

**GEOTECHNICAL AND GEO-ENVIRONMENTAL
SITE INVESTIGATION**

**THE FLOUCH INN, HAZLEHEAD
BARNLSLEY**

FOR

MR D YEARDLEY

ISSUE 1



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**GEOTECHNICAL AND GEO-ENVIRONMENTAL
SITE INVESTIGATION**


**THE FLOUCH INN, HAZLEHEAD
BARNESLEY**

FOR

MR D YEARDLEY

ISSUE 1

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1.0 EXECUTIVE SUMMARY

1. This report presents the findings of a geotechnical and geo-environmental site investigation carried out by Eastwood & Partners for Mr D Yeardley.
2. The site is that of the 'The Flouch Inn' hotel, associated car parking and grassed area, located at the north eastern corner of the junction of Old Manchester Road and Whams Road in Hazlehead, Barnsley. It is around 0.6 hectares in area.
3. The site appears to have been undeveloped prior to 'The Flouch Inn' being built between 1932 and 1948. Significant development is not shown in the surrounding area.
4. The geological map shows the site to be underlain by Rough Rock sandstone of the Lower Coal Measures. This is classified as a Secondary A aquifer.
5. Shallow mining of coal is not expected to affect development at this site.
6. Made ground was encountered in all four of the trial pits. This was to a depth between 0.4 m and 1.1 m bgl. Natural sand was encountered beneath the made ground with sandstone encountered from between 0.95 m and 1.65 m bgl.
7. Significant biodegradable material was not recorded. The surrounding area has been subject to some small scale sandstone quarrying, but this is not expected to pose a risk of ground gas to the site.
8. The most appropriate foundation solution will be trench fill or strip footings founded in undisturbed natural ground at a minimum depth of 0.75 m. An allowable bearing capacity of at least 150 kN/m² should be achieved in the natural sand.
9. It is recommended that a minimum of 600 mm of clean capping, including a minimum 150 mm of topsoil, is placed in garden and landscaped areas where made ground is present to provide a suitable growing medium and mitigate any risks to human health.
10. A classification of DS-2 AC- 2 is proposed for concrete products in the ground. Concrete mix FND2 will be appropriate.
11. The conclusions made in this report in relation to contamination are subject to agreement by the approving bodies, the Local Authority and your warranty provider.

2.0 INTRODUCTION

2.1 Terms of Reference

This report presents the findings of a geotechnical and geo-environmental site investigation carried out by Eastwood & Partners (Consulting Engineers) Limited for, and on the instructions of, Mr D Yeardley. Any other parties using the information in this report do so at their own risk and any duty of care is excluded.

2.2 Context

No other investigations are known to exist for the site.

2.3 Aims and Objectives

The aims and objectives of this investigation were as follows.

- Assimilate Phase 1 data to derive an outline conceptual model identifying potential contaminants, pathways and receptors, as well as possible linkages between these;
- Detail the ground conditions and their geotechnical properties enabling outline foundation proposals to be made;
- Carry out tiered risk assessment to establish the likely risks to future receptors, involving the use of generic assessment criteria and where unacceptable risks are identified, site specific assessment criteria within a detailed quantitative risk assessment;
- Identify feasible remediation options if unacceptable risks are highlighted; and
- Develop an appropriate remediation strategy where remediation is required.

2.4 Scope of Investigation

This document is split into two sections. These constitute the findings of the Phase 1 and Phase 2 investigations, consecutively.

2.4.1 Phase 1

The Phase 1 investigation involved a review of information extracted from published documentation as well as that obtained from a site reconnaissance. Information regarding the current and former land uses both on and surrounding the site, as well as the environmental sensitivity of the site

location as determined by factors including geology, hydrogeology and hydrology have been examined.

Information analysed in this section of the report has been obtained from a variety of sources and included the following:

- An Envirocheck report,
- A Coal Authority report, and
- Geological maps and associated geological memoirs.

2.4.2 Phase 2

This part of the investigation consisted of intrusive works. The findings were used to test the conceptual model and produce a final risk assessment.

The intrusive works comprised trial pits, which were excavated to enable:

- Examination of the upper few metres of ground;
- Assessment of any contamination identified using visual and olfactory methods; and
- Collection of samples for geotechnical and chemical testing.

2.5 Limitations of Investigation

This report is based on the assumption that the site will be developed with two to four storey houses or apartments of conventional construction and that existing ground levels will not alter significantly. If this is not the case, then the advice given in this report may not be appropriate.

Where assessments of site areas affected in particular ways are given, these are approximate. All information, comments and opinions given in this report are based on the ground conditions encountered during the site work, on the results of laboratory testing carried out as part of the investigation and information gained from a historical, geological and environmental desk study. However, there may be conditions at the site that have not been taken into account, such as unpredictable soil strata and water conditions between or below investigation points.

This report considers the ground and groundwater and does not cover any buildings or their fabric. Generally, testing has only been carried out for contaminants identified as potentially present with no assessment made of biological contamination. Risks to ecological receptors, such as bats, have not been considered.

3.0 THE SITE

3.1 Description

The site is that of the 'Flouch Inn' hotel, with associated car parking and grassed area. The Flouch Inn is still being used, primarily as a basement restaurant. The site is located on the junction of the north side of Old Manchester Road and the eastern side of Whams Road, in Hazlehead, Barnsley. It is around 0.6 hectares and is centred on grid reference SE 1978 0158 (419780, 401580).

Old Manchester Road forms the site's southern boundary, and Whams Road forms the site's western boundary. Beyond the northern and eastern boundaries are open fields. Low stone walls are present on the grass verges bordering the western and southern boundaries of the site, and trees and hedges are present along the boundaries. Metal railings surround the eastern and northern boundaries. The southern half of the eastern boundary is a stone retaining wall, raising the car park level higher than the field on the other side.

The Flouch Inn hotel covers the central part of the site. Tarmac car parking areas comprise the majority of the rest of the site, while an area of grass is present in the north eastern corner. Two propane tanks and a fenced soakaway and cesspit are present in the area of grass. A retaining wall intersecting the area that the building covers, from the central northern part to the south eastern part, creates a higher levelled car park on the north western side and the southern portion of the site, with a lower levelled car park between the building and the area of grass in the north eastern corner.

The '*Exploratory Hole Location Plan*', drawing 34106/001 revision A, in Appendix 1, shows the features described. Some photographs are also included in this Appendix.

3.2 History

A review of historical maps has been carried out for the purposes of assessing former land usage at and within the vicinity of the site. Copies of historical Ordnance Survey (OS) maps for the site, from the Envirocheck report, are in Appendix 2.

3.2.1 The Site

The First Edition Ordnance Survey map, dated 1855, shows the site to be covered by fields. Between 1932 and 1948 the Flouch Inn appears to have been built in its current position. Apart from some minor changes, such as anecdotal evidence suggesting that the car park was resurfaced in 1993 with "red ash" gravel, the site then remains much the same to the present day.

3.2.2 The Surrounding Area

The First Edition Ordnance Survey map, dated 1855, showed the surrounding area to be largely agricultural fields. Two small sandstone quarries are shown around 100 m north-west and 115 m south-west of the site, and were probably just for local use. The Old Flouch Inn and Flouch Farm are shown around 20 m to the west of the site on the opposite side of Whams Road.

The larger scale 1893 map shows a small round brick kiln around 250 m north-west of the site. The area previously covered by the small sandstone quarry 100 m to the north-west is shown as rough pasture, therefore it is assumed it had become disused or possibly in-filled. The other sandstone quarry 115 m to the south-west is labelled as an 'Old Quarry' with some pools in the bottom. By 1905, two cottages have been built on the previous site of the north-western quarry.

By 1931, a building is shown around 50 m south of the site. Two houses were also built approximately 100 m and 120 m to the south-west, the latter being built adjacent to the old sandstone quarry.

Between 1955 and 1964, the building around 50 m south of the site is labelled as 'garage'. The brick kiln 250 m to the north-west of the site is last shown on a map from 1977. Today there is a small ruin in its place.

The surrounding area then stays much the same to the present day.

3.3 Geology

The British Geological Survey map Sheet 281 NW (1:10,560 scale) shows the solid geology beneath the site to be Rough Rock sandstone of the Lower Coal Measures. The strata dip to the north-east at around 3°. The shallowest potential coal below the site is the horizon between the Rough Rock and underlying Rough Rock Flags, in which an unnamed coal seam sometimes occurs. This is discussed further in section 3.6.

No faults or drift superficial deposits are shown on the site.

3.4 Hydrogeology

3.4.1 Groundwater Vulnerability

The Envirocheck report states that the site overlies a Secondary A aquifer comprising 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. The site is not within 2 km of a Groundwater Source Protection Zone.

3.4.2 Groundwater Abstractions

The Envirocheck report, in Appendix 2, indicates that the closest groundwater abstraction licence is located 555 m north-east of the site. It is described as a water undertaking for Yorkshire Water Plc.

3.5 Hydrology

The Envirocheck report states there is one surface water feature within 250 m of the site. We presume that this refers to a drain around 150 m to the east of the site. It also states that there are no surface water abstractions within 500 m of the site.

3.6 Mining

The shallowest coal seam potentially beneath the site is indicated to be an unnamed coal located at the base of the Rough Rock. This is indicated as not being continuous throughout the area and is not shown in the vicinity of the site. If it is present, this seam is probably thin, or of poor quality, and with an absence of shafts or collieries in the area it was probably not worked. The horizon outcrops approximately 200 m south west of the site. The depth of this possible coal horizon beneath the site is approximately 4 m at its shallowest. It is not expected to be present, or if present it is not expected to be worked. It would therefore not affect the development.

The next shallowest coal is another unnamed coal seam just above the White Rock sandstone, approximately 42 m below the first unnamed coal seam. This is at such a depth as to not affect the site.

A Coal Authority mining report has been obtained and is presented in Appendix 2. This states the site is not within the likely zone of influence from any present or future underground coal workings, however, reserves of coal exist in the locality which could be worked at some point in the future subject to feasibility, licenses and planning consents.

The Coal Authority report also states that the site is not in an area for which a notice to withdraw support has been published.

Although the site is unlikely to be influenced by past workings, there is always a potential for unrecorded shafts to be present on or near the site.

3.7 Ground Gas

Information obtained from the Envirocheck report indicates that there are no historical or currently licensed landfills within 250 m of the site. The surrounding area has historically been quarried for sandstone, but at a small scale, probably just for local use. Therefore, it is considered that there is no risk from landfill gas.

Information provided within the Envirocheck report states that no radon precautions will be required for residential development on this site.

3.8 Pollution Incidents to Controlled Waters

The Envirocheck report, in Appendix 2, lists a minor pollution incident in 1998 originating from The Flouch Inn, involving a discharge of vegetable oil into a river Don tributary 50 m south of the site. This would not be expected to be significant.

3.9 Discharge Consents

The Envirocheck report records one discharge consent within 500 m of the site. This belongs to Flouch Engineering Co. Ltd. and is located 180 m away from the site to the east, and is licensed to discharge final treated sewage effluent into a tributary of the Cranberry Holes Brook.

3.10 Flooding

The site is not shown to be within a flood plain.

4.0 OUTLINE CONCEPTUAL MODEL

The following table details the possible sources and associated contaminants of concern, pathways and receptors, highlighted by the Phase 1 investigation as potentially present.

4.1 Solid or Liquid Contaminants

Table 4.1 – Solid or Liquid Contaminants Outline Conceptual Model

Source	Potential Contaminants	Potential Pathways	Potential Receptors
Made Ground	Commonly encountered contaminants including: metals/metalloids, sulphates, and polycyclic aromatic hydrocarbons (PAHs).	Ingestion, inhalation, direct contact Migration through ground	Site workers, future residents Plants Concrete products Plastic water supply pipes Secondary A aquifer
Naturally elevated concentrations of contaminants	Naturally occurring contaminants such as arsenic and pyrite (resulting in elevated levels of sulphate), as well as anthropogenically influenced contamination such as PAHs.	Ingestion, inhalation, direct contact Migration through ground	Site workers, future residents Plants Concrete products Plastic water supply pipes Secondary A aquifer

4.2 Ground Gas

Table 4.2 – Ground Gas Outline Conceptual Model

Source	Potential Contaminants	Pathway	Receptor	Risk Assessment
Made ground	Carbon dioxide and methane	Migration through ground	Future residents and buildings	Table 8.5 in CIRIA C665 identifies “typical made ground” as representing a low risk and as a typical source of generation leading to a gassing regime falling into Characteristic Situation 1 or 2, which would be considered of a similar order to a Green or Amber 1 gassing regime.

5.0 GROUND INVESTIGATION

5.1 Site Works

We visited site on 15 September 2011 and excavated 4 trial pits, referenced TP1 to TP4. These reached a maximum depth of 2.35 m below ground level.

Copies of the logs are presented in Appendix 3, and their locations are plotted on the 'Exploratory Hole Location Plan', Drawing number 34106/001 Revision A, in Appendix 1. Some photographs are also included in Appendix 3.

5.2 Laboratory Testing

Disturbed samples were obtained from each of the trial pits and were generally taken of each strata, as well as where any visual or olfactory evidence of potential contamination was recorded. Sampling comprised 500 g plastic tubs. Chemical testing was undertaken by Chemtest using MCERTs accredited methodologies, where available. Geotechnical testing was completed by Professional Soil Laboratory.

The geotechnical test results are presented in Appendix 4 and discussed in Section 7.0.

The chemical test results are presented in Appendix 5 and discussed in Section 8.0.

6.0 GROUND CONDITIONS

6.1 Surface Covering

The majority of the site is covered by a tarmacadam car park. This covers the site to the south-west of a line drawn diagonally from the north-western corner to the south-eastern corner. The public house stands in the centre, and an overgrown grassed area is present in the north-eastern corner. The topsoil in the grassed area is 750 mm thick in the far north-eastern corner (TP3), while the rest of the trial pits encountered a covering of up to 500 mm of gravel made ground. Overgrown grassed areas are also present on the verges to the southern and western boundaries of the site. The car park could not be investigated as it is still in use.

6.2 Made Ground

The thickness of made ground varied from 0.4 m to 1.1 m.

TP1, TP2 and TP4 all encountered a layer of ashy gravelly sand at surface between 400 mm and 500 mm thick. In trial pit TP1 granular made ground continued to 1.1 m below ground level (bgl).

It was reported to us that there is just over 2 m of made ground underneath the car park, but as stated above in section 6.1, excavation could not take place as it was still in use.

6.3 Natural Ground

The natural ground beneath the site was generally found to be coarse orange clayey sand with some sandstone gravel, over coarse grained sandstone. The sandstone was reached at depths of between 0.95 m in TP2 and 1.65 m (bgl) in TP1. A layer of very silty very sandy clay was encountered between 1.35 m and 1.65 m in TP1.

6.4 Obstructions

Some large sandstone cobbles were encountered between 0.5 m and 0.9 m in TP1, and strong rock was generally found at a relatively shallow depth. No other obstructions were encountered during the site investigation.

6.5 Groundwater

No groundwater was encountered during the site investigation.

6.6 Evidence of Contamination

Ashy made ground was encountered.

7.0 GEOTECHNICAL APPRAISAL

7.1 General

Made ground was encountered in all four of the trial pits. This was to a depth between 0.4 m and 1.1 m bgl. Natural sand was encountered beneath the made ground with sandstone encountered from between 0.95 m and 1.65 m bgl. A layer of very silty very sandy clay was encountered between 1.35 m and 1.65 m in TP1.

The made ground is not suitable as a bearing material for house foundations. The natural sand is expected to have a safe bearing capacity of 150 to 200 kN/m².

The samples of natural ground, taken from TP1 at 1.25 m and 1.45 m, were tested for plasticity. The sample of sand with clay pockets at 1.25 m was confirmed to be non-plastic, and the clay at 1.45 m was confirmed to have a modified plasticity index of 10%. This is the threshold between non-plastic and low plasticity. It is considered appropriate to assume that the natural ground will generally be unshrinkable.

7.2 Foundations

Conventional strip or trench-fill footings founded on undisturbed natural ground, at a minimum depth of 0.75 m, are proposed.

7.3 Ground Floors

Where less than 600 mm of made ground is present, ground bearing slabs will be appropriate. Elsewhere, reinforced suspended slabs or precast concrete floors with a minimum 150 mm high ventilated void should be used.

7.4 Superstructure Precautions

Additional superstructure precautions will not be required because of the ground conditions.

7.5 Excavation Problems

The excavation is expected to be fairly easy. However, the stability of any trenches may be poor in the made ground. Support will be required in accordance with current Health & Safety Regulations wherever access is required to trenches deeper than 1.2 m or less where there is risk of collapse.

7.6 Obstructions

Relic foundations and infrastructure associated with the public house are likely to be present, such as a cellar.

7.7 Surface Water

Soakaway tests have not been undertaken. However, there is a soakaway and cesspit already present on the site.

8.0 REFINEMENT OF OUTLINE CONCEPTUAL MODEL

8.1 Source Characterisation

An outline conceptual model, detailing the possible sources and associated contaminants of concern, potential pathways and receptors identified in the Phase 1 report was detailed in section 4.0.

This section of the report documents the works undertaken to obtain information to test and refine this model enabling a risk assessment to be produced and, where significant risks are expected, remediation recommendations.

8.2 Ground Conditions

The ashy gravelly sand may contain elevated levels of metals/metalloids, sulphates and polycyclic aromatic hydrocarbons (PAHs). The natural ground or topsoil may also contain elevated concentrations of these common contaminants. The chemical analysis undertaken for these materials is discussed below.

8.3 Ground Gas

There is up to 1.1 m of made ground present on the site, but very little to no biodegradable material was found. Ground gas is therefore not expected to pose significant risks.

8.4 Unexpected Contamination

No unexpected contamination was encountered.

8.5 Chemical Testing

In total, eight samples were sent for chemical testing. Four samples of the made ground and three of the natural ground were tested for the contaminants listed below. One sample of topsoil was also tested for the same contaminants, excluding the sulphate suite.

Contaminant Type	Actual Contaminants
Metals/Metalloids	Arsenic, cadmium, chromium (hexavalent and total), lead, mercury, nickel, copper and zinc
pH	pH
Polycyclic aromatic hydrocarbons (PAHs)	Speciated PAH
Sulphates	Water soluble sulphate, total sulphur and acid soluble sulphate

8.6 Assessment Criteria

The proposed development of the site is to be residential with associated gardens. Therefore the assessment criteria relating to a residential end use with plant uptake have been used. Tables detailing the relevant assessment concentrations used are included in Appendix 5.

8.7 Chemical Test Results

Copies of the chemical test results (Chemtest 139720) are presented in Appendix 5.

8.7.1 Topsoil

The sample of topsoil recorded no elevated contaminants.

8.7.2 Made Ground

The following samples recorded elevated concentrations of contaminants:

Ashy sandy gravel (TP1 – 0.1 m)

Contaminant	Elevated Concentrations (mg/kg)	Assessment Value (mg/kg)
Arsenic	110	32
Chromium	6900	130
Copper	510	200
Mercury	1.2	1
Nickel	3700	130
Lead	1200	450
Zinc	600	300
Benzo(a)pyrene	2.8	1

Ashy sand (TP1 – 0.45 m)

Contaminant	Elevated Concentrations (mg/kg)	Assessment Value (mg/kg)
Arsenic	35	32
Benzo(a)pyrene	1.2	1

The rest of the samples did not record any elevated concentrations of contaminants.

8.7.3 Natural Ground

None of the samples of natural ground recorded any elevated levels of contaminants.

8.7.4 Sulphates

In accordance with BRE Special Digest 1, the made ground comes under the classification of 'Brownfield'. All of the samples tested recorded the same water soluble sulphate result of less than 10 mg/l. The sulphur results indicate total potential sulphate concentrations of 0.03 to 0.51%. The pH is above 7.9.

8.8 Significant Pollutant Linkages

The significant pollutant linkages consequently identified are documented in the table below:

Source	Pathway	Receptor
Arsenic, chromium, copper, mercury, nickel, lead, zinc and Benzo(a)Pyrene in made ground	Ingestion, inhalation, direct contact	Future residents Construction workers Visitors
Sulphates in the made ground	Direct contact	Below ground cementitious products

9.0 RISK ASSESSMENT

9.1 Human Health

9.1.1 Topsoil

One sample of topsoil was tested. This indicates that the topsoil is likely to be suitable for re-use.

9.1.2 Made Ground

Four samples of made ground were tested. Two of these samples (TP1 at 0.1 m, and TP1 at 0.45 m) recorded elevated concentrations of contaminants.

It is recommended that a minimum of 600 mm of clean capping, including a minimum 150 mm of topsoil, is placed in garden and landscaped areas where made ground is present to provide a suitable growing medium and mitigate any risks to human health.

9.2 Controlled Waters

The contaminants recorded in the soil are generally of low solubility and significant risks to controlled waters are therefore not expected.

9.3 Construction Materials

9.3.1 Sulphates

Although the made ground recorded low water soluble sulphate concentrations, we recommend using a Design Sulphate Class of DS-2 and Aggressive Chemical Environment for Concrete (ACEC) class of AC-2 for concrete in contact with the made ground because of the potential variability of this material. This will result in the use of FND2 concrete.

9.3.2 PAHs

Yorkshire Water should be consulted over the type of water supply pipes that are appropriate.

9.4 Unexpected Contamination Strategy

As with any brownfield site such as this there may be isolated hotspots of contamination which have not been identified. A suitable strategy for dealing with this should be included in the implementation plan prepared for the site.

9.5 Disposal of Material

If material needs to be removed, it needs to be taken to a suitably licensed landfill or waste treatment facility. The costs of disposal and landfill tax can be substantial. The disposal of material should therefore be seen as a last resort with options such as treatment and reuse either on-site or off-site considered at the earliest opportunity.

The category of landfill which can accept the waste (inert, non-hazardous or hazardous) would need to be determined and will also have a significant effect on the costs. Additional testing may be required by the landfill operator and the acceptance of material is generally at their discretion.

10.0 CONTAMINATION - RECOMMENDATIONS AND APPROVALS

1. It is recommended that a minimum of 600 mm of clean capping, including a minimum 150 mm of topsoil, is placed in garden and landscaped areas where made ground is present to provide a suitable growing medium and mitigate any risks to human health.
2. The conclusions made in this report in relation to contamination are subject to agreement by the approving bodies, the Local Authority and your warranty provider.

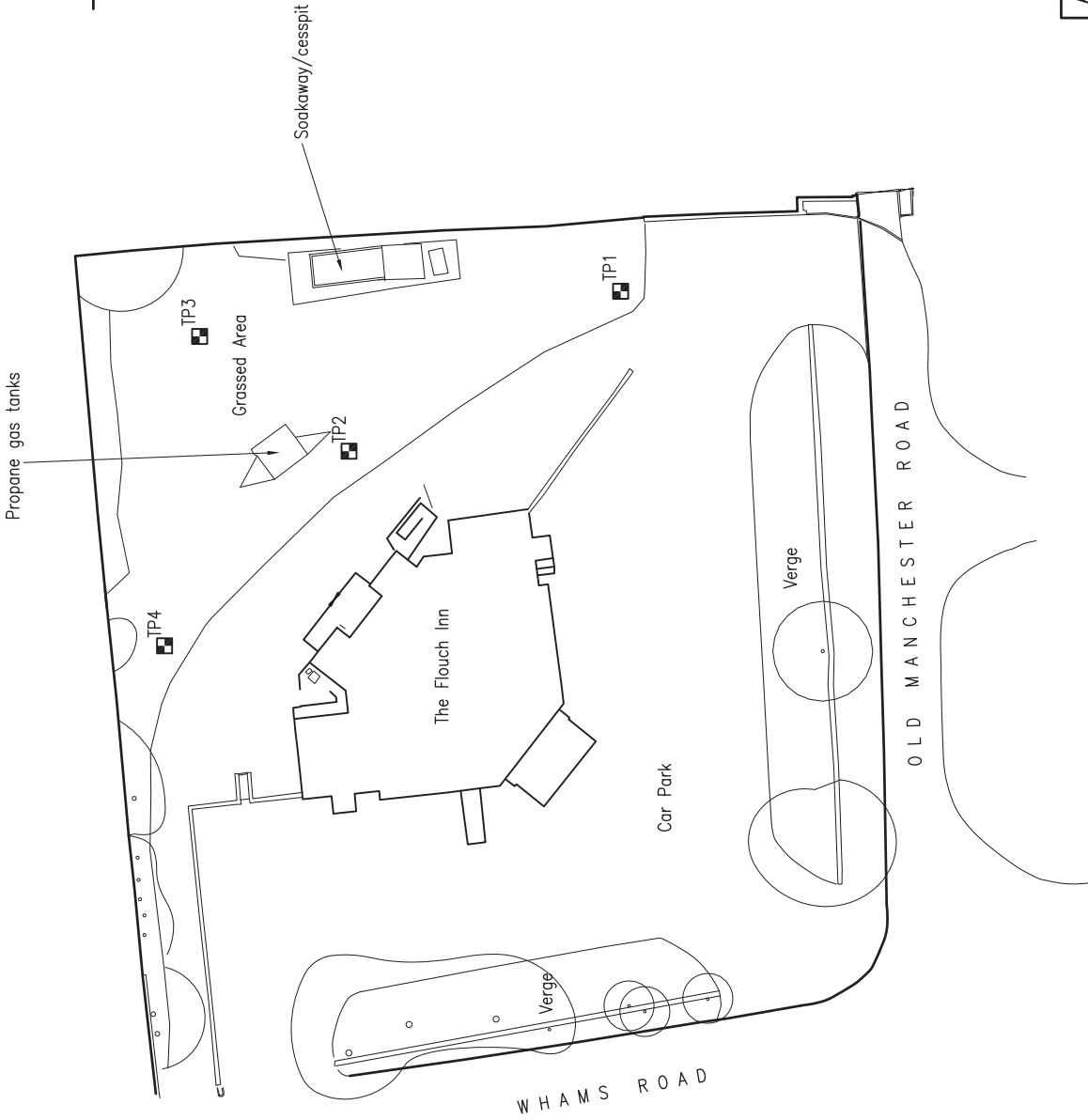
Appendix 1

Exploratory Hole Location Plan - drawing 34106/001
Site Photographs

Information within this drawing is not necessarily produced to scale.
Always use figured dimensions and co-ordinates – if in doubt, ask.

