made ground is sampled in order to assess whether concentrations are present at unacceptable levels and whether mitigation measures such as the application of a soil cover system for gardens is required. Such an intrusive investigation could be achieved through the excavation of trial-pits providing a suitably sized machine is made available to achieve sufficient penetration of the anticipated depth and density of made ground.

6.2.3. Ideally a site investigation entry should be targeted to the areas where fuel and oils are known to have been stored, however these are present beneath the footprints of the existing buildings. If investigations are to be carried out in advance of demolition, a second stage of inspections for hydrocarbon contamination should be carried out during removal of the ground slabs to the buildings in these areas.

6.2.4. Sampling of soils should include a range of typical contaminants such as heavy metals, PAHs, hydrocarbons and asbestos fibres.

6.2.5. Full radon protective measures are necessary in the construction of new dwellings or extensions This should afford a degree of protection from other low-risk gas / vapour sources although site conditions need to be confirmed through intrusive investigations.

6.2.6. The likely extent and significance of the contamination that can be reasonably anticipated is not considered sufficient to preclude the economic redevelopment of the site for residential use and what ground contamination that can be reasonably anticipated may be managed through the use of normal techniques for the redevelopment of brownfield land such as selective excavation and removal and the use of barrier clean soil cover for gardens and gas protection measures for buildings.

6.2.7. This Phase 1 report should be provided to the Contaminated Land Officer at WCBC and the proposed scope of Phase 2 intrusive investigations agreed in advance. If required, depended on the results of the investigation, an appropriate remedial strategy should be agreed prior to the on-set of development.

6.3. Limitations

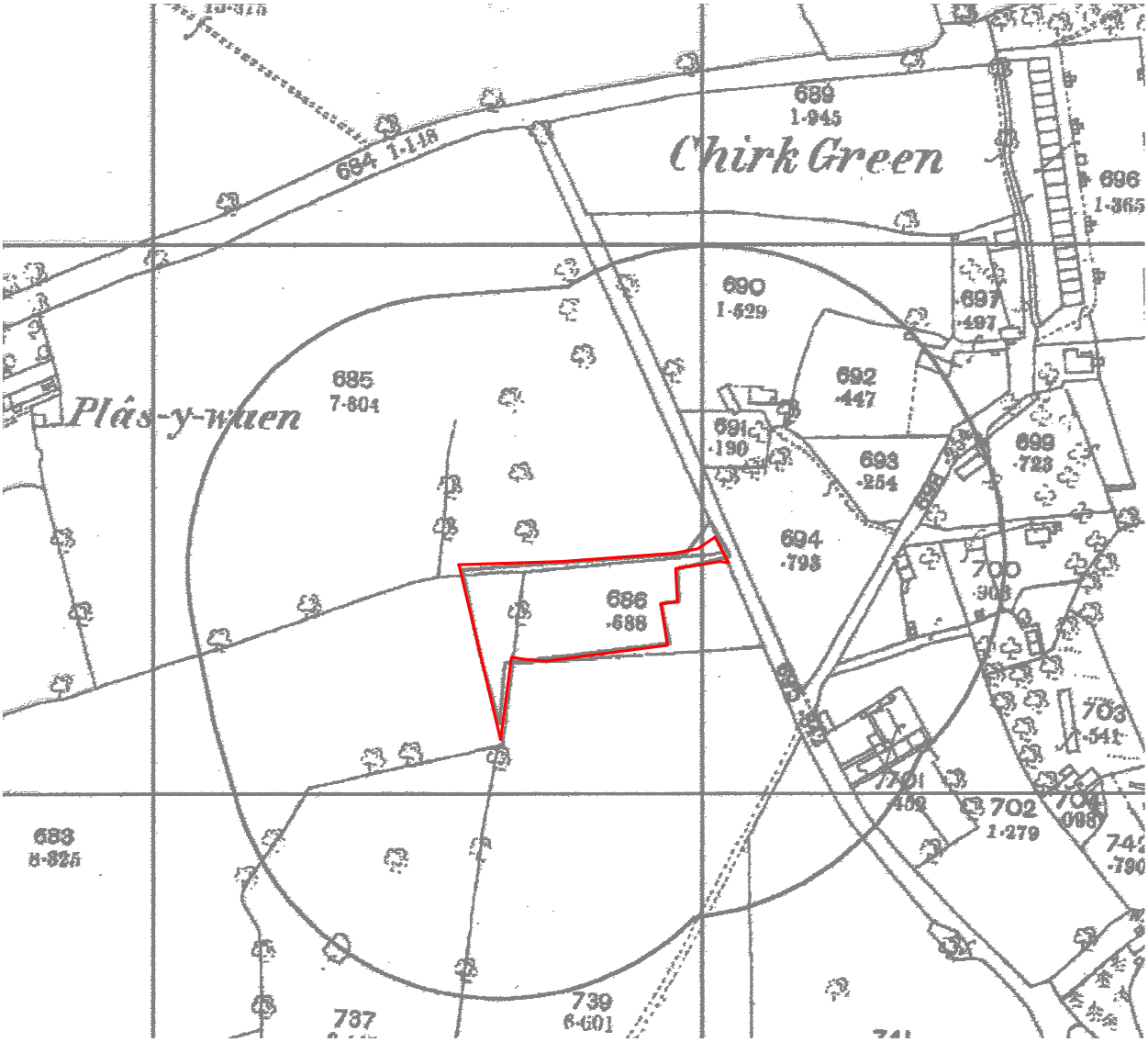
6.3.1. SGP reserves the right to alter any of the foregoing information in the event of new information being disclosed or provided and in the light of changes to legislation, guidelines and responses by the statutory and regulatory authorities.

6.3.2. 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.

6.3.3. This report has been prepared by Smith Grant LLP, for the sole and exclusive use of Messer A & B Roberts. 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.

6.3.4. 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: Former Coal Yard, Lloyds Lane, Chirk		Drawn: PM	Checked: DW
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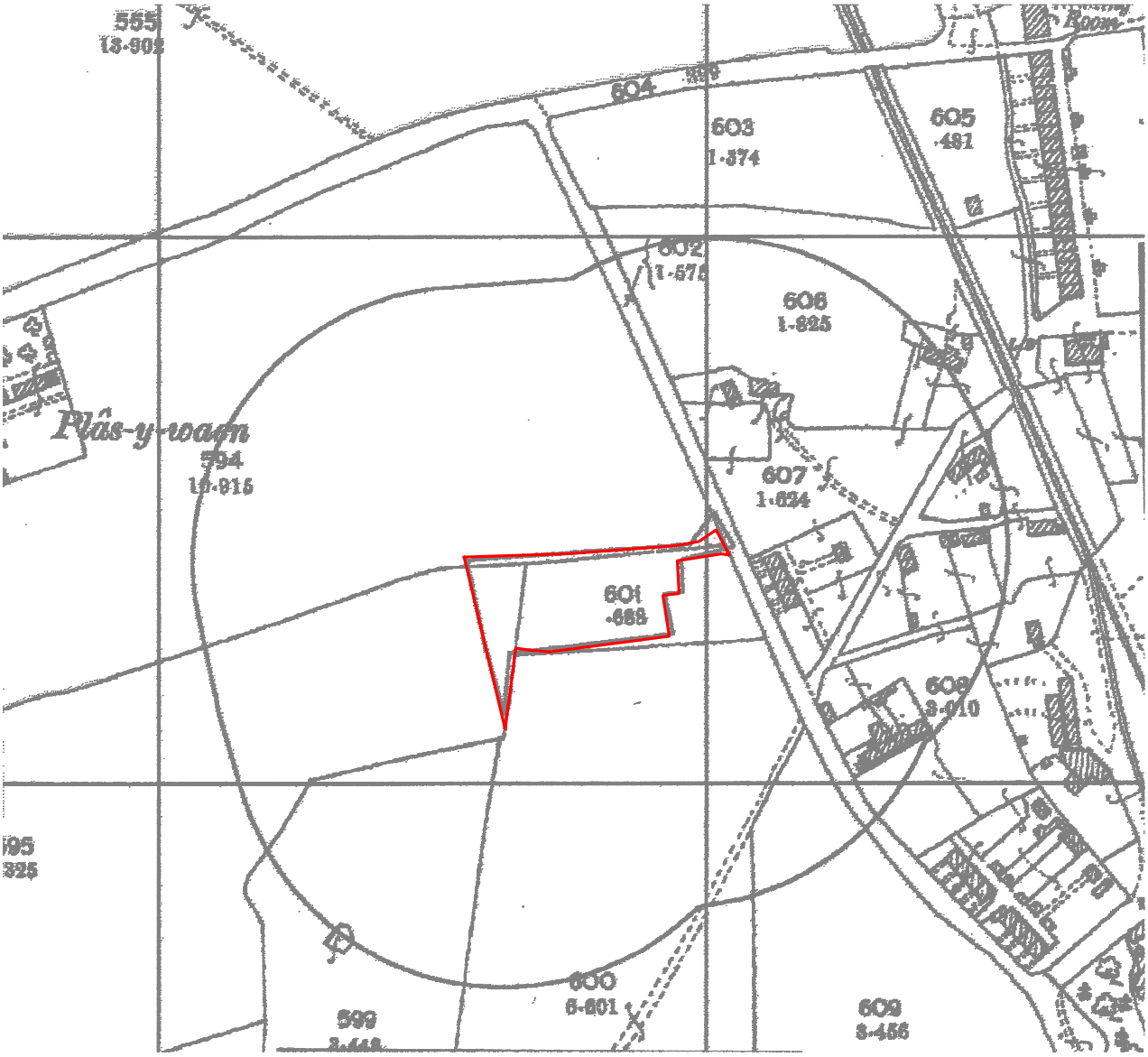
		Job No: R2280	Drg No: D01



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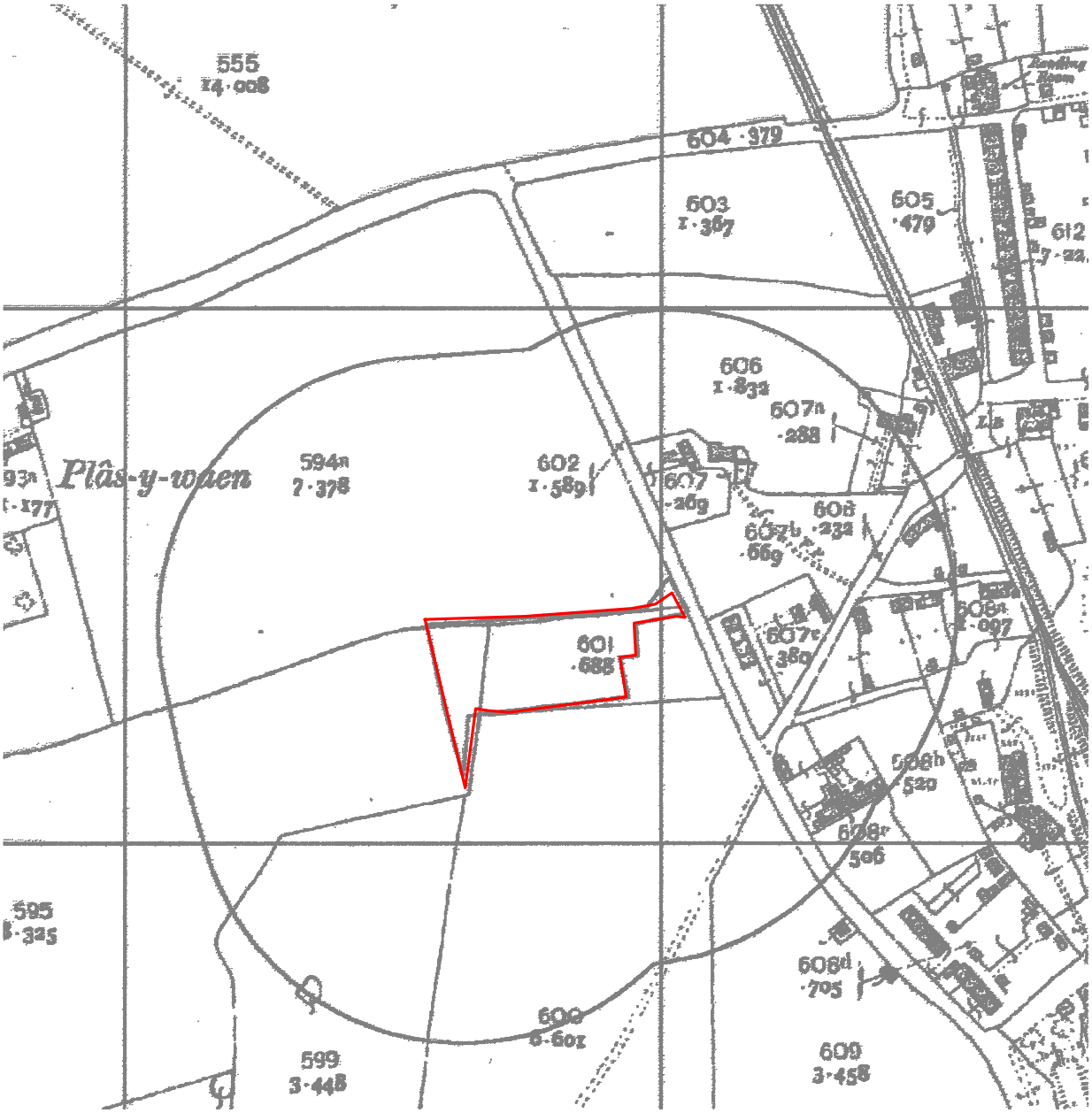

