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CEO-ENVIRONMENTAL ENGINEERING EXCELLENCE

LIDL UK GMBH

Shawbridge Street, Clitheroe

Desk Study Assessment Report

JW/C3598/1388

June 2017



PROJECT QUALITY CONTROL DATA SHEET

Site Name:	Shawbridge Street, Clitheroe		
Report Title:	Desk Study Assessment Report		
Report No:	JW/C3598/1388		
Status:	Final		
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C3598/01	-	Site Location Plan

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DESK STUDY ASSESSMENT REPORT FOR A SITE OFF SHAWBRIDGE STREET, CLITHEROE

1.0 INTRODUCTION

1.1 Objectives

1.1.1 This report describes a Desk Study Assessment carried out by Brownfield Solutions Limited (BSL) for Lidl UK GmbH on a site off Shawbridge Street, Clitheroe. The works were instructed by the Engineer, Rapleys LLP.

1.1.2 The objectives of the Desk Study Assessment were to determine the sites environmental setting and likely site conditions, highlighting potential areas of concern that may govern the sites redevelopment.

1.1.3 The report has been completed to fulfil the requirements of a preliminary risk assessment in accordance with CLR11 "Model Procedures for the Management of Land Contamination".

1.2 Proposed Development

1.2.1 The proposed development is commercial end use comprising extension to an existing Lidl store and associated staff car parking areas.

1.3 Limitations

1.3.1 This Desk Study Assessment has been carried out based on information obtained from a number of areas, BSL have assumed that this information is correct.

1.3.2 There may be other conditions prevailing on the site which are outside the scope of work and have not been highlighted by this assessment and therefore have not been taken into account by this report. Responsibility cannot be accepted for such site conditions not revealed by the assessment.

1.3.3 This report has been prepared for the sole use of the client. No other third parties may rely upon or reproduce the contents of this report without the written permission of Brownfield Solutions Ltd (BSL). If any unauthorised third party comes into possession of this report they rely on it at their own risk and BSL do not owe them any Duty of Care.



2.0 THE SITE

2.1 Location & Access

2.1.1 The site covers an area of 0.47 hectares and is situated approximately 2.7 km south-east of Waddington town centre.

2.1.2 The site is centred on National Grid Reference 374606, 441678 as shown on the Site Location Plan C3598/01.

2.1.3 Access to the site is gained off Shawbridge Street to the east of the site.

2.2 Site Description

2.2.1 The site is irregular in shape, and appears generally level. It comprises a Lidl store with loading bay and associated car park areas. To the south-west of the store there is a public long stay car park.

2.2.2 The store is single storey of steel frame and brick construction with metal sheet cladding and a pitched roof. An open canopy is present at the front of the store, and there is a loading bay running along the northern elevation.

2.2.3 Surfacing across the site generally comprises hard standing of tarmac and concrete, with soft landscaping along the northern and eastern edges of the site.

2.2.4 The site is bounded to the east and south with low wooden fencing, with Shawbridge street and Peel street beyond respectively. Metal wire fencing and a line of mature trees border the site to the west, and a low rendered brick wall borders the north of the site.

3.0 ENVIRONMENTAL SETTING

3.1 Geological Search

3.1.1 The following publications of the British Geological Survey (BGS) were examined in respect of the geology underlying the site:

- 1:50,000 Scale Geological Sheet 68, Clitheroe. Solid/drift
- BGS Geology of Britain viewer.

Made Ground

3.1.2 No made ground is indicated to be present underlying the site.

Superficial Deposits

3.1.3 The site is indicated by the BGS to be underlain by Alluvium. This strata typically comprises clay, silt, sand and gravel. This unit is described by the BGS as “soft to firm consolidated, compressible silty clay, but can contain layers of silts, sand, peat and basal gravel. A stronger, desiccated surface zone may be present”.

Solid Geology

3.1.4 The Clitheroe Limestone Formation and Hodder Mudstone Formation is indicated to be present underlying the site. This formation typically comprises mudstone.

3.1.5 No faults are shown on or within an influencing distance of the site.

3.2 Hydrogeology

3.2.1 The superficial deposits in this area are classified by the Environment Agency as a Secondary (A) Aquifer (Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers).

3.2.2 The bedrock is also classified as a Secondary (A) Aquifer.

3.2.3 There are no known Source Protection Zones within 500m of the site.

3.2.4 The nearest groundwater abstraction licence is 1464m to the north east of the site, and pertains to a borehole at Clitheroe auction mart for general use.

3.2.5 Soils underlying the site are indicated to be of Low Leaching Potential, which are described as “soils in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal, or they have the ability to attenuate diffuse pollutants”.

3.3 Hydrology

3.3.1 The nearest named watercourses to the site is Shaw Brook, an on-site culvert as well as Mearley Brook, an on-site primary river. There are seven surface water features within 250m of the study site.



- 3.3.2 The latest grading of river quality data from 2009 pertains to Pimlico brook, 157m north of the site. It designates the biological quality as grade B, and chemical quality as grade A.
- 3.3.3 Information obtained from the Environment Agency (EA) Risk of Flooding from Rivers and the Sea (RoFRaS) database indicates that the risk of flooding at the study site is high (1 in 30 or greater). The site also lies within both Zone 2 and Zone 3 floodplains.
- 3.3.4 There are 12 surface water abstraction licences within 2000m of the study site. The nearest two are 479m south west of the site, for the purpose of general use at Mearley Brook.
- 3.3.5 No discharge consents have been found within 500m of the study site.

3.4 Historical Setting

- 3.4.1 Information has been obtained from historical Ordnance Survey Maps with the pertinent issues that may have affected the site or its environs summarised below.
- 3.4.2 The following plans produced by the Ordnance Survey were examined.

Scale	Date
1:1056	1849
1:2500	1884, 1912, 1932, 1964, 1976, 1986, 1990, 1993, 1995
1:10000/10560	1847, 1847-1848, 1890, 1906-1911, 1911, 1910-1914, 1930, 1938, 1950-1955, 1971-1974, 2002, 2010, 2014

The Site

- 3.4.3 The earliest map dated 1847 indicates the site to be undeveloped, comprising an open field.
- 3.4.4 By 1884, a **cotton mill** named Shaw Bridge Mill has been constructed in the north-eastern half of the site.
- 3.4.5 From 1930, the south-western half of the site has been converted into allotment gardens.
- 3.4.6 The map of 1964 relabels Shaw Bridge Mill as a Cotton and Rayon Mill, and Works by 1976.
- 3.4.7 The allotment gardens have seemingly been removed by the map of 1971.
- 3.4.8 By 1990, a **car park** has been constructed in the south-western corner of the site.
- 3.4.9 The on-site building is unlabelled from 2002, and has been demolished by 2014, replaced by a smaller building that currently resembles the shape of the Lidl store.



Surrounding Area

- 3.4.10 The site lies within an industrialised area, for this reason, not all individual sources have been noted, as many sources can be grouped by use and distance.
- 3.4.11 The earliest map available of 1847 shows the site to be surrounded by residential areas, with Mearley Brook bordering the north west of the site. There is a **brewery** circa 40m to the north east.
- 3.4.12 The map of 1849 shows **timber yards** present circa 70 and 100m north west of the site, as well as a **tan yard** approximately 80m north west of the site.
- 3.4.13 By 1884, the brewery had been converted into another timber yard, and new construction, including the Victoria Brewery which had been erected approximately 20m north east of the site. The timber yard 70m north west of the site is no longer labelled.
- 3.4.14 The map of 1912 shows the previously labelled timber yard 70m to the north east of the site has now been relabelled as a **saw mill**. The other timber and tan yards noted on the 1849 map are no longer present. Brewery Mill has been renamed Claremont Mill.
- 3.4.15 Victoria Brewery is no longer labelled by 1932.
- 3.4.16 From the map of 1964, various **garages, engineering works'** and mills have been constructed, predominantly in the west and north of the site from circa 140m away. Many of the previous mills have been relabelled Cotton and Rayon Mill, and Carlton Mill has been repurposed as an **electrical depot**. There is a **clothing works** present circa 170m west of the site.- The closest **works** is circa 45m south of the site.
- 3.4.17 From 1976, a builder's yard has been constructed approximately 45m south of the site. Waterloo Road has been constructed, running northeast-southwest and borders the east of the site.
- 3.4.18 The majority of the surrounding works are still present on the most recent small/large scale maps dated 2002 and 1995 respectively.
- 3.4.19 The Historical Maps are presented in Appendix A.

3.5 Environmental Searches

- 3.5.1 A formal request has also been made to the Ribble Valley Borough Council (RVBC) Contaminated Land Department for information pertaining to the site. This information is presented in Appendix B. A summary of the relevant findings is presented below:
- 3.5.2 RVBC are not aware of any environmental problems or land reclamation schemes that would affect the site. They also do not consider the site to be, or likely to be identified as Contaminated Land under Part 2A of the EPA 1990
- 3.5.3 The RVBC considers the likelihood of the site to be the subject of a Remediation Notice either currently or in the future as extremely low.



- 3.5.4 The site is not considered a Special Site, there are no landfill sites within 250m of the study site and there are no records of pollution incidences on or in the vicinity of the site on the RVBC's records.
- 3.5.5 An Environmental Search has been conducted through Groundsure, which utilises British Geological Survey and Environment Agency databases. The full report can be found in Appendix C. Although a summary of the more relevant findings is presented below.

Entry	0 – 249m	250 – 500m	Details
Authorised industrial processes (IPC/IPPC/LAPPC)	2	5	The seven entries relate to Part B Activities. The closest is 218m south west of the site, and relates to coating process' at Flexible Reinforcements. No enforcements have been notified for any of the activities.
Pollution Incidents	2	0	The earliest pollution incident was in April 2008. The pollutant has not been identified, but it caused significant impact to water.
Landfill and Waste treatment	0	1	There is one landfill site within 500m of the site, which is a refuse tip 421m south east of the site. It is present on a 1964 historical map.
Discharge consent	0	0	
Control of Major Accident Hazard (COMAH) sites	0	0	
Consents issued under planning (Hazardous substances) Act 1990	0	0	
Radioactive substances	0	0	
Fuel Station entries	0	2	The only open fuel station is a BP garage 421m north of the site. The other entry is obsolete.
Other Current industrial land uses	20	0	One current land use pertains to the site, and is described as unspecified works or factories. The rest of the entries are between 96 and 248m away, and include industrial products, infrastructure and facilities, consumer products and repair and servicing.

3.6 Radon

- 3.6.1 The Groundsure Report indicated that although the site is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level, no radon protective measures are deemed necessary.



3.6.2 BRE Report 211 provides a general indication of which areas require radon protection, a site-specific assessment can be carried out through UK Radon or BGS.

3.7 Coal Authority Search

3.7.1 The site is outside the area of a designated coalfield; the Law Society and Coal Authority state a mining search is not required.

3.8 BGS Boreholes

3.8.1 There are a number of boreholes records within 500m from the site.

3.8.2 One Borehole (ID: SD74SW31) is reported as sandy clayey topsoil to 0.50m underlain by soft to firm and stiff to very stiff sandy clays [Boulder Clay] to the base of the borehole at 9.80m bgl.

3.8.3 The BGS Borehole Logs are presented in Appendix D.



4.0 DESK STUDY SUMMARY AND RISK ASSESSMENT

4.1 Introduction

4.1.1 The risk posed by any contaminants in soil or groundwater will depend on the nature and level of the source, the probability of exposure occurring, the potential pollution pathway and the likely effects on the receptors.

4.1.2 A contaminant is defined as a substance that has the potential to cause harm, a risk is considered to exist if such a substance is present at sufficient concentrations to cause harm and if a pathway is present a receptor could be exposed to the contaminant.

4.1.3 The following sections discuss the identified potential on-site and off-site sources, and any pollution that could impact receptors associated with the pathways proposed development. Pollution linkages are assessed which may represent a risk to human health and/or controlled water receptors from the information gained from the desk study searches. The assessment has been carried out on a qualitative basis and aims to produce a complete and comprehensive Preliminary Conceptual Site Model.

4.1.4 Three potential impacts exist for any given site and all three need to be considered in the qualitative risk assessment, these are:

- On-site impacts;
- The site impacting its surroundings;
- Off-site sources impacting the subject site.

4.2 Potential Contaminative Sources

On-Site

4.2.1 From the information obtained during the desk study, there are two sources which may affect the redevelopment of the site for commercial end use. These are the historical cotton mill and the car park.

Off-Site

4.2.2 Various off-site sources have been identified during the desk study, some of which are listed below:

- | | | |
|--------------------|---|----------------|
| • Brewery | - | 40m north east |
| • Timber Yard | - | 70m north west |
| • Tan Yard | - | 80m north west |
| • Works | - | 45m south |
| • Electrical Depot | - | 90m south west |
| • Builder's Yard | - | 45m south |

Associated Contaminants

4.2.3 The contaminants commonly associated with the potential sources of contamination identified include metals, PAHs, PCBs, phenols, VOCs, SVOCs and dyes.



4.3 Pathways

4.3.1 A pathway is defined as a medium by which a contaminant comes into contact with, or otherwise impacts a receptor. Due to the sites proposed end use being commercial, potential pollution pathways for contaminant migration at the site will exist.

4.3.2 At this stage the potential contaminants identified above are considered to present potential risks to site end users and controlled waters through the following pathways:

- Ingestion of contaminated soils;
- Dermal contact with contamination;
- Inhalation of gases or vapours in both indoor and outdoor air;
- Site end users – inhalation of gases or vapours in both indoor and outdoor air;
- Direct contact by buried structures such as services pipes;
- Surface run-off;
- Leaching of mobile contamination into groundwater;
- Migration of perched groundwater in any permeable soils or along existing or proposed service runs
- Saturated zone flow through the Secondary (A) Aquifers underlying the site;

4.4 Receptors

4.4.1 Receptors generally fall into the categories of human health or controlled waters. The identified receptors are listed below:

- Site End-Users
- Secondary (A) Aquifers
- Mearley Brook

4.4.2 Contaminants within the soil and groundwater could potentially attack the clean potable water supply pipe, the contaminants should be assessed to determine the correct pipe material and level of precautions.

4.5 Preliminary Conceptual Site Model

4.5.1 The information obtained in the previous sections has been used to compile a Preliminary CSM. The identified potential contaminants and receptors have been assessed in the table below as to whether a plausible source-pathway-receptor pollutant leakage for the proposed end use of the site exists. The risk classification has been estimated in accordance with information in Appendix F.

Human Health

4.5.2 The Preliminary CSM for human health is presented in the table below:

Potential Source	Potential Pathway	Potential Receptor	Uncertainty	Severity	Level of Risk
ON-SITE					
Cotton Mill	Ingestion, direct contact, inhalation of dusts.	End-users	Unlikely	Medium	Low
Allotment Gardens	Ingestion, direct contact, inhalation of dusts.	End-users	Unlikely	Medium	Low
General Made Ground	Ingestion, direct contact, inhalation of dusts.	End-users	Low Likelihood	Medium	Moderate/low
OFF-SITE					
Brewery	Ingestion, direct contact, inhalation of vapours	End Users	Unlikely	Medium	Low
Timber Yards	Ingestion, direct contact, inhalation of vapours	End Users	Unlikely	Medium	Low
Tan Yard	Ingestion, direct contact, inhalation of vapours	End Users	Unlikely	Medium	Low
Works	Ingestion, direct contact, inhalation of vapours	End Users	Unlikely	Medium	Low
Builders Yard	Ingestion, direct contact, inhalation of vapours	End Users	Unlikely	Medium	Low
Electrical Depot	Ingestion, direct contact, inhalation of vapours	End Users	Unlikely	Medium	Low

Human Health Justification

- 4.5.3 The proposed developments are continued commercial end use comprising the extension to the existing store and associated staff car park areas. The site will remain covered predominantly in hardstanding, and therefore site end-users are unlikely to come into contact with any potential contamination, resulting in a low risk.
- 4.5.4 As the current store building was constructed between 2002 and 2014, it is likely that any on-site sources beneath the existing store will have previously been remediated.
- 4.5.5 In the area of the proposed car park, there have been no structures built. The car park will remain covered in hardstanding, and therefore risks to end-users are considered to be low.

Controlled Waters

- 4.5.6 The Preliminary CSM for controlled waters is presented in the table below:



Potential Source	Potential Pathway	Potential Receptor	Likelihood	Severity	Level of Risk
Cotton Mill	Migration through groundwater or granular soils	Controlled waters	Unlikely	Medium	Low
Allotment Gardens	Migration through groundwater or granular soils	Controlled waters	Unlikely	Medium	Low
General Made Ground	Migration through groundwater or granular soils	Controlled waters	Unlikely	Medium	Low

Controlled Waters Justification

- 4.5.7 The site will remain covered in hardstanding post development, and will include new surface water drainage. This will prevent the leaching of any made ground underlying the site
- 4.5.8 As the ground conditions comprise of clays, attenuation of any off-site contaminants is likely. This, combined with the low leaching potential of the soils surrounding the site will result in a low risk to controlled waters.
- 4.5.9 There are no groundwater abstraction licences within 1000m of the site.

4.6 Ground Gas Risk Assessment

- 4.6.1 No potential on-site gas sources have been identified and the preliminary CSM therefore considers a very low risk to site end users.
- 4.6.2 The proposed development is an extension and the current building did not have any requirement for ground gas precautions. It is considered that ground gas monitoring will not be required.



5.0 DEVELOPMENT CONSTRAINTS

5.1 Foundations

- 5.1.1 The proposed development of the site is continued commercial end use comprising the extension of the existing Lidl store and car park areas. Ground conditions underlying the site are anticipated to consist of clays, silts, sands and gravels onto mudstone.
- 5.1.2 There is a line of mature trees running along the south-western edge of the store. These will require removal prior to the extension of the store. As the ground conditions include clays, these trees may affect foundation design. A survey of all trees within influencing distance of the site boundary by a qualified arboriculturalist would be recommended.
- 5.1.3 Shallow pad foundations are likely to be suitable, provided the anticipated heave from the on-site removal of trees is minimal. If not, piles would be recommended.
- 5.1.4 The ground conditions should be confirmed by on site intrusive investigations.
- 5.1.5 BRE Report 211 states that the site is within a Radon Affected area, as between 1 and 3% of properties in the area are above the Action Level. However, no radon protective measures are deemed necessary. A site-specific assessment can be carried out through UK Radon or BGS.

5.2 Other Constraints

- 5.2.1 Asbestos was not covered in this report. It should be noted that an asbestos survey should be conducted prior to any demolition or refurbishment.



6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Environmental

- 6.1.1 The proposed development comprises an extension to the existing Lidl store and associated car park areas.
- 6.1.2 The risks from the on-site and off-site sources of contamination have been deemed to be low and moderate to low.
- 6.1.3 No significant sources of ground gas were identified on, or in the vicinity of the study site.
- 6.1.4 The risks to controlled waters have been deemed low.

6.2 Geotechnical

- 6.2.1 Superficial clay, silt, sand and gravel deposits are anticipated to be present underlying the site, underlain by clay bedrock.
- 6.2.2 Shallow foundations are likely to be suitable for the proposed development. However, this should be confirmed by intrusive on-site investigations.

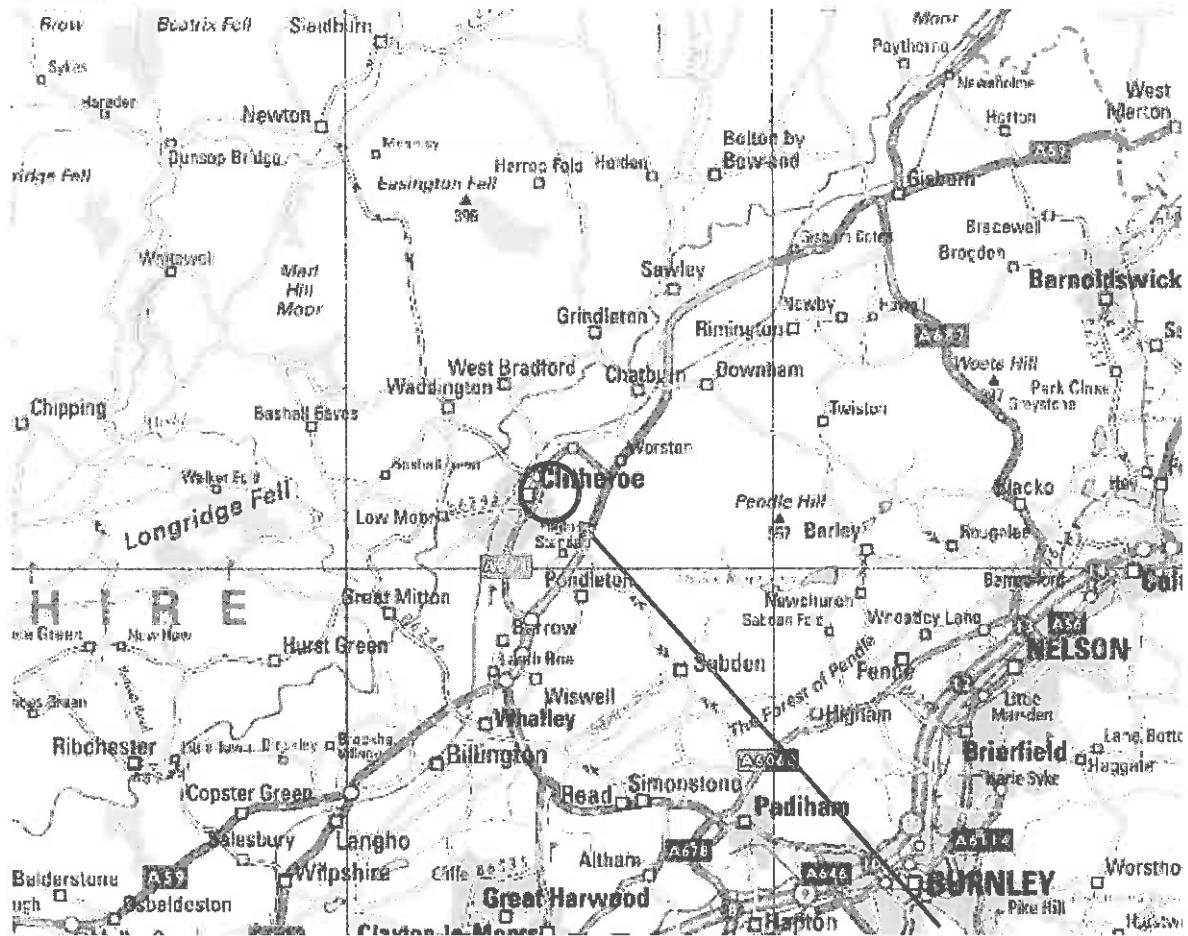
6.3 Further Work

- 6.3.1 Therefore, to allow future development of the site the following further works are recommended, although this list is not exhaustive and should be read in conjunction with any planning conditions that are applicable to the site.