KEY

- Approximate position of site boundary
- ▣ Approximate position of trial pit excavated by Eastwood & Partners, 15/09/2011



M BOOTH DESIGN
 THE FLOUCH INN, HAZLEHEAD
 SITE LOCATION PLAN

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A	First Issue.				
REV	DESCRIPTION	SIG	CHK	DATE	
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M BOOTH DESIGN LTD

THE FLOUCH INN, HAZLEHEAD, BARNSELY

VIEW OF SITE



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THE FLOUCH INN, HAZLEHEAD, BARNSELY

VIEW OF SITE



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CONSULTING ENGINEERS
St Andrew's House
23 Kingfield Road
Sheffield S11 9AS
Tel: (0114) 2554554 Fax: (0114) 2554330

M BOOTH DESIGN LTD
THE FLOUCH INN, HAZLEHEAD, BARNSELY
VIEW OF SITE INCLUDING NORTH CENTRAL RETAINING WALL



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P004
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Sheffield S11 9AS

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THE FLOCCH INN, HAZLEHEAD, BARNSELY

VIEW OF SITE



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P005
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Sheffield S11 9AS

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M BOOTH DESIGN LTD
THE FLOUCH INN, HAZLEHEAD, BARNESLEY
RETAINING WALL ON EASTERN BOUNDARY



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P006
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23 Kingfield Road
Sheffield S11 9AS

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THE FLOUCH INN, HAZLEHEAD, BARNSELY

VIEW OF LOWER PART OF SITE



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P007
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23 Kingfield Road
Sheffield S11 9AS

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THE FLOUCH INN, HAZLEHEAD, BARNSELY

VIEW OF FENCED SOAKAWAY AND CESSPIT



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P008
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THE FLOUCH INN, HAZLEHEAD, BARNSELY

VIEW OF ACCESS TO SITE



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P009
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23 Kingfield Road
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M BOOTH DESIGN LTD

THE FLOUCH INN, HAZLEHEAD, BARNSELY

VIEW OF ACCESS TO SITE

Appendix 2
Envirocheck Report
Coal Authority Report

Historical Mapping & Photography included:

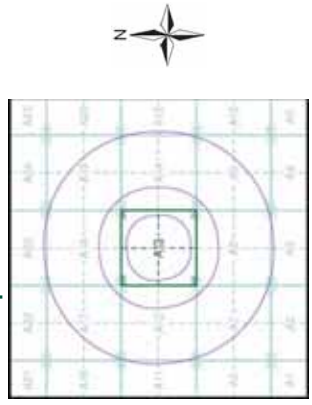
Mapping Type	Scale	Date	Pg
Yorkshire	1:10,560	1851 - 1855	2
Cheshire	1:10,560	1881	3
Yorkshire	1:10,560	1894	4
Yorkshire	1:10,560	1906	5
Yorkshire	1:10,560	1932	6
Yorkshire	1:10,560	1948	7
Ordnance Survey Plan	1:10,000	1955	8
Ordnance Survey Plan	1:10,000	1967	9
Ordnance Survey Plan	1:10,000	1977	10
Ordnance Survey Plan	1:10,000	1980 - 1989	11
10K Raster Mapping	1:10,000	2000	12
10K Raster Mapping	1:10,000	2006	13
10K Raster Mapping	1:10,000	2011	14

1:10,000 Raster Mapping

Ordnance Survey Plan 1:10,000

Ordnance Survey County Series 1:10,560

Historical Map - Slice A



Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
 National Grid Reference: 419780, 401580
 Site: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH

Yorkshire

Published 1851 - 1855

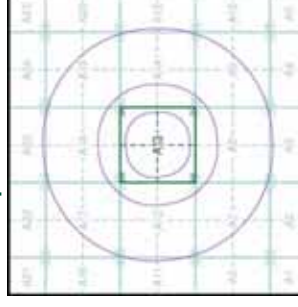
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

27900	1851
1:10,560	
28100	1855
1:10,560	

Historical Map - Slice A

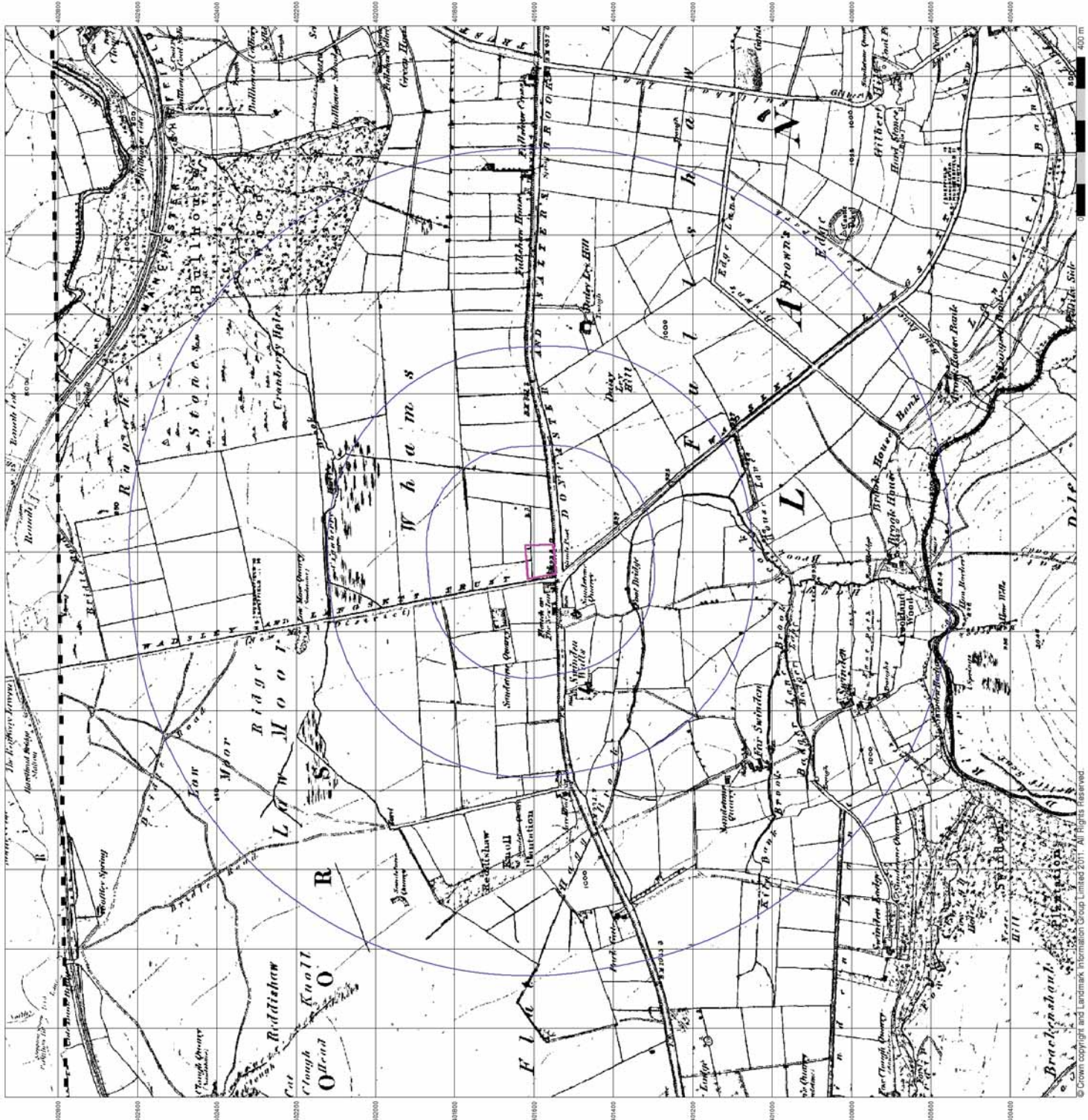


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



Cheshire

Published 1881

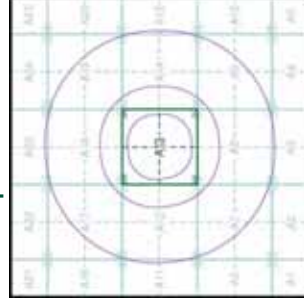
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A

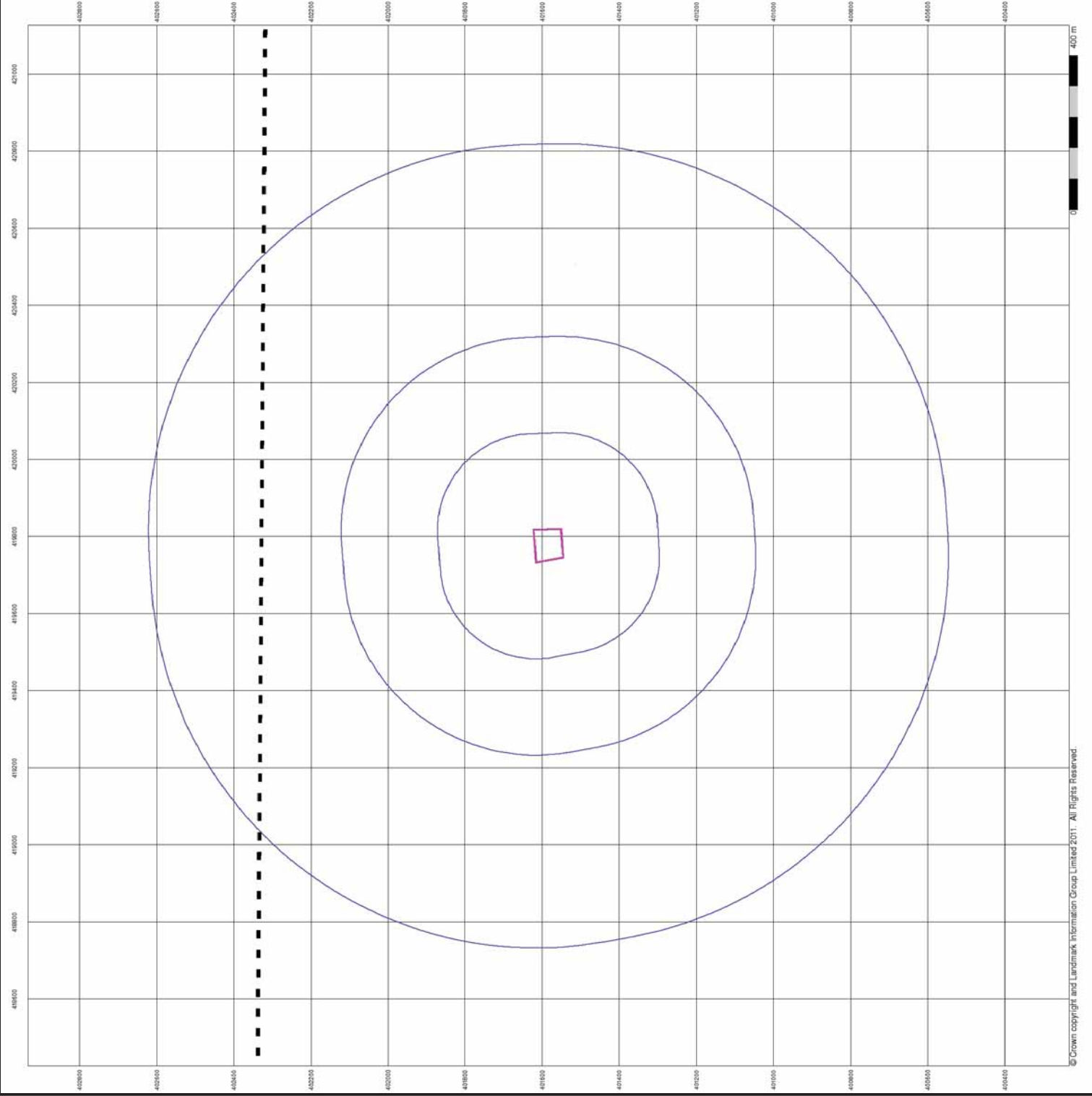


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH

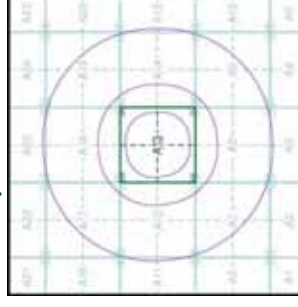


The historical maps shown were reproduced from maps predominantly held at a scale adopted for England, Wales and Scotland in the 1840's. In 1854 a scale of 1:2500 was adopted for the published maps. The published maps are used to update the 1:10,560 maps. The published data on these maps are often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

273SW	1894
1:10,560	
261NW	1894
1:10,560	

Historical Map - Slice A

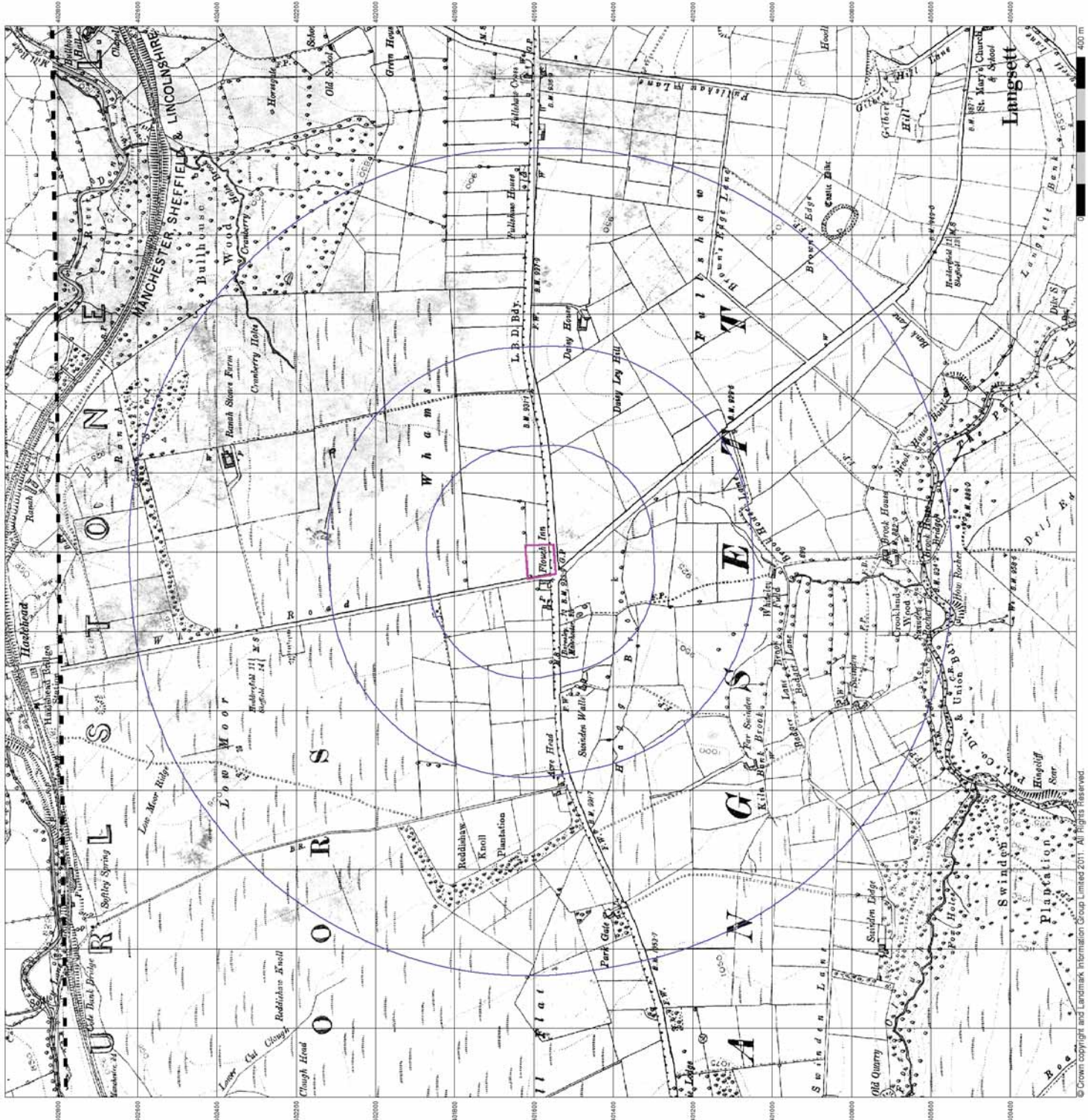


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



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Yorkshire

Published 1906

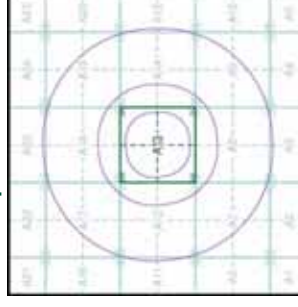
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at a 1:2500 scale for England, Wales and Scotland in the 1840's. In 1854 the Ordnance Survey published the first 1:10,560 scale maps. These maps are used to update the 1:10,560 maps. The published data is then there are often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

273SW	1906
1:10,560	
261NW	1906
1:10,560	

Historical Map - Slice A

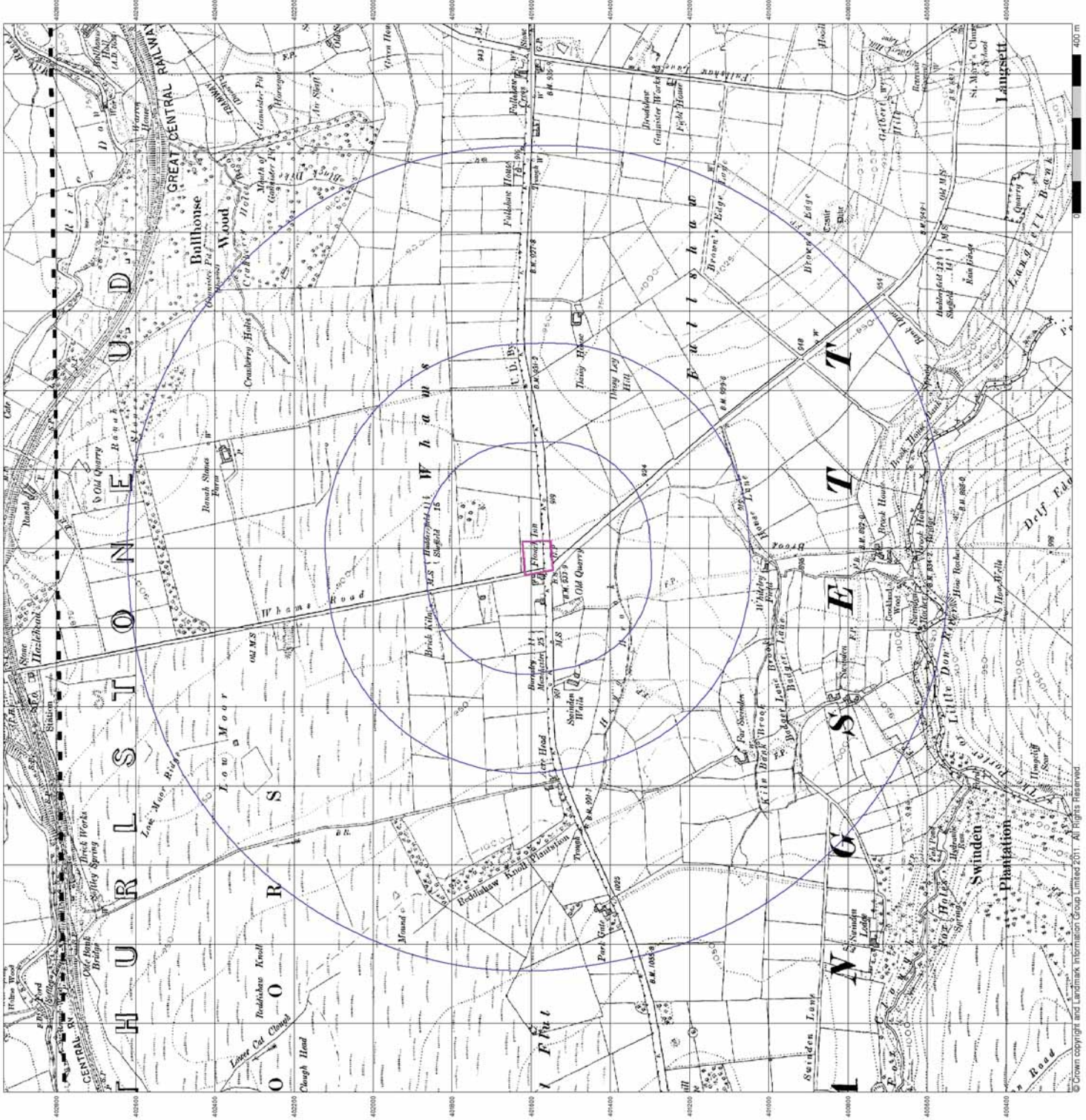


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



Yorkshire

Published 1932

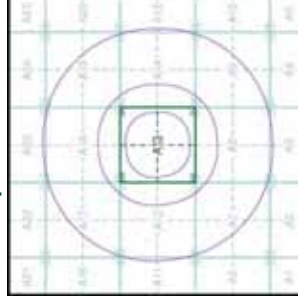
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at a scale adopted for England, Wales and Scotland in the 1840's. In 1854 a scale of 1:2500 was adopted for the published maps. These maps are used to update the 1:10,560 maps. The published data on these maps often comes later than the surveyed data. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

273 SW	1932
1:10,560	
261 NW	1932
1:10,560	

Historical Map - Slice A

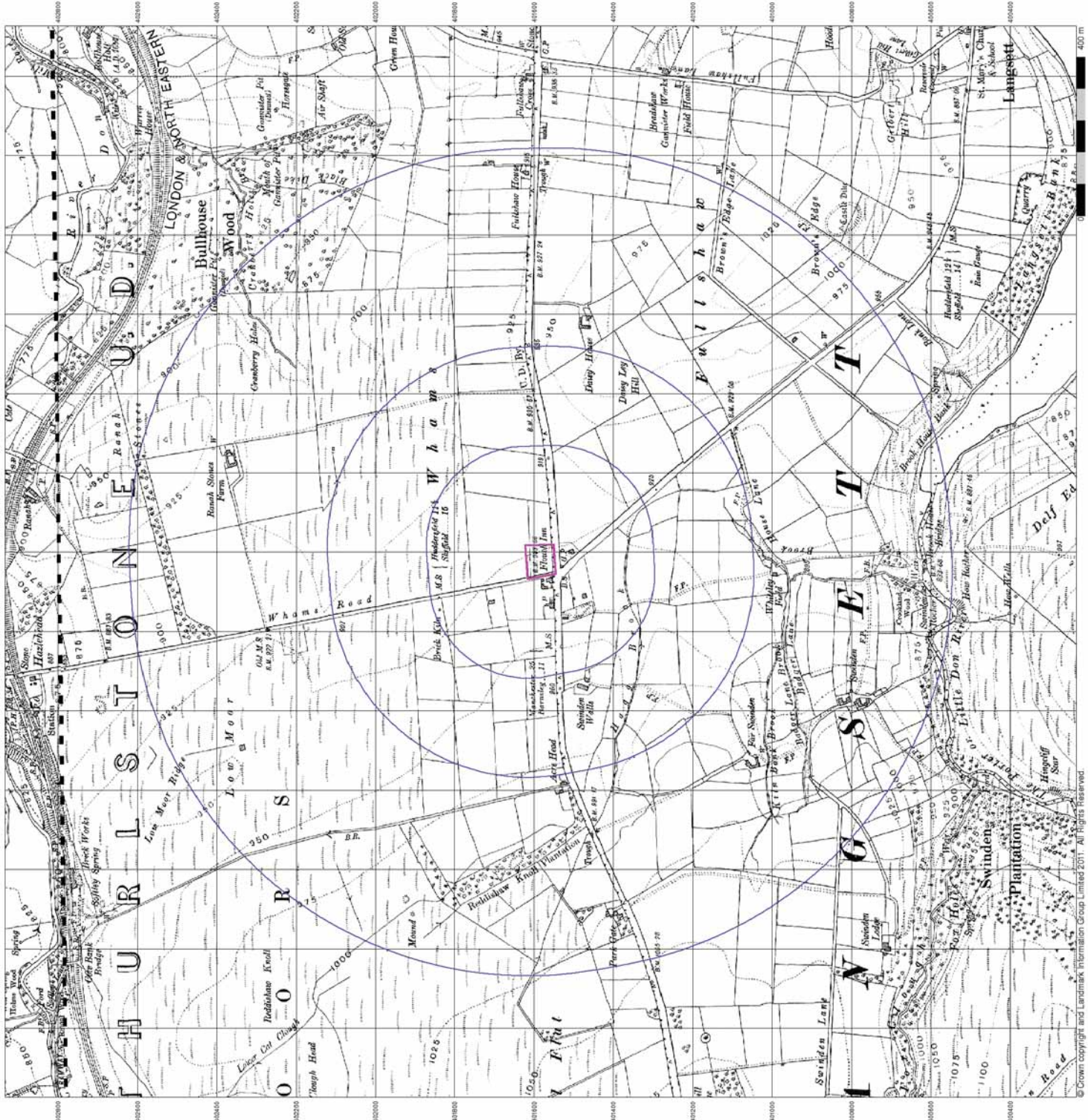


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJ/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

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Yorkshire

Published 1948

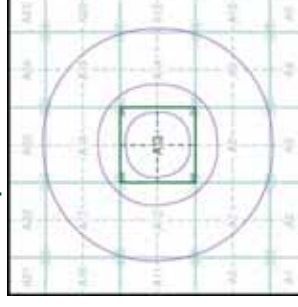
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