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Project: Former Coal Yard, Lloyds Lane, Chirk		Drawn: PM	Checked: DW
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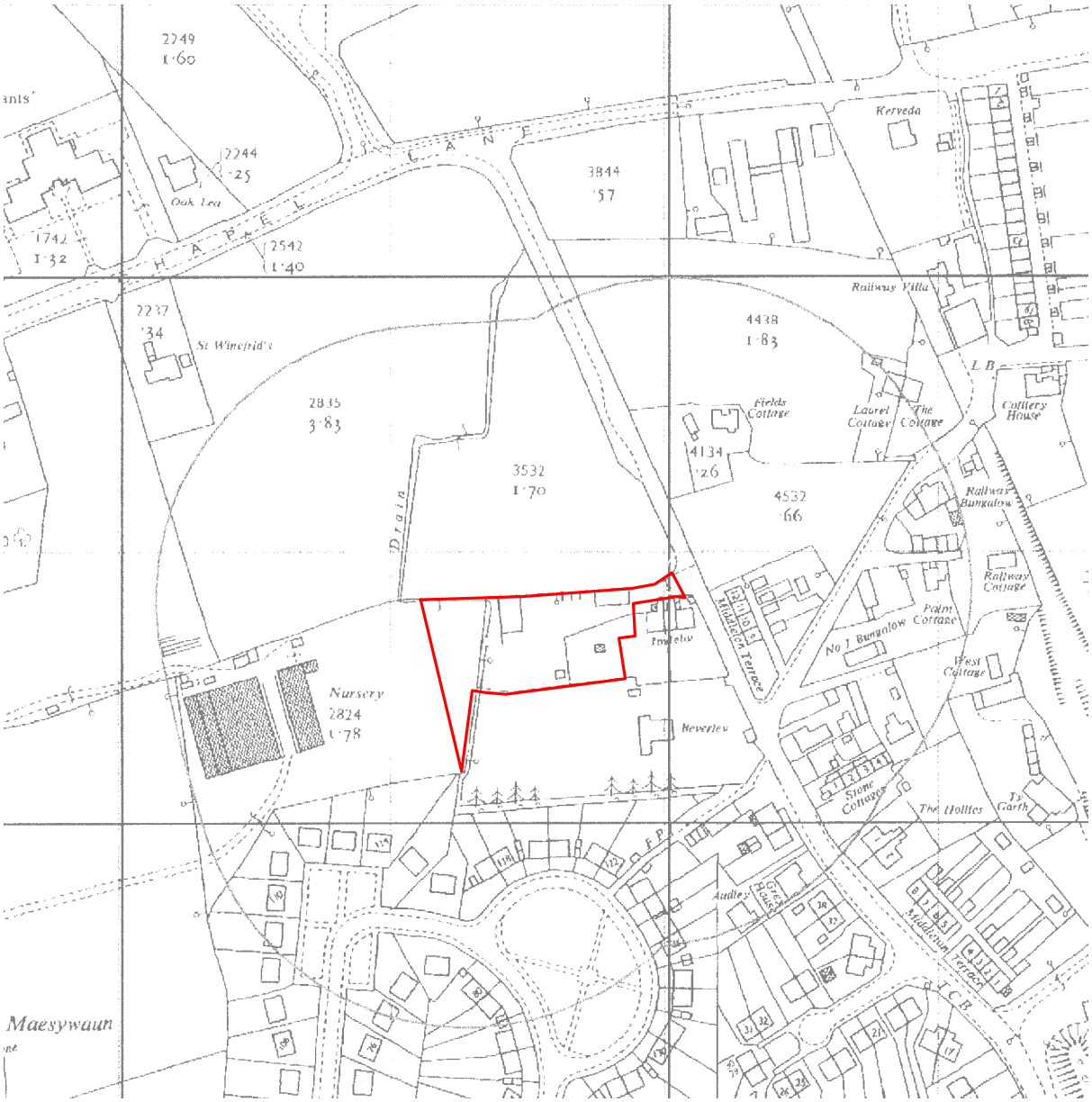

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Project: Former Coal Yard, Lloyds Lane, Chirk		Drawn: PM	Checked: DW
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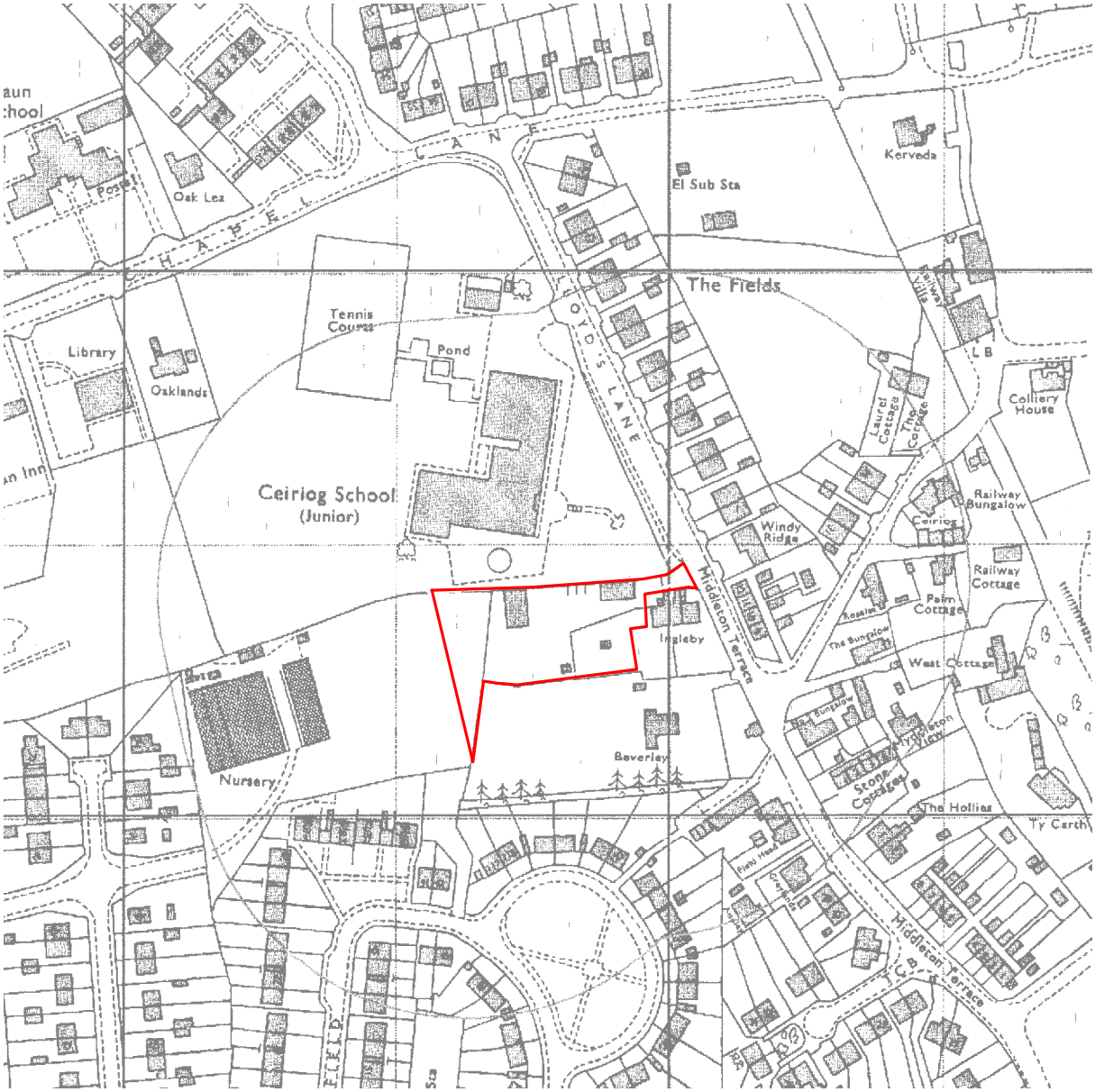

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Project: Former Coal Yard, Lloyds Lane, Chirk		Drawn: PM	Checked: DW
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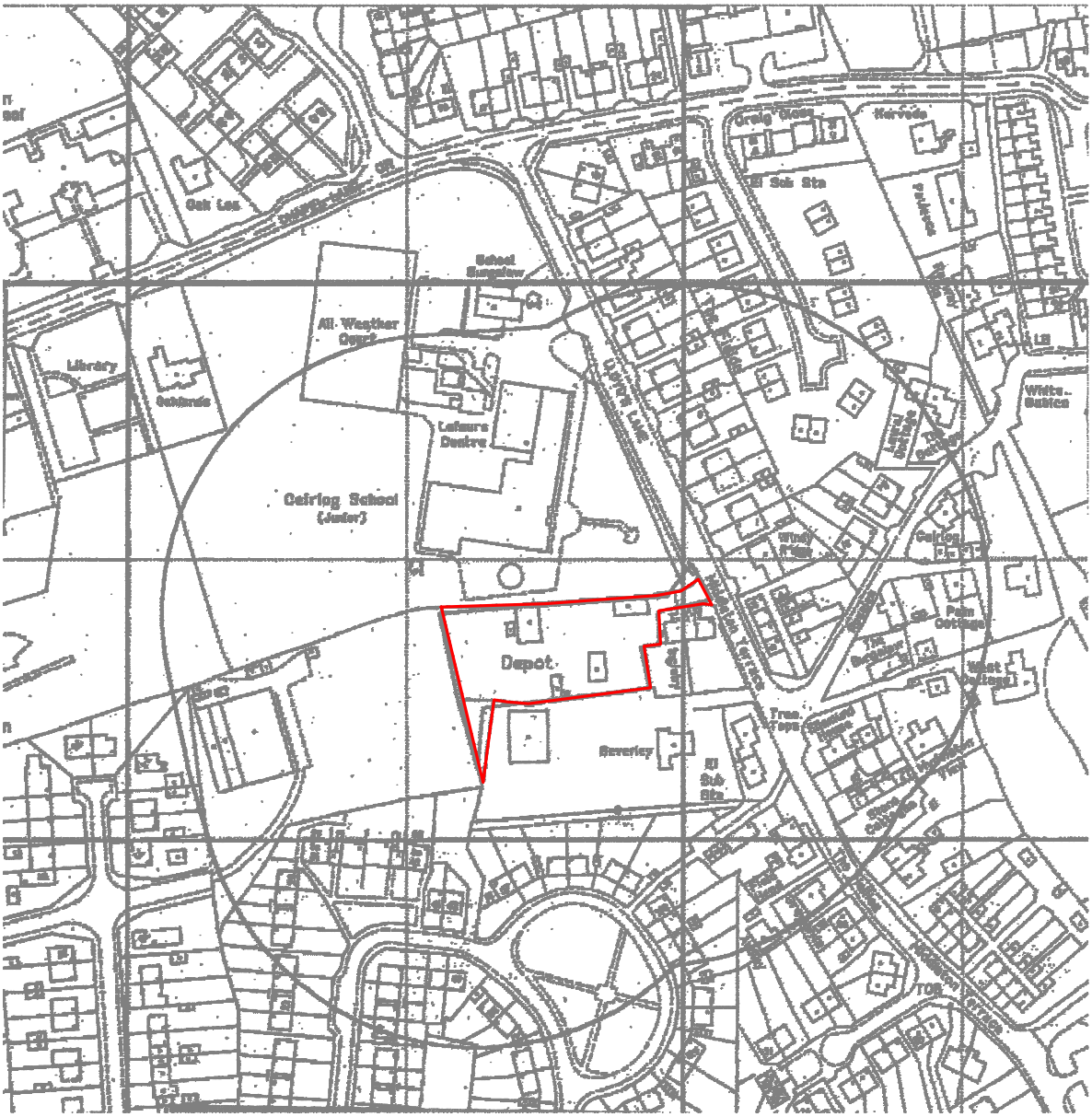

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Project: Former Coal Yard, Lloyds Lane, Chirk		Drawn: PM	Checked: DW
Drawing: Historical Map: 1996		Date: 14.11.17	Scale: 1:2,500
		Job No: R2280	Drg No: D06

APPENDIX A

Photographic Record

1.

01.11.17 - Gated entrance from Lloyd's Lane to site.

2.

01.11.17 - Looking west from the eastern boundary of the site, showing the downward slope of the site. Note, the rubble in the foreground used to build the ground level up in the east of the site.

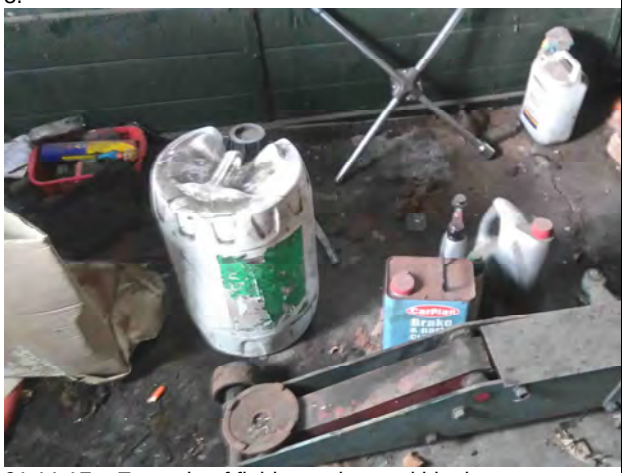
3.

01.11.17 – Looking west from the centre of the site across an area of hardstanding area in the west portion of the site.

4.

01.11.17 – Building closest to the entrance to site with an asbestos concrete roof present.

5.



01.11.17 – Example of fluid containers within the garages at the site from its previous use as an occasional vehicle repair garage.

6.

01.11.17 – Drums and other containers stored within the garage in the central north of the site.

7.

01.11.17 – Brick partitions in the north west of the site once used for partitioning stockpiles of coal.

8.

01.11.17 – Railway sleepers along the western boundary of the site used to stockpile coal against.

9.

01.11.17 – Looking east from the south west corner of the site showing asbestos concrete used on the side of a garage building.

10.

01.11.17 – Example of the vegetation along the perimeter of the site.

11.

01.11.17 – Large storage tank located within a building in the central south of the site.

12.

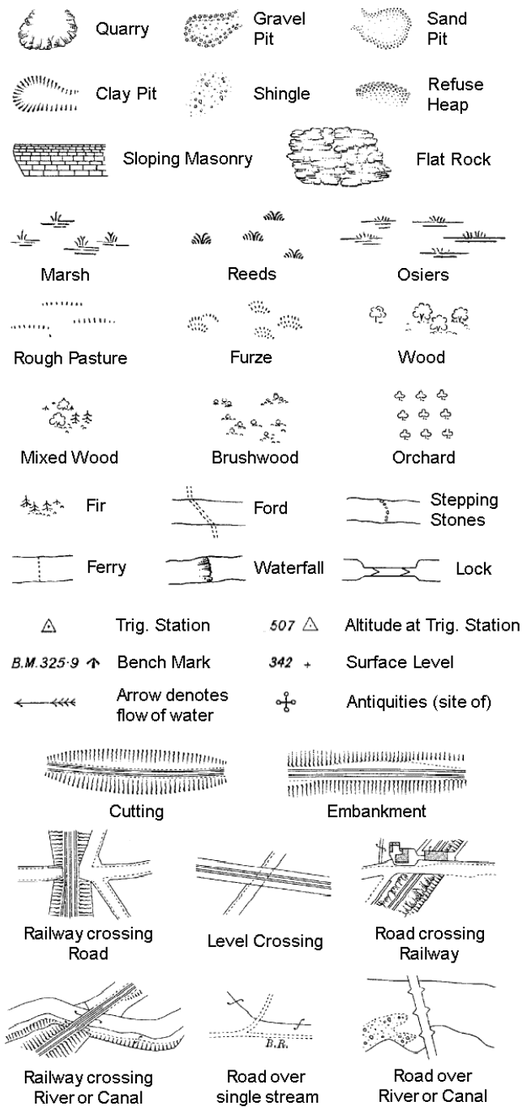
01.11.17 - Southern boundary of the site with plastic fluid containers stockpiled against the metal fence and vegetation.

