




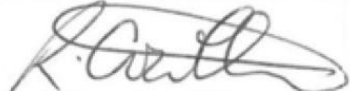
JPC Environmental Services
(A Division of JP Chick & Partners Ltd)

**Fairways Cottage
Newton
Sudbury
CO10 0QN**

Stage 1/ Tier 1 – Contaminated Land Assessment



DOCUMENT CONTROL

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Table of Contents

DOCUMENT CONTROL	1
ISSUE & REVISIONS RECORD	1
EXECUTIVE SUMMARY	4
1.0 INTRODUCTION	6
1.01 Brief	6
1.02 Scope	6
1.03 Location	7
1.04 Development Proposal	7
2.0 DESK STUDY	8
2.01 Sources of Information	8
2.02 Site Description	8
2.03 Site History	9
2.04 Geology, Hydrogeology & Hydrology	10
2.05 Statutory Searches – Enviro Insight Report	11
2.06 Radon	13
2.07 Mineral Workings	13
2.08 Local Authority Information – Babergh District Council	14
2.09 Planning Portal	14
2.10 Site Photographs	14
2.11 Site Walkover Survey	14
3.0 CONCEPTUAL SITE MODEL	15
3.01 Introduction	15
3.02 Potential Sources of Contamination	16
3.03 Potential Contaminant Pathways	16
3.04 Potential Contaminant Receptors	17
3.05 Plausible Pollutant Linkages	17
4.0 ENVIRONMENTAL ASSESSMENT	18
4.01 Summary of Key Drivers	18
4.02 Environmental Risk Assessment	18
4.03 Environmental Litigation (Part IIA)	19
4.04 Further Investigations	19
5.0 RECOMMENDATIONS	20

Appendix

Appendix A - Site Location Plan.....	A
Appendix B – Architects Layout Plan.....	B
Appendix C – Historic Maps.....	C
Appendix D – Enviro Insight Report.....	D
Appendix E - Site Photographs	E
Appendix F - Local Authority Response.....	F

Table of Figures

Figure 1 - Architects Proposed Layout.....	7
Figure 2 - Extract of Current Use Land Map	12
Figure 3 - Enviro Insight Infilled Land and Industrial Use Map.....	13

Tables

Table 1 - Historical Mapping.....	9
Table 2 - Geology.....	10
Table 3 - Contaminant Sources.....	11
Table 4 - Contaminant Pathways.....	12
Table 5 - Contaminant Receptors	12
Table 6 - Potential Sources of Contamination.....	15
Table 7 - Identified Pathways	16
Table 8 - Identified Receptors	16
Table 9 - Possible Pollutant Linkages.....	17
Table 10 - Risk Classification.....	18



EXECUTIVE SUMMARY

Site Name & Address:	Fairways Cottage, Newton, Sudbury CO10 0QN
Client:	Mr Nick Hunt and Dr Yanli Wang
Architect:	KHA Architectural Design
Local Planning Authority:	Babergh District Council
Historical Site Use:	Natural Health Practice
Present Site Use:	Residential Property
Proposed Site Use:	4 No. residential dwellings
Objectives:	
<ul style="list-style-type: none"> ▪ To develop a good understanding of the site's history and environmental context. ▪ To determine the potential existence of any significant pollutant linkages which might represent a potential risk to construction workers, future occupants of the site or controlled waters. ▪ To undertake a Stage 1/ Tier 1 Preliminary 'Contaminated Land' investigation in accordance with LCRM and guidance contained in the NHBC Publication 66: 2008. 	
Geology, Hydrogeology & Hydrology:	
<ul style="list-style-type: none"> ▪ Based on the BGS online mapping, the site is likely to be underlain by superficial deposits of Lowestoft Formation - Sand and Gravel. This is further underlain by bedrock deposits of London Clay Formation - Clay, Silt and Sand. ▪ The BGS borehole [TL94SW6] reports High-level Gravels to a depth of 3.96m (bgl), Boulder Clay to a depth of 5.03m (bgl), Sand and Gravel to a depth of 11.9m (bgl), London Clay to a depth of 21.3m (bgl), Reading Beds to a depth of 35.7m (bgl) and Chalk to a depth of 77.7m (bgl), where the borehole was terminated. Groundwater had a rest-level of 20.4m (bgl). ▪ The superficial deposits are classified as Secondary A Aquifer and the bedrock deposits (London Clay) as Unproductive Strata. ▪ The Environment Agency has classified the groundwater vulnerability as Minor Aquifer / Intermediate Leaching Potential. ▪ The site is located within groundwater Source Protection Zone 3 (Total Catchment). ▪ The site is located within Flood Zone 1. ▪ In relation to the overall hydrology, the site is occupied by a mixture of buildings, hardstanding and grass lawn. 	
Findings:	
<ul style="list-style-type: none"> ▪ The earliest available historical mapping suggests that the site was an unused open grass field in 1885. A few buildings and a tennis court appeared at some point between 1928 and 1955. ▪ The historical review of the surrounding area (within 500m of the site) has shown that nearby activities include the village of Newton to the north-east, Newton Green Golf Club to the east, and farms to the north and south-west. ▪ More recent images of the site show it is laid to a mixture of buildings, hardstanding, grass and small patches of trees. 	



Risk Assessment:

- Our desk-based research identified the following potential sources of contamination:
 - i) On-site; Heating oil tanks, Suspected asbestos containing materials, Bonfire area, Previous activities (Stables).
 - ii) Off-site; Historic Industry (Smithy / Malthouse), Current Industry (Water Pumping Station / Tank).
- We consider that these sources have the possibility to represent a MODERATE risk to the site and future occupants.
- We consider the potential on-site and off-site sources of contamination to represent a LOW risk to groundwater.
- The potential risk from ground gas migrating onto the site and affecting the proposed development is also considered to be LOW.

Recommendations:

Based on the information obtained and reviewed as part of this preliminary assessment, JPC Environmental Services would advise the following:

- We would recommend that a Stage 1/ Tier2 Quantitative Risk Assessment is undertaken, including an intrusive investigation. This would focus on the potential sources of contamination such as the demolition arisings, oil tanks, and bonfire area, and more sensitive locations such as the proposed garden areas. Based on the information obtained, we would recommend that samples of the on-site soils are tested for a routine suite of toxic metals and organic contaminants, including asbestos fibres.
- We would recommend undertaking an HSG264 Pre-demolition / major refurbishment asbestos survey of the existing buildings. All identified asbestos containing materials (ACM) should then be removed, by a suitably experienced contractor, prior to any demolition works.

1.0 INTRODUCTION

1.01 Brief

1.01.1 JPC Environmental Services were appointed by KHA Architectural Design, on behalf of Mr Nick Hunt and Dr Yanli Wang, to undertake a Phase I Contaminated Land Investigation and Risk Assessment for 'Fairways Cottage, Newton, Sudbury CO10 0QN' (hereafter referred to as 'the site').

1.01.2 The purpose of the investigation, comprising a desktop study was to:

- Identify any significant potential sources of ground contamination either on the site or in close proximity to it, which could have a negative impact on the proposed development.
- To determine the potential existence of any significant pollutant linkages that might represent a potential risk to future occupants.
- To determine whether any further investigations would be required, to enable the potential risk to human health and controlled waters to be assessed.

1.01.3 The investigation was carried out broadly in accordance with Contaminated Land Report 11 (CLR 11) and the updated NHBC Guidance Document "R & D Publication 66: 2008 – Guidance for the Safe Development of Housing on Land Affected by Contamination".

1.01.4 Authority to carry out this work was received on 05 November 2018 from KHA Architectural Design via email.

1.01.5 This report shall be for the private and confidential use of Mr Nick Hunt and Dr Yanli Wang for whom it was undertaken, and their architect. It should not be reproduced in whole or in part, or relied upon by a third party for any use without the express written authority of JPC Environmental Services.

1.02 Scope

1.02.1 The main elements of the investigation were as follows:

- The collection and review of historical and regulatory information relating to the site to gain an understanding of the site's history, the local environment and potential ground conditions
- The formulation of a "Conceptual Site Model" to explore and evaluate the existence and potential impact of any plausible pollutant linkages
- To utilise the resulting information to undertake a 'Tier 1' human and environmental risk assessment
- If appropriate, make recommendations on the extent of any intrusive investigations which may be required to fully establish the condition of the site



1.03 Location

- 1.03.1 Fairways Cottage, Newton, Sudbury CO10 0QN
- 1.03.2 Map coordinates: Easting: 591405
Northing: 240656
- 1.03.3 OS Ref: TL914406
- 1.03.4 NGR: TL94SW20
- 1.03.5 The site is accessed from: Unnamed road to the north-east.
- 1.03.6 A detailed map of the location is presented within the appendices.

1.04 Development Proposal

- 1.04.1 We understand that the intention is to demolish the existing structures and construct 4 No. new residential dwellings.
- 1.04.2 An extract of the proposed development layout is shown below. A full-scale copy of the Architect's layout drawing is presented within the appendices.

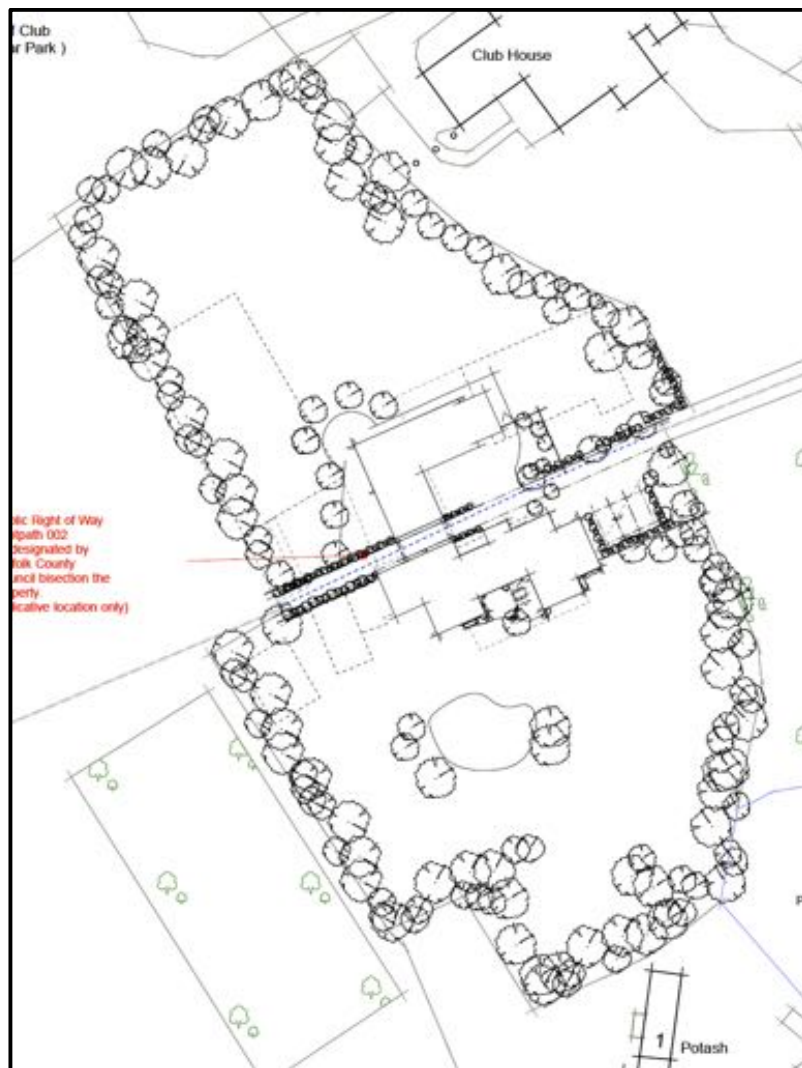


Figure 1 – Architect's Proposed Sketch Layout (extract)

2.0 DESK STUDY

2.01 Sources of Information

2.01.1 As part of the desk-based research, JPC Environmental Services consulted the following sources of information: -

- Enviro Insight Report – produced by Groundsure Ltd
- Map Insight Report – produced by Groundsure Ltd
- British Geological Survey (BGS) mapping and online referencing
- Environment Agency groundwater mapping – online
- Environment Agency source protection zones – online
- Environment Agency indicative flood mapping – online
- Environment Agency landfill mapping – online
- BR 211 Radon: Guidance on Protective Measures for New Dwellings, 2007 Edition
- Magic Map Website – magic.defra.gov.uk
- Babergh District Council Planning Portal
- Google Earth (Aerial Photographs)

2.02 Site Description

2.02.1 The following site description is based on a review of aerial photography. A detailed walkover survey is included within section 2.11 of this report.

2.02.2 The site is accessed via an unnamed road to the east. This leads to an area of asphalt hardstanding and several buildings. The buildings to the north and south appear to have tile roofs. To the west of the northern buildings is an area of gravel hardstanding.

2.02.3 There is a large building to the north-west of the site, which looks to be a barn or similar structure. There are a few more buildings to the immediate south of the 'barn'. Around one of these buildings is a small patch of trees.

2.02.4 The areas to the north and south of the site are laid to large areas of grass, and the boundaries are lined with trees.

2.02.5 On the northern boundary there appears to be a small pile of demolition arisings, where historical photographs (2012 & 2015) previously showed well defined rectangular features.

2.02.6 On Tuesday 13th September 2018 photographs of the site were provided by the architect. These have been incorporated into the report within section 2.10. The walkover survey was undertaken on Tuesday 30th March 2021 and is included in section 2.11.

2.03 Site History

2.03.1 To ascertain the existence of any potentially contaminative former land uses within the locality, JPC Environmental Services purchased a Map Insight report published by Groundsure Ltd, which contains a range of historic 'County' maps and modern Ordnance Survey map extracts. The extracts reviewed as part of this desk study were produced in three scales, 1:2,500 and 1:10,000 (metric

scale), and 1:10,560 (imperial scale). The maps cover the period from 1885 - 2014, with a more recent aerial photographs provided within the Enviro Insight report (2017) and Google Earth.

2.03.2 Details of the historic land uses are summarised in the table below, while copies of the full-sized map extracts are presented within appendices for reference purposes.