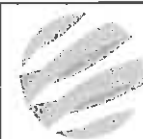
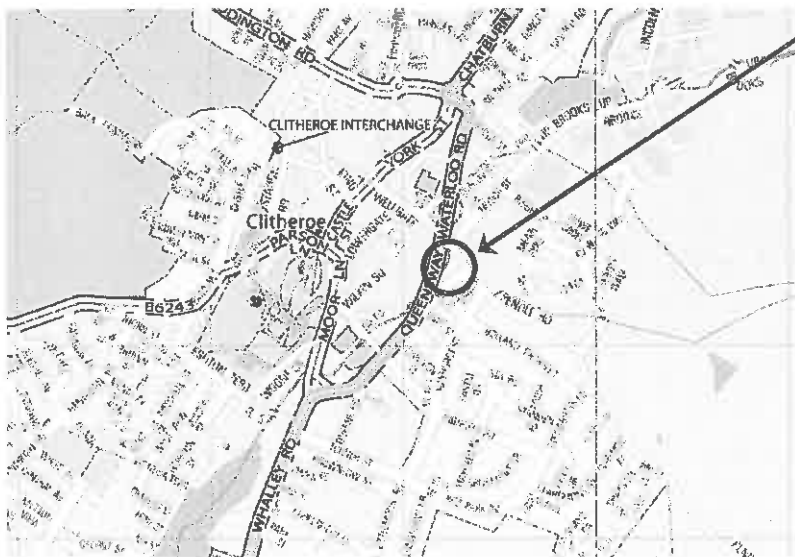
- Topographical survey
- Intrusive site investigations to confirm ground conditions for foundation design.
- Refurbishment/Demolition Asbestos survey.
- Radon assessment
- Foundation design
- Tree survey
- Confirmation of findings with Local Authority



DRAWINGS



SITE



**BROWNFIELD
SOLUTIONS LTD**

LIDL UK GMBH

Shawbridge Street, Clitheroe

Site Location Plan

Drawing Number C3598/01

Scale: NTS

Drawn By: JW

Checked By: WG



APPENDIX A HISTORICAL MAPS

Site Details:

Client Ref: EMS_423681_566160
Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

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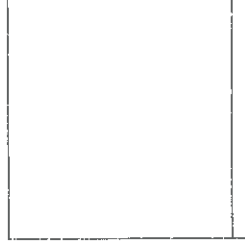
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Scale: 1:1,056

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Surveyed 1844
 Revised 1848
 Edition 1849
 Copyright N/A
 Levelled N/A



Surveyed 1846
 Revised 1848
 Edition 1849
 Copyright N/A
 Levelled N/A



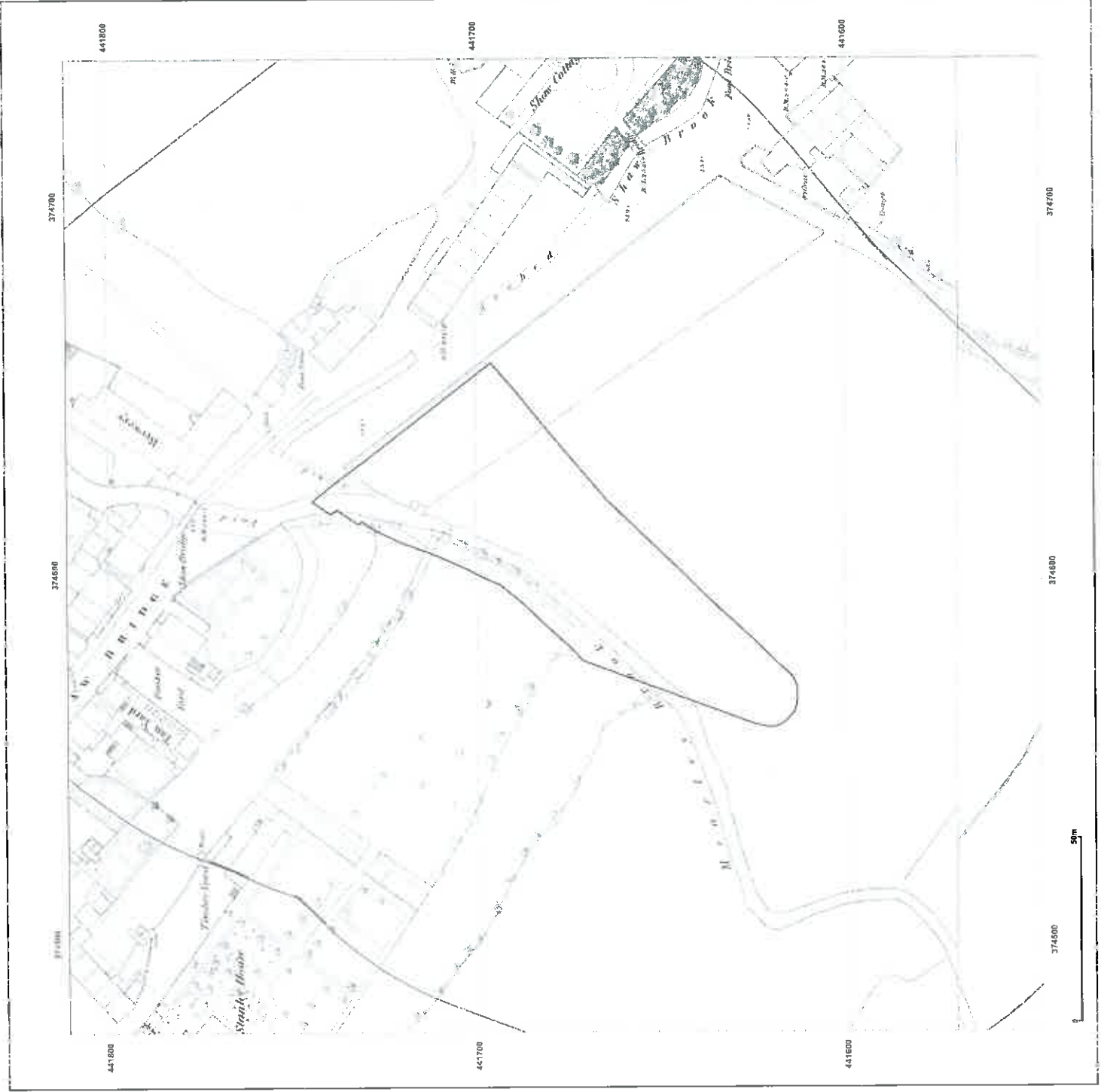
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Site Details:

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Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

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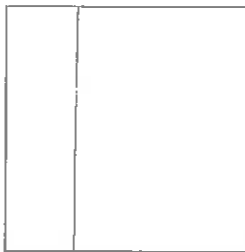
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Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1884
 Revised 1884
 Edition N/A
 Copyright N/A
 Levelled N/A



Surveyed 1884
 Revised 1884
 Edition N/A
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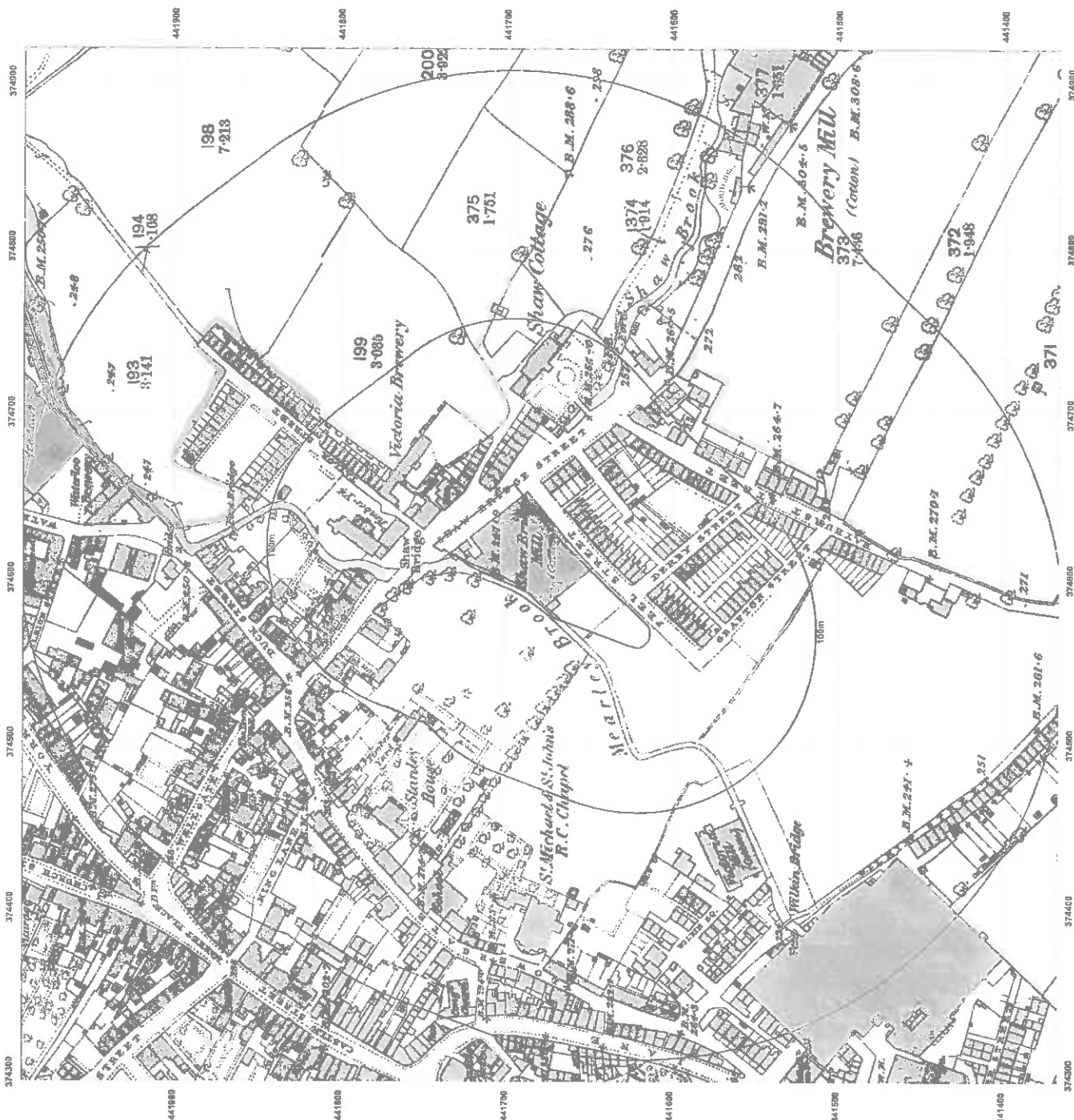
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Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: County Series

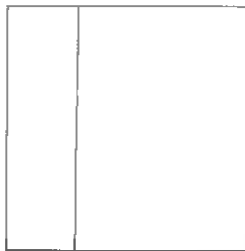
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Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1912
Revised 1912
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1912
Revised 1912
Edition N/A
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Site Details:

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Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

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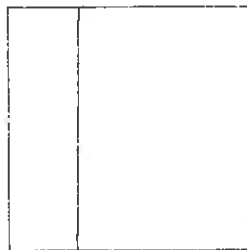
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Revised 1832
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1932
Revised 1832
Edition N/A
Copyright N/A
Levelled N/A



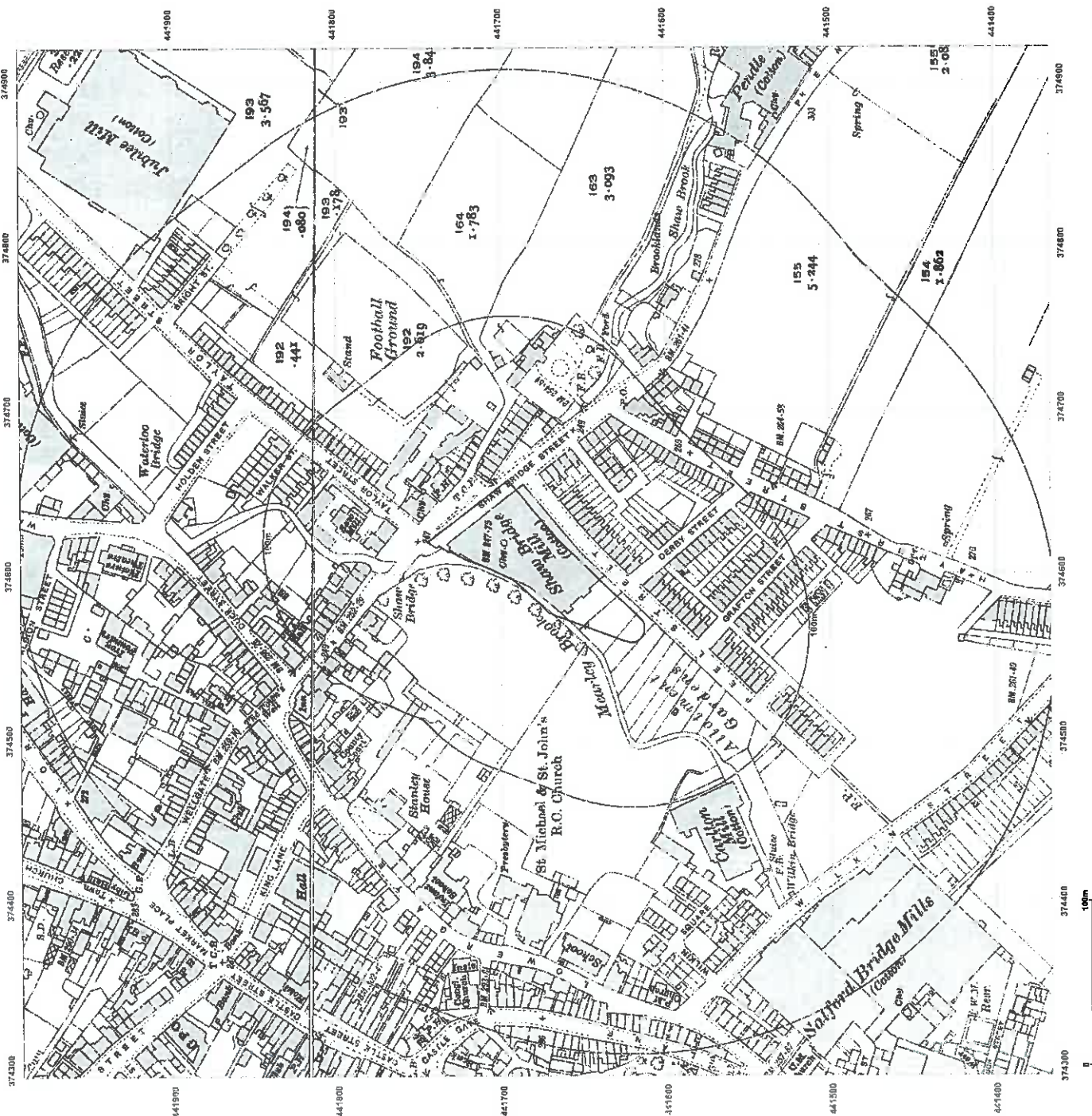
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Site Details:

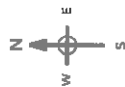
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Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: National Grid

Map date: 1964

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1964
 Revised 1984
 Edition N/A
 Copyright 1985
 Licensed 1982



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 Production date: 05 June 2017

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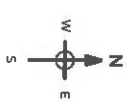
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Report Ref: EMS-423681_566160
Grid Ref: 374507, 441679

Map Name: National Grid

Map date: 1986

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1986
Licensed 1991



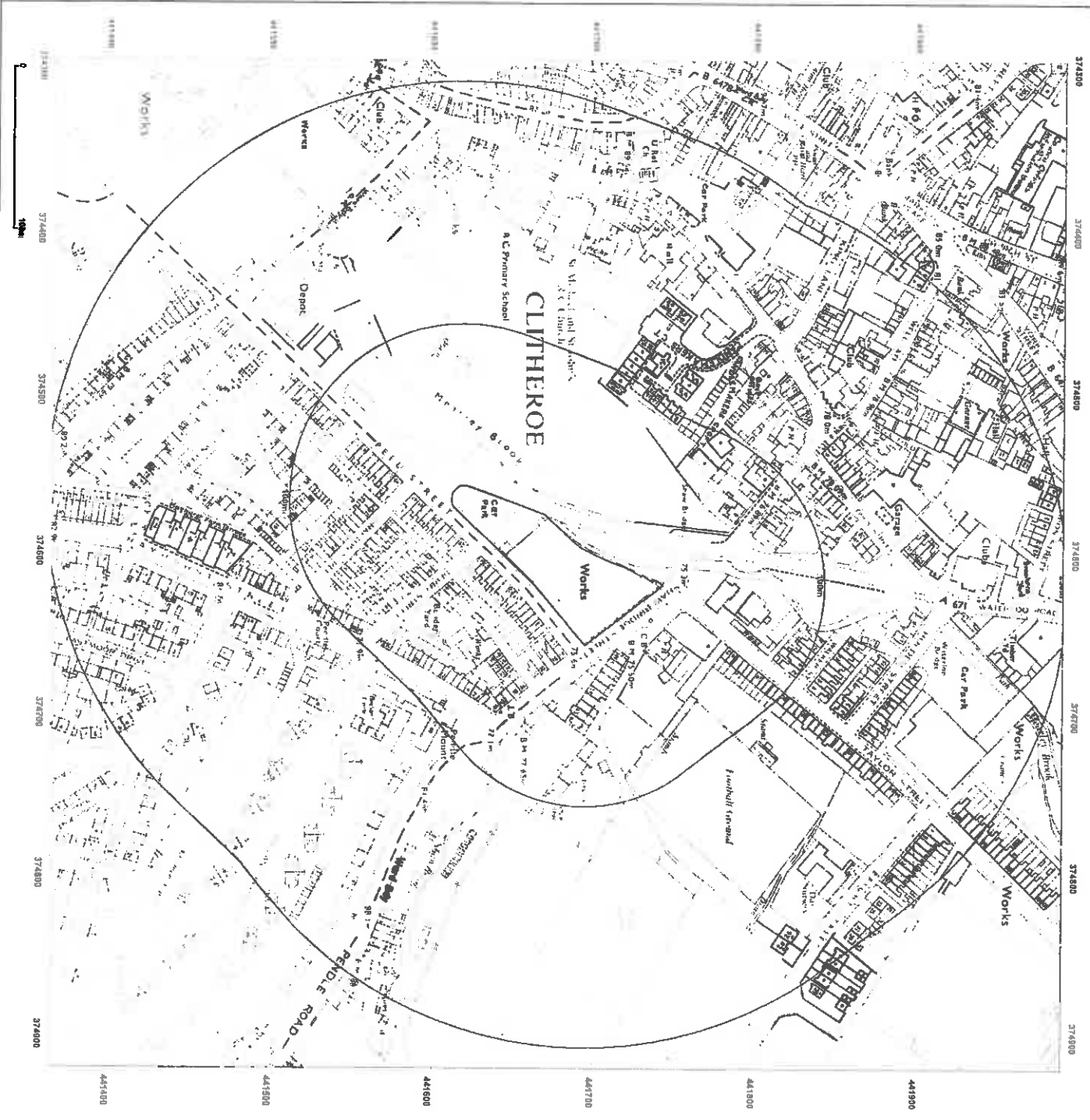
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Site Details:

Client Ref: EMS-423681_566160
Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: National Grid

Map date: 1990

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1990
Levelled 1967



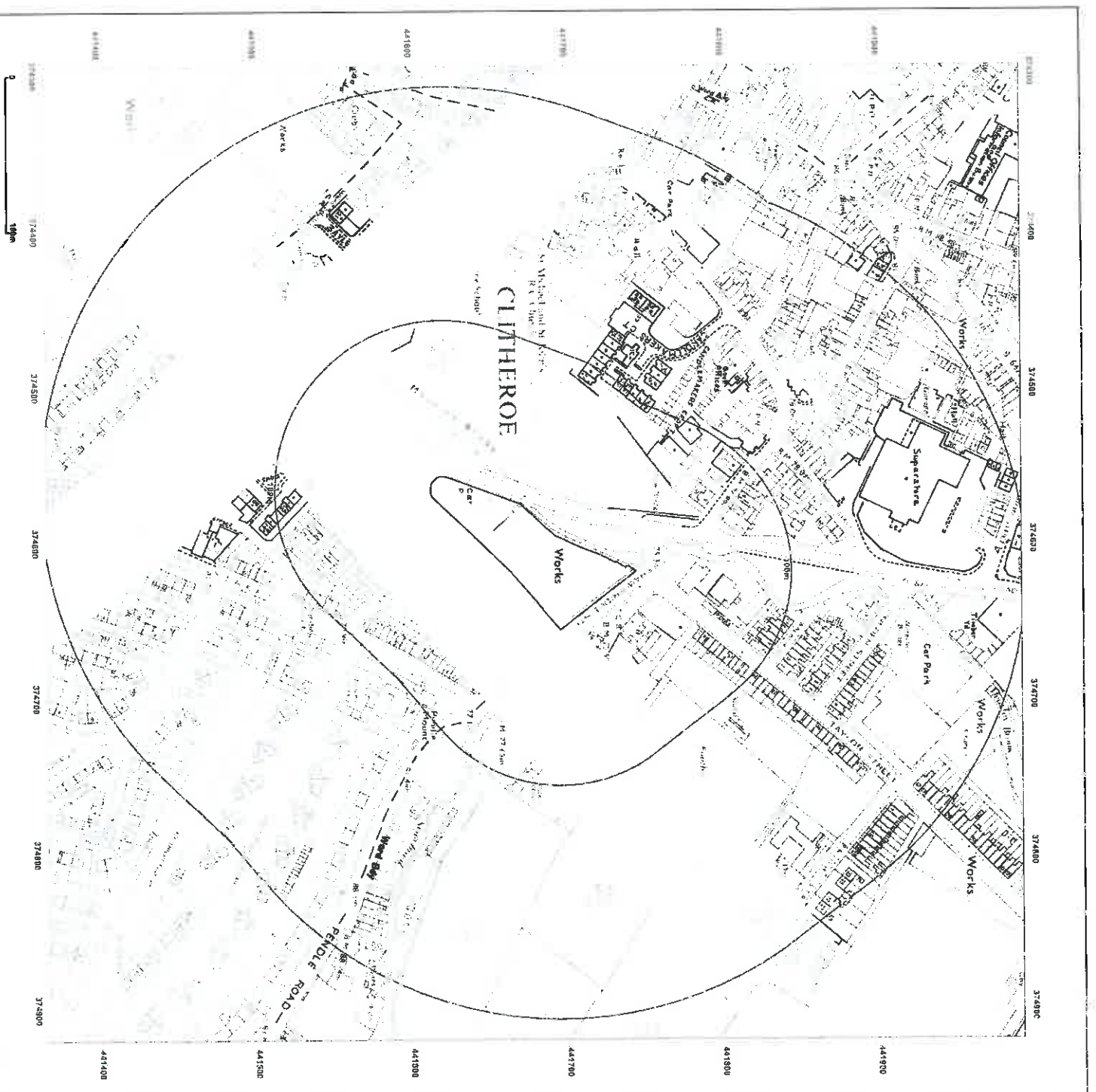
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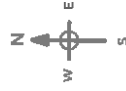
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Grid Ref: 374607, 441679

Map Name: National Grid

Map date: 1990

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1981
Revised 1990
Edition N/A
Copyright 1990
Landed 1991

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Site Details:

Client Ref: EMS_423681_566160
Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: National Grid

Map date: 1993

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

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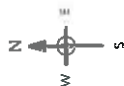
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Map Name: National Grid

Map date: 1993

Scale: 1:2,500

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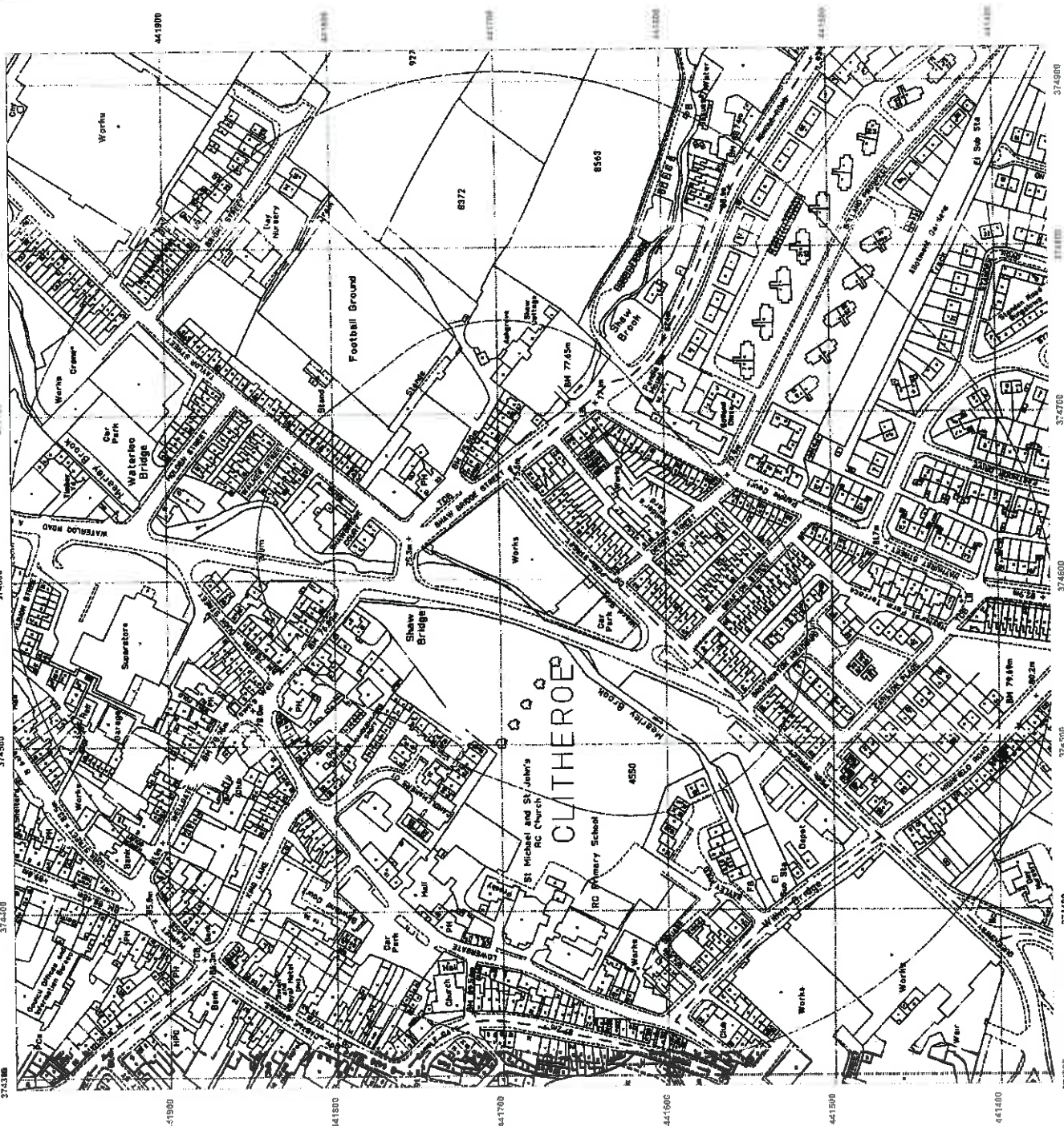


Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A



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Production date: 05 June 2017

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Map Name: National Grid

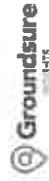
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Surveyed 1993
Revised 1993
Edition N/A
Copyright 1993
Levelled N/A



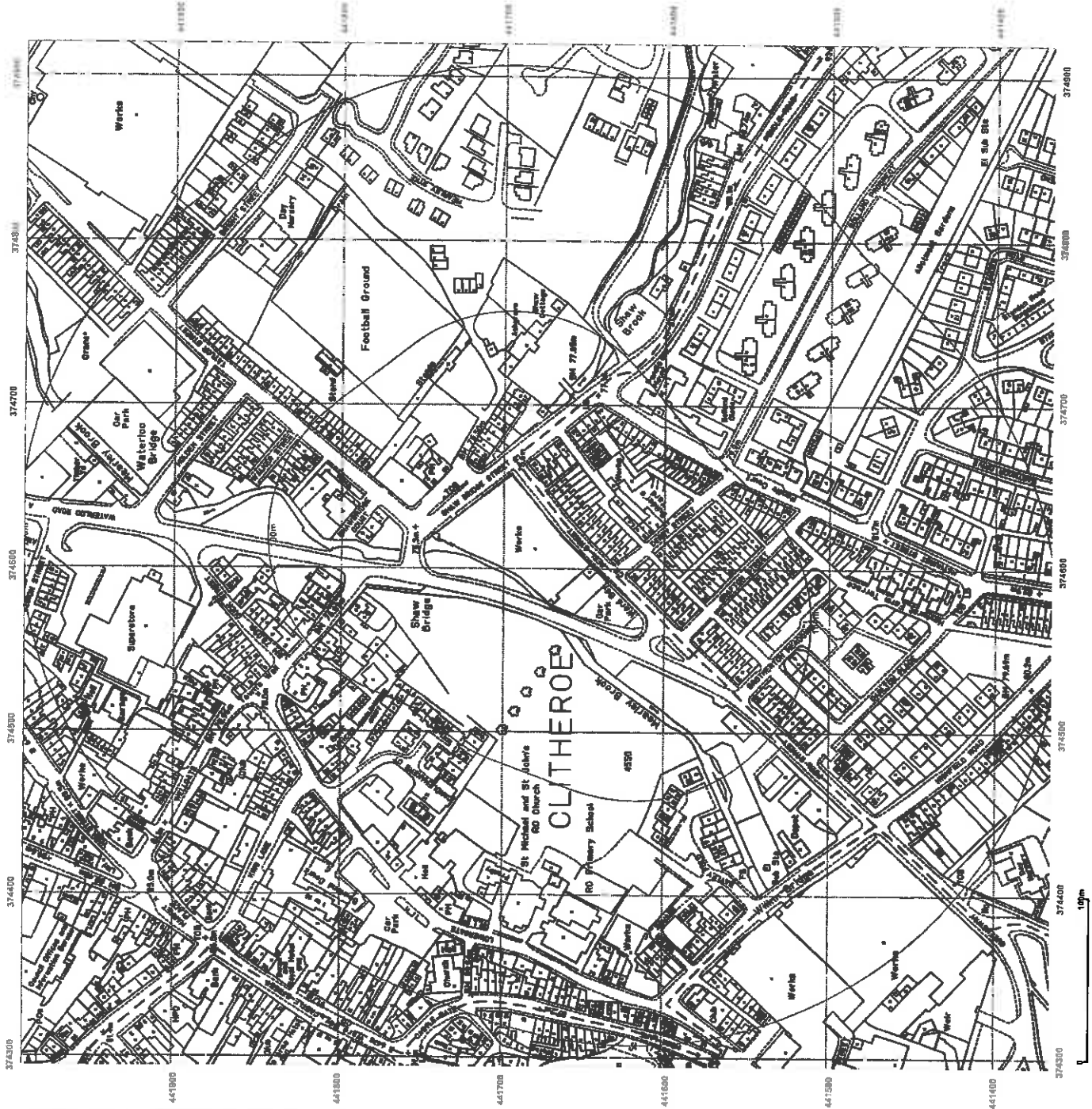
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Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: National Grid