APPENDIX B

Envirocheck Historical Maps

Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

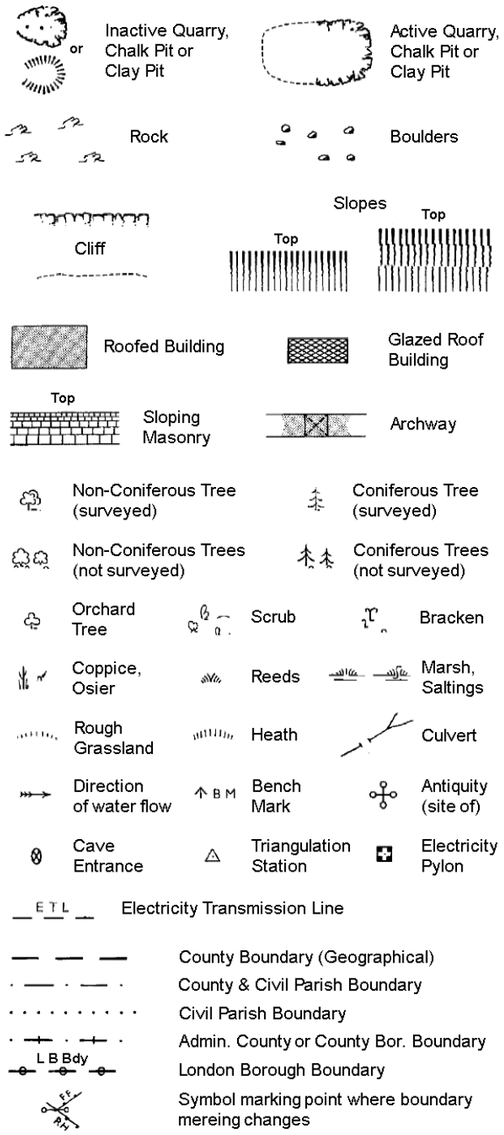
Administrative County & Civil Parish Boundary

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

Co. Burgh Bdy. County Burgh Boundary (Scotland)

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

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



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

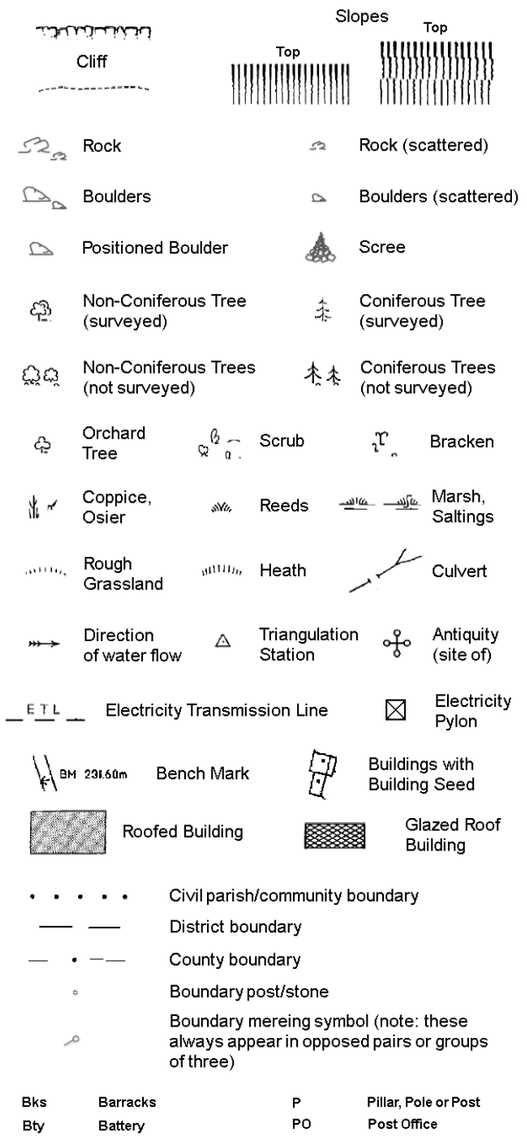
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

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

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



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

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

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

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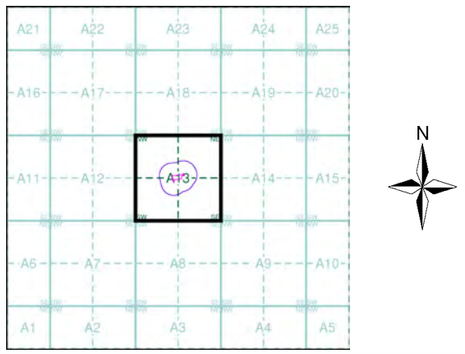
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Denbighshire	1:2,500	1873	2
Denbighshire	1:2,500	1899	3
Denbighshire	1:2,500	1912	4
Ordnance Survey Plan	1:2,500	1961	5
Additional SIMs	1:2,500	1961 - 1984	6
Ordnance Survey Plan	1:2,500	1973	7
Supply of Unpublished Survey Information	1:2,500	1973	8
Additional SIMs	1:2,500	1984 - 1991	9
Additional SIMs	1:2,500	1990 - 1992	10
Additional SIMs	1:2,500	1990	11
Large-Scale National Grid Data	1:2,500	1994	12
Large-Scale National Grid Data	1:2,500	1995	13
Large-Scale National Grid Data	1:2,500	1996	14
Historical Aerial Photography	1:2,500	2001	15

Historical Map - Segment A13



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Customer Ref:	R2280
National Grid Reference:	329360, 338270
Slice:	A
Site Area (Ha):	0.28
Search Buffer (m):	100

Site Details

1, The Nurseries, Maes Y Waun, Chirk, WREXHAM, LL14 5NQ

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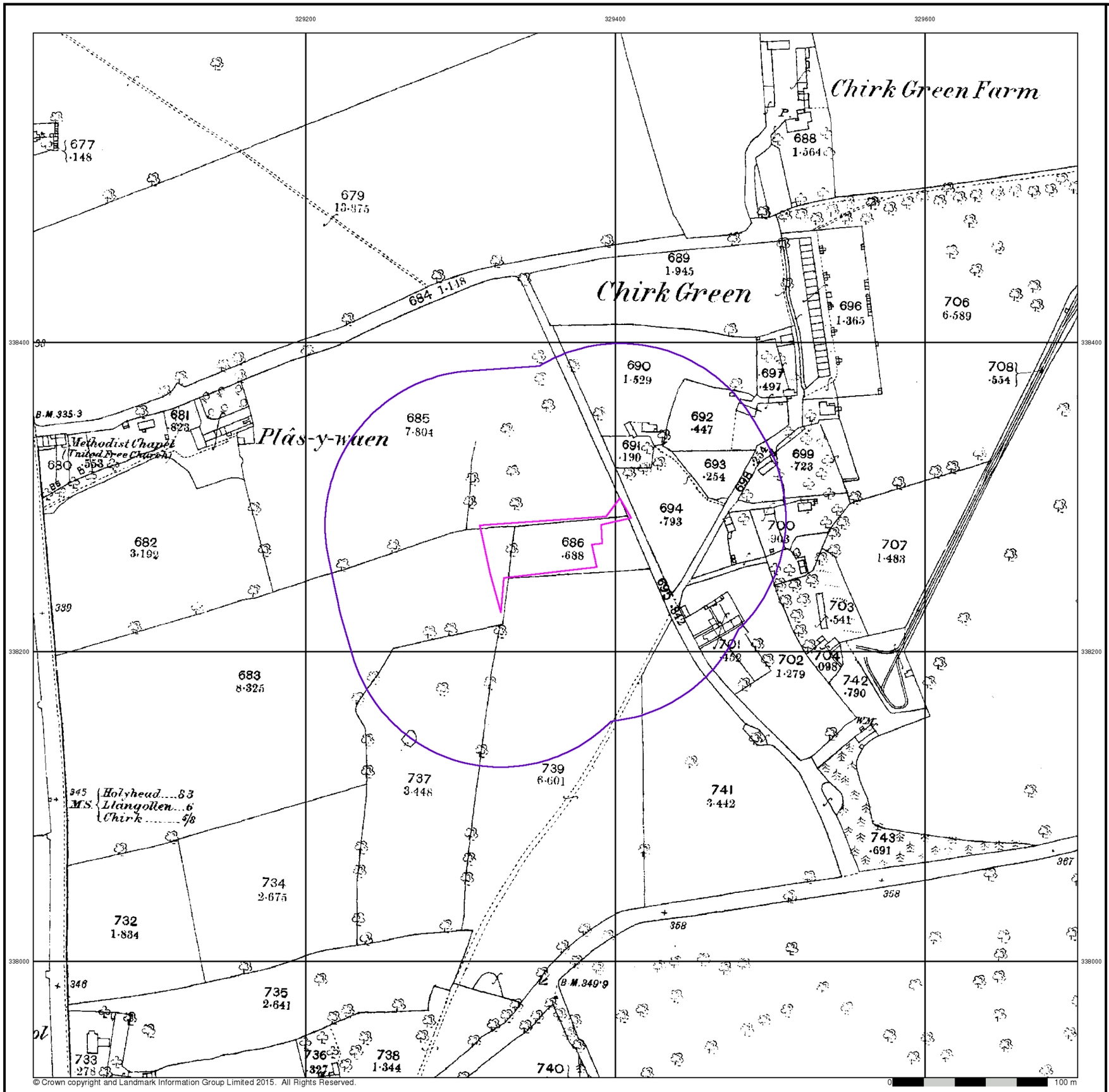

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Denbighshire

Published 1873

Source map scale - 1:2,500

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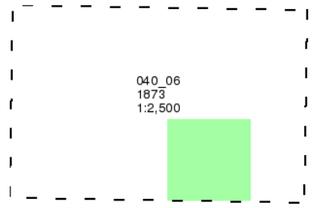
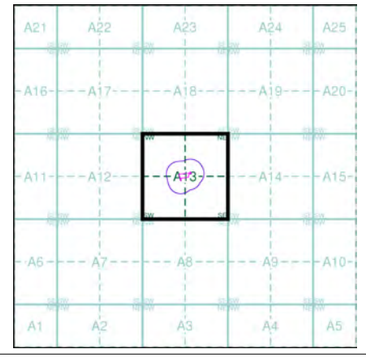
Map Name(s) and Date(s)



Historical Map - Segment A13



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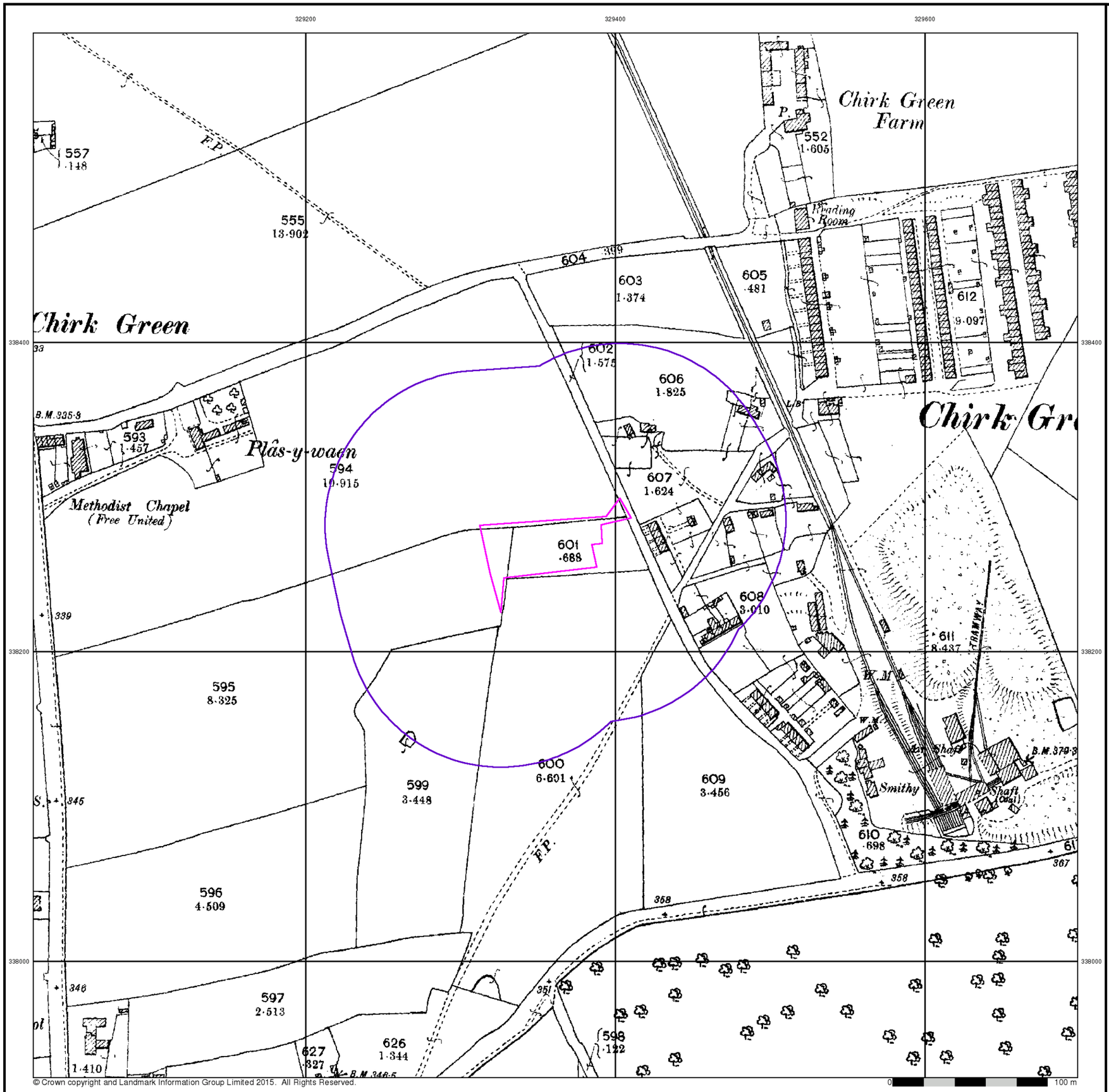

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Denbighshire

Published 1899

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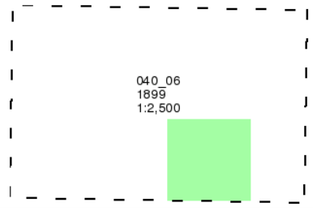