Map Edition (Date)	The Site	Surrounding Area
1885 (1:2,500)	The site is shown as an empty field.	A building is shown adjacent to the south-east. A smithy is shown ~180m to the north and a malthouse ~150m to the north-east. Additional village buildings are shown ~250m to the north-east. An old gravel pit is shown ~150m to the east. A collection of buildings is shown ~180m to the south-east. A few ponds are shown adjacent to the south-east, ~150m to the north-east and ~200m to the south-east. Agricultural fields are shown in all directions.
1885 (1:10,560)	The site appears unchanged.	'Hills Farm' is shown ~400m to the north and 'Newton Lays' ~450m to the south-west. Another large pond is shown ~450m to the east.
1902 (1:2,500)	The site appears unchanged.	The surrounding area appears unchanged.
1905 (1:10,560)	The site appears unchanged.	The surrounding area appears unchanged.
1926 (1:2,500)	The site appears unchanged.	A building to the north is no longer marked 'Smithy'. The buildings to the south is now marked 'Butcher's cottages'. The area ~140m to the east is marked as 'Golf Course'.
1928 (1:10,560)	The site appears unchanged.	Allotment Gardens are shown ~450m to the south-east.
1955 (1:2,500)	3 No. buildings and a tennis court are shown.	A building to the north-east is no longer marked 'Malthouse'.
1958 (1:10,560)	The site appears unchanged.	An additional building is shown associated with 'Newton Lays' ~350m to the south-west.
1976 (1:2,500)	The site appears unchanged.	The surrounding area appears unchanged.
1977 (1:10,000)	The site appears unchanged.	The village of Newton has grown with many new buildings.
1994 (1:2,500)	The site appears unchanged.	The surrounding area appears unchanged.

2002 (1:10,000)	The site appears unchanged.	A building is shown adjacent to the north-east.
2010 (1:10,000)	The site appears unchanged.	The golf course is now shown to the north-west.
2014 (1:10,000)	The site appears unchanged.	The surrounding area appears unchanged.
Aerial Photograph (2017)	There are a few buildings in the centre of the site. The north-west and south-east of the site is laid to grass lawn.	A building with associated car park is shown to the north. A golf course is shown to the north-west and west. A building and pond are adjacent to the south. Additional buildings and a pond are shown to the north-east.

Table 1 - Historical Mapping

2.04 Geology, Hydrogeology & Hydrology

2.04.1 To determine the nature of the underlying geology, we have consulted the 1:50,000 scale geological maps compiled by British Geological Survey (BGS) Our finds are summarised in the table below.

Geology

Age	Stratigraphic Name	Description
Quaternary	Lowestoft Formation – Sand and Gravel.	Permeable superficial deposits – comprising SAND and GRAVEL.
Palaeogene	London Clay Formation - Clay, Silt and Sand.	Permeable and Impermeable bedrock geology – comprising CLAY, SILT and SAND.

Table 2 - Geology

2.04.2 In addition to the mapping we have reviewed the BGS database for nearby boreholes. The nearest borehole [TL94SW6] is located ~250m from the site.

2.04.3 The log reports High-level Gravels to a depth of 3.96m (bgl), Boulder Clay to a depth of 5.03m (bgl), Sand and Gravel to a depth of 11.9m (bgl), London Clay to a depth of 21.3m (bgl), Reading Beds to a depth of 35.7m (bgl) and Chalk to a depth of 77.7m (bgl), where the borehole was terminated.

Hydrogeology

2.04.4 With reference to the groundwater mapping presented on the Environment Agency website, the superficial geology is designated as Secondary A Aquifer and the bedrock geology (London Clay) as Unproductive Strata.

2.04.5 In terms of groundwater vulnerability, the Environment Agency divides significant groundwater catchments into three Source Protection Zones (SPZ's) based on the potential risk associated with the migration of possible contaminants. In this instance the site is located within Source Protection Zone 3 (Total Catchment). The BGS borehole log reported a groundwater rest-level of 20.4m (bgl).

- 2.04.6 Groundwater vulnerability mapping hosted on the Environment Agency’s website shows that the site is located within an area described as Minor Aquifer / Intermediate Leaching Potential.
- 2.04.7 In respect of the local hydrology, the nearest surface water feature is a pond, which is located adjacent to the site to the south. The closest inland river is ~250m to the south.
- 2.04.8 According to the Environment Agency’s online indicative flood mapping the site is situated within Flood Zone 1. In terms of contamination we do not consider floodwaters as posing a potential pathway for soluble or surface contaminants.
- 2.04.9 In relation to the overall hydrology, the site is currently laid to a mixture of existing buildings with areas of grass and hardstanding. These have the potential to support both vertical and lateral migration.

2.05 Statutory Searches – Enviro Insight Report

- 2.05.1 To obtain a more detailed understanding of the site, in context of the surrounding environment, JPC Environmental Services obtained an Enviro Insight report from Groundsure Ltd. This report contains information derived from a database containing public record information from the Environment Agency, local authorities and other regulatory bodies.
- 2.05.2 The complete Enviro Insight report is provided within the appendices.
- 2.05.3 Potential issues noted within the report have been sub-divided into source, pathway and receptor issues and are summarised below:-

Sources

No.	Source	Related to	Distance
1, 2A-3A	Historical Industrial Use	Malthouse	0 - 250m
10E-11E		Smithy	
4B-5B, 26B-27B	Historical Industrial Use Potentially Infilled Land	Unspecified Ground Workings	
12F-13F, 32F-33F			
19I-20I	Potentially Infilled Land	Pond*	
21J-25J		Old Gravel Pit	
28C-29C			
30D-31D	Potentially Infilled Land	Unspecified Pit	0 – 250m
34G-35G			
1	Current Industrial Use	Tank (Generic)	
2		Water Pumping Station	
16	Historical Tank	Unspecified	250 – 500m
17H-18H			
1	Records of a Licensed Discharge Consent	Sewage / Treated	
2		Surface Water	
36L	Potentially Infilled Land	Pond	
37K-38K			
39L-42L			
43M-45M	Potentially Infilled Land	Pond	250 – 500m

*The Enviro Insight report records the existence of an on-site pond. This is likely a mistake and instead refers to an adjacent pond on the site boundary.

Table 3 - Contaminant Source(s)



Figure 2 – Extract from Current Land Use map – Enviro Insight Report

Pathways

Pathway	Related to	Distance
Groundwater Vulnerability / Soil Leaching Potential	Minor Aquifer / Intermediate Leaching Potential	On-site
Superficial Deposits	Secondary A Aquifer	

Table 4 - Contaminant Pathways

Receptors

Receptor	Related to	Distance
Groundwater Source Protection Zone	Zone 3 (Total Catchment)	On-site
Designated Environmentally Sensitive Area	Nitrate Vulnerable Zone	
Surface Water Features	Ponds / Inland River	0 – 250m*
Groundwater Abstraction Licences	Spray Irrigation - Direct	250 - 500m
Surface Water Abstraction Licences	Spray Irrigation - Storage	

*The Enviro Insight report records the existence of an on-site pond. This is likely a mistake and instead refers to an adjacent pond on the site boundary.

Table 5 - Contaminant Receptors

2.06 Radon

2.06.1 According to the Enviro Insight Report and BR211 (2007), the site appears to be located in a lower probability Radon affected area. Therefore, as less than 1% of homes are above the action level for Radon, no radon protection measures are necessary in the construction of new buildings or residential dwellings.

2.07 Mineral Workings

2.07.1 The historical map review, along with the Enviro Insight report, highlighted several potentially infilled ponds and an old gravel pit near to the study area. A study of both aerial photographs and modern mapping shows that the ponds still exist as ponds and that the old gravel pit still forms a slight depression.

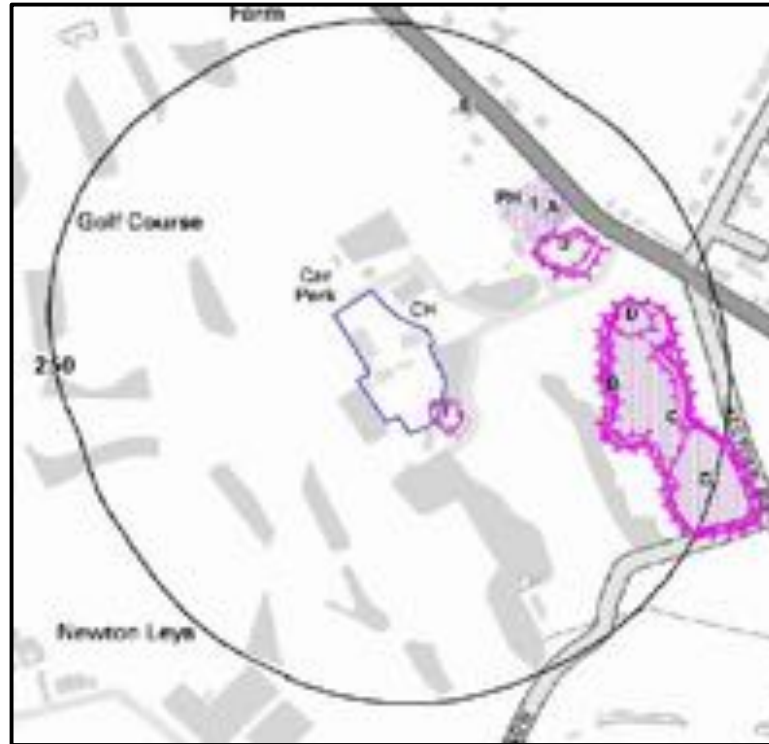


Figure 3 – Enviro Insight Infilled Land and Industrial Uses Map

2.07.2 The report also mentions ‘Unspecified Ground Workings’ in the area of the old gravel pit on 1955 and 1973 maps. A review of the 1955, 1958 and 1976 maps shows that the area is used as a golf course with no mention of other activities.

2.07.3 In addition to the Enviro Insight report, we have consulted the Environment Agency landfill mapping. There are no historic landfill sites within 500m of the site.

2.08 Local Authority Information – Babergh District Council

2.08.1 During our investigation of Fairways Cottage, Newton, an additional request by JPC Environmental Services was made to Nathan Pittam, Senior Environmental Health Officer for Babergh District Council. The response was received on the 28th of November and is detailed below.

2.08.2 *“The search site is within 110 metres of an area of land which our records denote as a former quarry between the 1880s and the 1960s. Our records do not indicate whether the quarry has since been filled.”*

2.08.3 A copy of this information is included within the appendices.

2.09 Planning Portal

- 2.09.1 A search was made on the Babergh District Council planning portal. This was done to further explore the evolution of the site and any available information related to nearby sites. On 4th August 1986 an application was approved for the construction of a barn which was to be used for the exercising of horses [ref: B//86/00516]. This introduces two possible sources of contamination; Asbestos containing materials in buildings built before 2000 and Animal Waste / Ammonia from the horses.
- 2.09.2 Planning permission was then granted on 15th April 1997 for the site to be used as consulting rooms for a natural health practice [ref: B//97/00169].
- 2.09.3 A further application for the construction of a granny annexe extension was granted on 16th September 2009 [ref: B/09/00751]. This forms the western part of the northern building.
- 2.09.4 Use of the site as residential was granted on 23rd November 2015 [ref: B/15/01080]. This application states the then present owners had resided in the property for almost 11 years (i.e. since the previous application above). It also includes some pictures of the main house and shows it to be of brick and tile construction. While it mentions the existence of various outbuildings, including historical stables, it does not state build materials or include any pictures.

2.10 Site Photographs

- 2.10.1 The following information is based on photographs provided by the architect on Tuesday 13th November.
- 2.10.2 The main buildings appear to be of brick and tile construction with some exterior walls rendered. Some extensions appear attached to the rear with flat felt roofs. The outbuildings appear as a mixture of timber construction with felt cladding and the large barn appears to be constructed from metal. Most of the outbuildings appear to have corrugated sheet roofing of an unknown material.
- 2.10.3 The ground cover appears to be a mixture of concrete hardstanding and grass lawn. There appear to be some wooded areas and areas of gravel. There appears to be an oil tank adjacent to one of the main buildings.

2.11 Site Walkover Survey

- 2.11.1 The site walkover was conducted on Tuesday, 30 March 2021 by Andrew Cartwright on behalf of JPC Environmental Services.
- 2.11.2 The site is accessed via an unnamed road to the east, leading from Sudbury Road. This leads to an area of asphalt hardstanding and several buildings. Please see an extract from the Architect's schedule of accommodation overleaf.



Figure 4 - Schedule of accommodation (extract)

- 2.11.3 Building A is constructed from bricks with a tiled roof and is currently being used as the client’s primary residence. To the east is a large pile of rusted metal, gas bottles, timber, a trailer, and a heating oil tank. The oil tank holds 2,500 litres and appears to be of modern construction on concrete hardstanding. To the south-west of building A is an area of gravel with a second heating oil tank. This tank holds 1,300 litres and also appears to be of modern construction on concrete hardstanding.
- 2.11.4 Building B is clad in corrugated suspected asbestos sheeting, painted brown, with a concrete floor. The building is being used for vehicle storage with some fuel and oil containers and a small workshop. To the north is an area used for bonfires, including 2 No. fire barrels and a suspended fire box. There is evidence of burning on the ground around the fire box.
- 2.11.5 Buildings C and E comprise timber structures with felt cladding and suspected asbestos roofs. The buildings are being used to store general items including glass panels, timber and items of furniture. To the south of building E, there is a caravan and a large pile of demolition arisings including damaged suspected asbestos sheeting.
- 2.11.6 Building D comprises a prefab structure and is being used to store exercise equipment.
- 2.11.7 Building F is constructed from bricks with a tiled roof and is being used to store general items including items of furniture. To the east, there are 2 No. timber sheds with suspected asbestos roofs, which are being used to store cut timber.

2.11.8 Adjacent tot the site, to the south-east, is a pond.

3.0 CONCEPTUAL SITE MODEL

3.01 Introduction

3.01.1 The “conceptual site model” is a simplified representation of the ground conditions that exist on site, which is subsequently used to assess the potential risk to human and environmental receptors. According to the contaminated land report (CLR11) *“a conceptual model represents the characteristics of the site in diagrammatic or written form; that shows the possible relationships between contaminants, pathways and receptors”*.

3.01.2 Although the model is formulated during the initial phase of the investigation it is subject to change, as new information comes to light, and our understanding of the site improves. It is central to the risk assessment process and therefore must consider all potential relationships/interactions.

