

## GEOTECHNICAL AND GEO-ENVIRONMENTAL SITE INVESTIGATION

### FORMER DEARNE & DOVE WORKS WEST STREET, WORSBROUGH BARNESLEY

FOR

HOOBER HOMES

ISSUE 1



48404-002

07 September 2023

Eastwood Consulting Engineers is a trading name of Eastwood and Partners (Consulting Engineers) Limited  
Registered Office: St Andrew's House, 23 Kingfield Road, Sheffield, S11 9AS, Company No: 1835021, VAT Registration No: 738 2114 44

**Directors:** P Richardson, BSc CEng MICE FStructE | S R Ellis, BEng CEng MStructE MICE | S J English, BEng CEng MStructE  
C A Topliss, BSc CEnv CSci CGeol SILC MICE FGS | A R Priest, BEng | A G Marshall, BEng CEng MStructE

**Technical Directors:** A Allison, BEng | M P Chappell, BEng IEng AMStructE | K Edwards, MSc CGeol FGS  
C Hodge, EngTech MICE | A J Kerslake, BEng FGS

**Senior Associates:** C A Wood, BSc CEng MStructE MICE

**Associates/Principals:** A M Cross, MEng CEng MICE | A Lavelle, MEng CEng MICE | R A Noble, BSc FGS | C L Capes, BSc FGS  
R Wall, BSc CGeol FGS | W T Chidawanyika BSc CEng MIEI MICE

**Consultants:** S D Preston, BEng CEng FICE FStructE | K R Pursall, BEng CEng MStructE | S J Mitchell, BSc MSc CEng MEI MCIBSE

**GEOTECHNICAL AND GEO-ENVIRONMENTAL  
SITE INVESTIGATION**

**FORMER DEARNE & DOVE WORKS  
WEST STREET, WORSBROUGH  
BARNLEY**

**FOR**

**HOOBER HOMES**

**ISSUE 1**

Job No. : 48404  
Report Status : Issue 1  
Document Date : 07 September 2023

Approved : 

**Kate Edwards**

**CONTENTS**

<b>1.0</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>6</b>
<b>2.0</b>	<b>INTRODUCTION.....</b>	<b>9</b>
<b>2.1</b>	<b>Terms of Reference.....</b>	<b>9</b>
<b>2.2</b>	<b>Context .....</b>	<b>9</b>
<b>2.3</b>	<b>Aims and Objectives.....</b>	<b>9</b>
<b>2.4</b>	<b>Scope of Investigation.....</b>	<b>9</b>
<b>2.5</b>	<b>Limitations of Investigation.....</b>	<b>11</b>
<b>3.0</b>	<b>THE SITE.....</b>	<b>12</b>
<b>3.1</b>	<b>Description .....</b>	<b>12</b>
<b>3.2</b>	<b>History .....</b>	<b>12</b>
<b>3.3</b>	<b>Geology .....</b>	<b>13</b>
<b>3.4</b>	<b>Hydrogeology.....</b>	<b>14</b>
<b>3.5</b>	<b>Hydrology .....</b>	<b>15</b>
<b>3.6</b>	<b>Mining and Mineral Extraction .....</b>	<b>15</b>
<b>3.7</b>	<b>Ground Gas .....</b>	<b>17</b>
<b>3.8</b>	<b>Pollution Incidents to Controlled Waters .....</b>	<b>18</b>
<b>3.9</b>	<b>Discharge Consents .....</b>	<b>18</b>
<b>3.10</b>	<b>Flooding.....</b>	<b>19</b>
<b>3.11</b>	<b>Soil Geochemistry.....</b>	<b>19</b>
<b>3.12</b>	<b>Contemporary Trade Entries.....</b>	<b>19</b>
<b>4.0</b>	<b>OUTLINE CONCEPTUAL MODEL .....</b>	<b>20</b>
<b>4.1</b>	<b>Potential Sources of Contamination.....</b>	<b>20</b>
<b>4.2</b>	<b>Ground Gas .....</b>	<b>20</b>
<b>4.3</b>	<b>Potential Pollutant Linkages .....</b>	<b>20</b>
<b>5.0</b>	<b>PHASE 2 INVESTIGATION .....</b>	<b>21</b>
<b>5.1</b>	<b>Site Works .....</b>	<b>21</b>
<b>5.2</b>	<b>Laboratory Testing.....</b>	<b>21</b>
<b>6.0</b>	<b>GROUND CONDITIONS.....</b>	<b>22</b>
<b>6.1</b>	<b>Made Ground.....</b>	<b>22</b>
<b>6.2</b>	<b>Natural Ground.....</b>	<b>22</b>
<b>6.3</b>	<b>Coal.....</b>	<b>23</b>

6.4	Groundwater.....	23
7.0	<b>GEOTECHNICAL APPRAISAL .....</b>	<b>24</b>
7.1	General .....	24
7.2	Coal Mining Assessment.....	24
7.3	Foundations .....	26
7.4	Ground Slabs .....	27
7.5	Superstructure Precautions .....	27
7.6	Excavation Problems and Obstructions.....	27
7.7	Roads.....	27
7.8	Surface Water Drainage.....	28
8.0	<b>REFINEMENT OF OUTLINE CONCEPTUAL MODEL .....</b>	<b>29</b>
8.1	Source Characterisation.....	29
8.2	Investigation of Potential Contamination Sources .....	29
8.3	Ground Gas .....	29
8.4	Unexpected Contamination.....	29
8.5	Chemical Testing .....	30
8.6	Assessment Criteria .....	30
8.7	Chemical Test Results .....	31
8.8	Significant Pollutant Linkages .....	34
9.0	<b>RISK ASSESSMENT .....</b>	<b>35</b>
9.1	Human Health: Future Site Users .....	35
9.2	Human Health: During Construction .....	36
9.3	Plants .....	37
9.4	Ground Gas .....	37
9.5	Construction Materials .....	37
9.6	Controlled Waters .....	38
9.7	Unexpected Contamination.....	39
9.8	Disposal of Material .....	39

## APPENDICES

- Appendix 1** Envirocheck  
Consultants Coal Mining Report  
Coal Authority Mine Entry Plan and Data Sheets  
Walker Ingram Associates' Mineshaft Cap Plan and Section, drawing 1000A
- Appendix 2** Exploratory Hole Location Plan, Drawing 48404/001A  
Trial Pit Logs, TP01 to TP14  
Trial Trench Logs, TT01 to TT03  
Borehole Logs, BH01 to BH08, BH01A, BH01B  
Site Photographs
- Appendix 3** Geotechnical Test Results - TBC
- Appendix 4** Chemical Test Results - Eurofins Chemtest Reports 22-09399-02 and 22-13422-02  
Table of Assessment Values - Residential with Homegrown Produce End Use

## 1.0 EXECUTIVE SUMMARY

1. The 1.54 ha site is located on the southern side of West Street, in Worsbrough, Barnsley. The site slopes down from around 60.0 m AOD in the north east corner to around 53.0 m AOD in the south east.
2. The site currently comprises a vacant plot of land. A portacabin, sub-station and electricity supply area surrounded by fencing are present in the north of the site and one partly demolished building is present in the south east. Four stockpiles are present in the north east of the site, predominantly made up of soil or building rubble. A 'U' shaped bank is situated in the west where soil has been pushed back and mounded, in the vicinity of a former mine shaft.
3. Historically, a mine shaft was present in the west of the site which has since been capped, and a canal ran east to west across the southern end of the site until around 1966 when it was backfilled. The site was used for a saw mill in the east and timber yard in the west. The saw mills were later extended west and labelled as an engineering works. The buildings were demolished by 2021/2022 leaving a substation in the north.
4. The solid geology beneath the majority of the site is anticipated to comprise strata of the Kent's Rock comprising sandstone. The north east and south west of the site are shown to be underlain by the Pennine Middle Coal Measures Formation comprising mudstone, siltstone and sandstone. No superficial deposits are shown to underlie the site.
5. Made ground is shown in the southern half of the site, considered to be from the backfilling of the Dearne & Dove Canal.
6. The Kent's thin coal seam is inferred to outcrop across the site from the north west to the south east. A fault is shown crossing the south eastern corner of the site, trending south west to north east.
7. Made ground was encountered in all exploratory holes. The made ground was deepest in the south west within the backfilled canal, with depths reaching over 3.6 m bgl. The made ground in the south east of the site, still within the former canal footprint, reached depths of between 0.9 and 2.6 m bgl. The remainder of the site recorded made ground depths of between 0.25 and 2.2 m bgl.
8. The natural ground predominantly consists of soft to firm, occasionally stiff, gravelly sandy clay. In the north east of the site, natural sand and sandstone bedrock are present. A 300 mm thick coal seam was encountered across the site between 1.4 and 13.0 m.

9. Groundwater was encountered between 1.1 and 2.7 m bgl. Oily sheens were recorded within TP02 and TP14 in the south and within TP04 in the east of the site.
10. Ten boreholes were drilled across the site to between 10.0 and 30.0 m bgl. A thin 300 mm thick coal seam was encountered within the majority of the boreholes. 'Soft push' was recorded within two boreholes, thought to be water-softened mudstone. Fractured sandstone was noted in the centre and north of the site. No further remedial works to 'treat' this soft or fractured ground is considered to be required.
11. The concrete mine shaft cap was located and measured to be 8.1 m by 8.1 m, with the top of the cap found at around 54 m AOD.
12. Since there is a variable thickness of made ground, differential settlement will need to be considered with junctions detailed accordingly. Appropriate measures such as flexible service joints and thickened capping beneath hardstanding should be allowed or, as well as extra brick facings for houses and detached garages.
13. Due to the depth of the made ground, shallow groundwater and soft clays, piling is expected to be required across the majority of the site, with piles taken into underlying competent bedrock. Discussions with a piling contractor should be undertaken to determine the most favourable pile type. An allowance for replacing broken piles should also be allowed for.
14. Where natural ground is expected at shallow depth, likely below the centre-north and north east of the site, reinforced strip or trench fill footings could be utilised.
15. Additional superstructure precautions are required for plots which utilise spread footings, based on the ground conditions encountered.
16. Due to previous site uses, there may be obstructions such as buried slabs and foundations associated with the former buildings, canal walls in the south of the site and buried service runs. Boulders of sandstone were encountered within the made ground within TP02 and within the natural ground within TP06 and TP07.
17. At this stage, no adoptable roads are proposed over the former canal, except for a small section which crosses a former dock. Should a sudden change in thickness of made ground be found at this location, a thickened road construction and incorporation of a geogrid may be necessary.
18. Soakaway drainage is not considered a viable option for surface water drainage.

19. Elevated concentrations of heavy metals, PAHs and TPHs were recorded within the made ground. Two samples recorded slightly elevated SVOCs and VOCs above the laboratory detection limit. Four samples of the made ground recorded asbestos fibers between 0.001% and 0.12%. Elevated concentrations were also recorded in the natural ground.
20. A 600 mm thick capping (of which at least 100 mm should consist of topsoil) is required in gardens or soft landscaped areas. A geotextile demarcation membrane will be required at the base of the capping to deter excavation through the base of the capping into the underlying made ground.
21. Any significant visible fragments of asbestos containing material encountered should be hand-picked by a suitable contractor.
22. An allowance should be made for disposing of impacted water where encountered in excavations, as well as any significantly impacted soils.
23. No radon precautions are considered necessary. Six rounds of gas monitoring will be undertaken on the site. The results will be reported on within Issue 2 of this report. At this stage, allowance should be made for Amber 2 ground gas precautions.
24. Concrete in contact with made ground will require DS-4 AC-4 sulphate measures. The results of the chemical testing will need to be forwarded to the water company so that appropriate water supply pipes can be selected.
25. The conclusions made in this report in relation to contamination are subject to agreement by the approving bodies, such as the Local Authority, and any 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 Consulting Engineers for, initially issued in May 2022, and has been re-assigned to Hooper Homes in September 2023. 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

The following reports have previously been undertaken on the site:

- Haigh Huddleston & Associates 'Phase 1 Geo-environmental Report' E13/5820/R001, August 2013;
- Haigh Huddleston & Associates, 'West Street, Worsbrough, Coal Mining Risk Assessment' E13/5820/MD/003, March 2014.

### 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;
- Obtain information enabling refinement and subsequent testing of the conceptual model;
- Carry out a 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;
- Develop an appropriate remediation strategy where remediation is required; and
- Detail the ground conditions and their geotechnical properties enabling outline foundation proposals to be made.

### 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:

- A Landmark Envirocheck;
- A Consultants Coal Mining Report;
- Geological maps;
- The British Geological Survey website; and
- A site walkover.

The results of the Phase 1 investigation were used to derive an outline conceptual model from which a preliminary risk assessment was made.

## 2.4.2 Phase 2

This part of the investigation consisted of intrusive works and laboratory analysis. The findings were used to test the conceptual model and produce a final risk assessment. The intrusive works comprised trial pits, trenches and rotary boreholes to enable:

- Examination of the upper few metres of ground;
- In situ description of soils, enabling any localised lateral and vertical changes in soil conditions to be logged;
- Assessment of any contamination identified using visual and olfactory methods;
- Infiltration tests to be carried out;
- Determine if shallow coal workings are present;
- Installation of gas and groundwater monitoring wells; and
- Collection of soil 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 residential properties of conventional construction with private gardens and driveways. It is assumed that existing ground levels will be regraded. 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 geological, historical 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. It should be noted that gas and groundwater levels vary due to seasonal or other effects, and may at times differ from those measured during the investigation.

This report considers the ground and groundwater and does not cover any buildings or their fabric, or the constituents of any existing hardstanding materials. 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 located on the southern side of West Street, in Worsbrough, approximately 3 km south east of Barnsley, South Yorkshire. The 1.54 ha site is roughly rectangular in shape and is centred around grid reference 435890, 403650.

The site currently comprises a vacant plot of land. A portacabin, substation and electricity supply area surrounded by fencing are present in the north of the site and one partly demolished building is present in the south east. Four stockpiles are present in the north east of the site, predominantly made up of soil or building rubble. A 'U' shaped bank is situated in the west where soil has been pushed back and mounded, in the vicinity of a former mine shaft.

Several man holes are present on the site, four of which are aligned north to south across the middle of the site. One of these manholes is reported to access a culvert which is recorded to cross the south eastern part of the site.

The site is accessed from West Street in the north east and north west.

The site slopes down to the north from around 60.0 m AOD in the north east corner to around 53.0 m AOD in the south east.

The site is surrounded by housing to the north and west, industrial units to the east and a dismantled rail line, now the Trans Pennine Trail, to the south.

Site photographs are included in Appendix 2.

### 3.2 History

Historical Ordnance Survey maps and aerial photography have been reviewed to assess the previous use of the site and surrounding area and are summarised in the table below. The historical maps can be found in the Envirocheck, in Appendix 1.

Date	The Site	Surrounding Area
1855	A coal pit is situated in the west of the site. The Dearne and Dove canal is present in the south of the site running east to west. Two docks extend northwards from the canal. A small square structure, possibly a dwelling lies on the northern boundary.	A chemical works is present adjacent to the eastern boundary of the site, Caulker Lane is shown along the northern boundary, a rail line is present adjacent to the southern boundary, running east to west, and the River Dove is shown around 100 m south. A glass works and foundry are situated around 150 m west. Two wells are shown, 20 m east and 200 m west.

Date	The Site	Surrounding Area
		Darley Main Colliery is situated 250 m north east of the site. Two coal pits are shown around 500 m and 600 m south west and also 700 m north west. Sandstone quarries are shown around 300 m north east, 750 m north and 800 m east. The Worsbrough Dale Mill is shown 750 m south east.
1892-1894	The coal pit is no longer labelled. Buildings associated with the Dearne & Dove Saw Mills are present in the eastern half of the site. Terraced housing is present along the north eastern boundary.	The wells are no longer shown as well as the coal pits and sandstone quarries and also Darley Main Colliery. A reservoir associated with the chemical works is now present to the east. The road along the northern boundary is labelled west street.
1906-1907	A timber yard is now shown in the western half of the site. Buildings associated with the Dearne and Dove saw mills have extended northwards	Residential development has taken place to the north. An air shaft is present 250 m north west. The foundry 250 m to the west is now labelled as a steel works. A sewage farm is situated 500 m south east and a saw mill is present 500 m east. Lewden Quarry is shown 750 m east.
1931-1932	The coal pit is labelled as 'old shaft'. The buildings associated with the saw mills have extended west.	The works to the west are labelled to be a chemical works. Allotment gardens are labelled around 100 m south of the site.
1948-1956	No significant changes have occurred.	Residential development has occurred to the north west extending over the former air shaft.
1960-1966	The Dearne & Dove canal is now shown as marshland. Several tracks are shown extending around the site from West Street. The Dearne & Dove Saw Mills are now labelled as 'works'.	The chemical works and reservoir are no longer present to the east of the site. Works are labelled 300 m south east. Colliery works from Barrow colliery to the south extends to within 450 m of the site. Lewden Quarry is labelled as disused.
1971	The works are now labelled as 'Engineering Works' with a depot in the west. Two substations are shown in the north of the site. The marshland is no longer shown in the south of the site	A battery factory is located adjacent to the eastern boundary.
1980-1989	An additional building has been developed to the south of the main engineering works building.	Colliery works extend to within 300 m of the site. The works are now labelled as sewage works to the south east. By 1989 the rail line immediately to the south of the site it labelled as dismantled. The allotment gardens are no longer present. The colliery works are now labelled as a disused tip and the colliery buildings have been demolished.
1993-1999	The works building has extended to the south west.	The building immediately to the east is now only labelled as a factory.
2002-2006	No significant changes have occurred.	The tip to the south is no longer labelled.
2021	The majority of the buildings on site have been demolished. One rectangular building remains in the south east corner.	No significant changes have occurred.

### 3.3 Geology

The geological map sheet, SE30 NE (1:10,000) and the British Geological Survey (BGS) Online Viewer have been consulted.

The solid geology beneath the majority of the site is anticipated to comprise strata of the Kent's Rock comprising sandstone. The north east and south west of the site are shown to be underlain by the Pennine Middle Coal Measures Formation comprising mudstone, siltstone and sandstone.

No superficial deposits are shown to underlie the site.

Made ground is shown in the southern half of the site, considered to be from the backfilling of the Dearne & Dove Canal.

According to the geological map sheet the bedrock is shown to be dipping around 4° to the north east.

The Kent's Thin coal seam is inferred to outcrop across the centre of the site from the north west to the south east.

A fault is shown crossing the south eastern corner of the site, trending south west to north east.

A cluster of 12 boreholes undertaken in 1987 are present around 60 m north of the site, taken to depths of around 4 and 14 m, and drilled from around 62.5 to 68.7 m AOD (i.e. around 2 to 9 m above the site's highest point). No plan is available to view so their locations cannot be confirmed, but seven boreholes encountered a shallow band of broken ground; most holes recorded this band at around 61 to 58 m AOD. One additional borehole found broken ground at a higher level, from around 64 m AOD. Seven boreholes recorded a 700 mm thick intact coal seam; most holes recorded this seam between 0.5 and 4.0 m above the broken ground, with one borehole recording the coal 0.5 m below the broken ground. The geological map sheets show the Low Beamshaw coal seam inferred to outcrop around 10 m south of the boreholes. Broken ground may be associated with this coal seam.

Three boreholes around 65 m east of the site were drilled in 1975; these boreholes found between <0.5 to 4 m of made ground over clay and interbedded sandstone and mudstone. Bedrock was noted to be fractured. A thin coal seam (100 mm) was noted at around 4.6 m in one borehole, and 'disturbed ground' was noted in another at around 8.3 to 9.5 m. A third hole recorded 50 mm of coal at 2.7 m, 450 mm poor quality coal at 4.1 m and 100 mm of coal at 6.95 m. The boreholes were drilled adjacent to the Worsbrough fault line. The Low Beamshaw coal seam is inferred to outcrop to the west of the fault line and the Abdy coal seam is inferred to outcrop to the east of the fault line. The variable depth of the coal seams encountered is likely due to the fault.

### 3.4 Hydrogeology

The underlying bedrock is classified as a Secondary A Aquifer. These are defined as permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases

forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.

The site is not within a Groundwater Source Protection Zone.

There are no water abstractions recorded within 500 m of the site.

### **3.5 Hydrology**

The nearest surface water feature is the River Dove, located approximately 79 m south.

### **3.6 Mining and Mineral Extraction**

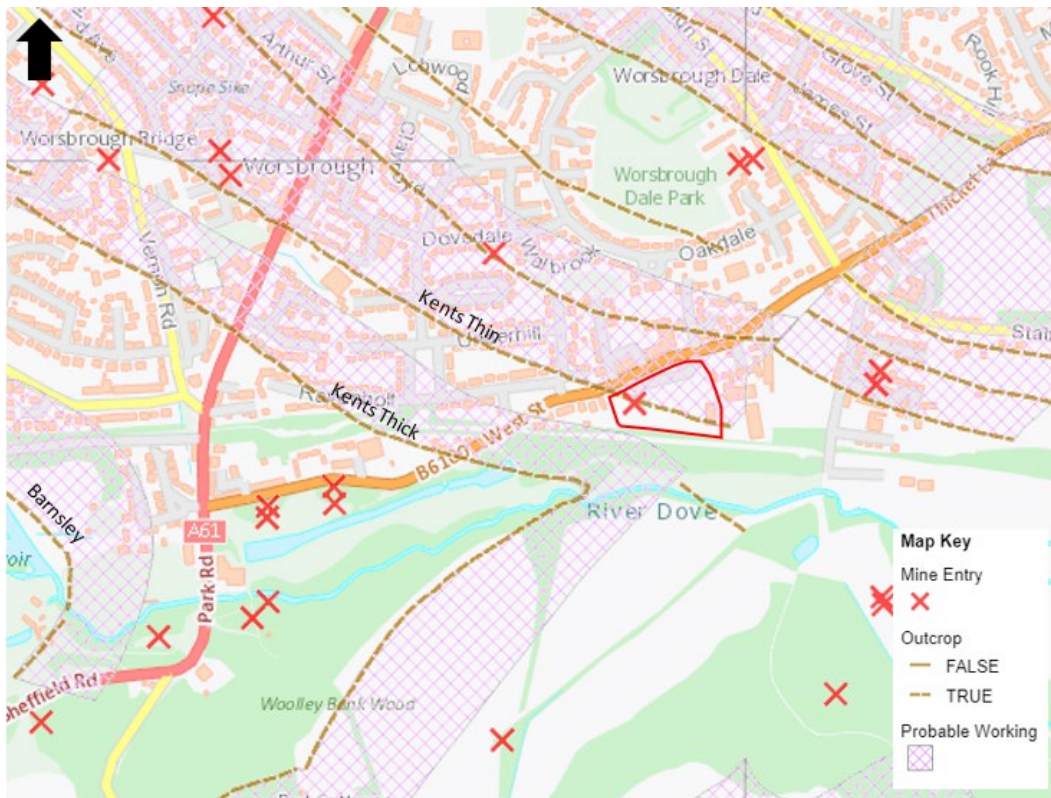
#### **Coal Mining**

The shallowest named coal seam beneath the site is expected to be the Kents Thin which is conjectured to outcrop across the site from north west to south east. According to the geological vertical section, the Kents Thin is noted to be approximately 0.56 to 0.66 m thick. The Kents Thin coal seam is therefore expected to be present at shallow depth beneath the north eastern half of the site but is understood to have been little worked in the area.

The second shallowest named coal seam in the area is the Kents Thick, conjectured to outcrop around 150 m south west of the site. According to the geological vertical section on the SE30 NE map sheet, the Kents Thick is noted to be approximately 0.86 to 2.26 m thick, potentially occurring as two beds separated by a thin dirt parting. According to the geological memoir for the area, the Kents Thin and Kents Thick seams have around 18 m of measures between them, including a thin unnamed seam around 4.0 m above the Kents Thick coal.

The third shallowest coal seam stratigraphically beneath the site is the Barnsley Rider coal which does not appear to outcrop in the vicinity of the site. The seam is recorded as approximately 0.36 to 1.38 m in thickness. The next shallowest coal seam is the Barnsley coal, conjectured to outcrop around 750 m south west of the site. According to annotations on the geological map sheet, the Barnsley coal was recorded at 78 m depth within the mine shaft on site and is approximately 2.4 to 2.64 m thick.

The coal seam outcrops are shown on the extract below:



If workings within the Kents Thin or Kents Thick seams are present, they may potentially affect the proposed development, leading to a need to drill and grout the voided ground to stabilise the workings. Therefore, a rotary borehole investigation was required to determine the depths of coal seams below the site, and whether any workings are present. The Barnsley seam workings are deep enough to require treatment.

The site is within an area where a Coal Authority report is required. This has been obtained and is included in the Appendix. The report states that the site is within the likely zone of influence from known workings in nine seams of coal (Barnsley, Top Hard Barnsley, Lidgett, Low Fenton, Top Fenton, Parkgate, Middleton Main, Thorncliffe and Silkstone) at depths of between 57 and 456 m, last worked in 1969.

The report also states that the site is within an area with probable unrecorded shallow workings.

There is one recorded mine shaft on site, denoted 435403-004. The shaft plan, data sheets and cap details for the shaft have been obtained and are included in Appendix 1. The shaft is recorded as being 78.0 m deep, named as No.2 pit from Darley Main Colliery. The diameter of the shaft is unknown and the shaft is recorded as being unfilled but covered with a reinforced concrete cap in 2020.

The roughly north east to south west trending Kents Thin coal seam is recorded to outcrop across the site.

There are no faults, fissures or breaklines recorded.

Opencast mines are located within 500 m of the site to the south.

The Coal Authority has no record of a damage notice or claim within 50 m of the site, since October 1994. The Coal Authority is not aware of any request having been made to carry out preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

There are no records of any mine gas emissions or mine water treatment schemes, within 500 m of the site.

The Coal Authority report notes a site investigation was undertaken 39 m north west of the site. The following reports were reviewed for this north western site (planning application number 2018/0806):

- Hamson Barron Smith 'Ground Investigation Report' Report ref 23-24-18-1-6004-GIR1, September 2017;
- Alan Wood and Partners, 'Additional Intrusive Ground Investigation' Ref AHB/ST/41027-Lt002, June 2018.

The Hamson Barrow Smith report states that the natural ground comprised soft to firm slightly sandy slightly gravelly clay to between 1.6 and 3.9 m bgl underlain by firm to stiff clay progressing into mudstone with depth. All of the boreholes were dry. One window sample borehole encountered coal between 5.0 and 5.42 m in the south east of the site. Two rotary boreholes were drilled to 30.0 m and encountered coal at between 16.0 and 17.6 m in the north east and coal at between 3.6 and 5.5 m and 18.95 and 19.1 m bgl in the south west. No voids were recorded. The additional investigation by Alan Wood and Partners undertook a further borehole in the centre of the site to 30.0 m and encountered one coal seam at 8.1 to 8.6 m bgl and no workings.

### **Sandstone and Clay Extraction**

On the historical maps, sandstone quarries are shown in the surrounding areas. There is no evidence on the historical or geological maps to suggest that sandstone or clay extraction has taken place on site or in the site's immediate vicinity.

### **3.7 Ground Gas**

The property is in an intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). No radon protective measures are therefore considered necessary in the construction of new extensions or dwellings.

Deep made ground is anticipated to be present in the south of the site where the former canal was located.

The Kents Thin and Kents Thick coal seams are expected at shallow depth beneath the site. If workings are present there may be the risk of mine gas.

According to the Envirocheck, there is one historical landfill within 250 m of the site, located around 87 m north east. The waste accepted is unknown. This landfill is also a Local Authority Recorded Landfill.

There are six infilled features recorded within 250 m of the site:

Distance & Direction	Notes
On site	Coal shaft, present on site since at least the 1850s.
On site	Canal, infilled around the 1960s.
36 m East	Reservoir, infilled by 1960.
76 m South West	Section of canal, infilled by 1980.
116 m North	Land associated with Darley Main Colliery, no longer shown by 1890s.
228 m South East	Land associated with Edmund Main Colliery, no longer shown by 1907.

Due to the age of the backfill of the offsite features, little gas risk is expected to be posed.

Due to the potential for deep made ground associated with the infilled canal in the south of the site and possible mine workings beneath the site, a programme of gas monitoring is recommended to confirm the level of gas precautions necessary, if any, for a residential development.

### 3.8 Pollution Incidents to Controlled Waters

According to the Envirocheck, there are three pollution incidents to controlled waters within 250 m of the site. The nearest is recorded as 101 m south involving sewage and storm overflow to Dearne tributaries, listed as a Category 3 minor incident. The next closest is recorded as 104 m south east involving unknown pollutants listed as a Category 3 minor incident, and the final is located 242 m east involving waste oils into Dearne tributaries recorded as a Category 3 minor incident.

### 3.9 Discharge Consents

Within 250 m of the site, the Envirocheck records six discharge consents located between 106 and 180 m. All are associated with Yorkshire Water Services Ltd and involve sewage discharges / stormwater overflows to the River Dove between 1997 and 2020.

### 3.10 Flooding

The site lies within Flood Zone 1.

The northern half of the site has a limited potential for groundwater flooding whilst the southern half has the potential for groundwater flooding to occur.

The southern half of the site is recorded as having medium to high risk of surface water flooding.

### 3.11 Soil Geochemistry

The Envirocheck estimates the following concentrations of arsenic, cadmium, chromium, nickel and lead to be present in the natural soil at the site:

Contaminant	Estimated Concentration (mg/kg)	Assessment Value (mg/kg)
Arsenic	15 to 25	37
Cadmium	<1.8	11
Chromium	60 to 90	910
Lead	100 to 200	200
Nickel	15 to 30	180

The concentrations of these contaminants are therefore not expected to be elevated within the natural ground.

### 3.12 Contemporary Trade Entries

There are sixteen listed trade entries within the Envirocheck. The closest is listed as being a powder coating works at 0 m north east and is labelled as 'active'. There are twelve trade entries listed as 'inactive' which are located between 9 m and 245 m north east, west. These relate to a garage, engineering services, wrought ironwork, machinery, polyethene and plastic sheeting supplies, metal products, brick manufacturers, car recovery services, nuts bolts and fixings and a car dealer.

Three are listed as active and are located 32 m east at Oakwell fabrications, 59 m north east at Booths Manufacturing of soft furnishings and 72 m north east at Barnsley Tyre Centre.

## 4.0 OUTLINE CONCEPTUAL MODEL

The site is being considered for the construction of residential properties with private gardens.

### 4.1 Potential Sources of Contamination

Historically, a mine shaft was present in the west of the site which has since been capped, and a canal ran east to west across the southern end of the site until the 1960s when it was backfilled. The site was also used for a saw mill in the east and timber yard in the west. The saw mills were later extended west and labelled as an engineering works. The buildings were demolished by 2021/2022 leaving a substation in the north.

### 4.2 Ground Gas

No radon protective measures are considered necessary.

Due to the potential for deep made ground associated with the infilled canal in the south of the site and possible mine workings beneath the site, a programme of gas monitoring is recommended to confirm the level of gas precautions necessary, if any, for a residential development.

### 4.3 Potential Pollutant Linkages

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

Source	Potential Contaminants	Potential Pathways	Potential Receptors
Made ground  Substation	Heavy metals/metalloids Asbestos PAHs TPH VOCs/SVOCs  PCBs	Ingestion Inhalation Direct contact Biological uptake Migration through ground	Site residents and visitors to the site Site construction workers Secondary A Aquifer Plants Water supply pipes
Made or natural ground	Sulphates Low pH	Direct contact	Below ground concrete
Infilled canal and potential shallow coal workings	Ground gas and mine gas	Migration through ground	Site residents and visitors Construction workers Buildings

## 5.0 PHASE 2 INVESTIGATION

### 5.1 Site Works

Eastwood Consulting Engineers initially visited site on 10 March 2022 and undertook eight trial pits, referenced TP01 to TP08, to determine the underlying ground conditions. The trial pits reached depths of between 1.3 and 3.9 m below ground level (bgl).

Eastwood Consulting Engineers also attended site on 04 and 05 April 2022 and undertook the following:

- Five trial pits (TP09 to TP14) to depths between 1.8 and 3.8 m;
- Three soakaway tests within TP09, TP10 and TP11;
- Three trial trenches (TT01 to TT03) to determine the depth, extent and thickness of the mine shaft cap;
- Ten rotary boreholes (BH01 to BH08, BH01A, BH01B) to depths between 10.0 and 30.0 m; and
- The installation of six gas and groundwater monitoring wells within BH01, BH04 to BH08, to 3.0 m bgl.

The trial pit logs and photographs of the trial pits are presented in Appendix 2. The trial pit positions are plotted on the Exploratory Hole Location Plan, drawing number 46967/001A, also in Appendix 2.

### 5.2 Laboratory Testing

Five samples of natural ground were sent to Professional Soils Laboratory for geotechnical testing. The geotechnical test results are still outstanding but when received, will be included in Appendix 3 and discussed further in Section 5.

Twenty-one samples of made ground and six samples of natural ground were dispatched for chemical testing. Soil samples were taken in 500 g plastic tubs and 250 ml amber jars. All samples were analysed at Eurofins Chemtest Limited, using MCERTs accredited methodologies where available. The chemical test results are presented in Appendix 4 and discussed further in Sections 8 and 9.

## 6.0 GROUND CONDITIONS

### 6.1 Made Ground

#### *Backfilled Canal*

TP01 to TP03 and TP14 were excavated through the former backfilled canal in the south of the site.

TP01 and TP14 in the south west of the site encountered over 3.2 m and over 3.6 m of made ground comprising gravelly ashy sand or sandy ashy gravel with gravel of brick, metal, coal, clinker and sandstone to depths up to 1.6 and 3.3 m bgl. Made ground comprising soft clayey silt was encountered below, with decaying roots noted in TP01 and a slight hydrocarbon odour recorded within TP14. The made ground extended below the final depth of the trial pits.

TP02 and TP03 in the south east of the site encountered made ground comprising clayey gravelly sand with brick, plastic, glass, coal, wood and ceramics to between 0.9 and 1.6 m bgl. Within TP02, ashy sandy gravel was encountered below with gravel of coal, brick clinker and slag to 2.6 m bgl.

#### *Remainder of Site*

Made ground comprising clayey sandy gravel or clayey gravelly sand with gravel of sandstone, brick, metal, plastic, glass clinker and coal was encountered within TP04 to TP13 to depths of between 0.25 and 2.0 m bgl.

Made ground comprising dark grey stained sandy slightly gravelly clay was encountered within TP04 to 2.0 m bgl. A faint hydrocarbon odour was noted.

Cohesive made ground was encountered in two trial pits. Soft yellowish brown sandy clay was encountered within TP09 in the north west corner of the site to 2.2 m bgl. Reworked brown grey clay was encountered within TP06 between 0.7 and 0.8 m bgl.

### 6.2 Natural Ground

Natural ground was encountered below the made ground in the majority of the trial pits excluding TP01 and TP14 in the south west of the site and generally comprised firm to stiff (occasionally soft) orange grey sandy gravelly clay, with gravel of sandstone from between 0.4 and 2.9 m.

Firm to stiff grey brown slightly gravelly clay was encountered within six trial pits, TP02, TP03, TP05, TP06, TP07 and TP13, from between 2.5 and 3.0 m up to between 2.7 m and extending past the finished depth of the trial pits. Boulders were recorded within the clay in TP06 and TP07.

Brown clayey gravelly sand was encountered between 2.1 and 2.7 m bgl within TP07 and between 0.25 and 2.7 m bgl within TP13.

Extremely weak weathered brown sandstone was encountered within TP10, TP11 and TP12 from between 1.7 and 2.2 m and extending past the finished depth of the trial pits.

## 6.3 Coal

Ten rotary boreholes were drilled across the site to determine the depth to the Kents Thin and Kents Thick coal seams and if the seams have been worked.

One thin coal seam was encountered within the majority of the boreholes and within TP05 at the depths summarised in the table below:

Location		Depth of Coal (m bgl)	Thickness
TP05	West	1.4 to 1.7	300 mm
BH01B	North East	13.0 to 13.2	200 mm
BH02	North East	10.5 to 10.8	300 mm
BH03	Centre North	6.5 to 6.8	300 mm
BH04	Centre North	4.0 to 4.3	300 mm
BH05	Centre	11.0 to 11.3	300 mm
BH06	West	7.5 to 7.8	300 mm
BH07	South East	11.0 to 11.3	300 mm
BH08	East	13.0 to 13.3	300 mm

The results are discussed in further detail in Section 7.2.

## 6.4 Groundwater

A number of the trial pits encountered groundwater during site works as follows:

Location		Depth of Water Strike (m bgl)	Geology	Comments
TP01	South West	2.7	Made Ground	Fast ingress
TP02	Centre South	2.5	Base of the made ground	Fast ingress – oily sheen
TP03	South East	1.7	Gravelly cobbly sandy CLAY	Slight ingress
TP04	Centre	1.2	Made Ground	Fast ingress – oily sheen
TP08	Centre East	1.1	Slightly sandy CLAY	Fast ingress
TP10	North	2.5	Sandstone	Base of pit
TP11	Centre East	1.2 and 1.8	Gravelly sandy CLAY	Slight ingress
TP14	South West	2.4	Made Ground	Fast ingress – oily sheen

## 7.0 GEOTECHNICAL APPRAISAL

### 7.1 General

The proposed development is to include low-rise residences of conventional construction with private gardens.

Made ground was encountered in all exploratory holes. The made ground was deepest in the south west within the backfilled canal, with depths reaching over 3.6 m bgl. The made ground in the south east of the site, still within the former canal footprint, reached depths of between 0.9 and 2.6 m bgl. The remainder of the site recorded made ground depths of between 0.25 and 2.2 m bgl.

The natural ground predominantly consists of soft to firm, occasionally stiff, gravelly sandy clay. In the north east of the site, natural sand and sandstone bedrock are present. A 300 mm thick coal seam was encountered across the site between 1.4 and 13.0 m.

Groundwater was encountered between 1.1 and 2.7 m bgl.

Six hand shear vane tests were carried out within the natural clay, at depths of between 1.2 and 3.3 m, with shear strengths of between 27 kN/m<sup>2</sup> and 132 kN/m<sup>2</sup>, indicative of soft to stiff clays.

Five samples of natural ground were sent for geotechnical testing. The results will be reported on within Issue 2 of this report.

The Party Wall Act will need to be considered for structures associated with neighbouring properties along the site boundaries.

Since there is a variable thickness of made ground, differential settlement will need to be considered with junctions detailed accordingly. Appropriate measures such as flexible service joints and thickened capping beneath hardstanding should be allowed or, as well as extra brick facings for houses and detached garages.

### 7.2 Coal Mining Assessment

#### Underground Workings

A rotary borehole investigation has been undertaken to ascertain the presence and extent of any workings within the Kents Thin and Kents Thick coal seams.

A 300 mm thick coal was found from around 1.4 to 5.0 m in the west, deepening to around 13 m in the east.