273SW	1948	1:10,560
281NW	1948	1:10,560

Historical Map - Slice A

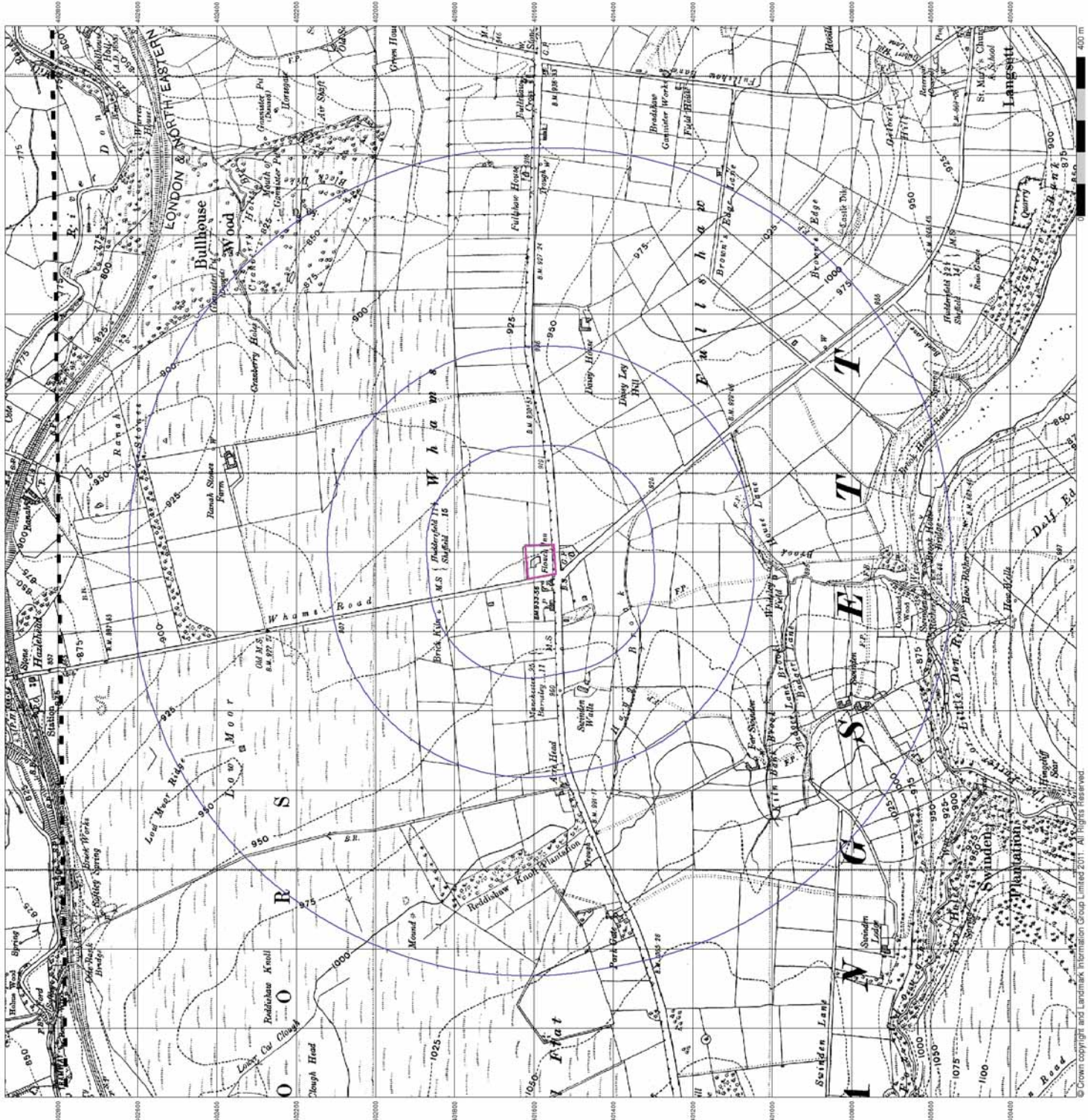


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



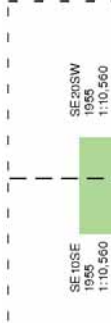
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Ordnance Survey Plan Published 1955

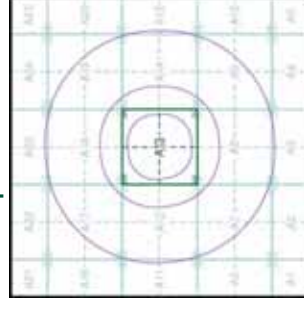
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at a scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2500 maps were replaced by 1:10,000 maps. The published data on these maps are often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A

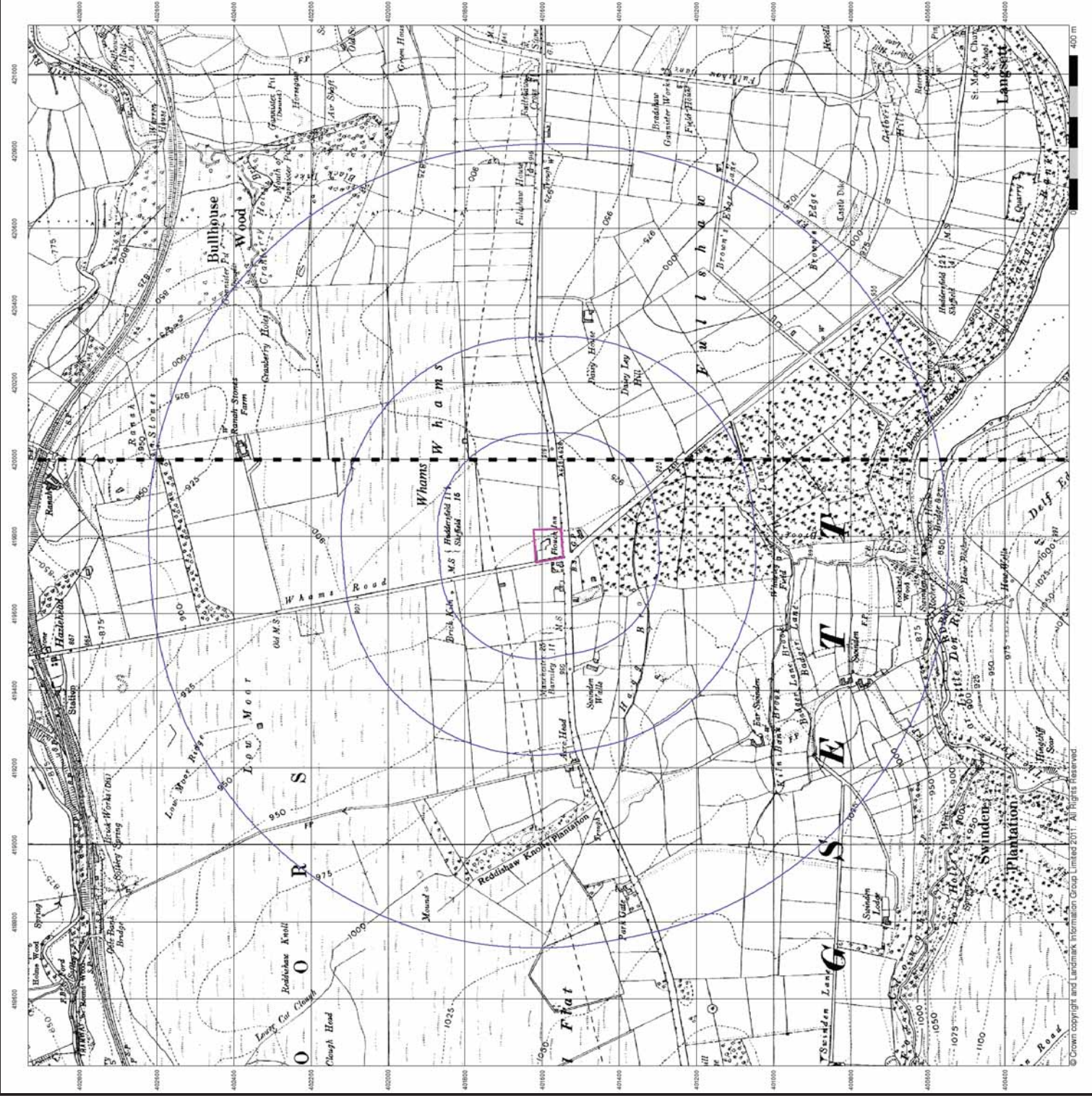


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
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 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



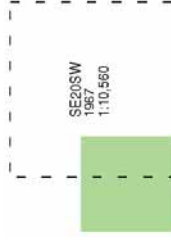
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Ordnance Survey Plan Published 1967

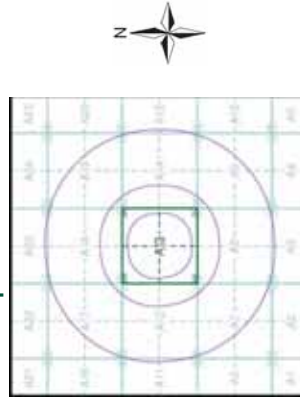
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at a scale adopted for England, Wales and Scotland in the 1840's. In 1854 a scale of 1:2500 was adopted for the 1:10,000 maps. The published data on these maps are often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A

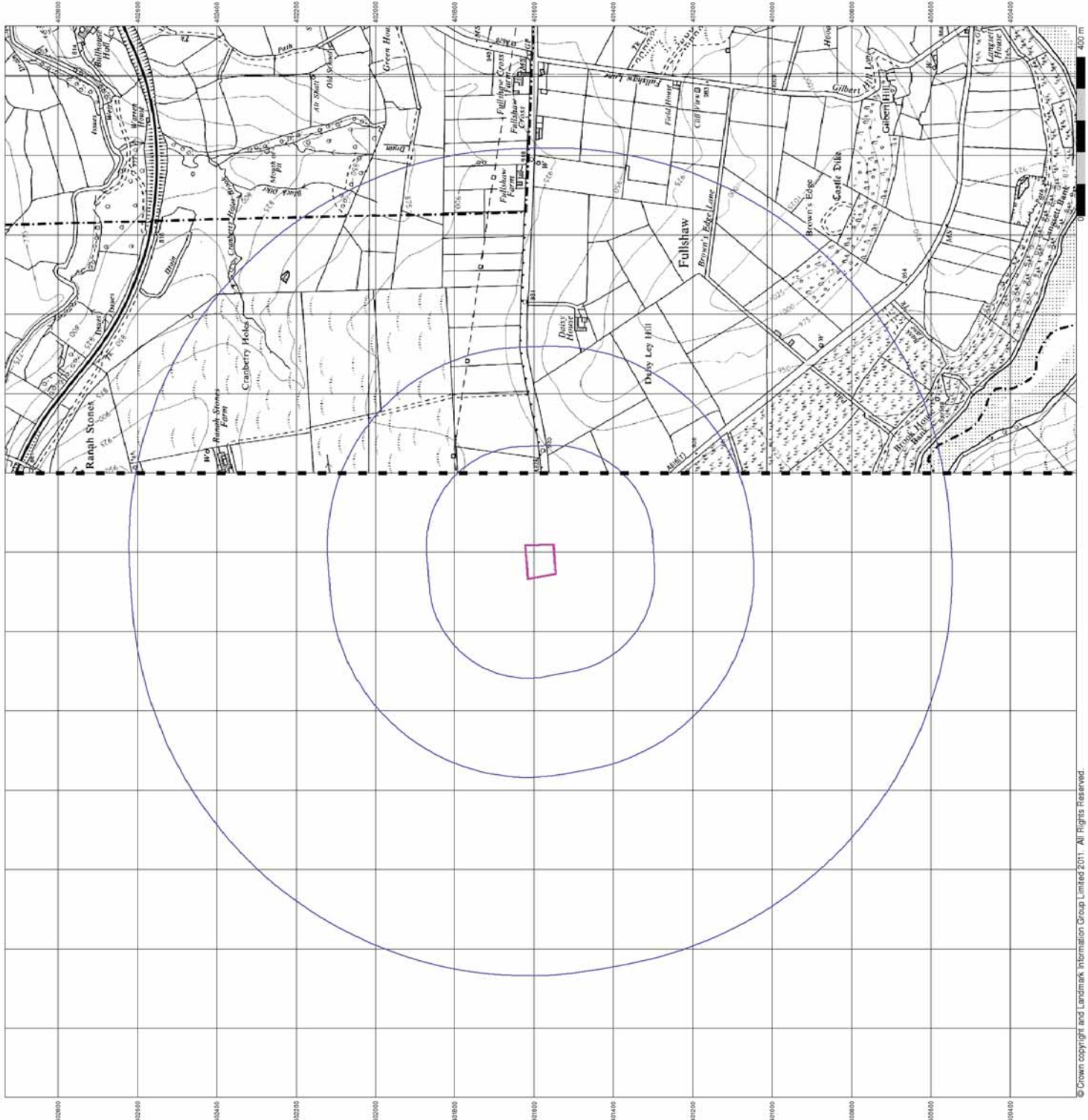


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH

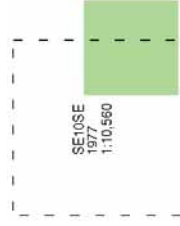


Ordnance Survey Plan Published 1977

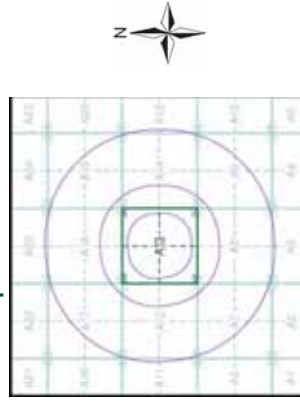
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at a scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2500 scale maps were updated to 1:10,000 maps. The published data on these maps are often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,000 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A

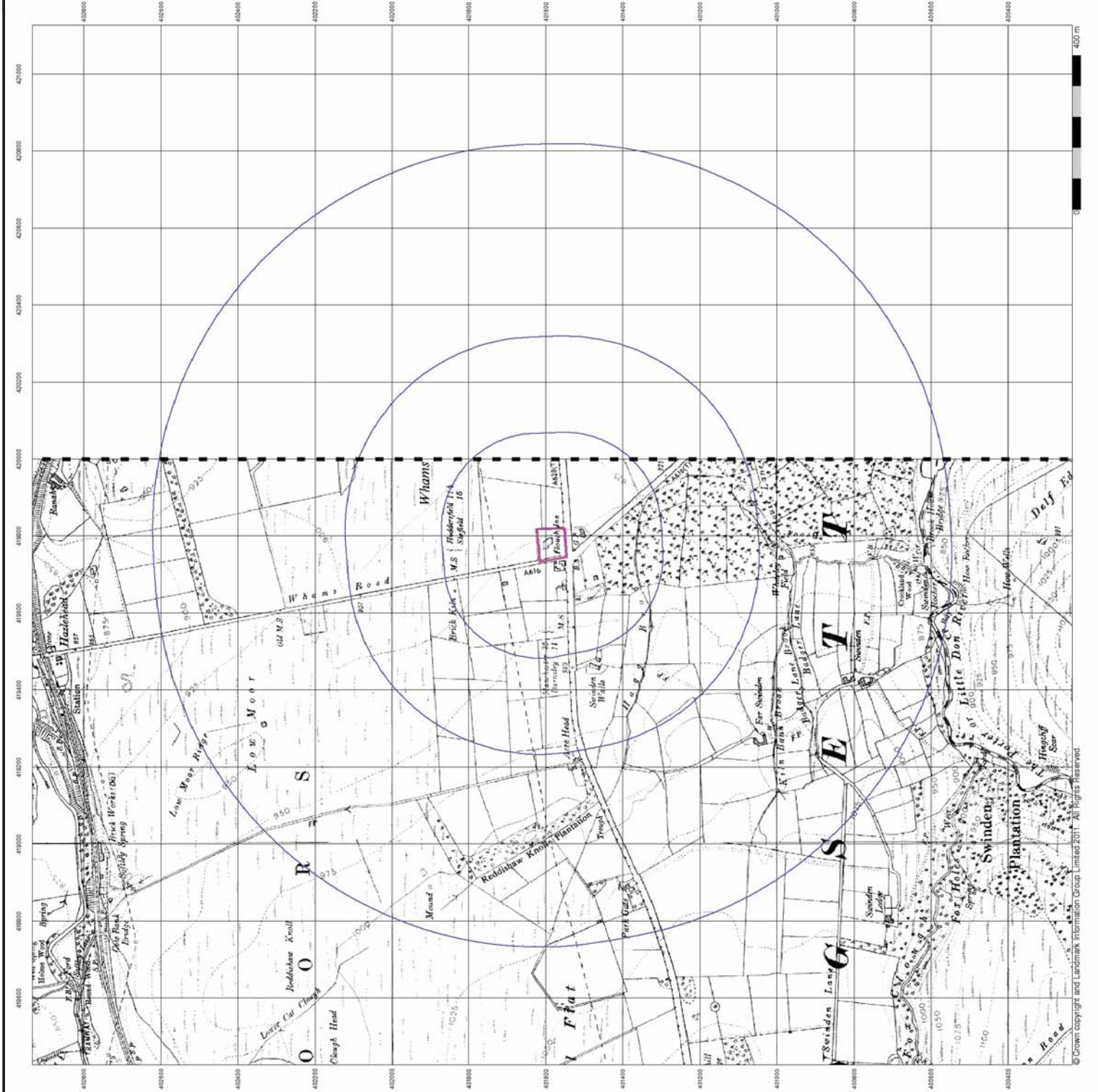


Order Details

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 Customer Ref: 34106/MJY/JAS
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 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH

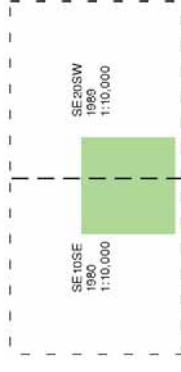


Ordnance Survey Plan Published 1980 - 1989

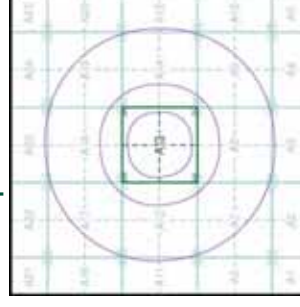
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at a scale of 1:10,000 for England, Wales and Scotland in the 1940's. In 1984, the Ordnance Survey published a series of maps at a scale of 1:10,000, which were used to update the 1:10,000 maps. The published data from these maps are often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,000 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



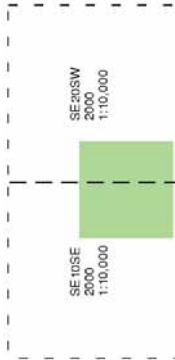
10k Raster Mapping

Published 2000

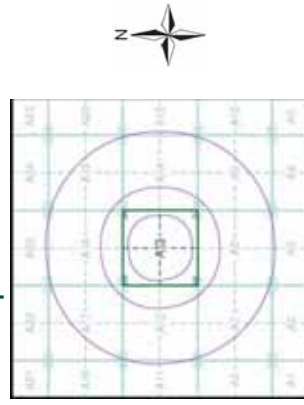
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour map series. These maps are published from 1970. The data is highly detailed showing buildings, roads and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information (including county, unitary authority, district, civil parish and constituency).

Map Name(s) and Date(s)



Historical Map - Slice A

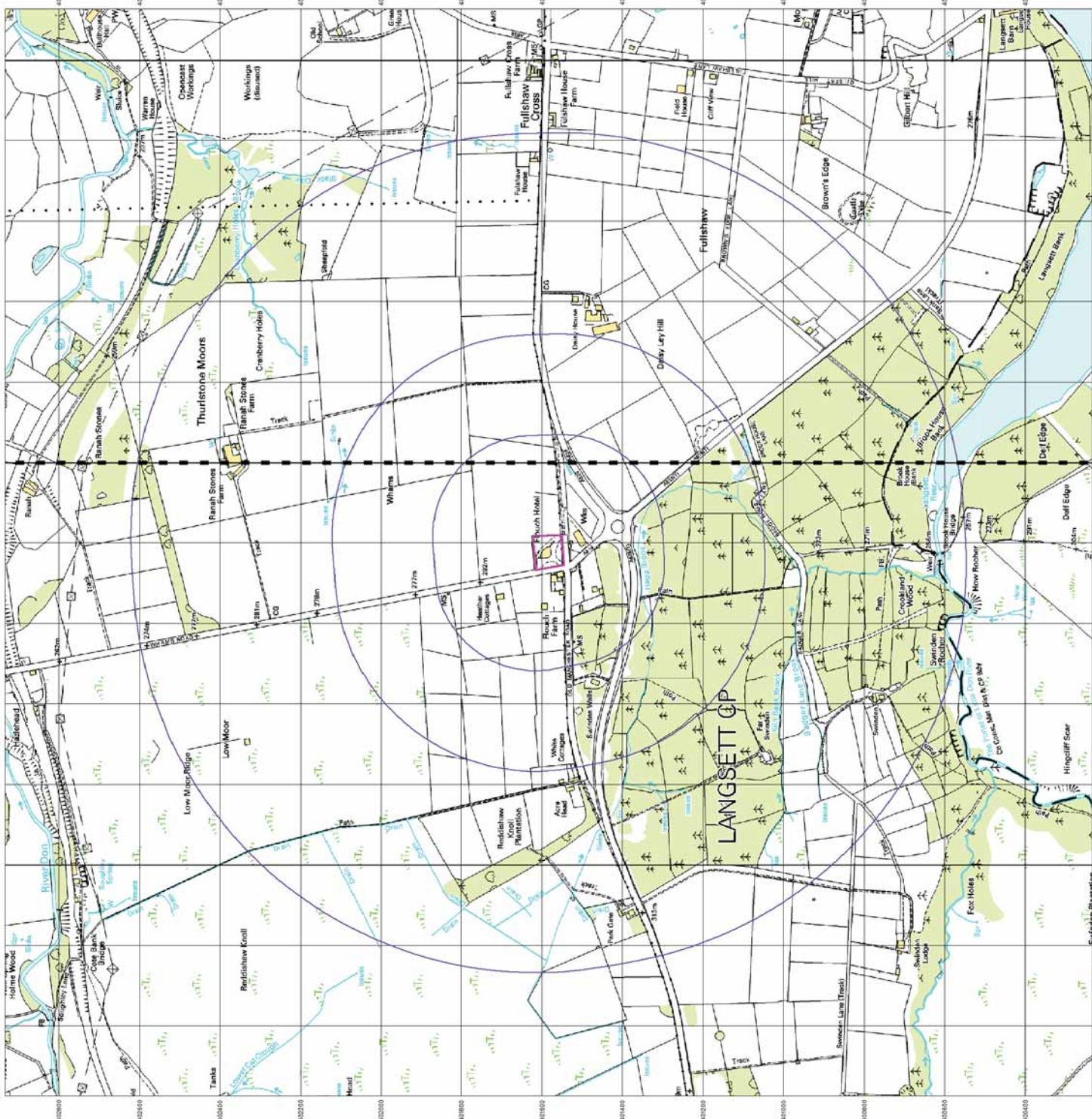


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



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10k Raster Mapping

Published 2006

Source map scale - 1:10,000

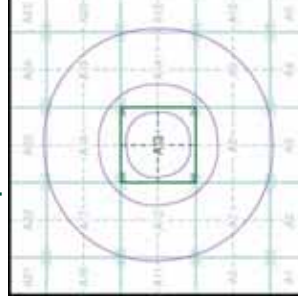
The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour topographic maps. These maps are published from 1970 onwards and are at a scale of 1:10,000. The data is highly detailed showing buildings, roads and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information (which includes county, unitary authority, district, civil parish and constituency).