3.01.3 There are four key aspects to the model, these are:

- Source(s) - These can include current or historic activities / business practices taking place either on or adjacent to the site, which may have had a negative impact on surface or sub-surface soils, or groundwater.
- Pathway(s) - This is the route by which contaminants travel / migrate between their source and any available receptor.
- Receptor(s) - These are varied and can include human or non-human organisms and eco-systems; controlled waters such as groundwater or surface water bodies; and structures or individual construction materials.
- Pollutant linkage(s) - These exist where all three of the previous elements are present, indicating that the “link” between an identified source and a potential receptor via a pathway.

3.02 Potential Sources of Contamination

Source	Description	Potential Contaminant	Distance
Construction Materials	Suspected asbestos containing materials within demolition arisings	Asbestos fibres.	On-site
Previous on-site Activities	Horse Stables	Animal Waste / Ammonia.	On-site
Heating Oil Tanks	On-site heating oil tanks	Petroleum Hydrocarbons, PAH’s, Metals.	On-site



Bonfire Area	Possible use of accelerants	Petroleum Hydrocarbons, PAH's, Metals.	On-site
Workshop Area/ Storage of fuel	Oil and fuel storage within workshop area	Petroleum Hydrocarbons, PAH's, Metals.	On-site
Historical Industrial Uses	Smithy / Malthouse	PAH's, Metals.	0 - 250m
Current Uses	Tank / Water Pumping Station	Petroleum Hydrocarbons, PAH's, Metals.	0 - 250m

Table 6 - Potential Sources of Contamination

3.03 Potential Contaminant Pathways

Pathways
Migration/Leaching - potential for migration of contaminants through soil / groundwater;
Surface water drainage- potential for contaminants to migrate within surface water runoff;
Inhalation- potential inhalation of soil derived dust containing toxic and / or carcinogenic contaminants;
Ingestion- future site users could swallow small quantities of soil derived dust originating from soft landscaped/ garden areas or disturbed ground;
Dermal absorption – contaminants present within surface or sub-surface soils / fill material can enter the human body through the skin or via open wounds;
Corruption of alkathene pipes – if elevated levels of petroleum hydrocarbons are present within surface / sub-surface soils, then 'plastic' drinking water pipe can become compromised;
Migration of Gas – modern construction techniques can cause accumulation of gas within structures, this can expose site users to gas and lead to explosion (where methane is present).

Table 7 - Identified Pathways

3.04 Potential Contaminant Receptors

Receptors
Future site users – future residents could be affected by contaminants in the soil, entering the mains water system or ground gas entering the building;
Construction workers – should any groundworks occur in the future, workers involved with potential site clearance and preparatory work will be exposed to contaminants present within on-site soils, should they exist;
Buildings and Infrastructure – modern construction techniques can cause accumulations of gas, if gas is able to accumulate within the proposed building there is potential for an explosion;
Plastic Drinking Water Pipes are vulnerable to petroleum hydrocarbons
On-site soils, particularly those close to the surface, may have been impacted by on-site activities

Table 8 - Identified Receptors

3.05 Plausible Pollutant Linkages

- 3.05.1 Using the ‘source – pathway – receptor’ tables above, potential pollutant linkages are identified. An assessment of the likely significance of each linkage is then considered, which would include; the possible extent and mobility of the source; the sensitivity of the receptor and the type of migration/exposure pathways.
- 3.05.2 An assessment of the probability and the magnitude of potential risk is presented below to give a valuation of each potential pollutant linkage identified and their significance.
- 3.05.3 This assessment is undertaken based on the current proposals for the site, at the time of issuing this report which are for the construction of a day centre with residential accommodation
- 3.05.4 This qualitative risk assessment has been undertaken in accordance with CIRIA C552: Contaminated Land Risk Assessment, A Guide to Good Practice (Rudland et al., 2001).
- 3.05.5 The following potential receptors have been identified:

Possible Pollutant Linkage			RISK CHARACTERISATION
Potential Sources	Pathways	Receptors	
Demolition Arisings (Suspected Asbestos Containing Materials)	Inhalation	Future site users, Construction workers.	MODERATE
Heating Oil Tanks (on-site)	Migration/Leaching	On-site soil, Future site users, Construction workers; Plastic drinking water pipes.	LOW / MODERATE
	Inhalation		
	Ingestion		
	Dermal absorption		
Bonfire Area (on-site)	Migration/Leaching	On-site soil, Future site users, Construction workers, Plastic drinking water pipes.	LOW / MODERATE
	Inhalation		
	Ingestion		
	Dermal absorption		
Workshop/ Oil and Fuel Containers (on-site)	Migration/Leaching	On-site soil, Future site users, Construction workers, Plastic drinking water pipes.	LOW
	Inhalation		
	Ingestion		
	Dermal absorption		
Historic Industries (on-site; Stables)	Migration/Leaching	On-site soil, Future site users, Construction workers, Plastic drinking water Pipes;	LOW
	Inhalation		
	Ingestion		
	Dermal Absorption		



Current Uses (off-site; Water Pumping Station, Tank)	Migration/Leaching	On-site soil, Future site users, Construction workers.	LOW
	Inhalation		
	Ingestion		
	Dermal absorption		
	Buried services		

Table 9 - Possible Pollutant Linkages

3.05.6 The level of potential risk ascribed to each linkage is based on the following criteria:

Risk Classification	Description
Very high risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard at the site without appropriate remedial action.
High risk	Harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remedial action.
Moderate risk	It is possible that without appropriate remedial action harm could arise to a designated receptor but it is relatively unlikely that any such harm would be severe, and if any harm were to occur it is more likely that such harm would be relatively mild.
Low risk	It is possible that harm could arise to a designated receptor from an identified hazard but is likely that, at worst, this harm if realised would normally be mild.
Negligible risk	The presence of an identified hazard does not give rise to the potential to cause significant harm to a designated receptor.

Table 10 - Risk Classification

4.0 ENVIRONMENTAL ASSESSMENT

4.01 Summary of Key Drivers

4.01.1 The site appears to have remained undeveloped in 1885. The first buildings appeared between 1928 and 1955. Since then, it has been used to exercise horses, as a natural health practice and a private residence. The main driver for environmental risk on this site is the possibility of asbestos containing materials within the existing structures or suspected heaps of demolition arisings and an on-site heating oil tank. The previous on-site horse exercising activities, historic smithy and malthouse, tank and water pumping station are less likely to have a significant adverse impact.

4.02 Environmental Risk Assessment

Human Health

4.02.1 The condition of the underlying soils will determine the risk posed to future occupants. The proposed development will lead to an increased density of residential occupation. Creation of garden land for the new dwellings will require the demolition of an existing building and the removal of several structures. Due to the nature of the final development, the production and consumption of homegrown vegetables represents a potential pathway (ingestion).

4.02.2 The possibility of asbestos fibres on-site within demolition arisings or from damaged weathered panels pose a MODERATE risk to future occupants and construction workers. Asbestos cladding

that remains in good condition does not pose a risk provided it is dismantled and disposed of correctly.

- 4.02.3 The on-site heating oil tanks and bonfire area pose a LOW/MODERATE risk to future site occupants.

Controlled Waters

- 4.02.4 The site is underlain by permeable deposits but does not fall within a Source Protection Zone. This indicates the absence of any significant drinking water abstractions and therefore reduces the potential sensitivity of on-site groundwater.
- 4.02.5 The identified sources of potential contamination, both on and off-site, are considered to represent a LOW risk to groundwater.

Buildings

- 4.02.5 Our desk-based research has not identified any areas of infilled land within the immediate surroundings of the site. The potential risk of ground gas migrating to/accumulating beneath any new structures is, therefore, considered to be LOW.

4.03 Environmental Litigation (Part IIA)

- 4.03.1 Part IIA only applies to land with chemical contamination, where the contaminants pose an unacceptable risk to human health or the wider environment i.e. land where significant pollutant linkages have been identified. The legislation also only considers risks associated with current site use, leaving any risks associated with a future use to be addressed by the planning system.
- 4.03.2 Based on our understanding of the previous site uses, and the apparent condition of the site established by our desk-based research, we consider it extremely unlikely that the site would be classified as a Contaminated Land under Part IIA of the Environmental Protection Act.

4.04 Further Investigations

- 4.04.1 We would recommend that a Stage 1/ Tier 2 Quantitative Risk Assessment is undertaken, including an intrusive investigation. This would focus on the potential sources of contamination such as the demolition arisings, oil tanks, and bonfire area, and more sensitive locations such as the proposed garden areas. Based on the information obtained, we would recommend that samples of the on-site soils are tested for a routine suite of toxic metals and organic contaminants, including asbestos fibres. This investigation could comprise excavated trial pits or window sampler boreholes, with sampling of near surface soils and the deeper underlying natural geology.
- 4.04.2 Although not related to the condition of the on-site soils, we would recommend undertaking HSG264 Pre-demolition/ major refurbishment asbestos survey on the existing buildings. All identified asbestos containing materials (ACM) should then be removed, by a suitably experienced contractor, prior to the demolition and conversion of the barn.

5.0 RECOMMENDATIONS

5.01 Based on the information obtained and reviewed as part of this preliminary assessment, JPC Environmental Services would advise the following:

- We would recommend that a Stage 1/ Tier 2 Quantitative Risk Assessment is undertaken, including an intrusive investigation. This would focus on the potential sources of contamination such as the demolition arisings, oil tanks, and bonfire area, and more sensitive locations such as the proposed garden areas. Based on the information obtained, we would recommend that samples of the on-site soils are tested for a routine suite of toxic metals and organic contaminants, including asbestos fibres.
- We would recommend undertaking an HSG264 Pre-demolition/ major refurbishment asbestos survey on the existing buildings. All identified asbestos containing materials (ACM) should then be removed, by a suitably experienced contractor, prior to the demolition or renovation of the barns.

APPENDIX



Appendix A - Site Location Plan



Appendix B – Architects Layout Plan

Golf Club
(Car Park)

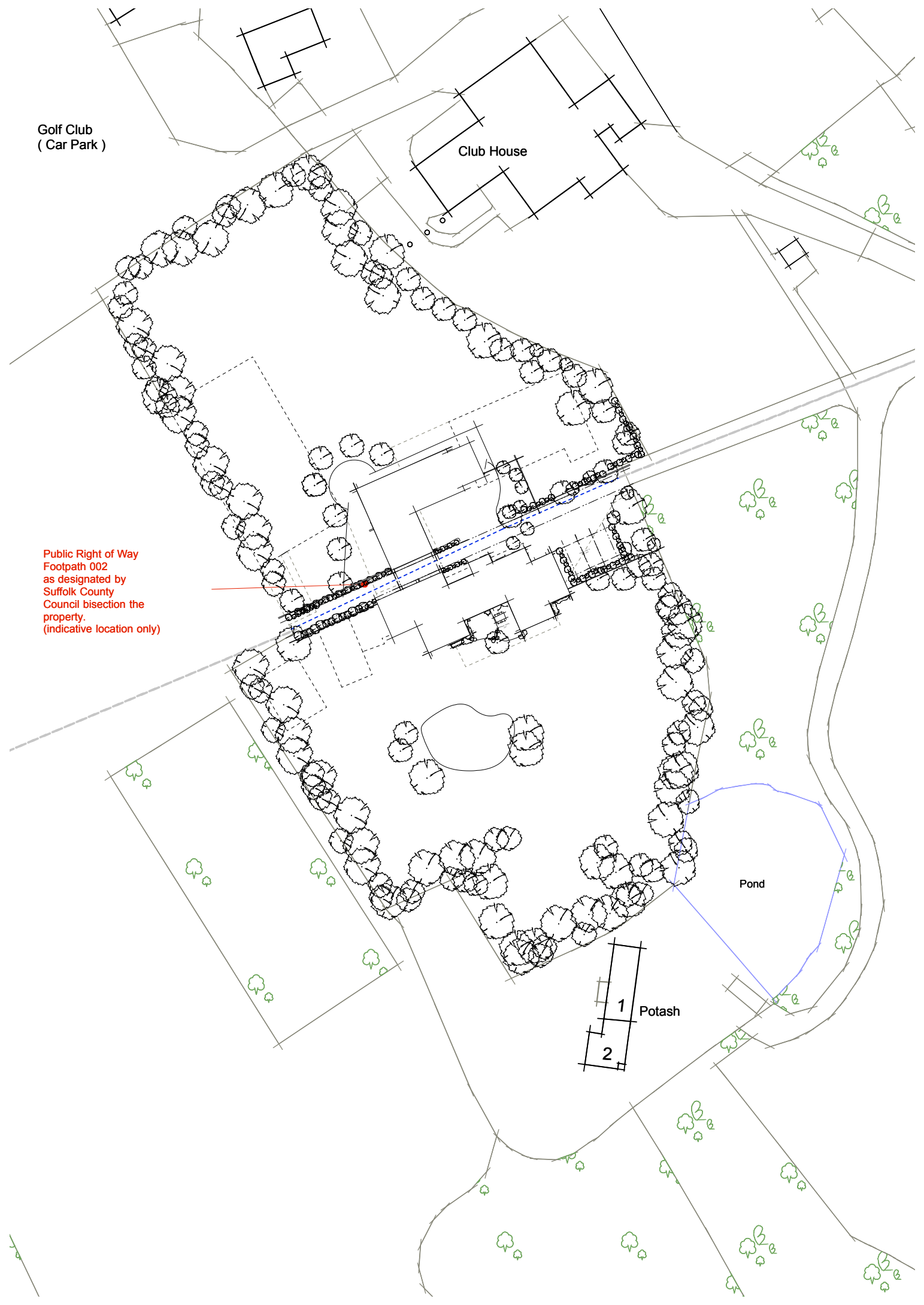
Club House

Public Right of Way
Footpath 002
as designated by
Suffolk County
Council bisection the
property.
(indicative location only)

Pond

1 Potash

2



Appendix C – Historic Maps

Site Details:

FAIRWAYS COTTAGE
 NEWTON, SUDBURY, CO10
 OQN

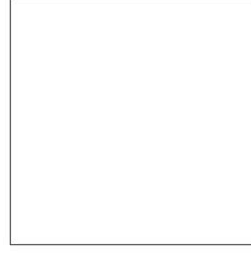
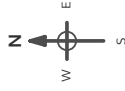
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Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1885
 Revised 1885
 Edition N/A
 Copyright N/A
 Levelled N/A