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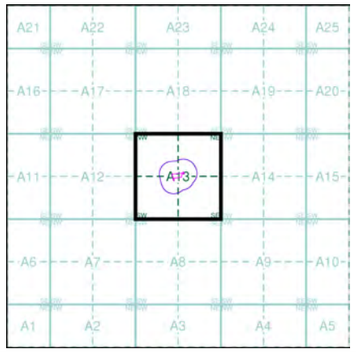

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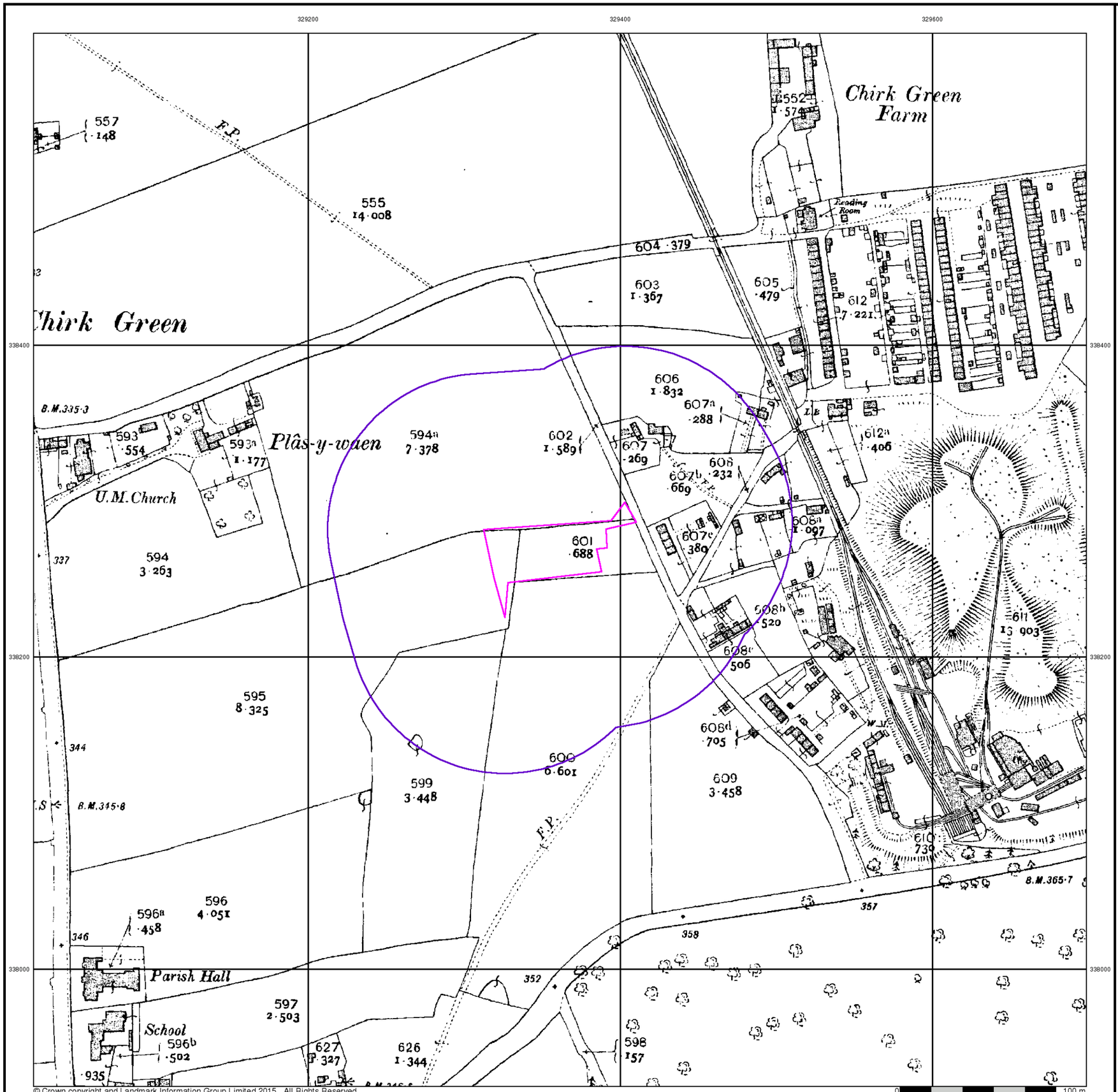

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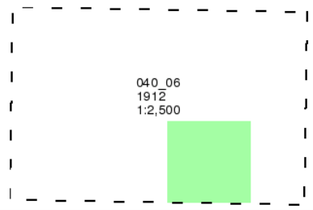

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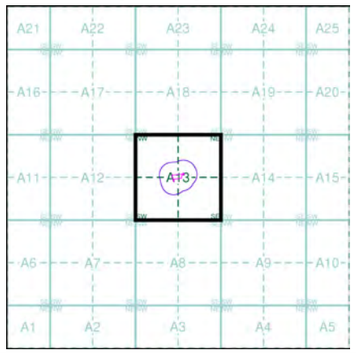

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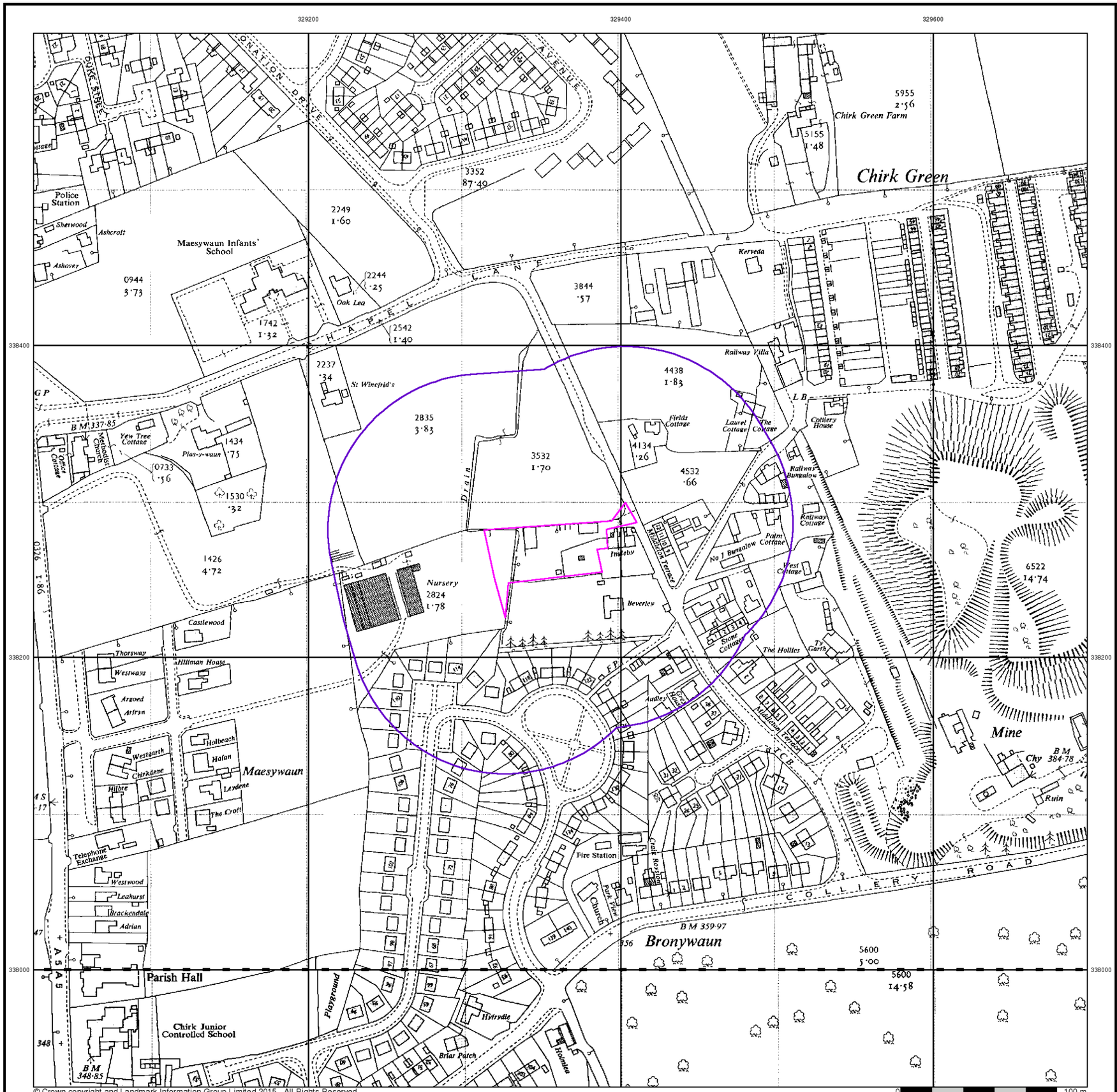

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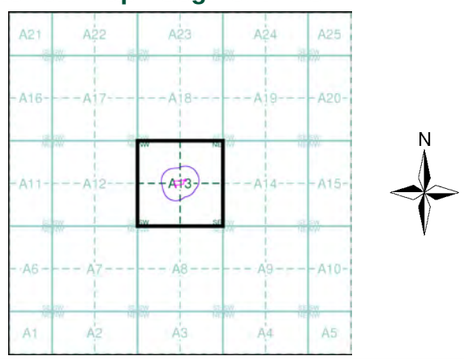
1961
1:2,500

SJ2937
1961
1:2,500

Historical Map - Segment A13



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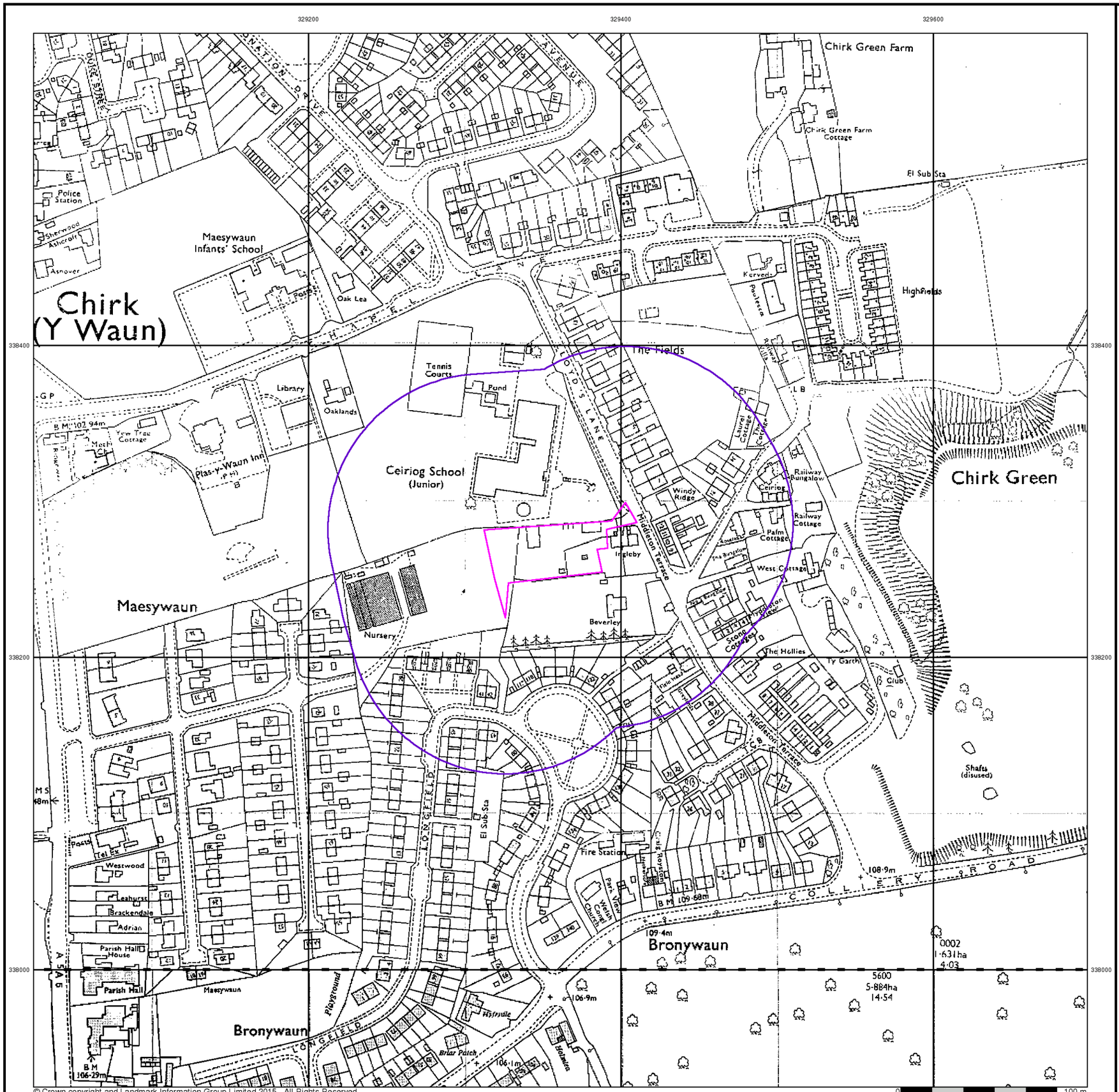

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Additional SIMs

Published 1961 - 1984

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.