Map date: 1995

Scale: 1:2,500

Printed at: 1:2,500



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



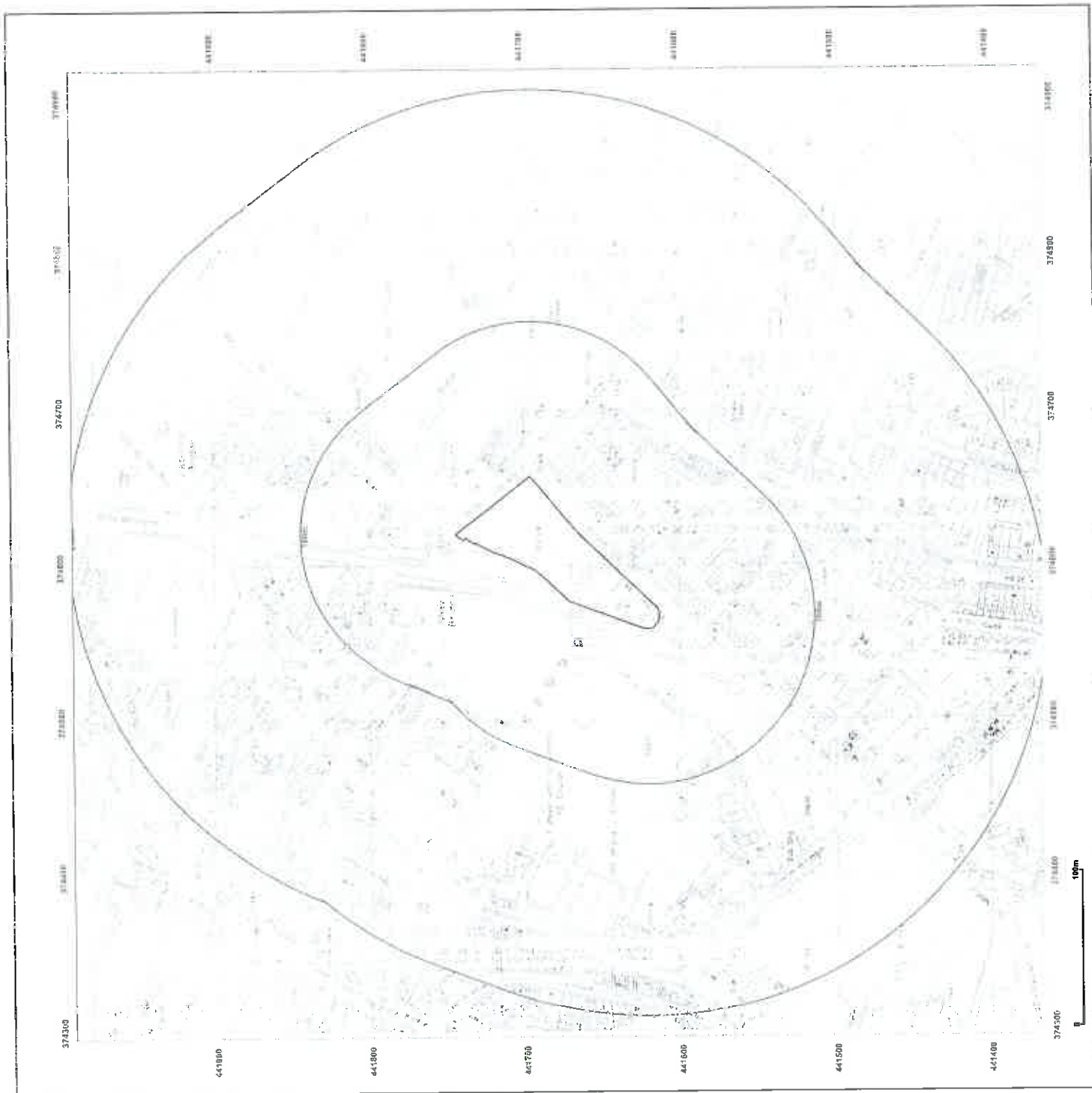
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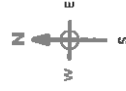
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Map Name: National Grid

Map date: 1995

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Printed at: 1:2,500



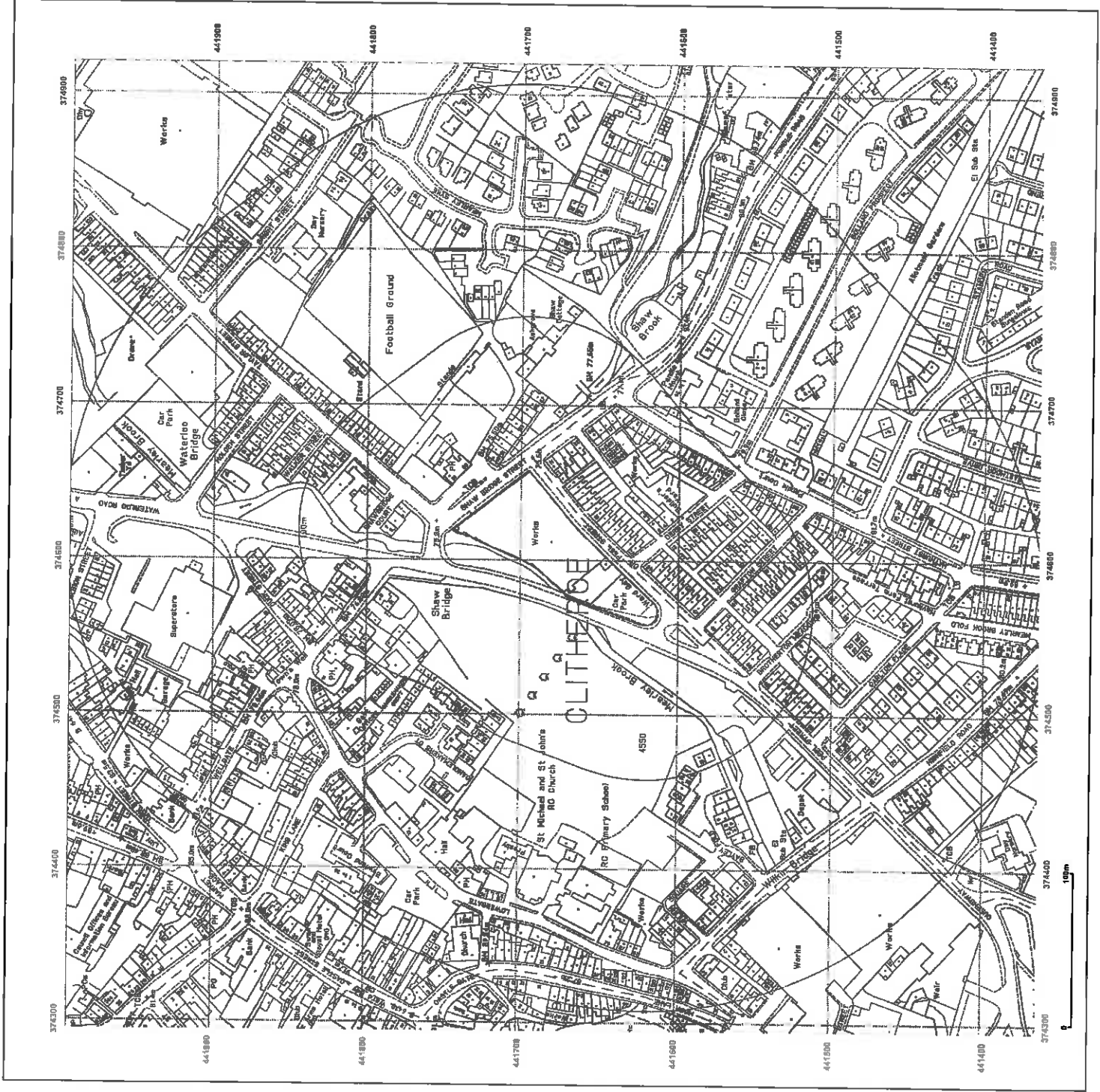
Surveyed 1886
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A



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Site Details:

Client Ref: EMS_423681_566160
Report Ref: EMS-423681_566160
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Map Name: County Series

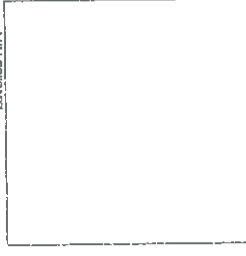
Map date: 1847

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1847
Edition 1847
Copyright N/A
Laid out N/A



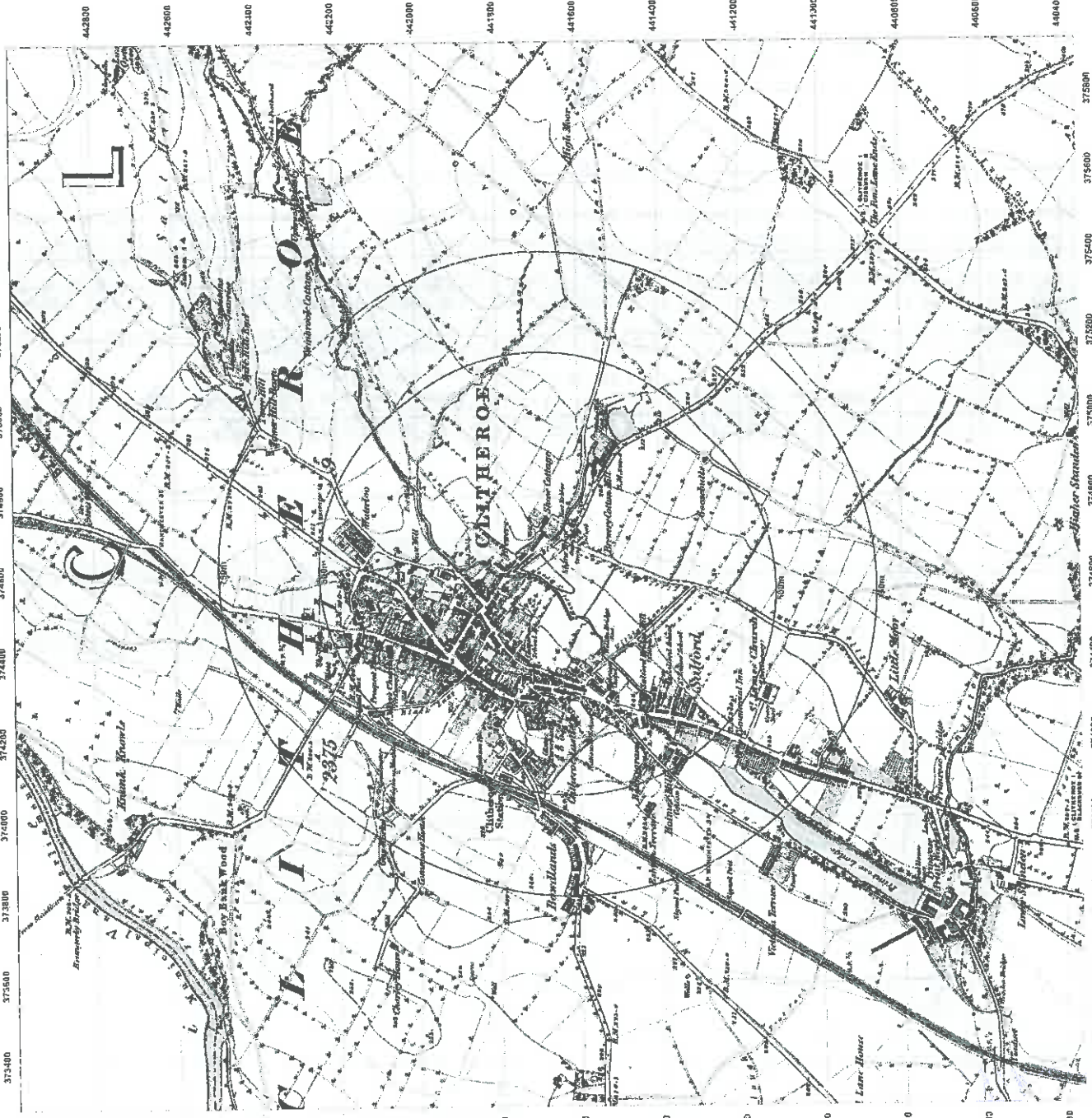
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50m

Site Details:

Client Ref: EMS_423681_566160
Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: County Series

Map date: 1847-1848

Scale: 1:10,560

Printed at: 1:10,560



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

Surveyed 1847
Revised N/A
Edition 1848
Copyright N/A
Levelled N/A



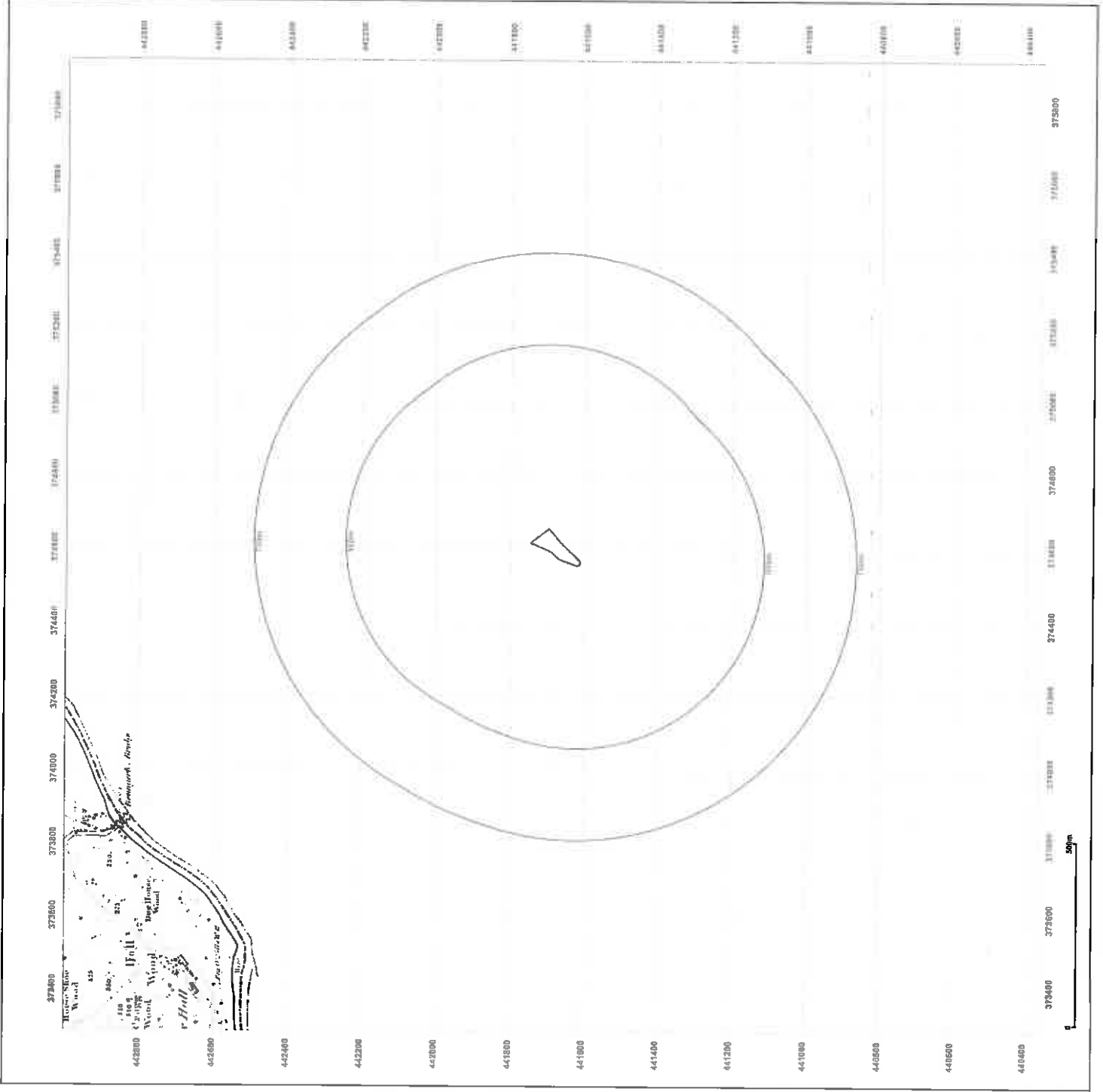
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Site Details:

Client Ref: EMS_423681_566160
Report Ref: EMS_423681_566160
Grid Ref: 374607, 441679

Map Name: County Series

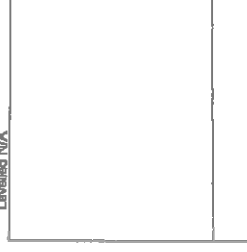
Map date: 1890

Scale: 1:10,560

Printed at: 1:10,560



Surveyed N/A
Revised N/A
Edition 1890
Copyright N/A
Levelled N/A



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A36-115

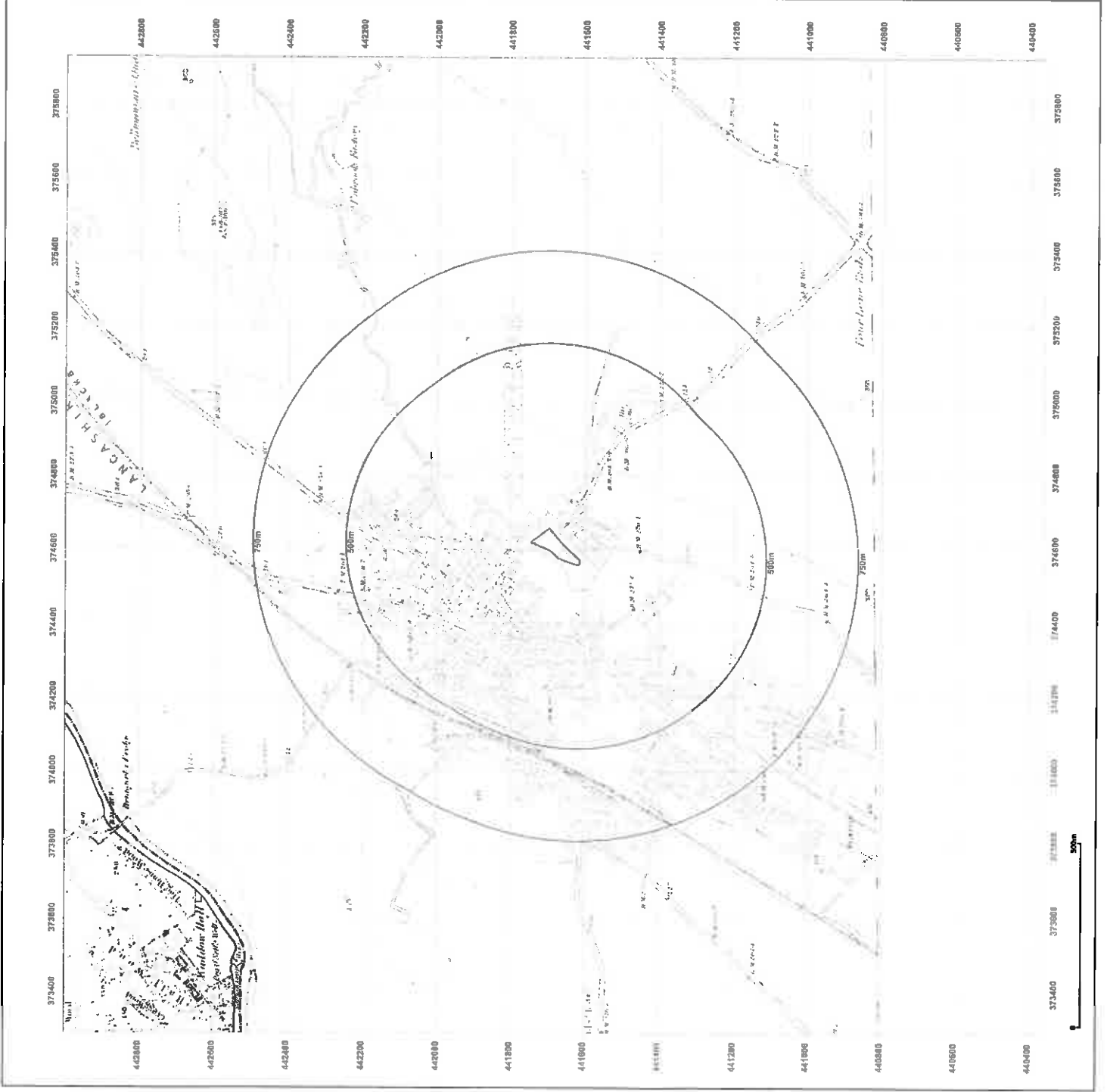
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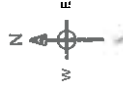
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Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: County Series

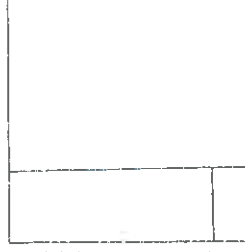
Map date: 1906-1911

Scale: 1:10,560

Printed at: 1:10,560



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



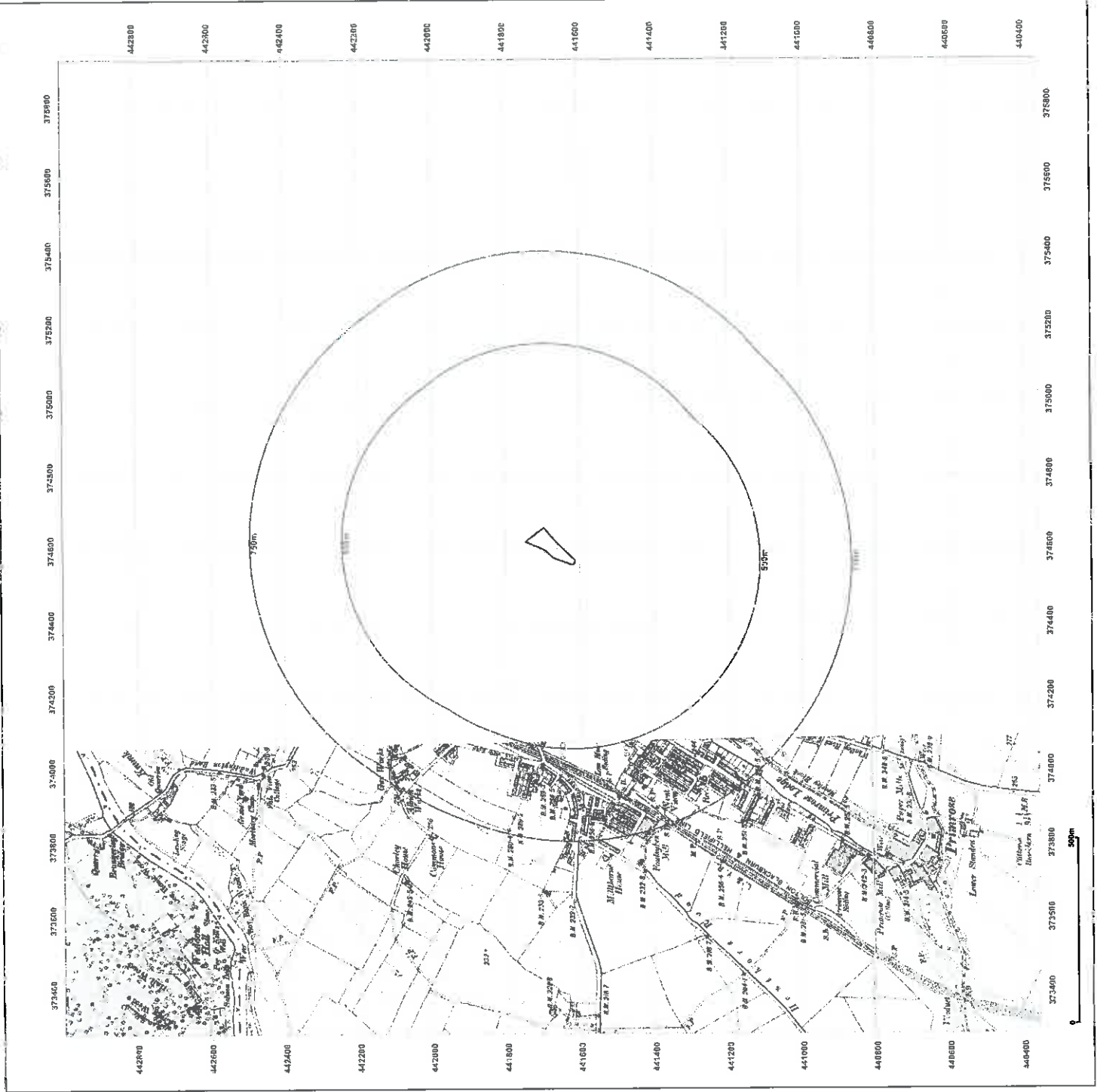
Surveyed 1847
 Revised 1911
 Edition N/A
 Copyright N/A
 Levelled N/A



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Site Details:

Client Ref: EMS_423681_566160
Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: County Series

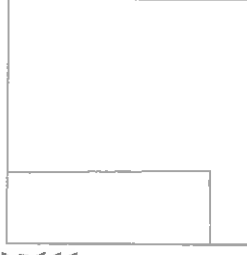
Map date: 1911

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1847
Revised 1911
Edition N/A
Copyright N/A
Levelled N/A