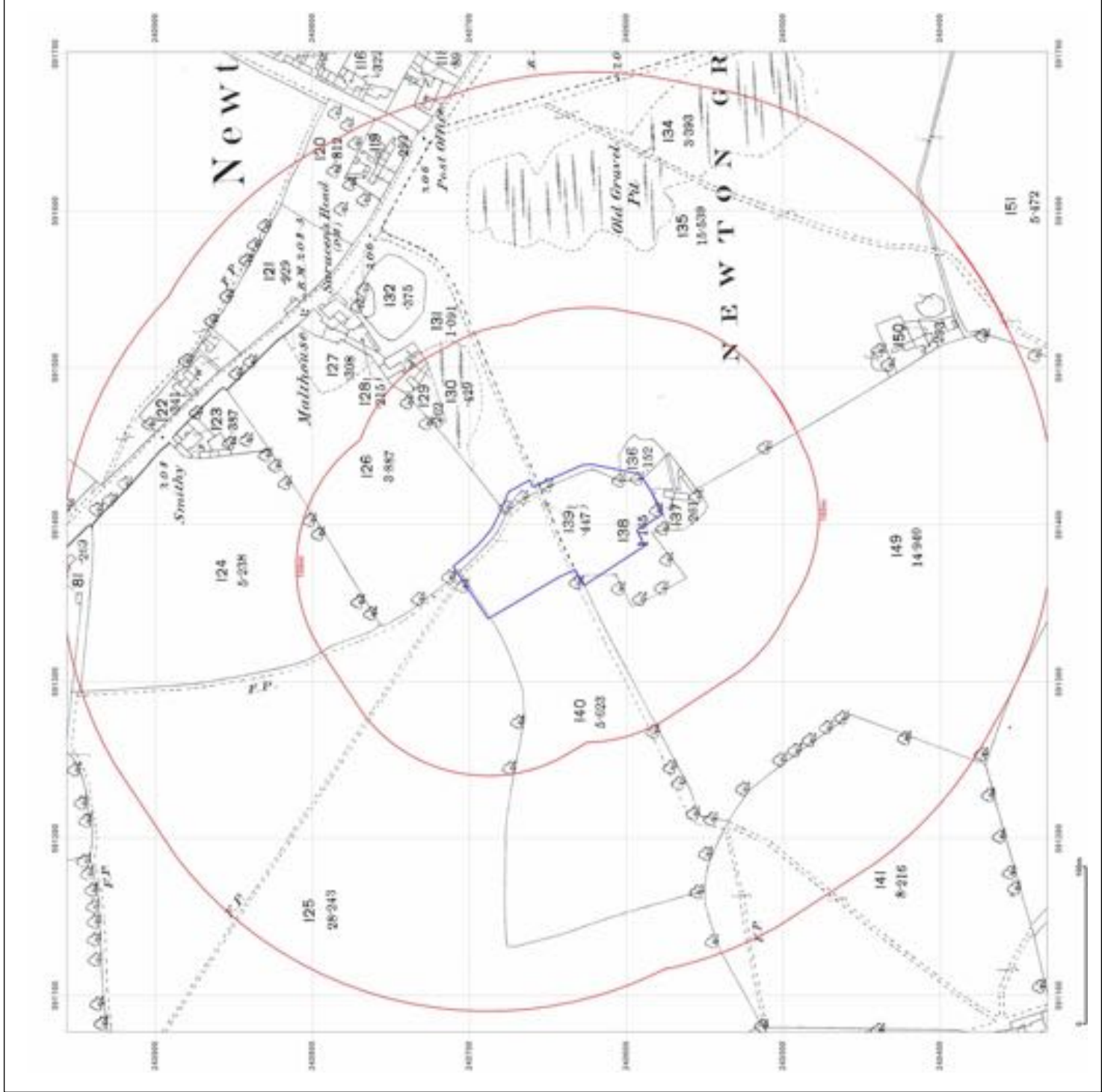
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Production date: 05 November 2018

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Site Details:

FAIRWAYS COTTAGE
 NEWTON, SUDBURY, CO10
 OQN

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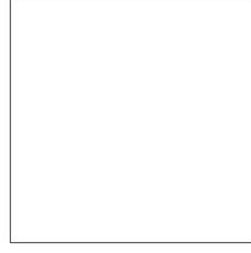
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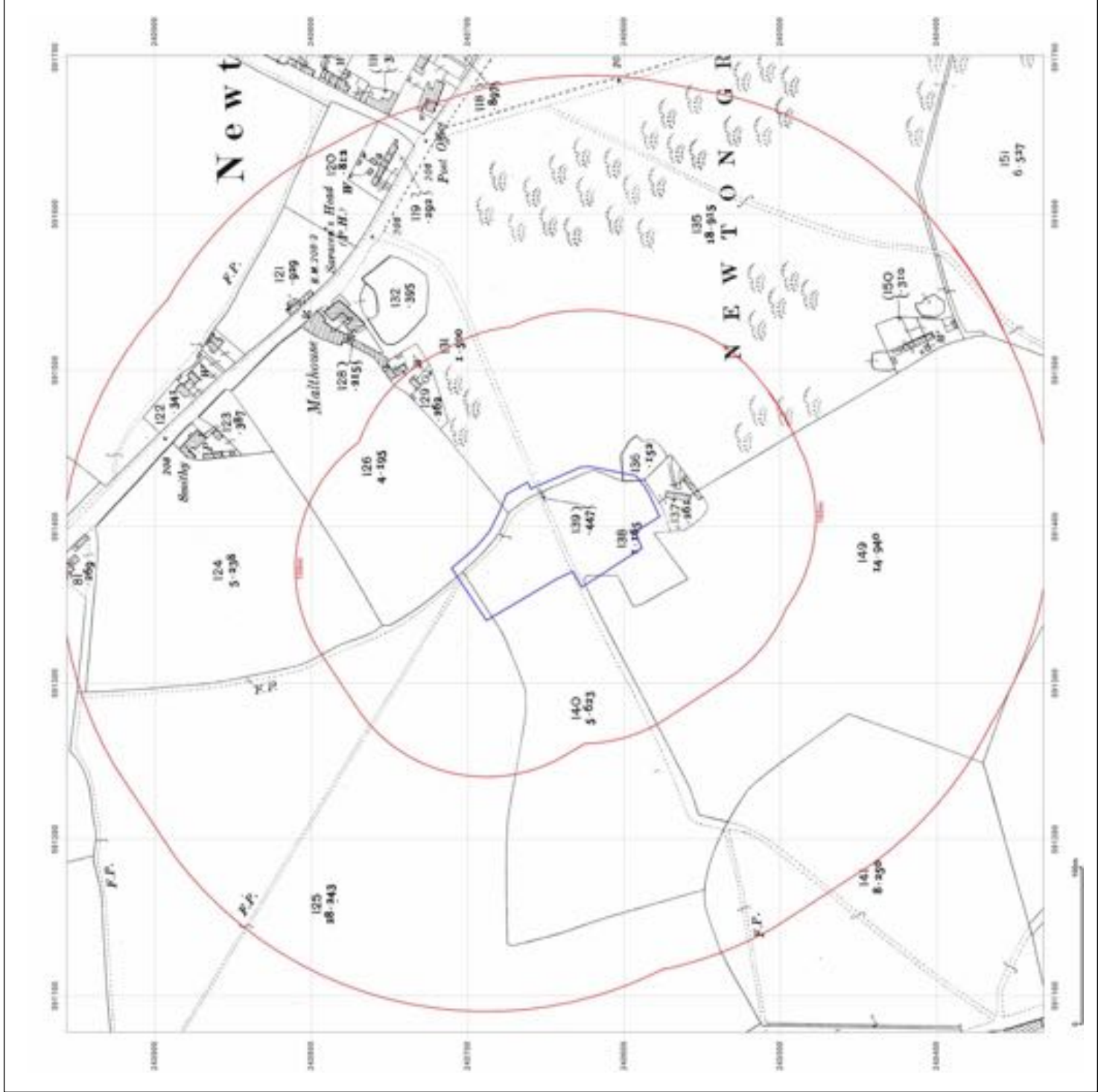
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Site Details:

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 OQN

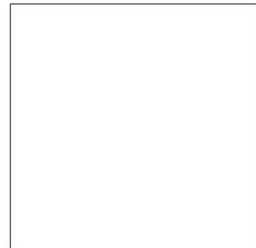
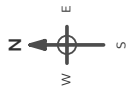
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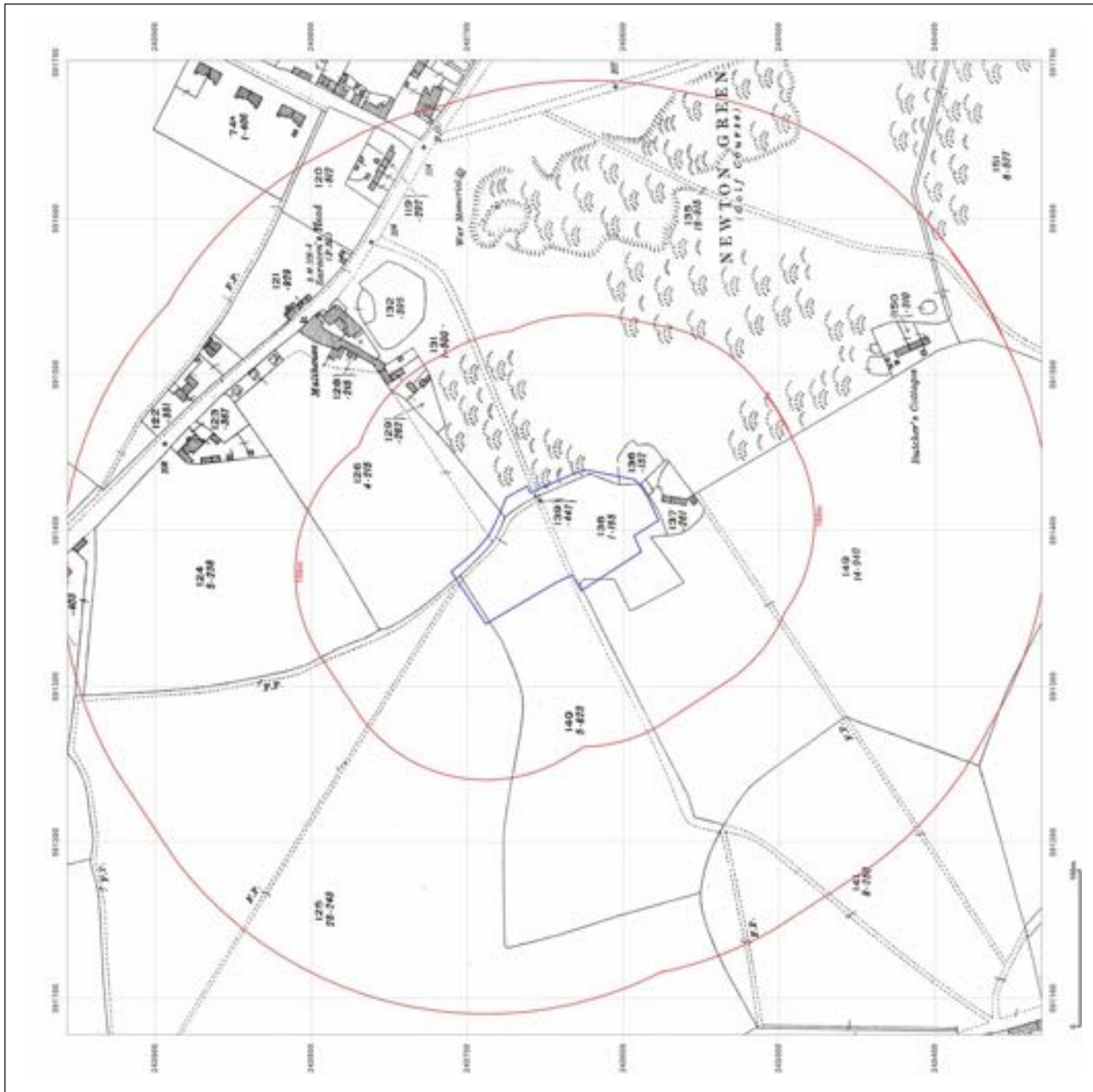
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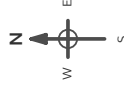
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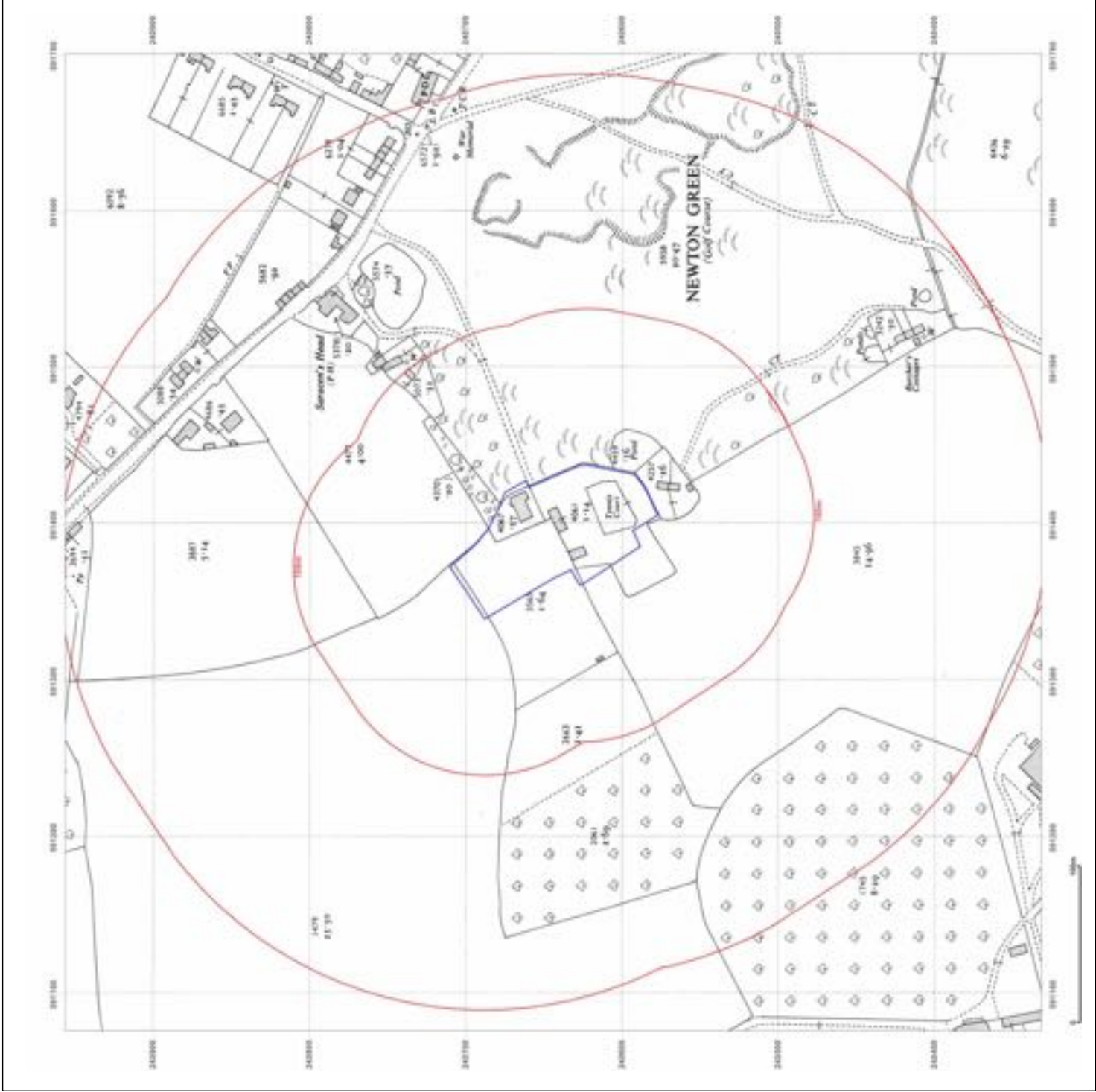