'Soft push', 'weak mudstone' and 'fractured' ground were reported by the drillers in the following locations:

Location		Depth (m bgl)	Notes
BH01	North East	3.0 to 6.0	Fractured Sandstone
		6.0 to 7.0	Soft Push (loss of flush)
BH01A	North East	6.0 to 9.0	Fractured Sandstone
BH02	North East	13.5 to 14.5	Soft Push (loss of flush)
BH03	Centre	19 to 22	Fractured Sandstone (partial loss of flush)
BH04	Centre North	4.3 to 10	Soft Mudstone
		16 to 18	Fractured Sandstone (partial loss of flush)
BH05	Centre	6.0 to 11	Soft Mudstone
BH06	West	1.2 to 7.5	Soft Mudstone/Clay
BH07	South East	5.0 to 8.0	Soft Mudstone/Clay
BH08	East	6.0 to 10	Soft Mudstone

The thin coal encountered is expected to represent the Kents Thin coal. BH05 and BH06 were taken to around 18 to 22 m below this seam and did not encounter the Kents Thick; the seam is expected to lie just below where the boreholes terminated.

Soft mudstone was reported in boreholes just above the Kents Thin and in one location, 2.0 m below it. It is expected that since this site is underlain by a shallow water table and a culverted watercourse, the 'soft' is due to water-softening, rather than workings. During the works, the drillers commented that they did not consider the 'soft' ground workings.

Fractured sandstone was encountered in four boreholes. Two of these holes were drilled in the north eastern site corner and found fractured sandstone between 3.0 and 9.0 m bgl, stratigraphically above the Kents Thin seam. A third hole drilled in this area recorded 'solid' strata throughout. The other two boreholes were located in the centre of the site and recorded fractured ground at around 16 to 19 m depth, stratigraphically below the Kents Thin.

Offsite, BGS boreholes indicate a poor quality coal present to the east at around 4.1 m, and 'disturbed ground' at around 8 m depth. To the north, a number of boreholes recorded 'broken ground'; the level of this band would put it stratigraphically in line with the site's north eastern corner, but is likely associated with a stratigraphically younger coal seam.

Since the depths at which the fractured ground was recorded do not appear to correlate with a named coal seam encountered below this site, the material may not be considered to be indicative of

underground workings. A fault is inferred to cross the east of the site, and deep coal workings are expected to be present. It could be considered that this fractured ground is associated with the fault zone, and exacerbated by collapse of deep workings.

No further remedial works to 'treat' this soft or fractured ground is considered to be required.

## **Mine Shaft**

The Coal Authority have provided the cap details for the structure installed in 2020. These drawings are included in Appendix 3.

Three trenches (TT01 to TT03) were pulled along the south east, south west and north west corner of the concrete cap. The trenches encountered between 200 and 250 mm limestone sub-base over reinforced concrete which was up to 600 mm in thickness. Firm slightly sandy slightly gravelly clay was encountered below the cap. Fast ingress of groundwater was also encountered at 0.9 m in TT01.

The concrete cap was measured to be 8.1 m by 8.1 m and the top of the cap was found at around 54 m AOD.

## **7.3 Foundations**

Due to the depth of the made ground, shallow groundwater and soft clays, piling is expected to be required across the majority of the site. Piles should be taken through any made and soft ground and into underlying competent bedrock. Discussions with a piling contractor should be undertaken to determine the most favourable pile type. An allowance for replacing broken piles should also be allowed for.

Where natural ground is expected at shallow depth, likely below the centre-north and north east of the site, reinforced strip or trench fill footings, taken through any made or soft ground and into the natural firm to stiff clay or sandstone bedrock are considered to be appropriate. A minimum foundation depth of 900 mm taken from finished or original ground level, whichever is lower, will apply to foundations within the natural clay, shallowing to 600 mm where in natural sand.

An allowable bearing capacity of at least 125 kN/m<sup>2</sup> is considered appropriate for the natural cohesive and granular soils in the north and north east of the site.

Where foundations are within influencing distance of past, present or proposed trees in or over cohesive ground, the footing depth will need to be increased in accordance with the NHBC Standards Chapter 4.2. Precautions against soil heave due to the influence of past or present trees are likely to be required wherever the footing depth is increased to greater than 1500 mm.

The geotechnical results are still outstanding; once received, the minimum depth in cohesive ground can be confirmed.

## 7.4 Ground Slabs

Precast concrete floors with an underlying minimum 150 mm high ventilated void will be required, increasing to 250 mm if plots require heave precautions (void height to be confirmed upon receipt of geotechnical results).

## 7.5 Superstructure Precautions

Additional superstructure precautions are considered to be required for plots which utilise spread footings, based on the ground conditions encountered.

## 7.6 Excavation Problems and Obstructions

The trial pits were unstable where granular made ground was present. Fast ingress of water was also present within some trial pits making pit sides unstable.

Boulders of sandstone were encountered within the made ground within TP02 and within the natural ground within TP06 and TP07.

An 8.1 by 8.1 m concrete cap is present above the former mine shaft in the west of the site.

Due to previous site uses, there may be obstructions such as buried slabs and foundations associated with the former buildings, canal walls in the south of the site and buried service runs. A culvert is also understood to be present beneath the south east of the site.

Temporary support will be required in accordance with current Health and Safety Regulations wherever access is required to trenches deeper than 1.2 m, or less where there is a risk of collapse.

## 7.7 Roads

A CBR value of 2% is expected to be appropriate for road design. It is recommended that CBR tests are undertaken along any proposed roads prior to construction so that accurate CBR values can be obtained. The ground should also be assumed to be frost susceptible and a minimum construction thickness of 450 mm will therefore apply.

At this stage, no adoptable roads are proposed over the former canal, except for a small section which crosses a former dock. Should a sudden change in thickness of made ground be found at this location, a thickened road construction and incorporation of a geogrid may be necessary.

## 7.8 Surface Water Drainage

Infiltration tests (SA01 to SA03) were carried out in TP09, TP10 and TP11:

Test	Monitoring Time	Material Tested	Comment
SA01/TP09	4 hours	Sandy CLAY	Water level rose 30 mm
SA02/TP10	4 hours	Sandy CLAY and SANDSTONE	Water level dropped 100 mm
SA03/TP11	3.25 hours	Sandy CLAY and SANDSTONE	No change in water level

Since the water had not drained to 25% effective depth in any of the pits, it was not possible to calculate a BRE365 rate for these tests. Soakaway drainage is therefore not considered a viable means of surface water drainage 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, is detailed in Section 4.

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 Investigation of Potential Contamination Sources

The investigation works undertaken to cover each of the sources of potential contamination outlined in Section 4, are detailed in the table below:

Source	Potential Contaminants	Exploratory Hole used to Investigate Source
Made ground	Heavy metals/metalloids Asbestos PAHs TPH VOCs/SVOCs	Made ground was encountered in all of the exploratory holes across the site.
Made or natural ground	Sulphates Low pH	Made and natural ground was encountered in the majority of the exploratory holes.
Substation in the north	PCBs	Samples collected near the sub-station and sent for PCB testing.
Infilled canal and potential shallow coal workings	Ground gas and mine gas	Six gas and groundwater monitoring wells installed across the site.

### 8.3 Ground Gas

No radon protective measures are considered necessary.

Six monitoring wells have been installed, and six rounds of gas monitoring will be undertaken. The results will be reported on within Issue 2 of this report.

### 8.4 Unexpected Contamination

Possible cement bound asbestos was encountered across the surface soils on the site.

Hydrocarbon odours were noted within the made ground in TP04, TP09 and TP14.

Oily sheens were recorded in the groundwater within TP02, TP04 and TP14.

Ashy made ground with inclusions of coal, clinker and slag has been encountered within TP02, TP14, TP07, TP09 and TP14.

Anthropogenic material has been encountered within the made ground including metal, plastic, possible cement bound asbestos, clinker, wood, brick and ceramics.

## 8.5 Chemical Testing

Twenty-one samples of made ground and six samples of natural ground were dispatched for chemical testing. Each of the samples was analysed for the suite of contaminants listed in the table below:

Contaminant Type	Actual Contaminants
Metals/Metalloids	Arsenic, cadmium, chromium, lead, mercury, nickel, selenium, copper and zinc
pH	pH
PAHs	Speciated PAH
Sulphates	Water soluble sulphate, acid soluble sulphate and sulphur

In addition to the above tests, the following was also undertaken:

- Nineteen samples of made ground and all six samples of natural ground were screened for asbestos fibres; if fibres were identified the results were quantified to assess the amount of fibres present;
- Eleven samples of made ground and one sample of natural ground were tested for total petroleum hydrocarbons (TPH CWG);
- Ten samples of made ground were tested for total phenols;
- One sample of made ground was tested for PCBs;
- Three samples of made ground were tested for VOCs and SVOCs; and
- Ten samples of made ground were tested for total organic carbon.

## 8.6 Assessment Criteria

The proposed development of the site is for residential properties with private gardens. The assessment criteria relating to residential with home-grown produce end use have therefore been used. Tables detailing the relevant assessment concentrations are included in Appendix 4.

## 8.7 Chemical Test Results

Total organic content (TOC) was analysed in a number of samples of made ground and a summary of the results is given in the table below alongside the resultant soil organic matter (SOM) content:

Material	Number of Samples	TOC (%)	Resultant SOM* (%)
MG: Ashy sandy gravel / gravelly sand	5	5.4 to 63	9.3 to 108.3
MG: Sandy gravelly clay	2	0.47 to 0.77	0.8 to 1.3
MG: Sandy clayey silt	2	12 to 14	20.6 to 24
MG: Clayey sand	1	9.7	16.7

\*SOM = TOC x 1.72

The majority of the made ground results have therefore been compared to the assessment values derived using the 6% SOM content, where applicable. Clay made ground within TP04 and TP09 has been assessed against the 1% SOM content.

### 8.7.1 Made Ground

Thirteen samples recorded elevated concentrations of the following heavy metals/metalloids:

Determinand	Assessment Value		Range of Elevated Sample Concentrations (mg/kg)
	Human Health	Phytotoxicity	
<b>Arsenic</b>	37	50	38 to 95 (11 samples)
<b>Lead</b>	200	300	210 to 450 (6 samples)
<b>Copper</b>	2,400	200	250 (1 sample)
<b>Nickel</b>	180	110	160 (1 sample)
<b>Zinc</b>	3,700	300	330 to 1300 (7 samples)

Fourteen samples recorded elevated concentrations of PAHs as summarised in the table below:

Determinand	Assessment Value (mg/kg)		Range of Elevated Sample Concentrations (mg/kg)
	1% SOM	6% SOM	
<b>Naphthalene</b>	2.3	13	14 to 87 (4 samples)
<b>Benzo(a)anthracene</b>	7.2	13	26 to 45 (3 samples)
<b>Chrysene</b>	15	27	40 (1 sample)
<b>Benzo(a)pyrene</b>	2.2	3.0	3.2 to 59 (10 samples)
<b>Dibenz(a,h)anthracene</b>	0.24	0.3	0.41 to 7.7 (8 samples)
<b>Benzo(b)fluoranthene</b>	2.6	3.7	4 to 66 (9 samples)

Three samples recorded elevated Aromatic TPH fractions as summarised in the table below:

Determinand	Assessment Value – 6% SOM (mg/kg)	Sample ID and Concentration		
		TP02 1.7-1.8 m	TP04 1.5-1.6 m	TP14 3.3-3.4 m
Aromatic TPH >C16-C21	390	1,300	2,800	450
Aromatic TPH >C21-C35	1,700	-	28,000	2,500

Three samples were tested for VOCs and SVOCs. Two samples recorded detectable concentrations of a number of VOCs and SVOCs summarised in the table below. Where available, assessment values have been derived from suitable 4 use levels (S4ULs) produced by Land Quality Management Ltd and the Chartered Institute of Environmental Health (LQM/CIEH). Where no screening value is available, the laboratory detection limit has been used as an initial screening value.

Determinand	Limit of detection	Human Health Assessment Value (mg/kg) (6% SOM)	Sample ID and Concentration	
			TP14 3.3-3.4 m	TP09 0.3-0.4 m
<b>Benzene</b>	1.0 ug/kg	0.37	4.0 ug/kg	<1
<b>Toluene</b>	1.0 ug/kg	660	6.1 ug/kg	<1
<b>M &amp; P Xylene</b>	1.0 ug/kg	310	16 ug/kg	<1
<b>o-Xylene</b>	1.0 ug/kg	330	4.0 ug/kg	<1
<b>Naphthalene</b>	0.5 mg/kg	13	1.9 mg/kg	1.0 mg/kg
<b>2-Methylnaphthalene</b>	0.5 mg/kg	DL	1.8 mg/kg	1.2 mg/kg
<b>Acenaphthylene</b>	0.5 mg/kg	920	2.3 mg/kg	2.0 mg/kg
<b>Dibenzofuran</b>	0.5 mg/kg	DL	1.6 mg/kg	1.0 mg/kg
<b>Fluorene</b>	0.5 mg/kg	860	3.0 mg/kg	0.77 mg/kg

DL – Detection Limit

Numbers highlighted grey denote exceedances of the DL

Asbestos fibres were recorded within four samples:

- 0.008% Amosite fibers within TP01 from the sample between 0.1-0.2 m;
- 0.12% Chrysotile within TP04 from the sample between 1.5-1.6 m;
- 0.001% Chrysotile within TP08 from the sample between 0.3-0.4; and
- 0.001% Crocidolite within TP11 from the sample at 0.3 m.

One sample from TP06 between 0.4 and 0.5 m adjacent to the electricity sub-station was tested for PCBs. No elevated concentrations were recorded above the laboratory's detection limit.

## 8.7.2 Natural Ground

The results have been compared against residential with home-grown produce end use derived assuming 1% SOM.

Determinand	Assessment Value (mg/kg)		Elevated Concentration (mg/kg)			
	Human Health	Phytotoxicity	TP05 2.0-2.1 m	TP11 0.9-1.8 m	TP12 1.2-1.3 m	TP13 1.0-1.1 m
Arsenic	37	50	74	-	-	-
Copper	2,400	200	260	-	-	-
Lead	200	300	910	-	-	-
Zinc	3,700	300	750	-	-	-
Naphthalene	2.3	-	-	7.7	37	17
Benzo(b)fluoranthene	2.6	-	6.6	-	-	-
Benzo(a)pyrene	2.2	-	5.3	-	-	-
Dibenz(a,h)anthracene	0.24	-	1.1	-	-	-

No asbestos was detected.

No elevated fractions of petroleum hydrocarbons were recorded within the natural ground samples tested.

## 8.7.3 Sulphates

In accordance with BRE Special Digest 1 (2005), the site has been taken as a brownfield location in relation to the Aggressive Chemical Environment for concrete classifications. Groundwater is assumed to be mobile. Twenty-one made ground samples and seven natural ground samples were analysed for sulphates. The range and characteristic values are shown in the tables below:

Made Ground	Range	Characteristic Values
pH	6.4 to 8.9	7.3
Water Soluble Sulphate g/l	0.02 to 1.50	0.60
Total Sulphur %	0.013 to 5.2	-
Total Potential Sulphate %	0.039 to 15.6	5.87

Natural Ground	Range	Characteristic Values
pH	7.5 to 8.4	7.7
Water Soluble Sulphate g/l	0.04 to 1.10	0.63
Total Sulphur %	0.02 to 1.10	-
Total Potential Sulphate %	0.06 to 3.30	1.98

## 8.8 Significant Pollutant Linkages

The significant pollutant linkages identified are documented in the following table:

Contaminants	Pathway	Receptor
<p>Made Ground: Elevated metals, PAHs, TPH, SVOCs and VOCs Asbestos</p> <p>Natural Ground: Elevated metals and PAHs</p>	<p>Ingestion, inhalation, direct contact Migration through ground</p>	<p>Future residents or visitors Construction workers Plants Secondary A Aquifer Water supply pipes</p>
Sulphates within the made ground and natural ground	Direct Contact	Below ground concrete
Ground gas	Migration through ground	<p>Future residents or visitors Construction workers Buildings</p>

## 9.0 RISK ASSESSMENT

### 9.1 Human Health: Future Site Users

#### *Made Ground*

Elevated concentrations of the heavy metals/metalloids and a number of PAHs including naphthalene were recorded.

Three samples of the made ground collected from TP02 in the south, TP04 in the south east and TP14 in the north west recorded elevated Aromatic TPH fractions. The pits were all noted as having hydrocarbon odours during excavation works and TP02 and TP14 were recorded as having an oily sheen to the groundwater.

Two samples from TP09 and TP14 recorded slightly elevated 2-methylnaphthalene concentrations above the laboratory's detection limit.

Laboratory testing identified asbestos fibres within the granular made ground recovered from TP01 in the south west of the site between 0.1 and 0.2 m bgl, recording 0.008% amosite, 0.001% chrysotile fibres were recorded within TP08 between 0.3 and 0.4 m bgl and 0.001% crocidolite fibres were recorded within TP11 at 0.3 m bgl in the east of the site. TP04 encountered 0.12% chrysotile fibres within the sample collected between 1.5 and 1.6 m bgl.

It is considered that asbestos containing product may have been entrained within the made ground soils within TP01, TP08 and TP11 during the demolition works of the former buildings on site. It should be noted that during the site walkover, asbestos containing material was present in the surface made ground. TP11 encountered asbestos much deeper within hydrocarbon impacted soils.

It is recommended that a 600 mm thick capping layer of clean soil (of which at least 100 mm should consist of topsoil) is placed over the existing made ground wherever it remains below gardens or soft landscaped areas. A geotextile demarcation membrane is recommended at the base of the capping to deter excavation through the base of the capping into the underlying made ground.

Any significant visible fragments of asbestos containing material encountered should be hand-picked by a suitable contractor.

The made ground was recorded as 'ashy' across the site, with the material noted to include ash, clinker and coal fragments. Given that the material has been in place without issue for many years, the material is not expected to pose a significant combustion risk. The capping required, as detailed above, will reduce the risk further. However, should any buried infrastructure considered as a potential ignition source such as electricity cables be installed within the ashy fill, any potentially combustible

material must be removed to at least 1.0 m from the service in all directions and replaced with suitable inert fill.

The Kents Thin coal seam is inferred to outcrop across the site. TP05 encountered the shallow coal seam from between 1.4 and 1.7 m bgl. Provided that ground levels will not be regraded significantly, we consider there to be sufficient cover above the coal seam (>1.0 m) for the seam to not be at risk of combustion.

### *Natural Ground*

No asbestos was detected in any of the natural ground samples.

One sample, TP05 2.0-2.1 m in the west of the site, recorded elevated concentrations of arsenic and lead. The same sample also recorded elevated PAH concentrations. The sample was collected directly below a coal seam. It is likely that coal is present within the sample sent which is giving elevated results.

Three samples, TP11 0.9-1.0, TP12 1.2-1.3 and TP13 1.0-1.1, excavated in the east of the site recorded elevated concentrations of naphthalene above their respective residential end use values for human health. The strata in TP11 between 0.4 and 1.7 m, was recorded as having a hydrocarbon odour and shallow groundwater ingress was noted within TP12 at 1.2 m and 1.8 m. The elevated concentration of naphthalene could be due to a hydrocarbon impacted plume that has migrated through the soils breaking down and releasing lighter end hydrocarbon fractions.

The capping, detailed above, will reduce any risk to site end users from the elevated concentrations.

Water within trial pits excavated in the south east of the site was visibly impacted by hydrocarbons as well as TP04 which encountered grey stained hydrocarbon impacted soils. An allowance should be made for disposing of impacted water where encountered in excavations, as well as any significantly impacted soils.

## **9.2 Human Health: During Construction**

Groundworkers employed during the construction phase of the development are most at risk of harm due to them having direct contact with soils. However, the contact is generally of short duration, and all competent ground workers will be aware of the potential risks associated with the made ground soils. Therefore, the overall risk to the health of construction workers is considered to be low.

All ground workers employed on the site should be made aware that elevated concentrations of contaminants are present. Normal site procedures, such as the wearing of gloves when handling soils

and the washing of hands prior to eating, should be implemented at all times, plus any additional protective measures deemed appropriate.

### 9.3 Plants

Elevated concentrations of phytotoxic metals arsenic, lead, copper, nickel and zinc were recorded above their assessment criteria within a number of the made ground samples tested. One sample of the natural ground, TP05 2.0-2.1 m, recorded elevated phytotoxic concentrations of arsenic and lead.

The prescribed 600 mm capping for the private gardens and soft landscaped areas for human health is considered sufficient to mitigate against any phytotoxic effects. The capping/topsoil thickness may need to be deepened for areas of proposed tree planting.

### 9.4 Ground Gas

Radon gas precautions are not required for the proposed development.

Six rounds of gas monitoring will be undertaken on the site. The results will be reported on within Issue 2 of this report.

Three made ground samples recorded elevated TPH Aromatic fractions, four samples recorded elevated naphthalene concentrations and one sample recorded elevated naphthalene and dibenzofuran volatile compounds above their detection limits. Three natural ground samples recorded elevated naphthalene concentrations.

Due to the risk of hydrocarbon and volatile organic vapours, at this stage Amber 2 ground gas precautions are considered necessary.

Amber 2 gas precautions will require a pre-cast concrete floor with a ventilated sub-floor void and the installation of a gas resistant membrane system. The membrane should be fully lapped and sealed in accordance with the manufacturer's instructions. It should continue across the cavity of external walls, or lap onto a suitable gas resistant damp proof course, and all service entries should be sealed, again in accordance with the manufacturer's instructions. Amber 2 measures require a greater level of certification to verify that the gas protective measures have been installed correctly. The gas measures will require installation by a qualified installer or independent verification by suitably qualified consultant, integrity testing (air lancing) and higher frequency of inspections.

### 9.5 Construction Materials

Based upon the pH and total potential sulphate results, the majority of the made ground would be assigned a Design Sulphate Class of DS-4 and Aggressive Chemical Environment for Concrete

(ACEC) Class of AC-4. This is based on 18 of the 21 samples tested recording <2.4% TPS. Three samples obtained from the canal however recorded significantly elevated TPS results:

- TP01 2.7 m – 2.64%;
- TP02 1.8 m – 3.30%;
- TP14 3.4 m – 15.6%.

The TP01 sample was described as a silt with roots and extraneous material whilst TP14 was also a silt, obtained from the lower layer of the canal backfill. TP02's material is described as a gravel with extraneous material.

For concrete in contact with canal backfill, the TPS results indicate a DS-5 AC-5 classification is required. However, in accordance with BRE Special Digest 1, a limiting factor can be applied where if the TPS results record equivalent to DS-5 but the water soluble sulphate concentrations are DS-3 or lower, the overall classification could be reduced to DS-4 AC-4. For concrete structures in contact with canal backfill, DS-4 AC-4 will be required.

The results of the chemical testing will need to be forwarded to the water company so that appropriate water supply pipes can be selected.

## 9.6 Controlled Waters

The site is located over a Secondary A Aquifer and the site is not within a Groundwater Source Protection Zone. The nearest surface water feature is the River Dove, located 79 m south. A culvert is understood to cross the site.

Elevated concentrations of metals, PAHs and TPHs are present within the made ground. Lead, arsenic and PAHs were elevated within one sample of the natural ground at TP05 and three natural ground samples from the centre-east of the site recorded elevated naphthalene concentrations. Three trial pits, TP02, TP04 and TP14 recorded 'oily sheens' on the water entering the pits.

The naphthalene concentrations were encountered near an area of hydrocarbon impacted ground. Once this impaction, as well as any impaction encountered in the canal backfill, has been excavated thus removing the source, the risk to controlled waters from site-won materials is considered to be low.

## **9.7 Unexpected Contamination**

It is considered that further contamination may be encountered during the construction works on the site such as further hydrocarbon impacted soils.

Should any unusual, brightly coloured, ashy, oily, fibrous or odorous material or material suspected of containing asbestos be encountered during construction this should be brought to the attention of the site staff and investigated.

## **9.8 Disposal of Material**

Any material which needs to be removed from site should 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 where possible.

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. It is considered likely that a large proportion of excavated soils from this site would be classed as hazardous due to the organic content of the material, as well as the local inclusion of asbestos fibres, hydrocarbons and PAHs. Additional testing may be required by the landfill operator and the acceptance of material is generally at their discretion.

**Appendix 1**

Envirocheck

Consultants Coal Mining Report

Coal Authority Mine Entry Plan and Data Sheets

Walker Ingram Associates' Mineshaft Cap Plan and Section, drawing 1000A

# Historical Mapping Legends

## Ordnance Survey County Series 1:10,560

	Gravel Pit		Sand Pit		Other Pits
	Quarry		Shingle		Orchard
	Osiers		Reeds		Marsh
	Mixed Wood		Deciduous		Brushwood
	Fir		Furze		Rough Pasture
	Arrow denotes flow of water		Trigonometrical Station		
	Site of Antiquities		Bench Mark		
	Pump, Guide Post, Signal Post		Well, Spring, Boundary Post		
	<b>-285</b> Surface Level				
	Sketched Contour		Instrumental Contour		
	Main Roads		Minor Roads		
	Sunken Road		Raised Road		
	Road over Railway		Railway over River		
	Railway over Road		Level Crossing		
	Road over River or Canal		Road over Stream		
	Road over Stream				
	County Boundary (Geographical)				
	County & Civil Parish Boundary				
	Administrative County & Civil Parish Boundary				
	County Borough Boundary (England)				
	County Burgh Boundary (Scotland)				
	Rural District Boundary				
	Civil Parish Boundary				

## Ordnance Survey Plan 1:10,000

	Chalk Pit, Clay Pit or Quarry		Gravel Pit
	Sand Pit		Disused Pit or Quarry
	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
	Coniferous Trees		Non-Coniferous Trees
	Orchard		Scrub
	Coppice		
	Bracken		Heath
	Rough Grassland		
	Marsh		Reeds
	Saltings		
	Building		Glasshouse
	Sloping Masonry		Pylon
	Electricity Transmission Line		Pole
	Cutting		Embankment
	Standard Gauge Multiple Track		
	Standard Gauge Single Track		
	Siding, Tramway or Mineral Line		
	Narrow Gauge		
	Geographical County		
	Administrative County, County Borough or County of City		
	Municipal Borough, Urban or Rural District, Burgh or District Council		
	Borough, Burgh or County Constituency Shown only when not coincident with other boundaries		
	Civil Parish Shown alternately when coincidence of boundaries occurs		
	BP, BS Boundary Post or Stone		Pol Sta Police Station
	Ch Church		PO Post Office
	CH Club House		PC Public Convenience
	F E Sta Fire Engine Station		PH Public House
	FB Foot Bridge		SB Signal Box
	Fn Fountain		Spr Spring
	GP Guide Post		TCB Telephone Call Box
	MP Mile Post		TCP Telephone Call Post
	MS Mile Stone		W Well

## 1:10,000 Raster Mapping

	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
	Area of wooded vegetation		Non-coniferous trees
	Non-coniferous trees (scattered)		Coniferous trees
	Coniferous trees (scattered)		Positioned tree
	Orchard		Coppice or Osiers
	Rough Grassland		Heath
	Scrub		Marsh, Salt Marsh or Reeds
	Water feature		Flow arrows
	MHW(S) Mean high water (springs)		MLW(S) Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
	Bench mark (where shown)		Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare stack or lighting tower
	Site of (antiquity)		Glasshouse
	General Building		Important Building

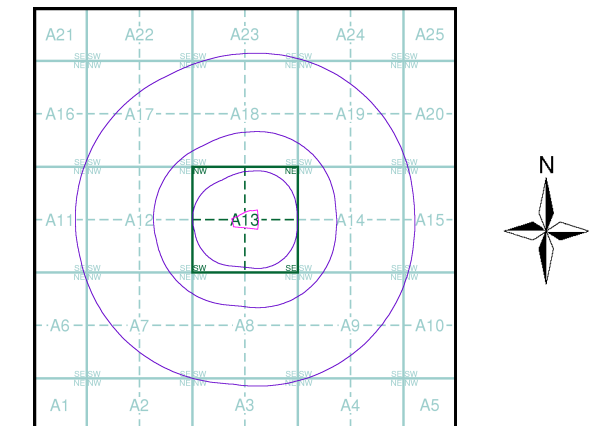
# Envirocheck®

LANDMARK INFORMATION GROUP®

## Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Yorkshire	1:10,560	1855	2
Yorkshire	1:10,560	1893 - 1894	3
Yorkshire	1:10,560	1907	4
Yorkshire	1:10,560	1932	5
Yorkshire	1:10,560	1938	6
Yorkshire	1:10,560	1948	7
Ordnance Survey Plan	1:10,000	1955 - 1956	8
Ordnance Survey Plan	1:10,000	1965 - 1966	9
Ordnance Survey Plan	1:10,000	1973 - 1978	10
Ordnance Survey Plan	1:10,000	1980 - 1984	11
Ordnance Survey Plan	1:10,000	1989	12
Ordnance Survey Plan	1:10,000	1993	13
10K Raster Mapping	1:10,000	2000	14
10K Raster Mapping	1:10,000	2006	15
VectorMap Local	1:10,000	2021	16

## Historical Map - Slice A



## Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

## Site Details

Site at 435880, 403660

**Landmark**  
 INFORMATION GROUP

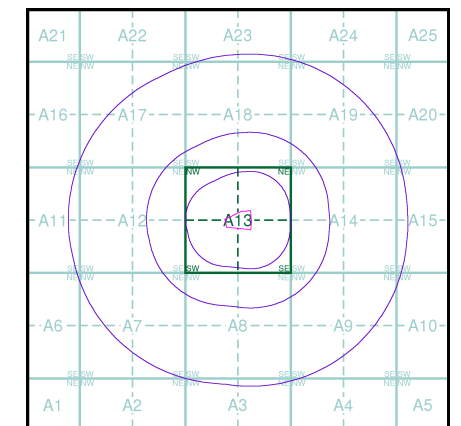
Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore 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. 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)

27400	1855	1:10,560
28200	1855	1:10,560

#### Historical Map - Slice A

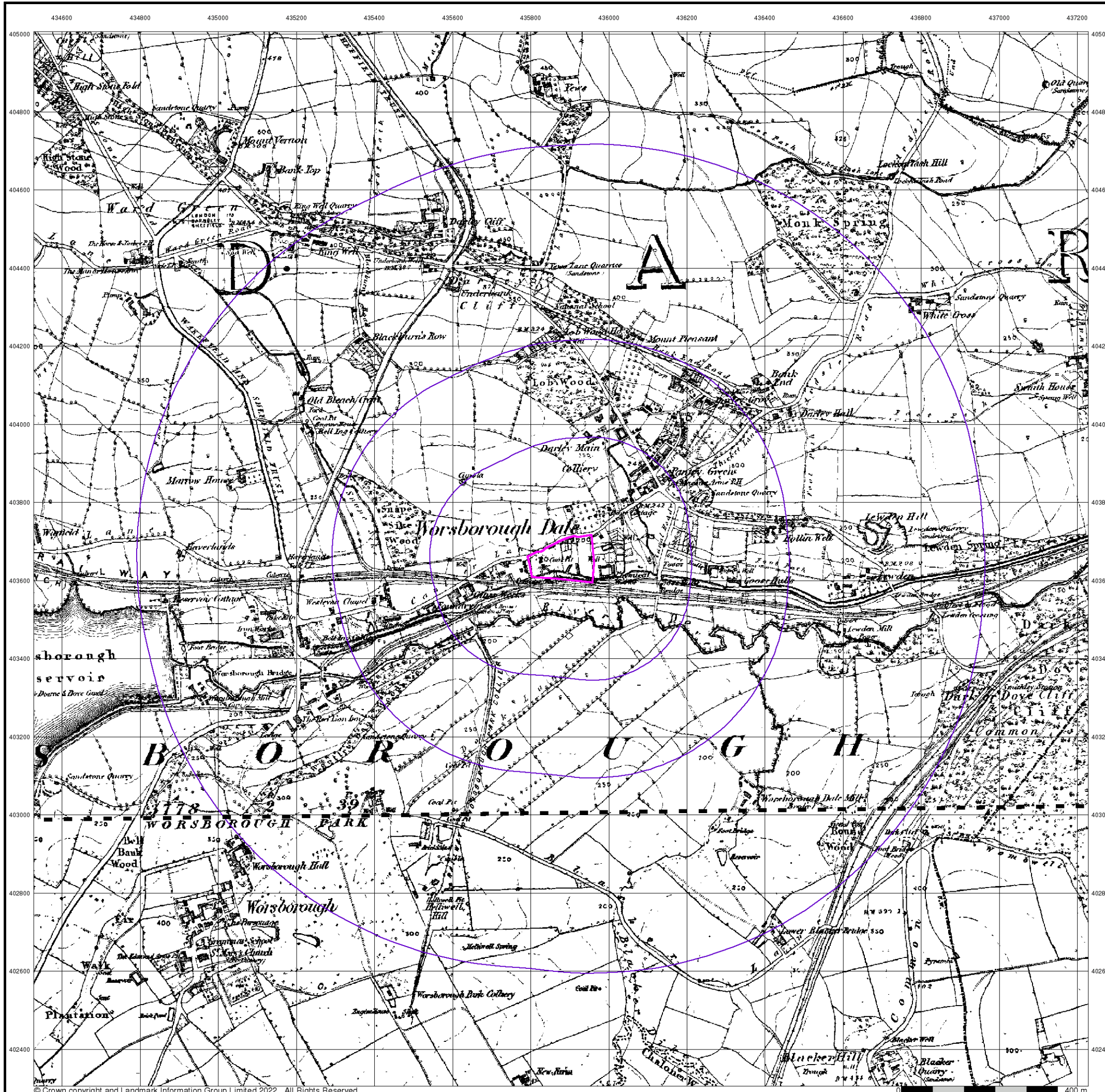


#### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

#### Site Details

Site at 435880, 403660

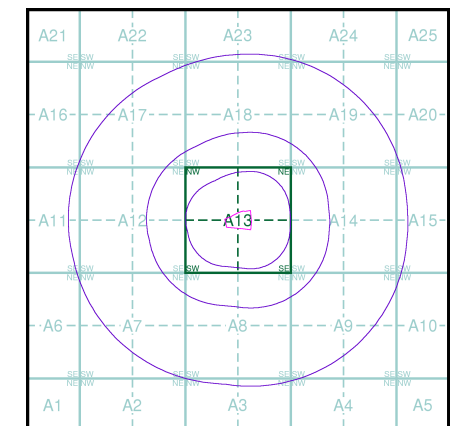


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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. 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)

274SE	1894	1:10,560
282NE	1893	1:10,560

### Historical Map - Slice A

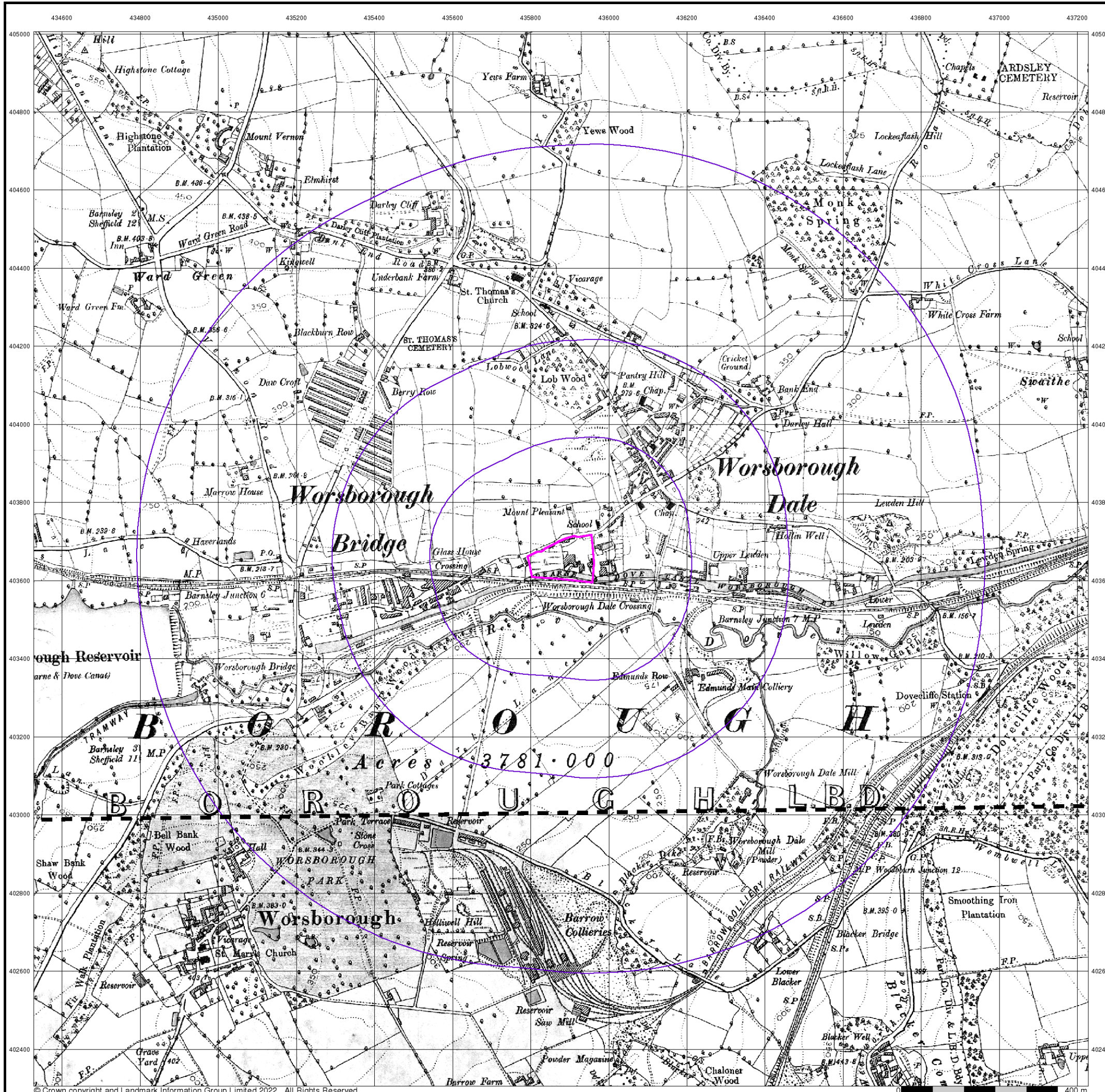


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660

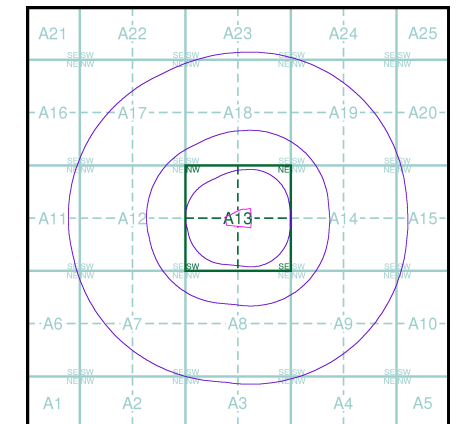


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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. 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)