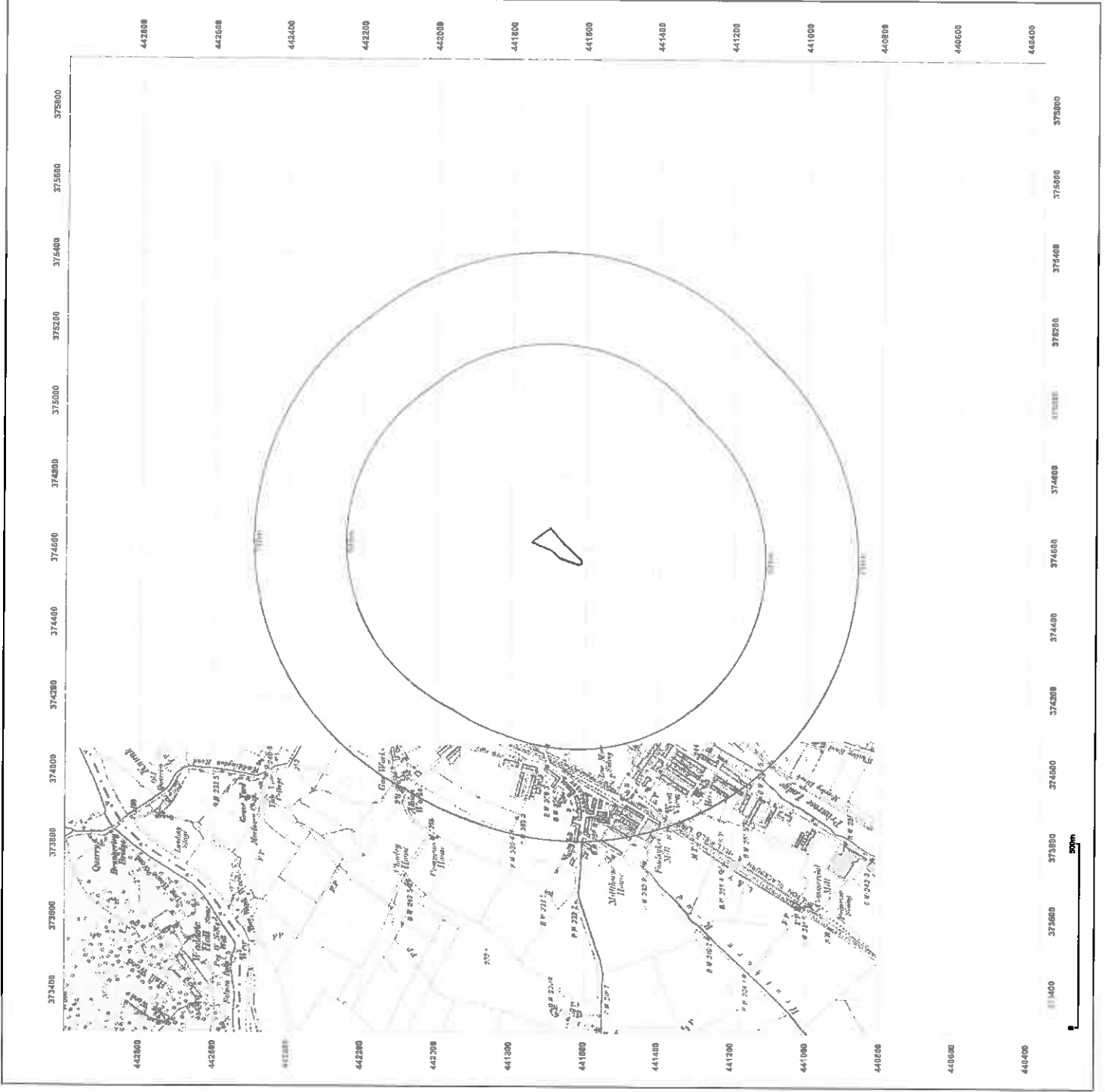
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Site Details:

Client Ref: EMS_423681_566160
Report Ref: EMS_423681_566160
Grid Ref: 374607, 441679

Map Name: County Series

Map date: 1910-1914

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1914
Edition N/A
Copyright N/A
Levelled N/A



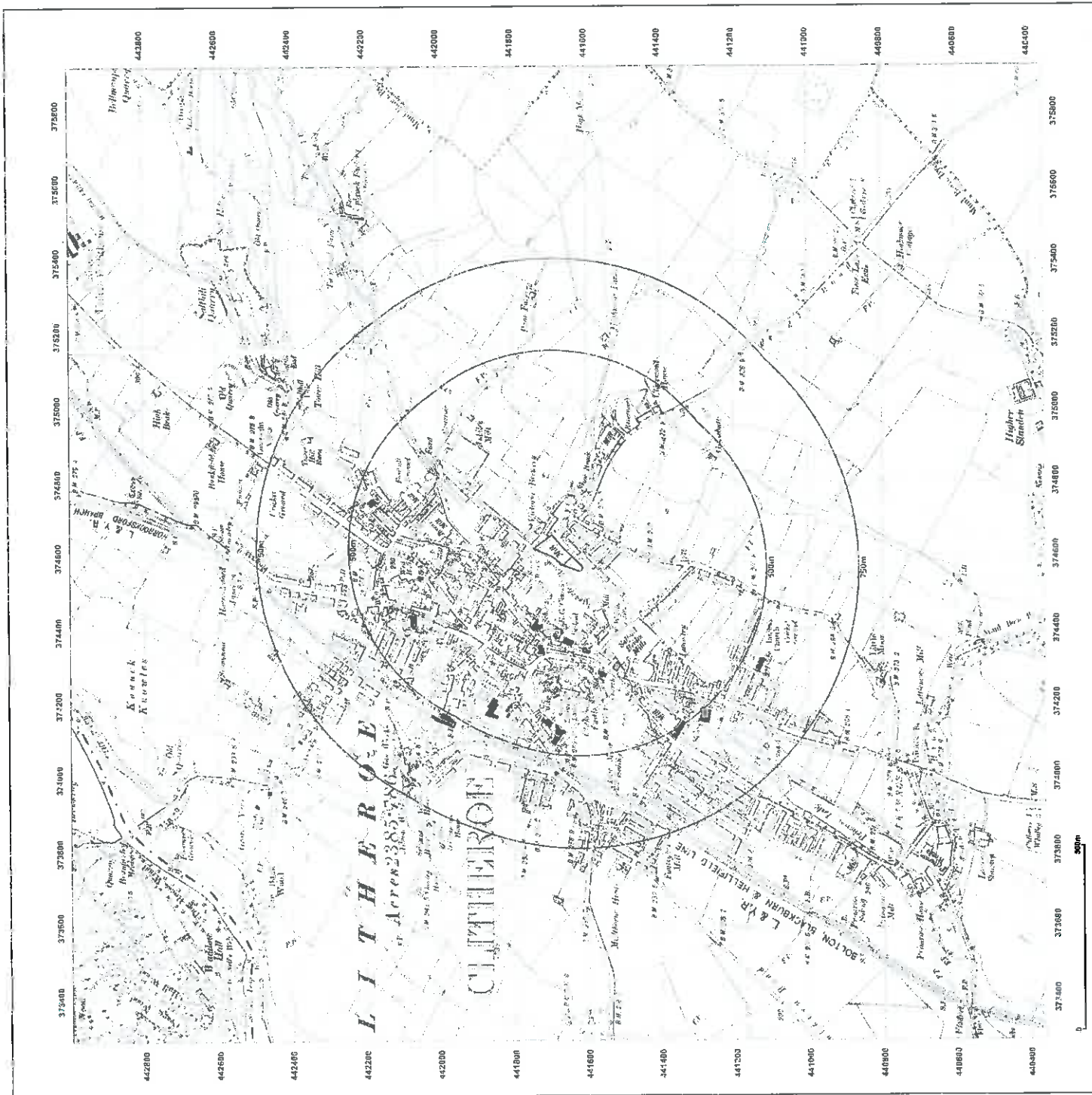
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Site Details:

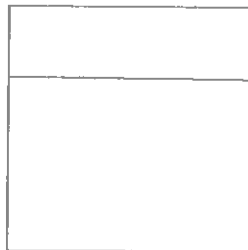
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Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: County Series

Map date: 1930

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1830
Edition N/A
Copyright N/A
Levelled N/A

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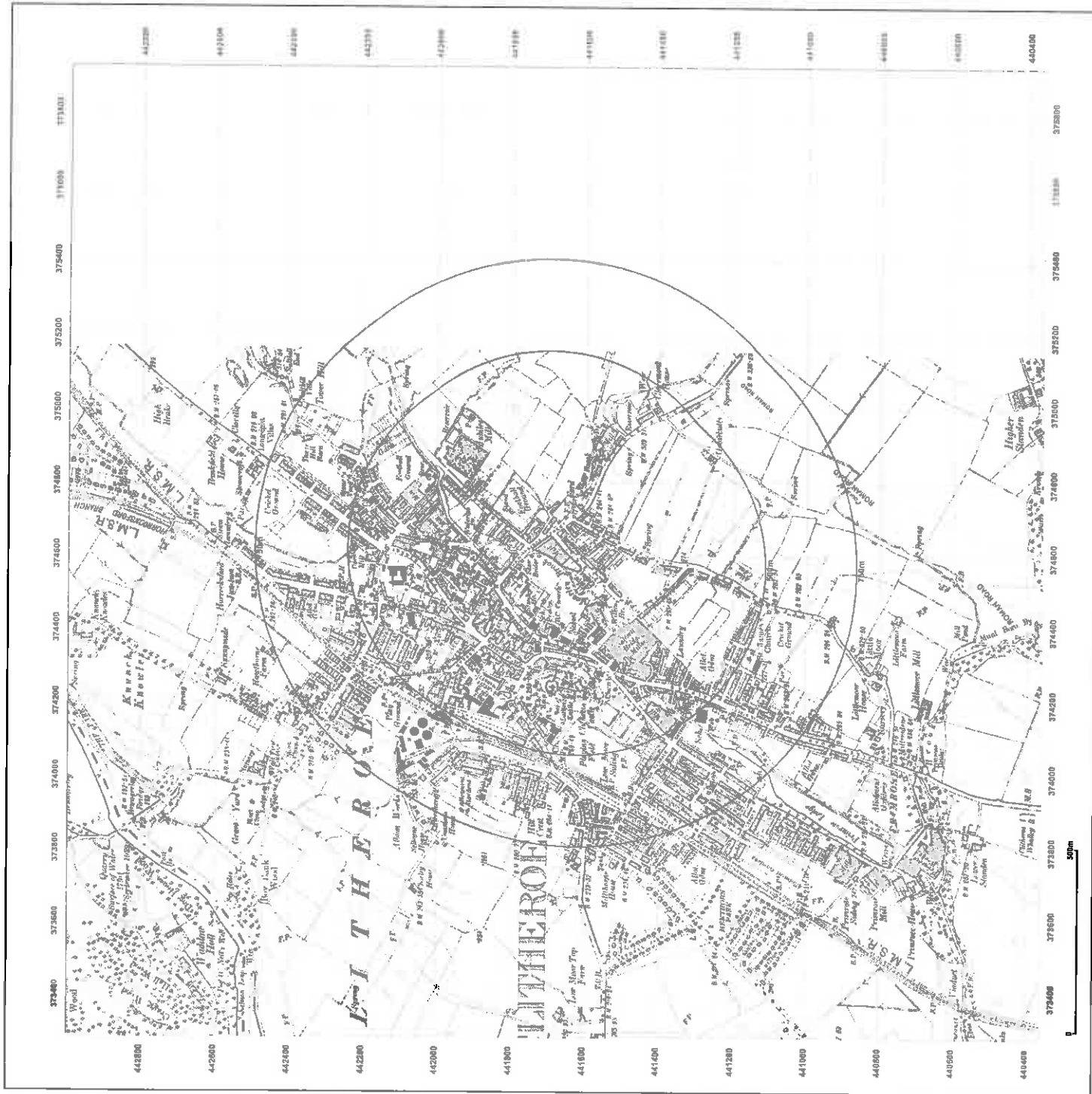
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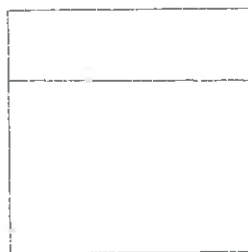
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Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Enlarged 1844
Revised 1838
Edwin N/A
Copyright N/A
Landed N/A

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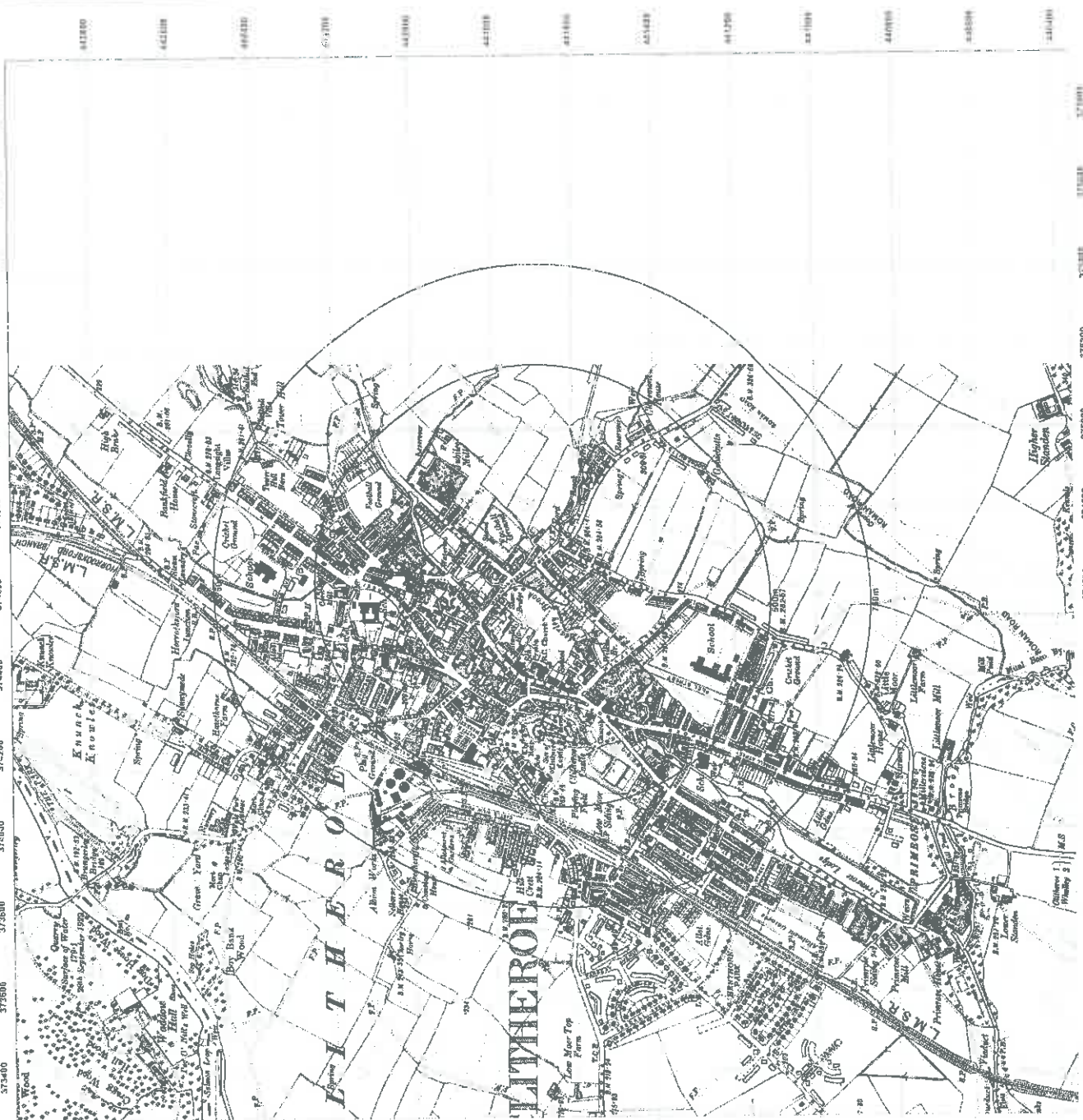
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Site Details:


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Report Ref:	EMS-423681_566160
Grid Ref:	374607, 441679

Map Name: Provisional

Map date: 1950-1955

Scale: 1:10,560

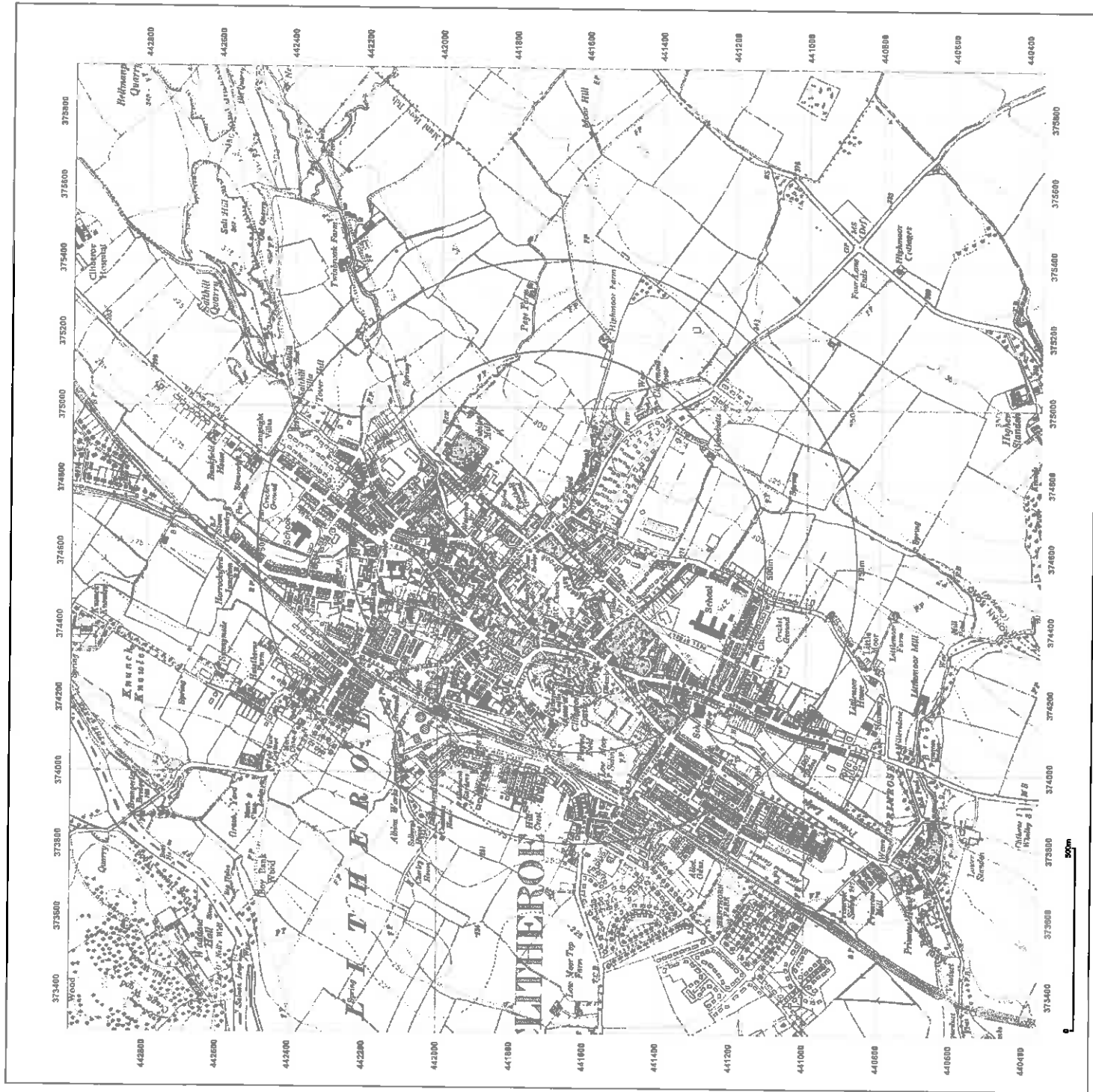
Printed at: 1:10,560





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Site Details:

Client Ref: EMS-423681_566160
Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: National Grid

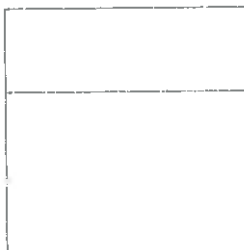
Map date: 1971-1974

Scale: 1:10,000

Printed at: 1:10,000



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



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



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Site Details:


Client Ref:	EMS_423681_566160
Report Ref:	EMS-423681_566160
Grid Ref:	374607, 441679

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000

A compass rose with four arrows pointing North (N), South (S), East (E), and West (W). The North arrow is slightly longer than the others. The letters N, S, E, and W are placed at the ends of the arrows.

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INSIGHT

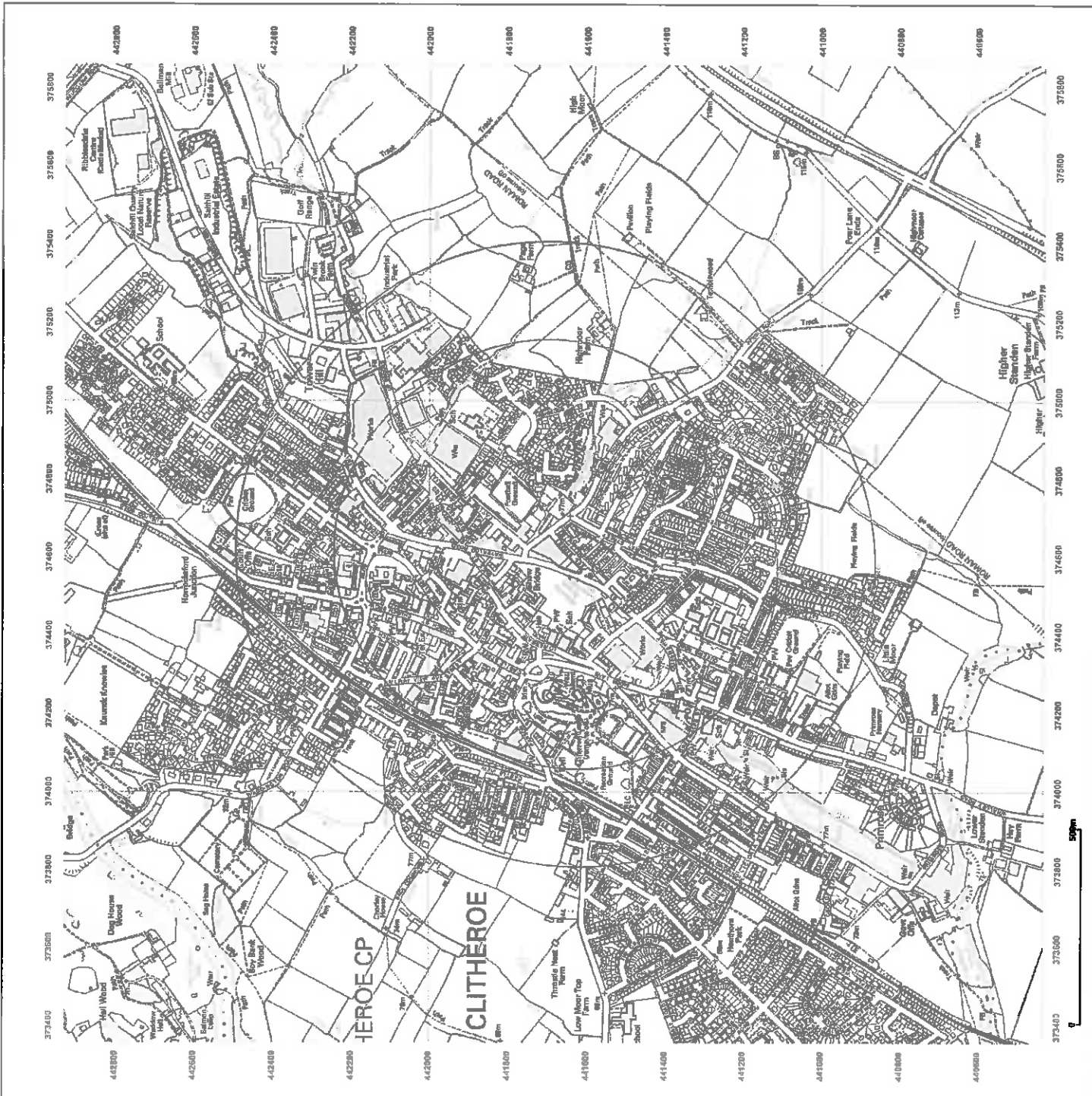
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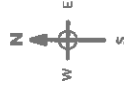
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Report Ref: EMS-423681_566160
Grid Ref: 374607, 441679

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010

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INSIGHTS

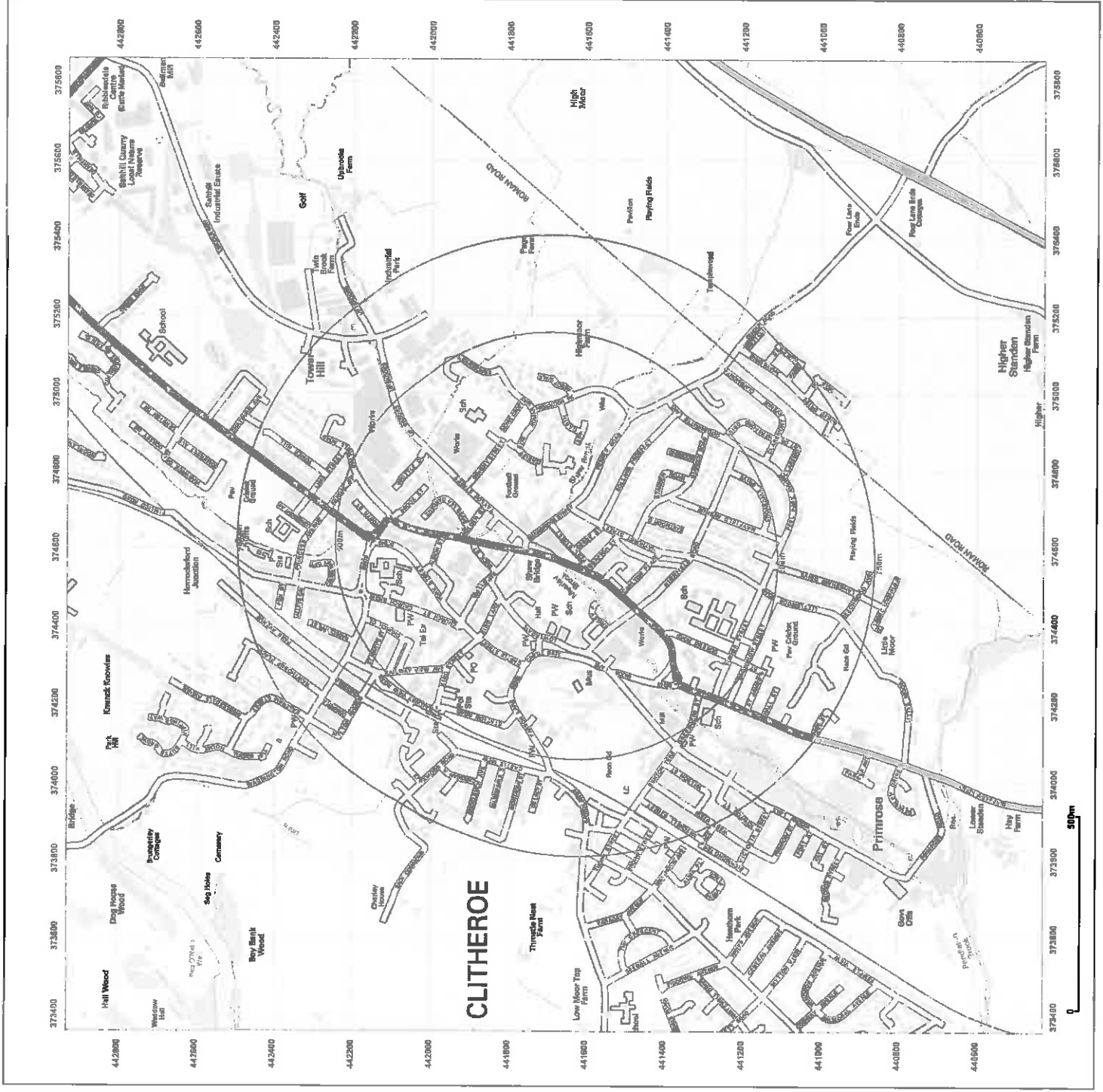
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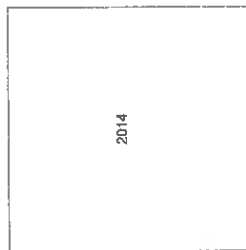
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Map Name: National Grid