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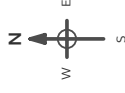
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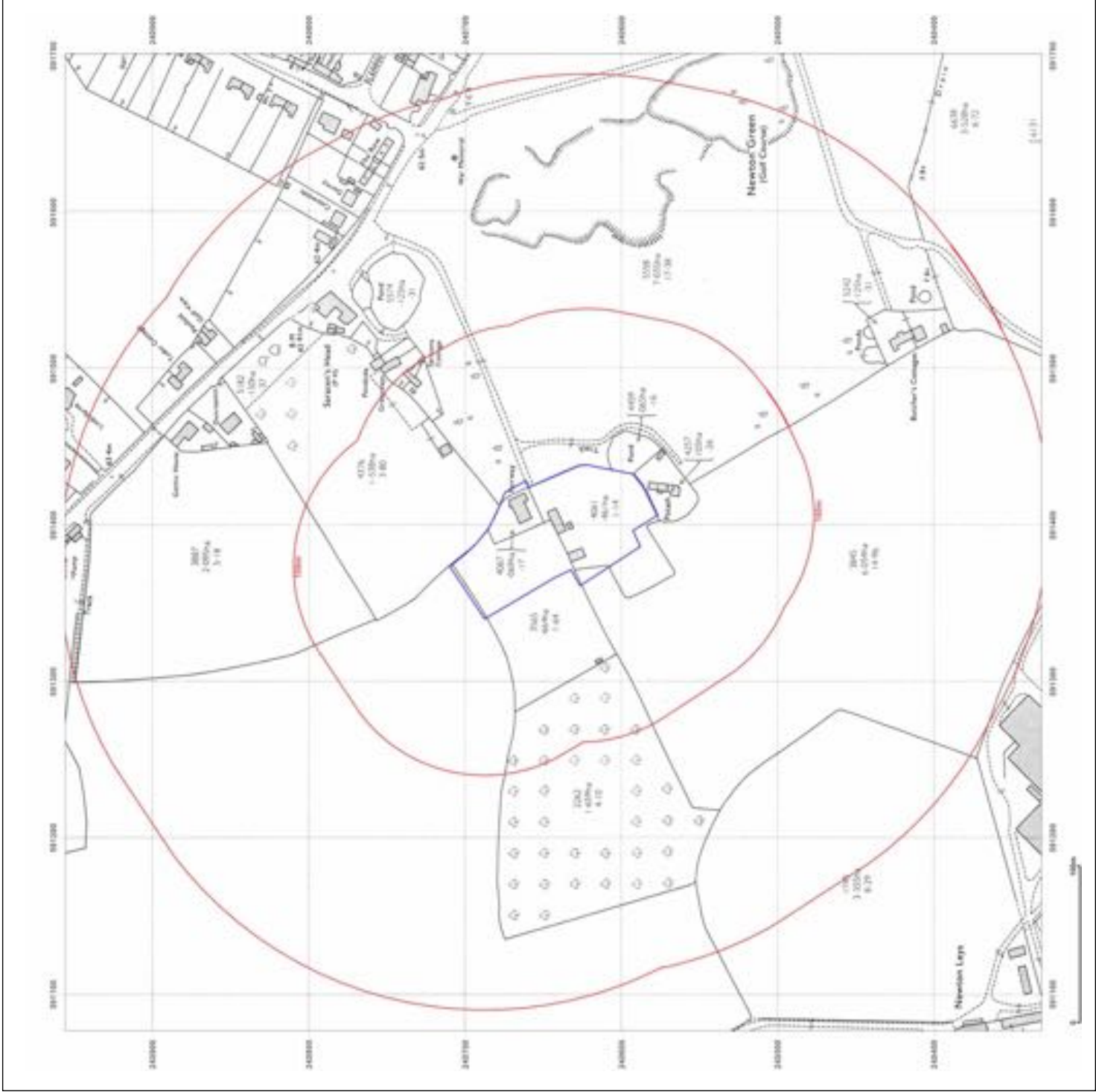


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 Revised N/A
 Edition N/A
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 Levelled N/A

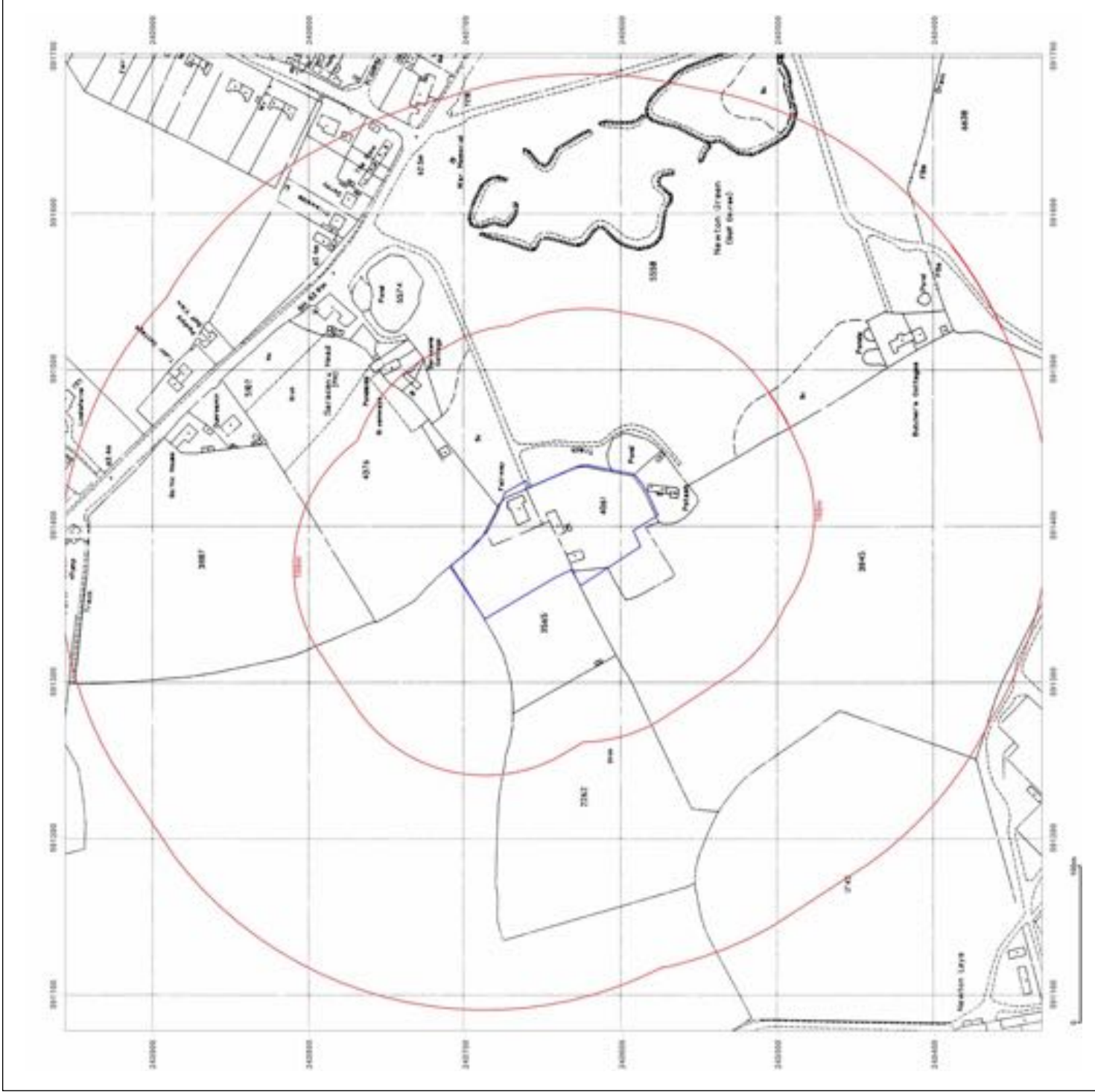


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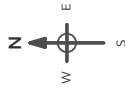
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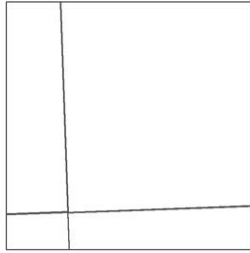
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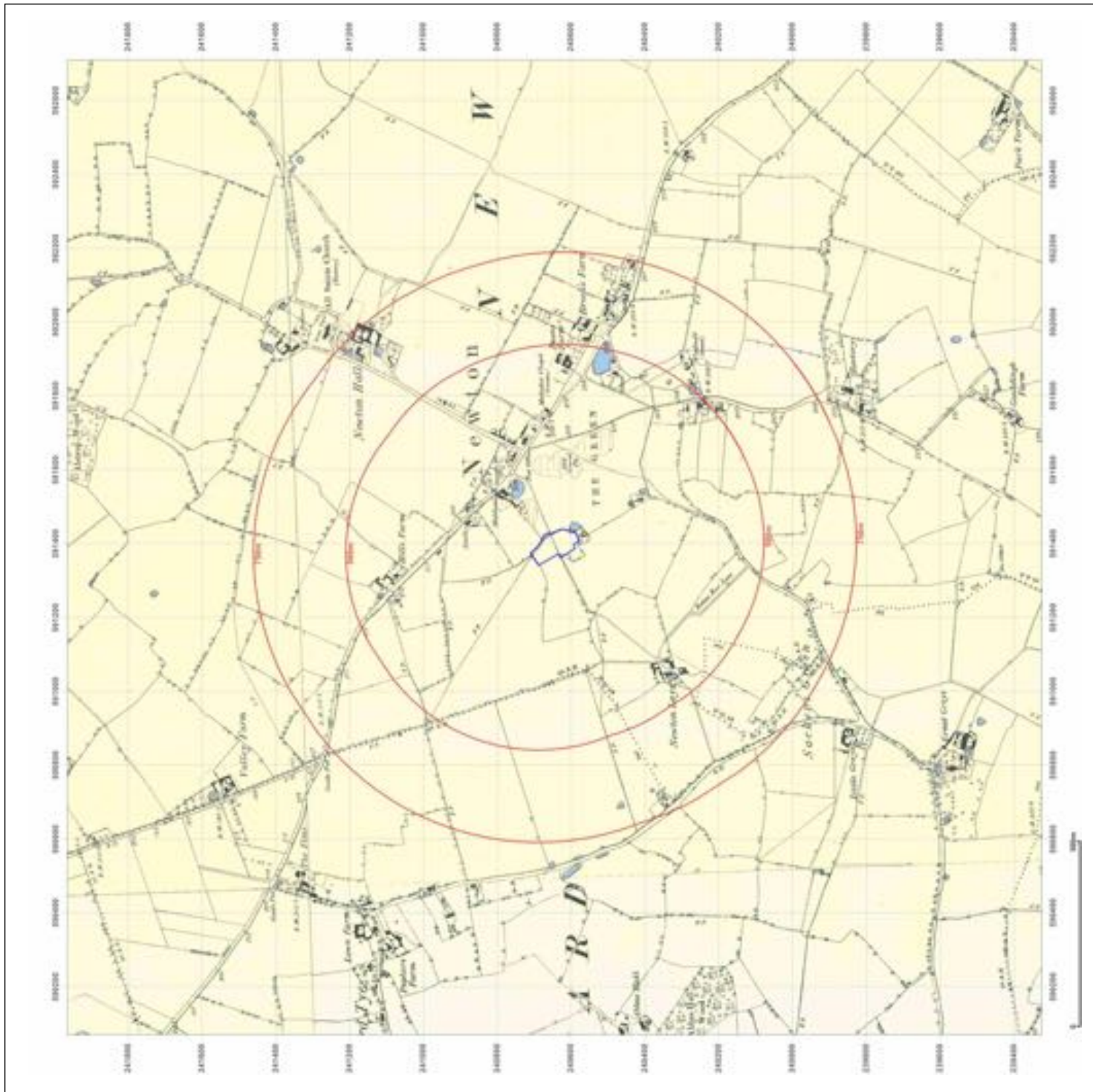
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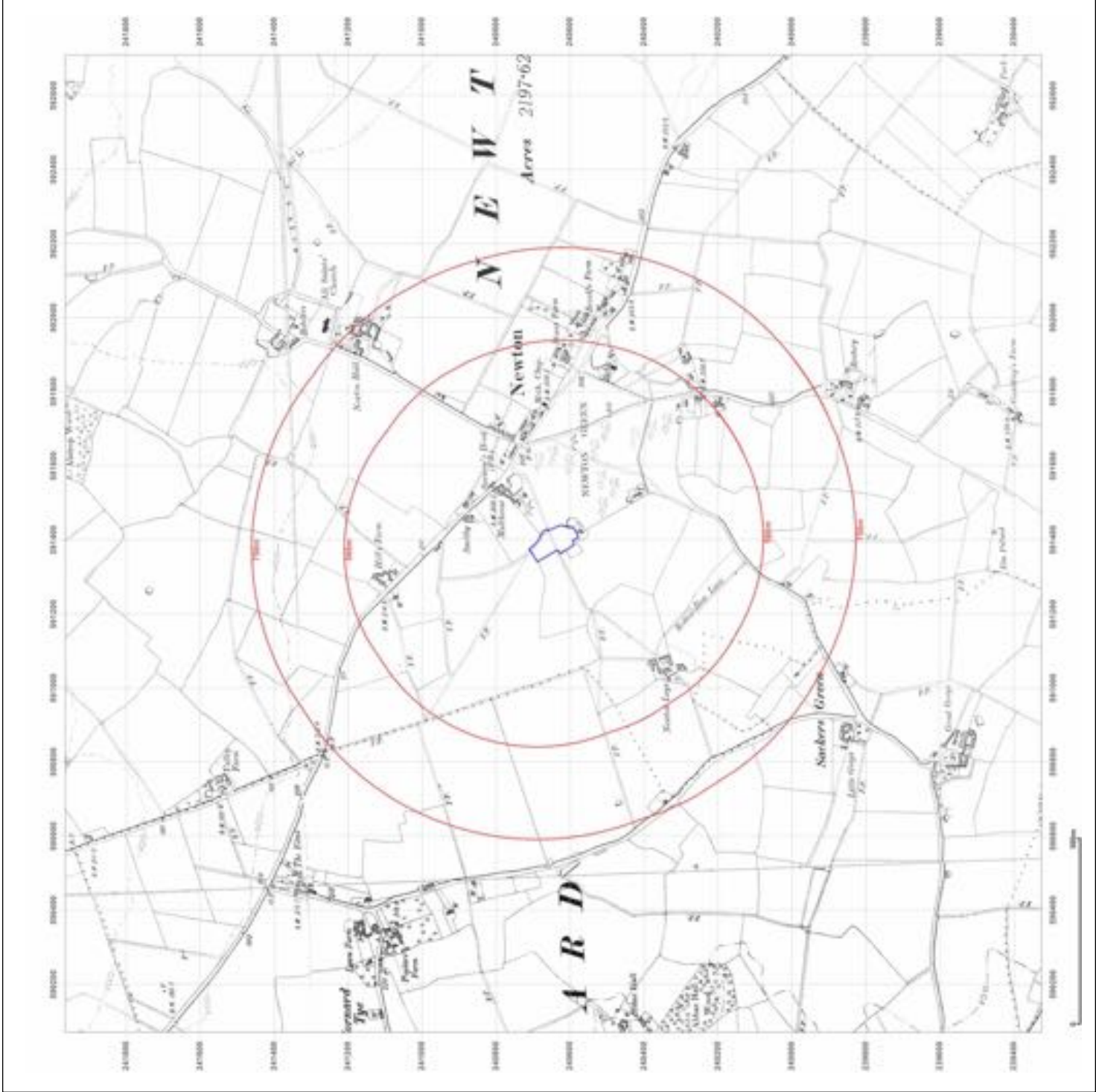