274SE	1907	1:10,560
282NE	1907	1:10,560

### Historical Map - Slice A

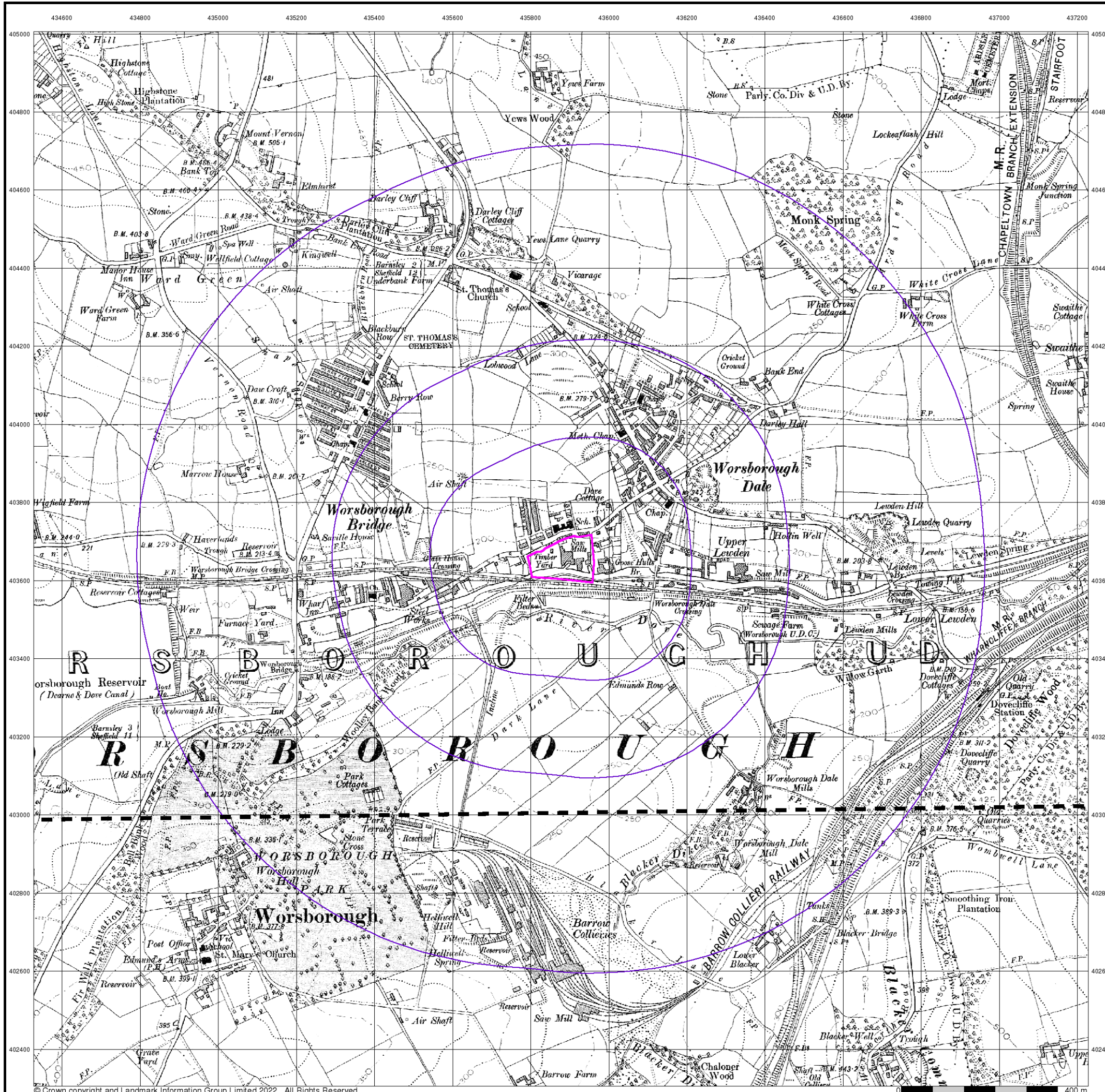


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660

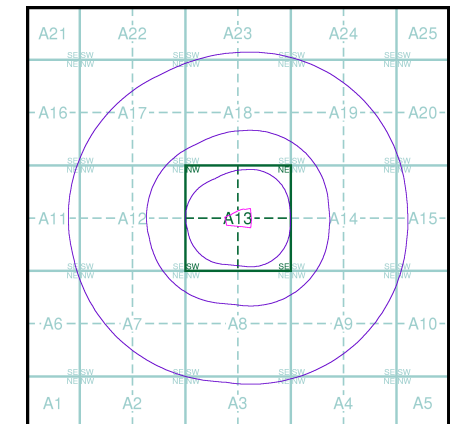


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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. 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)

274SE	1932	1:10,560
282NE	1932	1:10,560

### Historical Map - Slice A

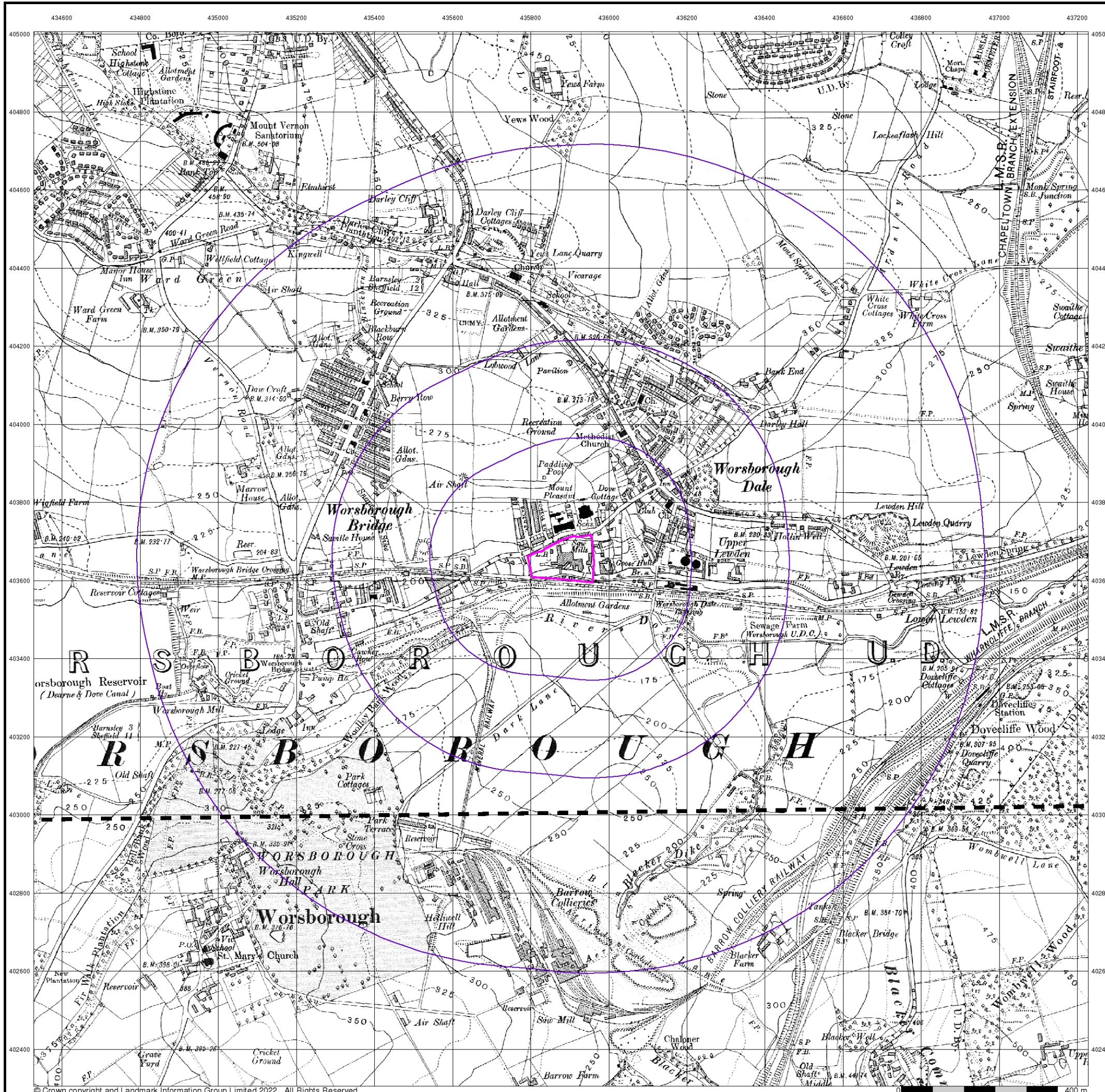


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660

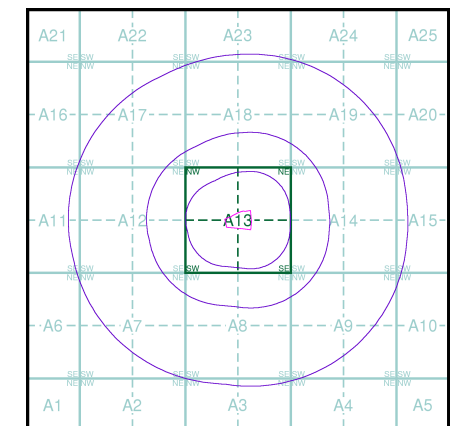


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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. 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)

274SE	1938	1:10,560
282NE	1938	1:10,560

### Historical Map - Slice A

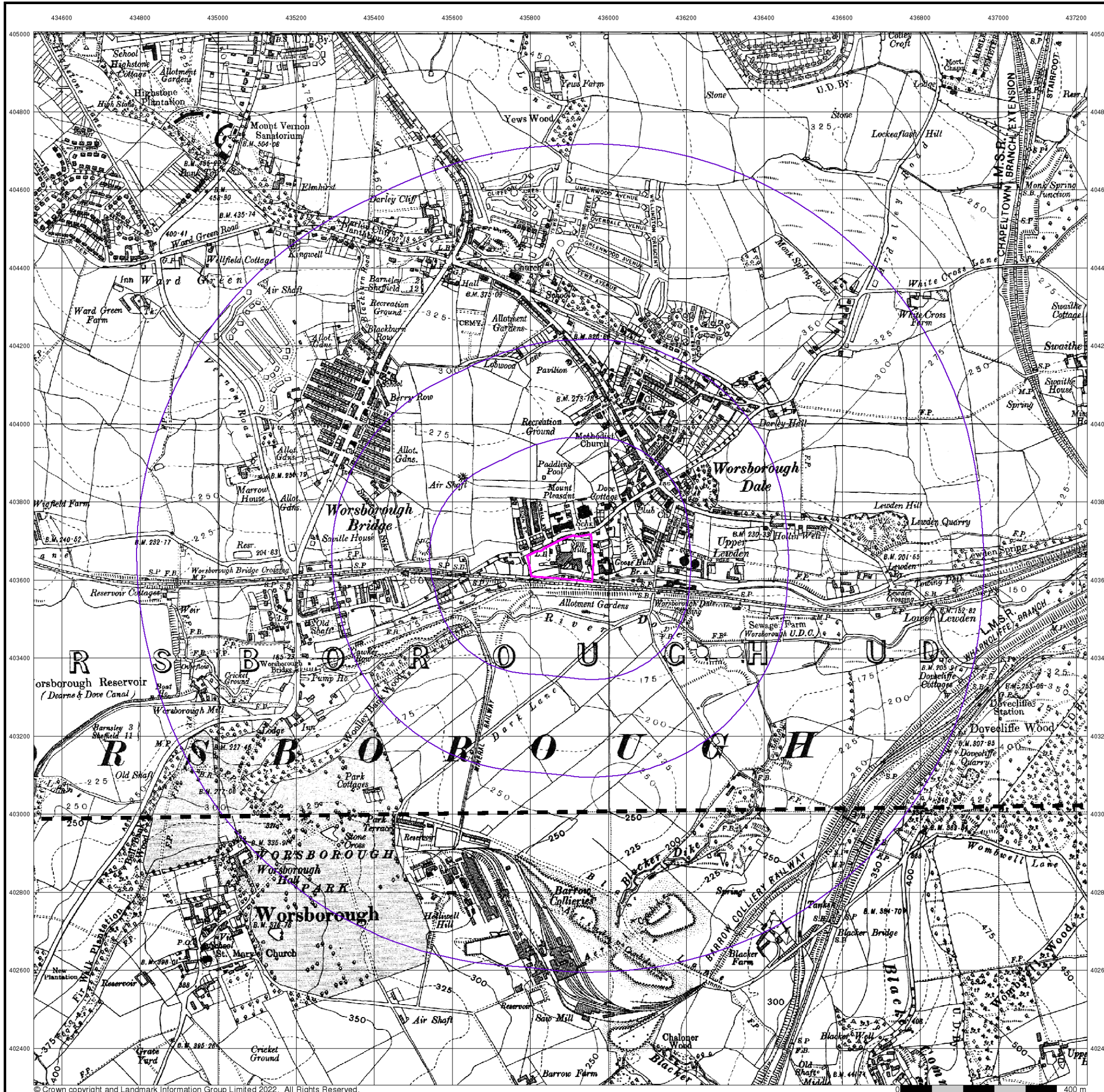


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660

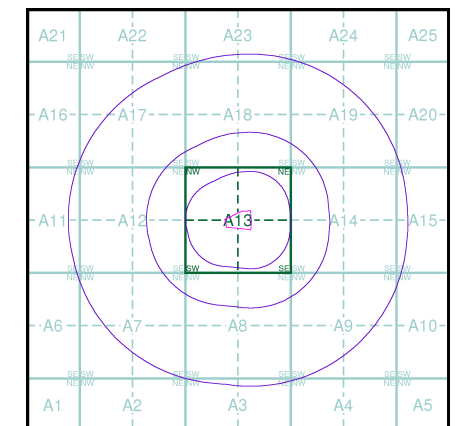


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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. 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)

274SE	1948	1:10,560
282NE	1948	1:10,560

#### Historical Map - Slice A

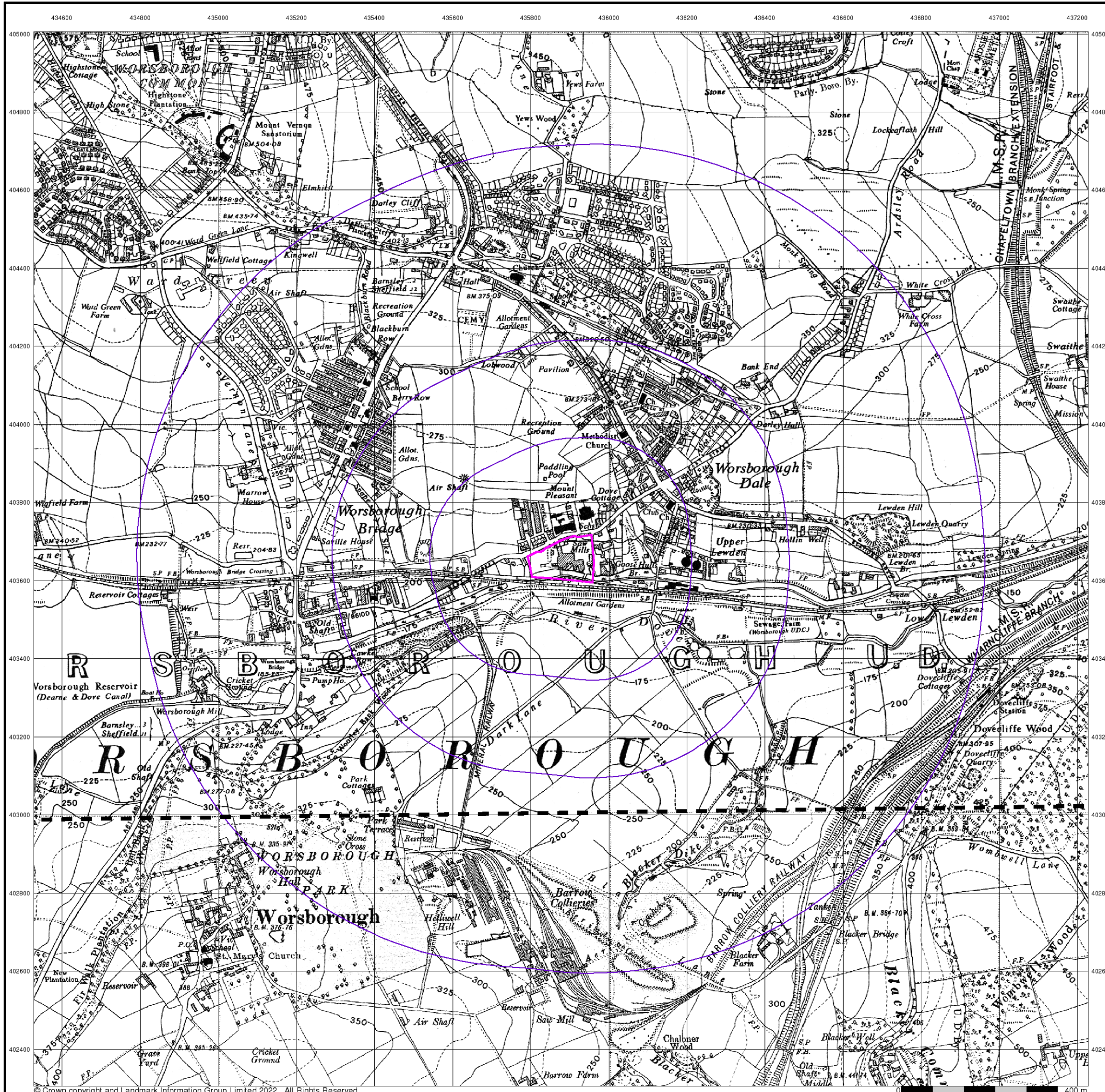


#### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

#### Site Details

Site at 435880, 403660



## Ordnance Survey Plan

Published 1955 - 1956

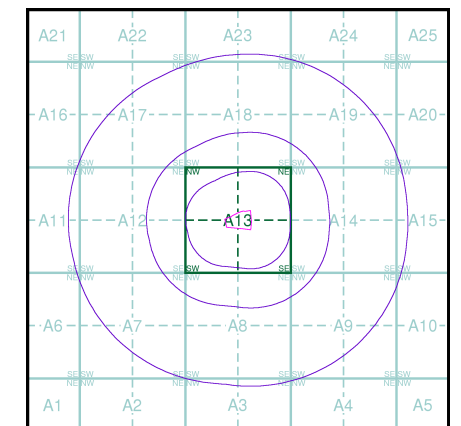
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore 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. 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)

SE30NW	SE30NE
1956	1955
1:10,560	1:10,560
SE30SW	SE30SE
1956	1956
1:10,560	1:10,560

### Historical Map - Slice A

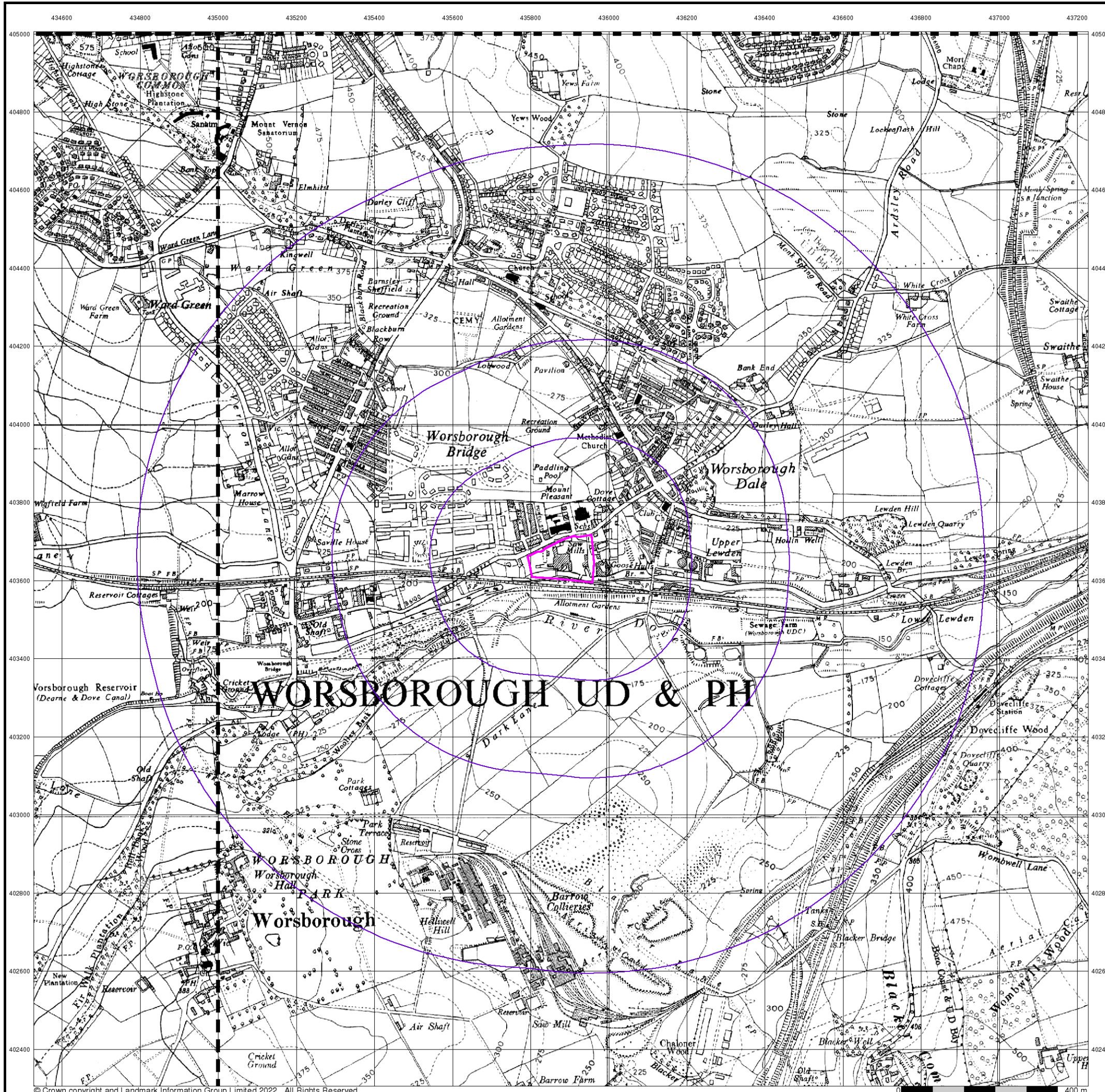


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660



## Ordnance Survey Plan

Published 1965 - 1966

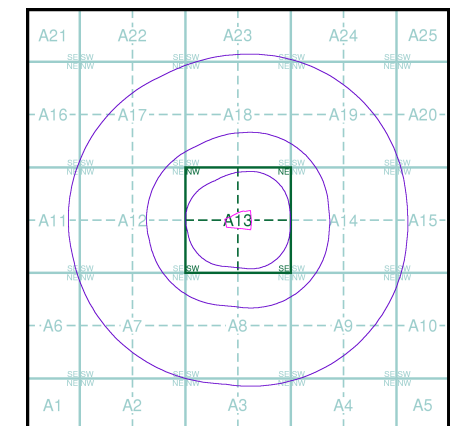
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore 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. 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)

SE30NW	SE30NE
1966	1966
1:10,560	1:10,560
SE30SW	SE30SE
1965	1966
1:10,560	1:10,560

### Historical Map - Slice A

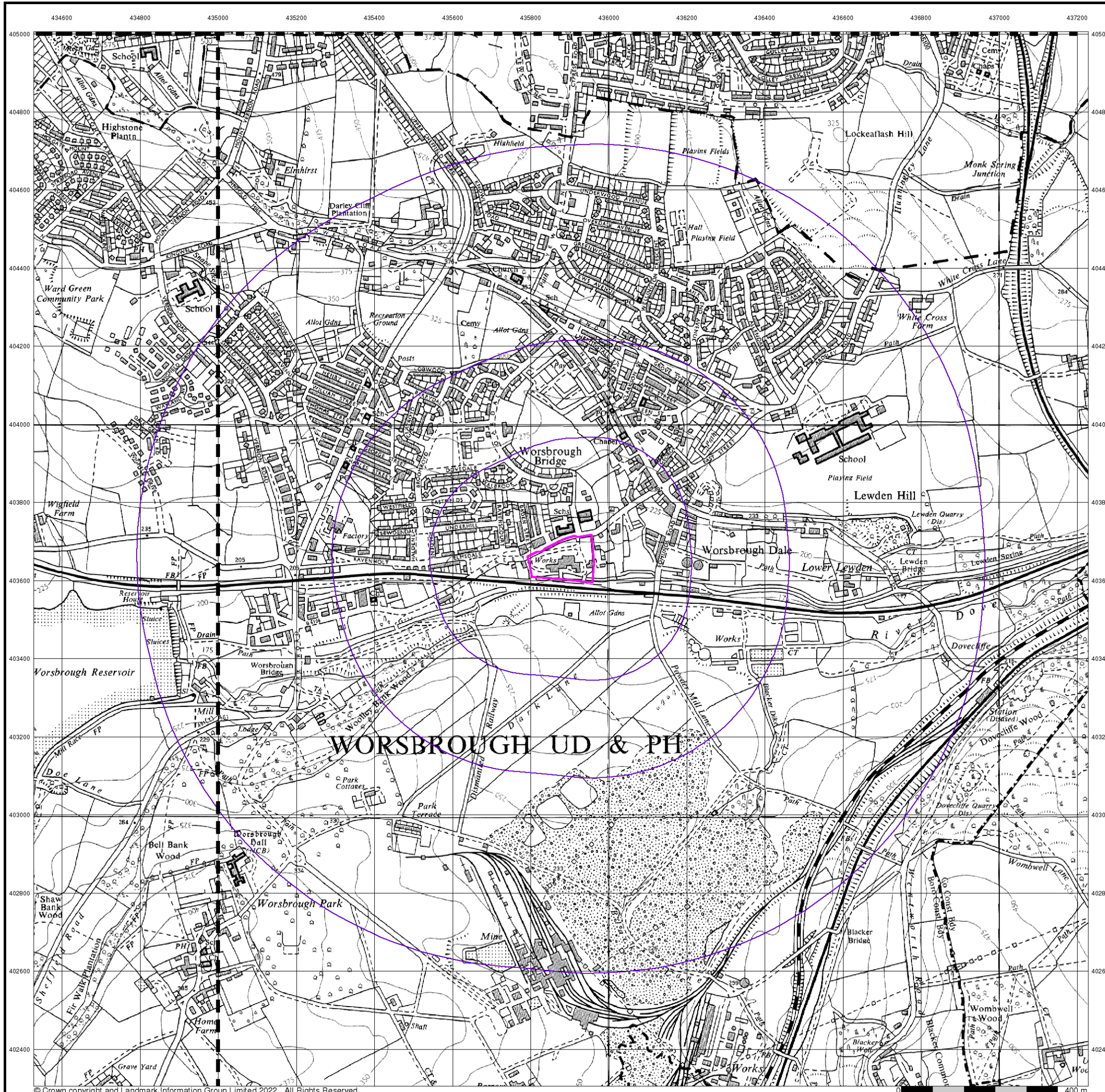


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660



## Ordnance Survey Plan

Published 1973 - 1978

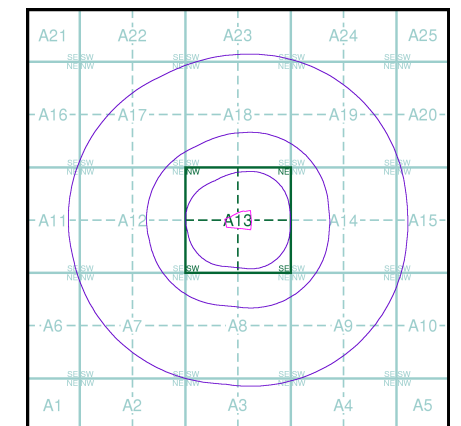
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore 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. 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)

SE30NW	SE30NE
1973	1974
1:10,000	1:10,000
SE30SW	
1978	
1:10,000	

### Historical Map - Slice A

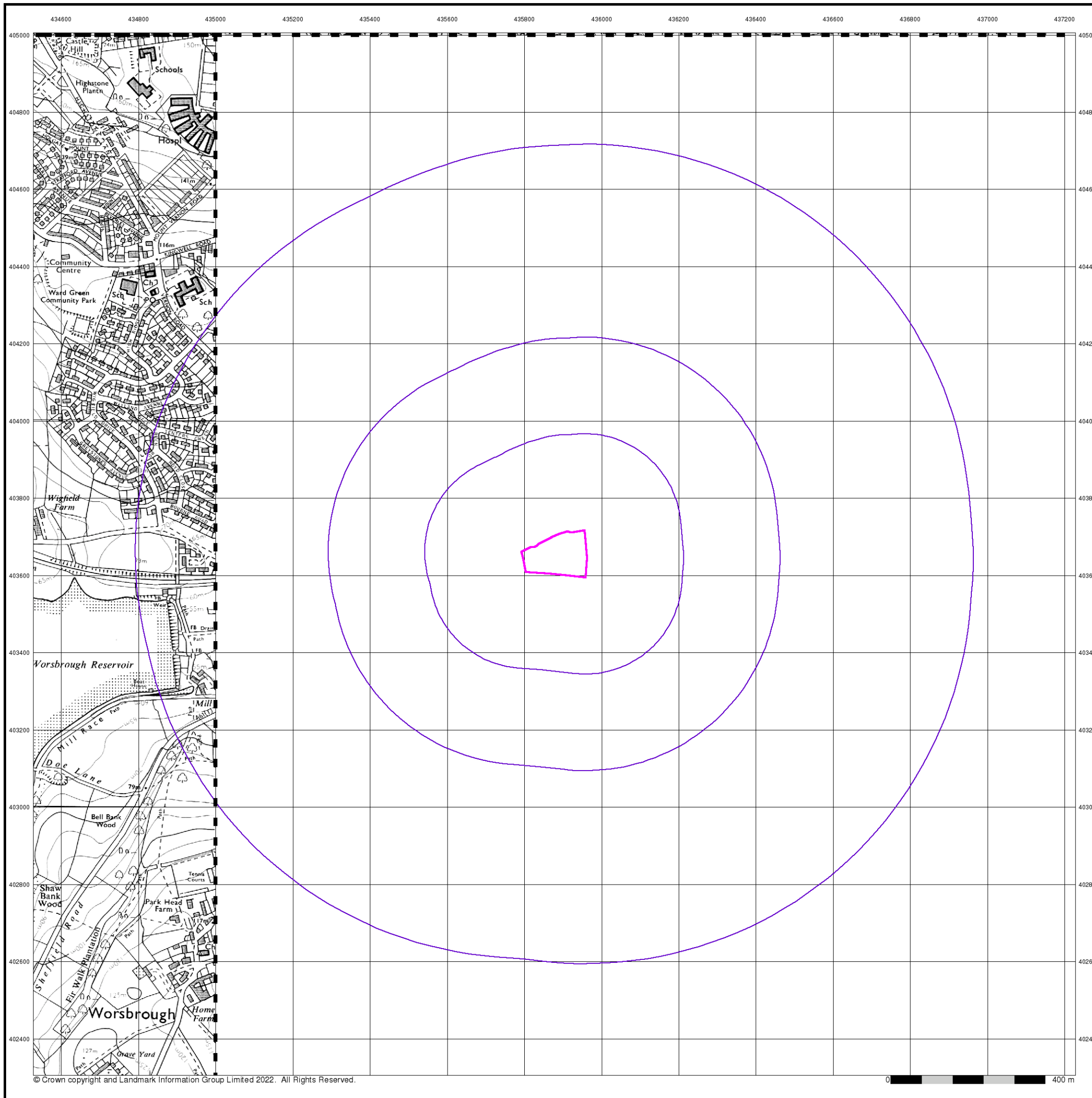


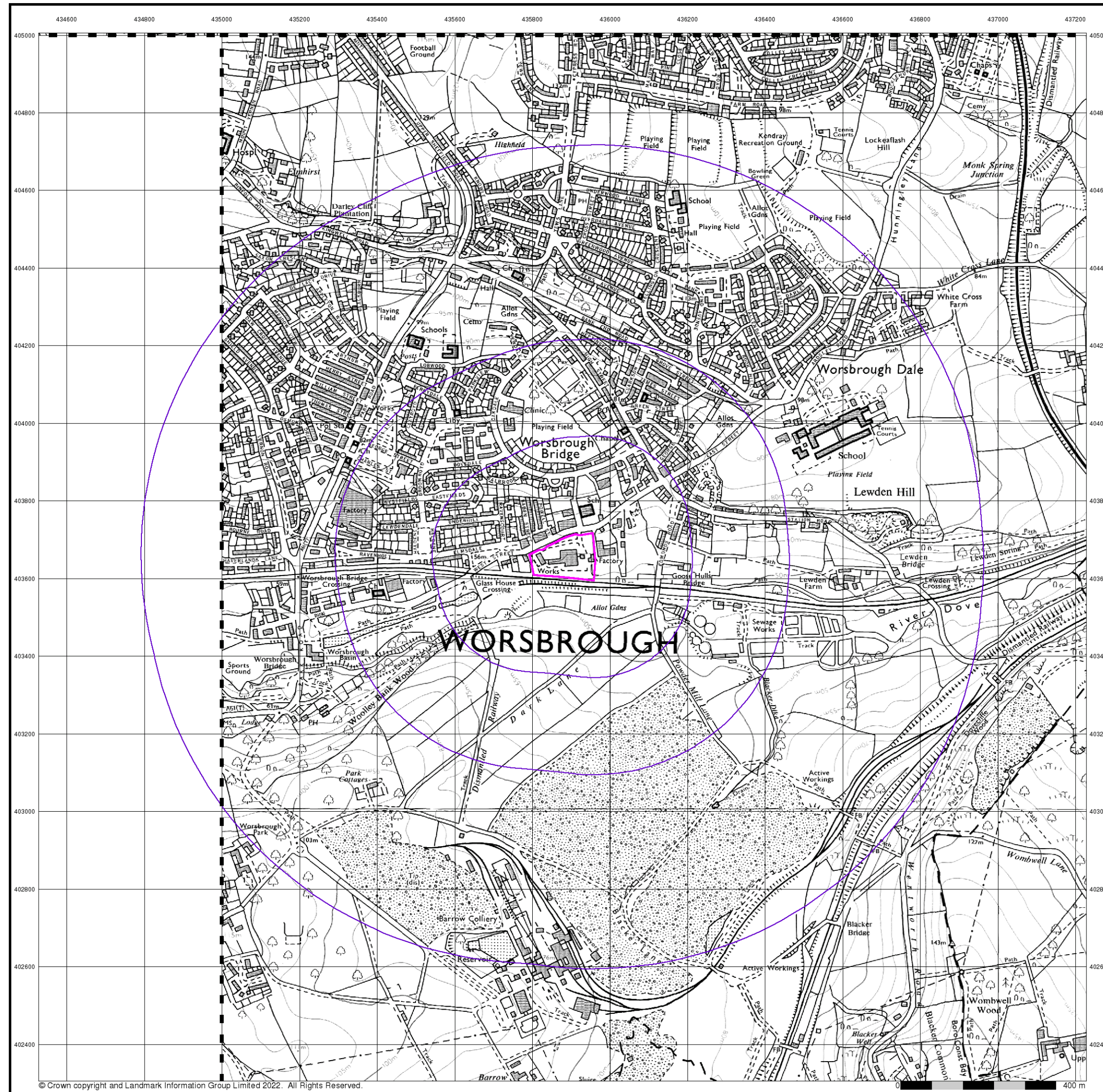
### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660





# Envirocheck®

● LANDMARK INFORMATION GROUP®

## Ordnance Survey Plan

Published 1980 - 1984

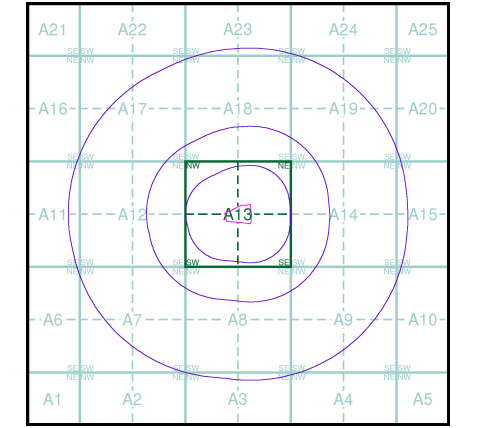
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore 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. 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)

SE30NW	SE30NE
1983	1984
1:10,000	1:10,000
SE30SE	
1980	
1:10,000	

### Historical Map - Slice A



### Order Details

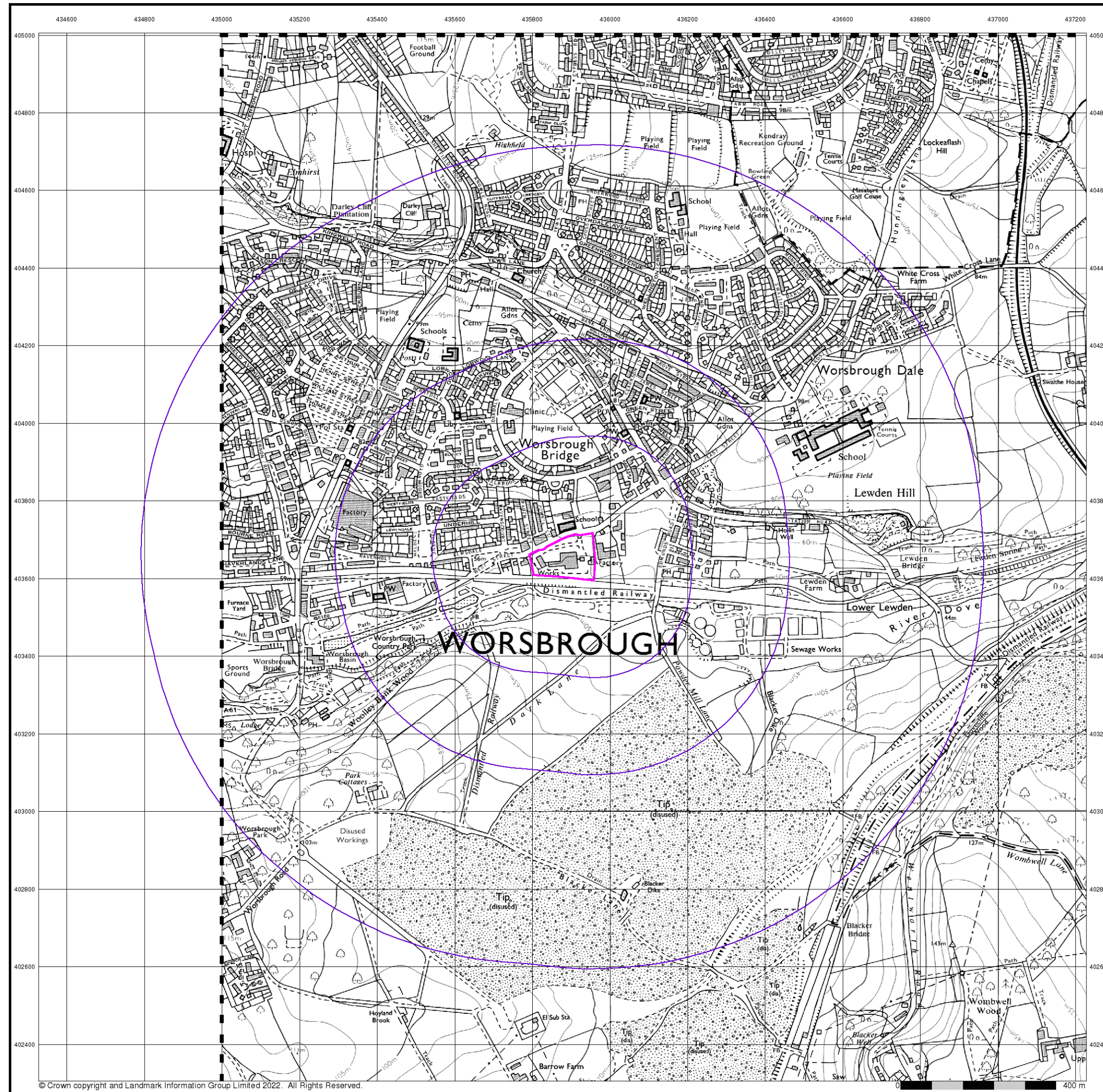
Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660