Map date: 2014

Scale: 1:10,000

Printed at: 1:10,000



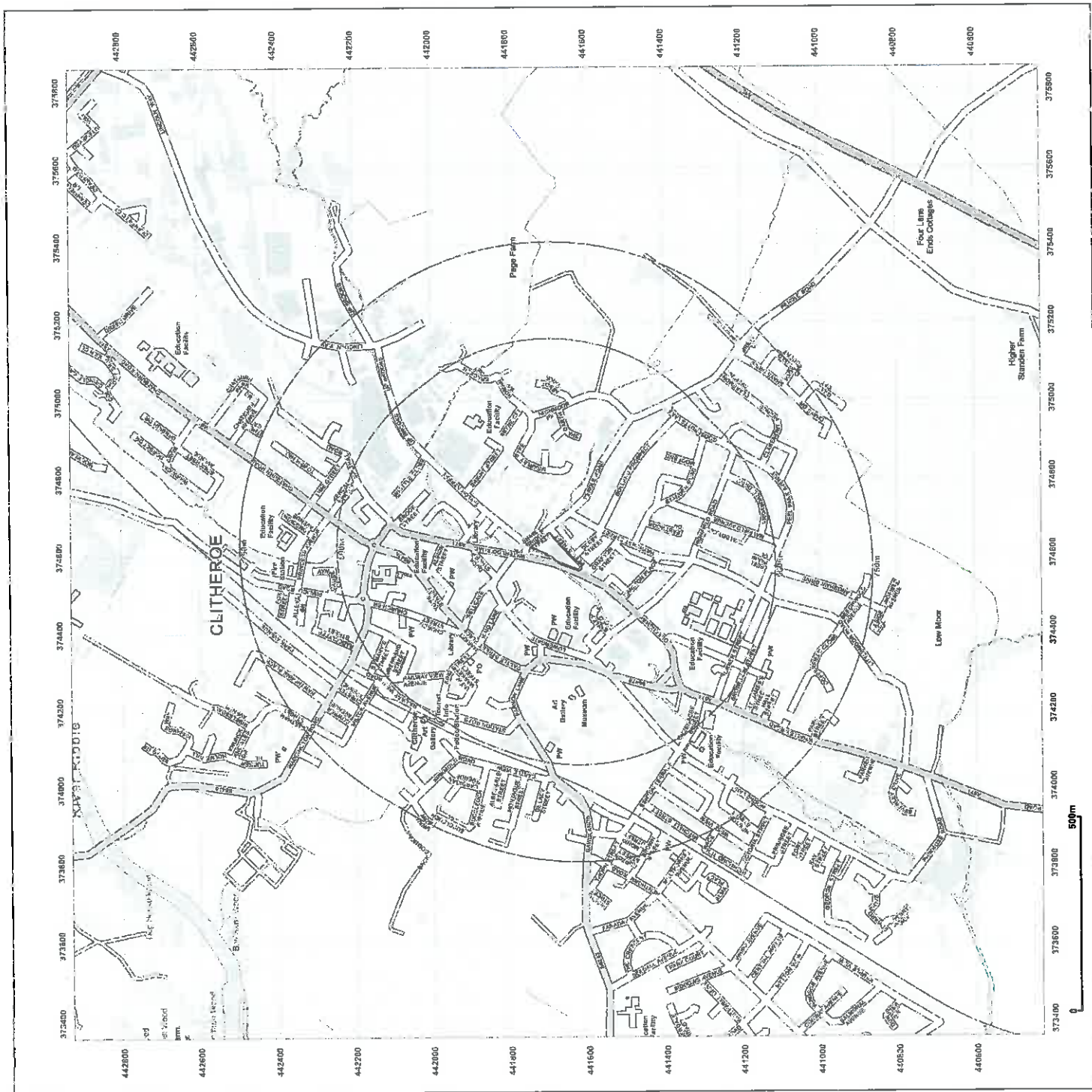
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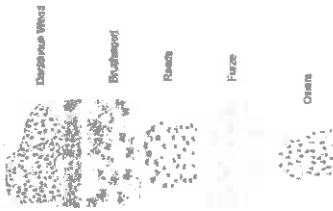
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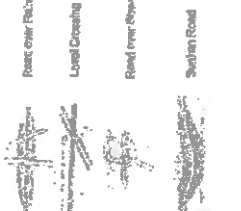


County Series 1:10,560 scale

VEGETATION



ROADS



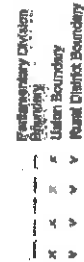
RAILWAYS



GENERAL FEATURES



BOUNDARIES



National Grid 1:10,000 scale

HEIGHTS (METRES)

Values are given in metres above mean sea level at Newlyn.

Survey heights: ground survey, air survey.

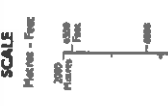
Beach profiles are shown as broken lines. Large scale and beach profiles are shown as broken lines. Information is available from the Ordnance Survey.

Contours are at 3 metre vertical interval.

ROCK FEATURES



CONVERSION SCALE

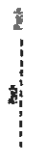


ABBREVIATIONS

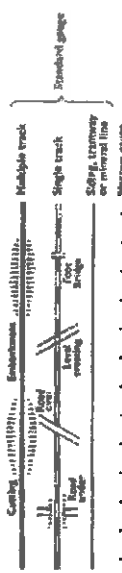
Abbreviation	Meaning
BC	Boundary Post or Stake
CH	Church
CL	Club House
FM	Fire Station
GR	Gravel Pit
PH	Public House
CP	Camp
GP	Gravel Pit
HP	Hill Post or Stake
P	Pit or Post
PS	Public Station

Abbreviation	Meaning
HO	Hill Outcrop
PC	Public Commission
PH	Public House
SP	Spit
TC	Town Centre
TCB	Town Centre Building
TCF	Town Centre Foot
TCR	Town Centre Road
TCW	Town Centre Wall
TCY	Town Centre Yard
TCZ	Town Centre Zone

ROADS



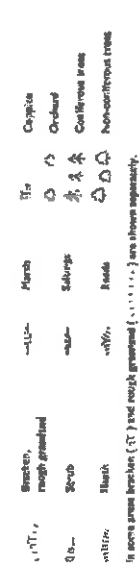
RAILWAYS



GENERAL FEATURES



VEGETATION



GroundSure

Historical Map Pack Legend

County Series & National Grid

1:10,560 scale

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Technical Helpline

Tel 08444159000

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APPENDIX B
Contaminated Land Officers Report

Good Morning,

I am emailing in response to your query regarding the LIDL site in Clitheroe. I have provided answers to your questions below -

1. *Details of any known environmental problems or land reclamation schemes that would affect the site.*
RVBC are not aware of any problems or schemes that would affect the site.
2. *Whether the Local Authority consider the site to be, or likely to be, contaminated land under Section S78 of the Environmental Protection Act 1990 as amended by the Environment Act 1995.*
Ribble Valley Borough Council does not consider the site to be, or likely to be, identified as Contaminated Land under Part 2A of the EPA 1990
3. *Whether the site is likely to be considered to be the subject of a Remediation Notice either currently or in the future.*
The likelihood is extremely low
4. *Whether the site could be considered a Special Site.*
No
5. *Landfill sites, either current, suspected or disused which may be within 250m of the site.*
None
6. *Any record of pollution incidences on or in the vicinity of the site.*
None on RVBC's records
7. *Any other information which could assist in our assessment.*
None

If you have any further queries please let me know

Kind Regards

Daniel Sutcliffe | Engineering Assistant/Contaminated Land Officer
Ribble Valley Borough Council



APPENDIX C
GroundSure Report



emapsite

Masdar House, 1 Reading Road,
Eversley, RG27 0RP

Groundsure
Reference: EMS-423681_566161

Your Reference: EMS_423681_566161

Report Date 5 Jun 2017

Report Delivery Method: Email - pdf

Enviro Insight

Address: ,

Dear Sir/ Madam,

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

If you would like further assistance regarding this report then please contact the emapsite customer services team on 0118 9736883 quoting the above report reference number.

Yours faithfully,

emapsite customer services team

Enc.

Groundsure Enviroinsight

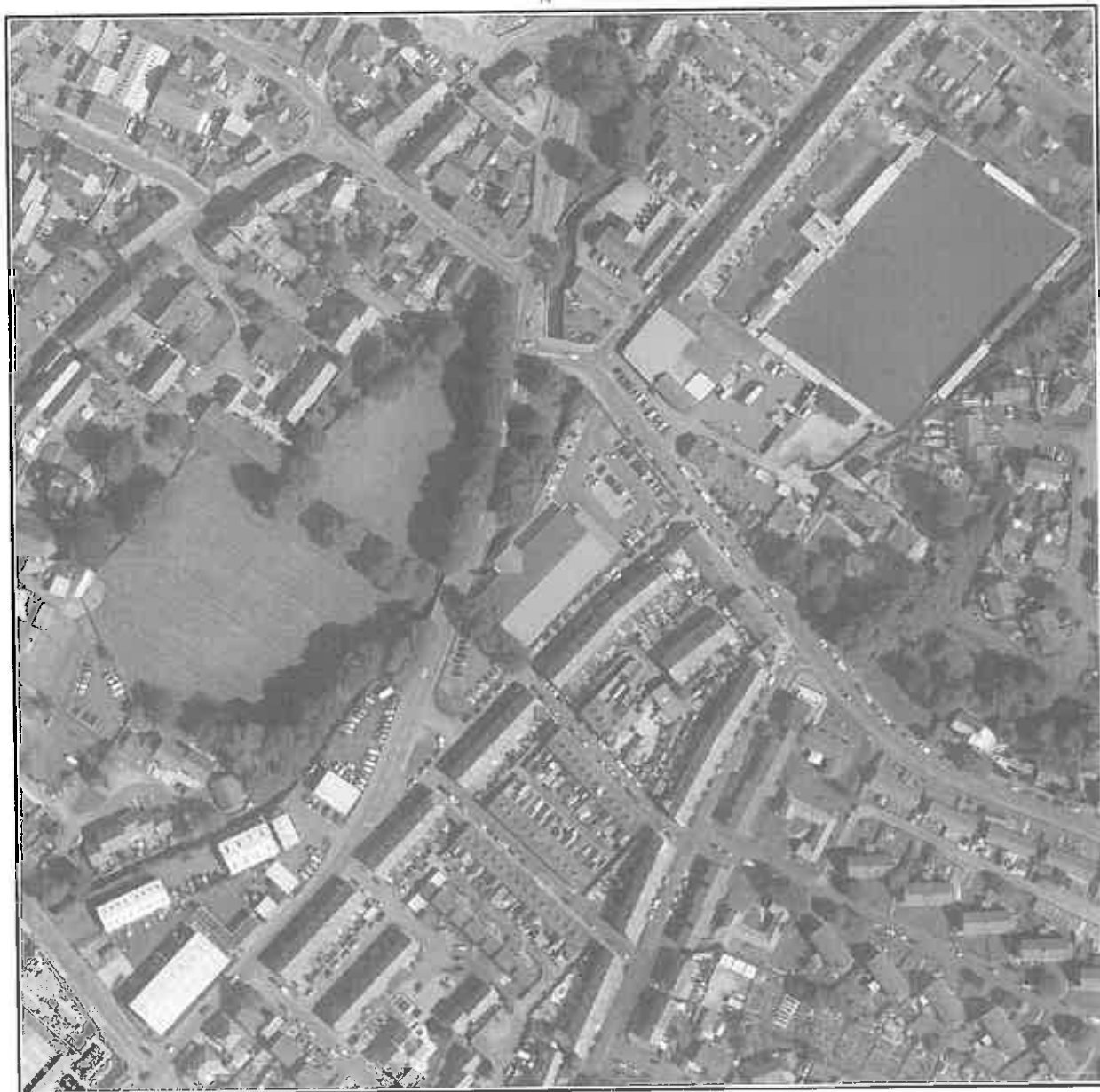
Address: ,
Date: 5 Jun 2017
Reference: EMS-423681_566161
Client: emapsite

NW

N

NE

W



E

SW

S

SE

Aerial Photograph Capture date: 04-Oct-2015
Grid Reference: 374606,441678
Site Size: 0.47ha

Report Reference: EMS-423681_566161
Client Reference: EMS_423681_566161

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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	4	2	24	33
1.2 Additional Information – Historical Tank Database	0	0	1	0
1.3 Additional Information – Historical Energy Features Database	0	0	9	48
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	12	9
1.6 Potentially Infilled Land	0	0	0	21

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	2	5
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	0
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	3	9	7
2.3.2 National Incidents Recording System, List 1	0	0	0	5
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	1	3
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	1	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	4

Section 4: Current Land Use

On-site 0-50m 51-250 251-500

4.1 Current Industrial Sites Data	1	0	19	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	2
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 Are there any records of Artificial Ground and Made Ground present beneath the study site?	No
5.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site?	Yes
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology

0-500m

6.1 Are there any records of Strata Classification in the Superficial Geology within 500m of the study site?	Yes
6.2 Are there any records of Strata Classification in the Bedrock Geology within 500m of the study site?	Yes

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	4
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	2	2	9
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)	0	0	0	0	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	0	0	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 Is there any Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site?	No	No	Yes	No	Yes	No
6.10 Detailed River Network entries within 500m of the site	2	2	3	10	Not searched	Not searched
6.11 Surface water features within 250m of the study site	Yes	Yes	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Are there any Environment Agency Zone 2 floodplains within 250m of the study site?	Yes
7.2 Are there any Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	Yes
7.3 What is the Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site?	High
7.4 Are there any Flood Defences within 250m of the study site?	Yes
7.5 Are there any areas benefiting from Flood Defences within 250m of the study site?	Yes
7.6 Are there any areas used for Flood Storage within 250m of the study site?	No
7.7 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Potential at Surface
7.8 What is the 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	2	2
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	1
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	2	2
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	0	0	0	0	0	0
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards

9.1 What is the maximum risk of natural ground subsidence?

Moderate

9.1.1 What is the maximum Shrink-Swell hazard rating identified on the study site?

Very Low

9.1.2 What is the maximum Landslides hazard rating identified on the study site?

Very Low

9.1.3 What is the maximum Soluble Rocks hazard rating identified on the study site?

Very Low

9.1.4 What is the maximum Compressible Ground hazard rating identified on the study site?

Moderate

9.1.5 What is the maximum Collapsible Rocks hazard rating identified on the study site?

Very Low

9.1.6 What is the maximum Running Sand hazard rating identified on the study site?

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 property is in a Radon Affected Area, as between 1 and 3% 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 Are there any coal mining areas within 75m of the study site?

No

10.2 Are there any Non-Coal Mining areas within 50m of the study site boundary?

Yes

10.3 Are there any brine affected areas within 75m of the study site?

No

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 licenses, 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 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: 63

ID	Distance [m]	Direction	Use	Date
1A	0	On Site	Unspecified Mill	1910
2A	0	On Site	Unspecified Mill	1938
3A	0	On Site	Unspecified Mill	1930
4A	0	On Site	Unspecified Mill	1955
5	13	NE	Brewery	1910
6	16	NE	Brewery	1846
7B	73	W	Unspecified Mill	1955
8B	84	W	Unspecified Mill	1910
9B	84	W	Unspecified Mill	1930
10B	84	W	Unspecified Mill	1938
11	159	NE	Unspecified Works	1971
12C	174	N	Unspecified Mill	1930
13C	174	N	Unspecified Mill	1938
14C	174	N	Unspecified Mill	1910
15D	182	SW	Unspecified Mills	1955
16C	184	N	Unspecified Mill	1955
17D	185	SW	Engineering Works	1971
18D	191	SW	Unspecified Mills	1910
19D	191	SW	Unspecified Mills	1938
20D	191	SW	Unspecified Mills	1930
21E	223	SE	Cotton Mill	1846
22H	226	N	Unspecified Mill	1910
23E	228	SE	Unspecified Mill	1971
24F	235	SE	Unspecified Mill	1930
25F	235	SE	Unspecified Mill	1910
26F	235	SE	Unspecified Mill	1938
27F	240	SE	Unspecified Mill	1955
28G	242	NE	Unspecified Mill	1930
29G	242	NE	Unspecified Mill	1910
30G	242	NE	Unspecified Mill	1938
31H	252	N	Sawmill	1846
32G	254	NE	Unspecified Mill	1955
33G	255	NE	Unspecified Mill	1971
34Q	286	N	Timber Yard	1846

35	298	SW	Cotton Mill	1846
36I	318	NE	Unspecified Mill	1930
37I	318	NE	Unspecified Mill	1910
38I	318	NE	Unspecified Mill	1938
39I	329	NE	Unspecified Mill	1955
40AJ	348	NW	Grave Yard	1846
41J	358	SW	Laundry	1910
42J	358	SW	Laundry	1930
43V	361	NE	Unspecified Tank	1971
44K	384	SW	Unspecified Mill	1938
45K	384	SW	Unspecified Mill	1930
46K	384	SW	Unspecified Mill	1910
47	389	NE	Unspecified Works	1971
48K	396	SW	Unspecified Mill	1955
49	424	NW	Police Station	1971
50N	437	W	Railway Sidings	1955
51K	440	SW	Cotton Mill	1846
52L	450	W	Railway Sidings	1910
53L	450	W	Railway Sidings	1938
54L	450	W	Railway Sidings	1930
55	469	W	Railway Sidings	1846
56M	470	N	Corn Mill	1938
57M	470	N	Corn Mill	1930
58	472	W	Railway Building	1955
59	476	NE	Unspecified Depot	1974
60N	478	W	Railway Building	1846
61	489	N	Stone Yard	1930
62	495	W	Railway Station	1846
63	499	W	Railway Sidings	1911

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:

1

ID	Distance (m)	Direction	Use	Date
64	95	N	Tanks	1964

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:

57

ID	Distance (m)	Direction	Use	Date
65O	52	SW	Electrical Depot	1964
66B	91	SW	Electrical Depot	1964
67O	132	SW	Electricity Substation	1997
68P	159	SW	Electricity Substation	1993
69P	160	SW	Electricity Substation	1976
70P	162	SW	Electricity Substation	1990
71P	162	SW	Electricity Substation	1990
72P	165	SW	Electricity Substation	1995
73P	165	SW	Electricity Substation	1997
74Q	297	N	Electricity Substation	1995
75R	297	N	Electricity Substation	1993
76R	297	N	Electricity Substation	1996
77R	297	N	Electricity Substation	1994
78R	297	N	Electricity Substation	1995
79R	297	N	Electricity Substation	1996
80R	297	N	Electricity Substation	1997
81S	313	E	Electricity Substation	1995
82S	313	E	Electricity Substation	1997
83S	313	E	Electricity Substation	1997
84T	321	N	Electricity Substation	1968
85T	321	N	Electricity Substation	1990
86T	322	N	Electricity Substation	1969
87U	356	SE	Electricity Substation	1990
88U	356	SE	Electricity Substation	1990
89U	357	SE	Electricity Substation	1997
90U	357	SE	Electricity Substation	1997
91U	357	SE	Electricity Substation	1995
92U	357	SE	Electricity Substation	1993
93U	358	SE	Electricity Substation	1976
94V	365	NE	Electricity Substation	1996
95V	365	NE	Electricity Substation	1993
96V	365	NE	Electricity Substation	1995
97V	365	NE	Electricity Substation	1994
98V	365	NE	Electricity Substation	1995
99V	365	NE	Electricity Substation	1996
100V	365	NE	Electricity Substation	1997
101W	429	N	Electricity Substation	1993
102W	429	N	Electricity Substation	1994
103W	429	N	Electricity Substation	1997
104W	429	N	Electricity Substation	1996

105W	429	N	Electricity Substation	1995
106W	429	N	Electricity Substation	1995
107W	429	N	Electricity Substation	1996
108X	432	SE	Electricity Substation	1997
109X	432	SE	Electricity Substation	1995
110X	432	SE	Electricity Substation	1997
111X	432	SE	Electricity Substation	1993
112Y	440	S	Electricity Substation	1976
113Y	440	S	Electricity Substation	1990
114Y	440	S	Electricity Substation	1990
115Y	440	S	Electricity Substation	1997
116Y	440	S	Electricity Substation	1997
117Y	440	S	Electricity Substation	1995
118Y	440	S	Electricity Substation	1993
119Z	451	SE	Electricity Substation	1990
120Z	451	SE	Electricity Substation	1990
121Z	454	SE	Electricity Substation	1976

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: 21

ID	Distance (m)	Direction	Use	Date
122AA	130	NW	Garage	1976
123AA	135	N	Garage	1964
124AB	189	NW	Garage	1993
125AB	189	NW	Garage	1995
126AB	189	NW	Garage	1997
127AB	189	NW	Garage	1997
128AB	195	NW	Garage	1990
129AB	195	NW	Garage	1990
130AB	201	NW	Garage	1976

131AB	201	NW	Garage	1964
132AC	202	NW	Garage	1976
133AC	202	NW	Garage	1964
134AD	393	W	Garage	1995
135AD	393	W	Garage	1993
136AD	393	W	Garage	1997
137AD	393	W	Garage	1997
138AD	396	W	Garage	1990
139AD	396	W	Garage	1990
140	411	SW	Garage	1997
141AE	458	N	Garage	1996
142AE	458	N	Garage	1997

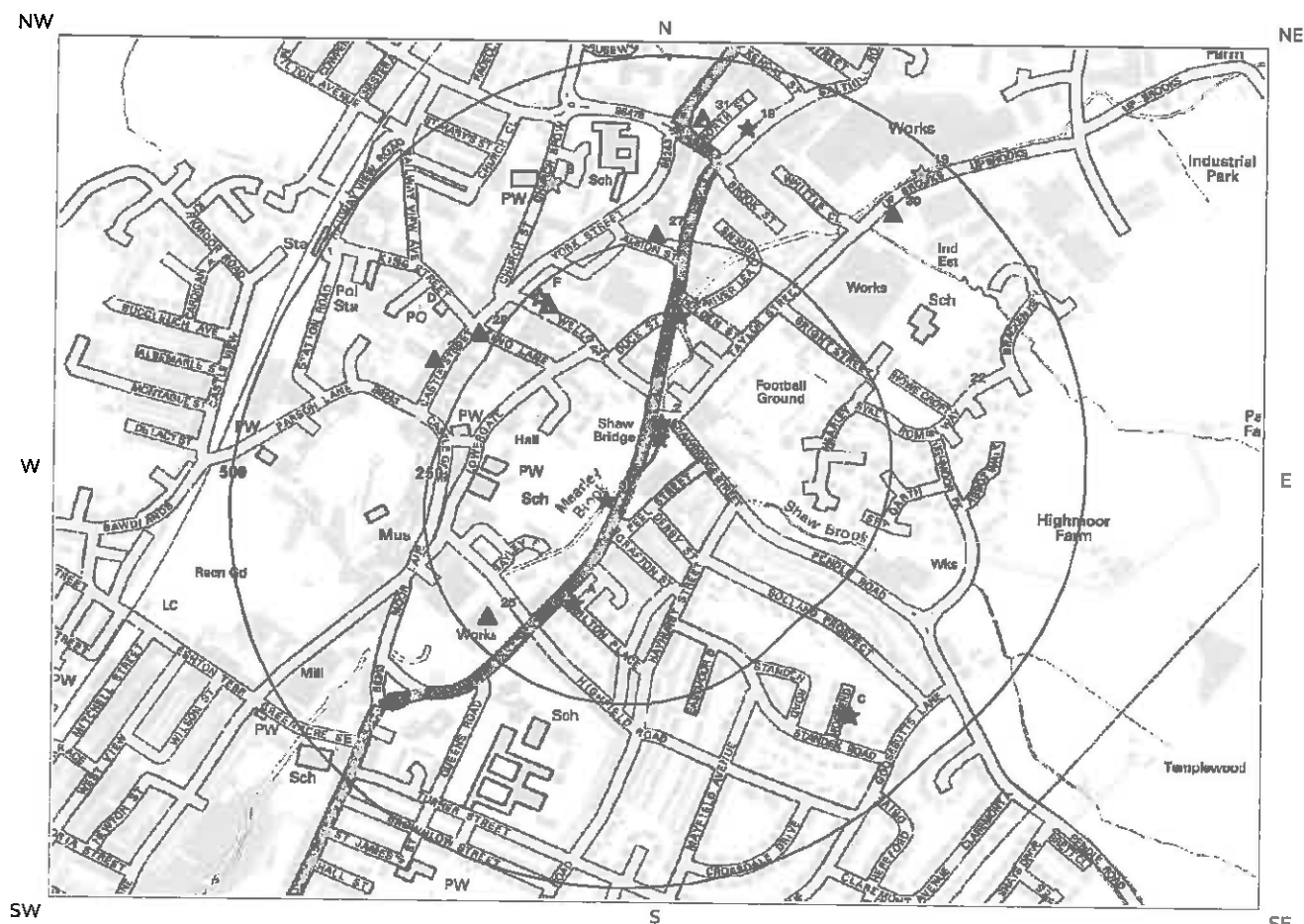
1.6 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 21

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

ID	Distance(m)	Direction	Use	Date
143AF	257	SE	Pond	1846
144AF	260	SE	Reservoirs	1930
145AF	260	SE	Reservoirs	1938
146AG	290	SW	Reservoir	1955
147	297	SE	Reservoirs	1955
148AG	303	SW	Reservoir	1938
149AG	303	SW	Reservoir	1930
150AH	335	NE	Reservoir	1930
151AH	335	NE	Reservoir	1938
152AI	341	SE	Pond	1846
153AI	345	SE	Reservoir	1910
154AI	345	SE	Reservoir	1930
155AI	345	SE	Reservoir	1938
156AJ	348	NW	Grave Yard	1846
157AI	349	SE	Reservoir	1955
158AH	350	NE	Reservoir	1955
159AK	355	NE	Reservoir	1910
160AK	355	NE	Reservoir	1930
161AK	355	NE	Reservoir	1938
162AK	368	NE	Pond	1971
163AK	368	NE	Reservoir	1955

2. Environmental Permits, Incidents and Registers Map



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- | | | |
|--|---------------------------------|--|
| Site Outline | ★ Recorded Pollution Incident | ▼ RAS 3 & 4 Authorisations |
| Search Buffers (m)
— 250 —
— 500 — | ◆ 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 / NIHS Sites |
| | ■ Licenced 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:

7

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
25	218	SW	374390 441480	Address: Flexible Reinforcements, Queensway House, Queensway, Clitheroe, Lancashire, BB7 1AU Process: Coating Process Status: Revoked Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
26F	222	NW	374464 441903	Address: Clitheroe Dry Cleaners, 23 Wellgate, Clitheroe Process: Dry Cleaning Status: Current Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
27	256	N	374600 442000	Address: Ian Boocock, Units 4 & 5, Albion Court, Waterloo Road, Clitheroe Process: Waste Oil Burner Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
28	271	NW	374375 441863	Address: Johnsons the Cleaners UK Ltd., 40 Castle Street, Clitheroe, BB7 2BX Process: Dry Cleaning Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
29	301	NW	374319 441827	Address: Johnson Cleaners, 38/40 Castle Street, Clitheroe, BB7 2BX Process: Dry Cleaning Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
30	404	NE	374904 442031	Address: Gee-co (Precast) Ltd., Upbrooks Mill, Taylor Street, Clitheroe, Lancashire, BB7 1NL Process: Concrete Batching Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
31	415	N	374658 442158	Address: Malthouse Fuels, Roundabout Service Station, Chatburn Road, Clitheroe, Lancashire, BB7 2AP Process: Vapour Recovery Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

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:

0

Database searched and no data found.