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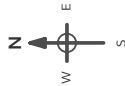
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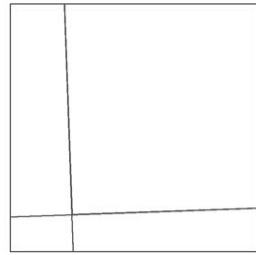
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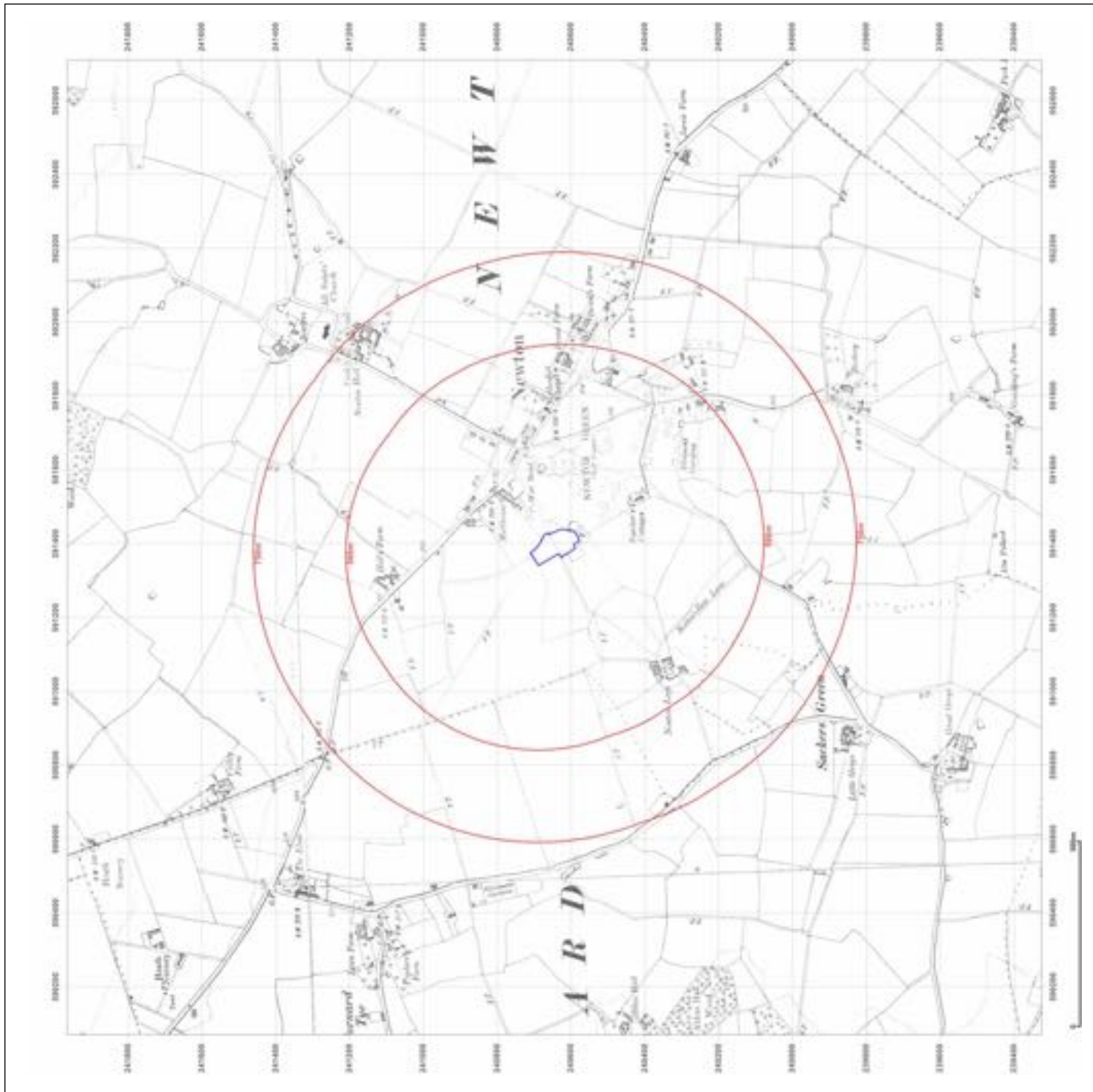
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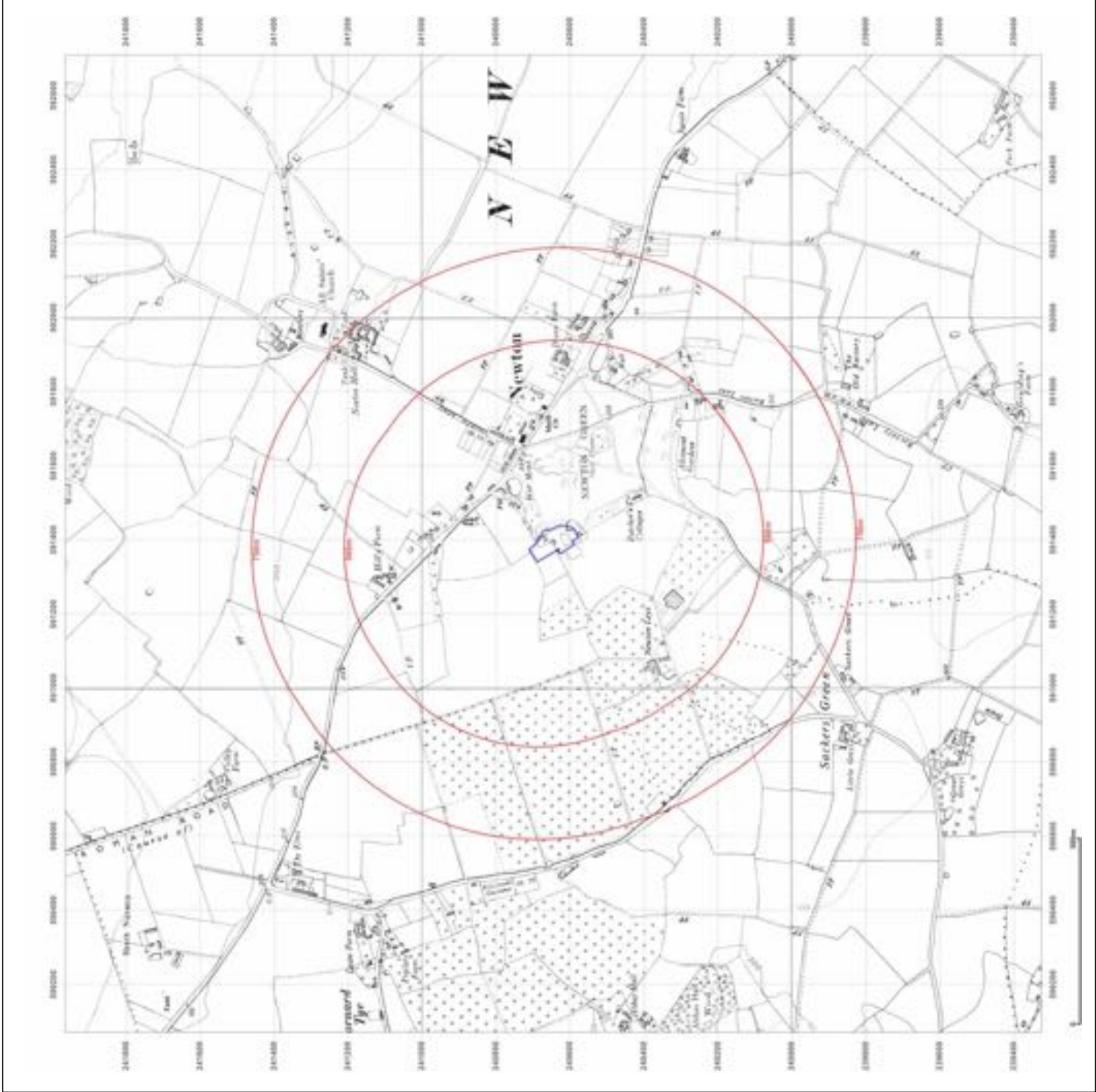


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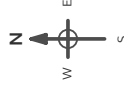
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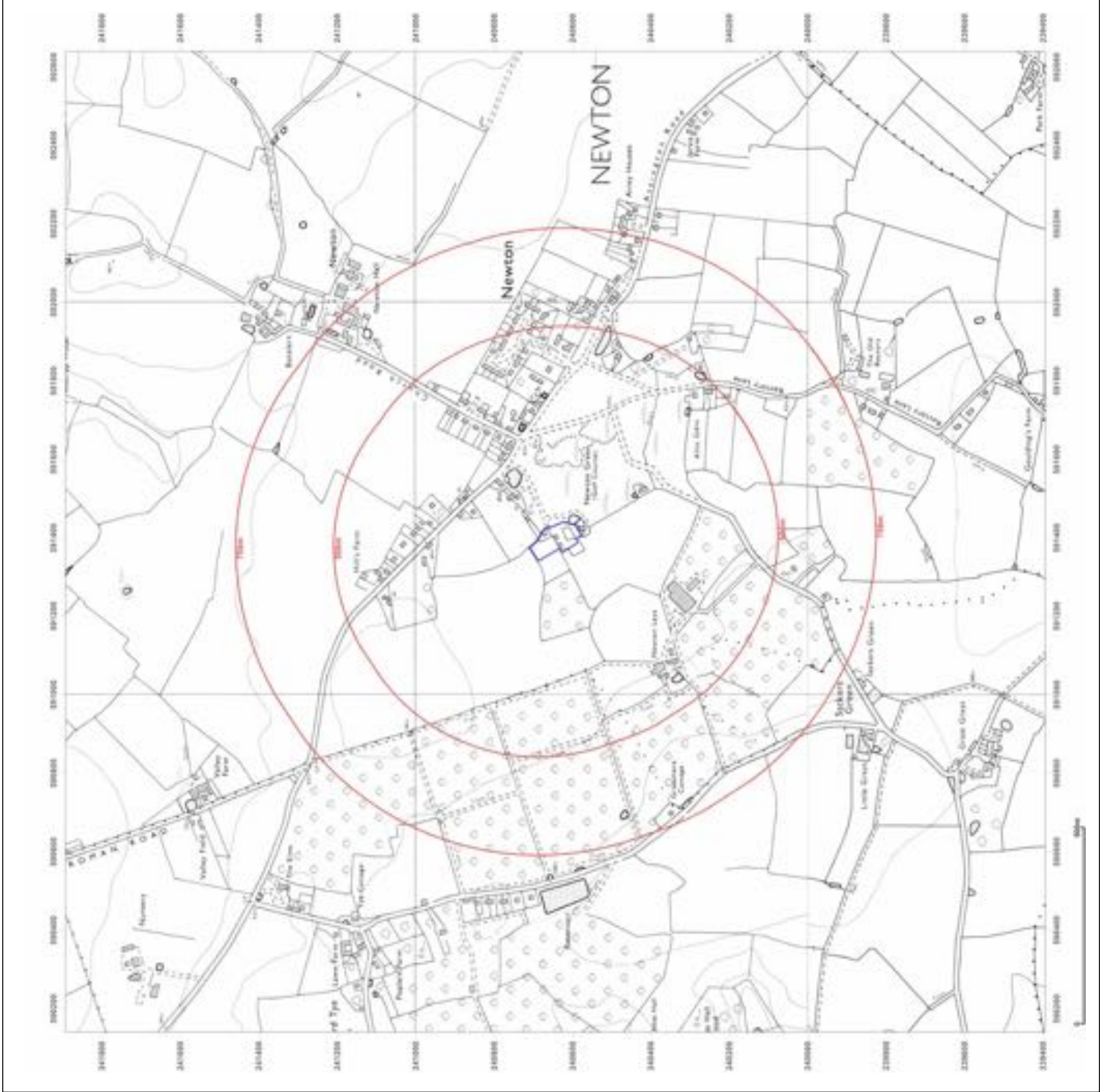