Map Name(s) and Date(s)

SE10SE
2006
1:10,000

SE20SW
2006
1:10,000

Historical Map - Slice A

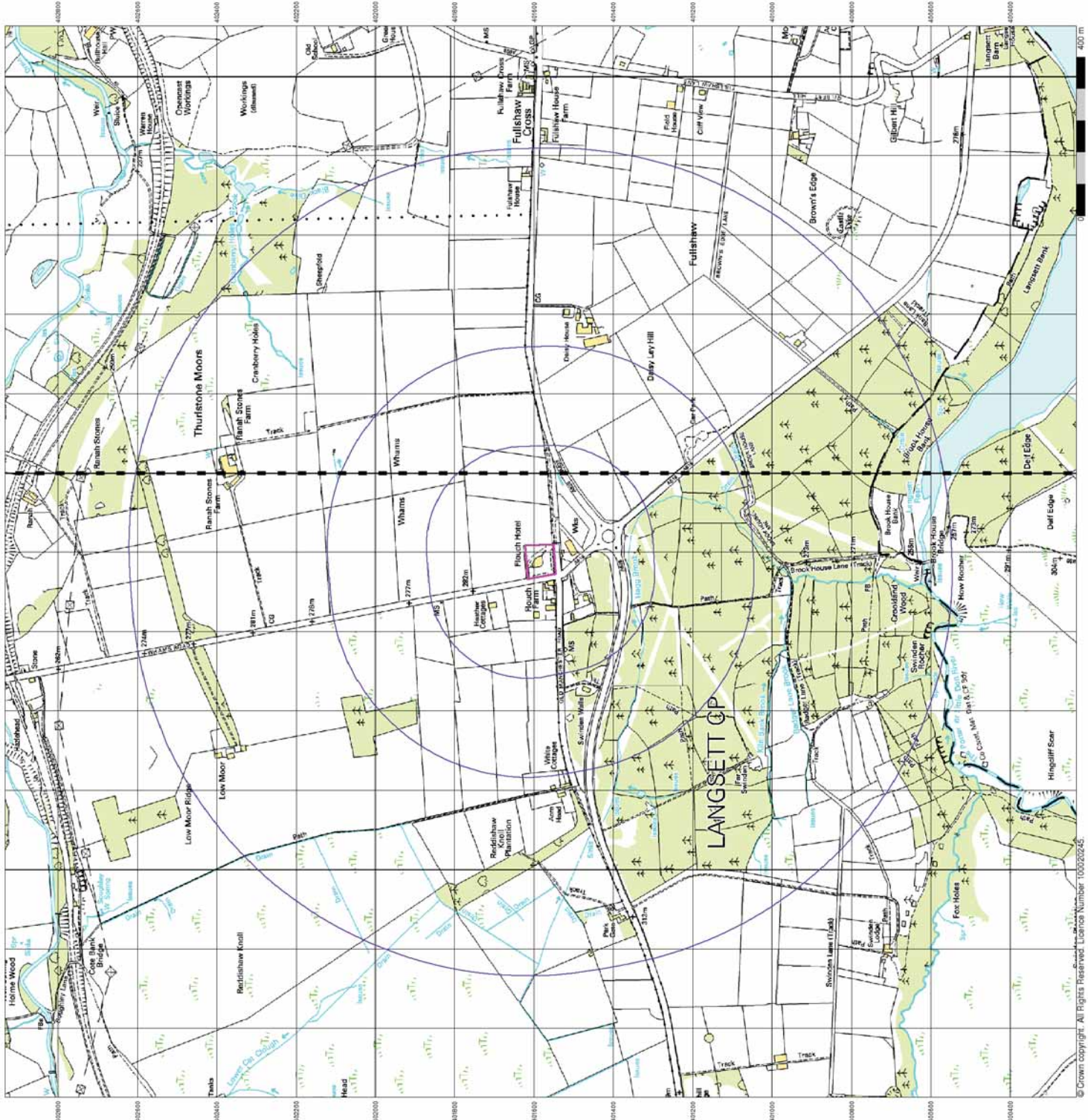


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



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10k Raster Mapping

Published 2011

Source map scale - 1:10,000

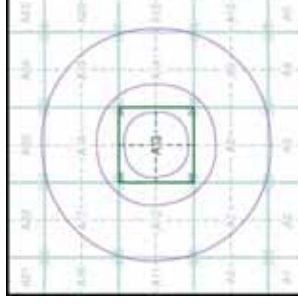
The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster maps. These maps are published from 1970 onwards and are highly detailed showing buildings, roads and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant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

Map Name(s) and Date(s)

SE10SE
2011
1:10,000

SE20SW
2011
1:10,000

Historical Map - Slice A

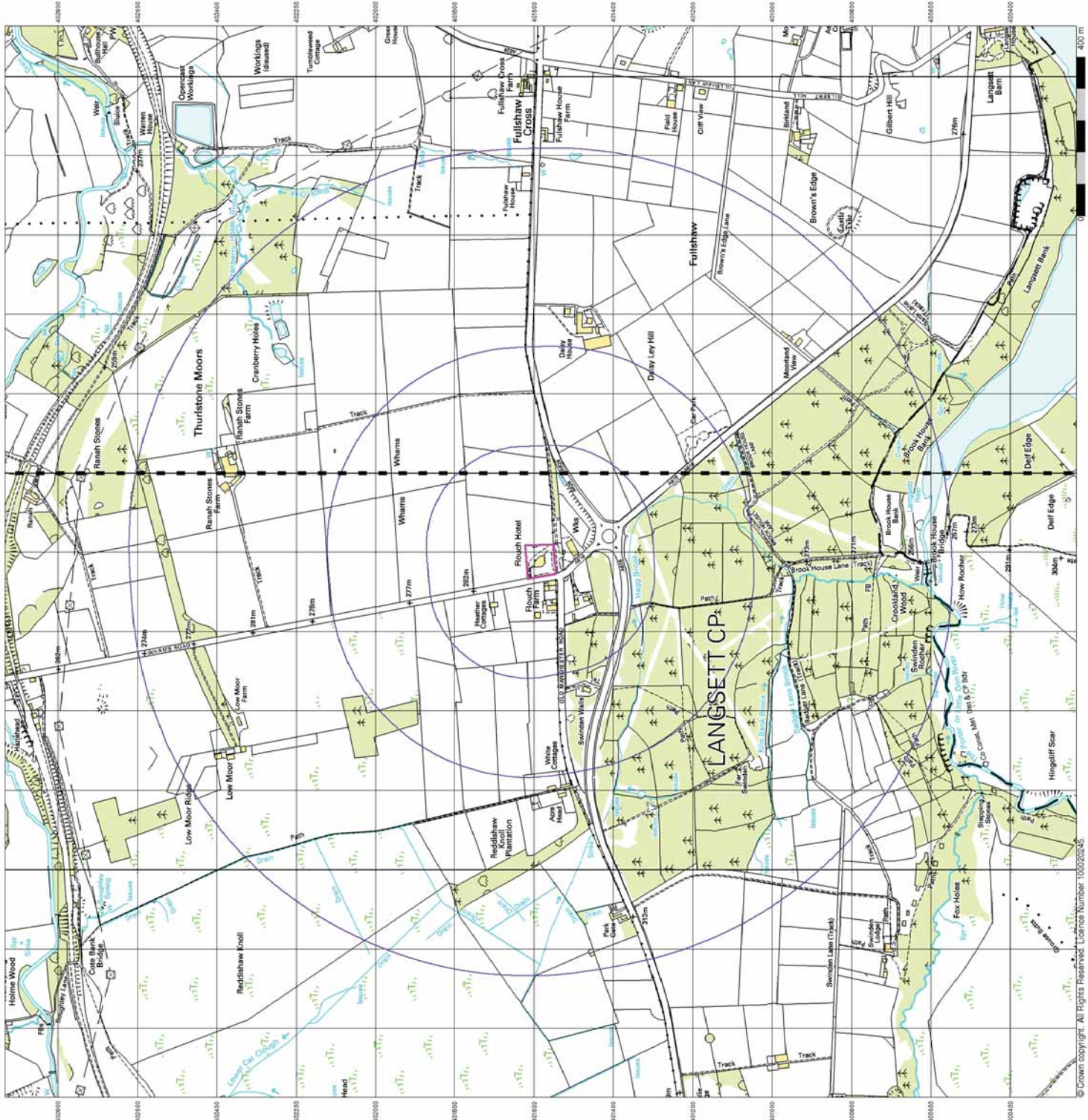


Order Details

Order Number: 35687595_1_1
Customer Ref: 34106/MJY/JAS
National Grid Reference: 419780, 401580
Slice: A
Site Area (Ha): 0.56
Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Yorkshire	1:2,500	1893	2
Yorkshire	1:2,500	1905	3
Yorkshire	1:2,500	1931	4
Ordnance Survey Plan	1:2,500	1964	5
Additional SIMs	1:2,500	1978 - 1991	6
Large-Scale National Grid Data	1:2,500	1992 - 1993	7
Large-Scale National Grid Data	1:2,500	1996	8

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

	Cliff		Slopes
	Rock		Top
	Boulders		Positioned Boulder
	Non-Confiferous Tree (surveyed)		Non-Confiferous Trees (not surveyed)
	Orchard Tree		Scrub
	Coppice, Osier		Reeds
	Rough Grassland		Heath
	Direction of water flow		Triangulation Station
	Electricity Transmission Line		Electricity Pylon
	Bench Mark		Roofed Building
	Civil parish/community boundary		District boundary
	County boundary		Boundary post/stone

Always appear in opposed pairs or groups of three

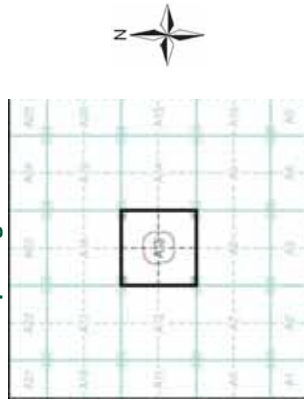
Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250

	Inactive Quarry, Chalk Pit or Clay Pit		Active Quarry, Chalk Pit or Clay Pit
	Roofed Building		Sloping Masonry
	Non-Confiferous Tree (surveyed)		Non-Confiferous Trees (not surveyed)
	Orchard Tree		Scrub
	Coppice, Osier		Reeds
	Rough Grassland		Heath
	Direction of water flow		Bench Mark
	Cave Entrance		Triangulation Station
	Electricity Transmission Line		Electricity Pylon
	County Boundary (Geographical)		County & Civil Parish Boundary
	Civil Parish Boundary		Admin. County or County Bor. Boundary
	London Borough Boundary		Symbol marking point where boundary merging changes

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

	Quarry		Gravel Pit		Sand Pit
	Clay Pit		Shingle		Refuse Heap
	Sloping Masonry		Flat Rock		Marsh
	Reeds		Osiers		Wood
	Furze		Brushwood		Orchard
	Mixed Wood		Ferry		Stepping Stones
	Ferry		Waterfall		Lock
	Trig. Station		Altitude at Trig. Station		Surface Level
	Bench Mark		Arrow denotes flow of water		Antiquities (site of)
	Embankment		Cutting		Road crossing Railway
	Level Crossing		Railway crossing Road		Road over River or Canal
	Road over single stream		River or Canal		County Boundary (Geographical)
	County & Civil Parish Boundary		Administrative County & Civil Parish Boundary		County Borough Boundary (England)
	County Borough Boundary (Scotland)		Boundary Post or Stone		Police Call Box
	Bridle Road		Foot Path		Signal Post
	Foot Path		Spring		Telephone Call Box
	Telephone Call Box		Moor Post or Ring		Well

Historical Map - Segment A13



Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
 National Grid Reference: 419780, 401580
 Site Area (Ha): A
 Search Buffer (m): 0.56
 100

Site Details

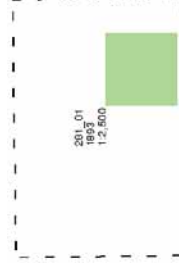
The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



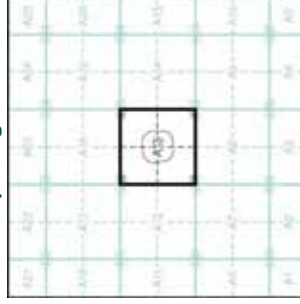
Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk

The historical maps shown were reproduced from maps predominantly held at a 1:2,500 scale for England, Wales and Scotland in the 1940s. In 1854, the Ordnance Survey adopted the metric system and produced a series of maps covering the whole of what was considered to be the populated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

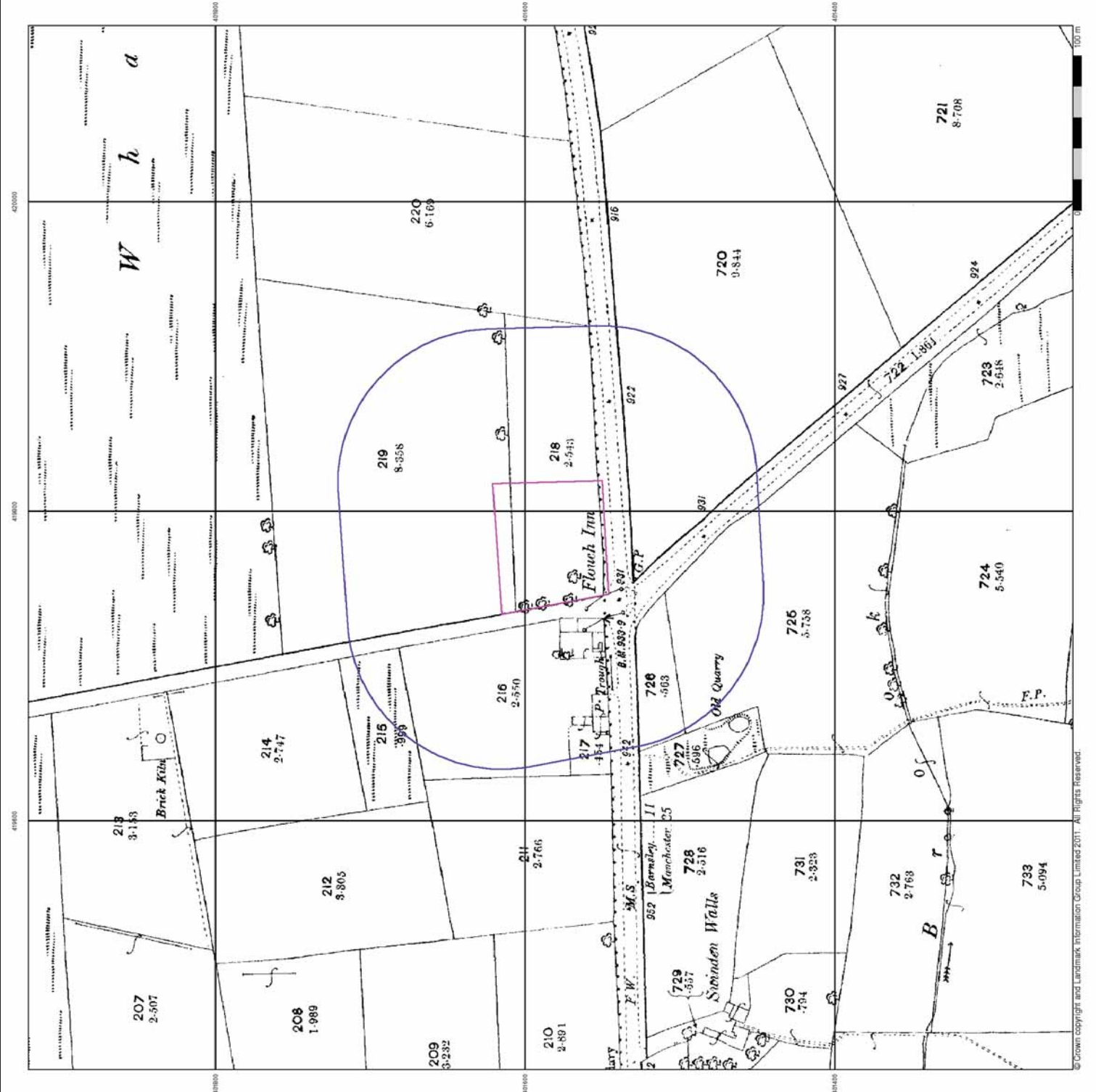


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 100

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH

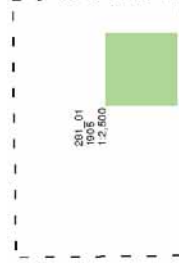


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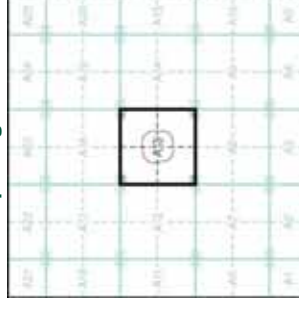
Yorkshire
Published 1905
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at a 1:2,500 scale for England, Wales and Scotland in the 1940s. The 1:2,500 scale maps were reproduced from the original maps published in 1864. The published date given below is often some years later than the surveyed date. Before 1938 all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

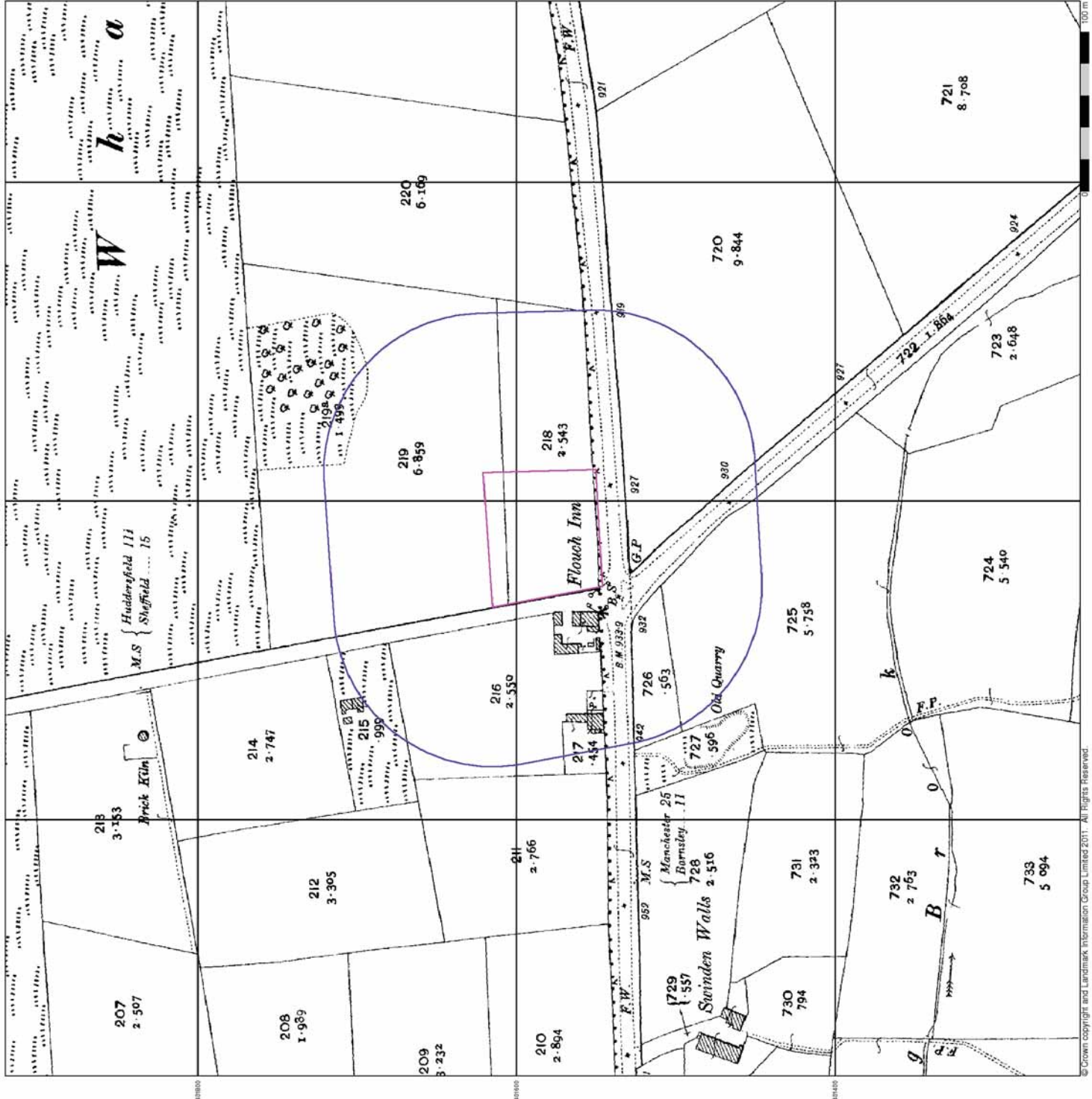


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 100

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



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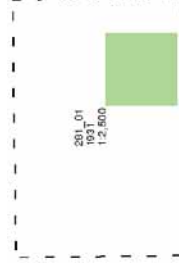
Yorkshire

Published 1931

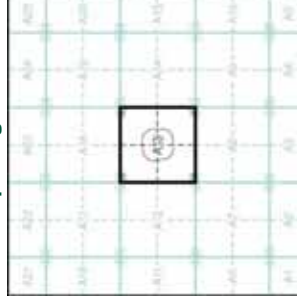
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at a 1:2,500 scale for England, Wales and Scotland in the 1940s. In 1864, the Ordnance Survey (OS) was established to produce a national map of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

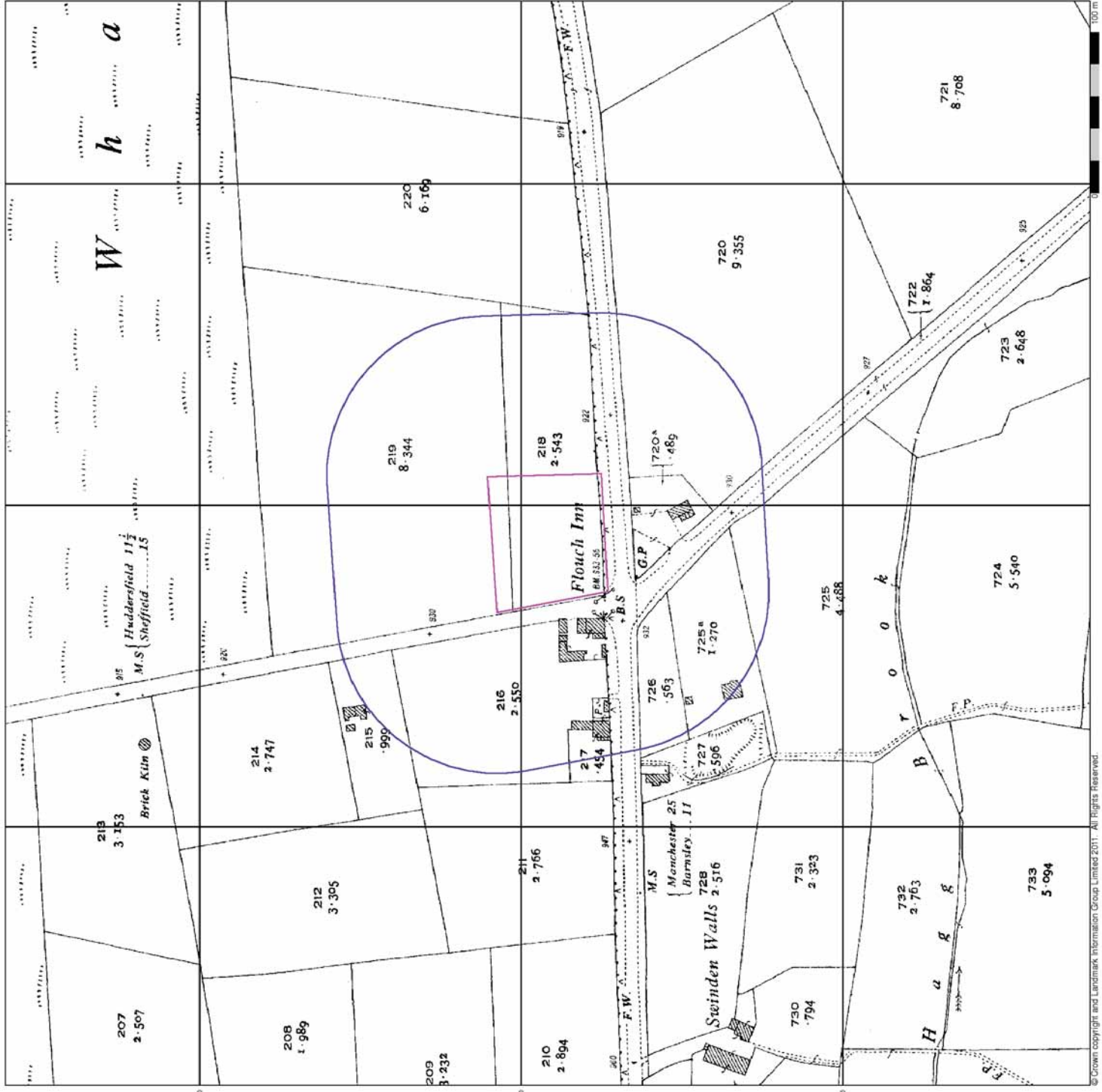


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 100

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH

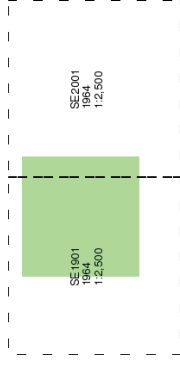


Ordnance Survey Plan Published 1964

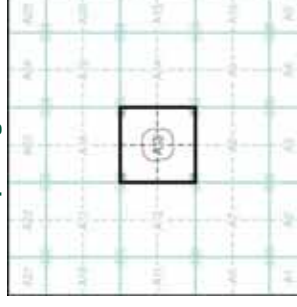
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at a 1:2,500 scale for England, Wales and Scotland in the 1940s. In 1964, the Ordnance Survey adopted the datum of 1938, which was based on the Cassini Projection. The whole of what was considered to be the unutilized parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

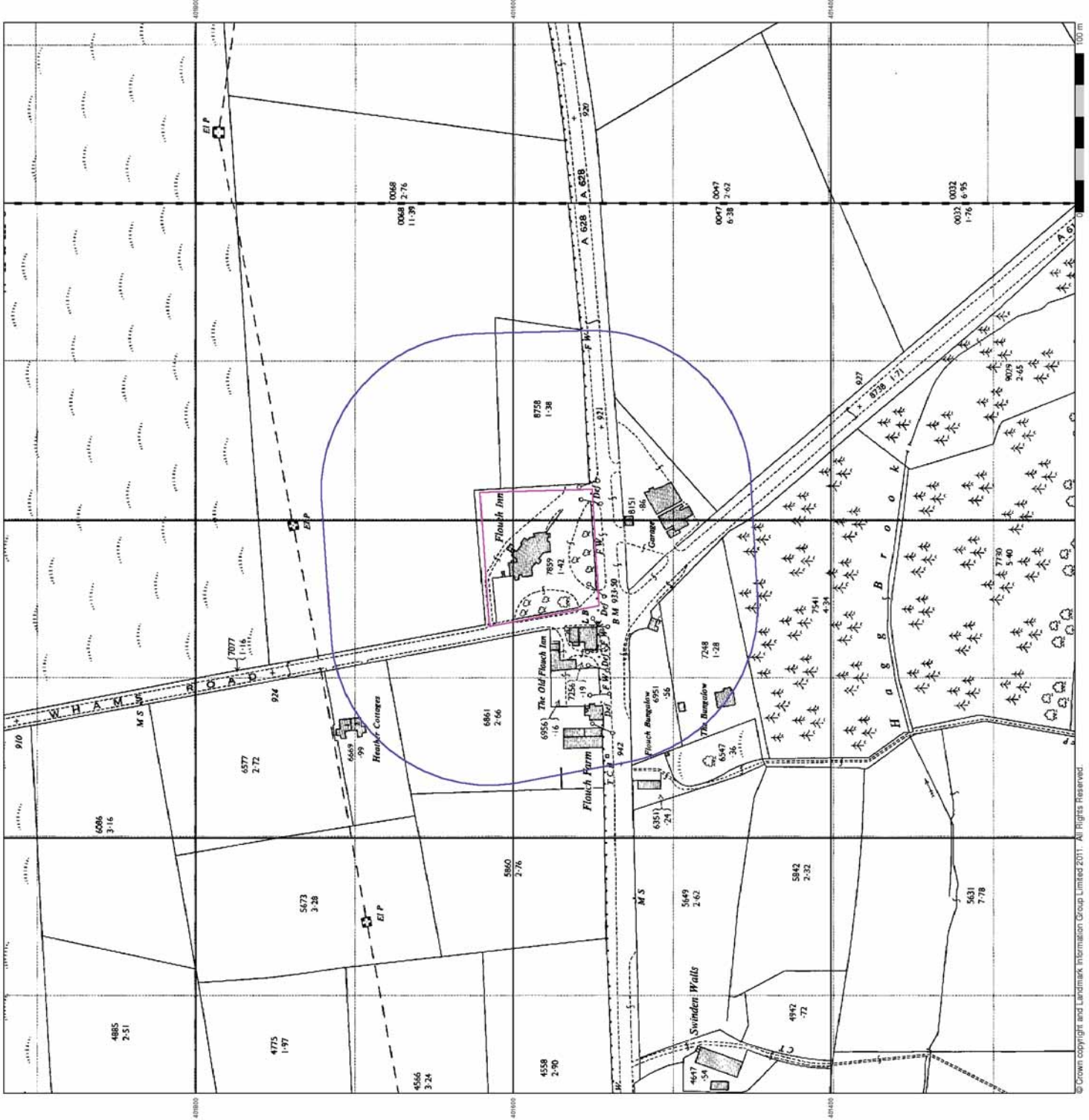


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 100

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



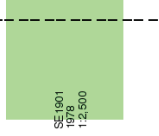
Additional SIMS

Published 1978 - 1991

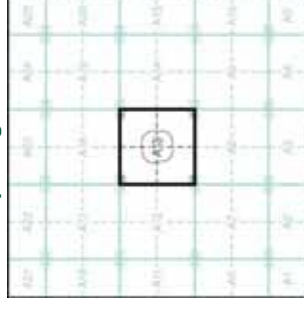
Source map scale - 1:2,500

The SIMS cards (Ordnance Survey's 'Survey of Information on Microfilm') are either color reduction mappings which were produced and published from 1947 to 1984, or contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13