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:

19

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
1	4	NW	374606 441726	Incident Date: 29-Apr-2008 Incident Identification: 582562 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
2	9	NW	374609 441745	Incident Date: 21-Jan-2003 Incident Identification: 132293 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Distance (m)	Direction	NGR	Details
3	23	W	374540 441640	Incident Date: 29-Oct-2003 Incident Identification: 198773 Pollutant: Sewage Materials Pollutant Description: Crude Sewage Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
4A	130	SW	374500 441500	Incident Date: 05-Oct-2002 Incident Identification: 112841 Pollutant: Atmospheric Pollutants and Effects: Atmospheric Pollutants and Effects Pollutant Description: Effects on Humans: Other Atmospheric Pollutant or Effect Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
5A	130	SW	374500 441500	Incident Date: 08-Nov-2001 Incident Identification: 41783 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Fumes Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
6A	130	SW	374500 441500	Incident Date: 10-Dec-2001 Incident Identification: 47528 Pollutant: Oils and Fuel Pollutant Description: Kerosene and Aviation Fuel Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
7A	130	SW	374500 441500	Incident Date: 05-Oct-2002 Incident Identification: 112841 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Effects on Humans Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
8A	130	SW	374500 441500	Incident Date: 05-Oct-2002 Incident Identification: 112841 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
9A	130	SW	374500 441500	Incident Date: 08-Nov-2001 Incident Identification: 41783 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Fumes Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
10A	130	SW	374500 441500	Incident Date: 07-Nov-2003 Incident Identification: 200530 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Sulphide Odour Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
11	147	N	374631 441891	Incident Date: 09-May-2002 Incident Identification: 77433 Pollutant: Oils and Fuel Pollutant Description: Unidentified Oil Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
12F	239	NW	374452 441915	Incident Date: 04-Oct-2001 Incident Identification: 34626 Pollutant: Other Pollutant Pollutant Description: Other Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
13B	359	NW	374466 442069	Incident Date: 16-Oct-2003 Incident Identification: 196493 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Sulphide Odour Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
14B	363	NW	374464 442072	Incident Date: 30-Aug-2003 Incident Identification: 186167 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Sulphide Odour Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

ID	Distance (m)	Direction	NGR	Details	
15C	381	SE	374849 441354	Incident Date: 08-Nov-2001 Incident Identification: 41788 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Fumes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
16C	381	SE	374849 441354	Incident Date: 08-Nov-2001 Incident Identification: 41788 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Fumes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
17C	387	SE	374856 441352	Incident Date: 11-Apr-2001 Incident Identification: 2148 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
18	414	N	374716 442147	Incident Date: 08-Nov-2001 Incident Identification: 41825 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Fumes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
19	469	NE	374939 442088	Incident Date: 16-Aug-2001 Incident Identification: 24575 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

5

The following NIRS List 1 records are represented as points on the Environmental Permits, Incidents and Registers Map:

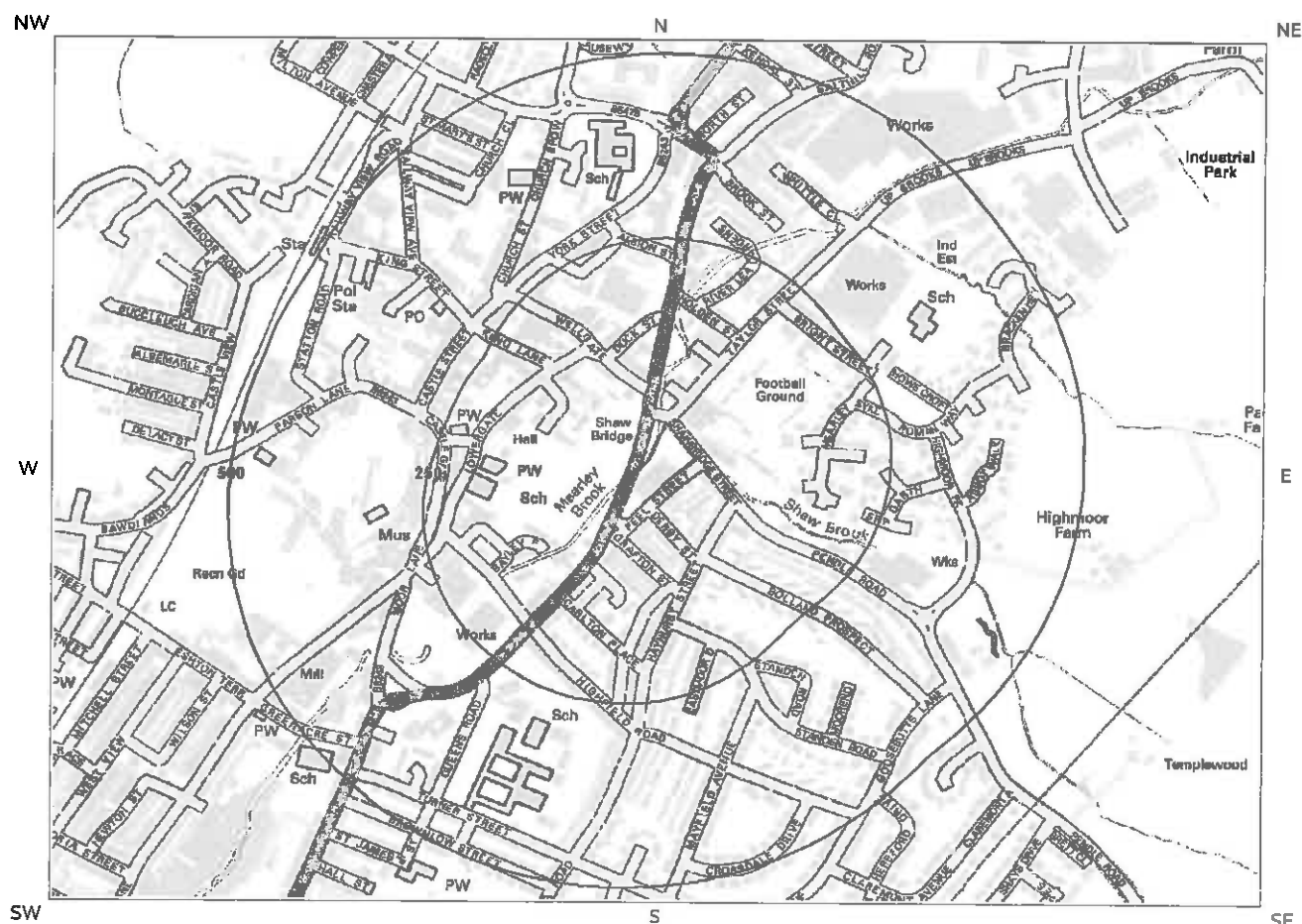
ID	Distance(m)	Direction	NGR	Details
20D	354	NW		<p>Incident Date: 24-Aug-2000 Incident Identification: 43254.0 Catchments Name: RIVER RIBBLE (LONG GILL) Water Description: ESTUARY Water Course: COASTLINE TRIB Incident Substantiated: Yes</p> <p>Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: No Impact Land Impact: No Impact Air Impact: Significant Impact Action Taken: Not Available</p>
21D	354	NW		<p>Incident Date: 04-Sep-2000 Incident Identification: 43257.0 Catchments Name: RIVER RIBBLE (LONG GILL) Water Description: ESTUARY Water Course: COASTLINE TRIB Incident Substantiated: Yes</p> <p>Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: No Impact Land Impact: No Impact Air Impact: Significant Impact Action Taken: Not Available</p>
22	359	E		<p>Incident Date: 18-Nov-1999 Incident Identification: 34085.0 Catchments Name: RIVER RIBBLE (LONG GILL) Water Description: RIVER STRETCH (FRESHWATER) Water Course: COASTLINE TRIB Incident Substantiated: Yes</p> <p>Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: No Impact Land Impact: No Impact Air Impact: Significant impact Action Taken: Not Available</p>
23E	479	SW		<p>Incident Date: 15-Jan-1999 Incident Identification: 30457.0 Catchments Name: MEARLEY BROOK Water Description: RIVER STRETCH (FRESHWATER) Water Course: WORSTON BROOK Incident Substantiated: Yes</p> <p>Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: Significant Impact Land Impact: No Impact Air Impact: No Impact Action Taken: Not Available</p>
24E	479	SW		<p>Incident Date: 15-Jan-1999 Incident Identification: 1610.0 Catchments Name: MEARLEY BROOK Water Description: RIVER STRETCH (FRESHWATER) Water Course: WORSTON BROOK Incident Substantiated: Yes</p> <p>Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: Significant Impact Land Impact: No Impact Air Impact: No Impact Action Taken: Not Available</p>

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

How many 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.



3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

4

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
Not shown	731	N	374600 442500	<p>Site Address: Atkinsons of Clitheroe, Clitheroe, Ribbles Valley, Lancashire</p> <p>Waste Licence: -</p> <p>Site Reference: K1/03/029</p> <p>Waste Type: Inert</p> <p>Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: -</p> <p>Licence Surrendered: -</p> <p>Licence Holder Address: -</p> <p>Operator: -</p> <p>Licence Holder: -</p> <p>First Recorded: -</p> <p>Last Recorded: -</p>
Not shown	1058	SW	373600 440900	<p>Site Address: Stalwart Dying Company Limited, Off Kemple View, Near Clitheroe, Lancashire</p> <p>Waste Licence: -</p> <p>Site Reference: K1/03/034</p> <p>Waste Type: Waste, unknown</p> <p>Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: -</p> <p>Licence Surrendered: -</p> <p>Licence Holder Address: -</p> <p>Operator: -</p> <p>Licence Holder: -</p> <p>First Recorded: -</p> <p>Last Recorded: -</p>
Not shown	1400	NE	375800 442600	<p>Site Address: Salt Hills Quarry, Off Pimlico - Bypass Link Road, Clitheroe, Ribbles Valley, Lancashire</p> <p>Waste Licence: -</p> <p>Site Reference: K1/03/042</p> <p>Waste Type: Waste, unknown</p> <p>Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: -</p> <p>Licence Surrendered: -</p> <p>Licence Holder Address: -</p> <p>Operator: -</p> <p>Licence Holder: -</p> <p>First Recorded: -</p> <p>Last Recorded: -</p>

ID	Distance (m)	Direction	NGR	Details
Not shown	1495	N	374600 443300	<p>Site Address: Crosshills Quarry, West Bradford Road, Pimlico, Clitheroe, Lancashire</p> <p>Waste Licence: - Site Reference: K1/03/006 Waste Type: Inert, Industrial, Household Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Clitheroe Metropolitan Borough Licence Holder: Clitheroe Municipal Borough Council First Recorded: 01-Oct-1967 Last Recorded: 31-Dec-1979</p>

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

0

Database searched and no data found.

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

1

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
9	421	SE	375041 441456	Refuse Tip	1964 mapping	Polygon

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

Database searched and no data found.

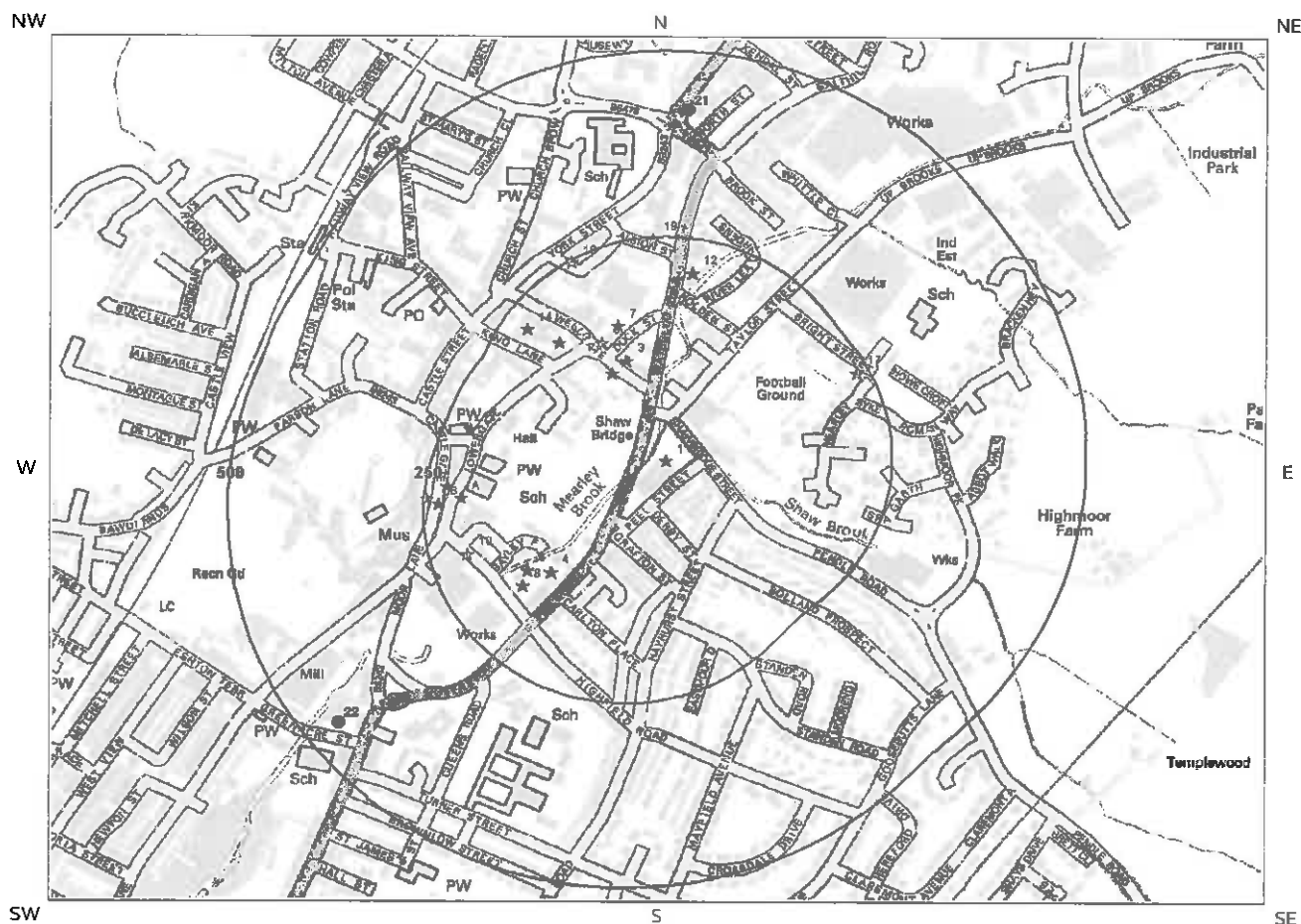
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

4

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
Not shown	1149	NE	375417 442572	<p>Site Address: Unit 3 Salthill Ind Est, Lincoln Way, Salthill Ind Est, Clitheroe, Lancashire, BB7 1QD</p> <p>Type: Household, Commercial & Industrial Waste T Stn</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: FOX017</p> <p>EPR reference: EA/EPR/EP3793MS/A001</p> <p>Operator: Miles Fox (Haulage) Ltd</p> <p>Waste Management licence No: 101189</p> <p>Annual Tonnage: 24999.0</p> <p>Issue Date: 29/06/2010</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Miles Fox (Haulage) Ltd</p> <p>Correspondence Address: -</p>
Not shown	1221	NE	375470 442620	<p>Site Address: Council Depot, Lincoln Way, Salthill Industrial Estat, Clitheroe, Lancashire, BB7 1QD</p> <p>Type: Household, Commercial & Industrial Waste T Stn</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: RIB003</p> <p>EPR reference: EA/EPR/BP3193ZP/A001</p> <p>Operator: Ribble Valley Brough Council</p> <p>Waste Management licence No: 54467</p> <p>Annual Tonnage: 250000.0</p> <p>Issue Date: 17/07/2006</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Lincoln Way Council Depot</p> <p>Correspondence Address: -</p>
Not shown	1438	N	375100 443100	<p>Site Address: Coplow Quarry, Ribblesdale Works, West Bradford Road, Clitheroe, Lancashire, BB7 4QF</p> <p>Type: Landfill taking Non-Biodegradeable Wastes</p> <p>Size: >= 25000 tonnes < 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: CAS001</p> <p>EPR reference: EA/EPR/TP3691CB/V002</p> <p>Operator: Castle Cement Ltd</p> <p>Waste Management licence No: 54014</p> <p>Annual Tonnage: 5000.0</p> <p>Issue Date: 13/03/1980</p> <p>Effective Date: -</p> <p>Modified: 05/05/2009</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Modified</p> <p>Site Name: Coplow Quarry</p> <p>Correspondence Address: -</p>
Not shown	1438	N	375100 443100	<p>Site Address: Coplow Quarry, Ribblesdale Works, West Bradford Road, Clitheroe, Lancashire, BB7 4QF</p> <p>Type: Industrial Waste Landfill (Factory curtilage)</p> <p>Size: >= 25000 tonnes < 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: CAS001</p> <p>EPR reference: EA/EPR/TP3691CB/V002</p> <p>Operator: Castle Cement Ltd</p> <p>Waste Management licence No: 54014</p> <p>Annual Tonnage: 5000.0</p> <p>Issue Date: 13/03/1980</p> <p>Effective Date: -</p> <p>Modified: 05/05/2009</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Modified</p> <p>Site Name: Coplow Quarry</p> <p>Correspondence Address: -</p>

4. Current Land Use Map



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4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

20

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	0	On Site	Works	374618 441691	Works, BB7	Unspecified Works Or Factories	Industrial Features
2	96	NW	Paul Orrell Coach Hire	374549 441810	Paul Orrell Coach Hire, 4, Shaw Bridge Street, Clitheroe, BB7 1LY	Vehicle Hire and Rental	Hire Services
3	98	NW	Sen Magazine Ltd	374567 441827	Sen Magazine Ltd, Chapel House 5, Shaw Bridge Street, Clitheroe, BB7 1LY	Published Goods	Industrial Products
4	116	SW	Electricity Sub Station	374472 441541	Electricity Sub Station, BB7	Electrical Features	Infrastructure and Facilities
5	135	NW	Hoody Marvelous	374536 441851	Hoody Marvelous, 7, Wellgate, Clitheroe, BB7 2DS	Textiles, Fabrics, Silk and Machinery	Industrial Products
6	138	SW	Automotion	374442 441543	Automotion, Unit 1-2, Highfield Road, Clitheroe, BB7 1AQ	Vehicle Parts and Accessories	Motoring
7	143	NW	Clitheroe Country Furniture	374557 441873	Clitheroe Country Furniture, 13, Duck Street, Clitheroe, BB7 1LP	Furniture	Consumer Products
8	155	SW	Electricity Sub Station	374436 441522	Electricity Sub Station, BB7	Electrical Features	Infrastructure and Facilities
9	174	NW	M J Motorcare	374482 441851	M J Motorcare, Wellgate Garage, Wellgate, Clitheroe, BB7 2DP	Vehicle Repair, Testing and Servicing	Repair and Servicing
10	201	W	Electricity Sub Station	374364 441565	Electricity Sub Station, BB7	Electrical Features	Infrastructure and Facilities
11A	202	W	Kaine & Rawson Ltd	374356 441640	Kaine & Rawson Ltd, 79, Lowergate, Clitheroe, BB7 1AG	Beds and Bedding	Consumer Products
12	203	N	Alan Richards Cleaning Equipment	374651 441945	Alan Richards Cleaning Equipment, Waterloo Mill, Waterloo Road, Clitheroe, BB7 1LR	Cleaning Equipment and Supplies	Industrial Products
13	216	W	Ribble Valley Shopmobility	374368 441733	Ribble Valley Shopmobility, Memorial Hall, Lowergate, Clitheroe, BB7 1AD	Disability and Mobility Equipment	Consumer Products
14	218	NW	Damp & Timber Ltd	374440 441868	Damp & Timber Ltd, Unit 1 Wellgate Court, Wellgate, Clitheroe, BB7 2DS	Construction Completion Services	Construction Services
15A	223	W	Vanilla	374338 441656	Vanilla, 23, Moor Lane, Clitheroe, BB7 1BE	Baking and Confectionery	Foodstuffs

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
16B	231	W	Lightworks Stained Glass	374327 441632	Lightworks Stained Glass, 122, Lowergate, Clitheroe, BB7 1AG	Glass	Industrial Products
17	235	NE	A B Promotions	374861 441811	A B Promotions, 1, Mearley Syke, Clitheroe, BB7 1JG	Workwear	Industrial Products
18	247	NW	The Jenny Press	374497 441959	The Jenny Press, Back York Street, Clitheroe, BB7 2DW	Published Goods	Industrial Products
19	248	N	Clitheroe Exhaust Centre Ltd	374599 441991	Clitheroe Exhaust Centre Ltd, Unit 1 Albion Court, Waterloo Road, Clitheroe, BB7 1NS	Vehicle Repair, Testing and Servicing	Repair and Servicing
20B	248	W	Twitterlane Interiors	374311 441640	Twitterlane Interiors, 32-36, Moor Lane, Clitheroe, BB7 1BE	Carpets, Flooring, Rugs and Soft Furnishings	Consumer Products

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

2

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
21	421	N	374645 442165	BP	Mrh Roundabout, Chatburn Road, Chatburn Road, Clitheroe, Lancashire, BB7 2AP	No	Open
22	455	SW	374200 441337	Obsolete	Greenacre Street Garage, Greenacre Street, Greenacre Street, Clitheroe, Lancashire, BB7 1ED	Not Applicable	Obsolete

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site: 0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

5.3 Bedrock and Solid Geology

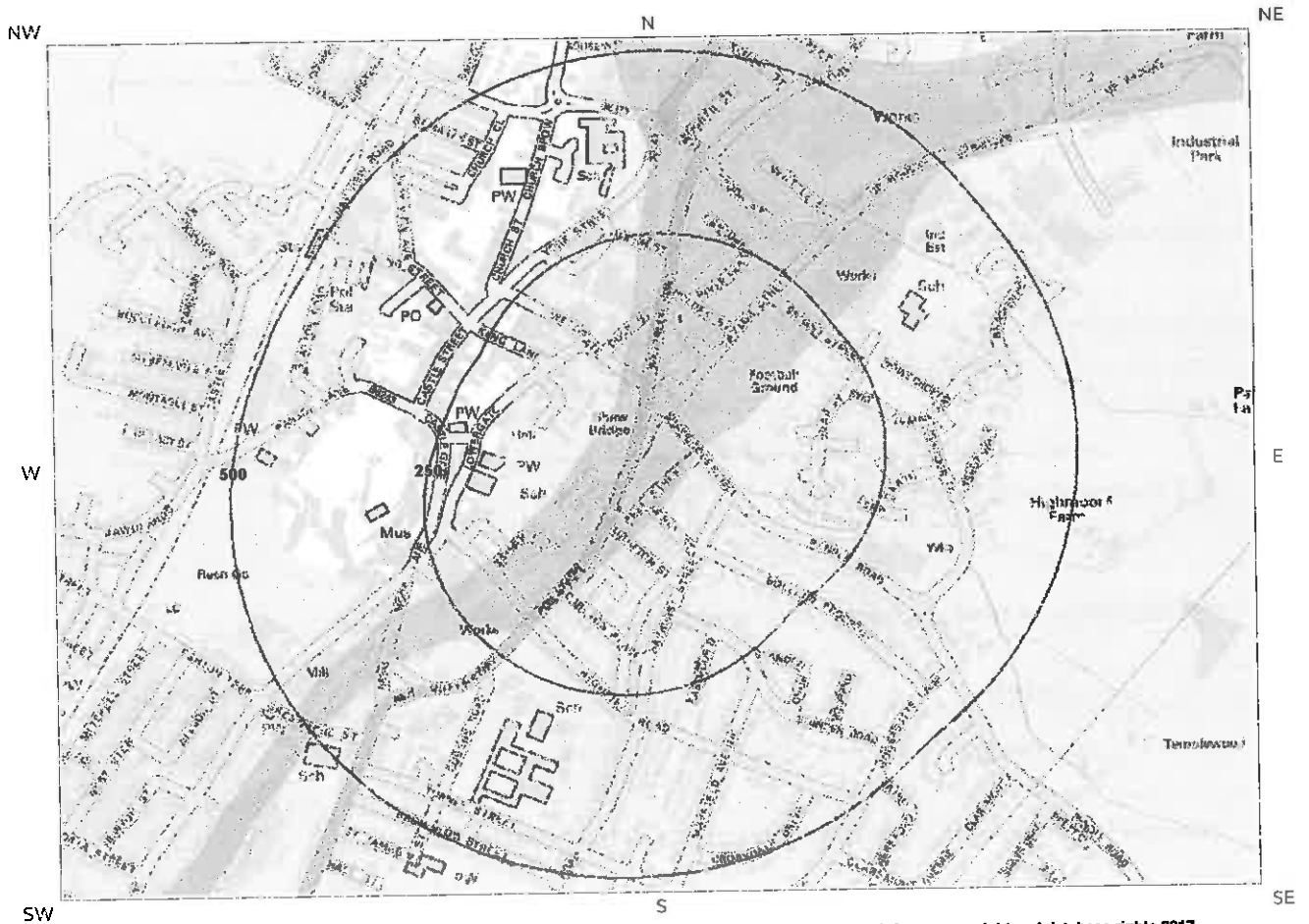
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
CLHOM-MDST	CLITHEROE LIMESTONE FORMATION AND HODDER MUDSTONE FORMATION (UNDIFFERENTIATED)	MUDSTONE