**Landmark**  
 ● INFORMATION GROUP

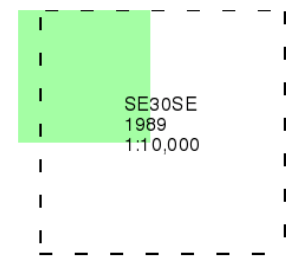
Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



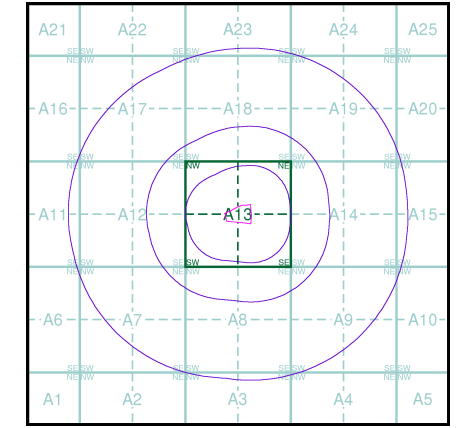
## Ordnance Survey Plan Published 1989 Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore 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. 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: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

**Site Details**  
 Site at 435880, 403660

## Ordnance Survey Plan

Published 1993

Source map scale - 1:10,000

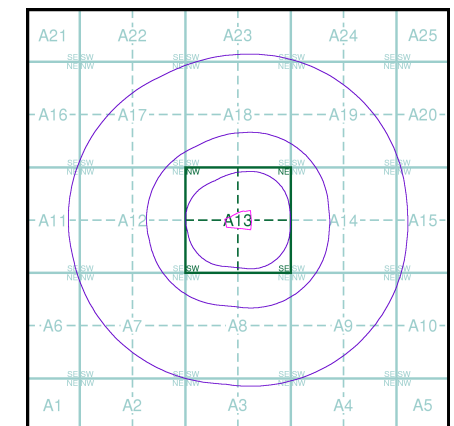
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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. 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)

SE30NW 1993 1:10,000	SE30NE 1993 1:10,000
----------------------------	----------------------------



### Historical Map - Slice A

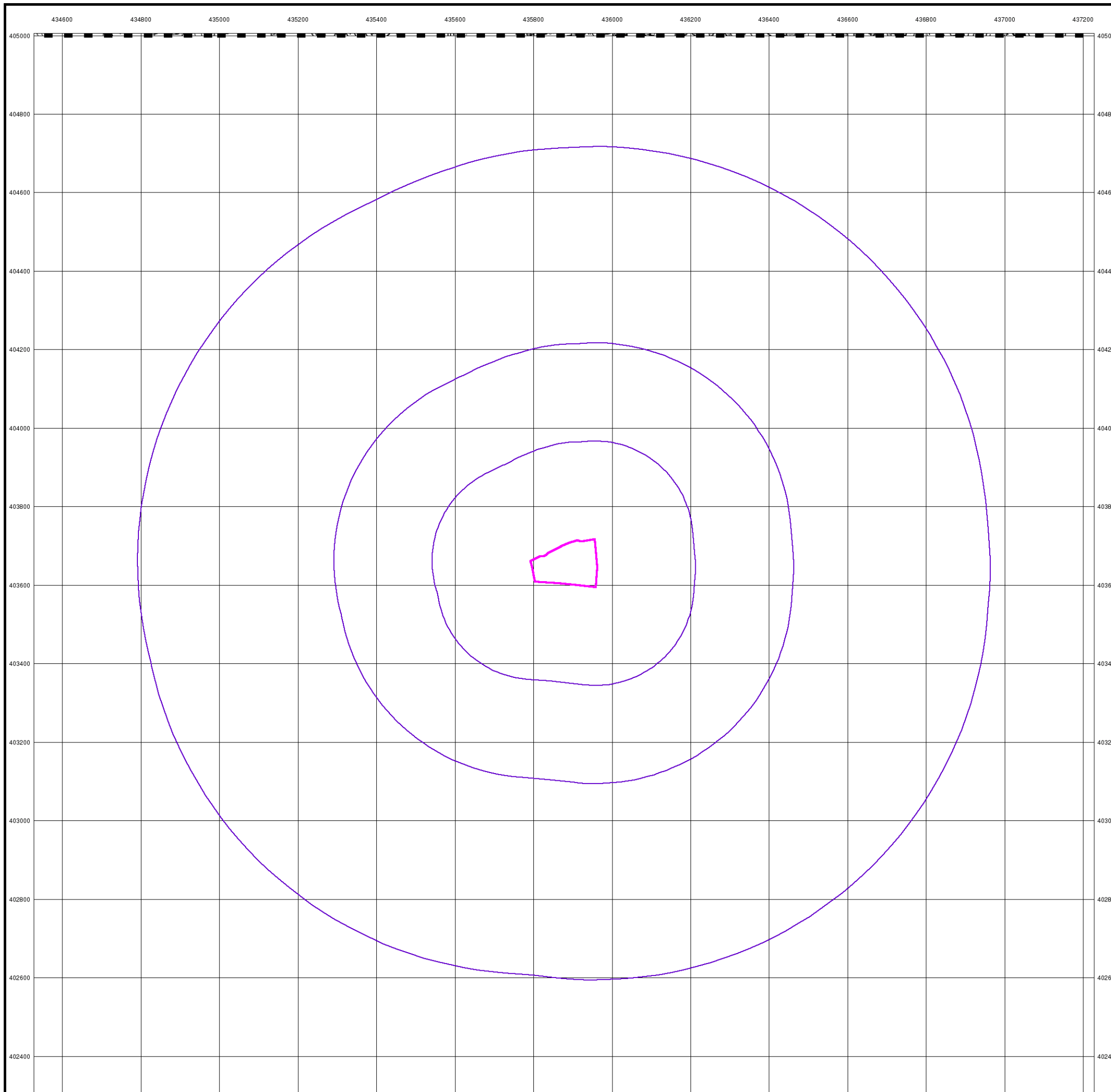


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660





# Envirocheck®

● LANDMARK INFORMATION GROUP®

## 10k Raster Mapping

Published 2000

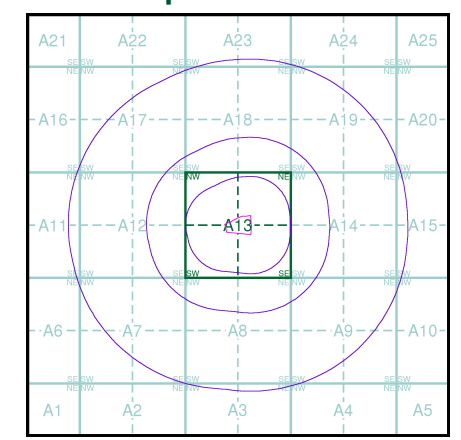
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences 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 depiction includes county, unitary authority, district, civil parish and constituency.

### Map Name(s) and Date(s)

SE30NW	SE30NE
2000	2000
1:10,000	1:10,000
SE30SW	SE30SE
2000	2000
1:10,000	1:10,000

### Historical Map - Slice A



### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660

**Landmark**  
 ● LANDMARK INFORMATION GROUP

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

## 10k Raster Mapping

Published 2006

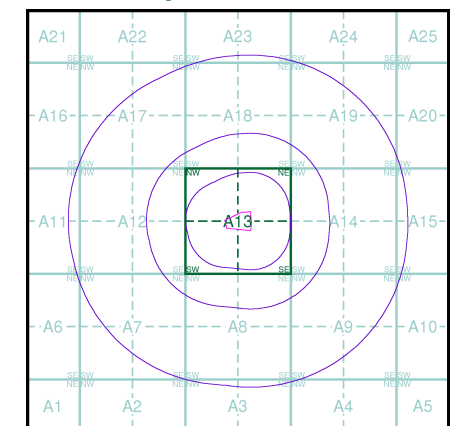
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences 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 depiction includes county, unitary authority, district, civil parish and constituency.

### Map Name(s) and Date(s)

SE30NW 2006 1:10,000	SE30NE 2006 1:10,000
SE30SW 2006 1:10,000	SE30SE 2006 1:10,000

### Historical Map - Slice A

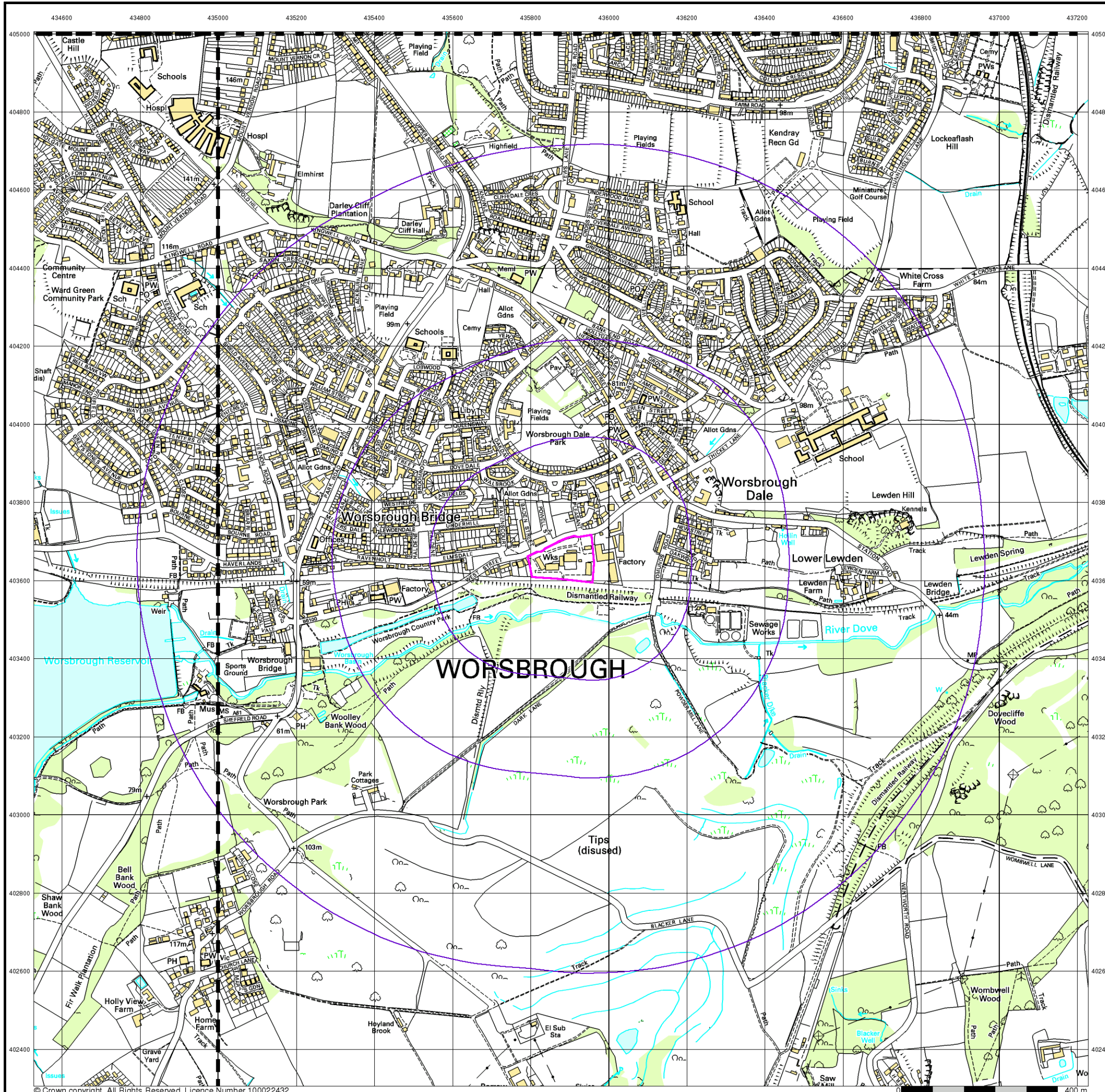


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660



## VectorMap Local

Published 2021

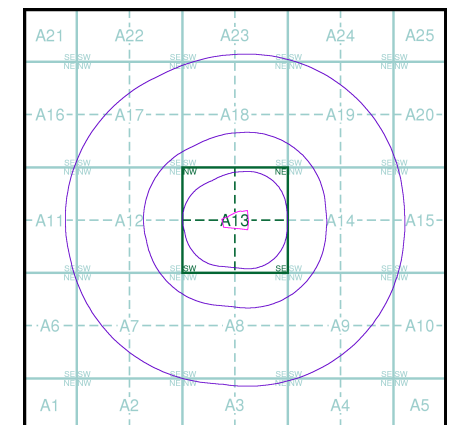
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

### Map Name(s) and Date(s)

SE30NW 2021 Variable	SE30NE 2021 Variable
SE30SW 2021 Variable	SE30SE 2021 Variable

### Historical Map - Slice A

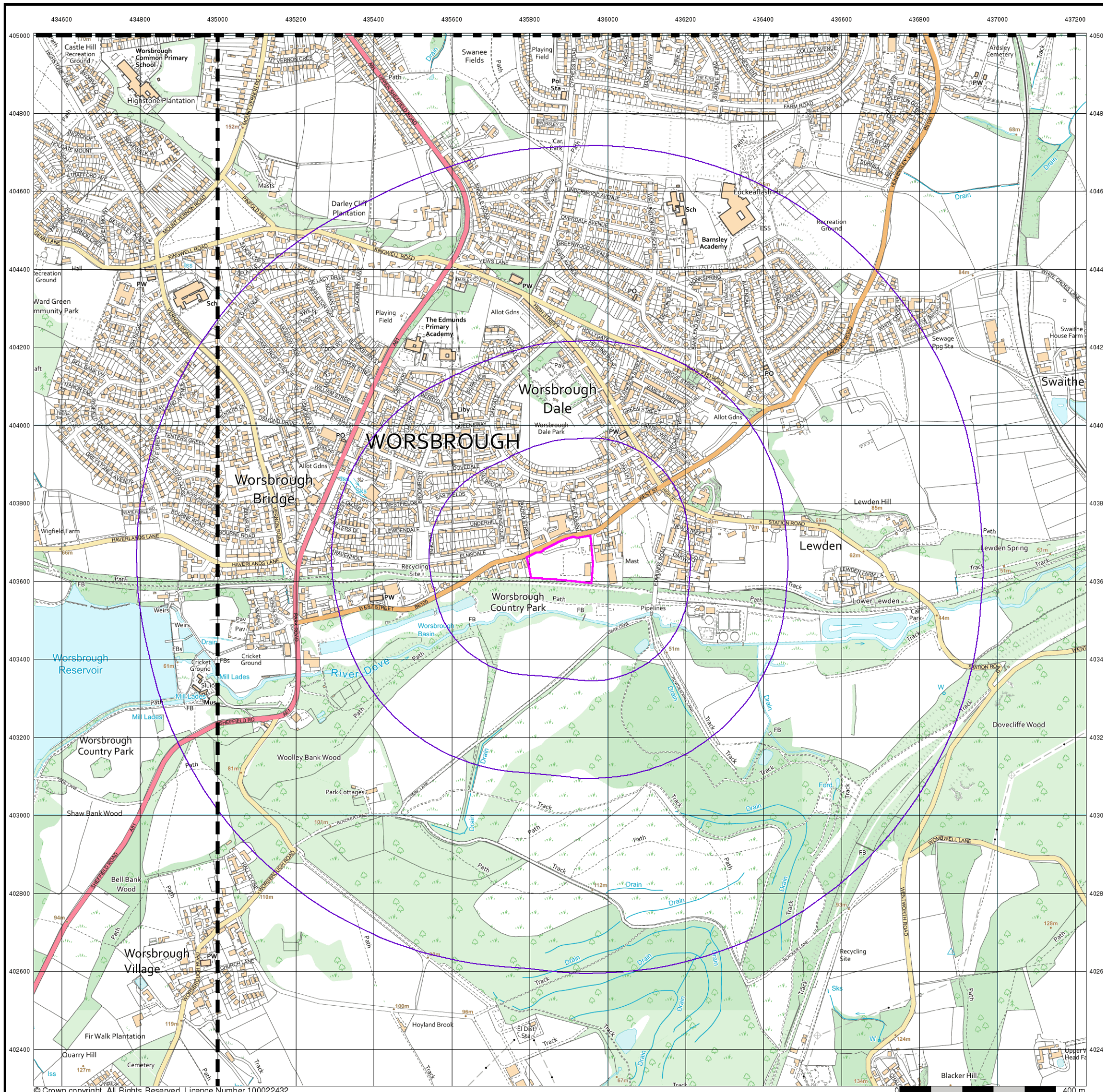


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660



# Historical Mapping Legends

## 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**  
**Rough Pasture**   **Furze**   **Wood**  
**Mixed Wood**   **Brushwood**   **Orchard**  
**Fir**   **Ford**   **Stepping Stones**  
**Ferry**   **Waterfall**   **Lock**  
**Trig. Station**   **Altitude at Trig. Station**  
**B.M. 325.9**   **Bench Mark**   **Surface Level**  
**Arrow denotes flow of water**   **Antiquities (site of)**  
**Cutting**   **Embankment**  
**Railway crossing Road**   **Level Crossing**   **Road crossing Railway**  
**Railway crossing River or Canal**   **Road over single stream**   **Road over River or Canal**  
**County Boundary (Geographical)**  
**County & Civil Parish Boundary**  
**Administrative County & Civil Parish Boundary**  
**County Borough Boundary (England)**  
**County Burgh Boundary (Scotland)**  
**Boundary Post or Stone**   **Police Call Box**  
**B.R. Bridle Road**   **Pump**  
**E.P. Electricity Pylon**   **S.P. Signal Post**  
**F.B. Foot Bridge**   **Sl. Sluice**  
**F.P. Foot Path**   **Sp. Spring**  
**G.P. Guide Post or Board**   **T.C.B. Telephone Call Box**  
**M.S. Mile Stone**   **Tr. Trough**  
**M.P. M.R. Mooring Post or Ring**   **W. Well**

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

**Inactive Quarry, Chalk Pit or Clay Pit**   **Active Quarry, Chalk Pit or Clay Pit**  
**Rock**   **Boulders**  
**Cliff**   **Slopes**   **Top**  
**Roofed Building**   **Glazed Roof Building**  
**Sloping Masonry**   **Archway**  
**Non-Coniferous Tree (surveyed)**   **Coniferous Tree (surveyed)**  
**Non-Coniferous Trees (not surveyed)**   **Coniferous Trees (not surveyed)**  
**Orchard Tree**   **Scrub**   **Bracken**  
**Coppice, Osier**   **Reeds**   **Marsh, Saltings**  
**Rough Grassland**   **Heath**   **Culvert**  
**Direction of water flow**   **Bench Mark**   **Antiquity (site of)**  
**Cave Entrance**   **Triangulation Station**   **Electricity Pylon**  
**Electricity Transmission Line**  
**County Boundary (Geographical)**  
**County & Civil Parish Boundary**  
**Civil Parish Boundary**  
**Admin. County or County Bor. Boundary**  
**London Borough Boundary**  
**Symbol marking point where boundary mereing changes**  
**BH Beer House**   **P Pillar, Pole or Post**  
**BP, BS Boundary Post or Stone**   **PO Post Office**  
**Cn, C Capstan, Crane**   **PC Public Convenience**  
**Chy Chimney**   **PH Public House**  
**D Fn Drinking Fountain**   **Pp Pump**  
**EI P Electricity Pillar or Post**   **SB, S Br Signal Box or Bridge**  
**FAP Fire Alarm Pillar**   **SP, SL Signal Post or Light**  
**FB Foot Bridge**   **Spr Spring**  
**GP Guide Post**   **Tk Tank or Track**  
**H Hydrant or Hydraulic**   **TCB Telephone Call Box**  
**LC Level Crossing**   **TCP Telephone Call Post**  
**MH Manhole**   **Tr Trough**  
**MP Mile Post or Mooring Post**   **Wr Pt, Wr T Water Point, Water Tap**  
**MS Mile Stone**   **W Well**  
**NTL Normal Tidal Limit**   **Wd Pp Wind Pump**

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

**Cliff**   **Slopes**   **Top**  
**Rock**   **Rock (scattered)**  
**Boulders**   **Boulders (scattered)**  
**Positioned Boulder**   **Scree**  
**Non-Coniferous Tree (surveyed)**   **Coniferous Tree (surveyed)**  
**Non-Coniferous Trees (not surveyed)**   **Coniferous Trees (not surveyed)**  
**Orchard Tree**   **Scrub**   **Bracken**  
**Coppice, Osier**   **Reeds**   **Marsh, Saltings**  
**Rough Grassland**   **Heath**   **Culvert**  
**Direction of water flow**   **Triangulation Station**   **Antiquity (site of)**  
**Electricity Transmission Line**   **Electricity Pylon**  
**Bench Mark**   **Buildings with Building Seed**  
**Roofed Building**   **Glazed Roof Building**  
**Civil parish/community boundary**  
**District boundary**  
**County boundary**  
**Boundary post/stone**  
**Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)**  
**Bks Barracks**   **P Pillar, Pole or Post**  
**Bty Battery**   **PO Post Office**  
**Cemy Cemetery**   **PC Public Convenience**  
**Chy Chimney**   **Pp Pump**  
**Cis Cistern**   **Ppg Sta Pumping Station**  
**Dismtd Rly Dismantled Railway**   **PW Place of Worship**  
**EI Gen Sta Electricity Generating Station**   **Sewage Ppg Sta Sewage Pumping Station**  
**EI P Electricity Pole, Pillar**   **SB, S Br Signal Box or Bridge**  
**EI Sub Sta Electricity Sub Station**   **SP, SL Signal Post or Light**  
**FB Filter Bed**   **Spr Spring**  
**Fn / D Fn Fountain / Drinking Ftn.**   **Tk Tank or Track**  
**Gas Gov Gas Valve Compound**   **Tr Trough**  
**GVC Gas Governor**   **Wd Pp Wind Pump**  
**GP Guide Post**   **Wr Pt, Wr T Water Point, Water Tap**  
**MH Manhole**   **Wks Works (building or area)**  
**MP, MS Mile Post or Mile Stone**   **W Well**

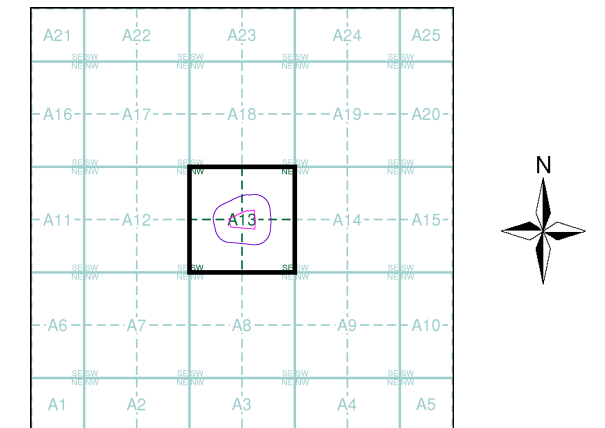
# Envirocheck®

LANDMARK INFORMATION GROUP®

## Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Yorkshire	1:2,500	1892	2
Yorkshire	1:2,500	1906	3
Yorkshire	1:2,500	1931	4
Ordnance Survey Plan	1:1,250	1960	5
Ordnance Survey Plan	1:2,500	1961 - 1962	6
Ordnance Survey Plan	1:1,250	1967 - 1971	7
Ordnance Survey Plan	1:2,500	1968	8
Additional SIMs	1:1,250	1985 - 1988	9
Additional SIMs	1:1,250	1990	10
Large-Scale National Grid Data	1:1,250	1993	11
Large-Scale National Grid Data	1:1,250	1994	12
Historical Aerial Photography	1:2,500	1999	13

## Historical Map - Segment A13



## Order Details

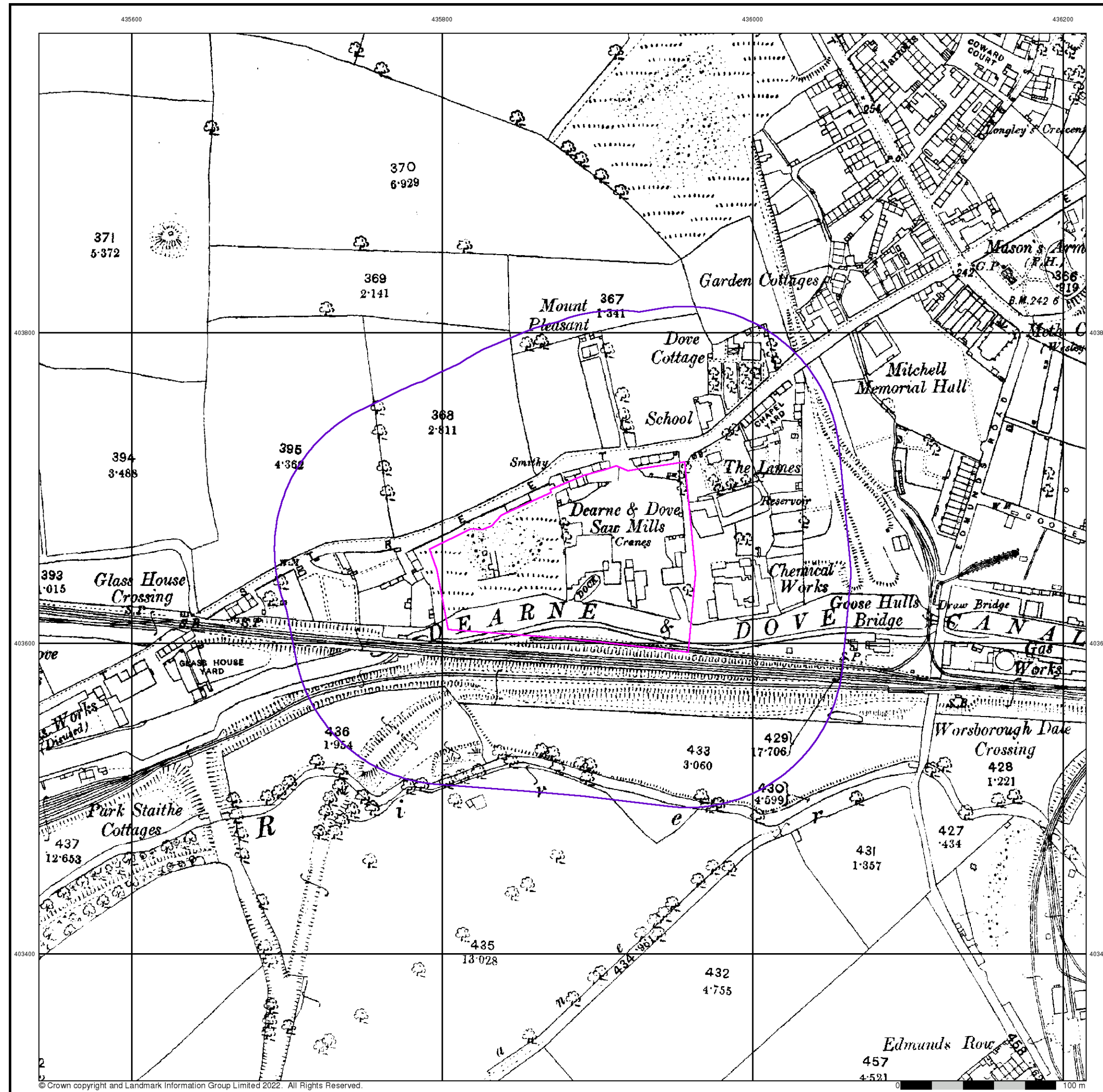
Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

## Site Details

Site at 435880, 403660

**Landmark**  
 INFORMATION GROUP

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



# Envirocheck®

LANDMARK INFORMATION GROUP®

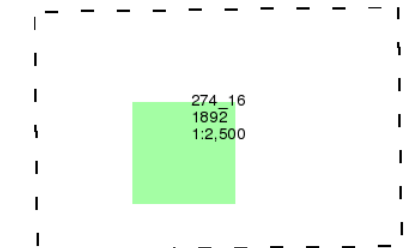
Yorkshire

Published 1892

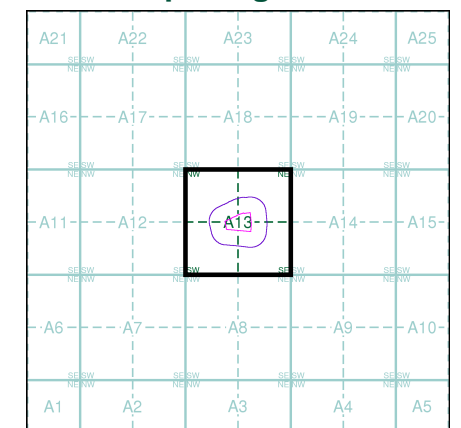
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated 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: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

## Site Details

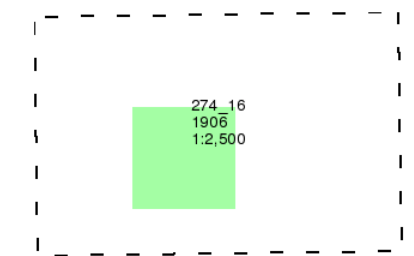
Site at 435880, 403660

**Landmark**  
 INFORMATION GROUP

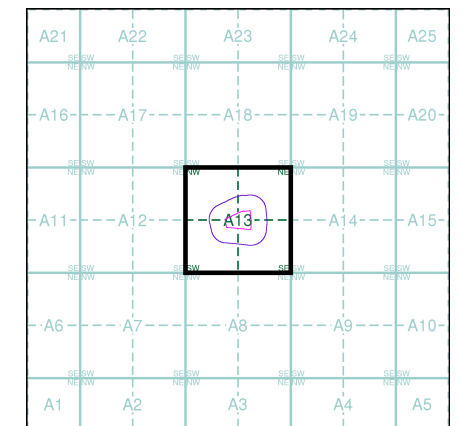
Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated 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**

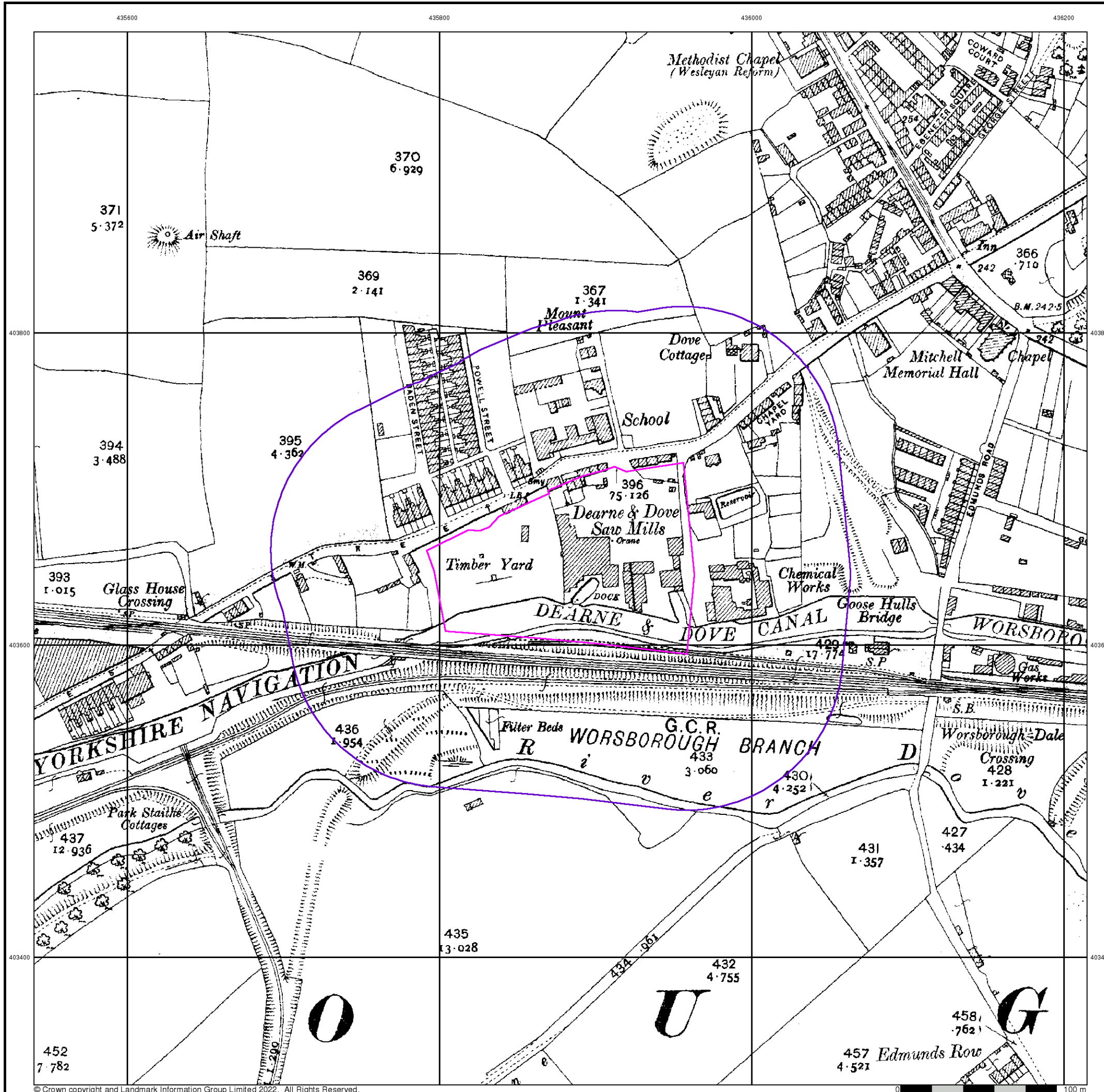


**Order Details**

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

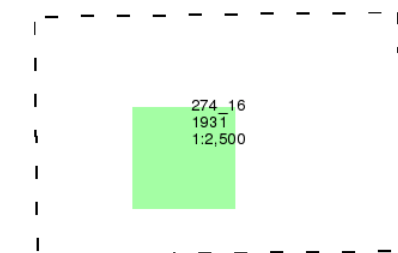
**Site Details**

Site at 435880, 403660

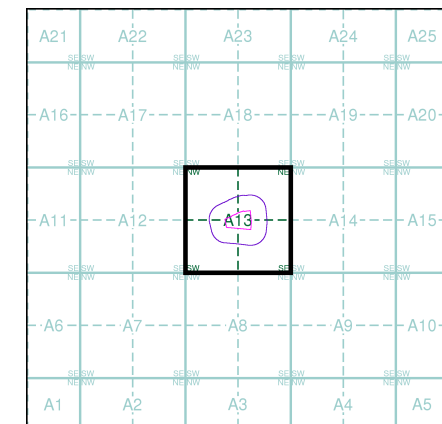


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. 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

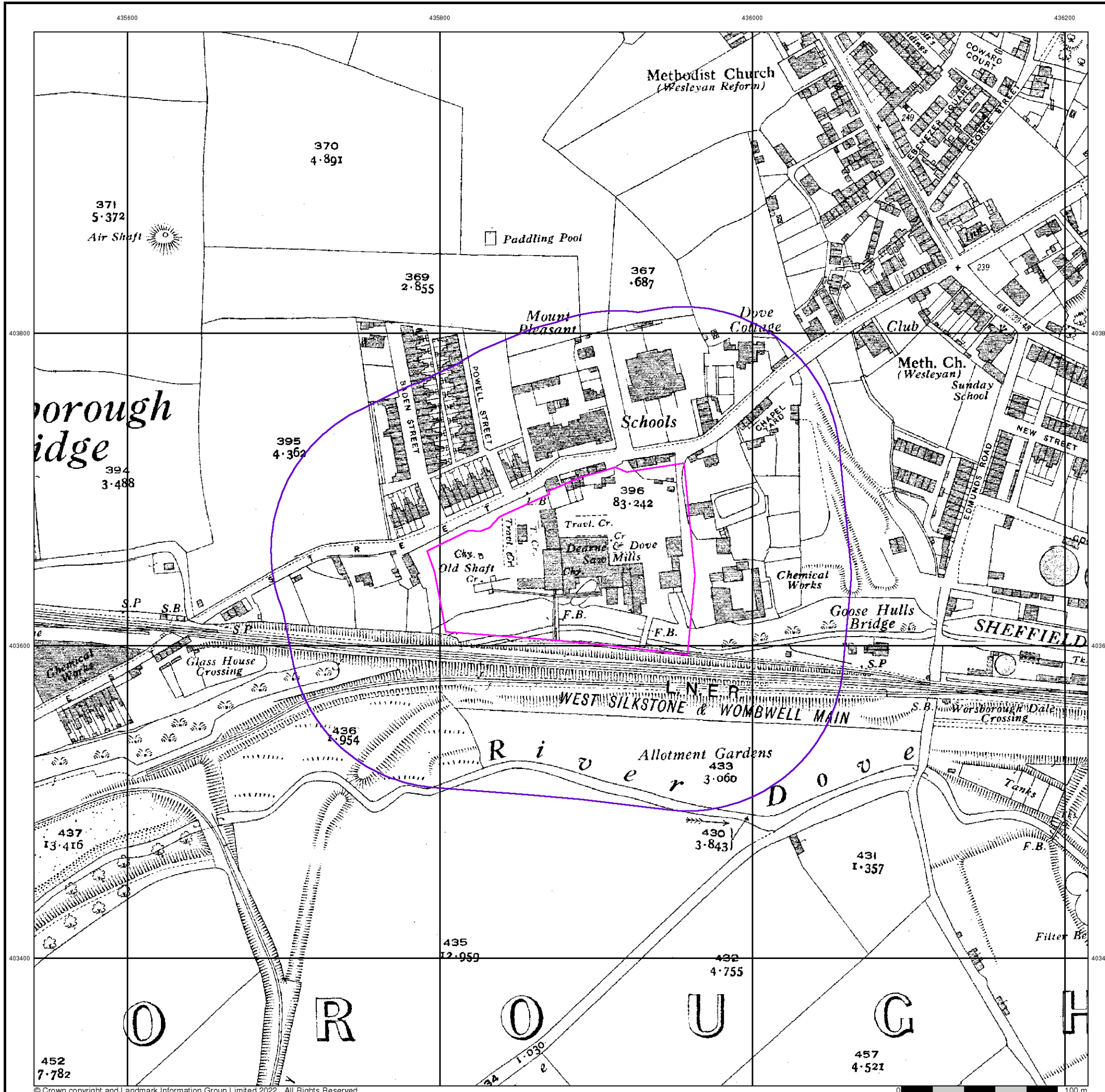


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

### Site Details

Site at 435880, 403660



452  
7-782

## Ordnance Survey Plan

Published 1960

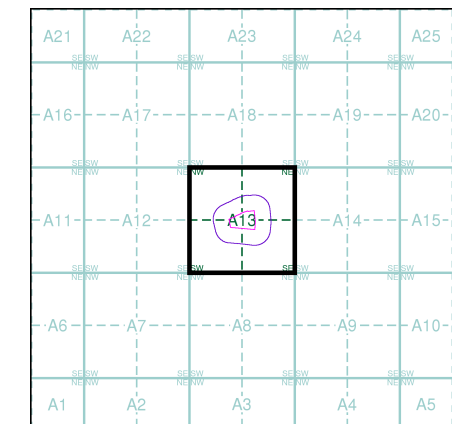
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated 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)