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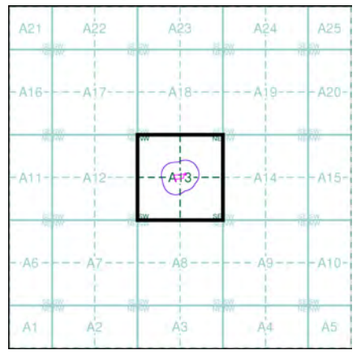
1:2,500

SJ2937
1961
1:2,500

Historical Map - Segment A13



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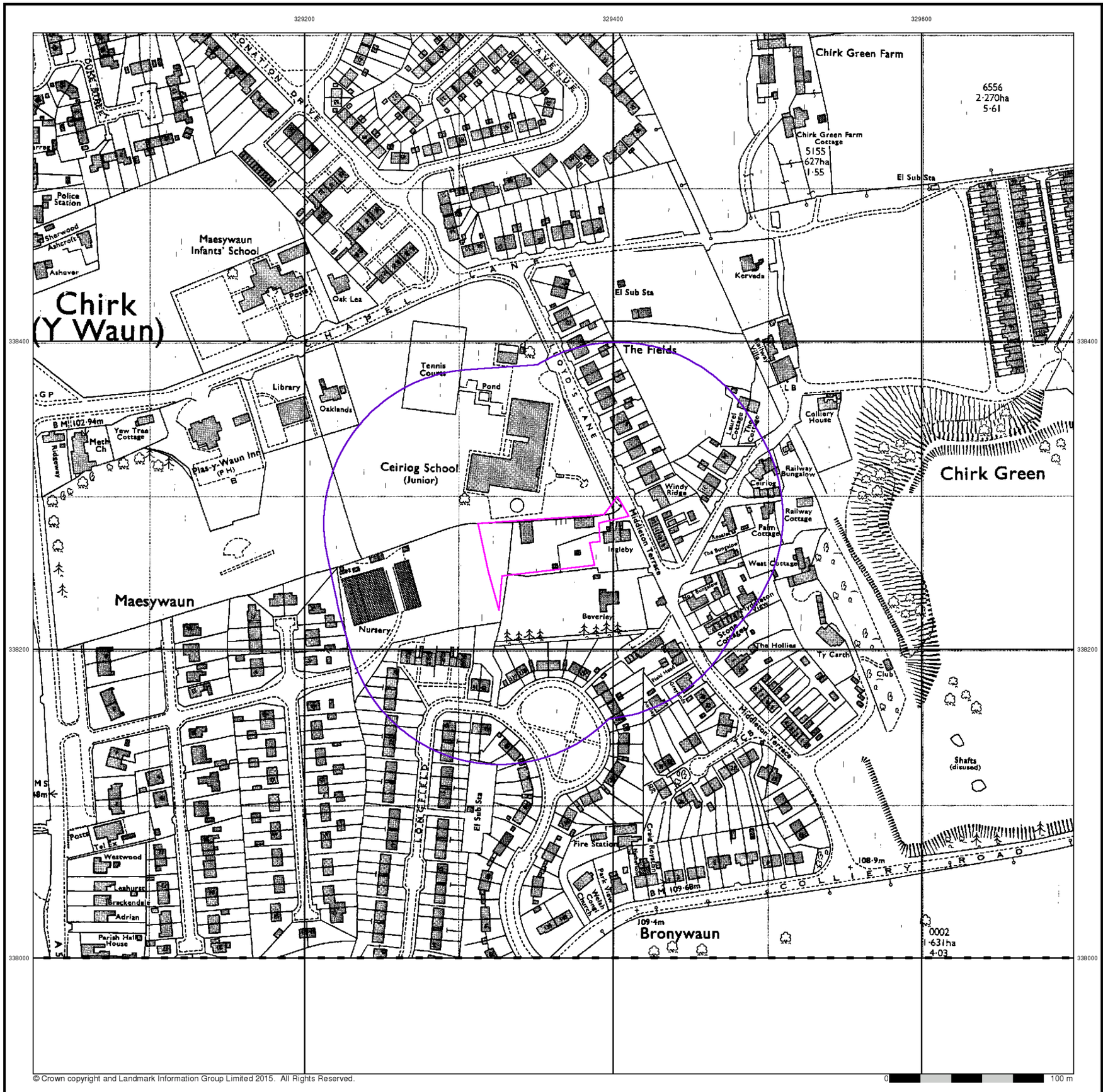

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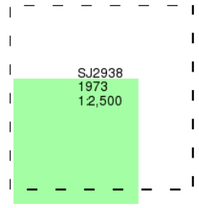

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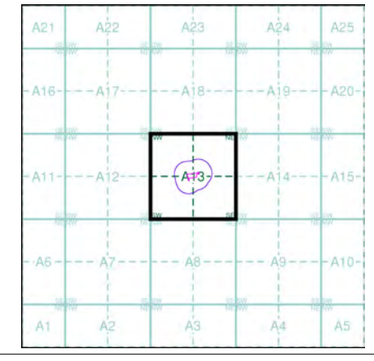

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Site Area (Ha):	0.28
Search Buffer (m):	100

Site Details

1, The Nurseries, Maes Y Waun, Chirk, WREXHAM, LL14 5NQ

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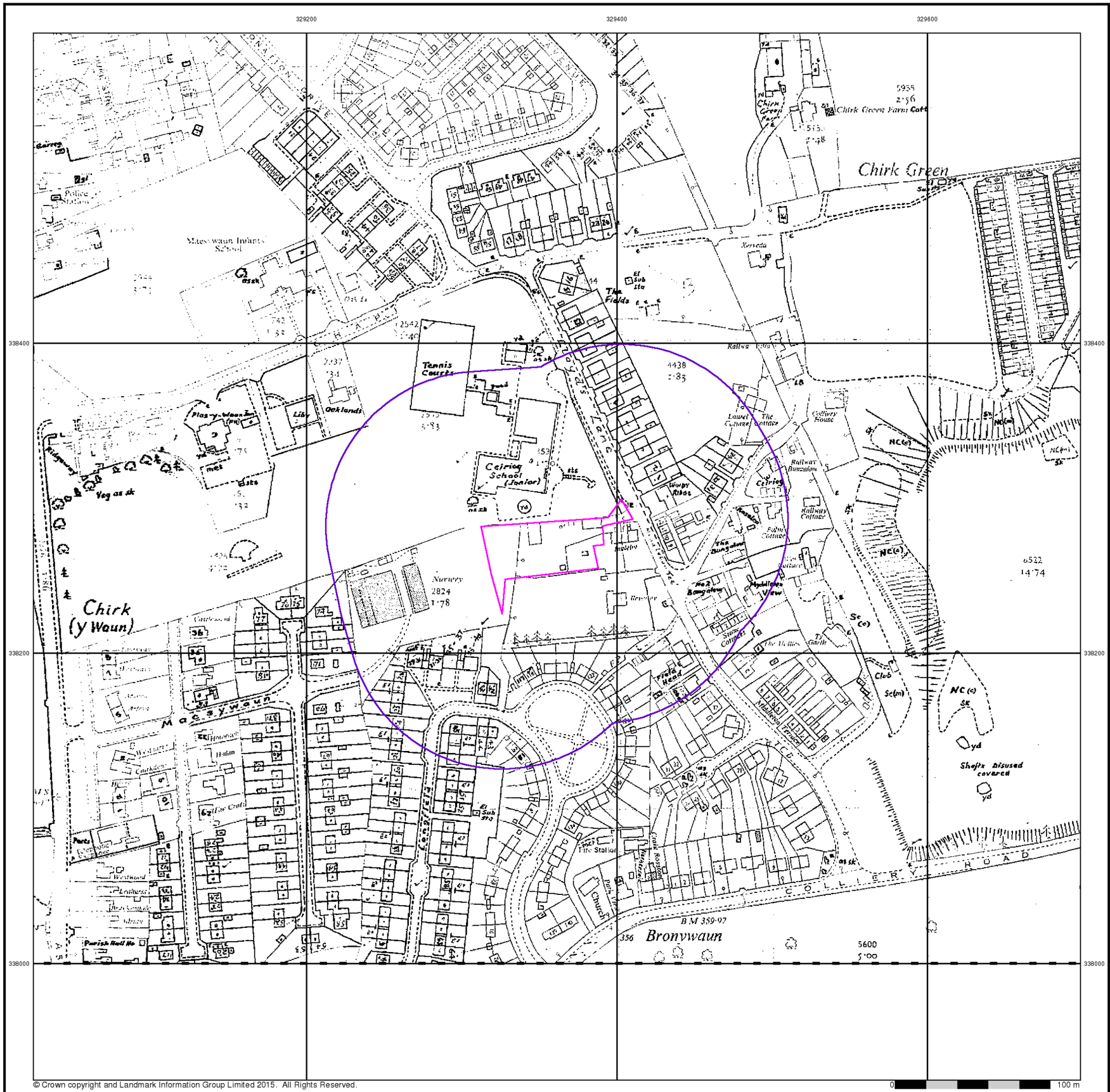
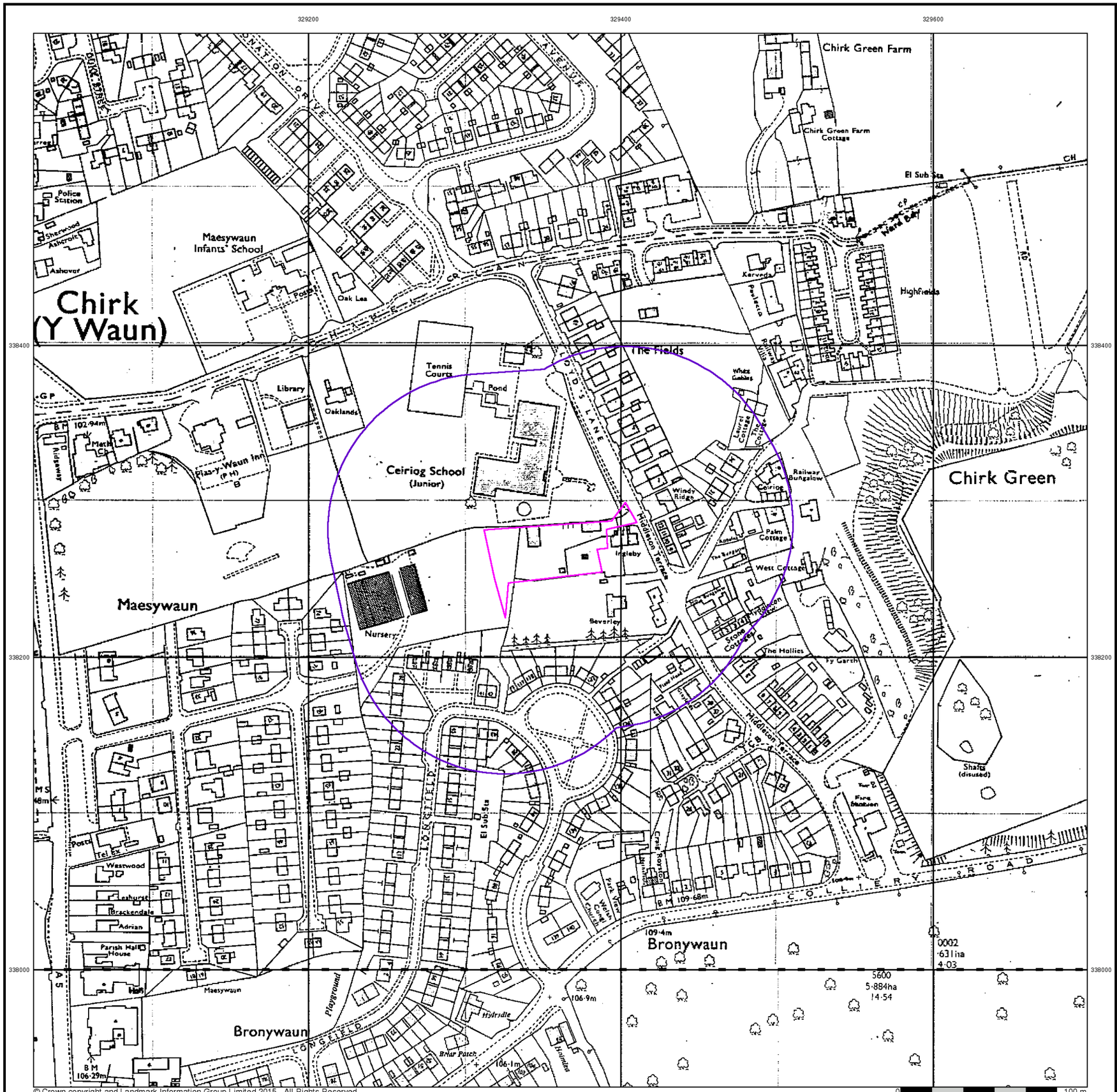

329200
329400
329600
338400
338200
338000
Chirk Green
Chirk Green Farm Cott
Maesywaun Infants School
Police Station
The Fields
Tennis Courts
Oaklands
Plas-y-Waun (PH)
Cefriog School (Junior)
Laurel Cottage
The Cottage
Railway Cottages
Railway Bungalow
Cefriog
Railway Cottage
Colliery House
Wesleyan Chapel
Nursery
Chirk (y Waun)
Maesywaun
Parish Hall
Bronywaun
B.M 359·97
COLLIERY ROAD
Shafts disused covered
Sc(m)
NC(c)
Gasholder
Tanks
Pylons
Lib
Ch
Sch
Vic
Rly
Sta
Ho
Cott
Bungalow
Club
Church
Path
Track
Footpath
Boundary
Fence
Hedge
Wall
Gate
Steps
Slope
Cutting
Embankment
Quarry
Spoil Heap
Pond
Stream
Ditch
Marsh
Reeds
Rough Grass
Scrub
Trees
Orchard
Allotments
Sports Ground
Golf Course
Cricket Ground
Tennis Court
Bowling Green
Racecourse
Shooting Butts
Caravan Site
Camping Site
Public Park
Garden
Nursery
Glasshouse
Refuse Tip
Slag Heap
Shaft
Adit
Level
Mine
Drift
Mineral Line
Tramway
Aqueduct
Weir
Lock
Sluice
Dock
Pier
Slipway
Boatyard
Foreshore
Mud
Sand
Shingle
Rock
Cliff
Beach
Dune
Saltmarsh
Coastal Feature
Lighthouse
Coastguard
Lifeboat Station
Radio Station
Telephone Exchange
Post Office
Police Station
Fire Station
Ambulance Station
Hospital
Surgery
Clinic
Dentist
Veterinary Surgery
Pharmacy
Optician
Chemist
Doctor
Nursing Home
Residential Home
Sheltered Housing
Retirement Home
Care Home
Children's Home
Orphanage
Prison
Borstal
Remand Centre
Young Offenders Institution
Detention Centre
Secure Unit
Secure Training Centre
Secure Accommodation
Secure Hospital
Secure Psychiatric Unit
Secure Mental Health Unit
Secure Learning Disability Unit
Secure Forensic Unit
Secure Medium Security Unit
Secure Low Security Unit
Secure High Security Unit
Secure Maximum Security Unit
Secure Special Security Unit
Secure Top Security Unit
Secure Ultra Security Unit
Secure Super Security Unit
Secure Hyper Security Unit
Secure Mega Security Unit
Secure Giga Security Unit
Secure Tera Security Unit
Secure Peta Security Unit
Secure Exa Security Unit
Secure Zetta Security Unit
Secure Yotta Security Unit
Secure Xona Security Unit
Secure Weka Security Unit
Secure Vendeka Security Unit
Secure Udeka Security Unit
Secure Tredeka Security Unit
Secure Undeka Security Unit
Secure Dod



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Additional SIMs

Published 1984 - 1991

Source map scale - 1:2,500

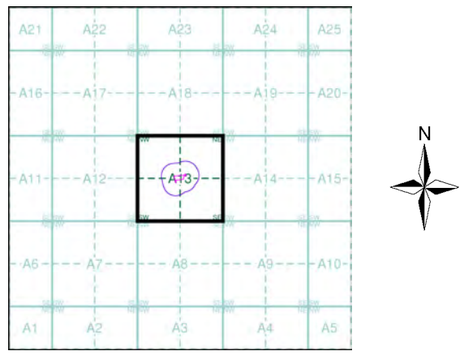
The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps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