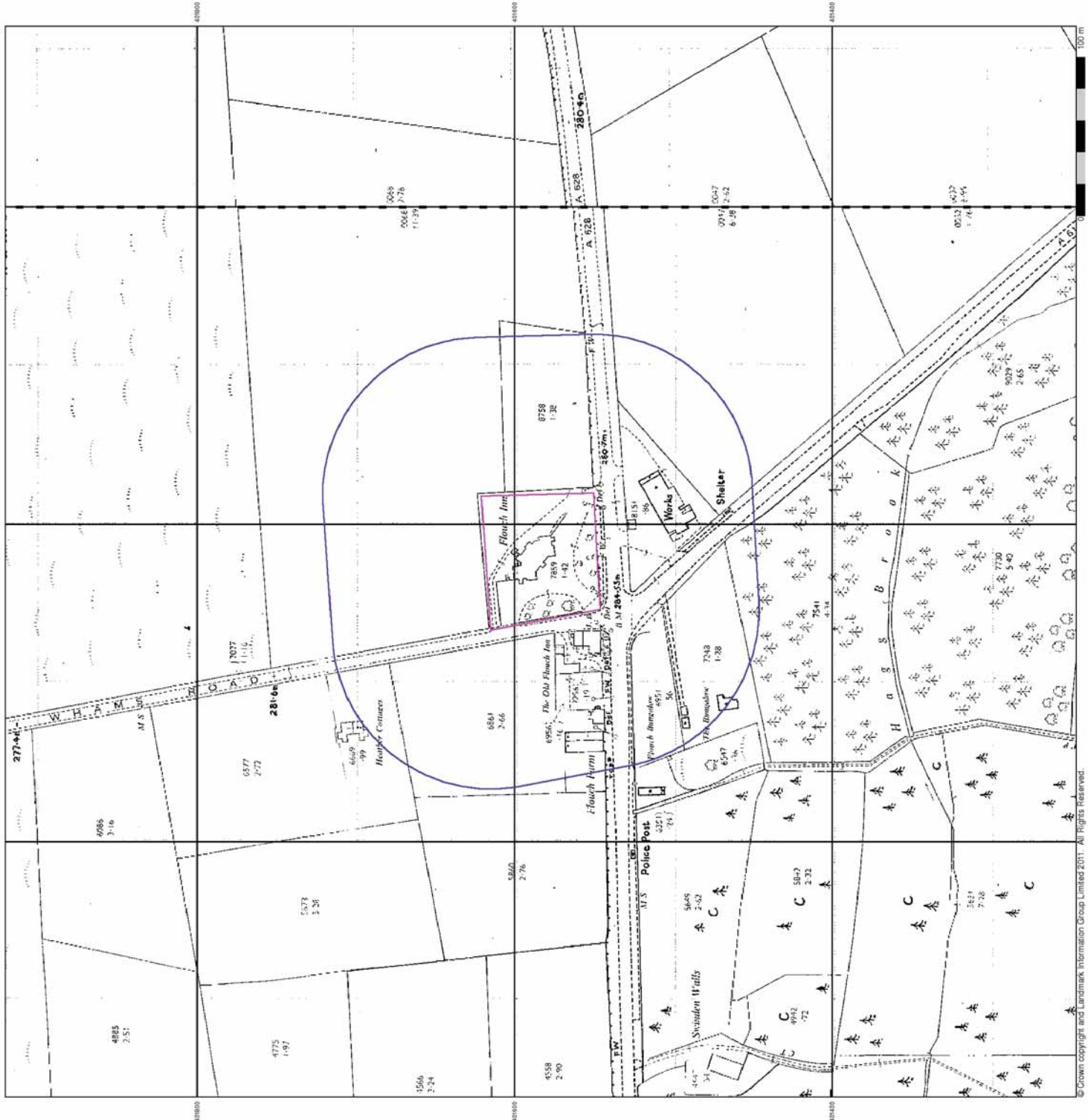


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 100

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH

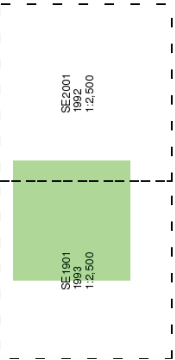


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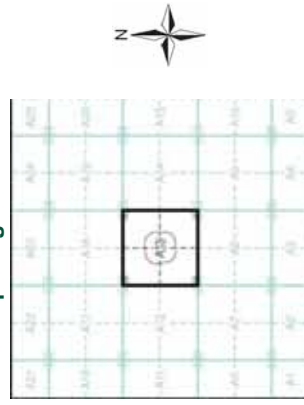
**Large-Scale National Grid Data
Published 1992 - 1993
Source map scale - 1:2,500**

Large Scale National Grid Data superseded SIM cards (Ordnance Survey's Survey Information on Microfilm) in 1992, and continued to be produced until 1993. These maps were produced by digital mapping and provide detailed information on roads, houses and fields, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13

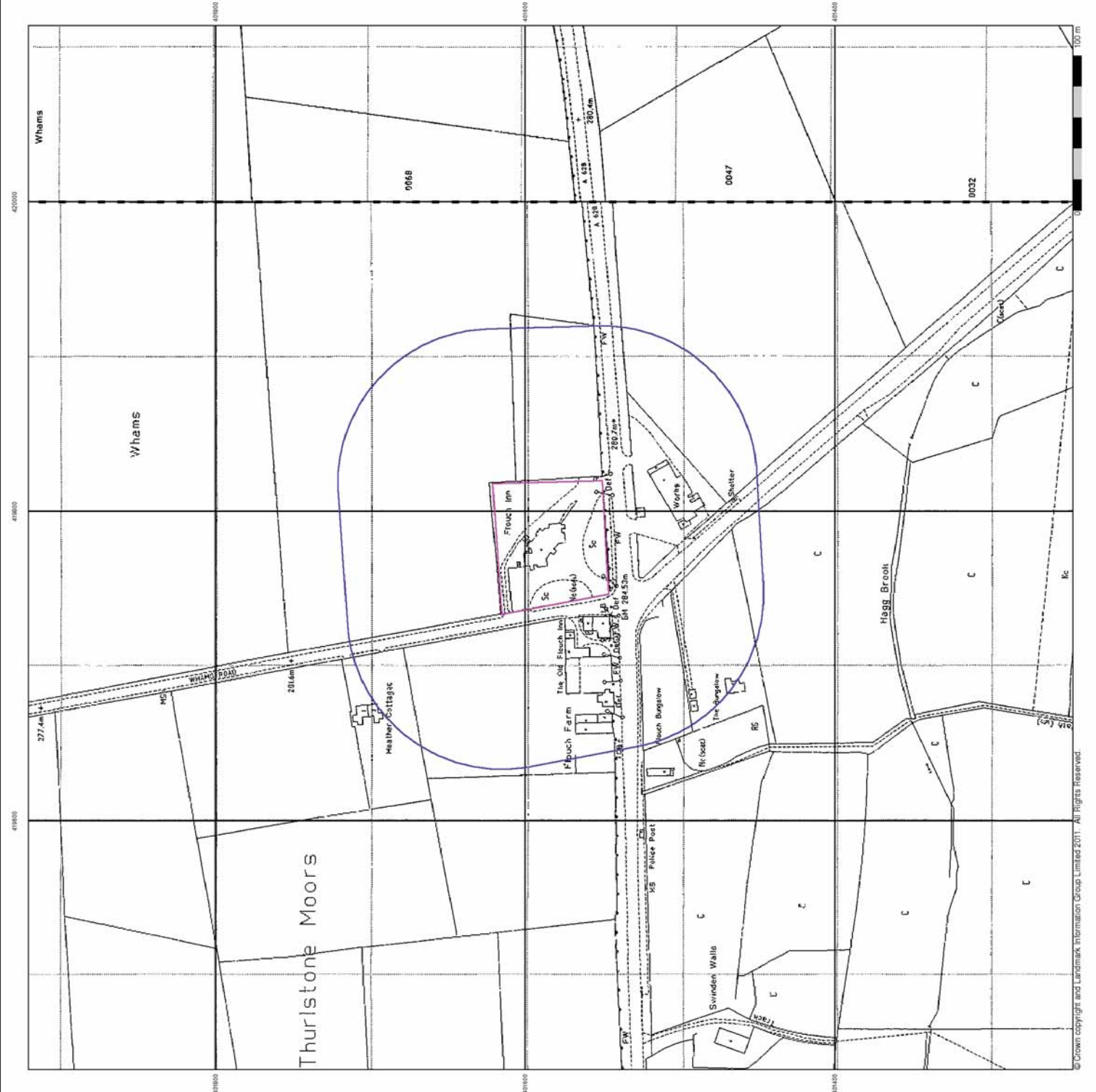


Order Details

Order Number: 35887595_1_1
Customer Ref: 34106/MJY/JAS
National Grid Reference: 419780, 401580
Slice: A
Site Area (Ha): 0.56
Search Buffer (m): 100

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



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**Large-Scale National Grid Data
Published 1996**

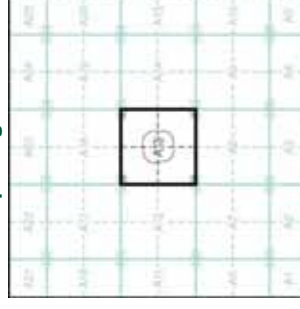
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13

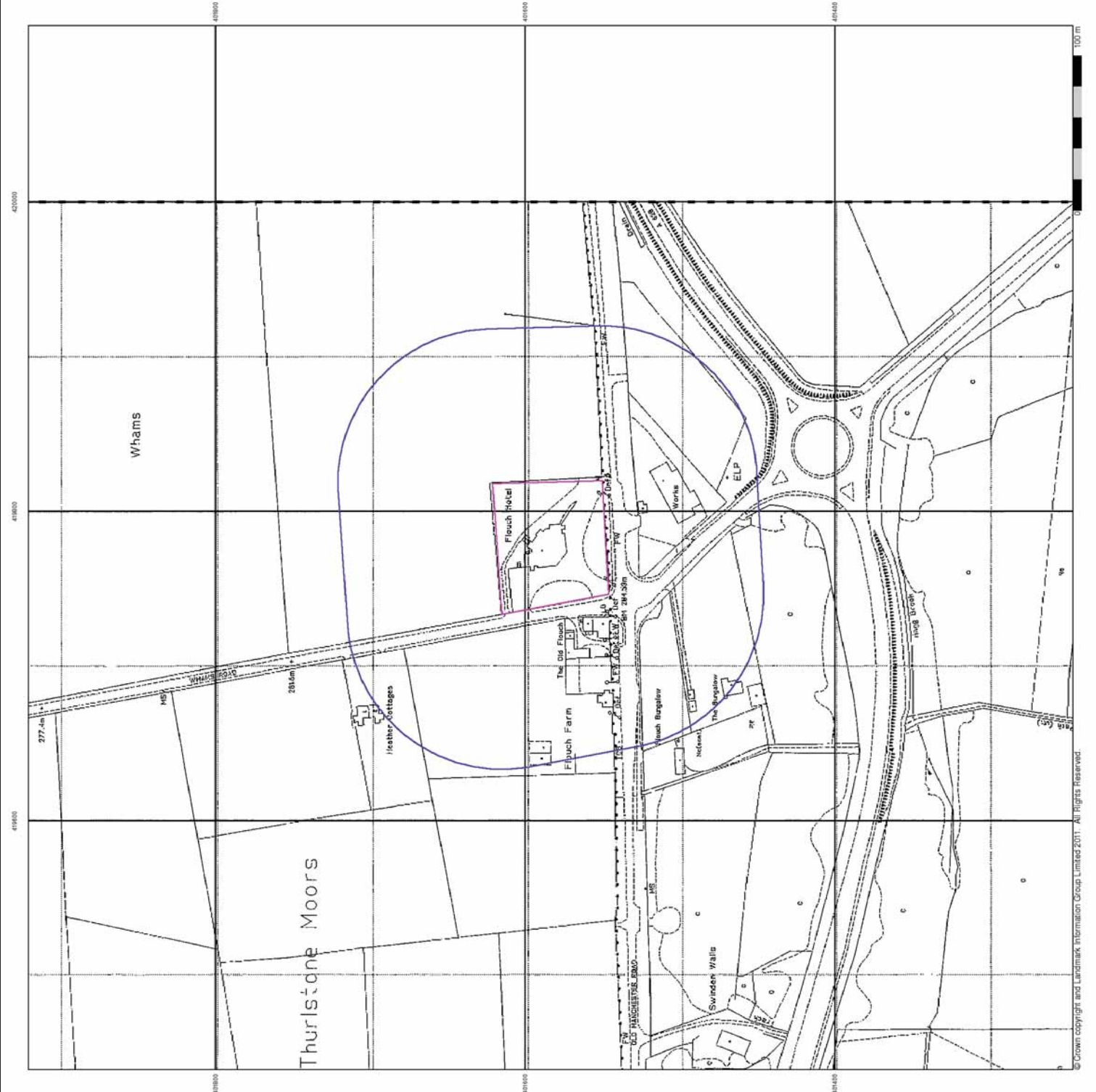


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 100

Site Details

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Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

35887595_1_1

Customer Reference:

34106/MJY/AS

National Grid Reference:

419780, 401580

Slice:

A

Site Area (Ha):

0.56

Search Buffer (m):

1000

Site Details:

The Old Flouch Inn

Flouch, Crow Edge

Sheffield

S36 4HH

Client Details:

Miss A Seymour

Eastwood & Partners Ltd

St Andrews House

23 Kingfield Road

Sheffield

S11 9AS

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	7
Hazardous Substances	-
Geological	8
Industrial Land Use	-
Sensitive Land Use	11
Data Currency	12
Data Suppliers	17
Useful Contacts	18

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

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

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Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and the Health Protection Agency.

Report Version v47.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1		1		1
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 1		Yes		
Pollution Incidents to Controlled Waters	pg 1		1	1	5
Prosecutions Relating to Authorised Processes					
Prosecutions Relating to Controlled Waters					
Registered Radioactive Substances					
River Quality	pg 2				1
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 2				5 (*9)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 6	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 6	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Recorded Landfill Sites					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS Recorded Mineral Sites	pg 8		3		4
BGS 1:625,000 Solid Geology	pg 9	Yes	n/a	n/a	n/a
Brine Compensation Area			n/a	n/a	n/a
Coal Mining Affected Areas	pg 9	Yes	n/a	n/a	n/a
Mining Instability	pg 9	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 9	Yes	Yes	n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 9	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 9	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards				n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 9		Yes	n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries					
Fuel Station Entries					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Areas of Adopted Green Belt	pg 11	1			
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas	pg 11		1		
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks	pg 11		1		
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 11	1			
Ramsar Sites					
Sites of Special Scientific Interest	pg 11				1
Special Areas of Conservation	pg 11				1
Special Protection Areas	pg 11				1

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	<p>Discharge Consents</p> <p>Operator: Flouch Engineering Co. Ltd Property Type: Trade (Unknown/Other) Location: Premises At Flouch, Hazelhead, Stocksbridge, Sheffield Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3692 Permit Version: 1 Effective Date: 21st June 1983 Issued Date: 21st June 1983 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib Of Cranberry Holes Brook Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961 Positional Accuracy: Located by supplier to within 100m</p>	A13NE (E)	182	1	420000 401600
2	<p>Discharge Consents</p> <p>Operator: Peakvaze Farm Property Type: Domestic Property (Single) Location: Wham Road Low Moor, Hazelhead, Huddersfield, West Yorkshire Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8326 Permit Version: 1 Effective Date: 13th May 2004 Issued Date: 13th May 2004 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Land Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m</p>	A18NW (N)	820	1	419500 402400
	<p>Nearest Surface Water Feature</p>	A13SE (E)	153	-	419970 401526
3	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Restaurant/Hotels/Pubs Location: Tributary Of Don From Flouch Inn, LANGSETT Authority: Environment Agency, North East Region Pollutant: Oils - Vegetable Oil Note: River Don; Fish Killed: No Information Incident Date: 8th October 1998 Incident Reference: SH980361 Catchment Area: Don Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Unknown</p>	A13SE (S)	49	1	419800 401500
4	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Road Location: A616 Near , Flouch Cross Roads Authority: Environment Agency, North East Region Pollutant: Oils - Petrol Note: Little Don River; No Fish Killed Incident Date: 11th May 1998 Incident Reference: SH980177 Catchment Area: Don Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p>	A8NE (SE)	394	1	420001 401201
5	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Farm Location: Penistone/Source Don Afu Authority: Environment Agency, North East Region Pollutant: Silage Liquor Note: Not Supplied Incident Date: 30th June 1991 Incident Reference: 124079 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m</p>	A14SW (E)	583	1	420400 401500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	Pollution Incidents to Controlled Waters Property Type: Farm Location: Penistone/Source Don Afu Authority: Environment Agency, North East Region Pollutant: Silage Liquor Note: Not Supplied Incident Date: 17th June 1992 Incident Reference: 134405 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A14NE (E)	924	1	420700 401895
6	Pollution Incidents to Controlled Waters Property Type: Farm Location: Penistone/Source Don Afu Authority: Environment Agency, North East Region Pollutant: Agricultural: Yard Run Off (Dirty Water) Note: Not Supplied Incident Date: 22nd May 1992 Incident Reference: 133358 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14NE (E)	926	1	420700 401900
7	Pollution Incidents to Controlled Waters Property Type: Farm Location: Penistone/Source Don Afu Authority: Environment Agency, North East Region Pollutant: Animal Waste/Slurry Note: Not Supplied Incident Date: 29th April 1992 Incident Reference: 133054 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SE (NE)	959	1	420700 401995
7	Pollution Incidents to Controlled Waters Property Type: Farm Location: Penistone/Source Don Afu Authority: Environment Agency, North East Region Pollutant: Animal Waste/Slurry Note: Not Supplied Incident Date: 18th May 1994 Incident Reference: 152030 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A19SE (NE)	961	1	420700 402000
	River Quality Name: Little_Don_River GQA Grade: River Quality B Reach: Hordron_Bank_Langset Estimated Distance (km): 7.4 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A8SE (S)	976	1	420038 400599
8	Water Abstractions Operator: Yorkshire Water Plc Licence Number: 2/27/05/014 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: Water Undertaking Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 1318 Yearly Rate (m3): 386410 Details: Millstone Grit Licence Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	557	1	420100 402100

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	<p>Water Abstractions</p> <p>Operator: Mr J O Higgins Licence Number: 2/27/05/145 Permit Version: 100 Location: Well - Millstone Grit - Stocksbridge Authority: Environment Agency, North East Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Moorland View, Langsett, Stockbridge, Sheffield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 2nd January 1967 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A9SW (SE)	809	1	420300 400900
10	<p>Water Abstractions</p> <p>Operator: Yorkshire Water Plc Licence Number: 2/27/05/015 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: Water Undertaking Abstraction Type: Not Supplied Source: Spring Daily Rate (m3): 0 Yearly Rate (m3): 10910 Details: Licence Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A12SW (W)	842	1	418900 401500
11	<p>Water Abstractions</p> <p>Operator: Mr J O Higgins Licence Number: 2/27/05/145 Permit Version: 100 Location: Well - Millstone Grit - Stocksbridge Authority: Environment Agency, North East Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 2 Yearly Rate (m3): 818 Details: Moorland View, Langsett, Stockbridge, Sheffield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 2nd January 1967 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A9NE (SE)	875	1	420500 401000
12	<p>Water Abstractions</p> <p>Operator: A Bridge Licence Number: 2/27/05/095 Permit Version: 100 Location: Well - Coal Measures - Sheffield Authority: Environment Agency, North East Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 0 Yearly Rate (m3): 1818 Details: Parkgate Farm, Thurlstone Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th March 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A12SW (W)	957	1	418800 401400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Yorkshire Water Plc Licence Number: 2/27/05/018 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: Water Undertaking Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 5955 Yearly Rate (m3): 1504726 Details: Coal Measures Licence Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A22NE (N)	1425	1	419400 403000
	Water Abstractions Operator: William Hoyland & Company Limited Licence Number: 2/27/05/170 Permit Version: Not Supplied Location: Bullhouse Mill Works, Lee Lane, Millhouse, SHEFFIELD, South Yorkshire Authority: Environment Agency, North East Region Abstraction: Cooling Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 273 Yearly Rate (m3): 63640 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A25SW (NE)	1511	1	420900 402675
	Water Abstractions Operator: Booth Brothers Ltd Licence Number: Ne/027/0005/007 Permit Version: 1 Location: River Don - Bullhouse Mill, Penistone Authority: Environment Agency, North East Region Abstraction: Electricity: Transfer Between Sources Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Bullhouse Mill, Penistone Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 12th October 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A25SW (NE)	1513	1	420902 402675
	Water Abstractions Operator: Mr W H Booth Licence Number: 2/27/05/183 Permit Version: 100 Location: Borehole - Coal Measures - Penistone Sheffield Authority: Environment Agency, North East Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 20 Yearly Rate (m3): 7330 Details: Millhouse Green, Penistone, Nr. Sheffield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 29th February 1996 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1820	1	420200 403400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: S R Marsh & A J Punshon Licence Number: 2/27/05/195 Permit Version: 1 Location: Borehole-Millstone Grit-Bord Hill-Flouch Authority: Environment Agency, North East Region Abstraction: Commercial Private Water Undertaking: Drinking; Cooking; Sanitary; Washing; (Small Garden)</p> <p>Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: The Dog And Partridge,Bord Hill,Flouch,Sheffield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th October 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	(W)	1905	1	417890 401120
	<p>Water Abstractions</p> <p>Operator: Booth Brothers Ltd Licence Number: Ne/027/0005/008 Permit Version: 1 Location: Borehole - Coal Measures - Bullhouse Mill Authority: Environment Agency, North East Region Abstraction: Paper And Printing; Heat Pump Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 11th January 2011 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A25NE (NE)	1911	1	421190 402950
	<p>Water Abstractions</p> <p>Operator: S R Marsh & A J Punshon Licence Number: 2/27/05/091 Permit Version: 101 Location: Spring-Hazlehead-Penistone Authority: Environment Agency, North East Region Abstraction: Hotels; Public Houses And Conference Centres: Drinking; Cooking; Sanitary; Washing; (Small Garden)</p> <p>Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Dog & Partridge Inn, Broadhills, Hazlehead, Penistone Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th September 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	(W)	1997	1	417800 401100
	<p>Water Abstractions</p> <p>Operator: Mr & Mrs I & J Winch Licence Number: 2/27/05/091 Permit Version: 100 Location: Spring-Hazlehead-Penistone Authority: Environment Agency, North East Region Abstraction: Hotels; Public Houses And Conference Centres: Drinking; Cooking; Sanitary; Washing; (Small Garden)</p> <p>Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 2 Yearly Rate (m3): 273 Details: Dog & Partridge Inn, Broadhills, Hazlehead, Penistone Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 24th June 1988 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	(W)	1997	1	417800 401100

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: J W Robinson Licence Number: 2/27/05/128 Permit Version: 100 Location: Spring-Langsett-Near Sheffield Authority: Environment Agency, North East Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 0 Yearly Rate (m3): 195 Details: Ellerslie Lodge, Hazlehead, Langsett, Sheffield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 12th September 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1997	1	417800 401100
	Groundwater Vulnerability Soil Classification: Soils of Low Leaching Potential - Soils in which pollutants are unlikely to penetrate the soil layer because water movement is largely horizontal or they have large ability to attenuate diffuse pollutants. Lateral flow from these soils contribute to groundwater recharge elsewhere in the catchment Map Sheet: Sheet 11 South Pennines Scale: 1:100,000	A13SE (E)	0	1	419812 401573
	Groundwater Vulnerability Soil Classification: Soils of High Leaching Potential (H3)- Coarse textured or moderately shallow soils which readily transmit non-absorbed pollutants and liquid discharges but which have some ability to attenuate absorbed pollutants because of their large clay or organic matter contents Map Sheet: Sheet 11 South Pennines Scale: 1:100,000	A13NE (SE)	0	1	419779 401585
	Drift Deposits None				
	Bedrock Aquifer Designations Aquifer Desination: Secondary Aquifer - A	A13NE (SE)	0	2	419779 401585
	Superficial Aquifer Designations No Data Available				
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Barnsley Metropolitan Borough Council - Has supplied landfill data		0	8	419779 401585
	Local Authority Landfill Coverage Name: Sheffield Metropolitan District Council - Has not been able to supply Landfill data		803	9	419930 400755