SE3503NE 1960 1:1,250	SE3603NW 1960 1:1,250
-----------------------------	-----------------------------

### Historical Map - Segment A13



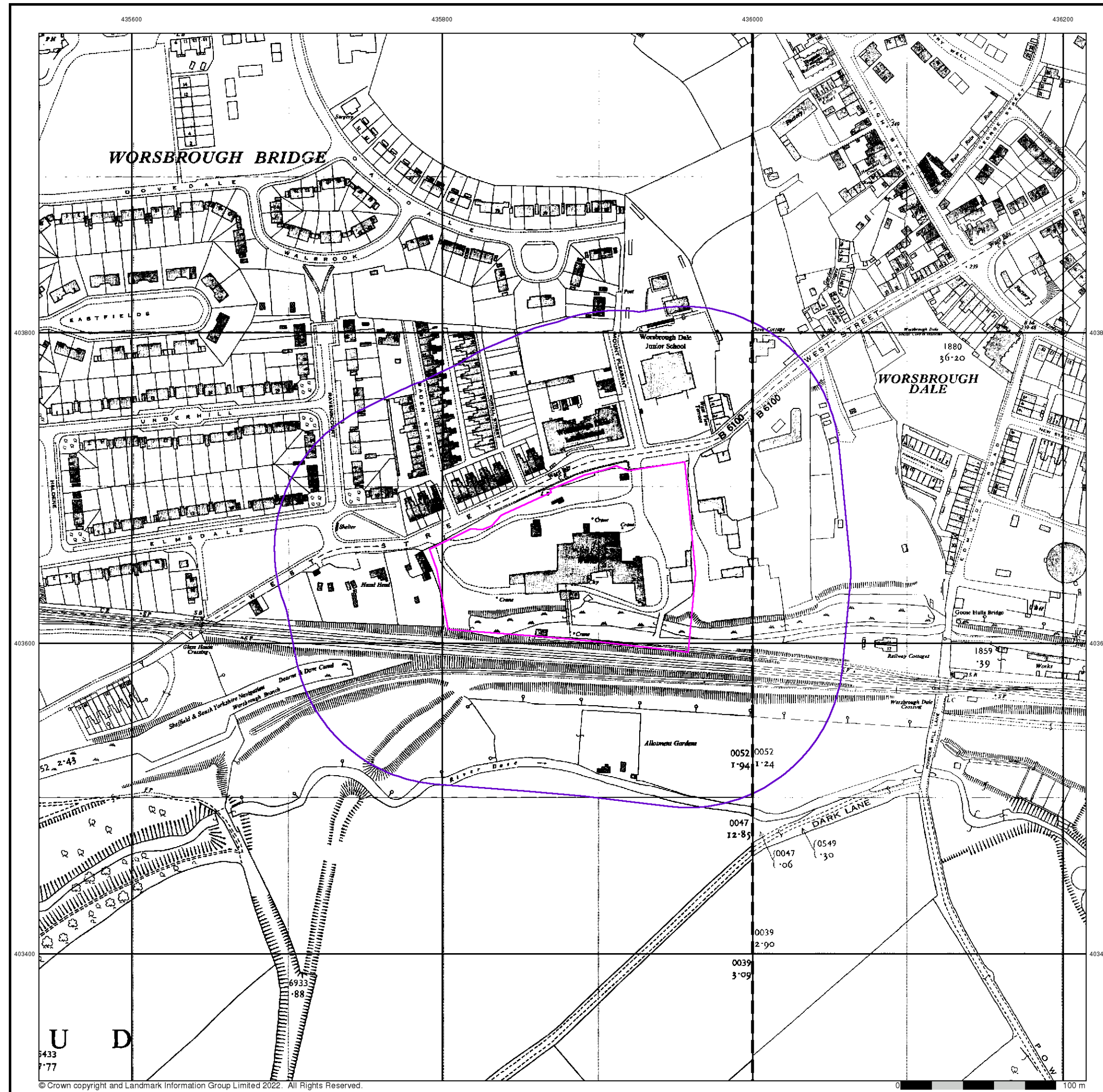
### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

### Site Details

Site at 435880, 403660





# Envirocheck®

● LANDMARK INFORMATION GROUP®

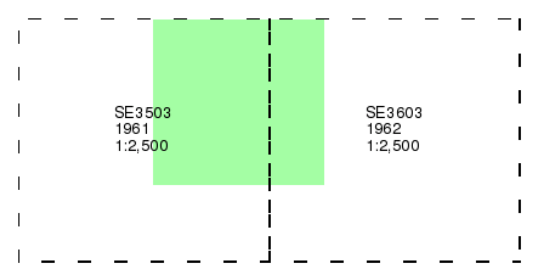
## Ordnance Survey Plan

Published 1961 - 1962

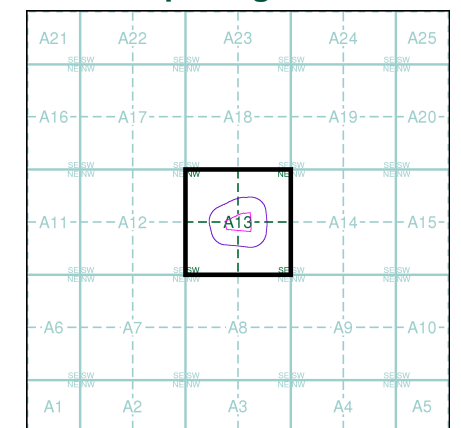
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated 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: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

### Site Details

Site at 435880, 403660

**Landmark**  
 ● LANDMARK INFORMATION GROUP

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

U D  
 433  
 777

## Ordnance Survey Plan

Published 1967 - 1971

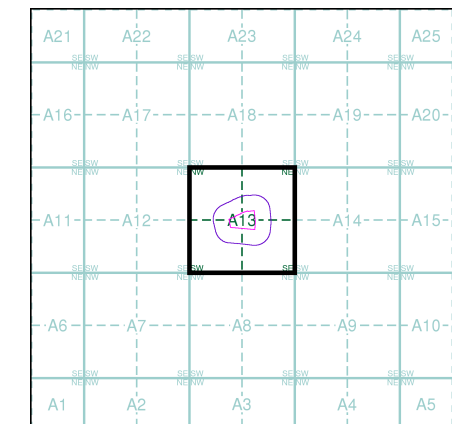
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated 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)

SE3503NE 1971 1:1,250	SE3603NW 1967 1:1,250
-----------------------------	-----------------------------

### Historical Map - Segment A13



### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

### Site Details

Site at 435880, 403660



435600

435800

436000

436200

# Envirocheck®

LANDMARK INFORMATION GROUP®

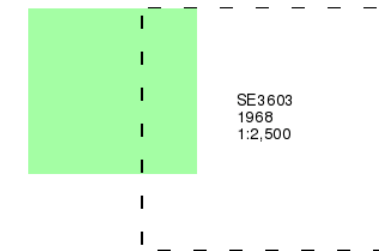
## Ordnance Survey Plan

Published 1968

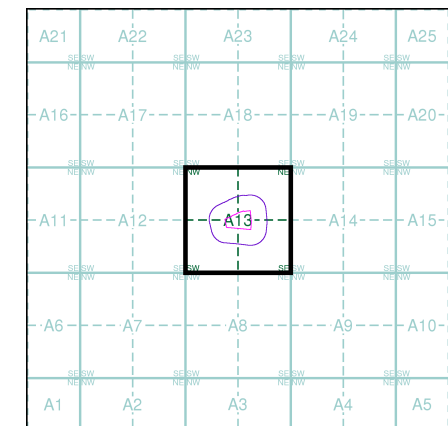
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated 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

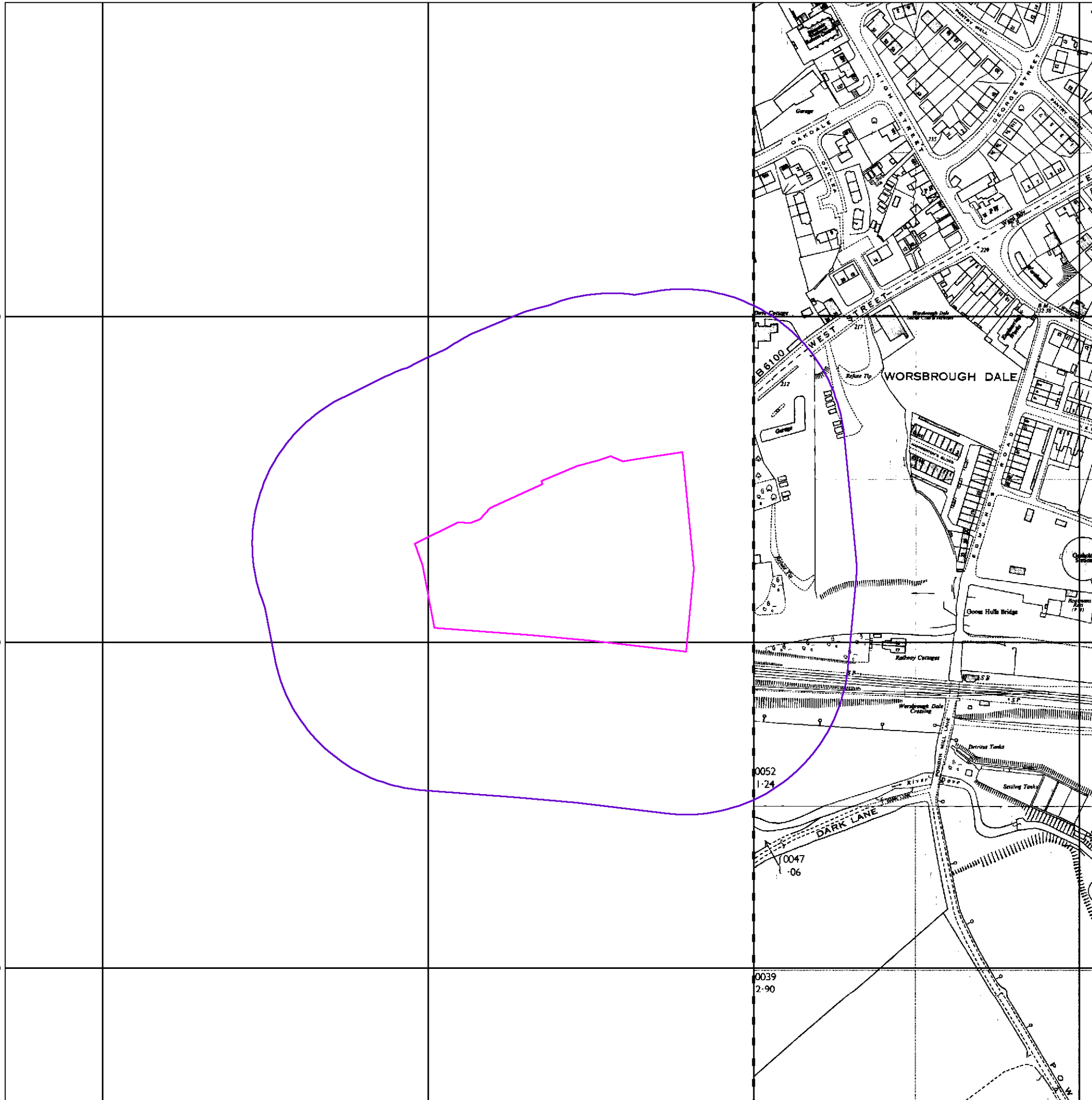
Order Number: 291577021\_1\_1  
Customer Ref: 46967  
National Grid Reference: 435890, 403650  
Slice: A  
Site Area (Ha): 1.54  
Search Buffer (m): 100

### Site Details

Site at 435880, 403660

**Landmark**  
INFORMATION GROUP

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



## Additional SIMs

Published 1985 - 1988

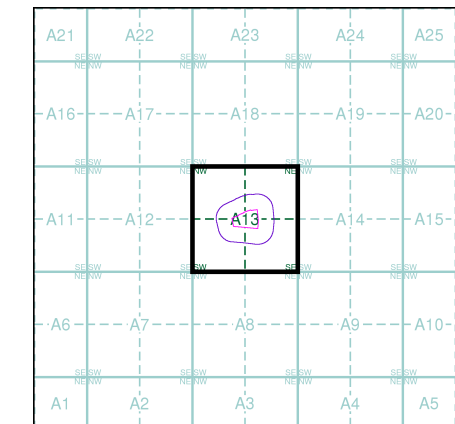
Source map scale - 1:1,250

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

## Map Name(s) and Date(s)

SE3503NE 1988 1:1,250	SE3603NW 1985 1:1,250
-----------------------------	-----------------------------

## Historical Map - Segment A13

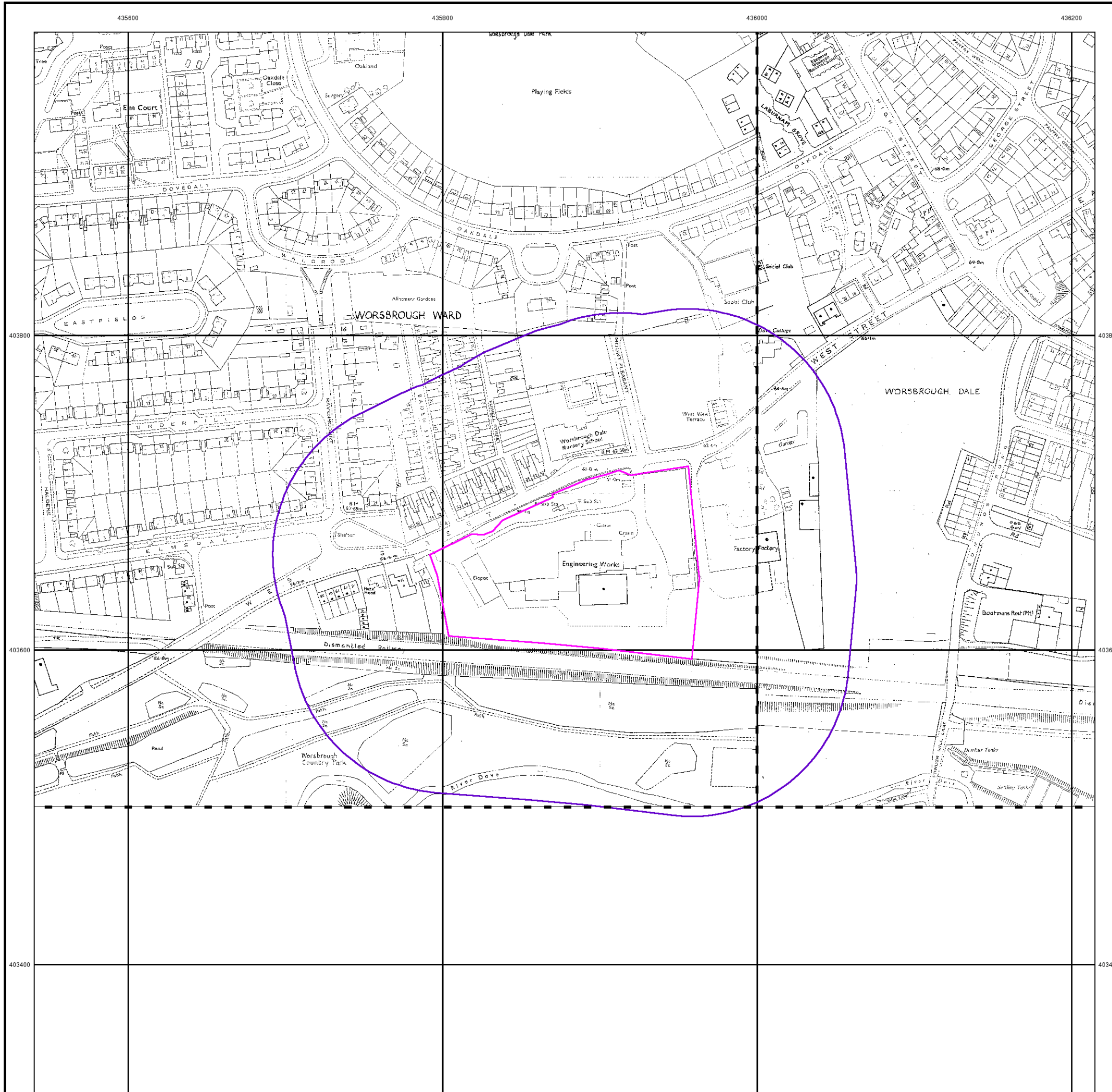


## Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

## Site Details

Site at 435880, 403660



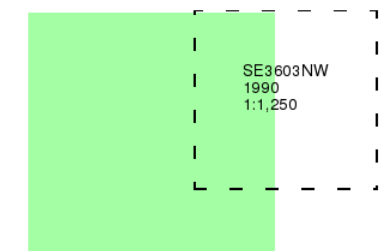
## Additional SIMs

Published 1990

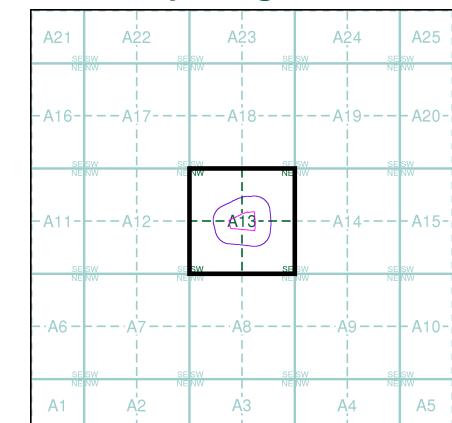
Source map scale - 1:1,250

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

## Map Name(s) and Date(s)



## Historical Map - Segment A13

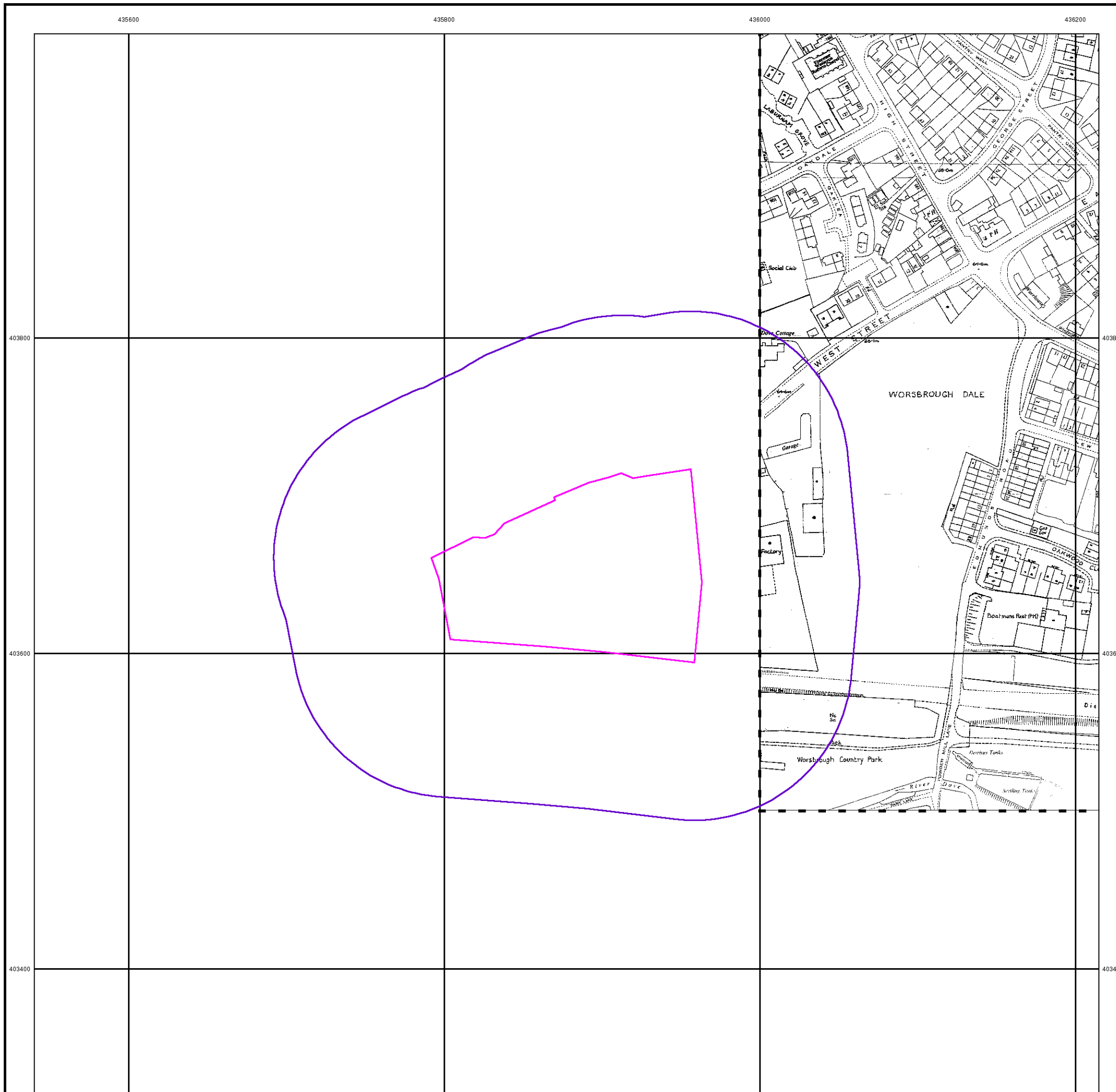


## Order Details

Order Number: 291577021\_1\_1  
Customer Ref: 46967  
National Grid Reference: 435890, 403650  
Slice: A  
Site Area (Ha): 1.54  
Search Buffer (m): 100

## Site Details

Site at 435880, 403660



## Large-Scale National Grid Data

Published 1993

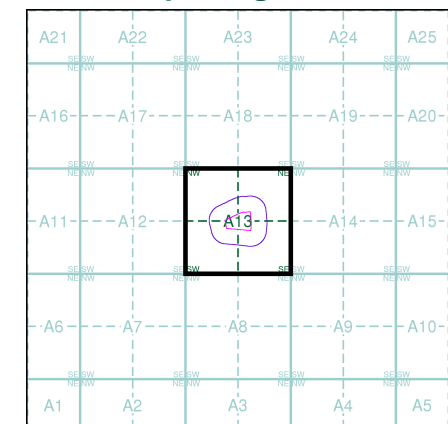
Source map scale - 1:1,250

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

### Map Name(s) and Date(s)

SE3503NE 1993 1:1,250	SE3603NW 1993 1:1,250
SE3503SE 1993 1:1,250	SE3603SW 1993 1:1,250

### Historical Map - Segment A13

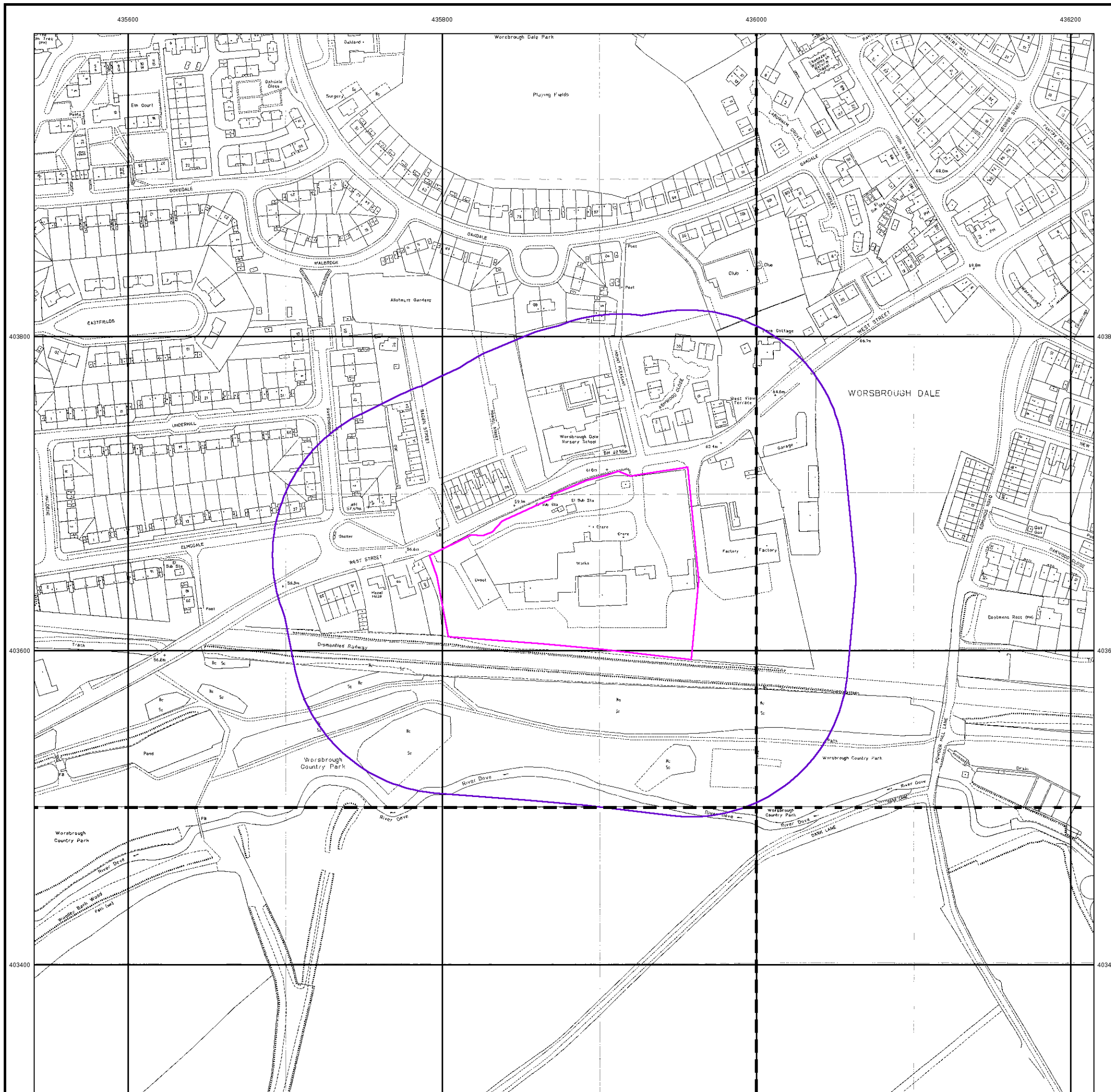


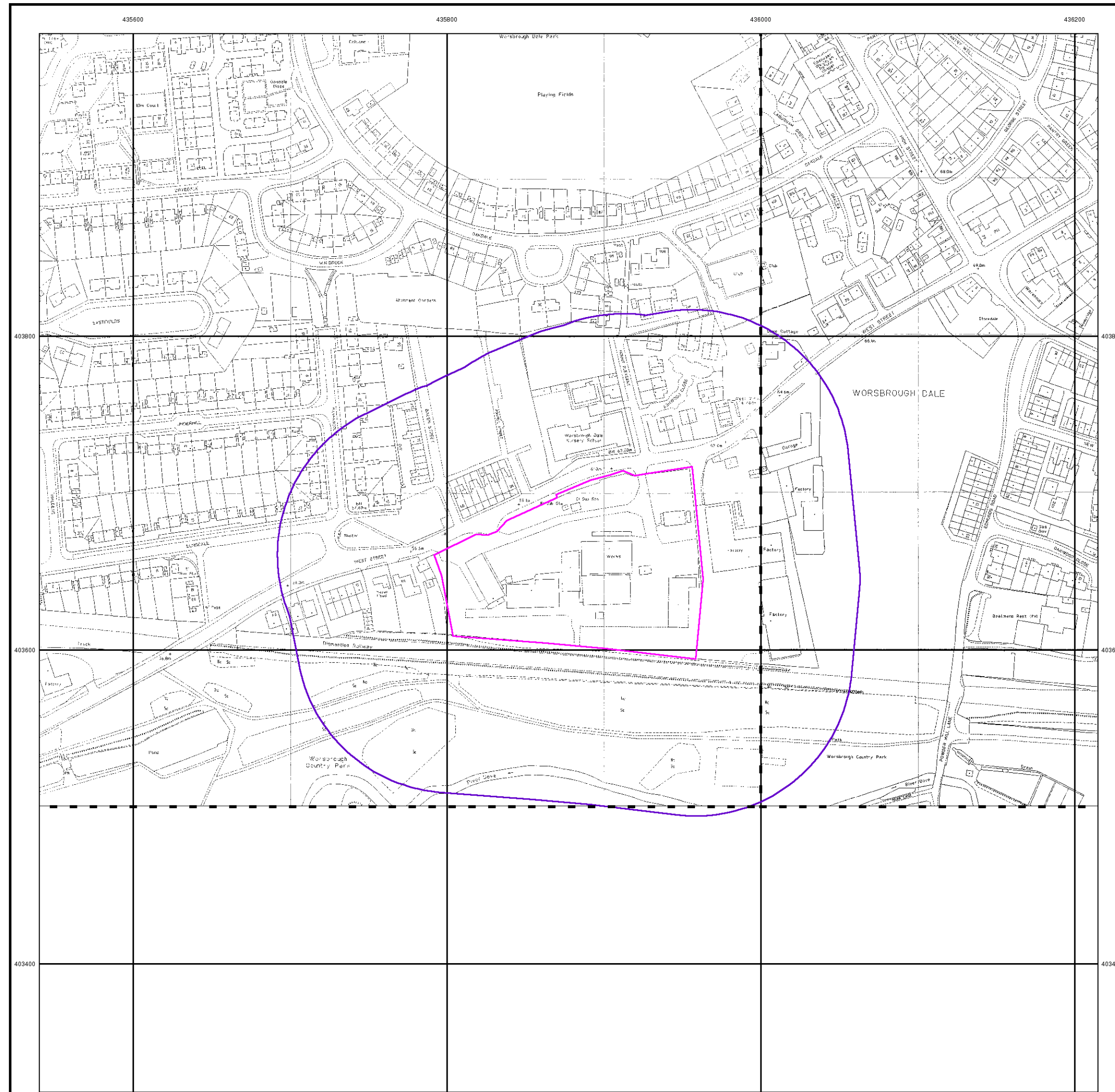
### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

### Site Details

Site at 435880, 403660





# Envirocheck®

● LANDMARK INFORMATION GROUP®

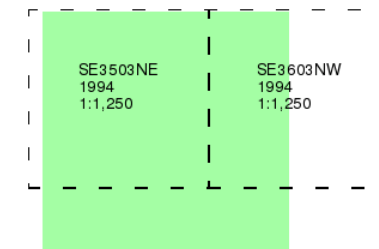
## Large-Scale National Grid Data

Published 1994

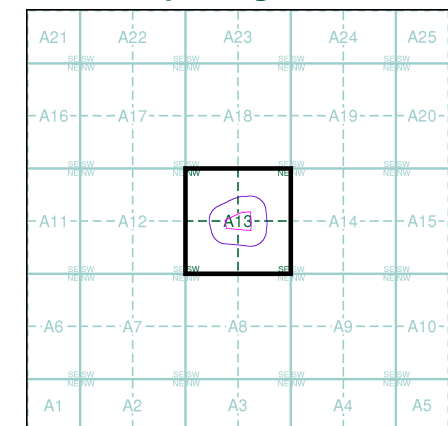
Source map scale - 1:1,250

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

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

### Site Details

Site at 435880, 403660

**Landmark**  
 ●●● INFORMATION GROUP

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

435600

435800

436000

436200



# Envirocheck®

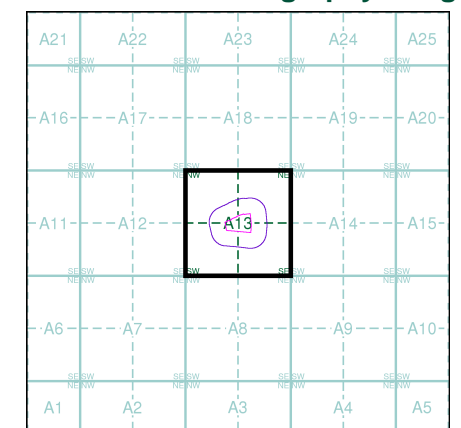
● LANDMARK INFORMATION GROUP®

## Historical Aerial Photography

Published 1999

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

### Historical Aerial Photography - Segment A13



### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 100

### Site Details

Site at 435880, 403660

**Landmark®**  
 ●●● INFORMATION GROUP

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

## Envirocheck<sup>®</sup> Report:

### Datasheet

#### Order Details:

**Order Number:**

291577021\_1\_1

**Customer Reference:**

46967

**National Grid Reference:**

435890, 403650

**Slice:**

A

**Site Area (Ha):**

1.54

**Search Buffer (m):**

1000

#### Site Details:

Site at 435880, 403660

#### Client Details:

Mrs K Betson  
Eastwood & Partners Ltd  
St Andrews House  
23 Kingfield Road  
Sheffield  
S11 9AS

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	37
Hazardous Substances	-
Geological	41
Industrial Land Use	56
Sensitive Land Use	66
Data Currency	67
Data Suppliers	73
Useful Contacts	74

### 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/Natural Resources Wales 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 this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

### Copyright Notice

© Landmark Information Group Limited 2022. The Copyright on the information and data and its format as contained in this Envirocheck® Report ("Report") is the property of Landmark Information Group Limited ("Landmark") and several other Data Providers, including (but not limited to) Ordnance Survey, British Geological Survey, the Environment Agency/Natural Resources Wales and Natural England, and must not be reproduced in whole or in part by photocopying or any other method. The Report is supplied under Landmark's Terms and Conditions accepted by the Customer. A copy of Landmark's Terms and Conditions can be found with the Index Map for this report. Additional copies of the Report may be obtained from Landmark, subject to Landmark's charges in force from time to time. The Copyright, design rights and any other intellectual rights shall remain the exclusive property of Landmark and/or other Data providers, whose Copyright material has been included in this Report. © Environment Agency & United Kingdom Research and Innovation 2022. © Natural Resources Wales & United Kingdom Research and Innovation 2022.

### Natural England Copyright Notice

Site of Special Scientific Interest, National Nature Reserve, Ramsar, Special Protection Area, Special Conservation Area, Marine Nature Reserve data (derived from Ordnance Survey 1:10000 raster) is provided by, and used with the permission of, Natural England who retain the copyright and Intellectual Property Rights for the data.

### Scottish Natural Heritage Copyright

Contains SNH information licensed under the Open Government Licence v3.0.

### Ove Arup Copyright Notice

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

### Stantec Copyright Notice

The cavity data presented has been extracted from the PBA (now Stantec UK Ltd) enhanced version of the original DEFRA national cavity databases. Stantec UK Ltd retain the copyright & intellectual property rights in the data. Whilst all reasonable efforts are made to check that the information contained in the cavity databases is accurate we do not warrant that the data is complete or error free. The information is based upon our own researches and those collated from a number of external sources and is continually being augmented and updated by Stantec UK Ltd. In no event shall Stantec UK Ltd or Landmark be liable for any loss or damage including, without limitation, indirect or consequential loss or damage arising from the use of this data.

### Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and Public Health England.

### Natural Resources Wales Copyright Notice

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number 100019741. Crown Copyright and Database Right. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2022. Land & Property Services © Crown copyright and database right.

### Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Agency &amp; Hydrological</b>					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 3		6	29	15
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control	pg 16			4	
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 17		Yes		
Pollution Incidents to Controlled Waters	pg 17		3	3	15
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 20		1	3	
River Quality Biology Sampling Points	pg 21			2	
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 22			1	1
Water Abstractions	pg 22				13 (*10)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 28	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 28	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	pg 28		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 28		Yes	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
OS Water Network Lines	pg 28		1	12	61

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Waste</b>					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 37		1		
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 37			1	
Local Authority Landfill Coverage	pg 37	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites	pg 37		1		
Potentially Infilled Land (Non-Water)	pg 37	1	2	4	9
Potentially Infilled Land (Water)	pg 38	1	2		14
Registered Landfill Sites					
Registered Waste Transfer Sites	pg 39			3	
Registered Waste Treatment or Disposal Sites					
<b>Hazardous Substances</b>					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Geological</b>					
BGS 1:625,000 Solid Geology	pg 41	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 41	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 46	1	2	8	32
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 53	Yes	n/a	n/a	n/a
Mining Instability	pg 53	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 53	Yes	Yes	n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 53	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 54	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 54	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 54	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 55	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 55	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
<b>Industrial Land Use</b>					
Contemporary Trade Directory Entries	pg 56	1	15	8	22
Fuel Station Entries	pg 60				1
Points of Interest - Commercial Services	pg 60	1	1	4	3
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 60	2	7	4	6
Points of Interest - Public Infrastructure	pg 62			8	22
Points of Interest - Recreational and Environmental	pg 64			1	2
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Sensitive Land Use</b>					
Ancient Woodland	pg 66		1		2
Areas of Adopted Green Belt	pg 66	1			1
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves	pg 66		1		
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 66	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	0	1	435950 403600
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (S)	0	1	435888 403650
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (N)	0	1	435888 403650
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	6	1	435850 403600
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (NW)	32	1	435800 403700
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (E)	37	1	436000 403650
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	42	1	436000 403600
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (W)	44	1	435750 403650
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (W)	55	1	435750 403600
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	55	1	436000 403750
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (N)	83	1	435888 403800
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (E)	88	1	436050 403650
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (S)	106	1	435850 403500
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (N)	148	1	435850 403850
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (S)	195	1	435900 403400
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	195	1	435950 403400
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	197	1	436150 403550
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (W)	213	1	435600 403550
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	215	1	436050 403400
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SW (SW)	232	1	435600 403500
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (NW)	234	1	435750 403900
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (SE)	240	1	436150 403450

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	245	1	435950 403350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	245	1	435900 403350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (W)	250	1	435550 403600
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (S)	250	1	435888 403350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	258	1	436200 403800
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	259	1	435600 403450
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	261	1	436050 403350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	300	1	435550 403450
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (S)	300	1	435888 403300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NW (S)	305	1	435850 403300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (NW)	308	1	435550 403850
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	311	1	436200 403400
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	311	1	436150 403350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (NW)	323	1	435650 403950
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	329	1	435550 403400
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (S)	355	1	435850 403250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NW (S)	359	1	435800 403250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (SW)	369	1	435500 403400
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (NW)	390	1	435600 404000
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (W)	392	1	435400 403650
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (SW)	400	1	435500 403350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	402	1	435400 403750

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (S)	409	1	435800 403200
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (SW)	411	1	435450 403400
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NW (S)	413	1	435750 403200
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (SW)	439	1	435450 403350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	440	1	436400 403600
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	451	1	435350 403750
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (NW)	459	1	435550 404050
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (SE)	462	1	436350 403350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	463	1	435750 403150
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A7NE (SW)	470	1	435450 403300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NW (S)	471	1	435700 403150
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	480	1	435400 403350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (SW)	485	1	435650 403150
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	487	1	436450 403650
1	<b>Discharge Consents</b> Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Birdwell Cso Land Adjacent To River Dove, Dark Lane, Worsbrough, Barnsley Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra7252 Permit Version: 1 Effective Date: 2nd January 1997 Issued Date: 2nd January 1997 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: River Dove <b>Status: New Consent, by Application (Water Resources Act 1991, Section 88)</b> Positional Accuracy: Located by supplier to within 100m	A13SE (S)	106	2	435940 403490

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Edmunds Road Combined Sewer Overflw, Worsbrough Dale, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: C4961  Permit Version: 1  Effective Date: 27th January 1988  Issued Date: 27th January 1988  Revocation Date: 23rd December 1997  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>Transferred from COPA 1974</b>  Positional Accuracy: Located by supplier to within 100m</p>	A13SE (SE)	161	2	436100 403520
2	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Edmunds Road Combined Sewer Overflw, Worsbrough Dale, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: C4961  Permit Version: 2  Effective Date: 24th December 1997  Issued Date: 24th December 1997  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A13SE (SE)	169	2	436110 403520
2	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Yorkshire Water Edmunds Road Worsbo, Rough Dale  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: 3267  Permit Version: 1  Effective Date: 8th September 1983  Issued Date: 8th September 1983  Revocation Date: 7th April 1986  Discharge Type: Trade Effluent  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Not Supplied  <b>Status:</b> <b>Authorisation revoked</b>  Positional Accuracy: Located by supplier to within 100m</p>	A13SE (SE)	171	2	436100 403500
2	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: West Street Worsbrough Cso O/S No 18 West Street, Worsbrough Dale, Barnsley, South Yorkshire, S70 5pg  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra9239  Permit Version: 2  Effective Date: 28th August 2020  Issued Date: 28th August 2020  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A13SE (SE)	172	2	436113 403521

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: West Street Worsbrough Cso O/S No 18 West Street, Worsbrough Dale, Barnsley, South Yorkshire, S70 5pg  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra9239  Permit Version: 1  Effective Date: 3rd September 2007  Issued Date: 3rd September 2007  Revocation Date: 27th August 2020  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A13NE (NE)	180	2	436110 403810
4	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E708  Permit Version: 1  Effective Date: 2nd May 1986  Issued Date: 2nd May 1986  Revocation Date: 31st August 1989  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>Transferred from COPA 1974</b>  Positional Accuracy: Located by supplier to within 100m</p>	A13SE (SE)	260	2	436200 403500
4	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E708(Ss)  Permit Version: 1  Effective Date: 16th November 1981  Issued Date: 16th November 1981  Revocation Date: 1st May 1986  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>Transferred from 1975 Regulations</b>  Positional Accuracy: Located by supplier to within 100m</p>	A13SE (SE)	260	2	436200 403500
5	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewage Disposal Works - Water Company  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 3  Effective Date: 31st March 2010  Issued Date: 25th February 2005  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	331	2	436260 403460

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E708  Permit Version: 3  Effective Date: 1st December 1990  Issued Date: 1st December 1990  Revocation Date: 28th October 1998  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status: Authorisation revoked</b>  Positional Accuracy: Located by supplier to within 100m</p>	A14SW (E)	355	2	436300 403500
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 7  Effective Date: 24th March 2010  Issued Date: 24th March 2010  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 7  Effective Date: 24th March 2010  Issued Date: 24th March 2010  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 4  Effective Date: 9th February 2009  Issued Date: 5th February 2009  Revocation Date: 31st March 2009  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 4  Effective Date: 9th February 2009  Issued Date: 5th February 2009  Revocation Date: 31st March 2009  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 5  Effective Date: 26th May 2009  Issued Date: 5th February 2009  Revocation Date: 23rd March 2010  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 5  Effective Date: 26th May 2009  Issued Date: 5th February 2009  Revocation Date: 23rd March 2010  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 6  Effective Date: 1st April 2009  Issued Date: 14th October 2008  Revocation Date: 25th May 2009  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 6  Effective Date: 1st April 2009  Issued Date: 14th October 2008  Revocation Date: 25th May 2009  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewage Disposal Works - Water Company  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 3  Effective Date: 31st March 2010  Issued Date: 25th February 2005  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 2  Effective Date: 1st April 1999  Issued Date: 21st December 1998  Revocation Date: 8th February 2009  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 2  Effective Date: 1st April 1999  Issued Date: 21st December 1998  Revocation Date: 8th February 2009  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 1  Effective Date: 9th April 1998  Issued Date: 9th April 1998  Revocation Date: 31st March 1999  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7404  Permit Version: 1  Effective Date: 9th April 1998  Issued Date: 9th April 1998  Revocation Date: 31st March 1999  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	362	2	436280 403430
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Yorkshire Water Services Limited, W, Orsbrough Sewage Treatment Works  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra6831  Permit Version: 1  Effective Date: 2nd February 1993  Issued Date: 2nd February 1993  Revocation Date: 21st May 1998  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>Consent revoked: Discharge ceased (Water Resources Act 1991, Schedule 10 &amp; 6)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	375	2	436290 403420
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E708  Permit Version: 1  Effective Date: 2nd May 1986  Issued Date: 2nd May 1986  Revocation Date: 31st August 1989  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>Transferred from COPA 1974</b>  Positional Accuracy: Located by supplier to within 100m</p>	A14SW (SE)	394	2	436300 403400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E708(Ss)  Permit Version: 1  Effective Date: 16th November 1981  Issued Date: 16th November 1981  Revocation Date: 1st May 1986  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status: Transferred from 1975 Regulations</b>  Positional Accuracy: Located by supplier to within 100m</p>	A14SW (SE)	394	2	436300 403400
8	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY)  Location: Wors. Grundy-Country Park Sps, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: C5115  Permit Version: 2  Effective Date: 6th March 2001  Issued Date: 6th March 2001  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Pumping Station - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Culverted Trib Of River Dove  <b>Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12SE (W)	364	2	435460 403490
8	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY)  Location: Wors. Grundy-Country Park Sps, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: C5115  Permit Version: 1  Effective Date: 27th June 1988  Issued Date: 27th June 1988  Revocation Date: 5th March 2001  Discharge Type: Sewage Discharges - Pumping Station - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Culverted Trib Of River Dove  <b>Status: Deemed Consent - 1961 Act Application (Section 40)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12SE (W)	364	2	435460 403490
9	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewerage Network - Sewers  Location: Westfields, WORSBROUGH BRIDGE  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: 9th January 1963  Revocation Date: Not Supplied  Discharge Type: Sewage Effluent Discharge-Storm Effluent  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A12NE (W)	371	2	435450 403805

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewerage Network - Sewers  Location: Westfields, WORSBROUGH BRIDGE  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: 30th June 1993  Revocation Date: Not Supplied  Discharge Type: Sewage Effluent Discharge-Storm Effluent  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A12NE (W)	373	2	435450 403810
10	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Westfields Cso (Rear Of No 13), Worsborough, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra7982  Permit Version: 1  Effective Date: 31st March 2004  Issued Date: 3rd February 2004  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Shape Dike  <b>Status: Revised by Application, granted by Secretary of State (Section 35)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12NE (W)	414	2	435390 403760
11	<p><b>Discharge Consents</b></p> <p>Operator: R J B Mining (Uk) Ltd (23)  Property Type: Coal Extraction, Surface  Location: Rockingham Occs (Rear Of No 13), Sheffield Road, Birdwell, BARNSELEY, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Not Given  Reference: WA6021  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: Not Supplied  Revocation Date: Not Supplied  Discharge Type: Storm Sewage  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A8NE (S)	428	2	436010 403170
11	<p><b>Discharge Consents</b></p> <p>Operator: R J B Mining (Uk) Ltd (23)  Property Type: Coal Extraction, Surface  Location: Rockingham Occs , Sheffield Road, Birdwell, BARNSELEY, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Not Given  Reference: WA6021  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: Not Supplied  Revocation Date: Not Supplied  Discharge Type: Storm /emergency overflow  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A8NE (S)	433	2	436010 403165

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
12	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Yorkshire Water Services Limited, W, Orsbrough Sewage Treatment Works  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra6831  Permit Version: 1  Effective Date: 2nd February 1993  Issued Date: 2nd February 1993  Revocation Date: 21st May 1998  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status: Consent revoked: Discharge ceased (Water Resources Act 1991, Schedule 10 &amp; 6)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	435	2	436360 403430
12	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewage Disposal Works  Location: Worsbrough Stw, BARNSELY, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Not Given  Reference: WRA6873  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: Not Supplied  Revocation Date: Not Supplied  Discharge Type: Storm Sewage  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A14SW (SE)	435	2	436360 403430
13	<p><b>Discharge Consents</b></p> <p>Operator: Len Blackburn Motors Ltd  Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE)  Location: The Garage Park Rd Worsbrough The Garage, Park Road, Worsbrough Bridge, Barnsley, South Yorkshire, S70 5**  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: C3919  Permit Version: 1  Effective Date: 22nd July 1983  Issued Date: 22nd July 1993  Revocation Date: 9th December 1996  Discharge Type: Trade Effluent  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Issued Between 1986 And 1991  <b>Status: Consent revoked: Discharge ceased (Water Resources Act 1991, Schedule 10 &amp; 6)</b>  Positional Accuracy: Located by supplier to within 100m</p>	A12SE (SW)	546	2	435300 403400
14	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E708  Permit Version: 3  Effective Date: 1st December 1990  Issued Date: 1st December 1990  Revocation Date: 28th October 1998  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status: Authorisation revoked</b>  Positional Accuracy: Located by supplier to within 100m</p>	A14SW (E)	550	2	436500 403500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
14	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY)  Location: Worsbrough Wwtw, Edmunds Road, Worsborough, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E708  Permit Version: 2  Effective Date: 1st September 1989  Issued Date: 1st September 1989  Revocation Date: 30th November 1990  Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status:</b> <b>Transferred from Water Act 1989</b>  Positional Accuracy: Located by supplier to within 100m</p>	A14SW (E)	550	2	436500 403500
15	<p><b>Discharge Consents</b></p> <p>Operator: British Coal Opencast  Property Type: MINING OF COAL + LIGNITE  Location: Rockingham Occs Sheffield Road, Birdwell, Barnsley, South Yorkshire  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wa 6021  Permit Version: 1  Effective Date: 14th May 1990  Issued Date: 14th May 1990  Revocation Date: 11th April 1997  Discharge Type: Trade Effluent  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Not Supplied  <b>Status:</b> <b>Revoked (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 100m</p>	A9NW (SE)	595	2	436420 403220
16	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewerage Network - Sewers  Location: Bank End Avenue, WORSBROUGH DALE  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: 9th January 1963  Revocation Date: Not Supplied  Discharge Type: Sewage Effluent Discharge-Storm Effluent  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status:</b> <b>Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A18NE (N)	665	2	436140 404355
16	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewerage Network - Sewers  Location: Bank End Avenue, WORSBROUGH DALE  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: 30th June 1993  Revocation Date: Not Supplied  Discharge Type: Sewage Effluent Discharge-Storm Effluent  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status:</b> <b>Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A18NE (N)	669	2	436140 404360

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
17	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewerage Network - Sewers  Location: Blacker Hill, Blacker Lane  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: 30th June 1993  Revocation Date: Not Supplied  Discharge Type: Sewage Effluent Discharge-Storm Effluent  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A8SE (S)	821	2	436060 402780
17	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewerage Network - Sewers  Location: West Street, WORSBROUGH DALE  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: 9th January 1963  Revocation Date: Not Supplied  Discharge Type: Sewage Effluent Discharge-Storm Effluent  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A8SE (S)	822	2	436065 402780
17	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewerage Network - Sewers  Location: West Street, WORSBROUGH DALE  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: 30th June 1993  Revocation Date: Not Supplied  Discharge Type: Sewage Effluent Discharge-Storm Effluent  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A8SE (S)	826	2	436060 402775
17	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: Sewerage Network - Sewers  Location: Blacker Hill, Blacker Lane  Authority: Environment Agency, North East Region  Catchment Area: Dearne  Reference: S/UD/13  Permit Version: Not Supplied  Effective Date: Not Supplied  Issued Date: 9th January 1963  Revocation Date: Not Supplied  Discharge Type: Sewage Effluent Discharge-Storm Effluent  Discharge: Unknown  Environment:  Receiving Water: Not Supplied  <b>Status: Not Supplied</b>  Positional Accuracy: Located by supplier to within 100m</p>	A8SE (S)	827	2	436065 402775

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	<p><b>Discharge Consents</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Property Type: CULTURAL/ZOO/COMMUNITY CENTRE/MUSEUM/LIBRARY/ARCHIVE  Location: Worsbrough Mill Museum &amp; Country Park Road, Worsbrough, Barnsley, South Yorkshire, S70 5lj  Authority: Environment Agency, North East Region  Catchment Area: Derwent Tributaries  Reference: Eprfp3723ka  Permit Version: 1  Effective Date: 10th December 2010  Issued Date: 10th December 2010  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status: New issued under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12SW (W)	845	2	435002 403343
19	<p><b>Discharge Consents</b></p> <p>Operator: Worsbrough Mill Museum  Property Type: Undefined Or Other  Location: Barnsley Metropolitan Borough Council, 11 Worsbrough Mill Museum Off Pa, Rk Road Worsbrough  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: 3666  Permit Version: 1  Effective Date: 7th January 1983  Issued Date: 7th January 1983  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: River Dove  <b>Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961</b>  Positional Accuracy: Located by supplier to within 100m</p>	A12SW (W)	884	2	434950 403380
20	<p><b>Discharge Consents</b></p> <p>Operator: British Coal Corporation  Property Type: MINING OF COAL + LIGNITE  Location: Barrow Colliery-Outlet No.3-Point A, ,Reservoir Overflow  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: E527  Permit Version: 1  Effective Date: 8th September 1983  Issued Date: 8th September 1983  Revocation Date: 7th April 1986  Discharge Type: Trade Effluent  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Not Supplied  <b>Status: Authorisation revoked</b>  Positional Accuracy: Located by supplier to within 100m</p>	A8SE (S)	896	2	436000 402700
21	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Bank End Avenue Cso Bank End Avenue (Opp No.73), Worsbrough, Barnsley, South Yorkshire, S70 4qn  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra9240  Permit Version: 2  Effective Date: 9th August 2019  Issued Date: 9th August 2019  Revocation Date: Not Supplied  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Dob Sike  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A18NE (N)	914	2	436190 404600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	<p><b>Discharge Consents</b></p> <p>Operator: Yorkshire Water Services Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Bank End Avenue Cso Bank End Avenue (Opp No.73), Worsbrough, Barnsley, South Yorkshire, S70 4qn  Authority: Environment Agency, North East Region  Catchment Area: Don Tributaries  Reference: Wra9240  Permit Version: 1  Effective Date: 3rd September 2007  Issued Date: 3rd September 2007  Revocation Date: 8th August 2019  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Dob Sike  <b>Status: New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A18NE (N)	914	2	436190 404600
22	<p><b>Integrated Pollution Prevention And Control</b></p> <p>Name: Yorkshire Water Services Limited  Location: Worsbrough Sludge Treatment Facility, Worsbrough Wwtw, Edmunds Road, Worsbrough Dale, Worsbrough, BARNSELEY, South Yorkshire, S70 4TJ  Authority: Environment Agency, North East Region  Permit Reference: XP3833JN  Original Permit Ref: Kp3136lr  Effective Date: 2nd November 2017  <b>Status: Surrender Effective</b>  Application Type: Surrender  App. Sub Type: Whole  Positional Accuracy: Located by supplier to within 10m  Activity Code: 5.4 A(1) (a) (ii)  Activity Description: DISPOSAL OF &gt; 50 T/D NON-HAZARDOUS WASTE (&gt; 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT  Primary Activity: Y</p>	A14SW (E)	299	2	436250 403530
22	<p><b>Integrated Pollution Prevention And Control</b></p> <p>Name: Yorkshire Water Services Limited  Location: Worsbrough Sludge Treatment Facility, Worsbrough Wwtw, Edmunds Road, Worsbrough Dale, Worsbrough, BARNSELEY, South Yorkshire, S70 4TJ  Authority: Environment Agency, North East Region  Permit Reference: FP3130VC  Original Permit Ref: Kp3136lr  Effective Date: 18th February 2014  <b>Status: Superseded By Variation</b>  Application Type: Variation  App. Sub Type: Minor  Positional Accuracy: Located by supplier to within 10m  Activity Code: 5.4 A(1) (a) (ii)  Activity Description: DISPOSAL OF &gt; 50 T/D NON-HAZARDOUS WASTE (&gt; 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT  Primary Activity: Y</p>	A14SW (E)	299	2	436250 403530
22	<p><b>Integrated Pollution Prevention And Control</b></p> <p>Name: Yorkshire Water Services Limited  Location: Worsbrough Sludge Treatment Facility, Worsbrough Wwtw, Edmunds Road, Worsbrough Dale, Worsbrough, Barnsley, South Yorkshire, S70 4TJ  Authority: Environment Agency, North East Region  Permit Reference: KP3136LR  Original Permit Ref: Kp3136lr  Effective Date: 23rd February 2007  <b>Status: Superseded By Variation</b>  Application Type: Application  App. Sub Type: New  Positional Accuracy: Manually positioned within the geographical locality  Activity Code: 5.3 A(1) (C) (II)  Activity Description: Other Waste Disposal; Non-Hazardous Waste &gt;50T/D By Physico-Chemical Treatment  Primary Activity: Y</p>	A14SW (SE)	307	2	436244 403484

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	<p><b>Integrated Pollution Prevention And Control</b></p> <p>Name: Yorkshire Water Services Limited            Location: Worsbrough Sludge Treatment Facility, Worsbrough Wwtw, Edmunds Road, Worsbrough Dale, Barnsley, South Yorkshire, S70 4TJ            Authority: Environment Agency, North East Region            Permit Reference: EP3537UK            Original Permit Ref: Kp3136lr            Effective Date: 23rd September 2008  <b>Status: Superseded By Variation</b>            Application Type: Variation            App. Sub Type: Minor            Positional Accuracy: Manually positioned to the address or location            Activity Code: 5.3 A(1) (C) (II)            Activity Description: Other Waste Disposal; Non-Hazardous Waste &gt;50T/D By Physico-Chemical Treatment            Primary Activity: Y</p>	A14SW (E)	314	2	436258 403502
	<p><b>Nearest Surface Water Feature</b></p>	A13SW (S)	79	-	435865 403525
23	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Water Company Sewage: Storm Overflow            Location: Land Adjacent To, Worsborough Sewage Treatment Works            Authority: Environment Agency, North East Region            Pollutant: Surcharged Sewage            Note: Fish Killed: No Information            Incident Date: 6th September 1997            Incident Reference: SH970478            Catchment Area: Dearne 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>	A13SE (S)	101	2	435900 403500
24	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Other General Premises            Location: Darfield/Source Dove(S) Afu            Authority: Environment Agency, North East Region            Pollutant: Unknown            Note: Not Supplied            Incident Date: 9th September 1991            Incident Reference: 126169            Catchment Area: Not Given            Receiving Water: No Pollution            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A13SE (SE)	104	2	436000 403500
25	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Other General Premises            Location: Worsborough Dale, OAKWOOD            Authority: Environment Agency, North East Region            Pollutant: Oils - Waste Oil            Note: Fish Killed: No Information            Incident Date: 17th July 1997            Incident Reference: SH970343            Catchment Area: Dearne 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>	A13NE (E)	242	2	436200 403700
26	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Water Company Sewage: Foul Sewer            Location: Darfield/Source Dove(S) Afu            Authority: Environment Agency, North East Region            Pollutant: Crude Sewage            Note: Not Supplied            Incident Date: 7th August 1992            Incident Reference: 135474            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>	A12SE (W)	323	2	435500 403500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
27	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Water Company Sewage: Storm Overflow            Location: Near Worsbro Sewage Treatment Works, River Dove            Authority: Environment Agency, North East Region            Pollutant: Sewage - Storm Overflow            Note: Watercourse :River Dove; From Worsbrough Reservoir Inlets To Blacker Dyke            Incident Date: 23rd March 1998            Incident Reference: SH980113            Catchment Area: Dearne Tributaries            Receiving Water: Freshwater Stream/River            Cause of Incident: Unknown            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A8NW (SW)	422	2	435700 403200
28	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Water Company Sewage: Foul Sewer            Location: Dark Lane, Wosborough            Authority: Environment Agency, North East Region            Pollutant: Surcharged Sewage            Note: Pollution Found; No Fish Killed            Incident Date: 2nd July 1996            Incident Reference: SH960325            Catchment Area: Dearne Tributaries            Receiving Water: Freshwater Stream/River            Cause of Incident: Unknown            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A8NW (SW)	457	2	435600 403200
29	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Industrial Premises            Location: Darfield/Source Dove(S) Afu            Authority: Environment Agency, North East Region            Pollutant: Oils - Diesel (Including Agricultural)            Note: Not Supplied            Incident Date: 12th August 1994            Incident Reference: 152907            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</p>	A12SE (SW)	548	2	435300 403395
30	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Industrial Premises            Location: Netherwood Brdg/Aldham A633 Dove(S) 03            Authority: Environment Agency, North East Region            Pollutant: Miscellaneous - Inert Suspended Solids            Note: Not Supplied            Incident Date: 30th September 1992            Incident Reference: 137197            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</p>	A14SW (E)	556	2	436505 403495
31	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Water Company Sewage: Sewage Treatment Works            Location: Darfield/Source Dove(S) Afu            Authority: Environment Agency, North East Region            Pollutant: Sewage - Treated Effluent            Note: Not Supplied            Incident Date: 27th August 1993            Incident Reference: 147209            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)	576	2	436500 403400
32	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Highway/Car Park            Location: Darfield/Source Dove(S) Afu            Authority: Environment Agency, North East Region            Pollutant: Oils - Diesel (Including Agricultural)            Note: Not Supplied            Incident Date: 26th July 1994            Incident Reference: 152709            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</p>	A12SW (W)	595	2	435200 403600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	<b>Pollution Incidents to Controlled Waters</b> Property Type: Industrial Premises Location: Mth River/ Road Bridge B6096 Dove(S) 01 Authority: Environment Agency, North East Region Pollutant: Sewage - Storm Overflow Note: Not Supplied Incident Date: 12th August 1992 Incident Reference: 135727 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	A9NW (SE)	617	2	436500 403300
33	<b>Pollution Incidents to Controlled Waters</b> Property Type: Water Company Sewage: Sewage Treatment Works Location: Kirkbymoorside/Source Dove(N) Afu Authority: Environment Agency, North East Region Pollutant: Sewage Sludge Note: Not Supplied Incident Date: 10th September 1991 Incident Reference: 126713 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	A9NW (SE)	619	2	436500 403295
34	<b>Pollution Incidents to Controlled Waters</b> Property Type: Water Company Sewage: Foul Sewer Location: Powder Mill Lane, WORSBROUGH Authority: Environment Agency, North East Region Pollutant: Crude Sewage Note: No Fish Killed Incident Date: 15th September 1997 Incident Reference: SH970496 Catchment Area: Dearne 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	A9NW (SE)	627	2	436400 403150
35	<b>Pollution Incidents to Controlled Waters</b> Property Type: Coal Location: River Dove, Downstream Of A61 Road Bridge Authority: Environment Agency, North East Region Pollutant: Other Chemicals Note: No Fish Killed Incident Date: 6th September 1995 Incident Reference: SH950036 Catchment Area: Dearne Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	631	2	435300 403230
36	<b>Pollution Incidents to Controlled Waters</b> Property Type: Industrial Premises Location: Darfield/Source Dove(S) Afu Authority: Environment Agency, North East Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 7th August 1994 Incident Reference: 152838 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	A12SW (W)	639	2	435200 403400
37	<b>Pollution Incidents to Controlled Waters</b> Property Type: Industrial Premises Location: Darfield/Source Dove(S) Afu Authority: Environment Agency, North East Region Pollutant: Unknown Sewage Note: Not Supplied Incident Date: 8th April 1992 Incident Reference: 132255 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	A14SE (E)	649	2	436600 403500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	<b>Pollution Incidents to Controlled Waters</b> Property Type: Water Company Sewage: Water Distribution System Location: Darfield/Source Dove(S) Afu Authority: Environment Agency, North East Region Pollutant: Chlorinated Water Note: Not Supplied Incident Date: 17th May 1992 Incident Reference: 133089 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	A7NW (SW)	679	2	435200 403300
39	<b>Pollution Incidents to Controlled Waters</b> Property Type: Oil Storage Depot Location: Little Houghton/Edderthrp Ln Dearne 10 Authority: Environment Agency, North East Region Pollutant: Miscellaneous - Urban Runoff Note: Not Supplied Incident Date: 1st February 1991 Incident Reference: 119277 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	A7NW (SW)	769	2	435100 403300
40	<b>Pollution Incidents to Controlled Waters</b> Property Type: Farm Location: Darfield/Source Dove(S) Afu Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 30th April 1992 Incident Reference: 132608 Catchment Area: Not Given Receiving Water: No Pollution Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A14SE (E)	839	2	436800 403600
41	<b>Pollution Incidents to Controlled Waters</b> Property Type: Miscellaneous Premises: Unknown Location: Netherwood Brdg/Aldham A633 Dove(S) 03 Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 16th March 1993 Incident Reference: 141568 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	A14SE (E)	848	2	436800 403500
42	<b>Pollution Incidents to Controlled Waters</b> Property Type: Miscellaneous Premises: Unknown Location: Penistone/Source Don Afu Authority: Environment Agency, North East Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 13th September 1994 Incident Reference: 153237 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	A12SW (W)	907	2	434900 403500
	<b>River Quality</b> Name: River_Dove GQA Grade: River Quality C Reach: Worsbrough_Reservoir_Blacker_Dyk Estimated Distance (km): 2.2 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A13SE (S)	174	2	435981 403416

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>River Quality</b> Name: Blacker_Dyke GQA Grade: River Quality C Reach: Rockingham_Colliery_River_Dov Estimated Distance (km): 2.9 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A14SW (SE)	381	2	436230 403328
	<b>River Quality</b> Name: River_Dove GQA Grade: River Quality C Reach: Wombwell_Stw_River_Dearn Estimated Distance (km): 6.1 Flow Rate: Flow less than 0.62 cumecs Flow Type: River Year: 2000	A14SW (SE)	448	2	436374 403429
	<b>River Quality</b> Name: River_Dove GQA Grade: River Quality B Reach: Blacker_Dyke_Wombwell_St Estimated Distance (km): 1 Flow Rate: Flow less than 0.62 cumecs Flow Type: River Year: 2000	A14SW (SE)	448	2	436374 403429
43	<b>River Quality Biology Sampling Points</b> Name: Dove Reach: Wombwell Stw To River Dearne Estimated Distance: 6.10 Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 1995 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2000 GQA Grade: River Quality Biology GQA Grade E - Poor Year: 2002 GQA Grade: River Quality Biology GQA Grade C - Fairly Good Year: 2003 GQA Grade: River Quality Biology GQA Grade C - Fairly Good Year: 2004 GQA Grade: River Quality Biology GQA Grade C - Fairly Good Year: 2005 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2006 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2007 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2008 GQA Grade: River Quality Biology GQA Grade C - Fairly Good Year: 2009 GQA Grade: River Quality Biology GQA Grade C - Fairly Good	A14SW (SE)	381	2	436230 403328

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
43	<b>River Quality Biology Sampling Points</b> Name: Dove Reach: Blacker Dyke To Wombwell Stw Estimated Distance: 1.00 Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 1995 GQA Grade: River Quality Biology GQA Grade E - Poor Year: 2000 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2002 GQA Grade: River Quality Biology GQA Grade C - Fairly Good Year: 2003 GQA Grade: River Quality Biology GQA Grade C - Fairly Good Year: 2004 GQA Grade: River Quality Biology GQA Grade C - Fairly Good Year: 2005 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2006 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2007 GQA Grade: River Quality Biology GQA Grade D - Fair Year: 2008 GQA Grade: River Quality Biology GQA Grade C - Fairly Good Year: 2009 GQA Grade: River Quality Biology GQA Grade C - Fairly Good	A14SW (SE)	381	2	436230 403328
44	<b>Substantiated Pollution Incident Register</b> Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 29th December 2016 Incident Reference: 1493034 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Oils - Petrol	A8NW (SW)	313	2	435694 403316
45	<b>Substantiated Pollution Incident Register</b> Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 29th August 2003 Incident Reference: 186108 Water Impact: Category 4 - No Impact Air Impact: Category 4 - No Impact Land Impact: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Specific Waste Materials: Commercial Waste Pollutant: Specific Waste Materials: Vehicles And Vehicle Parts	A7NE (SW)	688	2	435466 403010
46	<b>Water Abstractions</b> Operator: National Coal Board Licence Number: 2/27/08/066 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 1136 Yearly Rate (m3): 272760 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	A12SE (SW)	581	2	435270 403380
47	<b>Water Abstractions</b> Operator: Mr & Mrs D & J Nuttall Licence Number: 2/27/08/128 Permit Version: 1 Location: Inland Water - River Dove Authority: Environment Agency, North East Region Abstraction: Private Non-Industrial Amenity: Make-Up Or Top Up Water Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Neather Lewden, Station Road, Worsbrough Dale, Barnsley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th September 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14SW (E)	610	2	436550 403450

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
47	<p><b>Water Abstractions</b></p> <p>Operator: Mr &amp; Mrs D &amp; J Nuttall            Licence Number: 2/27/08/128            Permit Version: 1            Location: Inland Water - River Dove            Authority: Environment Agency, North East Region            Abstraction: Private Non-Industrial Amenity: Make-Up Or Top Up Water            Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints            Source: Surface            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Neather Lewden, Station Road, Worsbrough Dale, Barnsley            Authorised Start: 01 November            Authorised End: 31 March            Permit Start Date: 13th September 2002            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A14SW (E)	610	2	436550 403450
48	<p><b>Water Abstractions</b></p> <p>Operator: Worsbrough Bridge Sports &amp; Development Association            Licence Number: 2/27/08/129            Permit Version: 1            Location: Inland Water - River Dove            Authority: Environment Agency, North East Region            Abstraction: General Agriculture: Spray Irrigation - Direct            Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints            Source: Surface            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Worsbrough Bridge Sports, Park Road, Worsbrough Bridge, Barnsley            Authorised Start: 01 April            Authorised End: 30 September            Permit Start Date: 4th September 2002            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 100m</p>	A7NW (W)	862	2	435000 403300
49	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council            Licence Number: 2/27/08/143/R01            Permit Version: 3            Location: Worsborough Mill Pond            Authority: Environment Agency, North East Region            Abstraction: Production Of Energy: Mechanical Non Electrical: Milling &amp; Water Power Other Than Electricity Generation            Abstraction Type: Water may be abstracted from a single point            Source: Surface            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Worsborough Mill, Worsborough, Barnsley            Authorised Start: 01 April            Authorised End: 31 March            Permit Start Date: 8th July 2020            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A7NW (W)	907	2	434947 403313
49	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council            Licence Number: 2/27/08/143/R01            Permit Version: 2            Location: Worsborough Mill Pond            Authority: Environment Agency, North East Region            Abstraction: Production Of Energy: Mechanical Non Electrical: Milling &amp; Water Power Other Than Electricity Generation            Abstraction Type: Water may be abstracted from a single point            Source: Surface            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Worsborough Mill, Worsborough, Barnsley            Authorised Start: 01 April            Authorised End: 31 March            Permit Start Date: 25th July 2019            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A7NW (W)	907	2	434947 403313

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
49	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: 2/27/08/143/R01  Permit Version: 1  Location: Worsborough Mill Pond  Authority: Environment Agency, North East Region  Abstraction: Production Of Energy: Mechanical Non Electrical: Milling &amp; Water Power Other Than Electricity Generation</p> <p>Abstraction Type: Water may be abstracted from a single point  Source: Surface  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Worsborough Mill, Worsborough, Barnsley  Authorised Start: 01 April  Authorised End: 31 March  Permit Start Date: 1st April 2017  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A7NW (W)	907	2	434947 403313
49	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: 2/27/08/143  Permit Version: 1  Location: Worsborough Mill Pond  Authority: Environment Agency, North East Region  Abstraction: Production Of Energy: Mechanical Non Electrical: Milling &amp; Water Power Other Than Electricity Generation</p> <p>Abstraction Type: Water may be abstracted from a single point  Source: Surface  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Worsborough Mill, Worsborough, Barnsley  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 14th February 2008  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A7NW (W)	956	2	434900 403300
49	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: 2/27/08/118  Permit Version: 102  Location: Worsborough Mill Pond  Authority: Environment Agency, North East Region  Abstraction: Production Of Energy: Mechanical Non Electrical: Milling &amp; Water Power Other Than Electricity Generation</p> <p>Abstraction Type: Water may be abstracted from a single point  Source: Surface  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Worsborough Mill, Worsborough, Barnsley  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 1st August 2002  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A7NW (W)	956	2	434900 403300
49	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: 2/27/08/118  Permit Version: 101  Location: Worsborough Mill Pond  Authority: Environment Agency, North East Region  Abstraction: Production Of Energy: Mechanical Non Electrical: Milling &amp; Water Power Other Than Electricity Generation</p> <p>Abstraction Type: Water may be abstracted from a single point  Source: Surface  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Worsborough Mill, Worsborough, Barnsley  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 24th November 2000  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A7NW (W)	956	2	434900 403300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
49	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council            Licence Number: 2/27/08/118            Permit Version: 100            Location: Worsborough Mill Pond            Authority: Environment Agency, North East Region            Abstraction: Production Of Energy: Mechanical Non Electrical: Milling &amp; Water Power Other Than Electricity Generation</p> <p>Abstraction Type: Water may be abstracted from a single point            Source: Surface            Daily Rate (m3): 0            Yearly Rate (m3): 0            Details: Worsborough Mill, Worsborough, Barnsley            Authorised Start: 01 January            Authorised End: 31 December            Permit Start Date: 4th July 1997            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 100m</p>	A7NW (W)	956	2	434900 403300
49	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council            Licence Number: Ne/027/0008/023            Permit Version: 1            Location: Worsborough Reservoir            Authority: Environment Agency, North East Region            Abstraction: Municipal grounds: 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: Not Supplied            Authorised Start: 01 April            Authorised End: 31 March            Permit Start Date: 25th July 2019            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A6NE (W)	992	2	434862 403299
49	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council            Licence Number: Ne/027/0008/019            Permit Version: 1            Location: Worsborough Reservoir            Authority: Environment Agency, North East Region            Abstraction: Municipal grounds: 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: Not Supplied            Authorised Start: 01 April            Authorised End: 31 March            Permit Start Date: 1st April 2017            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A6NE (W)	992	2	434862 403299
	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council            Licence Number: 2/27/08/143            Permit Version: 1            Location: Worsborough Reservoir            Authority: Environment Agency, North East Region            Abstraction: Municipal grounds: General use relating to Secondary Category (Very Low Loss)</p> <p>Abstraction Type: Water may be abstracted from a single point            Source: Surface            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Worsborough Mill, Worsborough, Barnsley            Authorised Start: 01 January            Authorised End: 31 December            Permit Start Date: 14th February 2008            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 100m</p>	A6NE (W)	1051	2	434800 403300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: 2/27/08/118  Permit Version: 102  Location: Worsborough Reservoir  Authority: Environment Agency, North East Region  Abstraction: Holiday Sites, Camp Sites &amp; Tourist Attractions: Make-Up or Top Up Water  Abstraction Type: Water may be abstracted from a single point  Source: Surface  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Worsborough Mill, Worsborough, Barnsley  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 1st August 2002  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A6NE (W)	1051	2	434800 403300
	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: 2/27/08/118  Permit Version: 101  Location: Worsborough Reservoir  Authority: Environment Agency, North East Region  Abstraction: Holiday sites, Camp Sites &amp; Tourist Attractions: Lake &amp; Pond Throughflow  Abstraction Type: Water may be abstracted from a single point  Source: Surface  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Worsborough Mill, Worsborough, Barnsley  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 24th November 2000  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A6NE (W)	1051	2	434800 403300
	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: 2/27/08/118  Permit Version: 100  Location: Worsborough Reservoir  Authority: Environment Agency, North East Region  Abstraction: Production Of Energy: Mechanical Non Electrical: Milling &amp; Water Power Other Than Electricity Generation  Abstraction Type: Water may be abstracted from a single point  Source: Surface  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Worsborough Mill, Worsborough, Barnsley  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 4th July 1997  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A6NE (W)	1051	2	434800 403300
	<p><b>Water Abstractions</b></p> <p>Operator: Mr H Brown  Licence Number: 2/27/08/040  Permit Version: 100  Location: Well - Coal Measures - Worsborough  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): 1  Yearly Rate (m3): 303  Details: 3 Acres Farmland, Brownfield, Worsborough Village, Barnsley  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 27th January 1966  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A1NE (SW)	1424	2	434800 402600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: Ne/027/0008/022  Permit Version: 1  Location: Rockley Dike  Authority: Environment Agency, North East Region  Abstraction: Municipal grounds: 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: Not Supplied  Authorised Start: 01 April  Authorised End: 31 March  Permit Start Date: 25th July 2019  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A6SW (SW)	1600	2	434416 402813
	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: Ne/027/0008/018  Permit Version: 1  Location: Rockley Dike  Authority: Environment Agency, North East Region  Abstraction: Municipal grounds: 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: Not Supplied  Authorised Start: 01 April  Authorised End: 31 March  Permit Start Date: 1st April 2017  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A6SW (SW)	1600	2	434416 402813
	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: 2/27/08/143  Permit Version: 1  Location: Rockley Dike  Authority: Environment Agency, North East Region  Abstraction: Municipal grounds: General use relating to Secondary Category (Very Low Loss)  Abstraction Type: Water may be abstracted from a single point  Source: Surface  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Worsborough Mill, Worsborough, Barnsley  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 14th February 2008  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A6SW (SW)	1621	2	434400 402800
	<p><b>Water Abstractions</b></p> <p>Operator: Barnsley Metropolitan Borough Council  Licence Number: 2/27/08/118  Permit Version: 102  Location: Rockley Dike  Authority: Environment Agency, North East Region  Abstraction: Holiday Sites, Camp Sites &amp; Tourist Attractions: Make-Up or Top Up Water  Abstraction Type: Water may be abstracted from a single point  Source: Surface  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Worsborough Mill, Worsborough, Barnsley  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 1st August 2002  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A6SW (SW)	1621	2	434400 402800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Water Abstractions</b> Operator: Barnsley Metropolitan Borough Council Licence Number: 2/27/08/118 Permit Version: 101 Location: Rockley Dike Authority: Environment Agency, North East Region Abstraction: Holiday sites, Camp Sites & Tourist Attractions: Lake & Pond Throughflow Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Worsborough Mill, Worsborough, Barnsley Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 24th November 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6SW (SW)	1621	2	434400 402800
	<b>Groundwater Vulnerability Map</b> Combined Classification: Secondary Bedrock Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: <40% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13SE (N)	0	3	435888 403650
	<b>Groundwater Vulnerability - Soluble Rock Risk</b> None				
	<b>Bedrock Aquifer Designations</b> Aquifer Designation: Secondary Aquifer - A	A13SE (N)	0	3	435888 403650
	<b>Superficial Aquifer Designations</b> No Data Available				
	<b>Extreme Flooding from Rivers or Sea without Defences</b> Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (S)	67	2	435888 403535
	<b>Flooding from Rivers or Sea without Defences</b> Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SE (S)	68	2	435880 403535
	<b>Areas Benefiting from Flood Defences</b> None				
	<b>Flood Water Storage Areas</b> None				
	<b>Flood Defences</b> None				
50	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 1558.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dove Catchment Name: Don and Rother Primacy: 1	A13SW (S)	82	4	435865 403522
51	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 146.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A13SE (SE)	284	4	436145 403381