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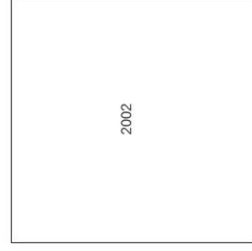
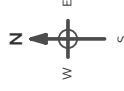
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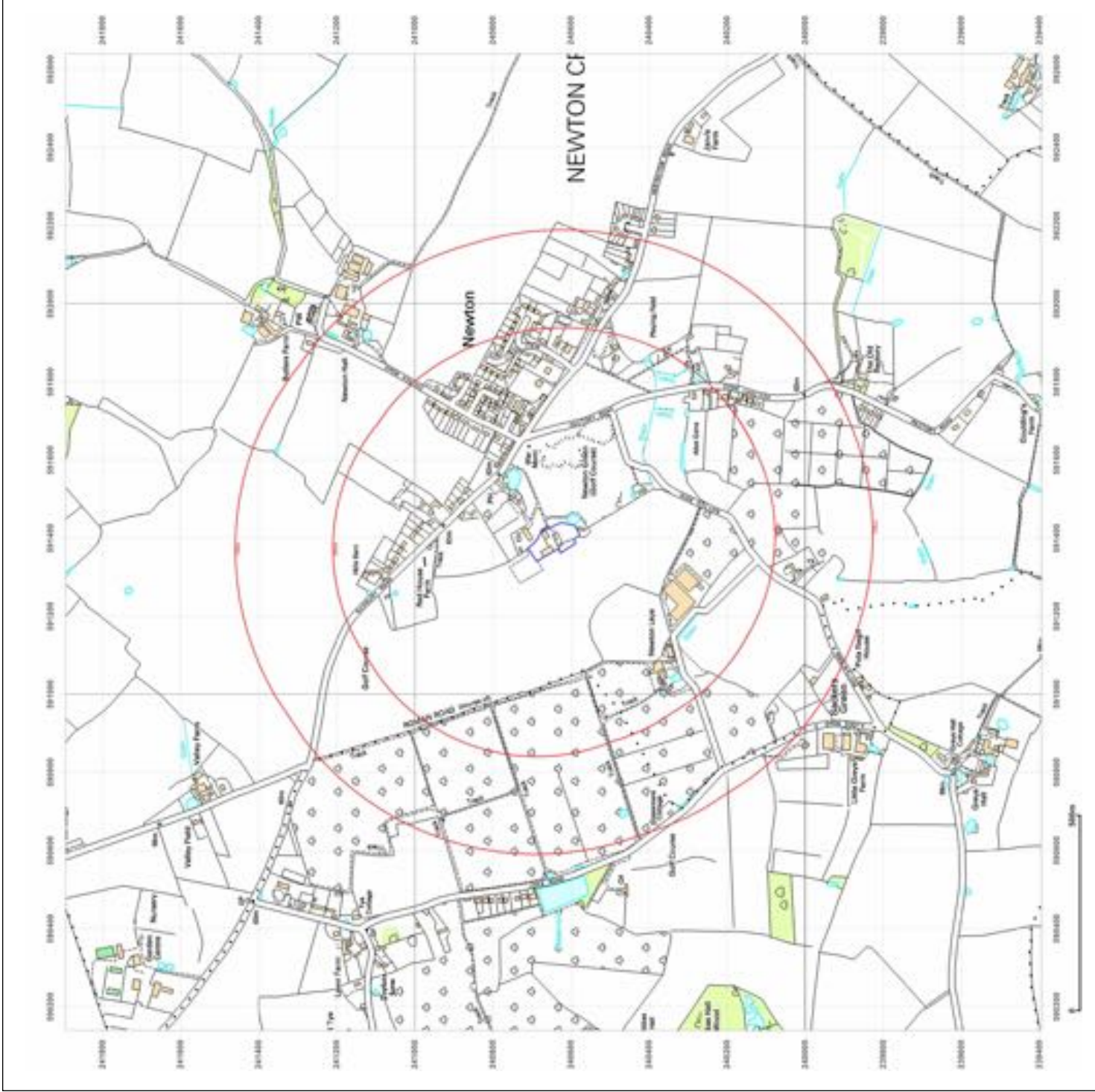
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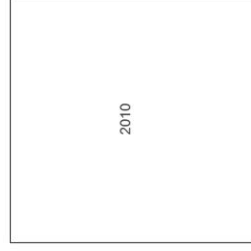
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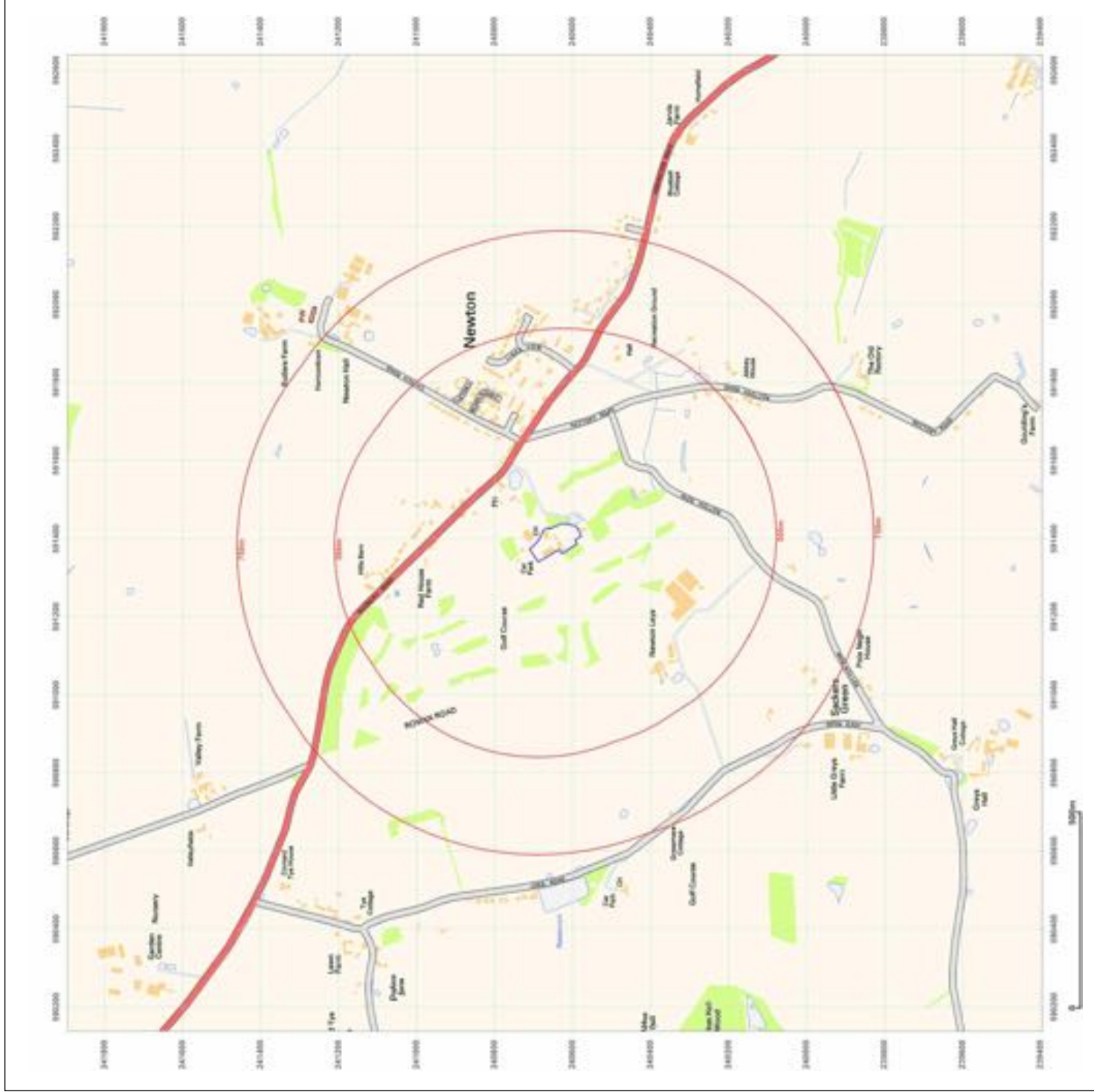


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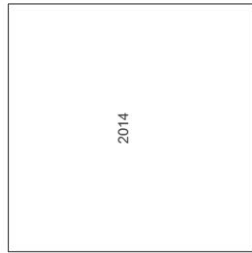
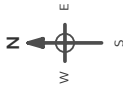
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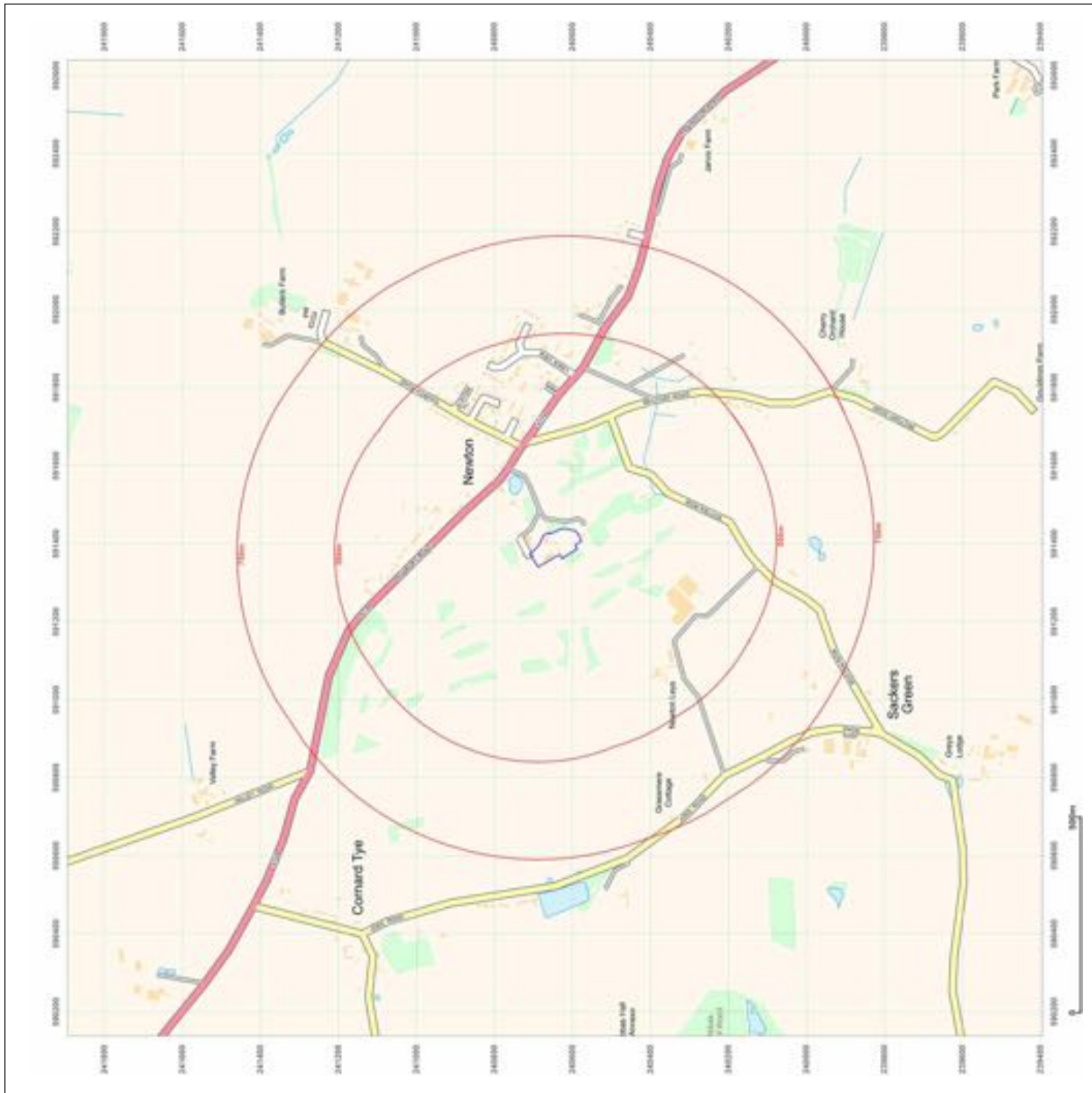


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Appendix D – Enviro Insight Report



Groundsure

LOCATION INTELLIGENCE

J P Chick & Partners Ltd

7 J P CHICK & PARTNERS, MUSEUM STREET,
IPSWICH, IP1 1HQ

Groundsure Reference: GS-5587528

Your Reference: IE18-090

Report Date 5 Nov 2018

Report Delivery Method: Email - pdf

Enviro Insight

Address: FAIRWAYS COTTAGE, NEWTON, SUDBURY, CO10 0QN

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviro Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,

Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Enviro Insight

Address: FAIRWAYS COTTAGE, NEWTON, SUDBURY, CO10 0QN
Date: 5 Nov 2018
Reference: GS-5587528
Client: J P Chick & Partners Ltd



Aerial Photograph Capture date: 09-Apr-2017
Grid Reference: 591396,240646
Site Size: 0.72ha

Report Reference: GS-5587528
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Contents Page