Map Name(s) and Date(s)

SJ2938
1991
1:2,500

SJ2937
1984
1:2,500

Historical Map - Segment A13

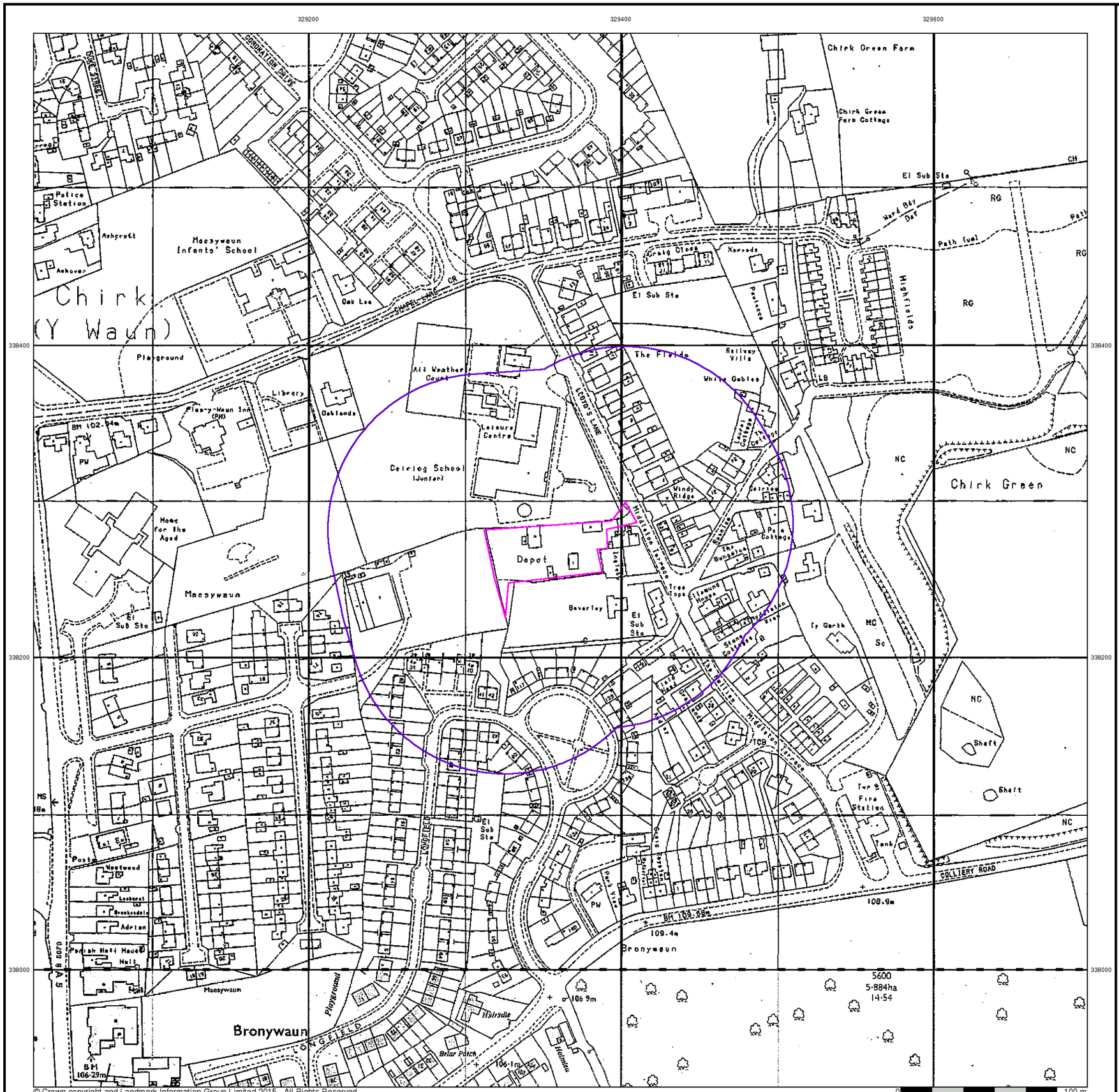


Order Details

Order Number:	144249272_1_1
Customer Ref:	R2280
National Grid Reference:	329360, 338270
Slice:	A
Site Area (Ha):	0.28
Search Buffer (m):	100

Site Details

1, The Nurseries, Maes Y Waun, Chirk, WREXHAM, LL14 5NQ



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Additional SIMs

Published 1990 - 1992

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.

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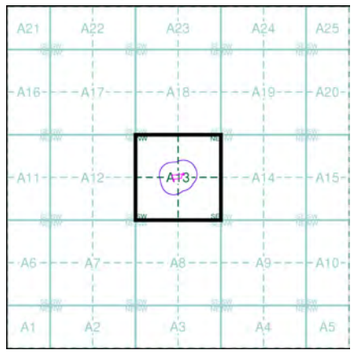
SJ2938
1992
1:2,500

SJ2937
1990
1:2,500

Historical Map - Segment A13



Order Details

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Customer Ref:	R2280
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Slice:	A
Site Area (Ha):	0.28
Search Buffer (m):	100

Site Details

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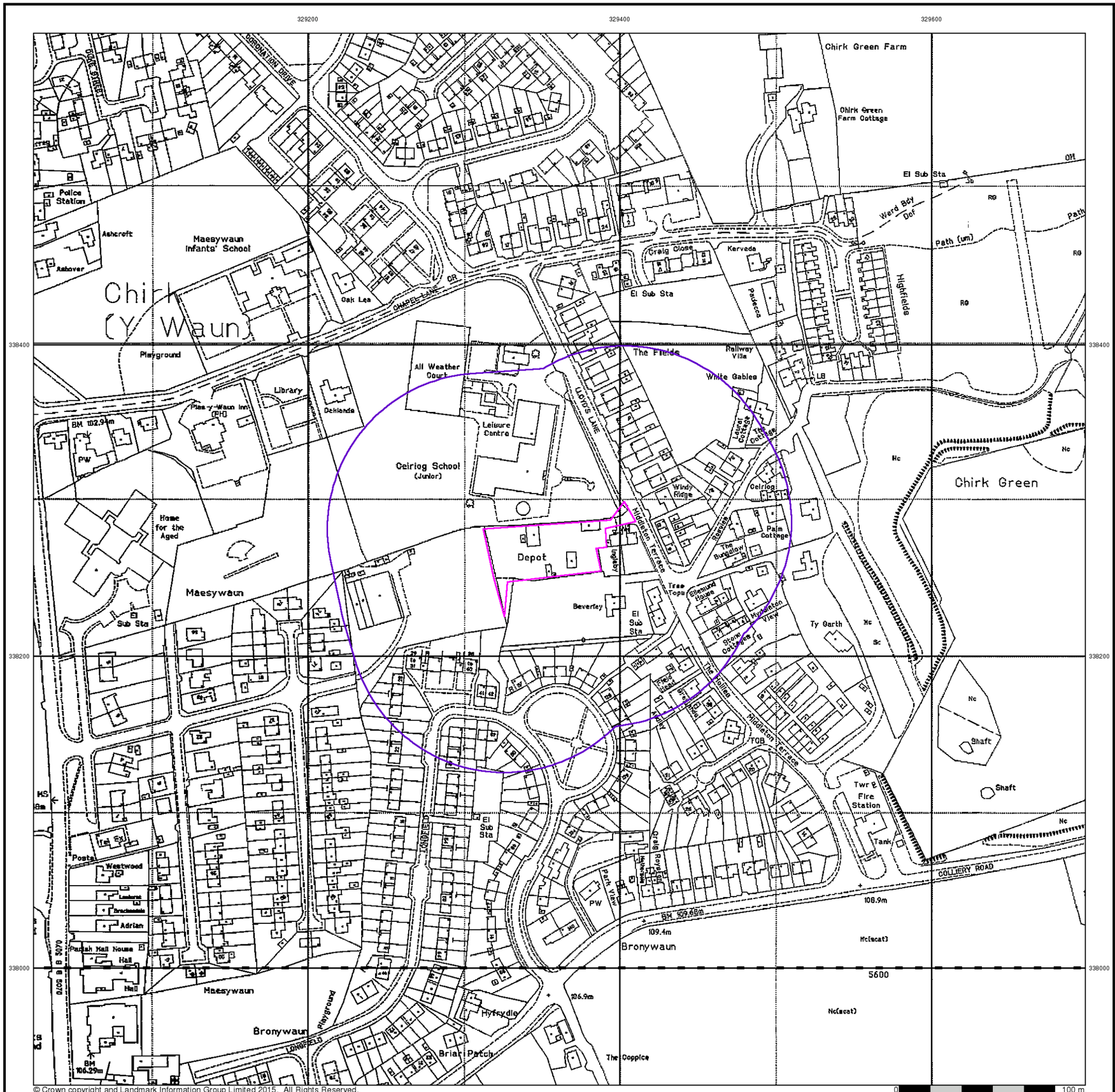

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Large-Scale National Grid Data

Published 1994

Source map scale - 1:2,500

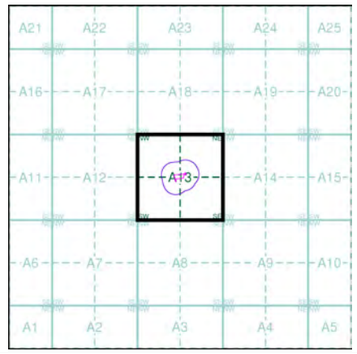
'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic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

Map Name(s) and Date(s)

SJ2938
1994
1:2,500

SJ2937
1994
1:2,500

Historical Map - Segment A13



Order Details

Order Number:	144249272_1_1
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National Grid Reference:	329360, 338270
Slice:	A
Site Area (Ha):	0.28
Search Buffer (m):	100

Site Details

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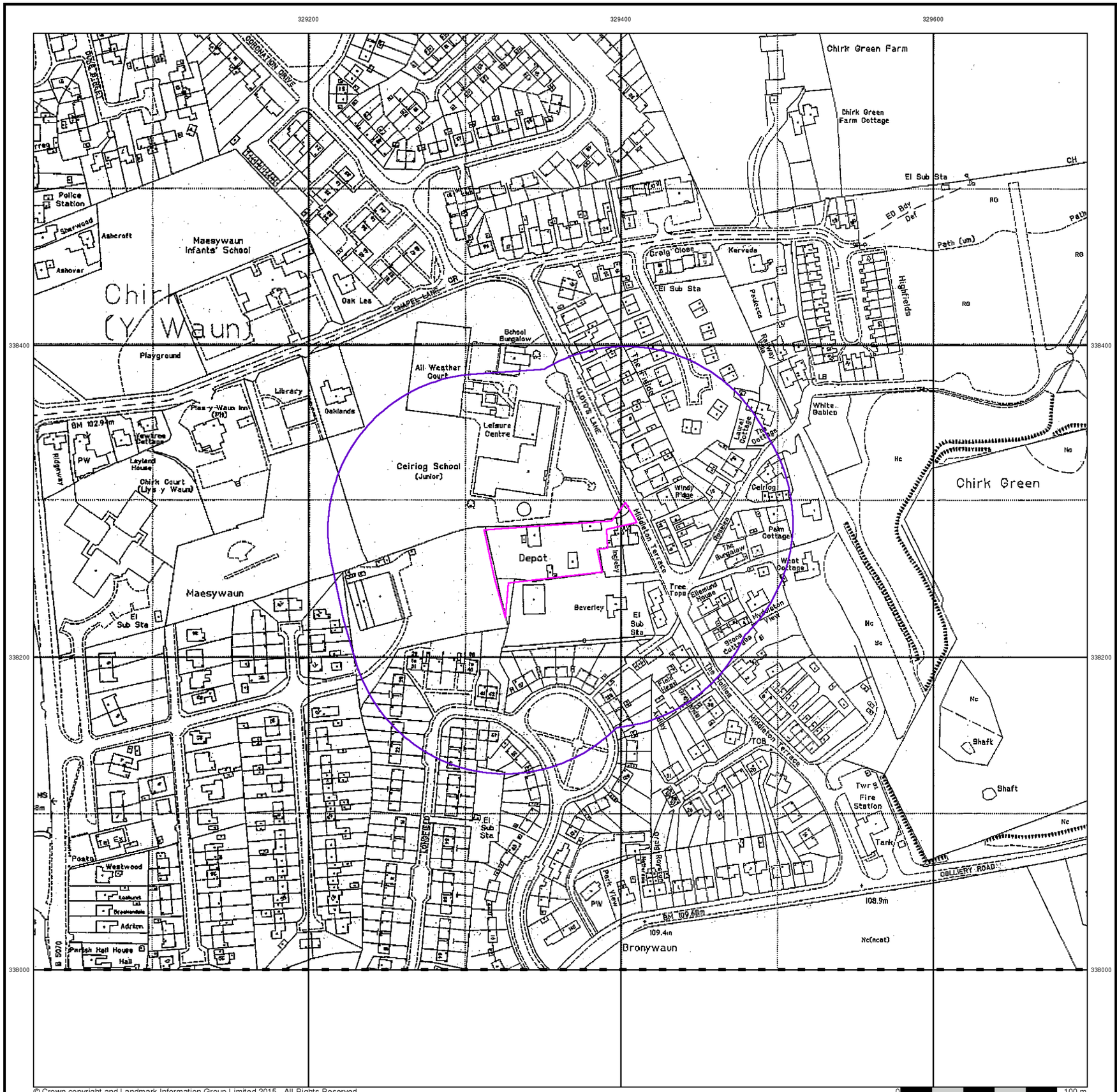

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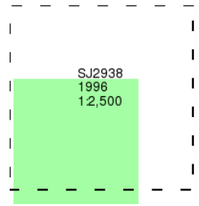
Large-Scale National Grid Data

Published 1996

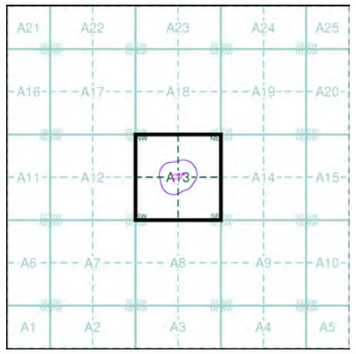
Source map scale - 1:2,500

'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)



Historical Map - Segment A13



Order Details

Order Number:	144249272_1_1
Customer Ref:	R2280
National Grid Reference:	329360, 338270
Slice:	A
Site Area (Ha):	0.28
Search Buffer (m):	100