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Swinden Walls Location: Thurlstone Moor, Penistone, Sheffield, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 109943 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m</p>	A13SW (SW)	118	2	419640 401495
14	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Swinden Walls Location: Thurlstone Moor, Penistone, Sheffield, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 109941 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m</p>	A13NW (NW)	126	2	419631 401688
15	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Flouch Inn Location: Flouch Inn, Crow Edge, Penistone, Derbyshire Source: British Geological Survey, National Geoscience Information Service Reference: 34830 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m</p>	A13NW (NW)	245	2	419643 401842
16	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Low Moor Quarry Location: Thurlstone Moor, Penistone, Sheffield, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 109939 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m</p>	A18SW (N)	581	2	419596 402179
17	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Far Swinden Location: Thurlstone Moor, Penistone, Sheffield, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 109944 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m</p>	A7NE (SW)	681	2	419218 401116
18	<p>BGS Recorded Mineral Sites</p> <p>Site Name: Reddishaw Knoll Plantation Location: Thurlstone Moor, Penistone, Sheffield, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 109942 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m</p>	A12NW (W)	719	2	419016 401650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	BGS Recorded Mineral Sites Site Name: Reddishaw Knoll Location: Thurlstone Moor, Penistone, Sheffield, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 109938 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A17SW (W)	869	2	418926 401936
	BGS 1:625,000 Solid Geology Description: Namurian (Millstone Grit Series)	A13NE (SE)	0	2	419779 401585
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13NE (SE)	0	3	419779 401585
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13NE (SE)	0	-	419779 401585
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	2	419779 401585
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	181	2	420000 401585
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	2	419779 401585
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	181	2	420000 401585
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	2	419779 401585
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	181	2	420000 401585
	Potential for Ground Dissolution Stability Hazards No Hazard				
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	2	419779 401585
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	181	2	420000 401585
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	217	2	419607 401379
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	2	419779 401585
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	181	2	420000 401585
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	2	419779 401585
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	96	2	419823 401450

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	181	2	420000 401585
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	186	2	420000 401508
	Radon Potential - Radon Affected Areas Affected Area: The property is in a lower probability radon area, as less than 1% of homes are above the action level Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	2	419779 401585
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (SE)	0	2	419779 401585

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	Areas of Adopted Green Belt Authority: Barnsley Metropolitan Borough Council, Planning Department Plan Name: Barnsley Unitary Development Plan Status: Adopted Plan Date: 31st December 2000	A13NE (SE)	0	4	419779 401585
21	Environmentally Sensitive Areas Name: North Peak Multiple Areas: N Total Area (m2): 549794670.58 Source: Natural England	A13SW (W)	8	6	419731 401582
22	National Parks Name: Peak District Multiple Area: N Area (m2): 1437831812.87 Source: Natural England Status: Fully Designated - designated as a National Park Designation Date: 1st April 1951	A13SW (W)	8	6	419732 401581
23	Nitrate Vulnerable Zones Name: Not Supplied Description: NVZ Deferred Slurry Storage Area Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	A13NE (SE)	0	7	419779 401585
24	Sites of Special Scientific Interest Name: The Dark Peak Multiple Areas: Y Total Area (m2): 318237953.4 Source: Natural England Reference: 1003028 Designation Details: EC Special Protection Area Designation Date: 8th July 1993 Date Type: Notified Designation Details: Geological Conservation Review Designation Date: 8th July 1993 Date Type: Notified Designation Details: National Park Designation Date: 8th July 1993 Date Type: Notified Designation Details: National Trust Reserve Designation Date: 8th July 1993 Date Type: Notified Designation Details: Nature Conservation Review Designation Date: 8th July 1993 Date Type: Notified Designation Details: Special Area Of Conservation Designation Date: 8th July 1993 Date Type: Notified	A8SW (S)	927	6	419742 400619
25	Special Areas of Conservation Name: South Pennine Moors Multiple Areas: Y Total Area (m2): 650255000.13 Source: Natural England Reference: UK0030280 Status: Candidate	A8SW (S)	927	6	419742 400619
26	Special Protection Areas Name: Peak District Moors (South Pennine Moors Phase 1) Multiple Areas: Y Total Area (m2): 453005651.3 Source: Natural England Reference: UK9007021 Designation Date: Not Supplied	A8SW (S)	927	6	419742 400619

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Sheffield City Council - Environmental Protection Service Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards High Peak Borough Council - Environment and Health Department Kirklees Metropolitan Borough Council - Planning Services	April 2011 July 2011 July 2011 October 2010	Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - Midlands Region Environment Agency - North East Region Environment Agency - North West Region	April 2011 April 2011 April 2011	Quarterly Quarterly Quarterly
Enforcement and Prohibition Notices Environment Agency - Midlands Region Environment Agency - North East Region	July 2011 July 2011	Quarterly Quarterly
Integrated Pollution Controls Environment Agency - Midlands Region Environment Agency - North East Region	October 2008 October 2008	Not Applicable Not Applicable
Integrated Pollution Prevention And Control Environment Agency - Midlands Region Environment Agency - North East Region	April 2011 April 2011	Quarterly Quarterly
Local Authority Integrated Pollution Prevention And Control Kirklees Metropolitan Borough Council - Environmental Health Department Sheffield City Council - Environmental Protection Service Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards High Peak Borough Council - Environmental Health Department	April 2010 February 2011 January 2011 March 2011	Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Controls Kirklees Metropolitan Borough Council - Environmental Health Department Sheffield City Council - Environmental Protection Service Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards High Peak Borough Council - Environmental Health Department	April 2010 February 2011 January 2011 March 2011	Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Kirklees Metropolitan Borough Council - Environmental Health Department Sheffield City Council - Environmental Protection Service Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards High Peak Borough Council - Environmental Health Department	April 2010 February 2011 January 2011 March 2011	Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update
Nearest Surface Water Feature Ordnance Survey	March 2011	Quarterly
Pollution Incidents to Controlled Waters Environment Agency - North East Region Environment Agency - Midlands Region Environment Agency - North West Region	December 1998 December 1999 January 2000	Not Applicable Not Applicable Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - Midlands Region Environment Agency - North East Region	July 2011 July 2011	Monthly Monthly
Prosecutions Relating to Controlled Waters Environment Agency - Midlands Region Environment Agency - North East Region	July 2011 July 2011	Monthly Monthly
Registered Radioactive Substances Environment Agency - Midlands Region Environment Agency - North East Region	April 2011 April 2011	Quarterly Quarterly
River Quality Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points Environment Agency - Head Office	January 2011	Annually

Agency & Hydrological	Version	Update Cycle
River Quality Chemistry Sampling Points Environment Agency - Head Office	January 2011	Annually
Substantiated Pollution Incident Register Environment Agency - Midlands Region - East Area Environment Agency - Midlands Region - Lower Trent Area Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	April 2011 April 2011 April 2011 April 2011	Quarterly Quarterly Quarterly Quarterly
Water Abstractions Environment Agency - Midlands Region Environment Agency - North East Region Environment Agency - North West Region	April 2011 April 2011 April 2011	Quarterly Quarterly Quarterly
Water Industry Act Referrals Environment Agency - Midlands Region Environment Agency - North East Region	April 2011 April 2011	Quarterly Quarterly
Groundwater Vulnerability Environment Agency - Head Office	January 2011	Not Applicable
Drift Deposits Environment Agency - Head Office	January 1999	Not Applicable
Bedrock Aquifer Designations British Geological Survey - National Geoscience Information Service	October 2010	Annually
Superficial Aquifer Designations British Geological Survey - National Geoscience Information Service	October 2010	Annually
Source Protection Zones Environment Agency - Head Office	July 2011	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	August 2011	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	August 2011	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	August 2011	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	August 2011	Quarterly
Flood Defences Environment Agency - Head Office	August 2011	Quarterly

Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Environment Agency - Midlands Region - East Area Environment Agency - Midlands Region - Lower Trent Area Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	July 2011 July 2011 July 2011 July 2011	Quarterly Quarterly Quarterly Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Midlands Region Environment Agency - North East Region	October 2008 October 2008	Not Applicable Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - Midlands Region - East Area Environment Agency - Midlands Region - Lower Trent Area Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	July 2011 July 2011 July 2011 July 2011	Quarterly Quarterly Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - Midlands Region - East Area Environment Agency - Midlands Region - Lower Trent Area Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	April 2011 April 2011 April 2011 April 2011	Quarterly Quarterly Quarterly Quarterly
Local Authority Landfill Coverage Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Derbyshire County Council High Peak Borough Council Kirklees Metropolitan Borough Council - Planning Services Sheffield City Council - Environmental Protection Service	May 2000 May 2000 May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Derbyshire County Council High Peak Borough Council Kirklees Metropolitan Borough Council - Planning Services Sheffield City Council - Environmental Protection Service	May 2000 May 2000 May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable
Registered Landfill Sites Environment Agency - Midlands Region - Lower Trent Area Environment Agency - North East Region - Ridings Area	March 2003 March 2003	Not Applicable Not Applicable
Registered Waste Transfer Sites Environment Agency - Midlands Region - Lower Trent Area Environment Agency - North East Region - Ridings Area	March 2003 March 2003	Not Applicable Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - Midlands Region - Lower Trent Area Environment Agency - North East Region - Ridings Area	March 2003 March 2003	Not Applicable Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	November 2010	Bi-Annually
Explosive Sites Health and Safety Executive	January 2011	Bi-Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements High Peak Borough Council - Housing & Planning Department Sheffield City Council Derbyshire County Council Peak District National Park - Development Control Kirklees Metropolitan Borough Council - Planning Services Barnsley Metropolitan Borough Council - Planning Department	February 2011 January 2011 July 2011 July 2011 March 2011 November 2010	Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update
Planning Hazardous Substance Consents High Peak Borough Council - Housing & Planning Department Sheffield City Council Derbyshire County Council Peak District National Park - Development Control Kirklees Metropolitan Borough Council - Planning Services Barnsley Metropolitan Borough Council - Planning Department	February 2011 January 2011 July 2011 July 2011 March 2011 November 2010	Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update
Geological	Version	Update Cycle
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	April 2011	Bi-Annually
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	August 1996	Not Applicable
Brine Compensation Area Cheshire Brine Subsidence Compensation Board	November 2002	Not Applicable
Coal Mining Affected Areas The Coal Authority - Mining Report Service	January 2006	As notified
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	February 2011	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	February 2011	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	As notified
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	As notified

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	May 2011	Quarterly
Fuel Station Entries Catalist Ltd - Experian	May 2011	Quarterly
Sensitive Land Use	Version	Update Cycle
Areas of Adopted Green Belt Barnsley Metropolitan Borough Council - Planning Department High Peak Borough Council Kirklees Metropolitan Borough Council Sheffield City Council	May 2011 May 2011 May 2011 May 2011	As notified As notified As notified As notified
Areas of Unadopted Green Belt Barnsley Metropolitan Borough Council - Planning Department High Peak Borough Council Kirklees Metropolitan Borough Council Sheffield City Council	May 2011 May 2011 May 2011 May 2011	As notified As notified As notified As notified
Areas of Outstanding Natural Beauty Natural England	April 2011	Bi-Annually
Environmentally Sensitive Areas Natural England	October 2010	Annually
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	April 2011	Bi-Annually
Marine Nature Reserves Natural England	September 2010	Bi-Annually
National Nature Reserves Natural England	April 2011	Bi-Annually
National Parks Natural England	April 2011	Bi-Annually
Nitrate Sensitive Areas Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	March 2003	Not Applicable
Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	February 2011	Annually
Ramsar Sites Natural England	April 2011	Bi-Annually
Sites of Special Scientific Interest Natural England	April 2011	Bi-Annually
Special Areas of Conservation Natural England	April 2011	Bi-Annually
Special Protection Areas Natural England	April 2011	Bi-Annually

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Countryside Council for Wales	
Scottish Natural Heritage	
Natural England	
Health Protection Agency	
Ove Arup	
Peter Brett Associates	

Contact	Name and Address	Contact Details
1	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 08708 506 506 Email: enquiries@environment-agency.gov.uk
2	British Geological Survey - Enquiry Service British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
3	The Coal Authority - Mining Report Service 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0845 7626848 Email: thecoalauthority@coal.gov.uk
4	Barnsley Metropolitan Borough Council - Planning Department Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
5	Sheffield City Council Howden House, 1 Union Street, Sheffield, South Yorkshire, S1 2SH	Telephone: 0114 273 4215 Fax: 0114 273 5002 Website: www.sheffield.gov.uk
6	Natural England Northminster House, Northminster Road, Peterborough, Cambridgeshire, PE1 1UA	Telephone: 0845 600 3078 Fax: 01733 455103 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
7	Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT	Telephone: 0113 2613333 Fax: 0113 230 0879
8	Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
9	Sheffield City Council - Environmental Protection Service 2-10 Carbrook Hall Road, Sheffield, S9 2DB	Telephone: 0114 272 6444 Website: www.sheffield.gov.uk
-	Health Protection Agency - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@hpa.org.uk Website: www.hpa.org.uk
-	Landmark Information Group Limited The Smith Centre, Henley On Thames, Oxfordshire, RG9 6AB	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

Index Map

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

Slice

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

Segment

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

Quadrant

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

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

Client Details

Miss A Seymour, Eastwood & Partners Ltd, St Andrews House, 23 Kingfield Road, Sheffield, S11 9AS

Order Details

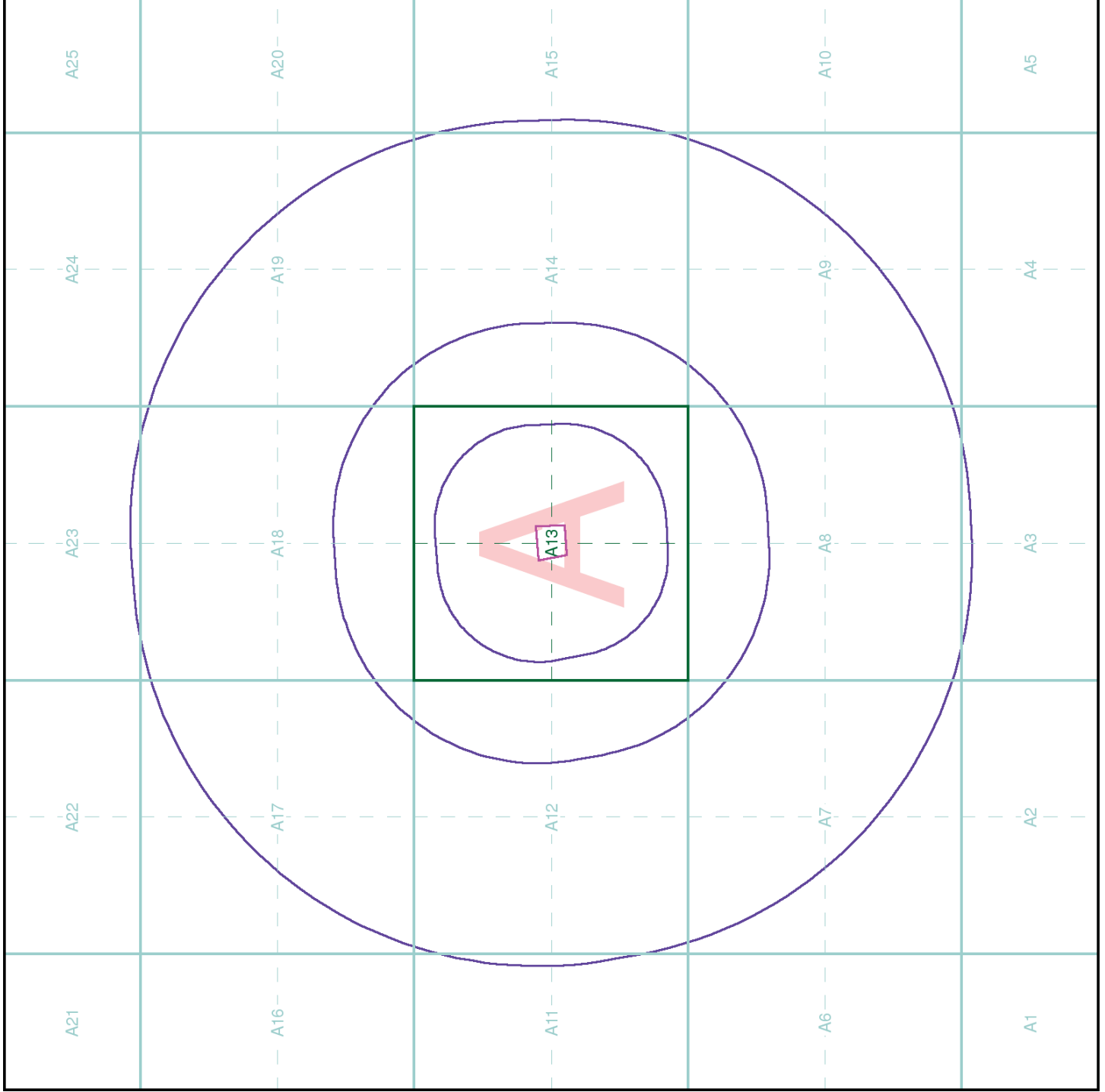
Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/JAS
 National Grid Reference: 419780, 401580
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



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 Web: www.envirocheck.co.uk



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Groundwater Vulnerability

General
 Specified Site Specified Buffer(s) Bearing Reference Point
 Site Map ID

Agency and Hydrological

Geological Classes

Major Aquifer (Highly Permeable)
 High (H) 1, 2, 3, U
 Intermediate (I) 1, 2
 Low

Minor Aquifer (Variably Permeable)
 High (H) 1, 2, 3, U
 Intermediate (I) 1, 2
 Low

Non Aquifer (Negligibly Permeable)

Water or Sea

Drift Deposit

Soil Classes

Major Aquifer (Highly Permeable)
 High (H) 1, 2, 3, U
 Intermediate (I) 1, 2
 Low

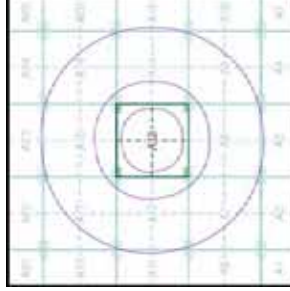
Minor Aquifer (Variably Permeable)
 High (H) 1, 2, 3, U
 Intermediate (I) 1, 2
 Low

Non Aquifer (Negligibly Permeable)

Water or Sea

Drift Deposit

Site Sensitivity Context Map - Slice A

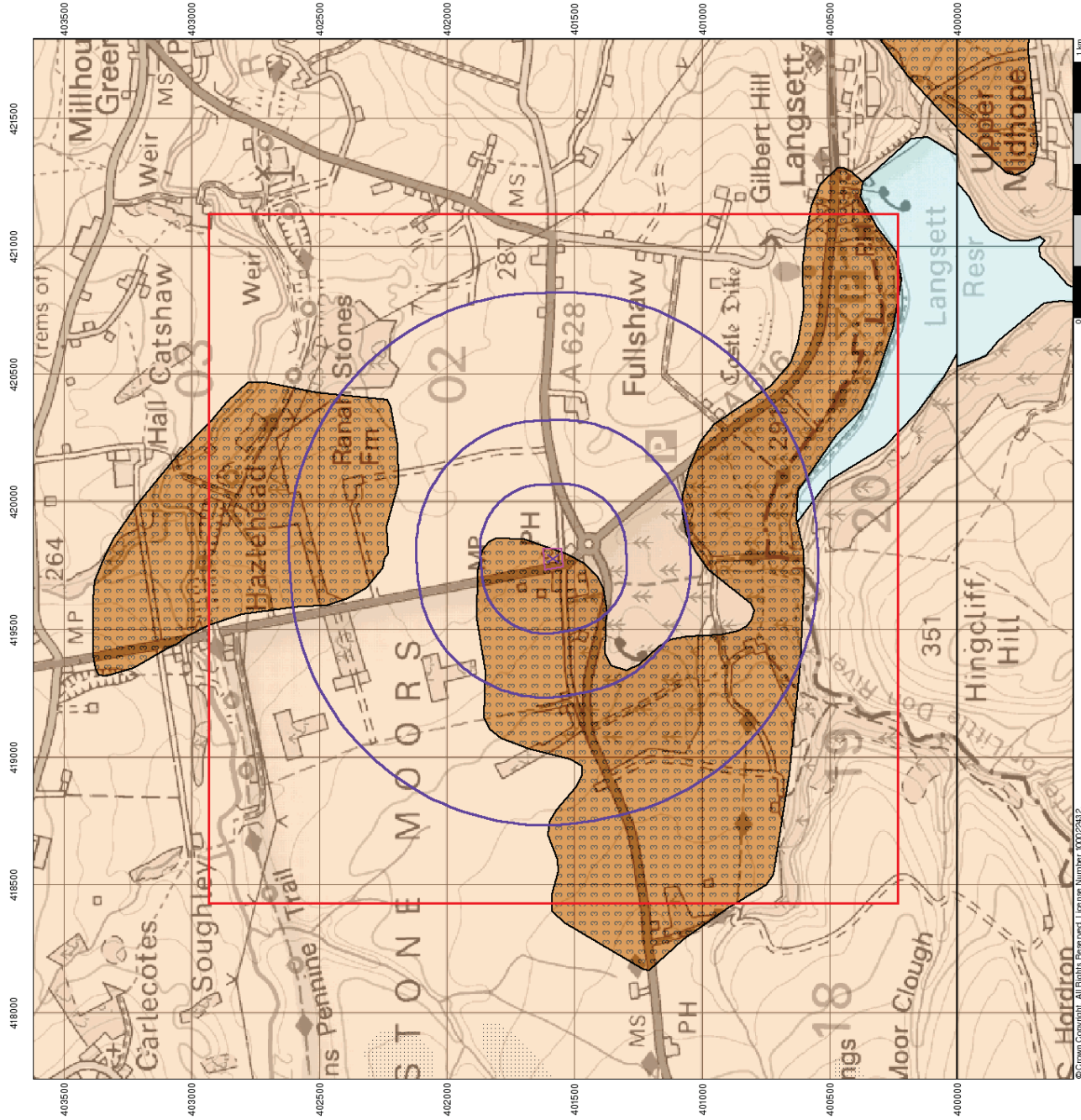


Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



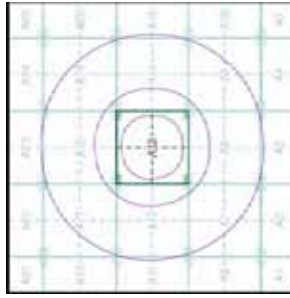
Bedrock Aquifer Designation

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

Agency and Hydrological

- Geological Classes**
- Principal Aquifer
 - Secondary A Aquifer
 - Secondary B Aquifer
 - Secondary Undifferentiated
 - Unproductive Strata
 - Unknown

Site Sensitivity Context Map - Slice A



Order Details

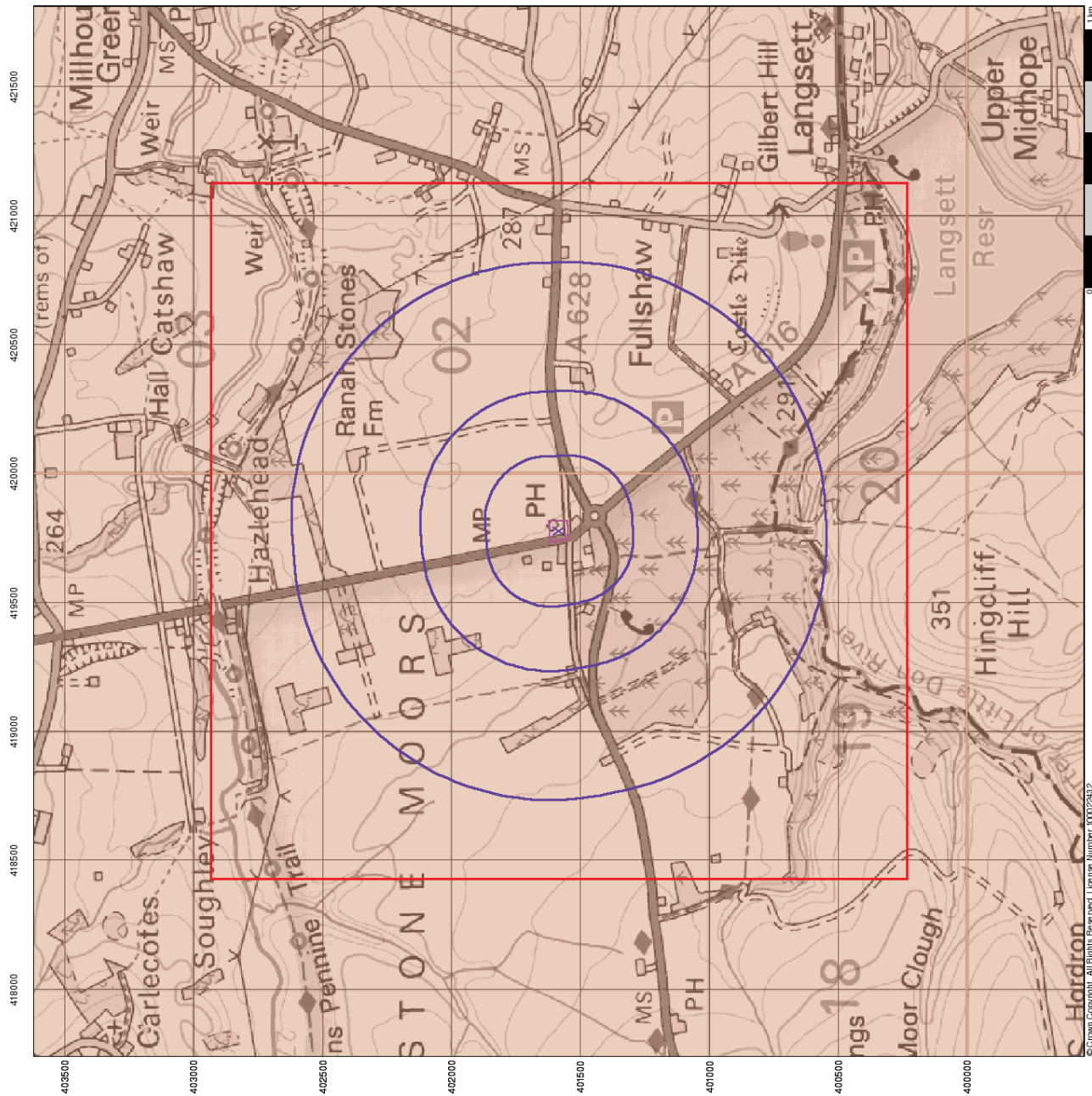
Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