Contents Page	3
Overview of Findings	6
Using this report	10
1. Historical Land Use	11
1. Historical Industrial Sites	12
1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping	12
1.2 Additional Information – Historical Tank Database	12
1.3 Additional Information – Historical Energy Features Database	13
1.4 Additional Information – Historical Petrol and Fuel Site Database	13
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	13
1.6 Historical military sites	13
1.7 Potentially Infilled Land	13
2. Environmental Permits, Incidents and Registers Map	15
2. Environmental Permits, Incidents and Registers	16
2.1 Industrial Sites Holding Licences and/or Authorisations	16
2.1.1 Records of historic IPC Authorisations within 500m of the study site	16
2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site	16
2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site	16
2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site	16
2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site	16
2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site	17
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	17
2.1.8 Records of Licensed Discharge Consents within 500m of the study site	17
2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site	17
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	17
2.2 Dangerous or Hazardous Sites	18
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents	18
2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site	18
2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site	18
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	18
3. Landfill and Other Waste Sites Map	19
3. Landfill and Other Waste Sites	20
3.1 Landfill Sites	20
3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site	20
3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site	20
3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site	20
3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site	20
3.2 Other Waste Sites	20
3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site	20
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site	21
4. Current Land Use Map	22
4. Current Land Uses	23
4.1 Current Industrial Data	23
4.2 Petrol and Fuel Sites	23
4.3 National Grid High Voltage Underground Electricity Transmission Cables	23
4.4 National Grid High Pressure Gas Transmission Pipelines	24

5. Geology	25
5.1 Artificial Ground and Made Ground.....	25
5.2 Superficial Ground and Drift Geology	25
5.3 Bedrock and Solid Geology	25
6 Hydrogeology and Hydrology	26
6a. Aquifer Within Superficial Geology	26
6b. Aquifer Within Bedrock Geology and Abstraction Licences	27
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences	28
6d. Hydrogeology – Source Protection Zones within confined aquifer	29
6e. Hydrology – Watercourse Network and River Quality	30
6.Hydrogeology and Hydrology	31
6.1 Aquifer within Superficial Deposits.....	31
6.2 Aquifer within Bedrock Deposits.....	31
6.3 Groundwater Abstraction Licences.....	32
6.4 Surface Water Abstraction Licences.....	34
6.5 Potable Water Abstraction Licences.....	35
6.6 Source Protection Zones.....	36
6.7 Source Protection Zones within Confined Aquifer.....	36
6.8 Groundwater Vulnerability and Soil Leaching Potential.....	36
6.9 River Quality.....	36
6.9.1 Biological Quality:.....	36
6.9.2 Chemical Quality:.....	37
6.10 Ordnance Survey MasterMap Water Network.....	37
6.11 Surface Water Features.....	40
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)	41
7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map	42
7 Flooding	43
7.1 River and Coastal Zone 2 Flooding.....	43
7.2 River and Coastal Zone 3 Flooding.....	43
7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating.....	43
7.4 Flood Defences.....	43
7.5 Areas benefiting from Flood Defences.....	43
7.6 Areas benefiting from Flood Storage.....	44
7.7 Groundwater Flooding Susceptibility Areas.....	44
7.8 Groundwater Flooding Confidence Areas.....	44
8. Designated Environmentally Sensitive Sites Map	45
8. Designated Environmentally Sensitive Sites	46
8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:.....	46
8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:.....	46
8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:.....	46
8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:.....	46
8.5 Records of Ramsar sites within 2000m of the study site:.....	46
8.6 Records of Ancient Woodland within 2000m of the study site:	47
8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:.....	47
8.8 Records of World Heritage Sites within 2000m of the study site:.....	47
8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:	47
8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:	47
8.11 Records of National Parks (NP) within 2000m of the study site:	48
8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:.....	48
8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:.....	48

8.14 Records of Green Belt land within 2000m of the study site:.....	48
9. Natural Hazards Findings	49
9.1 Detailed BGS GeoSure Data.....	49
9.1.1 Shrink Swell.....	49
9.1.2 Landslides.....	49
9.1.3 Soluble Rocks.....	49
9.1.4 Compressible Ground.....	50
9.1.5 Collapsible Rocks.....	50
9.1.6 Running Sand.....	50
9.2 Radon.....	51
9.2.1 Radon Affected Areas.....	51
9.2.2 Radon Protection.....	51
10. Mining	52
10.1 Coal Mining.....	52
10.2 Non-Coal Mining.....	52
10.3 Brine Affected Areas	52
Contact Details	53
Standard Terms and Conditions	55

Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	0	15	0
1.2 Additional Information – Historical Tank Database	0	0	0	3
1.3 Additional Information – Historical Energy Features Database	0	0	0	0
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	0
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	2	0	15	10

Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	0
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	2
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	0
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	0	0	0
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	0	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	1	1	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	None identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	Identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	On-site	0-50m	51-250	251-500	501-1000	1000-2000
0-500m						
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site						Identified
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site						Identified
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	4	6	4
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	4	6	2
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	1	0	0	1	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	#250GWW #	#500GWW #	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

0-500m

	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	10	22	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Environment Agency Zone 2 floodplains within 250m of the study site	None identified					
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified					
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low					
7.4 Flood Defences within 250m of the study site	None identified					
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified					
7.6 Areas used for Flood Storage within 250m of the study site	None identified					
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Potential at Surface					
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	Moderate					

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	4
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	2	0	0	0	2	4
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards

9.1 Maximum risk of natural ground subsidence	Very Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Negligible
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Very Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining

10.1 Coal mining areas within 75m of the study site	None identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	None identified
10.3 Brine affected areas within 75m of the study site	None identified

Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

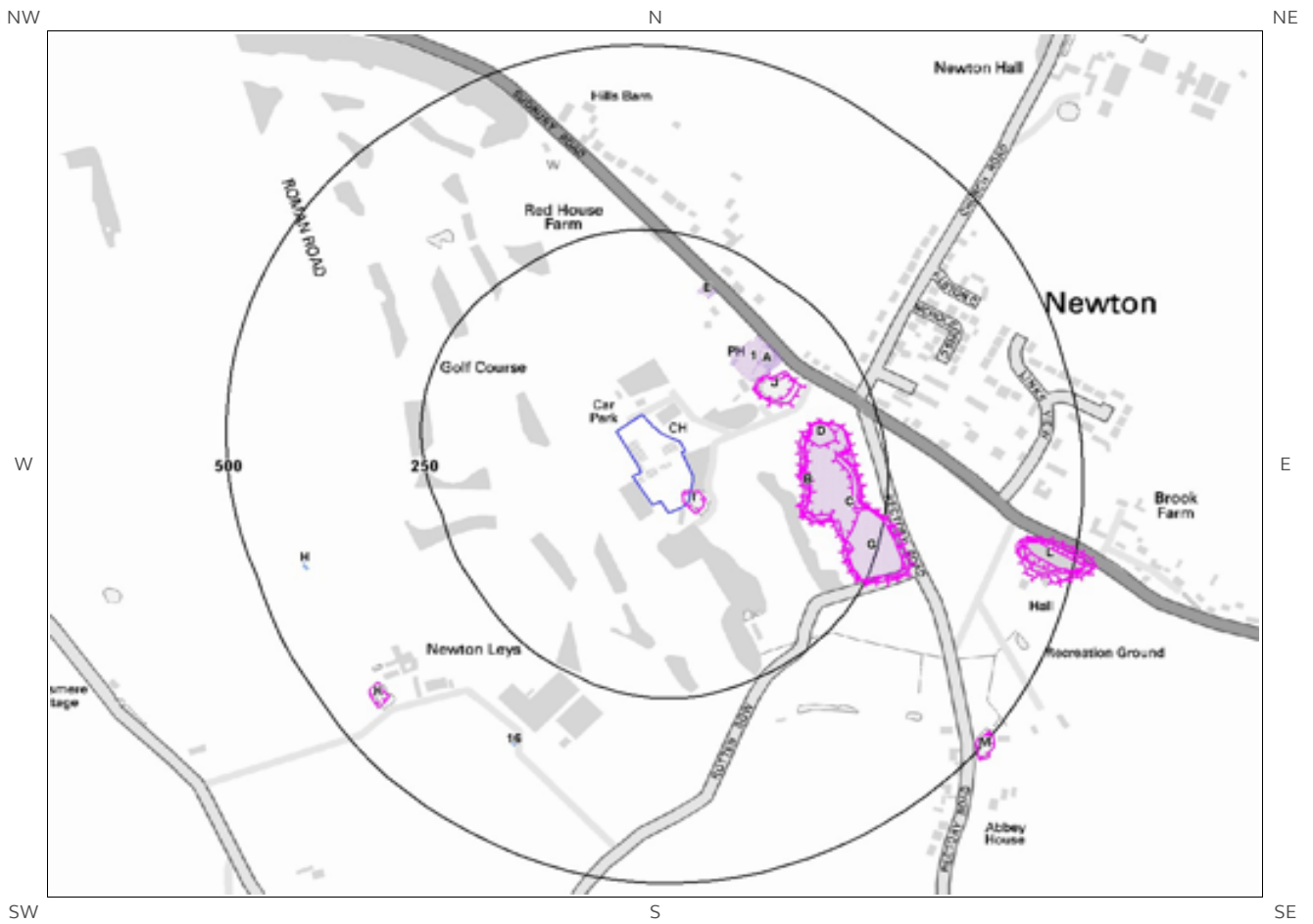
Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

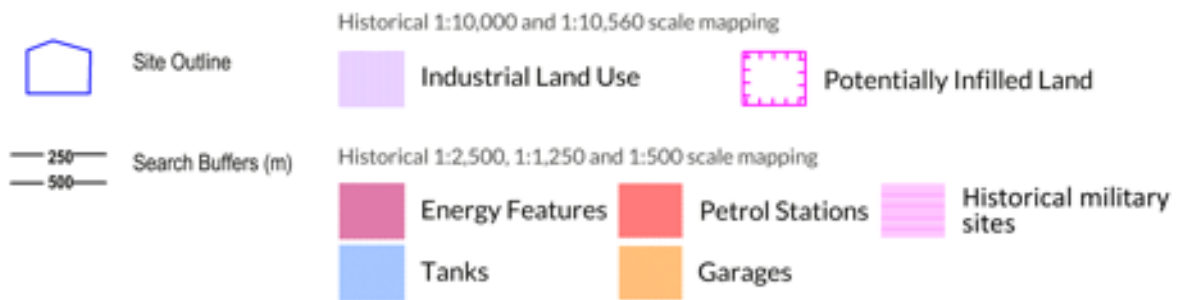
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Historical Land Use



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1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 15

ID	Distance [m]	Direction	Use	Date
1	120	NE	Malthouse	1885
2A	126	NE	Malthouse	1902
3A	126	NE	Malthouse	1927
4B	136	E	Unspecified Ground Workings	1973
5B	136	E	Unspecified Ground Workings	1955
6C	139	E	Unspecified Pit	1927
7C	140	E	Old Gravel Pit	1885
8D	157	E	Unspecified Pit	1973
9D	157	E	Unspecified Pit	1955
10E	179	NE	Smithy	1885
11E	179	NE	Smithy	1902
12F	185	E	Unspecified Ground Workings	1973
13F	185	E	Unspecified Ground Workings	1955
14G	206	E	Unspecified Pit	1955
15G	206	E	Unspecified Pit	1973

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary: 3

ID	Distance (m)	Direction	Use	Date
16	362	SW	Unspecified Tank	1976
17H	432	W	Unspecified Tank	1998
18H	434	W	Unspecified Tank	1956

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary: 0

Database searched and no data found.

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 0

Database searched and no data found.

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary: 0

Database searched and no data found.

1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 27

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:
















ID	Distance(m)	Direction	Use	Date
----	-------------	-----------	-----	------

19I	0	On Site	Pond	1955
20I	0	On Site	Pond	1973
21J	117	NE	Pond	1955
22J	117	NE	Pond	1973
23J	121	NE	Pond	1885
24J	121	NE	Pond	1902
25J	121	NE	Pond	1927
26B	136	E	Unspecified Ground Workings	1973
27B	136	E	Unspecified Ground Workings	1955
28C	139	E	Unspecified Pit	1927
29C	140	E	Old Gravel Pit	1885
30D	157	E	Unspecified Pit	1973
31D	157	E	Unspecified Pit	1955
32F	185	E	Unspecified Ground Workings	1955
33F	185	E	Unspecified Ground Workings	1973
34G	206	E	Unspecified Pit	1955
35G	206	E	Unspecified Pit	1973
36L	424	E	Pond	1955
37K	425	SW	Pond	1955
38K	425	SW	Pond	1973
39L	428	E	Pond	1885
40L	434	E	Pond	1973
41L	435	E	Pond	1902
42L	435	E	Pond	1927
43M	489	SE	Pond	1902
44M	489	SE	Pond	1927
45M	489	SE	Pond	1885

2. Environmental Permits, Incidents and Registers Map



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- | | | | | | |
|---|--------------------|---|-------------------------------|---|--|
|  | Site Outline |  | Recorded Pollution Incident |  | RAS 3 & 4 Authorisations |
|  | Search Buffers (m) |  | Dangerous Substances (List 1) |  | Part A(1) Authorised Processes and Historic IPC Authorisations |
|  | |  | Dangerous Substances (List 2) |  | Part A(2) and Part B Authorised Processes |
| | |  | Water Industry Referrals |  | COMAH / NIHHS Sites |
| | |  | Licensed Discharge Consents |  | Sites Determined as Contaminated Land |
| | |  | Red List Discharge Consents |  | Hazardous Substance Consents and Enforcements |

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

0

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

0

Database searched and no data found.

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

2

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
1	397	E	591800 240800	<p>Address: NEWTON GREEN NR SUDBURY, SUFFOLK</p> <p>Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY</p> <p>Permit Number: PR2NFE12064</p> <p>Permit Version: 1</p> <p>Receiving Water: Trib River Box</p> <p>Status: PRE NRA LEGISLATION WHERE ISSUE DATE < 01-SEP-89 (HISTORIC ONLY)</p> <p>Issue date: 13/10/1964</p> <p>Effective Date: 13-Oct-1964</p> <p>Revocation Date: 30/11/1992</p>
2	492	E	591900 240800	<p>Address: RES. DEVLPT AT THE DEANS, NEWTON GREEN, SUDBURY, SUFFOLK</p> <p>Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER</p> <p>Permit Number: PR2NFE04568</p> <p>Permit Version: 1</p> <p>Receiving Water: Trib River Box</p> <p>Status: PRE NRA LEGISLATION WHERE ISSUE DATE < 01-SEP-89 (HISTORIC ONLY)</p> <p>Issue date: 29/03/1968</p> <p>Effective Date: 29-Mar-1968</p> <p>Revocation Date: 25/02/1993</p>

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

0

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

0

Database searched and no data found.

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.

2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site

0

Database searched and no data found.