Site Details

1, The Nurseries, Maes Y Waun, Chirk, WREXHAM, LL14 5NQ

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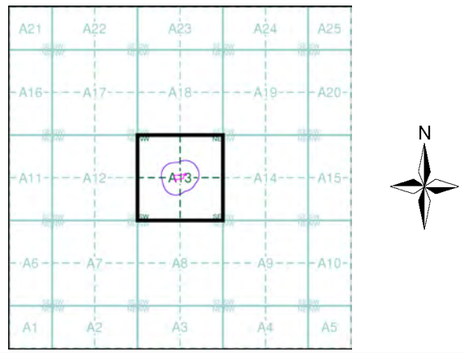
Historical Aerial Photography

Published 2001

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

Historical Aerial Photography - Segment A13



Order Details

Order Number:	144249272_1_1
Customer Ref:	R2280
National Grid Reference:	329360, 338270
Slice:	A
Site Area (Ha):	0.28
Search Buffer (m):	100

Site Details

1, The Nurseries, Maes Y Waun, Chirk, WREXHAM, LL14 5NQ

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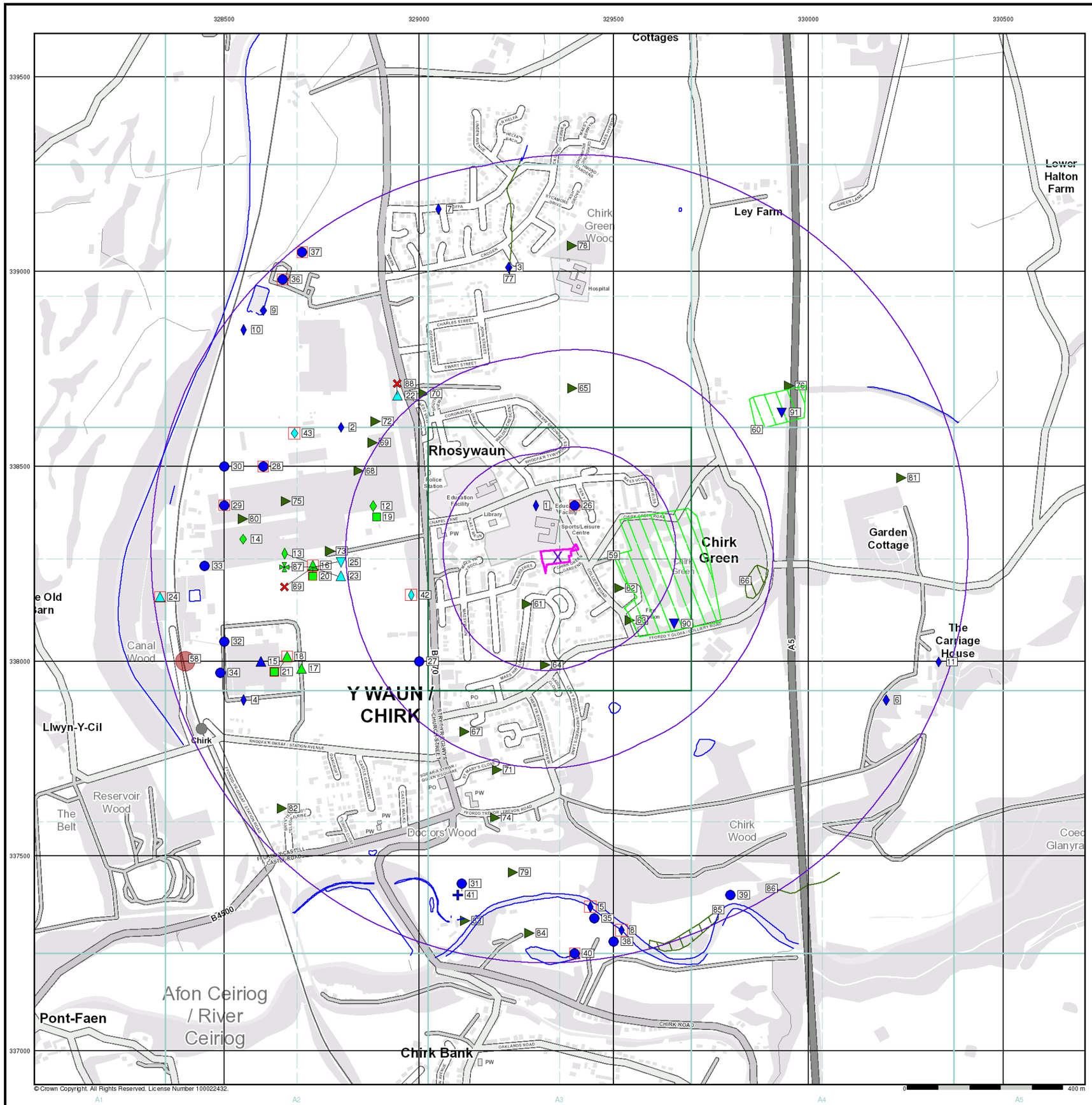
APPENDIX C

Envirocheck Sensitivity Report



Envirocheck®

LANDMARK INFORMATION GROUP®

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

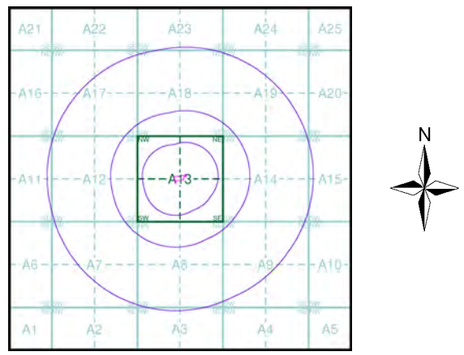
Geological

- 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)
- 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

Site Sensitivity Map - Slice A



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National Grid Reference:	329360, 338270
Slice:	A
Site Area (Ha):	0.28
Search Buffer (m):	1000

Site Details

1, The Nurseries, Maes Y Waun, Chirk, WREXHAM, LL14 5NQ

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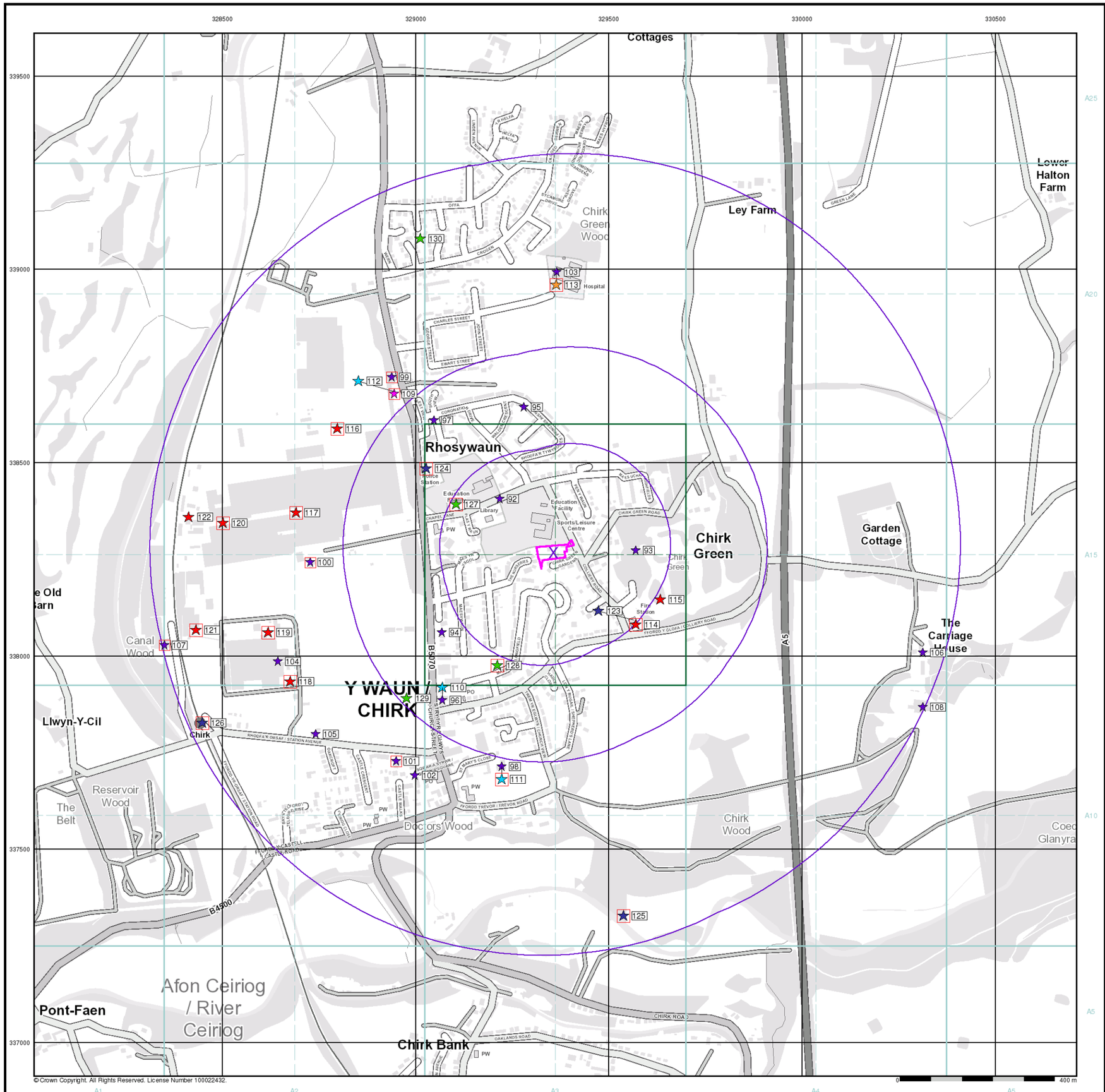

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Industrial Land Use Map

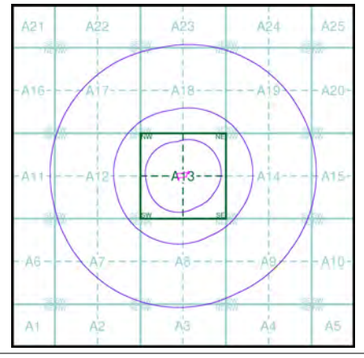
General

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



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Slice:	A
Site Area (Ha):	0.28
Search Buffer (m):	1000

Site Details

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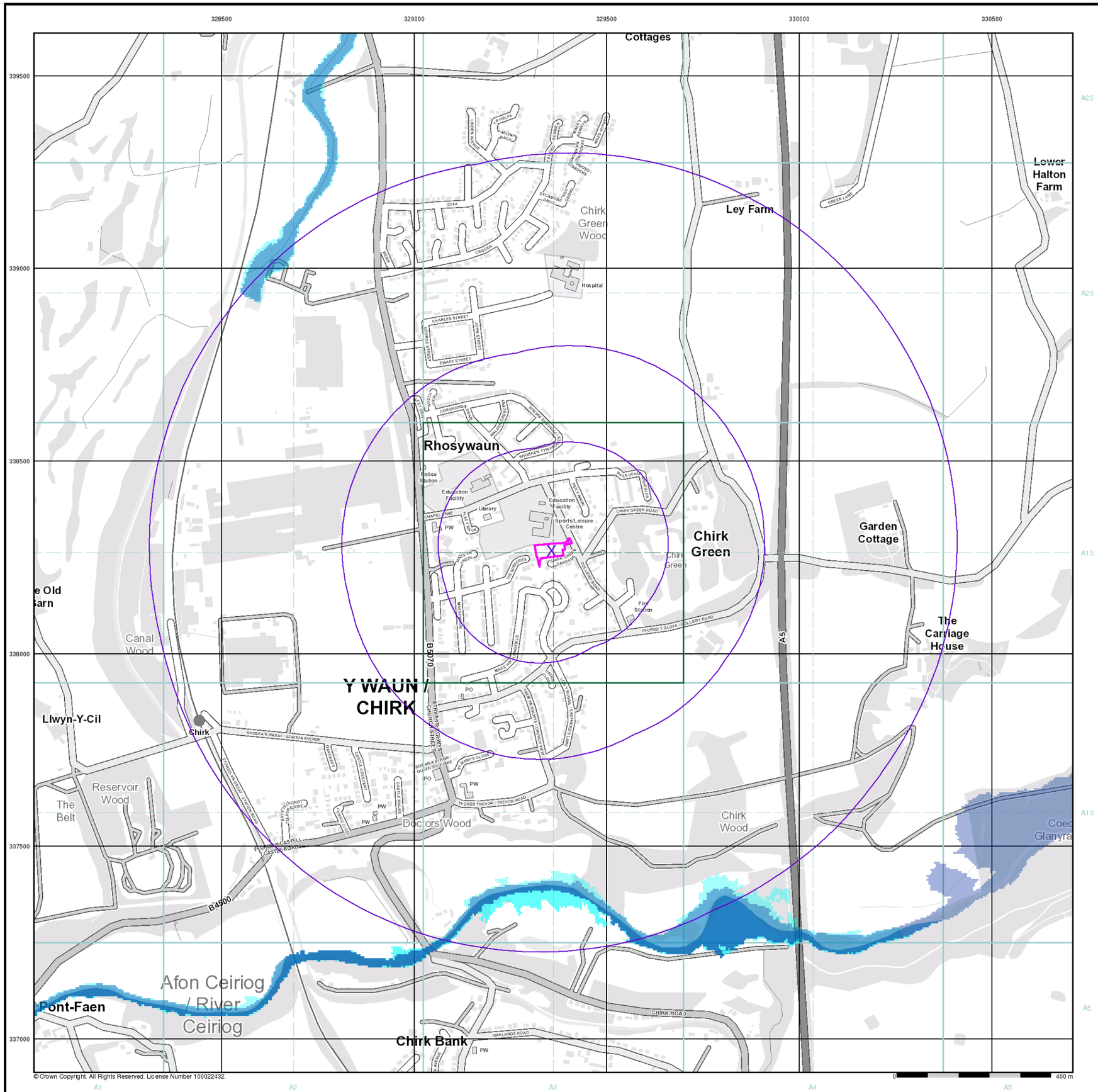

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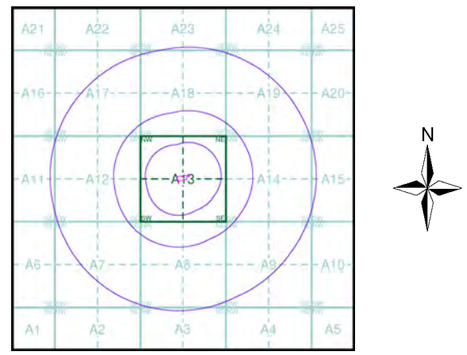
General

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

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



Order Details

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National Grid Reference:	329360, 338270
Slice:	A
Site Area (Ha):	0.28
Search Buffer (m):	1000