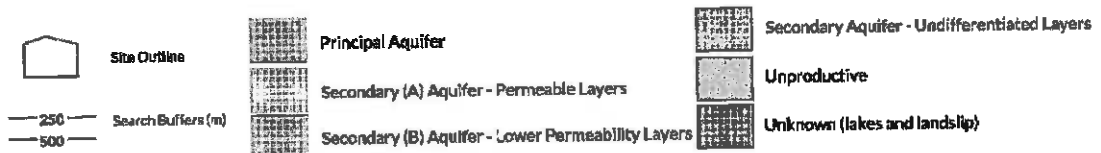
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



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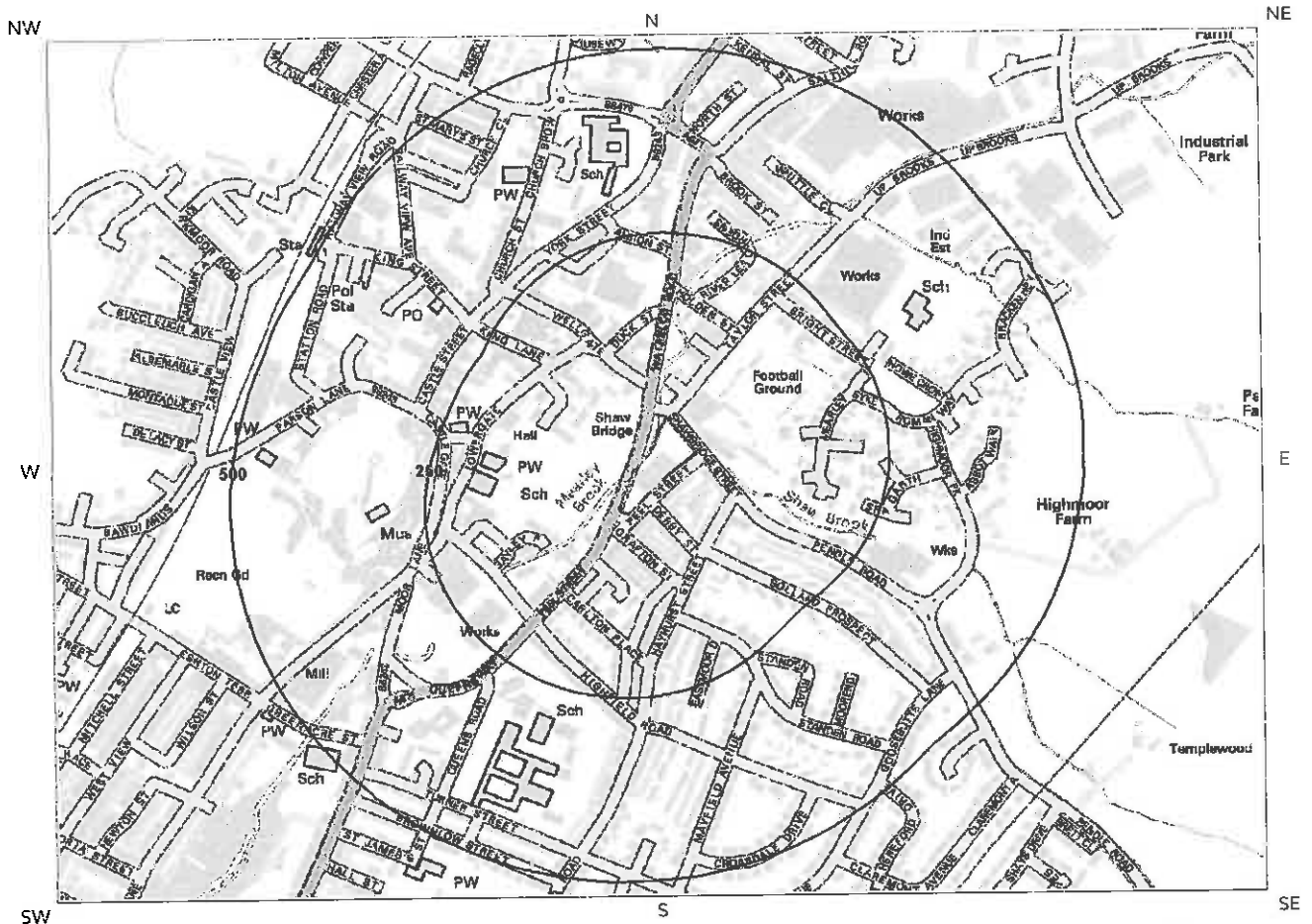


[illegible]

The map displays the study area with the following features:

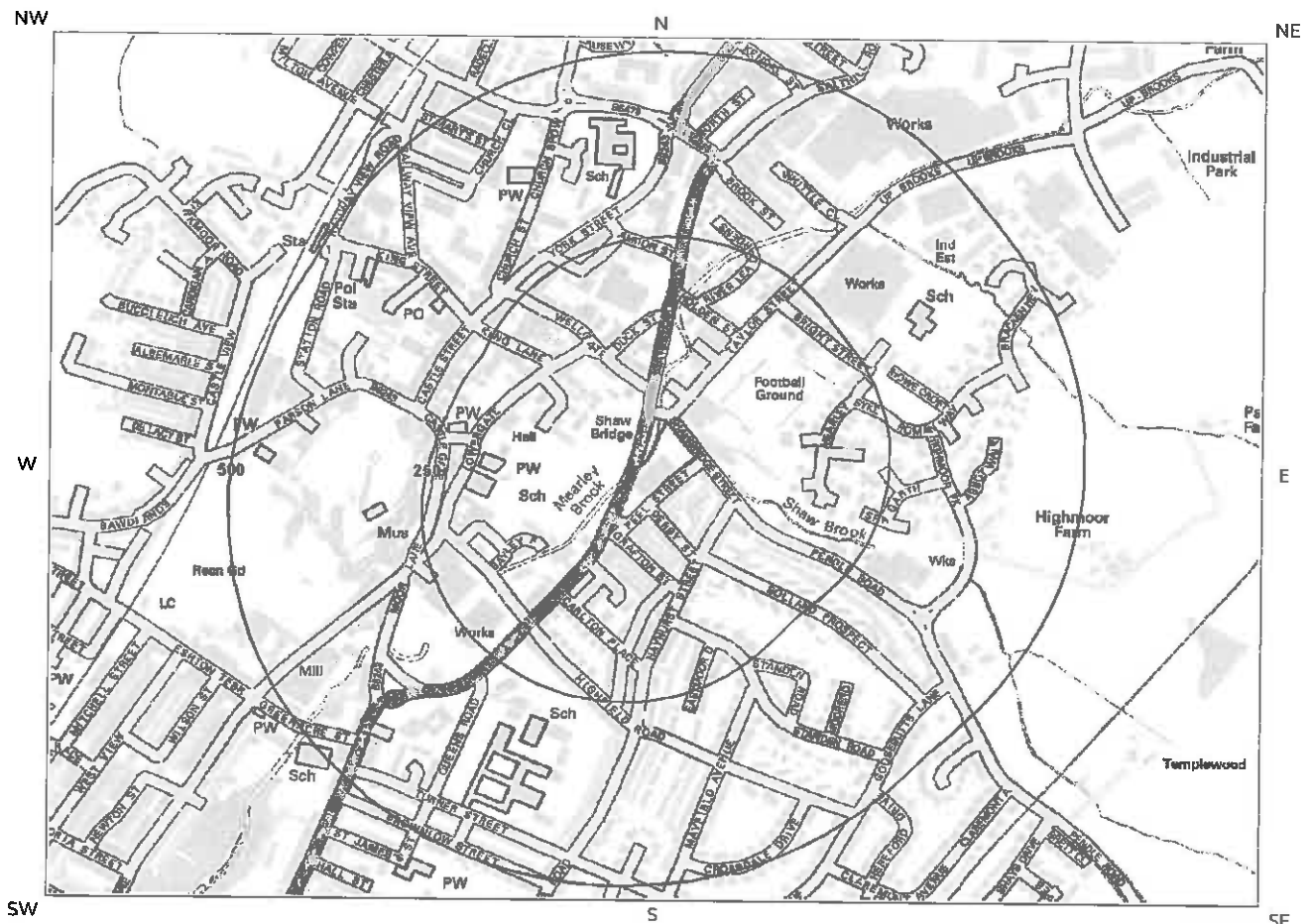
- Site Outline:** Indicated by a dashed line.
- Search Buffers (m):** 250m and 500m buffers around the site.
- Aquifer Types:**
 - Principal Aquifer:** Shaded in light blue.
 - Secondary (A) Aquifer - Permeable Layers:** Shaded in light green.
 - Secondary (B) Aquifer - Lower Permeability Layers:** Shaded in light yellow.
 - Secondary Aquifer - Undifferentiated Layers:** Shaded in light purple.
 - Unproductive:** Shaded in light grey.
 - Unknown (lakes and landfill):** Shaded in light brown.
- Licences:**
 - Groundwater Abstraction Licence:** Indicated by a blue circle with a cross.
 - Surface Water Abstraction Licence:** Indicated by a blue circle with a cross.

6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses

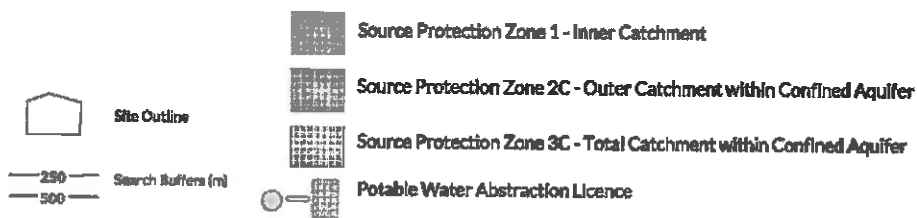


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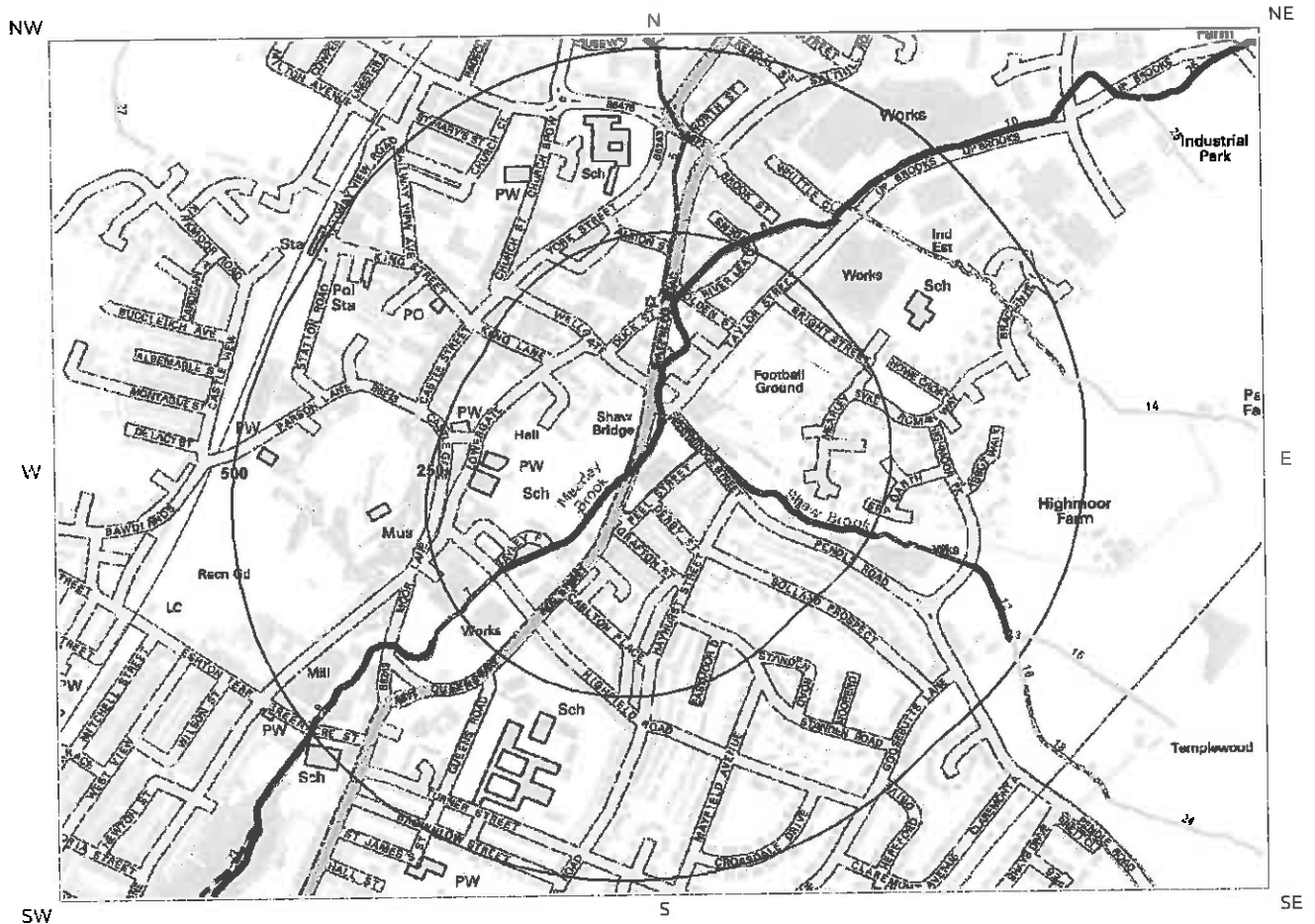
6d. Hydrogeology – Source Protection Zones within confined aquifer



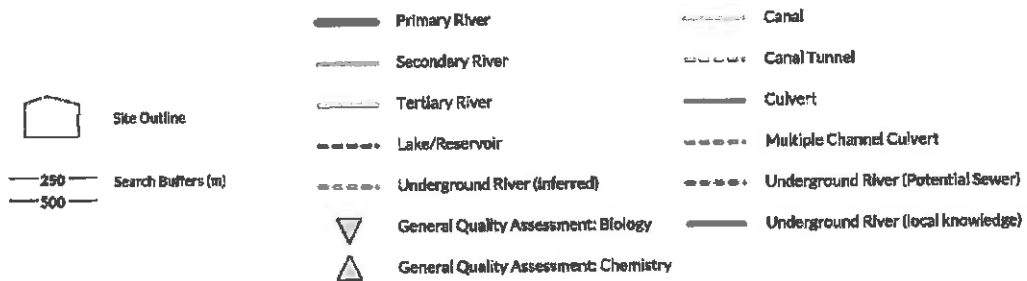
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6e. Hydrology – Detailed River Network and River Quality



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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Are there records of strata classification within the superficial geology at or in proximity to the property? Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
3	10	SE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	62	W	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	343	E	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

6.2 Aquifer within Bedrock Deposits

Are there records of strata classification within the bedrock geology at or in proximity to the property? Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	343	E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

6.3 Groundwater Abstraction Licences

Are there any Groundwater Abstraction Licences within 2000m of the study site?

Yes

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
Not shown	1464	NE	375720 442710	<p>Status: Historical Licence No: 2671309053 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: Borehole At Clitheroe Auction Mart, Clitheroe Data Type: Point Name: CLITHEROE AUCTION MART COMPANY LTD</p> <p>Annual Volume (m³): 9977 Max Daily Volume (m³): 28 Original Application No: 8739 Original Start Date: 5/10/2004 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 5/10/2004 Version End Date:</p>
Not shown	1466	NE	375721 442711	<p>Status: Active Licence No: NW/071/0309/006 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: Borehole At Clitheroe Auction Mart, Clitheroe Data Type: Point Name: CLITHEROE AUCTION MART COMPANY LTD</p> <p>Annual Volume (m³): 15261 Max Daily Volume (m³): 45 Original Application No: NPS/WR/009021 Original Start Date: 1/4/2013 Expiry Date: 31/3/2028 Issue No: 1 Version Start Date: 1/4/2013 Version End Date:</p>
Not shown	1755	N	375200 443400	<p>Status: Active Licence No: 2671309038 Details: Dust Suppression Direct Source: Ground Water - North West Region Point: Bankfield Quarry, Clitheroe, Lancs Data Type: Point Name: Tarmac Trading Limited</p> <p>Annual Volume (m³): 159113 Max Daily Volume (m³): 818 Original Application No: NPS/WR/024533 Original Start Date: 15/12/1976 Expiry Date: - Issue No: 106 Version Start Date: 8/9/2016 Version End Date:</p>
Not shown	1755	N	375200 443400	<p>Status: Historical Licence No: 2671309038 Details: Dust suppression Direct Source: Ground Water - North West Region Point: "bankfield Quarry, Clitheroe, Lancs" Data Type: Point Name: TARMAC CENTRAL LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 4989 Original Start Date: 15/12/1976 Expiry Date: - Issue No: 102 Version Start Date: 19/10/2001 Version End Date:</p>

6.4 Surface Water Abstraction Licences

Are there any Surface Water Abstraction Licences within 2000m of the study site?

Yes

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
7A	479	SW	374200 441300	<p>Status: Historical Licence No: 2671309025 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface, Non-tidal - North West Region Point: Nearley Brk At Clitheroe Data Type: Point Name: JAMES THORNER LTD</p> <p>Annual Volume (m³): 227300 Max Daily Volume (m³): 981.936 Application No: 3198 Original Start Date: 11/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/11/1966 Version End Date:</p>
8A	479	SW	374200 441300	<p>Status: Historical Licence No: 2671309025 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface, Non-tidal - North West Region Point: Mearley Brk At Clitheroe Data Type: Point Name: JAMES THORNER LTD</p> <p>Annual Volume (m³): 227300 Max Daily Volume (m³): 981.93 Application No: 3198 Original Start Date: 11/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/11/1966 Version End Date:</p>
9B	620	SW	374100 441200	<p>Status: Historical Licence No: 2671309033 Details: Transfer between sources Direct Source: Surface, Non-tidal - North West Region Point: Mearley Brk Feeding Primrose Lodge At Clitheroe Data Type: Point Name: STALWART DYEING CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Application No: 4549 Original Start Date: 16/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/12/1966 Version End Date:</p>
10B	620	SW	374100 441200	<p>Status: Historical Licence No: 2671309033 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface, Non-tidal - North West Region Point: Mearley Brk Feeding Primrose Lodge At Clitheroe Data Type: Point Name: STALWART DYEING CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Application No: 4549 Original Start Date: 16/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/12/1966 Version End Date:</p>
Not shown	1073	SW	374000 440700	<p>Status: Historical Licence No: 2671309032 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface, Non-tidal - North West Region Point: Pendleton Brk at Clitheroe Feeding The Mill Pond, Primrose Wks Data Type: Point Name: STALWART DYEING CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Application No: 4549 Original Start Date: 16/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/12/1993 Version End Date:</p>
Not shown	1073	SW	374000 440700	<p>Status: Historical Licence No: 2671309032 Details: Transfer between sources Direct Source: Surface, Non-tidal - North West Region Point: Pendleton Brk at Clitheroe Feeding The Mill Pond, Primrose Wks Data Type: Point Name: STALWART DYEING CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Application No: 4549 Original Start Date: 16/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/12/1993 Version End Date:</p>

ID	Distance (m)	Direction	NGR	Details	
Not shown	1115	SW	373800 440800	Status: Historical Licence No: 2671309033 Details: Transfer between sources Direct Source: Surface, Non-tidal - North West Region Point: Mearley Brk Feeding Primrose Lodge At Clitheroe \$314 Data Type: Point Name: STALWART DYEING CO LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: 4549 Original Start Date: 16/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/12/1966 Version End Date:
Not shown	1115	SW	373800 440800	Status: Historical Licence No: 2671309033 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface, Non-tidal - North West Region Point: Mearley Brk Feeding Primrose Lodge At Clitheroe \$314 Data Type: Point Name: STALWART DYEING CO LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: 4549 Original Start Date: 16/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/12/1966 Version End Date:
Not shown	1211	SW	373900 440600	Status: Historical Licence No: 2671309032 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface, Non-tidal - North West Region Point: Pendleton Brkatclitheroe Feeding Mill Pond, primrose Wks \$313 Data Type: Point Name: STALWART DYEING CO LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: 4549 Original Start Date: 16/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/12/1993 Version End Date:
Not shown	1211	SW	373900 440600	Status: Historical Licence No: 2671309032 Details: Transfer between sources Direct Source: Surface, Non-tidal - North West Region Point: Pendleton Brkatclitheroe Feeding Mill Pond, primrose Wks \$313 Data Type: Point Name: STALWART DYEING CO LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: 4549 Original Start Date: 16/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/12/1993 Version End Date:
Not shown	1680	SE	375300 440100	Status: Historical Licence No: 2671309021 Details: General use relating to Secondary Category (Medium Loss) Direct Source: surface, Non-tidal - North West Region Point: pendleton Brk, North Of Pendleton Village Data Type: Point Name: TRUSTEES OF STANDEN SETTLED ESTATE	Annual Volume (m³): - Max Daily Volume (m³): - Application No: 4005 Original Start Date: 20/5/1966 Expiry Date: - Issue No: 100 Version Start Date: 20/5/1966 Version End Date:
Not shown	1680	SE	375300 440100	Status: Historical Licence No: 2671309021 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface, Non-tidal - North West Region Point: Pendleton Brk, North Of Pendleton Village Data Type: Point Name: TRUSTEES OF STANDEN SETTLED ESTATE	Annual Volume (m³): - Max Daily Volume (m³): - Application No: 4005 Original Start Date: 20/5/1966 Expiry Date: - Issue No: 100 Version Start Date: 20/5/1966 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1680	SE	375300 440100	<p>Status: Active Licence No: 2671309021 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface, Non-tidal - North West Region Point: Pendleton Brook North Of Pendleton Village Data Type: Point Name: TRUSTEES OF STANDEN SETTLED ESTATE</p> <p>Annual Volume (m³): 59098 Max Daily Volume (m³): 163.65 Application No: 4005 Original Start Date: 20/5/1966 Expiry Date: - Issue No: 100 Version Start Date: 20/5/1966 Version End Date:</p>

6.5 Potable Water Abstraction Licences

Are there any Potable Water Abstraction Licences within 2000m of the study site?

No

Database searched and no data found.

6.6 Source Protection Zones

Are there any Source Protection Zones within 500m of the study site?

No

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Are there any Source Protection Zones within the Confined Aquifer within 500m of the study site?

No

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Is there any Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site? Yes

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/Low Leaching Potential	L	Soils in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal, or they have the ability to attenuate diffuse pollutants.

6.9 River Quality

Is there any Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site? Yes

6.9.1 Biological Quality:

Biological Quality data describes water quality in terms of 83 groups of macroinvertebrates, some of which are pollution sensitive. The results are graded from A ('Very Good') to F ('Bad').

The following Biological Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
35A	157	N	374600 441900	River Name: Pimlico Brook Reach: Qsl At Chatburn I.e. To Mearley Bk. End/Start of Stretch: End of Stretch NGR	C	B	B	B	B

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAH). In England, each chemical sample is measured for ammonia and dissolved oxygen. In Wales, the samples are measured for biological oxygen demand (BOD), ammonia and dissolved oxygen. The results are graded from A ('Very Good') to F ('Bad').

The following Chemical Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Chemical Quality Grade				
					2005	2006	2007	2008	2009
36A	157	N	374600 441900	River Name: Pimlico Bk. Reach: Qsl At Chatburn I.e. To Mearley Bk. End/Start of Stretch: End of Stretch NGR	A	A	A	A	A
Not shown	596	N	374583 442339	River Name: Pimlico Bk. Reach: Qsl At Chatburn I.e. To Mearley Bk. End/Start of Stretch: Sample Point NGR	A	A	A	A	A

6.10 Detailed River Network

Are there any Detailed River Network entries within 500m of the study site?