Tel: 0844 844 9952
 Fax: 0844 844 9951
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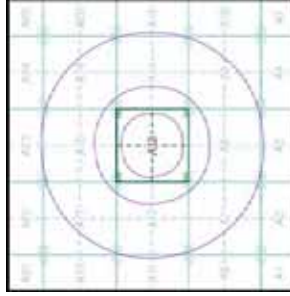
Superficial Aquifer Designation

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

Agency and Hydrological

- Geological Classes**
- Principal Aquifer
 - Secondary A Aquifer
 - Secondary B Aquifer
 - Secondary Undifferentiated
 - Unproductive Strata
 - Unknown

Site Sensitivity Context Map - Slice A

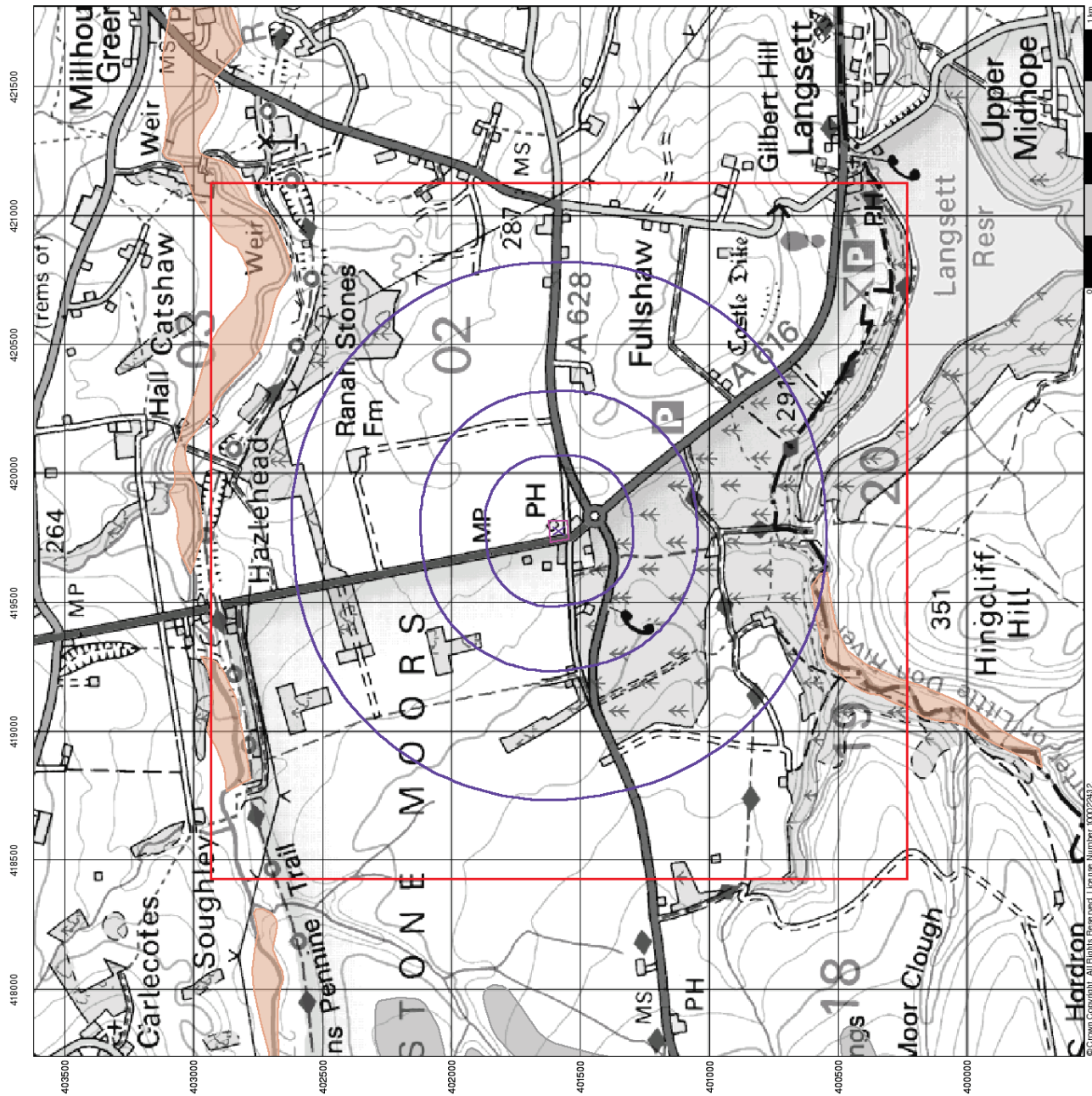


Order Details

Order Number: 35887595_1_1
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 Slice: A
 Site Area (Ha): 0.56
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Site Details

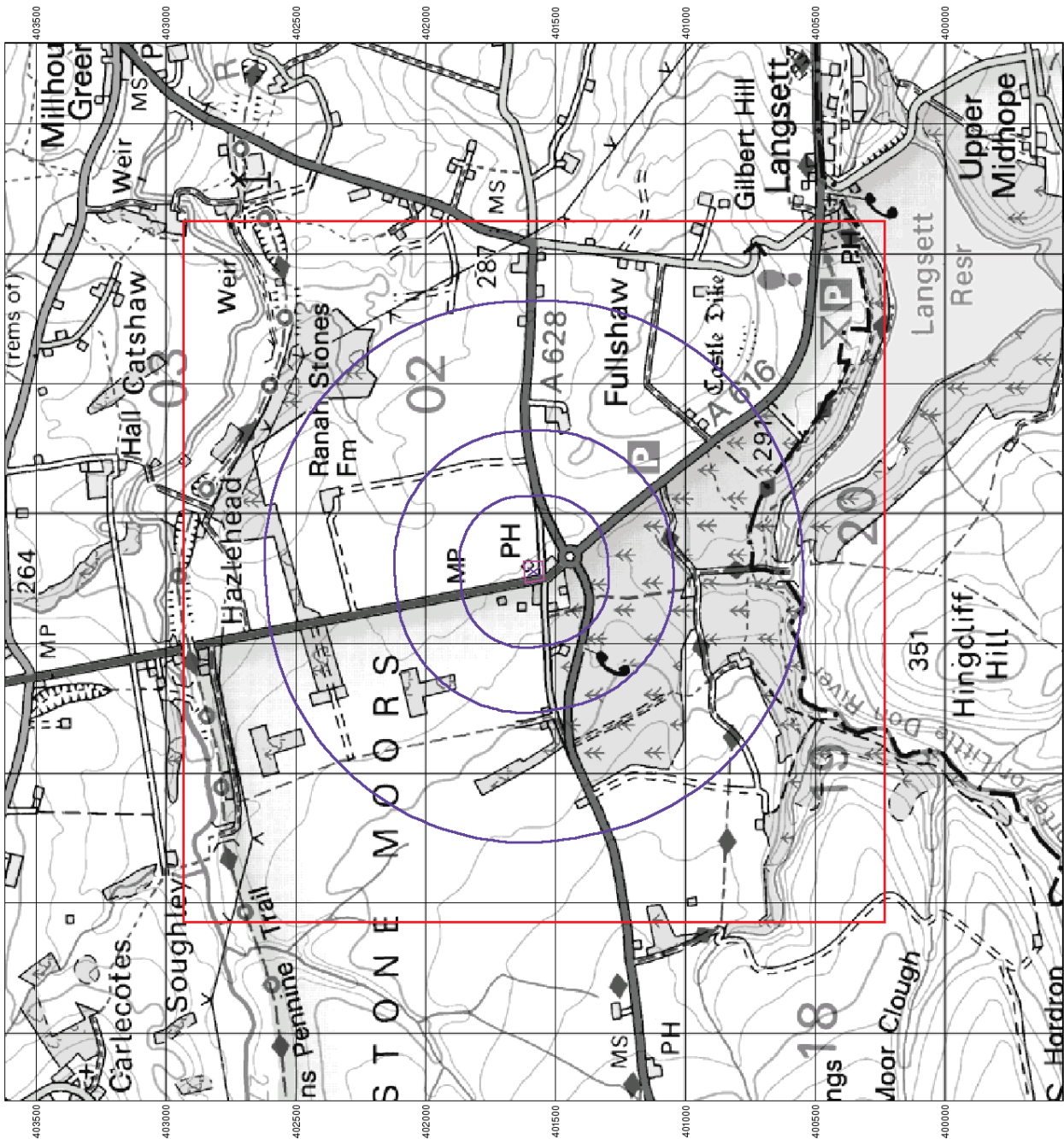
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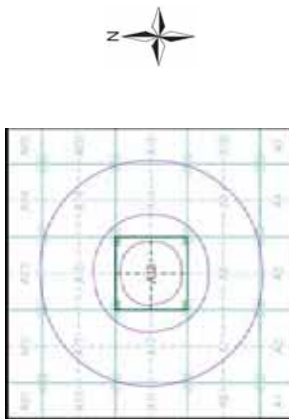
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Source Protection Zones

- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Site
 - Map ID
- Agency and Hydrological**
- Source Protection Zone I
 - Source Protection Zone II
 - Source Protection Zone III
 - Zone of Special Interest
 - Source Protection Zone Borehole



Site Sensitivity Context Map - Slice A



Order Details

Order Number: 35887595_1_1
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 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

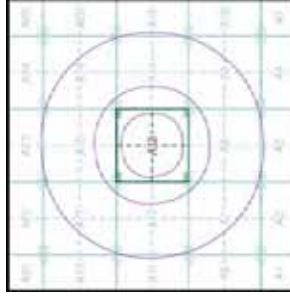
Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH

Sensitive Land Uses

- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Site
 - Map ID
- Sensitive Land Uses**
- Area of Adopted Green Belt
 - Area of Unadopted Green Belt
 - Area of Outstanding Natural Beauty
 - Environmentally Sensitive Area
 - Forest Park
 - Local Nature Reserve
 - Marine Nature Reserve
 - National Nature Reserve
 - National Park
 - Nitrate Sensitive Area
 - Nitrate Vulnerable Zone
 - Ramsar Site
 - Site of Special Scientific Interest
 - Special Area of Conservation
 - Special Protection Area

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 35887595_1_1
 Customer Ref: 34106/MJY/AS
 National Grid Reference: 419780, 401580
 Slice: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

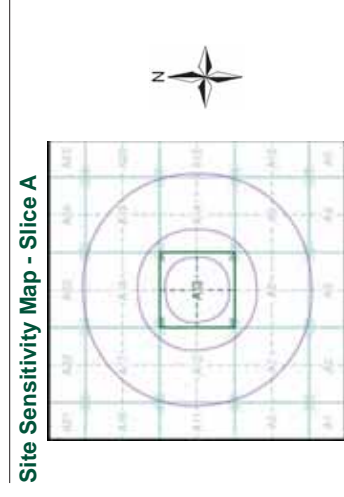
Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



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

- General**
- Specified Site
 - Specified Buffer(s)
 - ✕ Bearing Reference Point
 - 📍 Map ID
- Agency and Hydrological**
- 📍 Contaminated Land Register Entry or Notice
 - 📍 Discharge Consent
 - 📍 Enforcement or Prohibition Notice
 - 📍 Integrated Pollution Control
 - 📍 Local Authority Pollution Prevention and Control
 - 📍 Local Authority Pollution Prevention and Control
 - 📍 Pollution Incident to Controlled Waters
 - 📍 Prosecution Relating to Authorized Processes
 - 📍 Registered Landfill Site (Post Refused to (RM))
 - 📍 Registered Landfill Site (Post Refused to (RM))
 - 📍 River Network or Water Feature
 - 📍 River Quality Sampling Point
 - 📍 Substantiated Pollution Incident Register
 - 📍 Water Abstraction
 - 📍 Water Industry Act Referral
- Waste**
- 📍 BGS Recorded Landfill Site (Location)
 - 📍 BGS Recorded Landfill Site
 - 📍 EA Historic Landfill (Refused Row)
 - 📍 Integrated Pollution Control Registered
 - 📍 Licensed Waste Management Facility (Location)
 - 📍 Licensed Waste Management Facility (Location)
 - 📍 Local Authority Recorded Landfill Site (Location)
 - 📍 Local Authority Recorded Landfill Site
 - 📍 Registered Landfill Site
 - 📍 Registered Landfill Site (Post Refused to (RM))
 - 📍 Registered Landfill Site (Post Refused to (RM))
 - 📍 Registered Waste Transfer Site (Location)
 - 📍 Registered Waste Treatment or Disposal Site (Location)
 - 📍 Registered Waste Treatment or Disposal Site
 - 📍 Water Abstraction
- Geological**
- 📍 BGS Recorded Mineral Site
 - 📍 Explosive Site
 - 📍 NIHS Site
 - 📍 Planning Hazardous Substance Consent
 - 📍 Planning Hazardous Substance Enforcement
- Hazardous Substances**
- 📍 COMAH Site
 - 📍 Explosive Site
 - 📍 NIHS Site
 - 📍 Planning Hazardous Substance Consent
 - 📍 Planning Hazardous Substance Enforcement
- Industrial Land Use**
- 📍 Contemporary Trade Directory Entry
 - 📍 Fuel Station Entry

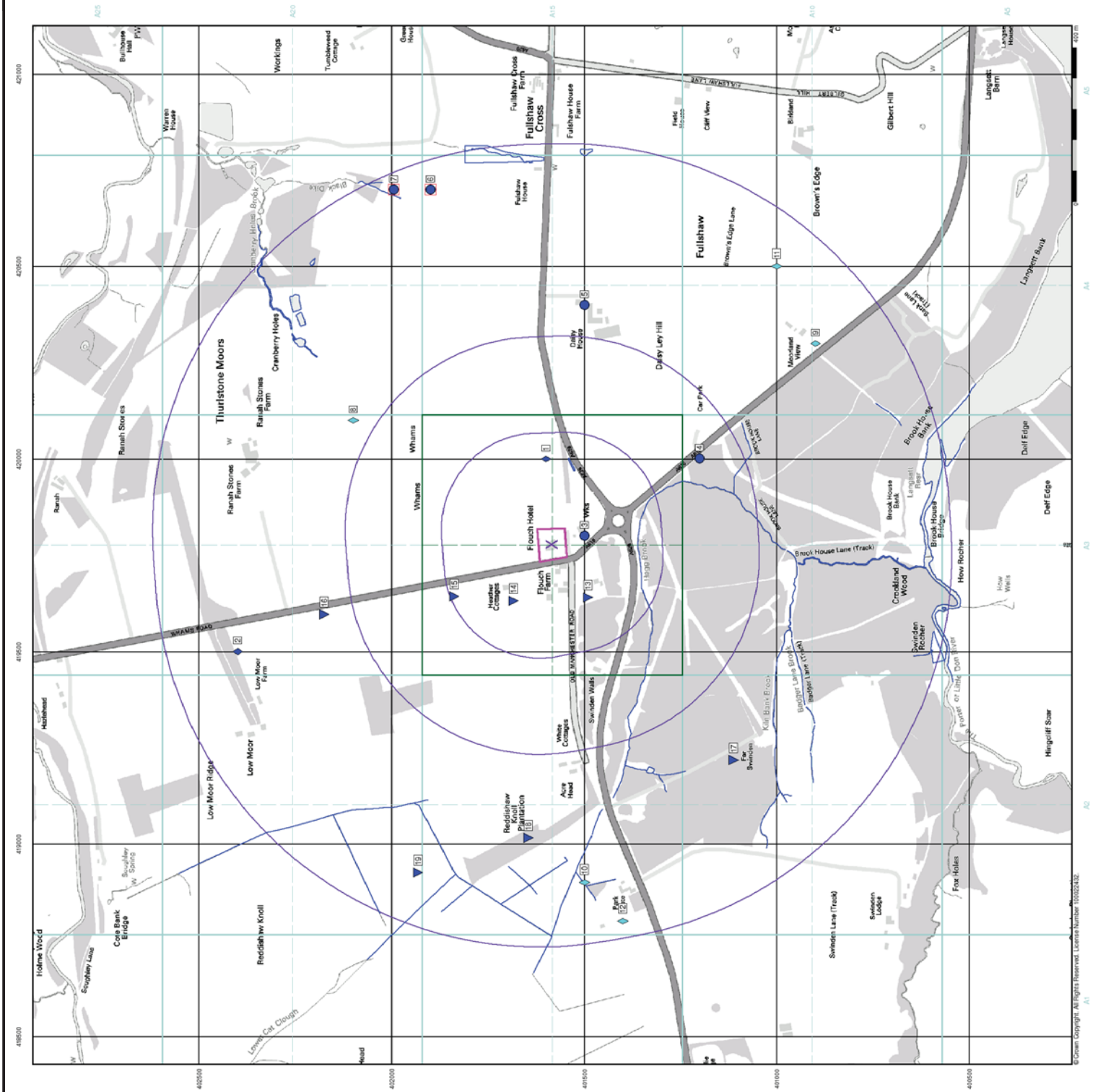


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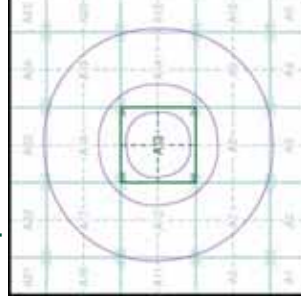
General

- Specified Site
- Bearing Reference Point

Agency and Hydrological (Flood)

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

Flood Map - Slice A

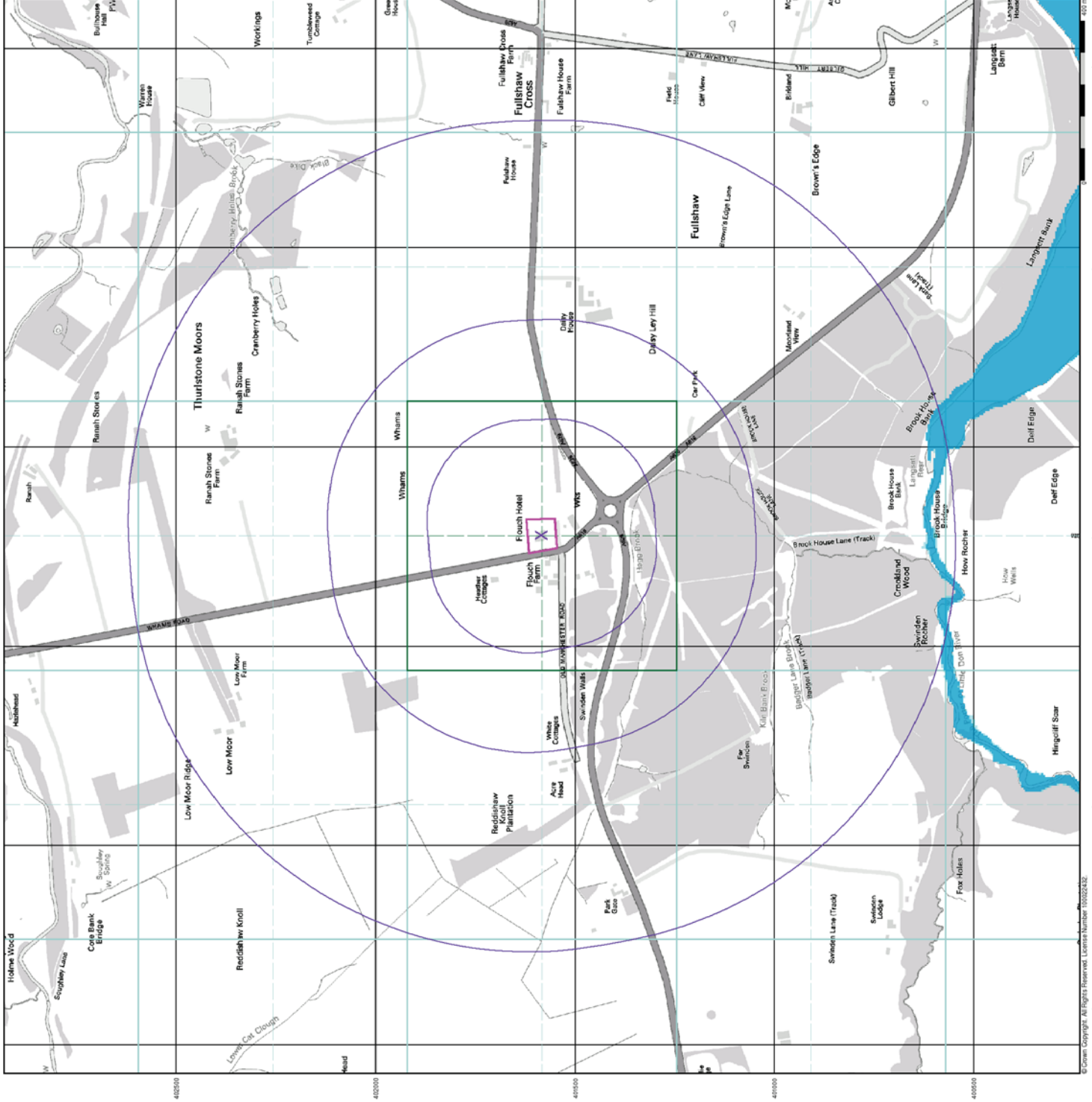


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 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



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

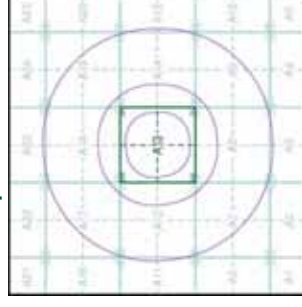
Agency and Hydrological (Boreholes)

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

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

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

Borehole Map - Slice A

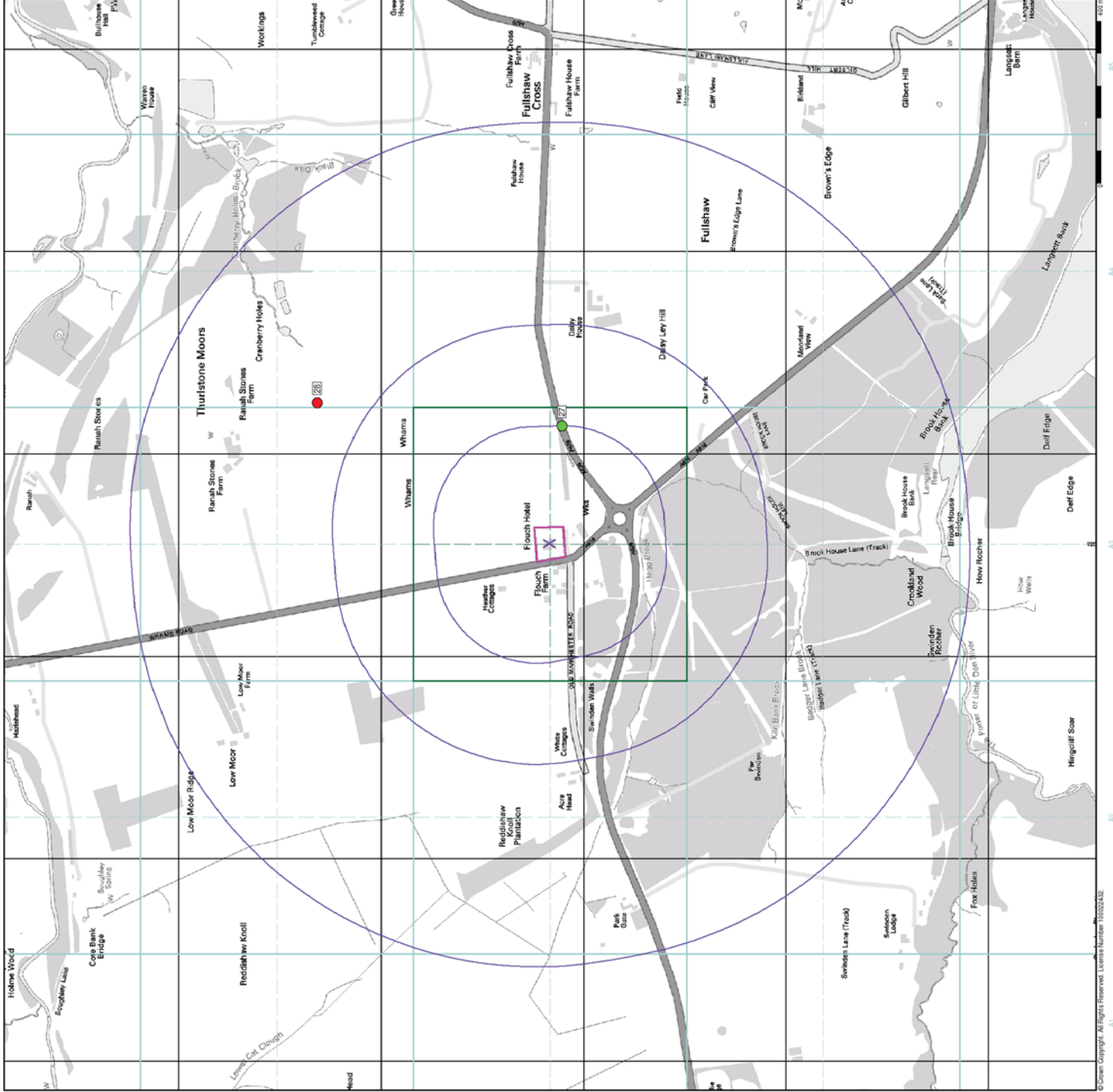


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Order Number: 35887595_1_1
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 Site: A
 Site Area (Ha): 0.56
 Search Buffer (m): 1000

Site Details

The Old Flouch Inn, Flouch, Crow Edge, Sheffield, S36 4HH



Envirocheck[®] Report:

BGS Boreholes Datasheet

Order Details:

Order Number:

35887595_1_1

Customer Reference:

34106/MJY/AS

National Grid Reference:

419780, 401580

Slice:

A

Site Area (Ha):

0.56

Borehole Search Buffer (m):

1000

Site Details:

The Old Flouch Inn

Flouch, Crow Edge

Sheffield

S36 4HH

Client Details:

Miss A Seymour

Eastwood & Partners Ltd

St Andrews House

23 Kingfield Road

Sheffield

S11 9AS

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
BGS Boreholes	pg 1	None	1	None	1

Introduction

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

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

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

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

Report Version v47.0

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
27	BGS Boreholes BGS Reference: Se20sw18 Drilled Length (m): 20 Borehole Name: Manchester-Shaffield Bore 2d19 Longdondale New Rou	A13SE (E)	250	2	420069 401554
28	BGS Boreholes BGS Reference: Se20sw4 Drilled Length (m): 142.65 Borehole Name: Cranby H Ranah Stores Farm Penistone	A19SW (NE)	621	2	420126 402159

BGS Boreholes	Version	Update Cycle
BGS Boreholes British Geological Survey - National Geoscience Information Service	July 2011	Quarterly

Contact Details	Contact Logo
<p>2 British Geological Survey - Enquiry Service</p> <p>British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG</p> <p>Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk</p>	 <p>British Geological Survey <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small></p>
<p>- Landmark Information Group Limited</p> <p>The Smith Centre, Henley On Thames, Oxfordshire, RG9 6AB</p> <p>Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk</p>	

Issued by:

The Coal Authority, Mining Reports Office, 200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire NG18 4RG
 ON-Line Service: www.groundstability.com - Phone: 0845 762 6848 - DX 716176 MANSFIELD 5

CUSTOMER SERVICES,
 LANDMARK INFORMATION GROUP LIMITED,
 ABBEY COURT UNIT 5/7,
 EAGLE WAY,
 SOWTON INDUSTRIAL ESTATE,
 EXETER,
 DEVON,
 EX2 7HY

Person dealing with this matter: **Keith Pennington**
 Our reference: **00052564-11**
 Your reference: 35887595
 Electronic Ref: EME_00016547860001_005
 RRUID: 005.00016547860001
 Date of your enquiry: **30 August 2011**
 Date we received your enquiry: **30 August 2011**
 Date of issue: **30 August 2011**

This report is for the property described in the address below and the attached plan.