Site Details

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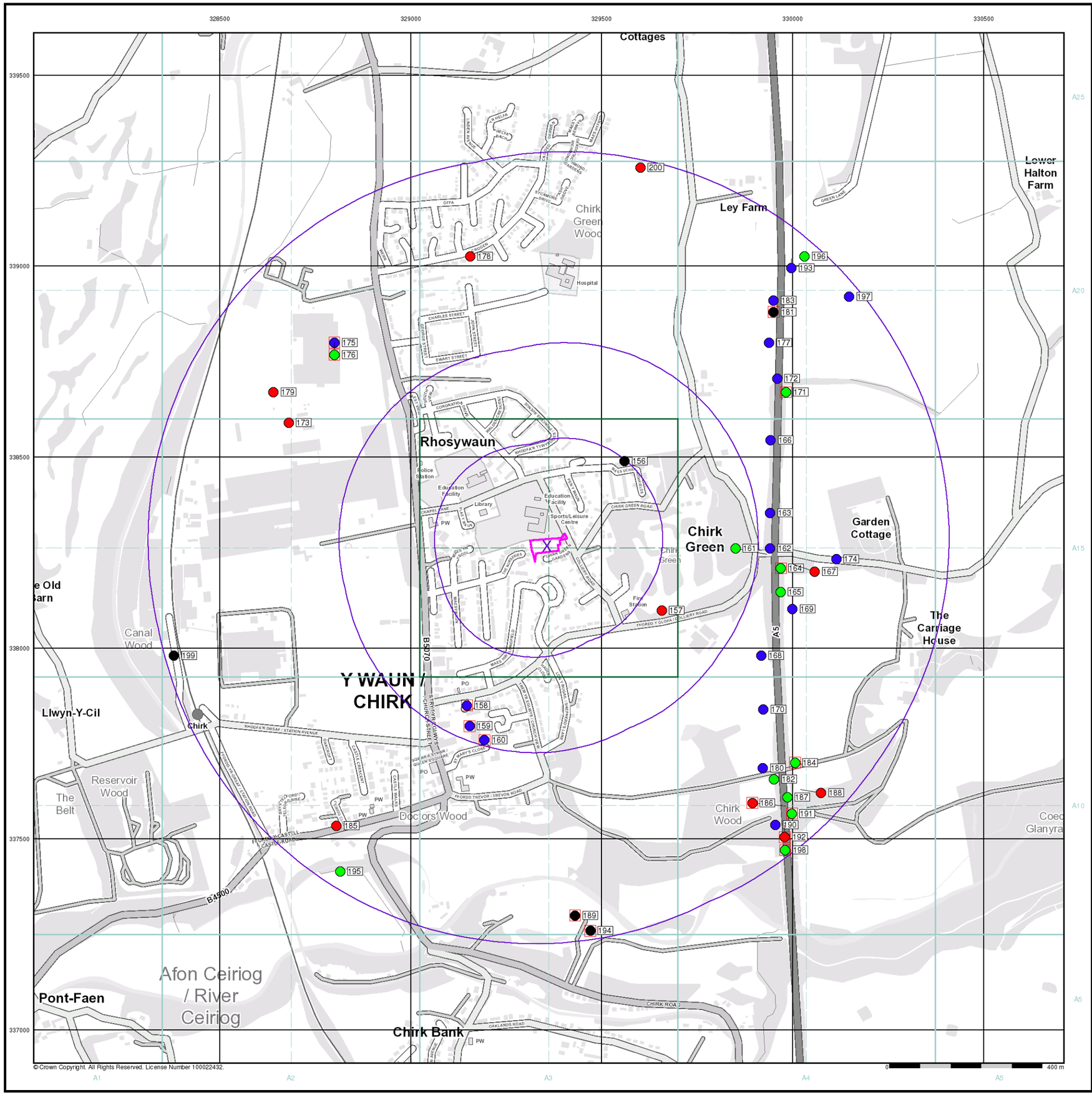

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LANDMARK INFORMATION GROUP®

General

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

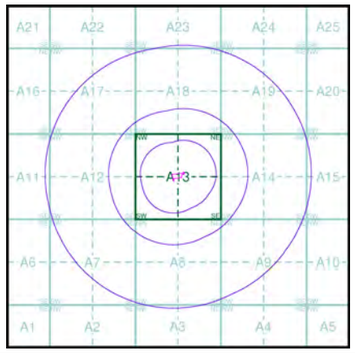
Agency and Hydrological (Boreholes)

- 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



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National Grid Reference:	329360, 338270
Slice:	A
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Search Buffer (m):	1000

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General

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

OS Water Network Data

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

Contours (height in meters)

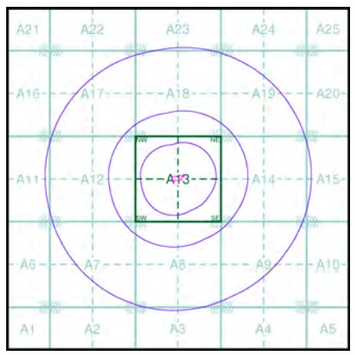
Standard Contour 105 100 95

Master Contour

Spot Height 167.3

- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



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Search Buffer (m):	1000

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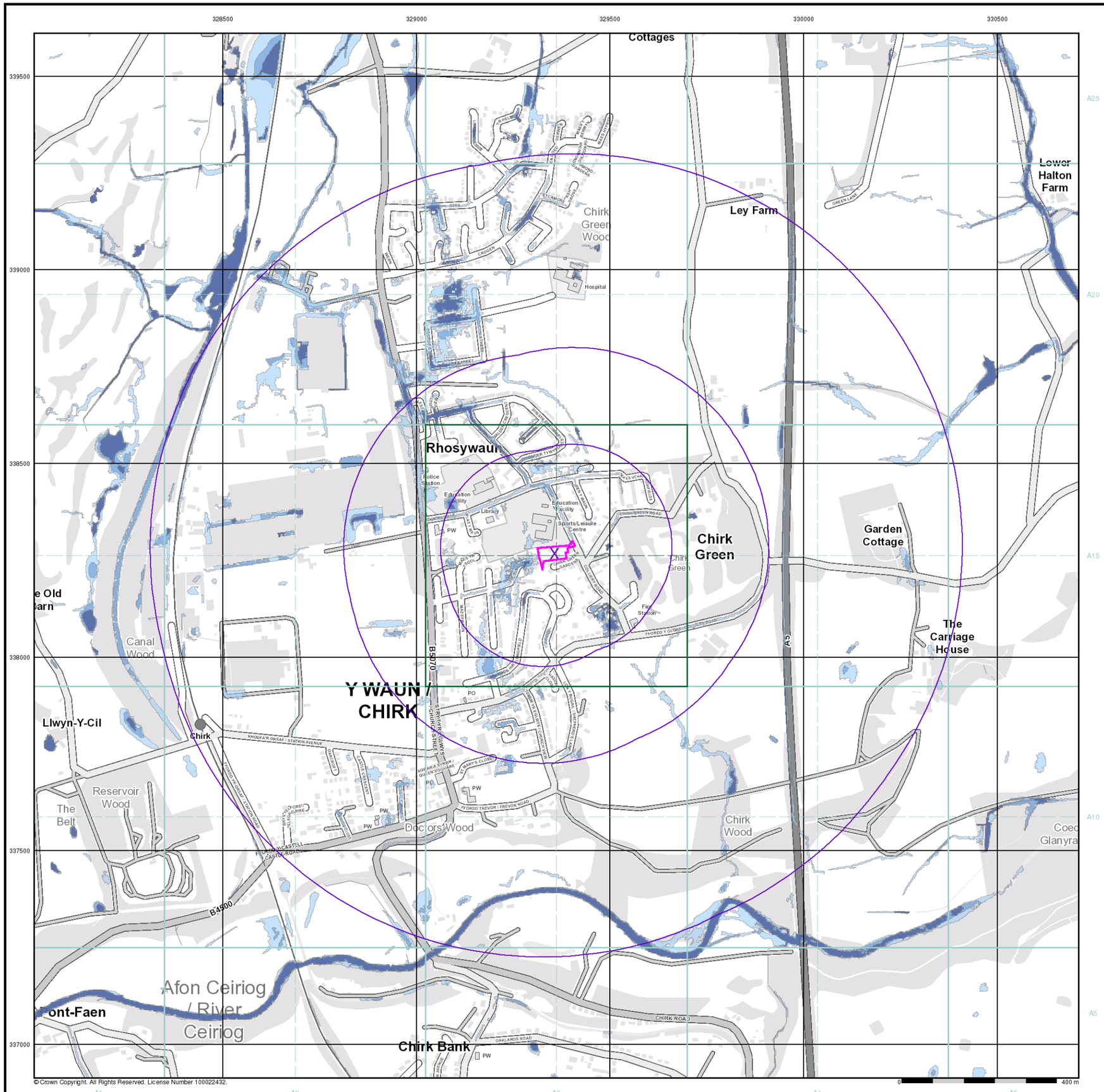

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General

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

Risk of Flooding from Surface Water

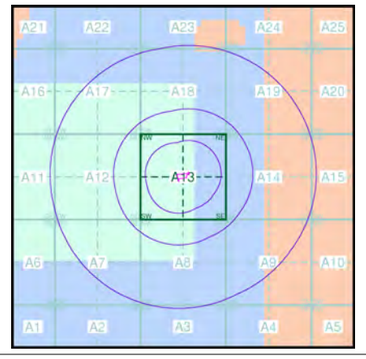
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



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APPENDIX D

Coal Mining Report

The Coal Authority

Resolving the impacts of mining

CON29M Non-Residential Mining Report

1, THE NURSERIES
MAES Y WAUN
CHIRK
WREXHAM

Date of enquiry:	26 October 2017
Date enquiry received:	26 October 2017
Issue date:	26 October 2017
Our reference:	51001683589001
Your reference:	144249272_2|

CON29M Non-Residential Mining Report

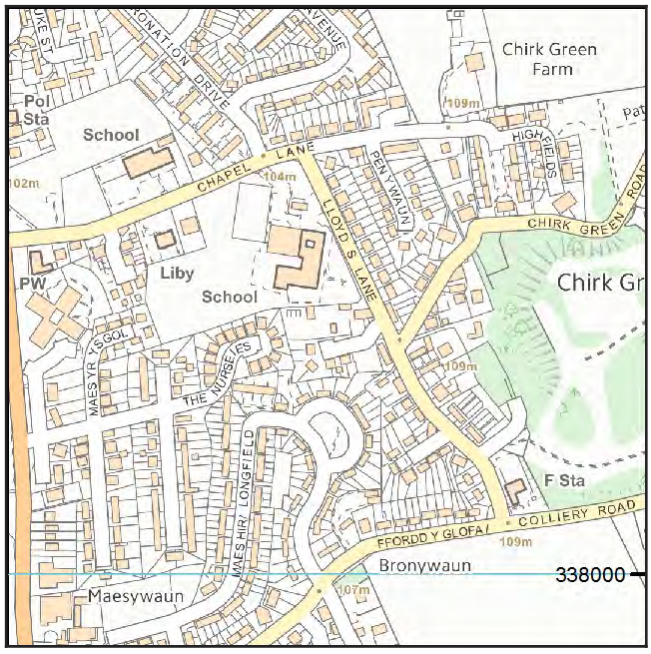
This report is based on, and limited to, the records held by the Coal Authority and the Cheshire Brine Subsidence Compensation Board's records, at the time we answer the search.

Client name

LANDMARK INFORMATION GROUP LIMITED

Enquiry address

1, THE NURSERIES, MAES Y WAUN, CHIRK, WREXHAM



Approximate position of property

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How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

/company/the-coal-authority
/thecoalauthority
/coalauthority

Summary

Has the search report highlighted evidence or potential of		
1	Past underground coal mining	No
2	Present underground coal mining	No
3	Future underground coal mining	Yes
4	Mine entries	No
5	Coal mining geology	No
6	Past opencast coal mining	No
7	Present opencast coal mining	No
8	Future opencast coal mining	No
9	Coal mining subsidence	No
10	Mine gas	No
11	Hazards related to coal mining	No
12	Withdrawal of support	No
13	Working facilities order	No
14	Payments to owners of former copyhold land	No
15	Information from the Cheshire Brine Subsidence Compensation Board	No

For detailed findings, please go to page 4.

Detailed findings

1. Past underground coal mining

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

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 plans to grant a licence to remove coal using 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 known coal mine entries within, or within 20 metres of, the boundary of the property.

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, 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 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.

15. Information from the Cheshire Brine Subsidence Compensation Board
The property lies outside the Cheshire Brine Compensation District.

Additional remarks

Information provided by the Coal Authority in this report is compiled in response to the Law Society's Con29M Coal Mining and Brine Subsidence Claim enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL. Please note that Brine Subsidence Claim enquiries are only relevant for England and Wales. This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority and Cheshire Brine Board's Terms and Conditions applicable at the time the report was produced.

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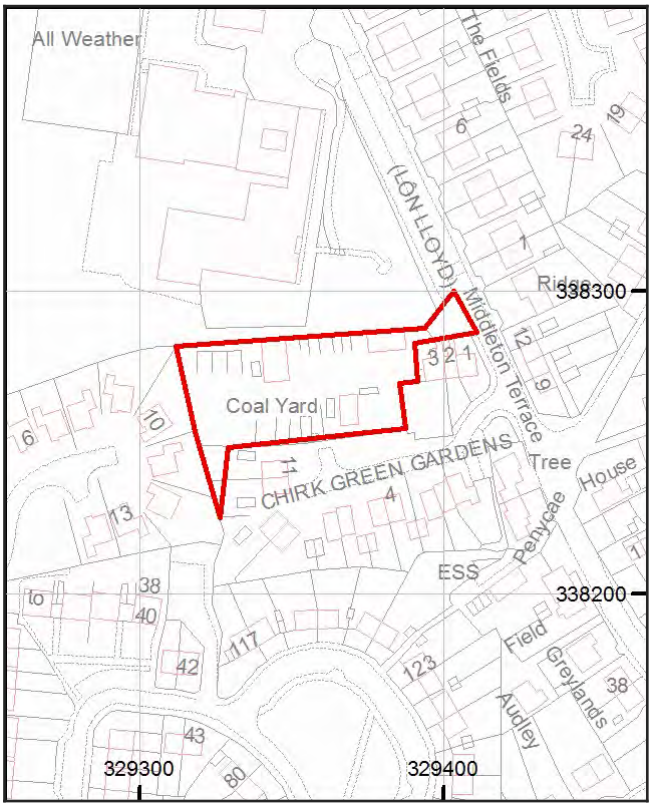
Enquiry boundary

Key

Approximate position of enquiry boundary shown



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Map data

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