Yes

The following Detailed River Network records are represented on the Hydrology Map (6e):

ID	Distance (m)	Direction	Details	
1	0	On Site	River Name: Shaw Brook Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
2	0	NW	River Name: Mearley Brook Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
3	6	NW	River Name: Mearley Brook Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
4	45	SE	River Name: Shaw Brook Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
5	158	N	River Name: Pimlico Watercourse Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
6	158	N	River Name: Mearley Brook Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
7	176	SW	River Name: Mearley Brook Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
8	258	SE	River Name: Shaw Brook Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined

ID	Distance (m)	Direction	Details	
9	300	SW	River Name: Mearley Brook Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
10	367	NE	River Name: Mearley Brook Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
11	367	NE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
12	387	SE	River Name: Shaw Brook Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
13	479	SE	River Name: Shaw Brook Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
14	484	E	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
15	484	SE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
16	484	SE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
17	497	N	River Name: - Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined

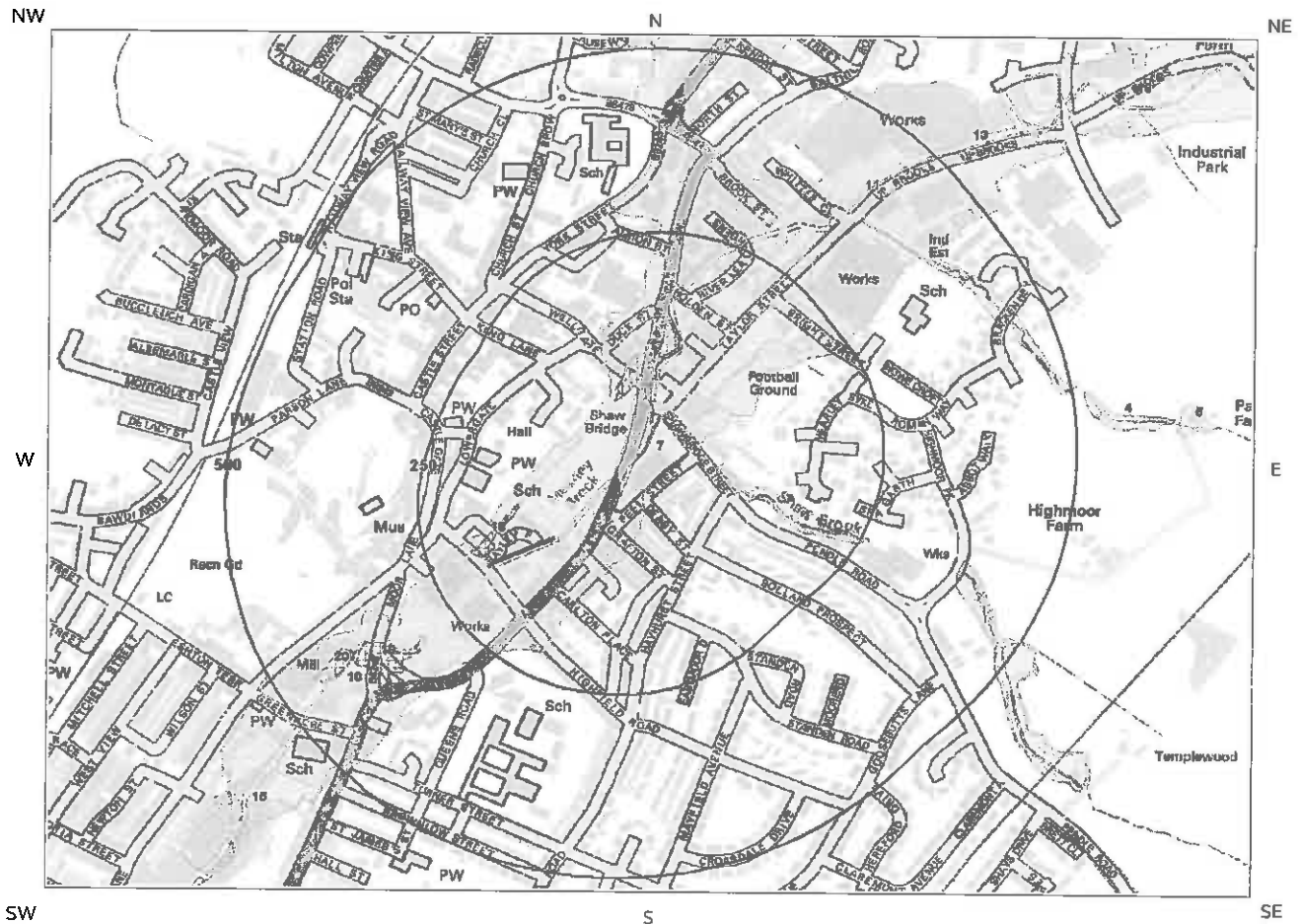
6.11 Surface Water Features

Are there any surface water features within 250m of the study site? Yes

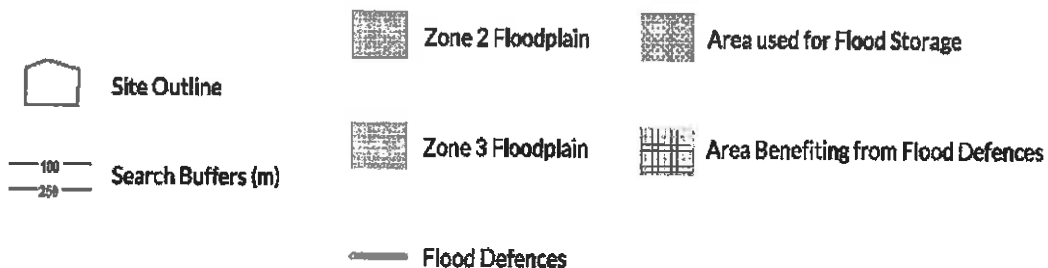
The following surface water records are not represented on mapping:

Distance (m)	Direction
0	On Site
12	W
20	N
63	SE
104	SE
173	N
190	NE

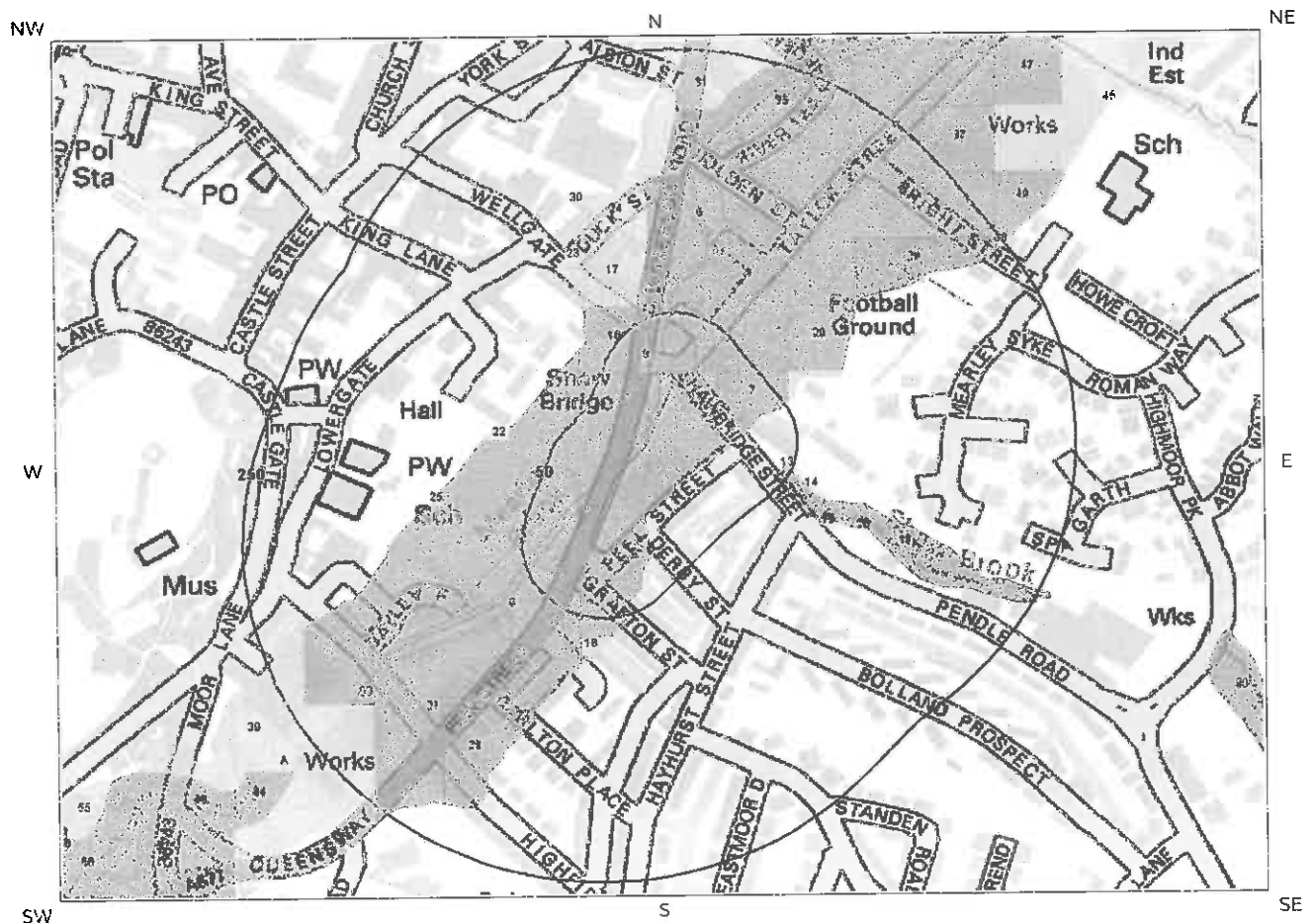
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



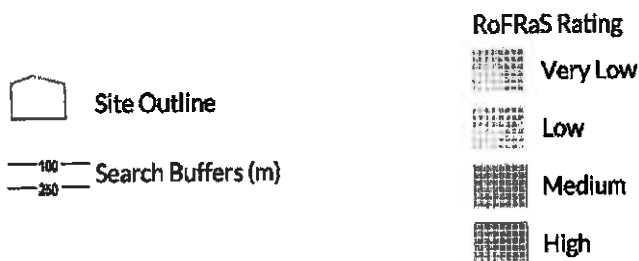
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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency/Natural Resources Wales Zone 2 floodplain? **Yes**

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

ID	Distance (m)	Direction	Update	Type
1	0	On Site	12-May-2017	Zone 2 - (Fluvial /Tidal Models)
2A	42	SE	12-May-2017	Zone 2 - (Fluvial /Tidal Models)

7.2 River and Coastal Zone 3 Flooding

Is the site within 250m of an Environment Agency/Natural Resources Wales Zone 3 floodplain? **Yes**

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

ID	Distance (m)	Direction	Update	Type
1	0	On Site	15-May-2017	Zone 3 - (Fluvial Models)
2A	8	S	15-May-2017	Zone 3 - (Fluvial Models)
	44	SE	15-May-2017	Zone 3 - (Fluvial Models)

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

What is the highest risk of flooding onsite?

High

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a High (1 in 30 or greater) chance of flooding in any given year.

Any relevant data within 250m is represented on the RoFRaS Flood map. Data to 50m is reported in the table below.

ID	Distance (m)	Direction	RoFRaS flood Risk
1	0.0	On Site	High
2	0.0	On Site	High
3	0.0	NE	Low
4	1.0	W	Medium
5	6.0	N	High
6	11.0	W	High
7	13.0	NE	High
8	19.0	SE	Low
9	19.0	NW	Low
10	24.0	NW	High
11	42.0	SE	Medium
12	44.0	NW	High
13	44.0	SE	Low
14	46.0	E	Low

7.4 Flood Defences

Are there any Flood Defences within 250m of the study site?

Yes

The following flood defence records are represented as lines on the Flood Map:

ID	Distance (m)	Direction	Update
21	6	NW	12-May-2017
22	83	SW	12-May-2017

7.5 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site?

Yes

7.6 Areas benefiting from Flood Storage

Are there any areas used for Flood Storage within 250m of the study site?

No

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site?

Yes

Does this relate to Clearwater Flooding or Superficial Deposits Flooding? Superficial Deposits Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?

Potential at Surface

Where potential for groundwater flooding to occur at surface is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

7.8 Groundwater Flooding Confidence Areas

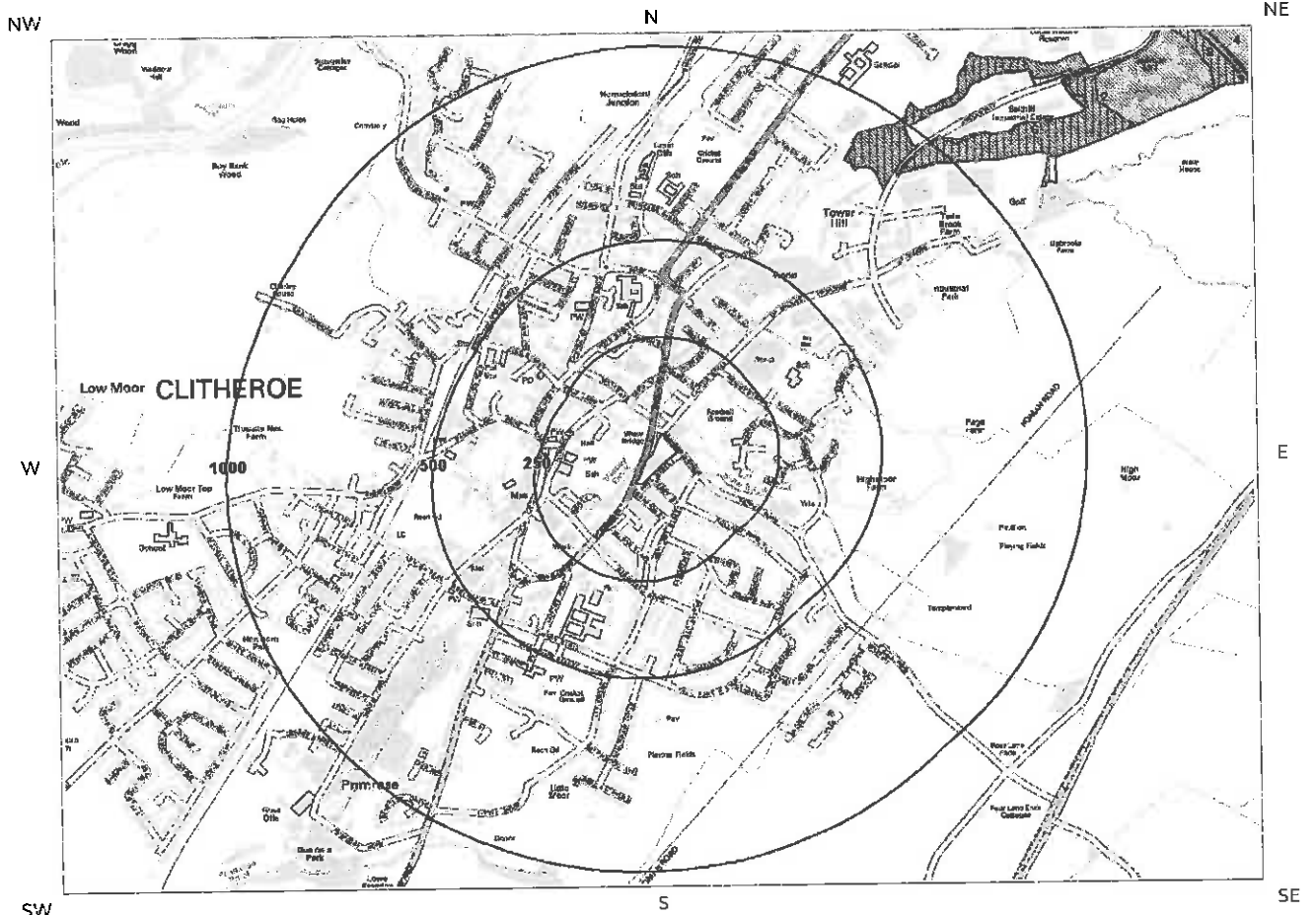
What is the British Geological Survey confidence rating in this result?

Moderate

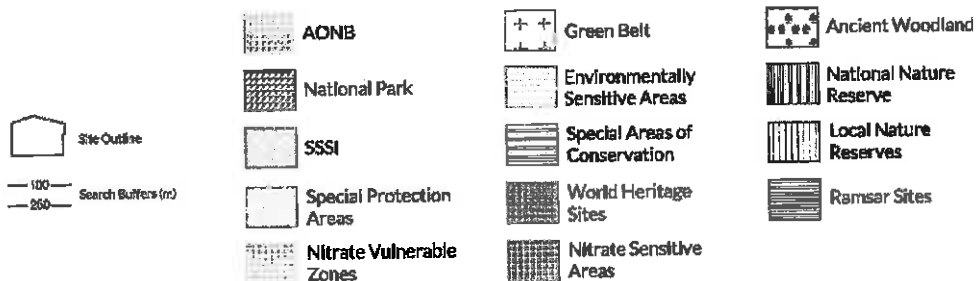
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



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8. Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site? Yes

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

4

The following Site of Special Scientific Interest (SSSI) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SSSI Name	Data Source
1	828	NE	Salthill and Bellmanpark Quarries	Natural England
2	880	NE	Salthill and Bellmanpark Quarries	Natural England
Not shown	1381	N	Coplow Quarry	Natural England
4	1690	NE	Salthill and Bellmanpark Quarries	Natural England

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

1

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
Not shown	1863	SW	UNKNOWN	Ancient and Semi-Natural Woodland

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

4

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
5	829	NE	Salthill Quarry	Natural England
6	881	NE	Salthill Quarry	Natural England
Not shown	1367	N	Cross Hill Quarry	Natural England
8	1609	NE	Salthill Quarry	Natural England

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

0

Database searched and no data found.

8.14 Records of Green Belt land within 2000m of the study site:

0

Database searched and no data found.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a Groundsure Geo Insight, available from our website. The following information has been found:

9.1.1 Shrink Swell

What is the maximum Shrink-Swell** hazard rating identified on the study site? Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

9.1.2 Landslides

What is the maximum Landslide* hazard rating identified on the study site? Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

What is the maximum Soluble Rocks* hazard rating identified on the study site? Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Significant soluble rocks are present. Problems unlikely except with considerable surface or subsurface water flow. No special actions required to avoid problems due to soluble rocks. No special ground investigation required or increased construction costs are likely. An increase in financial risk due to potential problems with soluble rocks is unlikely.

* This indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

What is the maximum Compressible Ground* hazard rating identified on the study site? **Moderate**

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

9.1.5 Collapsible Rocks

What is the maximum Collapsible Rocks* hazard rating identified on the study site? **Very Low**

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

What is the maximum Running Sand** hazard rating identified on the study site? **Low**

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property no significant increase in insurance risk due to running sand problems is likely.

9.2 Radon

9.2.1 Radon Affected Areas

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 property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level.

* This indicates an automatically generated 50m buffer and site.

9.2.2 Radon Protection

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.

10. Mining

10.1 Coal Mining

Are there any coal mining areas within 75m of the study site?

No

Database searched and no data found.

10.2 Non-Coal Mining

Are there any Non-Coal Mining areas within 50m of the study site boundary?

Yes

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Vein Mineral	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

Past underground mine workings may occur. The rock types present in these areas are such that small mineral veins may be present on which it is possible that small scale mining has been undertaken and/or it is possible that limited underground extraction of other materials may have occurred. All such occurrences are likely to be of minor localised extent and infrequent. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

10.3 Brine Affected Areas

Are there any brine affected areas within 75m of the study site?

No

Guidance: No Guidance Required.

Contact Details

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British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:

Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk

Environment Agency

National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 03708 506 506

Web: www.environment-agency.gov.uk

Email: enquiries@environment-agency.gov.uk

Public Health England

Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe

Email: enquiries@phe.gov.uk
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The Coal Authority

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Tel: 0345 7626 848
DX 715176 Mansfield 5
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Ordnance Survey

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Local Authority

Authority: Ribble Valley Borough Council
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Web: <https://www.ribblevalley.gov.uk/>

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**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL



**Environment
Agency**



**Public Health
England**



**The Coal
Authority**



getmapping

Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England who retain the Copyright and Intellectual Property Rights for the data.

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Standard Terms and Conditions

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<https://www.groundsure.com/terms-and-conditions-sept-2016>



**APPENDIX D
BGS Boreholes**

SIHATA SURVEYS LTD.,

Telephone: 0606 84 4637 Fax: 0606 84 6657

Borehole Number : 5374492

Sheet 1 of 1. 441473

Job Number : 5587

Location : Carlton Place, Clitheroe.

Dia. & Drilling Methods

Client : Consulting Engineers Co-partnership

150mm Diameter light cable percussion

Description of Strata	Ref. Level	Legend	Thick-ness	Depth	Sample Depths	Sample Types	N Value	Cu	s	Water level	Pie -zo	Daily Prog.
Sandy clayey Topsoil			(0.50)	0.00	0.20	W 1				7.75		
Soft to firm brown grey sandy CLAY, with occasional fine to coarse gravel. (Boulder Clay)			(1.00)	0.50	0.50 - 0.90	U 1		21	7			
				1.00		O 1						
Stiff to very stiff grey brown sandy CLAY, with fine to coarse gravel. (Boulder Clay)				1.50	1.50 - 2.75	U 2		83	14			
				2.50	2.50 - 2.95	S 1	N 31					
			(3.10)	3.00		D 2						
				3.50	3.50 - 3.80	U 3						
				4.50	4.50 - 4.95	S 2	N 17					
Soft to firm grey sandy CLAY, with fine to coarse gravel and cobbles. (Boulder Clay) Cobble stopped U4 and S3 samples being taken.				5.50		D 3						
				6.00		D 4						
			(3.80)	6.50	6.50 - 6.55	S 3	N 50 / 50					
				6.80		D 4						
				7.50	7.50 - 7.80	U 5		15	0			
				8.00		D 5						
Stiff to very stiff brown sandy CLAY, with fine to coarse gravel and the occasional cobble. (Boulder Clay)			(1.40)	8.40	8.50 - 8.60	S 4	N 50 / 100					
				9.00		D 5						
				9.50	9.50 - 9.90	S 5	N 57 / 300					
Borehole Completed				9.80								20/78

General Remarks :
 Water encountered during drilling, sample taken at 0.20m (standing water level).
 Casing knocked out of line by boulders.
 Five hours slow drilling and chiselling.

Dates : 29 JUNE 90

Driller : G.W

Engineer: E.H



APPENDIX E
Legislative Background



Legislative Background

Environmental liabilities and risks have been evaluated in terms of a source -pathway - target relationship in accordance with the approach set out in:

- The 1995 Environment Act;
- The Contaminated Land (England) Regulations 2000;
- The DETR circular 02/2000 Environmental Protection Act 1990: Part IIA Contaminated Land.

Contaminated land is defined within the legislative framework as land which is in such condition by reason of substances in, on or under the land that:

- 1) Significant harm is being caused or there is a significant possibility of such harm being caused;
- 2) Significant pollution of controlled waters is being or is likely to be caused.

The potential for harm is based on the presence of three factors:

- **Source** - substances that are potential contaminants or pollutants that may cause harm;
- **Pathway** - a potential route by which contaminants can move from the source to the receptor;
- **Receptor** - a receptor that may be harmed, for example the water environment, humans and water.

Where a source, pathway and target are all present a pollutant linkage exists and there is potential for harm to be caused. The presence of a source does not automatically imply that a contamination problem exists, since contamination must be defined in terms of pollutant linkages and unacceptable risk of harm. The nature and importance of both pathways and receptors are site specific and will vary according to the intended end use of the site, its characteristics and its surroundings.

The key principle which supports the SPR approach is 'suitable for use' criteria. This requires remedial action only where contamination is considered to pose unacceptable actual or potential risks to health or the environment and, taking into account the proposed use of the site.

Relevant Guidance Documents

This report has been prepared in accordance with the list of guidance below however the list is not exhaustive:

- CLR11 – Model Procedures;
- Contamination and Environmental Matters - Their implications for Property Professionals (2nd Edition RICS Nov 2003);
- Brownfields – Managing the development of previously developed land – A client's guide, CIRIA 2002;
- DEFRA and Environment Agency publications CLR7 – 10, supported by the TOX guides and SGV guides, dated March 2002;
- DETR Circular 02/2000, Contaminated Land: Implementation of Part IIA of the Environmental Protection Act 1990;
- Environment Agency technical advice to third parties on Pollution of Controlled Waters for Part IIA of the EPA1990, May 2002;

Relevant Legislative Documents

The following is a non-exhaustive list of legislative framework documents that has been considered in the production of this report:

- The Environment Act (1995);
- The Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance (2012);
- The Environment Protection Act (1990);
- The Contaminated Land (England) Act (2000);
- Contaminated Land (England) Regulations (2012);
- The Water Resources Act (1991);
- The Pollution Prevention and Control (England and Wales) Regulations (2000);
- The Landfill Regulations (England and Wales) Regulations (2002);
- The Landfill (England and Wales) (Amendment) Regulations (2004);
- Health and Safety at Work Act;



APPENDIX F

Risk Assessment Methodology



Contaminated Land Risk Assessment

Contaminated Land Risk Assessment is a technique that identifies and considers the associated risk, determines whether the risks are significant and whether action needs to be taken. The four main stages of risk assessment are:

Hazard Identification ➡ Hazard Assessment ➡ Risk Estimation ➡ Risk Evaluation

CLR11 outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. The starting point of the risk assessment is to identify the context of the problem and the objectives of the process. Under CLR11, three tiers of risk assessment exist - Preliminary, Generic Quantitative and Detailed Quantitative.

Formulating and developing a conceptual model for the site is an important requirement of risk assessment, this supports the identification and assessment of pollutant linkages. Development of the conceptual model forms the main part of preliminary risk assessment, and the model is subsequently refined or revised as more information and understanding is obtained through the risk assessment process.

Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the likelihood and the consequences of an event must be taken into account when assessing risk.

The risk assessment process needs to take into account the degree of confidence required in decisions. Identification of uncertainties is an essential step in risk assessment.

The likelihood of an event is classified on a four-point system using the following terms and definitions from CIRIA C552:

- **High likelihood:** There is a pollution linkage and an event appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution;
- **Likely:** There is a pollution linkage and all the elements are present and in the right place, which means it is probable that an event will occur. Circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term;
- **Low likelihood:** There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain even over a longer period such event would take place, and is less likely in the short term;
- **Unlikely:** There is a pollution linkage but circumstances are such that it is improbable the event would occur even in the long term.

The severity is also classified using a system based on CIRIA C552. The terms and definitions are:



- **Severe:** Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. A short-term risk to a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
Examples – High concentrations of contaminant on surface of recreation area, major spillage of contaminants from site into controlled waters, explosion causing building to collapse;
- **Medium:** Chronic damage to human health ('significant harm' as defined in DETR 2000). Pollution of sensitive water resources. A significant change in a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);
Examples - Concentrations of contaminants exceed the generic assessment criteria, leaching of contaminants from a site to a Principal or Secondary Aquifer, death of species within a designated nature reserve;
- **Mild:** Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures, services or the environment;
Examples – Pollution of non-classified groundwater or damage to buildings rendering it unsafe to occupy.
- **Minor:** harm, not necessarily significant harm, which may result in financial loss or expenditure to resolve. Non-permanent health effects to human health (easily prevented by use of personal protective clothing etc). Easily repairable effects of damage to buildings, structures and services.
Examples – Presence of contaminants at such concentrations PPE is required during site work, loss of plants in landscaping scheme or discolouration of concrete.

Once the likelihood and severity have been determined, a risk category can be assigned using the table below.

		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very Low	Very low

Definitions of the risk categories obtained from the above table are as follows together with an assessment of the further work that might be required:



- **Very high:** There is a high probability that severe harm could arise to a designated receptor from an identified hazard or there is evidence that severe harm is currently happening. This risk, if realised, could result in substantial liability. Urgent investigation and remediation are likely to be required;
- **High:** Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required and remedial works may be necessary in the short term and are likely over the longer term;
- **Moderate:** It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it would be more likely to be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term;
- **Low:** It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild;
- **Very Low:** There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.



APPENDIX G

Limitations



Standard Limitations

This desk study report was conducted and has been prepared for the sole internal use and reliance of the Client, Lidl UK GmbH and the Engineers, Rapleys LLP. This report shall not be relied upon or transferred to any other parties without the express written authorisation of BSL. If an unauthorised third party comes into possession of this report they rely on it at their risk and the authors owe them no duty of care or skill.

The findings and opinions conveyed via the desk study are based on information obtained from a variety of sources as detailed within this report, which BSL believes are reliable. Nevertheless, BSL cannot and does not guarantee the authenticity or reliability of the information it has relied upon.

Any recommendations made in this report should be confirmed with the Regulatory bodies and Planning Authority prior to implementation to ensure compliance.

No existing manhole covers were lifted or drainage runs inspected during the course of this ground investigation.

The site plans enclosed in this report should not be scaled off.