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
52	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 183.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8NW (S)	394	4	435728 403223
53	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 75.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Snape Sike Catchment Name: Don and Rother Primacy: 1	A12NE (W)	437	4	435383 403814
54	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 2.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A14SW (SE)	457	4	436387 403438
55	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 752.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dove Catchment Name: Don and Rother Primacy: 1	A14SW (SE)	457	4	436387 403438
56	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 32.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A14SW (SE)	458	4	436387 403436
57	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 5.2 Watercourse Level: Underground Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A14SW (SE)	467	4	436385 403404
58	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 42.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A14SW (SE)	470	4	436385 403399
59	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 16.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A14SW (SE)	490	4	436387 403357
60	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 43.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A14SW (SE)	490	4	436387 403357

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
61	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 12.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A14SW (SE)	494	4	436409 403393
62	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 4.6 Watercourse Level: Underground Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A14SW (SE)	499	4	436387 403340
63	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 125.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A14SW (SE)	502	4	436388 403336
64	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 23.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Shape Sike Catchment Name: Don and Rother Primacy: 1	A12NE (W)	506	4	435329 403864
65	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 551.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Shape Sike Catchment Name: Don and Rother Primacy: 1	A12NE (W)	529	4	435306 403869
66	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 201.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8NW (S)	573	4	435649 403057
67	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 137.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A9NW (SE)	587	4	436408 403218
68	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 176.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9NW (SE)	587	4	436408 403218
69	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 47.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SW (W)	619	4	435183 403548

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
70	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 25.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SW (W)	623	4	435174 403589
71	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 35.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SW (W)	624	4	435170 403613
72	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 77.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8NE (SE)	624	4	436175 403009
73	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 123.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A9NW (SE)	636	4	436350 403094
74	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 18.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9NW (SE)	644	4	436239 403015
75	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 24.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A9NW (SE)	655	4	436257 403012
76	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 267.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9NW (SE)	655	4	436257 403012
77	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 221.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A9NW (SE)	672	4	436249 402988
78	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 19.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9NW (SE)	672	4	436249 402988

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
79	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 18.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9SW (SE)	686	4	436242 402970
80	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 3.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9SW (SE)	686	4	436242 402970
81	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 158.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9SW (SE)	689	4	436241 402967
82	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 22.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9SW (SE)	697	4	436232 402954
83	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 149.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9SW (SE)	710	4	436220 402935
84	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 84.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SW (W)	783	4	435038 403447
85	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 152.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SE (S)	788	4	436036 402811
86	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 6.2 Watercourse Level: Underground Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A9SW (SE)	804	4	436460 402966
87	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 23.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9NE (SE)	807	4	436589 403093

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
88	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 151.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A9SW (SE)	810	4	436463 402961
89	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 8.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9NW (SE)	817	4	436507 402989
90	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 32.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9NE (SE)	819	4	436587 403069
91	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 338.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9NW (SE)	825	4	436510 402982
92	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 52.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9SW (SE)	840	4	436351 402852
93	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 48.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dove Catchment Name: Don and Rother Primacy: 1	A12SW (W)	847	4	434989 403377
94	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 108.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SW (W)	850	4	434991 403361
95	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 505.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SE (S)	852	4	436086 402752
96	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 2.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9SW (SE)	852	4	436311 402819

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
97	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 86.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A12SW (W)	860	4	434970 403401
98	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 46.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dove Catchment Name: Don and Rother Primacy: 1	A12SW (W)	860	4	434970 403401
99	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 56.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dove Catchment Name: Don and Rother Primacy: 1	A12SW (W)	883	4	434939 403436
100	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 47.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A12SW (W)	883	4	434939 403436
101	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 35.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A12SW (W)	897	4	434914 403477
102	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 69.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A12SW (W)	897	4	434914 403477
103	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 179.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A9SW (SE)	901	4	436422 402823
104	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 519.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SE (S)	910	4	436133 402702
105	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 9.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A12SW (W)	920	4	434881 403534

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
106	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 7.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A12SW (W)	929	4	434872 403536
107	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 42.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A15SW (E)	930	4	436892 403611
108	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 30.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A9SW (S)	931	4	436275 402719
109	<b>OS Water Network Lines</b> Watercourse Form: Reservoir Watercourse Length: 74.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A12SW (W)	933	4	434879 403470
110	<b>OS Water Network Lines</b> Watercourse Form: Reservoir Watercourse Length: 140.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A11SE (W)	937	4	434864 403535
111	<b>OS Water Network Lines</b> Watercourse Form: Reservoir Watercourse Length: 39.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Worsbrough Reservoir Catchment Name: Don and Rother Primacy: 1	A12SW (W)	939	4	434884 403422
112	<b>OS Water Network Lines</b> Watercourse Form: Reservoir Watercourse Length: 45.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 2	A12SW (W)	942	4	434885 403401
113	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 1.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NW (W)	945	4	434913 403294
114	<b>OS Water Network Lines</b> Watercourse Form: Transfer Watercourse Length: 701.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NW (W)	947	4	434911 403294

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
115	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 14.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A9SW (S)	955	4	436265 402691
116	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 290.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A9SW (S)	968	4	436270 402678
117	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 55.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A9SW (S)	968	4	436270 402678
118	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 574.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A3NE (S)	970	4	436124 402639
119	<b>OS Water Network Lines</b> Watercourse Form: Reservoir Watercourse Length: 21.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Worsbrough Reservoir Catchment Name: Don and Rother Primacy: 1	A11SE (W)	977	4	434845 403421
120	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 112.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A4NW (S)	991	4	436229 402642
121	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 8.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Blacker Dike Catchment Name: Don and Rother Primacy: 1	A4NW (S)	991	4	436229 402642
122	<b>OS Water Network Lines</b> Watercourse Form: Inland river Watercourse Length: 234.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A4NW (S)	998	4	436237 402636
123	<b>OS Water Network Lines</b> Watercourse Form: Reservoir Watercourse Length: 39.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Worsbrough Reservoir Catchment Name: Don and Rother Primacy: 1	A11SE (W)	999	4	434823 403421

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
124	<b>Historical Landfill Sites</b> Licence Holder: Mr A Smith Location: West Street, Worsbrough Name: Stallite Batteries Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD04402 First Input Date: 30th April 1965 Last Input Date: Not Supplied Specified Waste: Not Supplied Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 4400/0549 BGS Ref: Not Supplied Other Ref: 4400/(147)	A13NE (NE)	87	2	436037 403748
125	<b>Licensed Waste Management Facilities (Locations)</b> Licence Number: 60606 Location: West Street H W R C, West Street, Worsbrough, Barnsley, South Yorkshire, S70 5DJ Operator Name: F C C Recycling ( U K ) Limited Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Special Waste Transfer Stations Licence Status: <b>Modified</b> Issued: 18th August 1993 Last Modified: 5th September 2014 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A12SE (W)	310	2	435500 403550
	<b>Local Authority Landfill Coverage</b> Name: Barnsley Metropolitan Borough Council - Has supplied landfill data		0	5	435888 403650
126	<b>Local Authority Recorded Landfill Sites</b> Location: Not Supplied Reference: 147 Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards Last Reported Status: <b>Unknown</b> Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Positioned by the supplier Boundary Quality: Moderate	A13NE (NE)	81	5	436035 403731
127	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A13SW (W)	0	-	435840 403654
128	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A13NE (N)	116	-	435949 403832
129	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A13SE (SE)	228	-	436124 403438
130	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A13NW (NW)	259	-	435627 403860
131	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A8NW (SW)	473	-	435559 403205
132	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A19SW (NE)	496	-	436284 404089

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
133	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A8NW (SW)	500	-	435646 403135
134	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: S Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A8NE (S)	513	-	436021 403085
135	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A12SE (W)	529	-	435293 403474
136	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A12NE (NW)	611	-	435251 403944
137	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A8NW (SW)	627	-	435606 403014
138	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: S Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A8SW (S)	656	-	435628 402977
139	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A18NW (N)	665	-	435823 404373
140	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A18NW (N)	717	-	435787 404420
141	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A14NE (E)	742	-	436705 403656
142	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A17NW (NW)	968	-	435114 404351
143	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A13SE (S)	0	-	435887 403627
144	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13NE (E)	36	-	435994 403694
145	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SW (SW)	76	-	435732 403585
146	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A14SW (SE)	589	-	436510 403388
147	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A7NE (SW)	690	-	435253 403195
148	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1907	A14NE (E)	716	-	436675 403717
149	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A12NW (W)	734	-	435058 403663
150	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A12NW (W)	743	-	435088 403899

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
151	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A17SE (NW)	752	-	435215 404142
152	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A12NW (W)	777	-	435056 403909
153	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A7SE (SW)	844	-	435272 402954
154	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A8SW (S)	920	-	435710 402694
155	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A8SW (S)	923	-	435726 402690
156	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A9SW (SE)	964	-	436418 402747
157	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A11NE (W)	966	-	434855 403892
158	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A8SW (S)	966	-	435651 402655
159	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1907	A17NE (NW)	973	-	435259 404475
160	<b>Registered Waste Transfer Sites</b> Licence Holder: B.D.R. Waste Disposal Ltd Licence Reference: WD20 B 972 MOD 3 Site Location: West Street, Worsbrough, Barnsley, South Yorkshire Operator Location: Thorncliffe Hall, Thorncliffe Park Estate, Chapeltown, SHEFFIELD, South Yorkshire, S35 2PQ Authority: Environment Agency - North East Region, Ridings Area Site Category: Civic Amenity Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 1st September 1997 Preceded By: WD20 B 972 MOD 2 Licence: Superseded By: Not Given Licence: Positional Accuracy: Located by supplier to within 100m Boundary Quality: Not Supplied Authorised Waste: Bonded Asbestos Ferrous Metal Scrap Glass Household & Commercial Waste Max.Waste Permitted By Licence Mineral Oils Non-Ferrous Metal Scrap Paper/Cardboard Waste Textiles Prohibited Waste: Waste N.O.S.	A12SE (W)	310	2	435500 403550

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
160	<p><b>Registered Waste Transfer Sites</b></p> <p>Licence Holder: B.D.R. Waste Disposal Ltd            Licence Reference: WD20 B 972 MOD 2            Site Location: West Street, Worsbrough, Barnsley, South Yorkshire            Operator Location: Templeborough House, Mill Close, ROTHERHAM, South Yorkshire, S60 1BZ            Authority: Environment Agency - North East Region, Ridings Area            Site Category: Civic Amenity            Max Input Rate: Very Small (Less than 10,000 tonnes per year)            Waste Source: No known restriction on source of waste            Restrictions:            Licence Status: Record supersededSuperseded            Dated: 1st August 1993            Preceded By: WD 5 B 4            Licence:            Superseded By: WD20 B 972 MOD 3            Licence:            Positional Accuracy: Located by supplier to within 100m            Boundary Quality: Not Supplied            Authorised Waste: Ferrous Metal Scrap            Glass            Household &amp; Commercial Waste            Mineral Oils            Non-Ferrous Metal Scrap            Paper/Cardboard Waste            Textiles            Prohibited Waste: Waste N.O.S.</p>	A12SE (W)	310	2	435500 403550
160	<p><b>Registered Waste Transfer Sites</b></p> <p>Licence Holder: Barnsley M.B.C.            Licence Reference: WD 5 B 4            Site Location: West Street, Worsbrough, Barnsley, South Yorkshire            Operator Location: Cleansing Div. Smithies La.Depot, Barnsley, South Yorkshire            Authority: Environment Agency - North East Region, Ridings Area            Site Category: Civic Amenity            Max Input Rate: Undefined            Waste Source: No known restriction on source of waste            Restrictions:            Licence Status: Record supersededSuperseded            Dated: 1st November 1979            Preceded By: Not Given            Licence:            Superseded By: WD20 B 972 MOD 2            Licence:            Positional Accuracy: Located by supplier to within 100m            Boundary Quality: Not Supplied            Authorised Waste: Civic Amenity/Refuse Amenity Waste</p>	A12SE (W)	310	2	435500 403550

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS 1:625,000 Solid Geology</b> Description: Pennine Middle Coal Measures Formation And South Wales Middle Coal Measures Formation (Undifferentiated)	A13SE (N)	0	1	435888 403650
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (N)	0	1	435888 403650
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (S)	11	1	435889 403585
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 200 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (E)	37	1	436000 403650
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 200 - 300 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (SE)	45	1	436000 403578
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 200 - 300 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NE (NE)	64	1	436000 403763
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 200 - 300 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (SE)	100	1	436000 403504

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 30 - 45 mg/kg</p> <p>Concentration:</p>	A13SE (SE)	104	1	436000 403500
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic &lt;15 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 15 - 30 mg/kg</p> <p>Concentration:</p>	A13SE (SE)	112	1	436017 403500
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic &lt;15 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 15 - 30 mg/kg</p> <p>Concentration:</p>	A13SW (SW)	163	1	435661 403532
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 200 - 300 mg/kg</p> <p>Nickel 30 - 45 mg/kg</p> <p>Concentration:</p>	A13NE (NE)	241	1	436087 403919
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 30 - 45 mg/kg</p> <p>Concentration:</p>	A18SE (N)	284	1	435978 404000
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 15 - 25 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: &lt;100 mg/kg</p> <p>Nickel 15 - 30 mg/kg</p> <p>Concentration:</p>	A12SE (W)	292	1	435500 403650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 200 - 300 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14SW (SE)	303	1	436246 403500
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A12SE (W)	325	1	435500 403495
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A14SW (E)	418	1	436365 403500
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A18SE (NE)	480	1	436184 404139
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel 15 - 30 mg/kg Concentration:	A19SW (NE)	501	1	436369 404000
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 200 - 300 mg/kg Nickel 30 - 45 mg/kg Concentration:	A19SW (NE)	517	1	436388 404000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 30 - 45 mg/kg</p> <p>Concentration:</p>	A14SW (E)	537	1	436500 403650
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 15 - 25 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 15 - 30 mg/kg</p> <p>Concentration:</p>	A14NW (E)	545	1	436500 403751
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 15 - 25 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 15 - 30 mg/kg</p> <p>Concentration:</p>	A17SE (NW)	655	1	435233 404000
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 30 - 45 mg/kg</p> <p>Concentration:</p>	A8SE (S)	669	1	436000 402927
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 30 - 45 mg/kg</p> <p>Concentration:</p>	A9NE (SE)	709	1	436592 403277
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic &lt;15 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: &lt;100 mg/kg</p> <p>Nickel 15 - 30 mg/kg</p> <p>Concentration:</p>	A12SW (W)	790	1	435066 403327

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: &lt;100 mg/kg</p> <p>Nickel 30 - 45 mg/kg</p> <p>Concentration:</p>	A12SW (W)	792	1	435000 403650
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 30 - 45 mg/kg</p> <p>Concentration:</p>	A17SW (NW)	813	1	435054 404000
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: &lt;100 mg/kg</p> <p>Nickel 15 - 30 mg/kg</p> <p>Concentration:</p>	A12SW (W)	816	1	435000 403465
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: &lt;100 mg/kg</p> <p>Nickel 30 - 45 mg/kg</p> <p>Concentration:</p>	A12SW (W)	852	1	435000 403327
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 25 - 35 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: 100 - 200 mg/kg</p> <p>Nickel 30 - 45 mg/kg</p> <p>Concentration:</p>	A9SW (S)	879	1	436233 402760
	<p><b>BGS Estimated Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service</p> <p>Soil Sample Type: Rural Soil</p> <p>Arsenic 15 - 25 mg/kg</p> <p>Concentration:</p> <p>Cadmium &lt;1.8 mg/kg</p> <p>Concentration:</p> <p>Chromium 60 - 90 mg/kg</p> <p>Concentration:</p> <p>Lead Concentration: &lt;100 mg/kg</p> <p>Nickel 15 - 30 mg/kg</p> <p>Concentration:</p>	A17SW (W)	895	1	434965 404000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic: 25 - 35 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel: 30 - 45 mg/kg Concentration:	A17SW (W)	915	1	434951 404020
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic: 25 - 35 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel: 30 - 45 mg/kg Concentration:	A7NW (SW)	922	1	435000 403158
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic: 25 - 35 mg/kg Concentration: Cadmium: <1.8 mg/kg Concentration: Chromium: 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel: 30 - 45 mg/kg Concentration:	A18NW (N)	952	1	435841 404663
161	<b>BGS Recorded Mineral Sites</b> Site Name: Darley Main Colliery, No. 2 Shaft Location: Worsborough, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 204758 Type: Underground <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Barnsley Coal (West And South Yorkshire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NW (W)	0	1	435842 403658
162	<b>BGS Recorded Mineral Sites</b> Site Name: Worsbrough Dale Mine Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 204767 Type: Underground <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Abdy Coal (South Yorkshire And North Nottinghamshire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NE (E)	229	1	436190 403670
162	<b>BGS Recorded Mineral Sites</b> Site Name: Worsbrough Dale Mine Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 204768 Type: Underground <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Abdy Coal (South Yorkshire And North Nottinghamshire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A13NE (E)	240	1	436200 403682

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
163	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Darley Main Colliery            Location: Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204757            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A13NW (NW)	257	1	435625 403855
164	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Darley Main Colliery, No. 1 Shaft            Location: Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 37892            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A18SE (N)	282	1	435986 403997
165	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Pantry Green            Location: Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 37891            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Woolley Edge Rock            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A14NW (NE)	321	1	436252 403840
166	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Edmund'S Main Colliery            Location: Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204779            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14SW (SE)	343	1	436216 403369
167	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Edmund'S Main Colliery            Location: Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204780            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A8NE (SE)	423	1	436140 403213
168	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Bell Ing Colliery            Location: Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204756            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A12SE (W)	429	1	435389 403501

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
169	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Woolley Bank            Location: Birdwell, Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 37895            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A8NW (SW)	473	1	435563 403203
170	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Worsbrough Park Colliery            Location: Worsbrough Park, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204750            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A8NW (SW)	489	1	435642 403148
171	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Darley Grove            Location: Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 37894            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Woolley Edge Rock            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A19SW (NE)	501	1	436288 404091
172	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Bell Ing Colliery            Location: Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204753            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A12SE (W)	540	1	435279 403482
173	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Woolley Bank Pit            Location: Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204751            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A12SE (SW)	583	1	435282 403350
174	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Worsbrough Park Colliery            Location: Worsbrough Park, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204749            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A8NW (SW)	624	1	435593 403022

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
175	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Bell Ing Colliery            Location: Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 37878            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A12NE (NW)	640	1	435241 403986
175	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Bell Ing Colliery            Location: Worsbrough Bridge, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204755            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A17SE (NW)	655	1	435236 404006
176	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Yews Lane Quarries            Location: Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 37881            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Woolley Edge Rock            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A18NW (N)	663	1	435828 404372
177	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Worsborough Park Coal Pit            Location: Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 108307            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A8SW (SW)	698	1	435549 402960
177	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Worsborough Park Brick Kiln            Location: Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 108306            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Common Clay and Shale            Positional Accuracy: Located by supplier to within 10m</p>	A7SE (SW)	717	1	435530 402947
178	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Yews Lane Quarries            Location: Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 37880            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Woolley Edge Rock            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A18NW (N)	729	1	435758 404427

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
179	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Woolley Bank Mine            Location: Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204752            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A7NW (SW)	736	1	435131 403312
180	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill Mine            Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204769            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Meltonfield Coal (South And West Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14NE (E)	748	1	436710 403661
180	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill Mine            Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204770            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Meltonfield Coal (South And West Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14NE (E)	772	1	436734 403671
180	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill Shaft            Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204776            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Two-Foot Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14NE (E)	796	1	436758 403663
181	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill            Location: Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 37890            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Woolley Edge Rock            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A14NE (E)	751	1	436709 403724
182	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill Shaft            Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204777            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Two-Foot Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14NE (E)	802	1	436760 403735

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
183	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill Mine Shaft            Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204772            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Meltonfield Coal (South And West Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14NE (E)	821	1	436783 403679
183	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill Mine            Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204771            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Meltonfield Coal (South And West Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14NE (E)	822	1	436784 403663
183	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill Mine            Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204773            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Meltonfield Coal (South And West Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14SE (E)	825	1	436787 403635
183	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill Mine            Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204774            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Meltonfield Coal (South And West Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14SE (E)	863	1	436825 403638
184	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Bell Ing Colliery            Location: Worsbrough Bridge, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204754            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A17SW (NW)	821	1	435046 404002
185	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Helliwell Pit            Location: Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 108308            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A8SW (S)	849	1	435558 402797

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
186	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill Mine            Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204778            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Two-Foot Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14SE (E)	853	1	436813 403584
187	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Helliwell Pit            Location: Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204789            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A8SW (S)	862	1	435657 402760
187	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Helliwell Hill            Location: Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 108310            Type: Opencast  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Pennine Middle Coal Measures Formation            Commodity: Sandstone            Positional Accuracy: Located by supplier to within 10m</p>	A8SW (S)	871	1	435619 402758
188	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Lewden Hill Mine            Location: Lower Lewden, Worsbrough Dale, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 204775            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Meltonfield Coal (South And West Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A14SE (E)	885	1	436847 403628
189	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Vernon Road Pit            Location: Worsbrough Bridge, Worsborough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 205204            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Deep            Positional Accuracy: Located by supplier to within 10m</p>	A17SW (NW)	939	1	434971 404115
190	<p><b>BGS Recorded Mineral Sites</b></p> <p>Site Name: Worsbrough Mill Pit            Location: Worsbrough, South Yorkshire            Source: British Geological Survey, National Geoscience Information Service            Reference: 205223            Type: Underground  <b>Status: Ceased</b>            Operator: Unknown Operator            Operator Location: Not Supplied            Periodic Type: Carboniferous            Geology: Barnsley Coal (West And South Yorkshire)            Commodity: Coal - Opencast            Positional Accuracy: Located by supplier to within 10m</p>	A7NW (SW)	945	1	434964 403177

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
191	<b>BGS Recorded Mineral Sites</b> Site Name: Bell Ing Colliery Air Pit Location: Worsborough, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 204759 Type: Underground <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Barnsley Coal (West And South Yorkshire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A17NW (NW)	959	1	435113 404338
192	<b>BGS Recorded Mineral Sites</b> Site Name: Marrow House Pit Location: Worsbrough Bridge, Worsbrough, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 205203 Type: Underground <b>Status: Ceased</b> Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Barnsley Coal (West And South Yorkshire) Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A11NE (W)	961	1	434847 403835
193	<b>BGS Recorded Mineral Sites</b> Site Name: Barrow Colliery Silkstone Shaft Location: Worsborough, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 204787 Type: Underground <b>Status: Ceased</b> Operator: Individual'S Name Withheld Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Coal Measures Group Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A3NE (S)	989	1	435894 402608
194	<b>BGS Recorded Mineral Sites</b> Site Name: Barrow Colliery No. 3 Shaft Location: Worsborough, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 204788 Type: Underground <b>Status: Ceased</b> Operator: Individual'S Name Withheld Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Coal Measures Group Commodity: Coal - Deep Positional Accuracy: Located by supplier to within 10m	A3NW (S)	991	1	435810 402614
	<b>BGS Measured Urban Soil Chemistry</b> No data available				
	<b>BGS Urban Soil Chemistry Averages</b> No data available				
	<b>Coal Mining Affected Areas</b> 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.	A13SE (N)	0	6	435888 403650
	<b>Mining Instability</b> Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13SE (N)	0	-	435888 403650
	<b>Non Coal Mining Areas of Great Britain</b> Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403650
	<b>Non Coal Mining Areas of Great Britain</b> Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	242	1	436147 403864
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	32	1	435887 403568
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403650
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403651
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	32	1	435887 403568
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	139	1	435696 403522
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	170	1	436002 403431
	<b>Potential for Ground Dissolution Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403650
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403650
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	35	1	435865 403569
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	100	1	436042 403541
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	102	1	435869 403502
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	130	1	435975 403466
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	139	1	435709 403508
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	170	1	435963 403424
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	175	1	435633 403571
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	175	1	436009 403427
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	206	1	435642 403483
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	215	1	436180 403711
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	235	1	435619 403465
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403651
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	435885 403602
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	32	1	435887 403568
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	139	1	435696 403522
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	170	1	436002 403431
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403650
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	435885 403642
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	6	1	435954 403582
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	14	1	435846 403572
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	32	1	435887 403568
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	68	1	435879 403535
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	68	1	435902 403533
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	72	1	435936 403798
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	76	1	435811 403532
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	89	1	435729 403561
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	116	1	435736 403515
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	152	1	435667 403544
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	206	1	435642 403483
	<b>Radon Potential - Radon Affected Areas</b> Affected Area: The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403650
	<b>Radon Potential - Radon Protection Measures</b> Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	435888 403650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
195	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: D &amp; M Powder Coating            Location: Unit 3, Dearne Dove Works, West Street, Barnsley, S70 5PG            Classification: Powder Coatings            Status: <b>Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (NE)	0	-	435900 403657
196	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Autocare            Location: West St, Worsbrough, Barnsley, South Yorkshire, S70 5PG            Classification: Garage Services            Status: <b>Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A13NW (NW)	9	-	435828 403685
197	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Absolute Engineering Ltd            Location: West St, Worsbrough, Barnsley, South Yorkshire, S70 5PD            Classification: Engineering Machine Services            Status: <b>Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A13NW (W)	14	-	435778 403662
197	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: A &amp; D Fabrications            Location: West St, Worsbrough, Barnsley, South Yorkshire, S70 5PG            Classification: Wrought Ironwork            Status: <b>Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A13NW (W)	27	-	435765 403660
197	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Solway Machinery Ltd            Location: West St, Worsbrough Dale, Barnsley, South Yorkshire, S70 5PD            Classification: Machinery - Industrial &amp; Commercial            Status: <b>Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A13NW (W)	42	-	435750 403660
198	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Custom Liners            Location: West St, Worsbrough, Barnsley, South Yorkshire, S70 5PG            Classification: Polythene &amp; Plastic Sheeting Supplies            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	15	-	435976 403663
198	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Oakwell Fabrications            Location: Oakwell Fabrications, West Street, Barnsley, S70 5PG            Classification: Metal Products - Fabricated            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	32	-	435993 403662
198	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Oakwell Fabrications            Location: Oakwell Fabrications, West Street, Barnsley, S70 5PG            Classification: Machine Shops            Status: <b>Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (E)	32	-	435993 403662
199	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: M Douglas            Location: 1-3, West Street, Worsbrough, Barnsley, South Yorkshire, S70 5PG            Classification: Brick Manufacturers            Status: <b>Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (NE)	25	-	435980 403719
199	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Booth'S Manufacturing            Location: West Street, Worsbrough, Barnsley, South Yorkshire, S70 5PG            Classification: Soft Furnishings - Manufacturers            Status: <b>Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (NE)	59	-	436016 403704
199	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Barnsley Tyre Centre            Location: West Street, Worsbrough, Barnsley, S70 5PG            Classification: Tyre Dealers            Status: <b>Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A13NE (NE)	72	-	436026 403732
199	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Dvd Ltd            Location: West Street, Worsbrough, Barnsley, South Yorkshire, S70 5PG            Classification: Car Breakdown &amp; Recovery Services            Status: <b>Inactive</b>            Positional Accuracy: Manually positioned to an adjacent address or location</p>	A13NE (NE)	72	-	436026 403732

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
199	<b>Contemporary Trade Directory Entries</b> Name: Autocare Location: West St, Worsbrough, Barnsley, South Yorkshire, S70 5PG Classification: Garage Services Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	72	-	436026 403732
199	<b>Contemporary Trade Directory Entries</b> Name: A H Fasteners (Uk) Ltd Location: West St, Worsbrough, Barnsley, South Yorkshire, S70 5PG Classification: Nuts, Bolts & Fixings Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A13NE (NE)	88	-	436024 403772
200	<b>Contemporary Trade Directory Entries</b> Name: Lowerdale Autos Location: Thicket La, Worsbrough, Barnsley, South Yorkshire, S70 4ST Classification: Car Dealers Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	245	-	436174 403828
200	<b>Contemporary Trade Directory Entries</b> Name: Lowerdale Autos Location: Thicket Lane, Worsbrough Dale, Barnsley, South Yorkshire, S70 4ST Classification: Car Dealers Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the address or location	A13NE (NE)	245	-	436174 403828
201	<b>Contemporary Trade Directory Entries</b> Name: Advance Printing Ltd Location: 62, West Street, Worsbrough, Barnsley, South Yorkshire, S70 5DJ Classification: Printers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (W)	258	-	435545 403586
201	<b>Contemporary Trade Directory Entries</b> Name: Horace Pickering Ltd Location: 62, West Street, Worsbrough, Barnsley, South Yorkshire, S70 5DJ Classification: Printers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (W)	258	-	435545 403586
202	<b>Contemporary Trade Directory Entries</b> Name: Hemingways Location: 35, Station Road, Worsbrough, Barnsley, South Yorkshire, S70 4SY Classification: Damp & Dry Rot Control Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	289	-	436241 403759
203	<b>Contemporary Trade Directory Entries</b> Name: Dust In Time Location: 22, Oakwood Close, Worsbrough, Barnsley, South Yorkshire, S70 4TJ Classification: Cleaning Services - Domestic Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	296	-	436257 403616
204	<b>Contemporary Trade Directory Entries</b> Name: Waste Recycling Group Location: West St, Worsbrough, Barnsley, South Yorkshire, S70 5DJ Classification: Waste Disposal Services Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A12SE (W)	357	-	435457 403526
205	<b>Contemporary Trade Directory Entries</b> Name: B M V Cleaning Services Location: Former 10, Green Street, Barnsley, S70 4RS Classification: Carpet, Curtain & Upholstery Cleaners Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A18SE (NE)	366	-	436101 404052
206	<b>Contemporary Trade Directory Entries</b> Name: Ragtales Ltd Location: 63, Station Road, Worsbrough, Barnsley, S70 4SZ Classification: Toys, Games & Sporting Goods - Manufacturers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	451	-	436407 403733
207	<b>Contemporary Trade Directory Entries</b> Name: S Fox Location: 24, Grove Street, Worsbrough, Barnsley, South Yorkshire, S70 4SN Classification: Cleaning Services - Domestic Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A18SE (NE)	456	-	436183 404112

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
208	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Brads            Location: 14, Lobwood Lane, Worsbrough, Barnsley, South Yorkshire, S70 4AB            Classification: Road Haulage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SW (N)	517	-	435698 404187
209	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Pete'S Tool Shed            Location: 65, Park Road, Worsbrough, Barnsley, South Yorkshire, S70 5AD            Classification: Tool Sharpening, Repairing &amp; Servicing  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12NE (NW)	519	-	435324 403885
210	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Pheonix            Location: 27, Wellington Crescent, Worsbrough, Barnsley, South Yorkshire, S70 4QL            Classification: Cleaning Services - Domestic  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SE (N)	536	-	436107 404231
211	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Boffins            Location: 17, Bank End Road, Worsbrough, Barnsley, South Yorkshire, S70 4QH            Classification: Sound Equipment Systems Manufacturers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A18SE (N)	544	-	435985 404260
212	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: W K Stubbings            Location: Old Church of England School, Park Road, Worsbrough, Barnsley, South Yorkshire, S70 5AT            Classification: Printers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A17SE (NW)	547	-	435387 404029
212	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Instyle Print            Location: Old Church of England School, Park Road, Worsbrough, Barnsley, South Yorkshire, S70 5AT            Classification: Printers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A17SE (NW)	547	-	435387 404029
213	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Steve Hopkinson Auto Repairs            Location: Edmund Street, Worsbrough, Barnsley, South Yorkshire, S70 5AZ            Classification: Car Body Repairs  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A12NE (NW)	579	-	435274 403918
213	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Steve Hopkinson            Location: Edmund Street, Worsbrough, Barnsley, South Yorkshire, S70 5AZ            Classification: Car Body Repairs  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12NE (NW)	581	-	435271 403917
213	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Adept Auto Services            Location: Edmund Street, Worsbrough, Barnsley, S70 5AZ            Classification: Garage Services  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A12NE (NW)	582	-	435276 403928
214	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: G L S Car Sales Ltd            Location: Old Mill Garage, Park Road, Barnsley, S70 5LJ            Classification: Car Body Repairs  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (SW)	597	-	435251 403385
214	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Pot House Stoves            Location: 91 Park Road, Worsbrough, Barnsley, South Yorkshire, S70 5LJ            Classification: Fireplaces &amp; Mantelpieces  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A12SE (W)	602	-	435241 403398

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
214	<b>Contemporary Trade Directory Entries</b> Name: Elements Fires & Fireplaces Location: Park Road, Worsbrough, Barnsley, South Yorkshire, S70 5LJ Classification: Fireplaces & Mantelpieces Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	610	-	435226 403414
214	<b>Contemporary Trade Directory Entries</b> Name: Elements Location: 91, Park Road, Worsbrough, BARNSLEY, South Yorkshire, S70 5LJ Classification: Fireplaces & Mantelpieces Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	610	-	435226 403414
214	<b>Contemporary Trade Directory Entries</b> Name: Elements Location: Park Road, Worsbrough, Barnsley, South Yorkshire, S70 5LJ Classification: Fireplaces & Mantelpieces Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	610	-	435226 403414
214	<b>Contemporary Trade Directory Entries</b> Name: A L Auto Repairs Location: Old Mill Garage, Park Road, Worsbrough, BARNSLEY, South Yorkshire, S70 5LJ Classification: Car Painters & Sprayers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	610	-	435226 403414
214	<b>Contemporary Trade Directory Entries</b> Name: Yorkshire Gas Services Ltd Location: Park Road, Worsbrough, Barnsley, South Yorkshire, S70 5LJ Classification: Fireplaces & Mantelpieces Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	610	-	435226 403414
214	<b>Contemporary Trade Directory Entries</b> Name: Yorkshire Gas Location: 91, Park Road, Worsbrough, BARNSLEY, South Yorkshire, S70 5LJ Classification: Gas Companies Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	610	-	435226 403414
215	<b>Contemporary Trade Directory Entries</b> Name: Yorkshire Gas Location: 91 Park Rd, Worsbrough, Barnsley, South Yorkshire, S70 5LJ Classification: Gas - Industrial & Medical Suppliers Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A12SE (SW)	655	-	435203 403350
216	<b>Contemporary Trade Directory Entries</b> Name: J & J Location: 16, Darley, Worsbrough, Barnsley, South Yorkshire, S70 4RB Classification: Carpet, Curtain & Upholstery Cleaners Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SW (NE)	785	-	436465 404314
217	<b>Contemporary Trade Directory Entries</b> Name: Solo Blinds Location: 25, Ardsley Road, Worsbrough, Barnsley, South Yorkshire, S70 4RJ Classification: Blinds, Awnings & Canopies Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A19SE (NE)	806	-	436584 404222
218	<b>Contemporary Trade Directory Entries</b> Name: R J E Window Films Location: 15, Tenters Green, Worsbrough, Barnsley, South Yorkshire, S70 5HG Classification: Window Tinting Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A12NW (W)	856	-	434992 403967
219	<b>Contemporary Trade Directory Entries</b> Name: British Charcoal Location: 31 Clifedale Cr, Worsbrough, Barnsley, South Yorkshire, S70 4AR Classification: Coal & Smokeless Fuel Merchants & Distributors Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the address or location	A18NW (N)	922	-	435784 404627

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
220	<b>Fuel Station Entries</b> Name: The Old Mill Service Station Location: Park Road , Worsbrough , Barnsley, South Yorkshire, S70 5LJ Brand: OBSOLETE Premises Type: Not Applicable Status: <b>Obsolete</b> Positional Accuracy: Manually positioned to the address or location	A12SE (W)	612	-	435226 403409
221	<b>Points of Interest - Commercial Services</b> Name: Autocare Location: Unit 4 Dearne Dove Works, West Street, Worsbrough, Barnsley, S70 5PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SW (W)	0	7	435854 403638
222	<b>Points of Interest - Commercial Services</b> Name: R T Valeting Co UK Location: 8 Ravenscourt, Worsbrough, Worsbrough Bridge, Barnsley, S70 5DP Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A13NW (NW)	85	7	435744 403730
223	<b>Points of Interest - Commercial Services</b> Name: A Sefton Auto Electrics Location: Unit 1-4, Darley Yard, Worsbrough, Barnsley, S70 4SB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (N)	301	7	435977 404017
223	<b>Points of Interest - Commercial Services</b> Name: A Sefton Location: 35 High Street, Worsbrough, Barnsley, S70 4SD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (N)	373	7	436012 404086
224	<b>Points of Interest - Commercial Services</b> Name: Jena Location: 24 James Street, Worsbrough Dale, Barnsley, S70 4SL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (NE)	397	7	436113 404081
224	<b>Points of Interest - Commercial Services</b> Name: Jena Towbars Location: 24 James Street, Worsbrough Dale, Barnsley, S70 4SL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (NE)	398	7	436113 404082
225	<b>Points of Interest - Commercial Services</b> Name: Steve Hopkinson Auto Repairs Location: Edmund Street, Worsbrough, Barnsley, S70 5AZ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (NW)	579	7	435274 403918
225	<b>Points of Interest - Commercial Services</b> Name: Adept Auto Services Location: Edmund Street, Worsbrough, Barnsley, S70 5AZ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (NW)	580	7	435271 403916
225	<b>Points of Interest - Commercial Services</b> Name: Adept Auto Services Location: Edmund Street, Worsbrough, Barnsley, S70 5AZ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (NW)	581	7	435271 403917
226	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	0	7	435906 403660
226	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: S70 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	0	7	435902 403659

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
227	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: S70 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13NE (E)	28	7	435989 403662
227	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: S70 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13NE (E)	30	7	435991 403663
227	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (E)	47	7	436008 403663
227	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: S70 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13SE (E)	49	7	436010 403623
227	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13SE (E)	51	7	436012 403622
227	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: S70 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13NE (NE)	60	7	436017 403706
227	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (E)	70	7	436027 403702
228	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13SW (W)	256	7	435549 403580
228	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: S70 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13SW (W)	257	7	435548 403579
229	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	355	7	435447 403579
229	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: S70 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12SE (W)	356	7	435447 403576
230	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	548	7	435384 404026

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
230	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: S70 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	548	7	435384 404026
231	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: S70 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12NE (NW)	578	7	435280 403928
231	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (NW)	581	7	435277 403929
232	<b>Points of Interest - Manufacturing and Production</b> Name: Full Strength Ltd Tas Elements Location: Park Road, Worsbrough, Barnsley, S70 5LJ Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A12SE (W)	610	7	435226 403414
233	<b>Points of Interest - Manufacturing and Production</b> Name: Tank Location: S70 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	838	7	436720 404059
234	<b>Points of Interest - Public Infrastructure</b> Name: Public Recycling Facility Location: S70 Category: Infrastructure and Facilities Class Code: Recycling Centres Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	314	7	435490 403575
235	<b>Points of Interest - Public Infrastructure</b> Name: Sewage Works Location: S70 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	315	7	436262 403514
235	<b>Points of Interest - Public Infrastructure</b> Name: Sewage Works Location: S70 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A14SW (E)	315	7	436265 403523
235	<b>Points of Interest - Public Infrastructure</b> Name: Sewage Works Location: S70 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A14SW (E)	316	7	436266 403524
235	<b>Points of Interest - Public Infrastructure</b> Name: Slurry Bed Location: S70 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A14SW (SE)	322	7	436251 403461
235	<b>Points of Interest - Public Infrastructure</b> Name: Slurry Beds Location: S70 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	352	7	436295 403493
235	<b>Points of Interest - Public Infrastructure</b> Name: Sludge Beds Location: S70 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A14SW (SE)	379	7	436315 403469