Non-Residential Coal and Brine Report

Site At The Old Flouch Inn, Flouch, Crow Edge, Sheffield, South Yorkshire

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

Coal mining	Yes
Brine Compensation District	No

Information from the Coal Authority

Underground Coal Mining

Past

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

Present

The property is not in the likely zone of influence of any present underground coal workings.

Future

The property is not in an area for which the Coal Authority is determining whether to grant a licence to remove coal using underground methods.

The property is not in an area for which a licence has been granted to remove coal using underground methods.

The property is not in an area that is likely to be affected at the surface from any planned future workings.

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

No notice of the risk of the land being affected by subsidence has been given under section 46 of the Coal Mining Subsidence Act 1991.

Mine entries

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

Coal-mining geology

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

Opencast Coal Mining

Past

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

Present

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

Future

The property is not within 800 metres of the boundary of an opencast site for which the Coal Authority is determining whether to grant a licence to remove coal by opencast methods.

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

Coal-mining subsidence

The Coal Authority has not received a damage notice or claim for the property since 31 October 1994. There is no current Stop Notice delaying the start of remedial works or repairs to the property.

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

Mine gas

There is no record of a mine gas emission requiring action by the Coal Authority within the boundary of the property.

Hazards related to coal mining

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

Withdrawal of Support

The property is not in an area for which a notice of entitlement to withdraw support has been published.

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

Working Facilities Orders

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

Payments to Owners of Former Copyhold Land

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

Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

Additional remarks

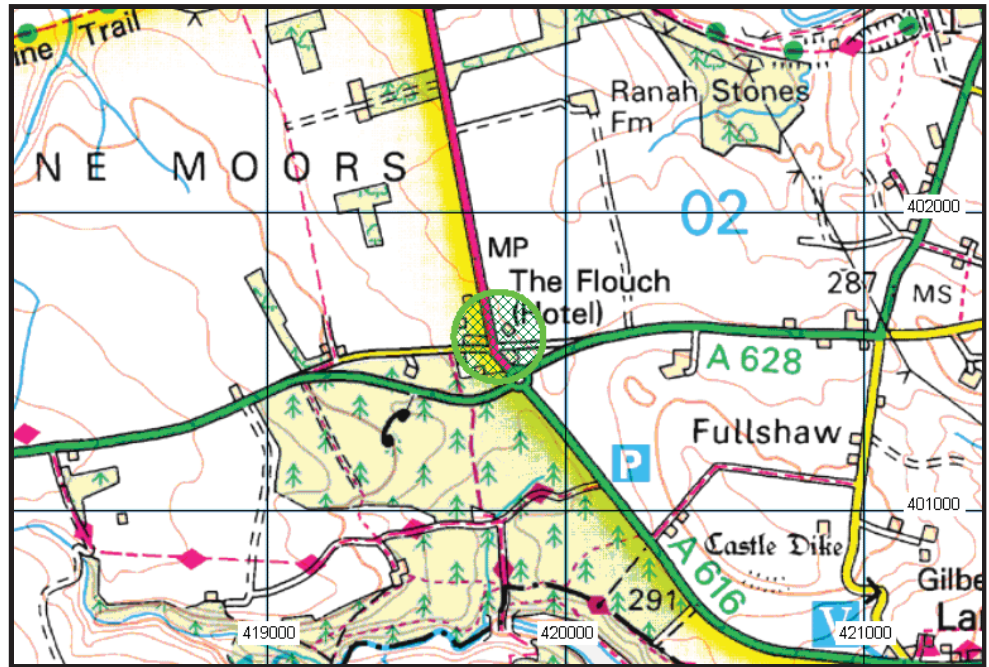
This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority and Cheshire Brine Board's Terms and Conditions 2006. The report is compliant with Home Information Pack requirements.

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Location map



Approximate position of property

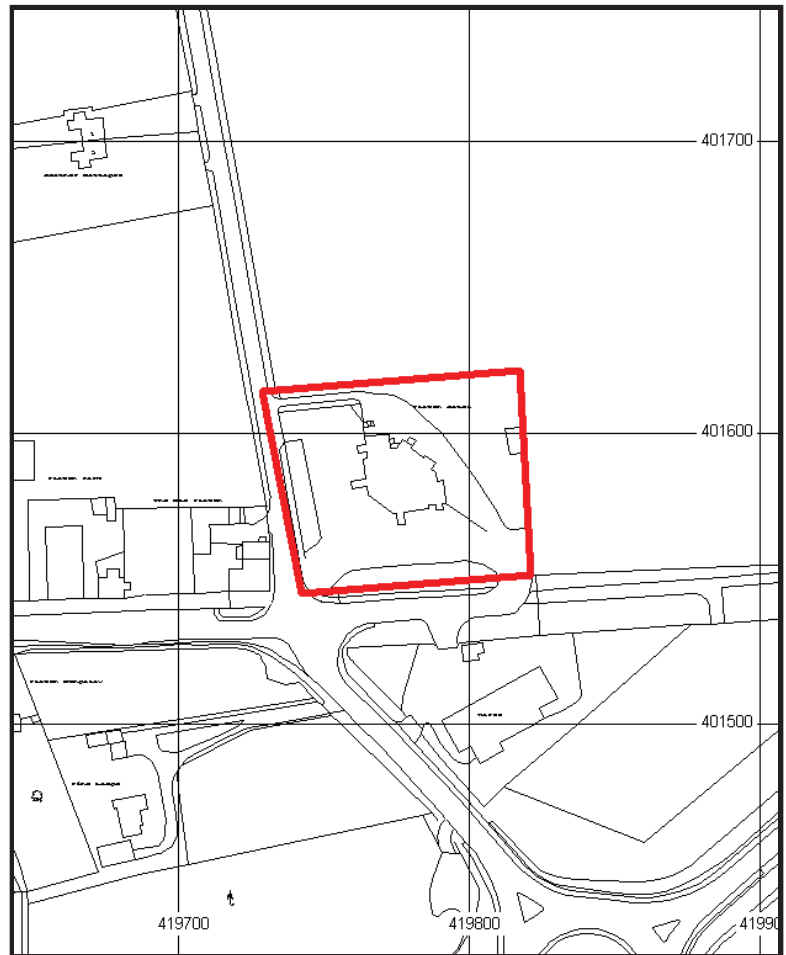


Enquiry boundary

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Key

Approximate position of enquiry boundary shown



Appendix 3

Trial Pit Logs - TP1 to TP4
Trial Pit Photographs

Project Name The Flouch Inn	Project No. 34106	Co-ords: - Level: -	Date 15/09/2011
Location: Hazlehead		Dimensions: -	Scale 1:25
Client: M Booth Design		Depth 2.35m	Logged By DES




Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description	
Depth (m)	Type	Results					
0.10	D					MADE GROUND: Black ashy sandy GRAVEL. Gravel is coarse subrounded to cobbles of sandstone and limestone. Rare metal and paving slabs found. ["Red ash" put down for car park]	
			0.30			MADE GROUND: Black ashy sand layer with pebbles.	
0.45	D		0.50			MADE GROUND: Light brown sandy COBBLES. Cobbles are subangular of sandstone and sandstone flags. [1940s car park area]	
			0.90			MADE GROUND: Black ashy sand layer.	
			1.10			Orange coarse clayey SAND with dark brown lumps of clay.	1
1.25	D		1.35			Light grey very silty very sandy CLAY.	
1.40	IPP	125	1.65			Moderately weak grey micaceous laminated SANDSTONE recovered as angular cobbles in a wet soft clay or clayey sand.	
1.45	D		1.95			Becoming moderately weak bright orange medium to coarse grained micaceous laminated SANDSTONE recovered as angular cobbles. .	2
			2.35			Trialpit Complete at 2.35 m	
							3
							4

Remarks: Trial pit terminated due to strong rock. Sides unstable from 0 - 1.1 m.

Groundwater: None encountered.



Project Name The Flouch Inn	Project No. 34106	Co-ords: - Level: -	Date 15/09/2011
Location: Hazlehead		Dimensions: - Depth 1.20m	Scale 1:25
Client: M Booth Design			Logged By DES







Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.10	D					TOPSOIL: Very dark brown sand with fragments of vegetation and rootlets. [15 year old wood chippings].
			0.75			Light yellow to white grey slightly clayey gravelly SAND. Gravel is coarse angular of sandstone. Occasional cobbles of sandstone.
0.95	D		1.00			Strong orange coarse grained micaceous laminated SANDSTONE recovered as angular cobbles in orange sand.
			1.20			----- Trialpit Complete at 1.20 m
						1 2 3 4

Remarks: Trial pit terminated due to strong rock.

Groundwater: None encountered.



Project Name The Flouch Inn	Project No. 34106	Co-ords: - Level: -	Date 15/09/2011
Location: Hazlehead		Dimensions: -	Scale 1:25
Client: M Booth Design		Depth 1.85m	Logged By DES

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.15	D					MADE GROUND: Black ashy sandy GRAVEL. Gravel is coarse subrounded to subangular of sandstone and limestone. Rare metal and paving slabs found. ["Red ash" put down for car park]
			0.50			Orange slightly clayey cobbly SAND with some fragments of black shale. Cobbles are angular of weak sandstone.
0.90	D					
			1.20			Weak orange SANDSTONE recovered as fine to coarse gravel in clayey sand.
1.60	D					
			1.70			Strong orange micaceous laminated SANDSTONE recovered as angular cobbles.
			1.85			Trialpit Complete at 1.85 m

Remarks: Trial pit terminated on strong rock.

Groundwater: None encountered.





Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P010
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EOP
Eastwood & Partners
CONSULTING ENGINEERS

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23 Kingfield Road
Sheffield S11 9AS

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M BOOTH DESIGN LTD
THE FLOUCH INN, HAZLEHEAD, BARNSELY
TRIAL PIT 1



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P011
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M BOOTH DESIGN LTD
THE FLOUCH INN, HAZLEHEAD, BARNSELY
TRIAL PIT 1 POSITION



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P012
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THE FLOUCH INN, HAZLEHEAD, BARNLEY
TRIAL PIT 2



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P013
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THE FLOUCH INN, HAZLEHEAD, BARNESLEY
TRIAL PIT 2 WITH SANDSTONE BASE



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P014
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M BOOTH DESIGN LTD

THE FLOUCH INN, HAZLEHEAD, BARNLEY

TRIAL PIT 3 WITH SANDSTONE BASE



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P015
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M BOOTH DESIGN LTD
THE FLOUCH INN, HAZLEHEAD, BARNSELY
POSITION OF TRIAL PIT 3



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P016
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TRIAL PIT 4 WITH SANDSTONE BASE



Prepared	DES	Checked	CAT	Date	15.9.2011	Photograph No	34106/P017
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THE FLOUCH INN, HAZLEHEAD, BARNSELY

**TRIAL PIT 4 SHOWING MADE GROUND AND SAND OVER
SANDSTONE**

Appendix 4
Geotechnical Test Results - PSL11/2360



LABORATORY REPORT



4043

Contract Number: PSL11/2360

Client's Reference:

Report Date: 21 September 2011

Client Name: Eastwood & Partners
St Andrew's House
23 Kingfield Road
Sheffield

S11 9AS

For the attention of: M Yates

Contract Title: The Flouch Inn, Hazlehead

Date Received: 19-September-11
Date Commenced: 19-September-11
Date Completed: 21-September-11

Notes: Observations and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

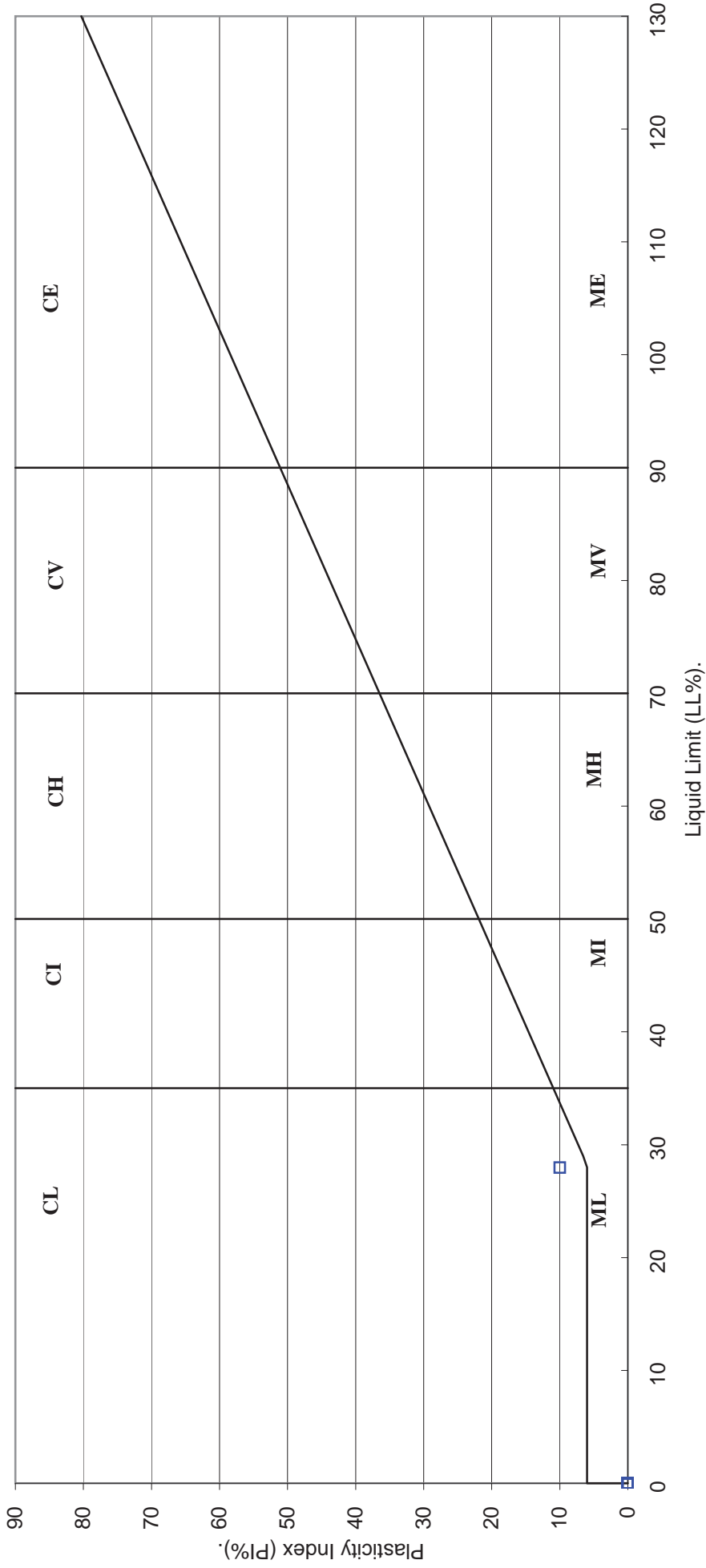
R Gunson
(Director)

A Watkins
(Director)

M Beastall
(Laboratory Manager)

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

(B.S.5930 : 1999)



Compiled by	Date	Checked by	Date	Approved by	Date
<i>[Signature]</i>	21/09/11	<i>[Signature]</i>	21/09/11	<i>[Signature]</i>	21/09/11
THE FLOUCH INN, HAZLEHEAD.				Contract No:	PSL11/2360
				Client Ref:	MJY/DES/34106-001

Appendix 5

Chemical test results – Chemtest 139720

Table of Assessment Values

Eastwood & Partners
St. Andrews House
23 Kingfield Road
Sheffield
S11 9AS

FAO Catherine Topliss
27 September 2011

Dear Catherine Topliss

Test Report Number 139720
Your Project Reference 34106 - The Flouch Inn, Hazlehead

Please find enclosed the results of analysis for the samples received 20 September 2011.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely



Authorised Signatory

Darrell Hall Director
 Phil Hellier Director
 Keith Jones Technical Manager
 John Crawford Quality Manager
 Malcolm Avis Director



Notes to accompany report:

- The sign < means 'less than'
- Tests marked 'U' hold UKAS accreditation
- Tests marked 'M' hold MCertS (and UKAS) accreditation
- Tests marked 'N' do not currently hold UKAS accreditation
- Tests marked 'S' were subcontracted to an approved laboratory
- n/e means 'not evaluated'
- i/s means 'insufficient sample'
- u/s means 'unsuitable sample'
- Comments or interpretations are outside of the scope of UKAS accreditation
- The results relate only to the items tested
- Stones represent the quantity of material removed prior to analysis
- All results are expressed on a dry weight basis
- The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, phenols
- For all other tests the samples were dried at < 37°C prior to analysis
- Uncertainties of measurement for the determinands tested are available upon request
- Soil descriptions, including colour and texture, are beyond the scope of MCertS accreditation
- None of the test results included in this report have been recovery corrected

Test Report 139720 Cover Sheet

Results of analysis of 8 samples
 received 19 September 2011

Report Date
 27 September 2011

34106 - The Flouch Inn, Hazlehead

FAO Catherine Topliss

Login Batch No

Chemtest LIMS ID

Sample ID

Sample No

Sampling Date

Depth

Matrix

SOP ↓ Determinand ↓

CAS No ↓

Units ↓

2175 Sulfur (total TRL report 447)

2120 Sulfate (2:1 water soluble) as SO4

2490 Chromium (hexavalent)

2430 Sulfate (total BS1377 HCl extract)

2450 Arsenic

Cadmium

Chromium

Copper

Mercury

Nickel

Lead

Selenium

Zinc

2800 Naphthalene

Acenaphthylene

Acenaphthene

Fluorene

Phenanthrene

Anthracene

Fluoranthene

Pyrene

Benzo[a]anthracene

Chrysene

Benzo[b]fluoranthene

Benzo[k]fluoranthene

Benzo[a]pyrene

Dibenzo[a,h]anthracene

139720

AG48611	AG48612	AG48613	AG48614	AG48615	AG48616	AG48617	AG48618
TP1	TP1	TP2	TP2	TP3	TP3	TP4	TP4
MG	MG	MG	Sand	TS	Sand	MG	Sand
19/09/2011	19/09/2011	19/09/2011	19/09/2011	19/09/2011	19/09/2011	19/09/2011	19/09/2011
0.1m	0.45m	0.2m	0.55m	0.1m	0.95m	0.15m	0.9m
SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
0.11	0.13	0.050	0.010		<0.010	0.17	0.010
<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
0.09	0.03	0.03	<0.01		<0.01	0.01	<0.01
110	35	24	4.7	12	<2.0	18	3.8
4.0	0.90	0.42	0.13	0.69	<0.10	3.0	0.33
6900	100	11	8.4	13	7.8	7.8	14
510	130	25	8.6	55	<5.0	100	13
1.2	0.28	0.13	<0.10	0.18	<0.10	<0.10	<0.10
3700	110	16	10	19	10	36	26
1200	160	100	13	36	5.7	58	12
0.45	0.38	1.1	<0.20	0.49	<0.20	0.72	0.27
600	160	50	45	89	47	210	85
0.4	0.2	<0.1	<0.1	0.1	<0.1	0.1	<0.1
0.5	0.1	<0.1	<0.1	<0.1	<0.1	0.7	<0.1
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2	1.2	0.5	<0.1	0.5	<0.1	1.8	<0.1
0.7	0.2	0.1	<0.1	0.1	<0.1	0.6	<0.1
3.9	2.3	0.9	0.2	1.5	<0.1	2.1	<0.1
3.4	1.8	0.9	0.1	1.2	<0.1	2.7	<0.1
2.7	1.1	0.5	<0.1	0.9	<0.1	1.2	<0.1
2.1	1	0.5	<0.1	0.8	<0.1	0.8	<0.1
3.6	1.7	0.7	0.2	1.2	<0.1	1.1	<0.1
1.3	0.6	0.2	<0.1	0.4	<0.1	0.3	<0.1
2.8	1.2	0.5	<0.1	0.9	<0.1	0.8	<0.1
0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

LABORATORY TEST REPORT

Results of analysis of 8 samples
 received 19 September 2011

Report Date
 27 September 2011

FAO Catherine Topliss

34106 - The Flouch Inn, Hazlehead

		139720							
		AG48611	AG48612	AG48613	AG48614	AG48615	AG48616	AG48617	AG48618
		TP1	TP1	TP2	TP2	TP3	TP3	TP4	TP4
		MG	MG	MG	Sand	TS	Sand	MG	Sand
		19/09/2011	19/09/2011	19/09/2011	19/09/2011	19/09/2011	19/09/2011	19/09/2011	19/09/2011
		0.1m	0.45m	0.2m	0.55m	0.1m	0.95m	0.15m	0.9m
		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
2800	Indeno[1,2,3-cd]pyrene	1.4	0.6	0.2	<0.1	0.4	<0.1	0.2	<0.1
	Benzo[g,h,i]perylene	1.4	0.6	0.2	<0.1	0.5	<0.1	0.3	<0.1
	Total (of 16) PAHs	27	13	5.2	<2	8.4	<2	13	<2
2010	pH	8.5	8.4	8.2	7.9	8.1	8.2	8.0	7.8
2030	Moisture	2.18	3.82	2.71	2.65	3.88	2.42	3.27	2.33
	Stones content (>50mm)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2040	Soil colour	brown	brown	brown	brown	brown	brown	brown	brown
	Soil texture	sand	sand	sand	sand	sand	sand	sand	sand
	Other material	stones	stones	stones	stones	stones	stones	stones	stones

Inorganics	Intended Land Use
	Residential (mg/kg)
Arsenic	32
Cadmium	10
Chromium	130
Chromium (VI)	4.3
Lead	450
Mercury	1
Nickel	130
Selenium	350
Copper	80 ^{*1} (200 above pH7)
Zinc	200 ^{*1} (300 above pH7)

Notes:

*1 - These are pH dependent; the most conservative value is given in this case.

The assessment values for the first seven metals or metalloids (arsenic to selenium) are the Soil Guideline Values (SGVs) derived by DEFRA and Environment Agency using the 'Contaminated Land Exposure Assessment' model. The assessment concentrations for arsenic, cadmium, nickel, mercury and selenium are outlined in the Environment Agency's Science Report series SC050021. These are based on a sandy loam soil and 6% soil organic matter. The assessment concentrations for the remaining metals/metalloids are described in the Contaminated Land Report Series (CLR), which have now been withdrawn.

The SGV threshold value is not intended to be applied to individual sample results where materials are similar, as the levels of contaminants will have a natural variability across the site. The modified mean value should instead be compared with the SGV.

The assessment values for the metals copper and zinc are levels at which plant growth is thought to be affected. The assessment values for copper and zinc are taken from the maximum permissible and advisable concentrations in soil after application of soil sludge given in the 'The Code of Good Agricultural Practice for the Protection of Soil', MAFF, 1998.

The assessment of sulphate, water soluble sulphate, elemental sulphur and sulphide is to determine the aggressive nature of the ground with respect to concrete and consequently the results are compared with BRE Special Digest 1:2005 'Concrete in Aggressive Ground'.

Prepared	CAT	Checked	CAT	Date	14.10.11	Job No	34106
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Organic Compounds	Intended Land Use Residential (mg/kg)		
	1% SOM	2.5% SOM	6% SOM
Naphthalene	1.5	3.7	8.7
Acenaphthene	210	480	1000
Acenaphthylene	170	400	850
Fluorene	160	380	780
Phenanthrene	92	200	380
Anthracene	2,300	4,900	9,200
Fluoranthene	260	460	670
Pyrene	560	1,000	1,600
Benzo(a)anthracene	3.1	4.7	5.9
Chrysene	6.0	8.0	9.3
Benzo(b)fluoranthene	5.6	6.5	7.0
Benzo(k)fluoranthene	8.5	9.6	10
Benzo(a)pyrene	0.83	0.94	1.0
Dibenz(a,h)anthracene	0.76	0.86	0.90
Indeno(1,2,3-cd)pyrene	3.2	3.9	4.2
Benzo(g,h,i)perylene	44	46	47
Phenol	210	390	420

The assessment criteria for chromium (VI) and the sixteen polycyclic aromatic hydrocarbon (PAH) species covered under the USEPA test have been taken from Nathanail, C. P., McCaffrey, C., Ashmore, M. H., Cheng, Y. Y., Gillett, A., Ogden, R. & Scott, D., 2009 *'The LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment 2nd Edition'*, Land Quality Press, Nottingham. This is also the case for phenol at 1% and 2.5% SOM. These are also all based on a sandy loam soil.

The threshold value is not intended to be applied to individual sample results where materials are similar, as the levels of contaminants will have a natural variability across the site. The modified mean value should instead be compared with the threshold value.

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