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
236	<b>Points of Interest - Public Infrastructure</b> Name: Worsbrough Police Station Location: Worsbrough Police Station, Queensway, Worsbrough, Barnsley, S70 5EN Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A18SW (NW)	401	7	435622 404024
237	<b>Points of Interest - Public Infrastructure</b> Name: Sludge Beds Location: S70 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	506	7	436449 403475
237	<b>Points of Interest - Public Infrastructure</b> Name: Sludge Bed Location: S70 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	572	7	436517 403475
238	<b>Points of Interest - Public Infrastructure</b> Name: Refuse Tip (Disused) Location: S70 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A8NE (S)	513	7	435927 403083
239	<b>Points of Interest - Public Infrastructure</b> Name: Refuse Tip (Disused) Location: S70 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	552	7	436220 403109
240	<b>Points of Interest - Public Infrastructure</b> Name: St Thomas's Cemetery Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	606	7	435649 404263
240	<b>Points of Interest - Public Infrastructure</b> Name: St Thomas's Cemetery Location: S70 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	606	7	435649 404263
241	<b>Points of Interest - Public Infrastructure</b> Name: Refuse Tip (Disused) Location: S70 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	663	7	435871 402937
242	<b>Points of Interest - Public Infrastructure</b> Name: Tip (Disused) Location: S74 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	791	7	436226 402851
242	<b>Points of Interest - Public Infrastructure</b> Name: Refuse Tip (Disused) Location: S74 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	793	7	436226 402848
243	<b>Points of Interest - Public Infrastructure</b> Name: Refuse Tip (Disused) Location: S74 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	806	7	436519 403016
244	<b>Points of Interest - Public Infrastructure</b> Name: Refuse Tip (Disused) Location: S70 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	855	7	435641 402770

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
245	<b>Points of Interest - Public Infrastructure</b> Name: Hilltop Service Station Location: 13 De Lacy Drive, Worsbrough, Barnsley, S70 5QD Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A17NE (NW)	867	7	435331 404395
246	<b>Points of Interest - Public Infrastructure</b> Name: Weir Location: S70 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	886	7	434929 403463
246	<b>Points of Interest - Public Infrastructure</b> Name: Weir Location: S70 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	890	7	434925 403462
246	<b>Points of Interest - Public Infrastructure</b> Name: Sluices Location: S70 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	905	7	434914 403443
246	<b>Points of Interest - Public Infrastructure</b> Name: Sluices Location: S70 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	905	7	434914 403444
246	<b>Points of Interest - Public Infrastructure</b> Name: Weir Location: S70 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	918	7	434884 403524
246	<b>Points of Interest - Public Infrastructure</b> Name: Weir Location: S70 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	918	7	434884 403526
246	<b>Points of Interest - Public Infrastructure</b> Name: Sluice Location: S70 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A11SE (W)	944	7	434857 403531
247	<b>Points of Interest - Public Infrastructure</b> Name: Refuse Tip (Disused) Location: S74 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	889	7	436452 402856
248	<b>Points of Interest - Public Infrastructure</b> Name: Sluice Location: S70 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A7NW (W)	909	7	434946 403311
248	<b>Points of Interest - Public Infrastructure</b> Name: Sluice Location: S70 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A7NW (W)	912	7	434942 403312
249	<b>Points of Interest - Recreational and Environmental</b> Name: Play Area Location: S70 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	449	7	435862 404160

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
250	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Monkspring, S70 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A19NW (NE)	780	7	436229 404447
251	<b>Points of Interest - Recreational and Environmental</b> Name: Play Area Location: S70 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	877	7	434957 403382

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
252	<b>Ancient Woodland</b> Name: Not Supplied Reference: 1411824 Area(m <sup>2</sup> ): 39818.4 Type: Ancient and Semi-Natural Woodland	A13SW (SW)	188	8	435667 403481
253	<b>Ancient Woodland</b> Name: Not Supplied Reference: 1411822 Area(m <sup>2</sup> ): 31244.13 Type: Ancient and Semi-Natural Woodland	A7NW (SW)	968	8	434930 403196
254	<b>Ancient Woodland</b> Name: Wombwell Wood Reference: 1103462 Area(m <sup>2</sup> ): 83066.25 Type: Ancient and Semi-Natural Woodland	A9NE (SE)	979	8	436759 403031
255	<b>Areas of Adopted Green Belt</b> Authority: Barnsley Metropolitan Borough Council, Planning Department Plan Name: Proposal Map Status: <b>Adopted</b> Plan Date: 3rd January 2019	A13SE (S)	0	9	435884 403603
256	<b>Areas of Adopted Green Belt</b> Authority: Barnsley Metropolitan Borough Council, Planning Department Plan Name: Proposal Map Status: <b>Adopted</b> Plan Date: 3rd January 2019	A18NW (N)	776	9	435590 404423
257	<b>Local Nature Reserves</b> Name: Worsborough Country Park Multiple Area: Y Area (m <sup>2</sup> ): 624946.17 Source: Natural England Designation Date: Not Supplied	A13SE (S)	14	8	435883 403587
258	<b>Nitrate Vulnerable Zones</b> Name: River Dearne Nvz Description: Surface Water Source: Environment Agency, Head Office	A13SE (N)	0	3	435888 403650

Agency & Hydrological	Version	Update Cycle
<b>Contaminated Land Register Entries and Notices</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Environment Agency - Head Office Sheffield City Council - Environmental Protection Service Rotherham Metropolitan Borough Council - Environmental Health Department	January 2020 June 2020 October 2017 September 2017	Annual Rolling Update Annually Annual Rolling Update Annual Rolling Update
<b>Discharge Consents</b> Environment Agency - North East Region	January 2022	Quarterly
<b>Enforcement and Prohibition Notices</b> Environment Agency - North East Region	March 2013	
<b>Integrated Pollution Controls</b> Environment Agency - North East Region	January 2009	
<b>Integrated Pollution Prevention And Control</b> Environment Agency - North East Region	January 2022	Quarterly
<b>Local Authority Integrated Pollution Prevention And Control</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Sheffield City Council - Environmental Protection Service Rotherham Metropolitan Borough Council - Planning Department	April 2014 June 2014 October 2014	Variable Variable Variable
<b>Local Authority Pollution Prevention and Controls</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Sheffield City Council - Environmental Protection Service Rotherham Metropolitan Borough Council - Planning Department	April 2014 June 2014 October 2014	Annual Rolling Update Annual Rolling Update Annual Rolling Update
<b>Local Authority Pollution Prevention and Control Enforcements</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Sheffield City Council - Environmental Protection Service Rotherham Metropolitan Borough Council - Planning Department	April 2014 June 2014 October 2014	Variable Variable Variable
<b>Nearest Surface Water Feature</b> Ordnance Survey	November 2021	
<b>Pollution Incidents to Controlled Waters</b> Environment Agency - North East Region	December 1998	
<b>Prosecutions Relating to Authorised Processes</b> Environment Agency - North East Region	July 2015	
<b>Prosecutions Relating to Controlled Waters</b> Environment Agency - North East Region	March 2013	
<b>Registered Radioactive Substances</b> Environment Agency - North East Region	June 2016	As notified
<b>River Quality</b> Environment Agency - Head Office	November 2001	Not Applicable
<b>River Quality Biology Sampling Points</b> Environment Agency - Head Office	April 2012	
<b>River Quality Chemistry Sampling Points</b> Environment Agency - Head Office	April 2012	
<b>Substantiated Pollution Incident Register</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	January 2022 January 2022	Quarterly Quarterly
<b>Water Abstractions</b> Environment Agency - North East Region	January 2022	Quarterly
<b>Water Industry Act Referrals</b> Environment Agency - North East Region	October 2017	
<b>Groundwater Vulnerability Map</b> Environment Agency - Head Office	June 2018	As notified
<b>Bedrock Aquifer Designations</b> Environment Agency - Head Office	January 2018	Annually

Agency & Hydrological	Version	Update Cycle
<b>Superficial Aquifer Designations</b> Environment Agency - Head Office	January 2018	Annually
<b>Source Protection Zones</b> Environment Agency - Head Office	May 2021	Bi-Annually
<b>Extreme Flooding from Rivers or Sea without Defences</b> Environment Agency - Head Office	February 2022	Quarterly
<b>Flooding from Rivers or Sea without Defences</b> Environment Agency - Head Office	February 2022	Quarterly
<b>Areas Benefiting from Flood Defences</b> Environment Agency - Head Office	February 2022	Quarterly
<b>Flood Water Storage Areas</b> Environment Agency - Head Office	February 2022	Quarterly
<b>Flood Defences</b> Environment Agency - Head Office	February 2022	Quarterly
<b>OS Water Network Lines</b> Ordnance Survey	October 2021	Quarterly
<b>Surface Water 1 in 30 year Flood Extent</b> Environment Agency - Head Office	May 2018	Annually
<b>Surface Water 1 in 100 year Flood Extent</b> Environment Agency - Head Office	May 2018	Annually
<b>Surface Water 1 in 1000 year Flood Extent</b> Environment Agency - Head Office	May 2018	Annually
<b>Surface Water Suitability</b> Environment Agency - Head Office	February 2016	Annually
<b>BGS Groundwater Flooding Susceptibility</b> British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
<b>BGS Recorded Landfill Sites</b> British Geological Survey - National Geoscience Information Service	November 2002	Not Applicable
<b>Historical Landfill Sites</b> Environment Agency - Head Office	January 2022	Quarterly
<b>Integrated Pollution Control Registered Waste Sites</b> Environment Agency - North East Region	January 2009	Not Applicable
<b>Licensed Waste Management Facilities (Landfill Boundaries)</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	January 2022 January 2022	Quarterly Quarterly
<b>Licensed Waste Management Facilities (Locations)</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	January 2022 January 2022	Quarterly Quarterly
<b>Local Authority Landfill Coverage</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Rotherham Metropolitan Borough Council - Environmental Health Department Sheffield City Council - Environmental Protection Service	February 2003 February 2003 February 2003	Not Applicable Not Applicable Not Applicable
<b>Local Authority Recorded Landfill Sites</b> Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards Rotherham Metropolitan Borough Council - Environmental Health Department Sheffield City Council - Environmental Protection Service	October 2018 October 2018 October 2018	
<b>Potentially Infilled Land (Non-Water)</b> Landmark Information Group Limited	December 1999	Not Applicable
<b>Potentially Infilled Land (Water)</b> Landmark Information Group Limited	December 1999	
<b>Registered Landfill Sites</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	March 2006 March 2006	Not Applicable Not Applicable
<b>Registered Waste Transfer Sites</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	April 2018 April 2018	
<b>Registered Waste Treatment or Disposal Sites</b> Environment Agency - North East Region - Ridings Area Environment Agency - North East Region - Yorkshire Area	June 2015 June 2015	
Hazardous Substances	Version	Update Cycle
<b>Control of Major Accident Hazards Sites (COMAH)</b> Health and Safety Executive	January 2022	Bi-Annually
<b>Explosive Sites</b> Health and Safety Executive	March 2017	Annually
<b>Notification of Installations Handling Hazardous Substances (NIHHS)</b> Health and Safety Executive	August 2001	
<b>Planning Hazardous Substance Enforcements</b> Rotherham Metropolitan Borough Council Sheffield City Council Barnsley Metropolitan Borough Council - Planning Department	February 2016 February 2016 January 2016	Variable Variable Variable
<b>Planning Hazardous Substance Consents</b> Rotherham Metropolitan Borough Council Sheffield City Council Barnsley Metropolitan Borough Council - Planning Department	February 2016 February 2016 January 2016	Variable Variable Variable

Geological	Version	Update Cycle
<b>BGS 1:625,000 Solid Geology</b> British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
<b>BGS Estimated Soil Chemistry</b> British Geological Survey - National Geoscience Information Service	December 2015	Annually
<b>BGS Recorded Mineral Sites</b> British Geological Survey - National Geoscience Information Service	November 2021	Bi-Annually
<b>CBSCB Compensation District</b> Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
<b>Coal Mining Affected Areas</b> The Coal Authority - Property Searches	March 2014	Annual Rolling Update
<b>Mining Instability</b> Ove Arup & Partners	June 1998	Not Applicable
<b>Non Coal Mining Areas of Great Britain</b> British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
<b>Potential for Collapsible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	April 2020	As notified
<b>Potential for Compressible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Ground Dissolution Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Landslide Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Running Sand Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Radon Potential - Radon Affected Areas</b> British Geological Survey - National Geoscience Information Service	July 2011	Annually
<b>Radon Potential - Radon Protection Measures</b> British Geological Survey - National Geoscience Information Service	July 2011	Annually

Industrial Land Use	Version	Update Cycle
<b>Contemporary Trade Directory Entries</b> Thomson Directories	January 2022	Quarterly
<b>Fuel Station Entries</b> Catalist Ltd - Experian	November 2021	Quarterly
<b>Gas Pipelines</b> National Grid	October 2021	Bi-Annually
<b>Points of Interest - Commercial Services</b> PointX	December 2021	Quarterly
<b>Points of Interest - Education and Health</b> PointX	December 2021	Quarterly
<b>Points of Interest - Manufacturing and Production</b> PointX	December 2021	Quarterly
<b>Points of Interest - Public Infrastructure</b> PointX	December 2021	Quarterly
<b>Points of Interest - Recreational and Environmental</b> PointX	December 2021	Quarterly
<b>Underground Electrical Cables</b> National Grid	May 2021	Bi-Annually

Sensitive Land Use	Version	Update Cycle
<b>Ancient Woodland</b> Natural England	February 2021	Bi-Annually
<b>Areas of Adopted Green Belt</b> Barnsley Metropolitan Borough Council - Planning Department Rotherham Metropolitan Borough Council Sheffield City Council	October 2020 October 2020 October 2020	Quarterly Quarterly Quarterly
<b>Areas of Unadopted Green Belt</b> Barnsley Metropolitan Borough Council - Planning Department Rotherham Metropolitan Borough Council Sheffield City Council	October 2020 October 2020 October 2020	Quarterly Quarterly Quarterly
<b>Areas of Outstanding Natural Beauty</b> Natural England	January 2021	Bi-Annually
<b>Environmentally Sensitive Areas</b> Natural England	January 2017	
<b>Forest Parks</b> Forestry Commission	April 1997	Not Applicable
<b>Local Nature Reserves</b> Natural England	February 2021	Bi-Annually
<b>Marine Nature Reserves</b> Natural England	July 2019	Bi-Annually
<b>National Nature Reserves</b> Natural England	January 2021	Bi-Annually
<b>National Parks</b> Natural England	February 2018	Bi-Annually
<b>Nitrate Sensitive Areas</b> Natural England	April 2016	Not Applicable
<b>Nitrate Vulnerable Zones</b> Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Environment Agency - Head Office	April 2016 June 2017	Bi-Annually
<b>Ramsar Sites</b> Natural England	August 2020	Bi-Annually
<b>Sites of Special Scientific Interest</b> Natural England	February 2021	Bi-Annually
<b>Special Areas of Conservation</b> Natural England	July 2020	Bi-Annually
<b>Special Protection Areas</b> Natural England	February 2021	Bi-Annually

A selection of organisations who provide data within this report

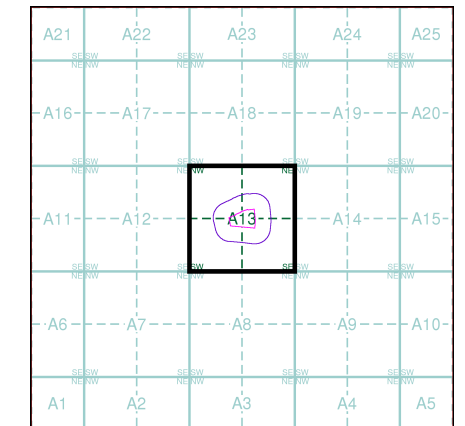
Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 <b>British Geological Survey</b> <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small>
Centre for Ecology and Hydrology	 <b>Centre for Ecology &amp; Hydrology</b> <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small>
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Contact	Name and Address	Contact Details
1	<b>British Geological Survey - Enquiry Service</b> British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	<b>Environment Agency - National Customer Contact Centre (NCCC)</b> PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	<b>Environment Agency - Head Office</b> Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	<b>Ordnance Survey</b> Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	<b>Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards</b> Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
6	<b>The Coal Authority - Property Searches</b> 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
7	<b>PointX</b> 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
8	<b>Natural England</b> County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
9	<b>Barnsley Metropolitan Borough Council - Planning Department</b> Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
-	<b>Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards</b> Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	<b>Landmark Information Group Limited</b> Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

- General**
- Specified Site
  - Specified Buffer(s)
  - Bearing Reference Point
  - Map ID
  - Several of Type at Location
  - Pylon
  - Overhead Transmission Line
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice (Location)
  - Contaminated Land Register Entry or Notice
  - Discharge Consent
  - Enforcement or Prohibition Notice
  - Integrated Pollution Control
  - Integrated Pollution Prevention Control
  - Local Authority Integrated Pollution Prevention and Control
  - Local Authority Pollution Prevention and Control Enforcement
  - Pollution Incident to Controlled Waters
  - Prosecution Relating to Authorised Processes
  - Prosecution Relating to Controlled Waters
  - Registered Radioactive Substance
  - River Network or Water Feature
  - River Quality Sampling Point
  - Substantiated Pollution Incident Register
  - Water Abstraction
  - Water Industry Act Referral
- Waste**
- BGS Recorded Landfill Site (Location)
  - BGS Recorded Landfill Site
  - EA Historic Landfill (Buffered Point)
  - EA Historic Landfill (Polygon)
  - Integrated Pollution Control Registered Waste Site
  - Licensed Waste Management Facility (Landfill Boundary)
  - Licensed Waste Management Facility (Location)
  - Local Authority Recorded Landfill Site (Location)
  - Local Authority Recorded Landfill Site
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Water)
  - Potentially Infilled Land (Water)
  - Potentially Infilled Land (Water)
  - Registered Landfill Site
  - Registered Landfill Site (Location)
  - Registered Landfill Site (Point Buffered to 100m)
  - Registered Landfill Site (Point Buffered to 250m)
  - Registered Waste Transfer Site (Location)
  - Registered Waste Transfer Site
  - Registered Waste Treatment or Disposal Site (Location)
  - Registered Waste Treatment or Disposal Site
- Hazardous Substances**
- COMAH Site
  - Explosive Site
  - NIHHS Site
  - Planning Hazardous Substance Consent
  - Planning Hazardous Substance Enforcement
- Geological**
- BGS Recorded Mineral Site

## Site Sensitivity Map - Segment A13

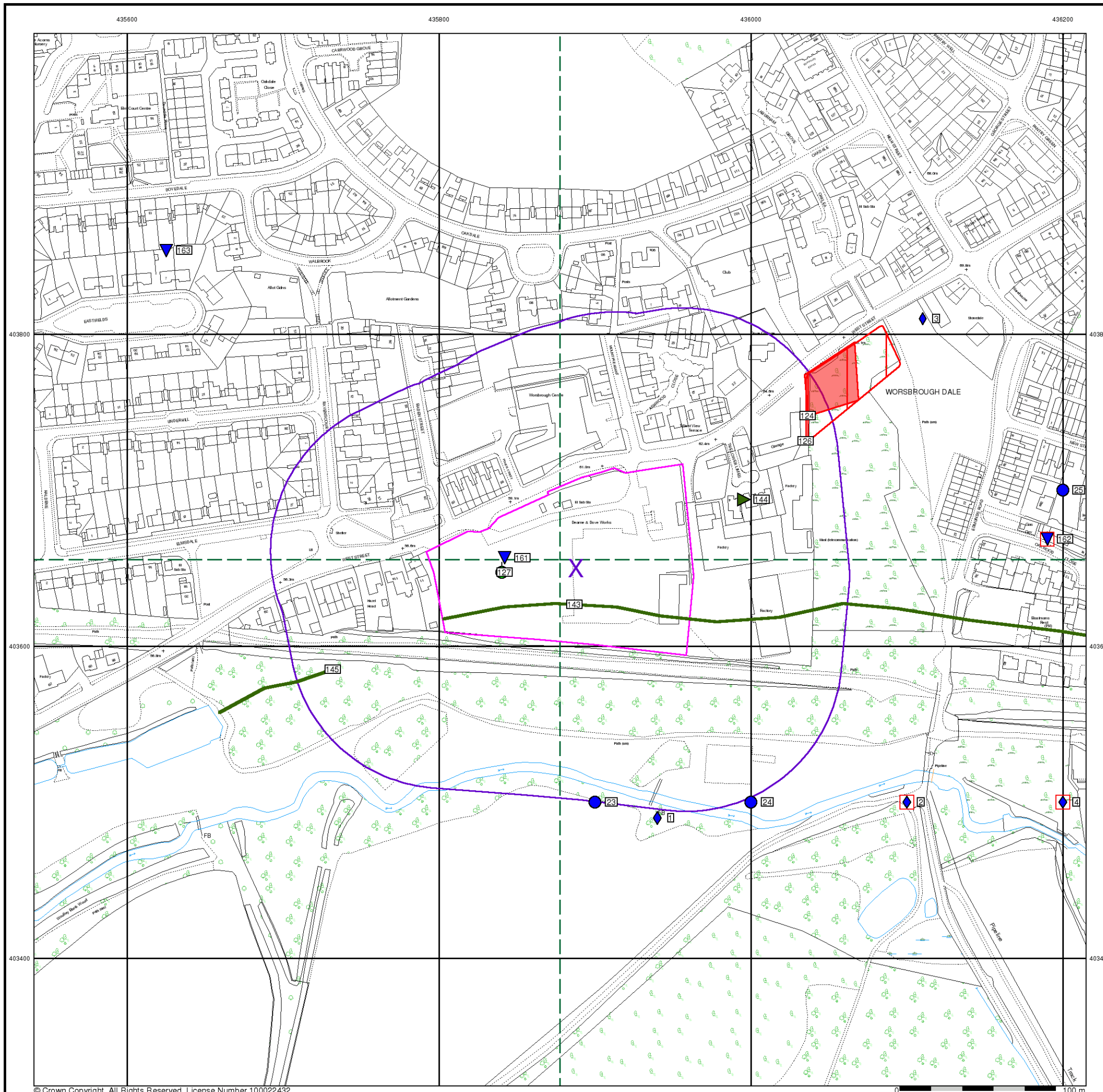


## Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Plot Buffer (m): 100

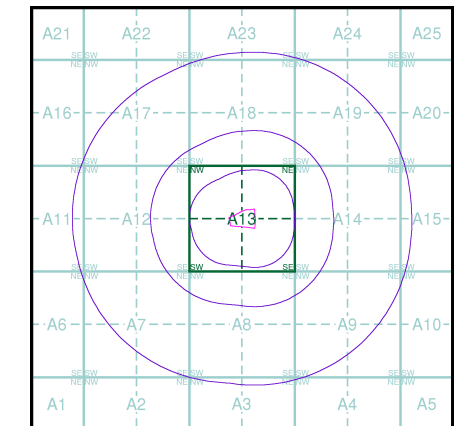
## Site Details

Site at 435880, 403660



- General**
- Specified Site
  - Specified Buffer(s)
  - Bearing Reference Point
  - Map ID
  - Several of Type at Location
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice (Location)
  - Contaminated Land Register Entry or Notice
  - Discharge Consent
  - Enforcement or Prohibition Notice
  - Integrated Pollution Control
  - Integrated Pollution Prevention Control
  - Local Authority Integrated Pollution Prevention and Control
  - Local Authority Pollution Prevention and Control
  - Local Authority Pollution Prevention and Control Enforcement
  - Pollution Incident to Controlled Waters
  - Prosecution Relating to Authorised Processes
  - Prosecution Relating to Controlled Waters
  - Registered Radioactive Substance
  - River Network or Water Feature
  - River Quality Sampling Point
  - Substantiated Pollution Incident Register
  - Water Abstraction
  - Water Industry Act Referral
- Hazardous Substances**
- COMAH Site
  - Explosive Site
  - NIHMS Site
  - Planning Hazardous Substance Consent
  - Planning Hazardous Substance Enforcement
  - BGS Recorded Mineral Site
- Waste**
- BGS Recorded Landfill Site (Location)
  - BGS Recorded Landfill Site
  - EA Historic Landfill (Buffered Point)
  - EA Historic Landfill (Polygon)
  - Integrated Pollution Control Registered Waste Site
  - Licensed Waste Management Facility (Landfill Boundary)
  - Licensed Waste Management Facility (Location)
  - Local Authority Recorded Landfill Site (Location)
  - Local Authority Recorded Landfill Site
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Water)
  - Potentially Infilled Land (Water)
  - Potentially Infilled Land (Water)
  - Registered Landfill Site (Location)
  - Registered Landfill Site (Point Buffered to 100m)
  - Registered Landfill Site (Point Buffered to 250m)
  - Registered Waste Transfer Site (Location)
  - Registered Waste Transfer Site
  - Registered Waste Treatment or Disposal Site (Location)
  - Registered Waste Treatment or Disposal Site

## Site Sensitivity Map - Slice A

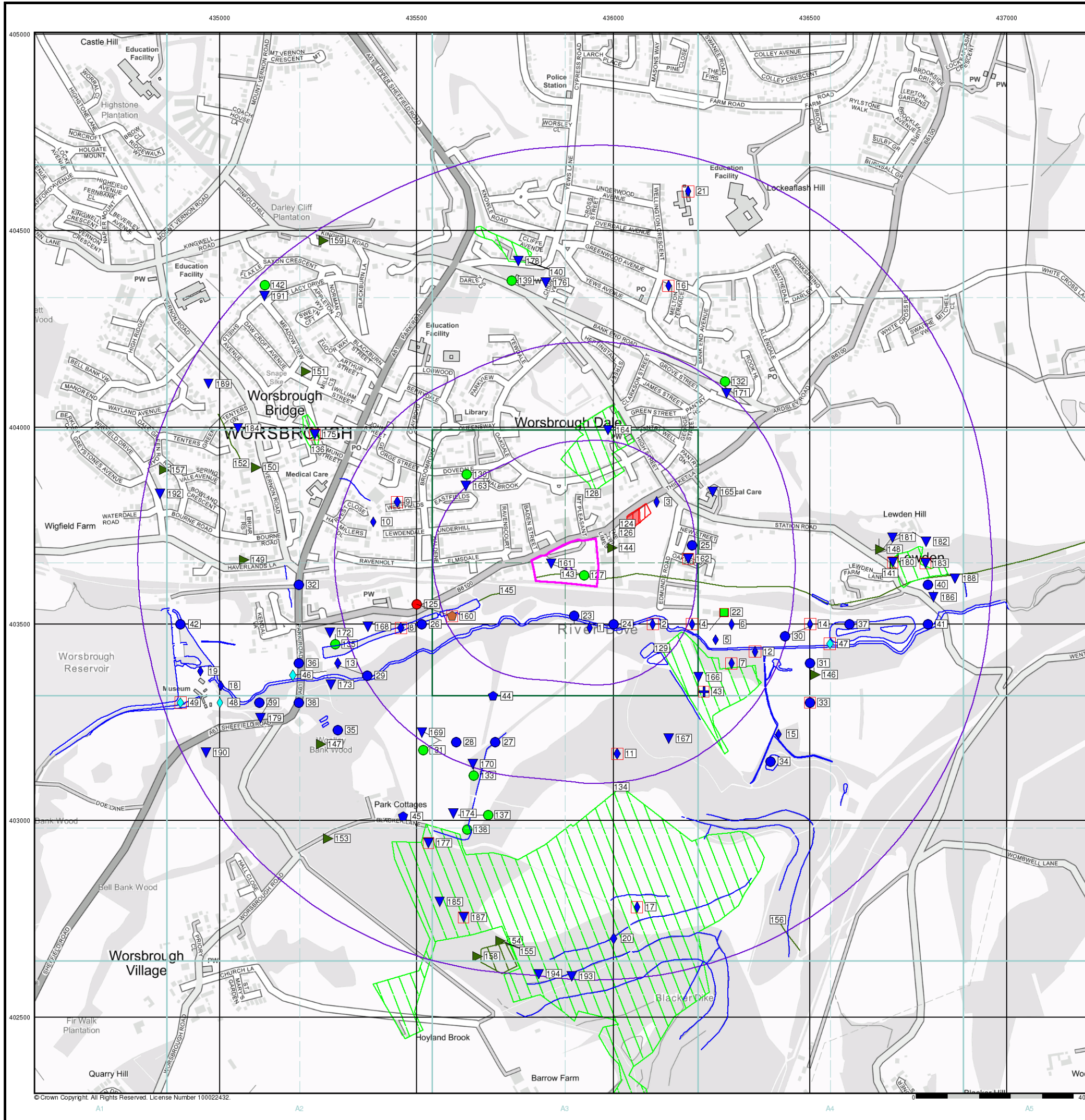


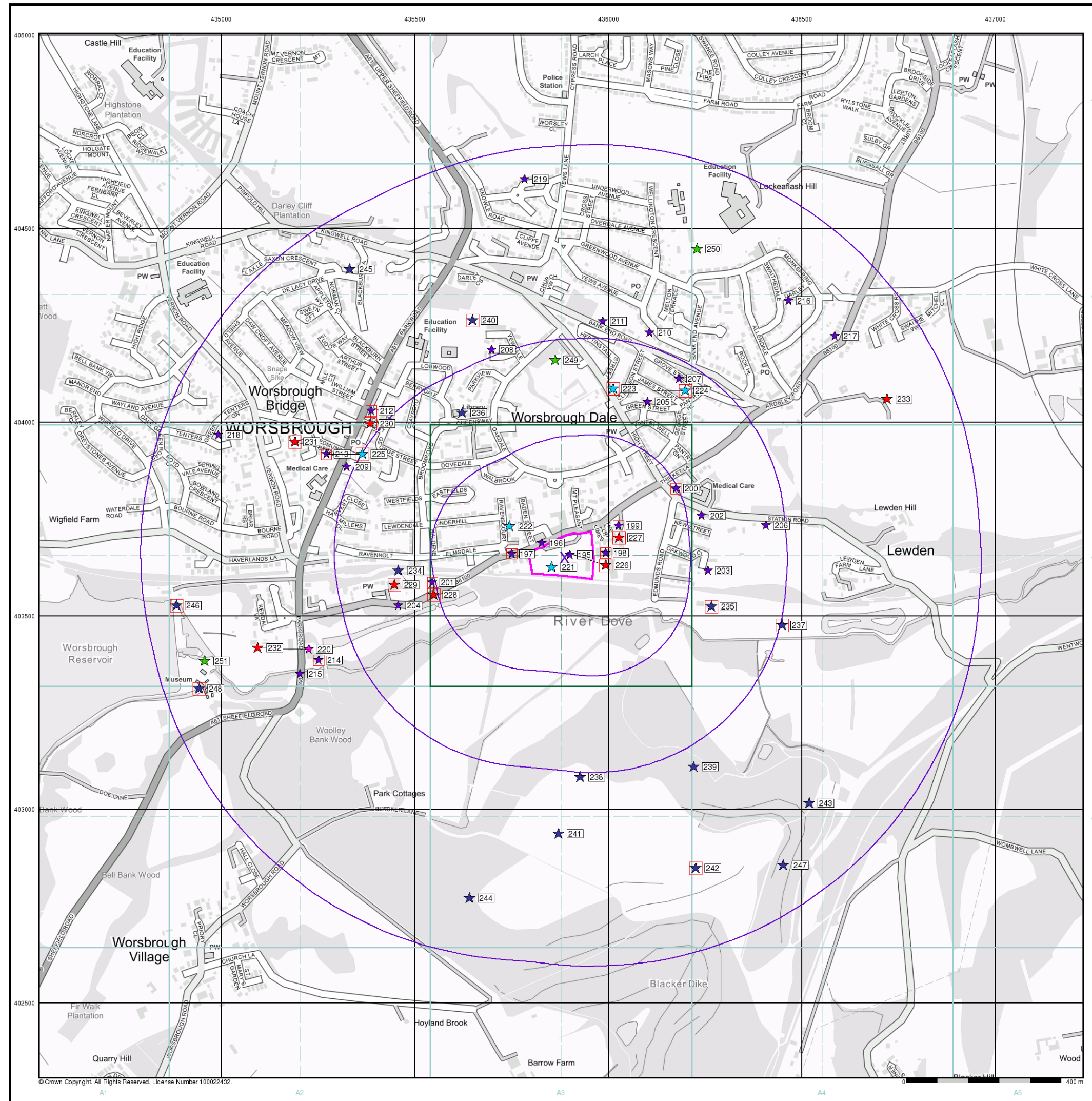
## Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

## Site Details

Site at 435880, 403660





# Envirocheck®

● LANDMARK INFORMATION GROUP®

## Industrial Land Use Map

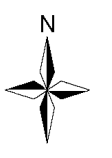
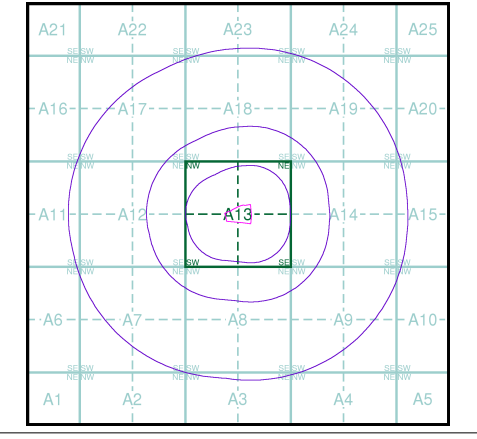
### General

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

### Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

### Industrial Land Use Map - Slice A



### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000




### Site Details

Site at 435880, 403660






**Landmark**  
 INFORMATION GROUP

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

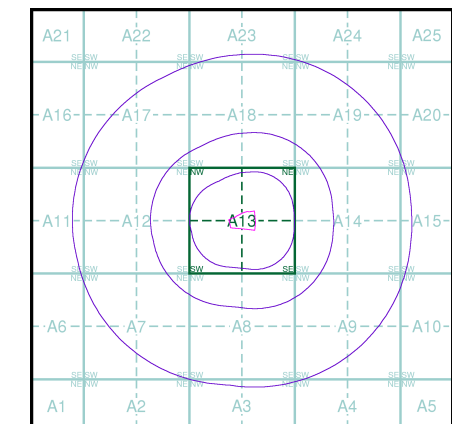
### General

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

### Agency and Hydrological (Flood)

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

### Flood Map - Slice A

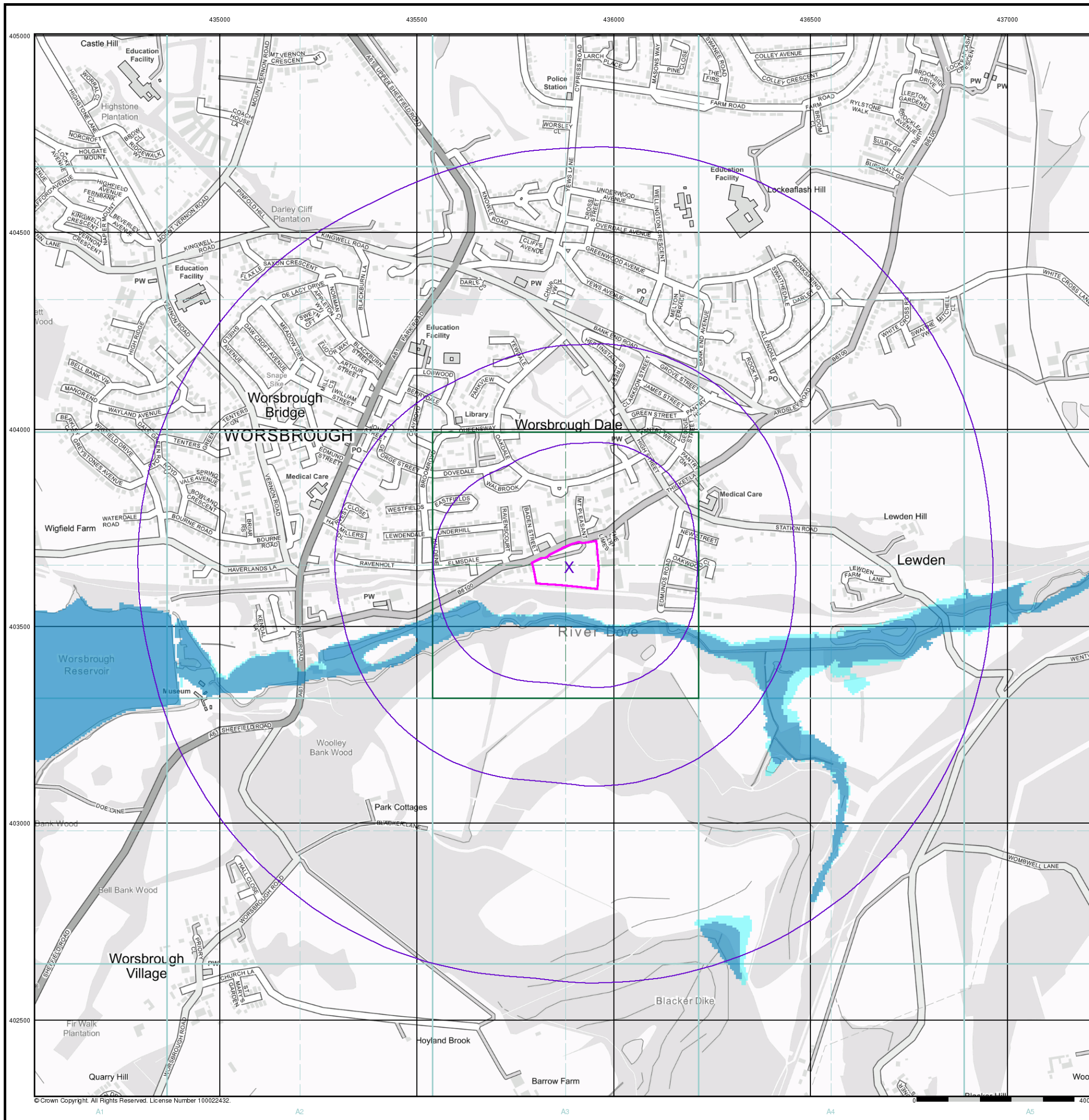


### Order Details






Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details






Site at 435880, 403660



### General

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

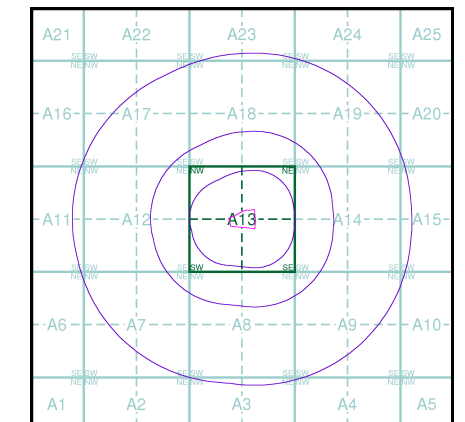
### Agency and Hydrological (Boreholes)

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

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

A copy of the BGS Borehole Ordering Form is available to download from the Support section of [www.envirocheck.co.uk](http://www.envirocheck.co.uk).

### Borehole Map - Slice A

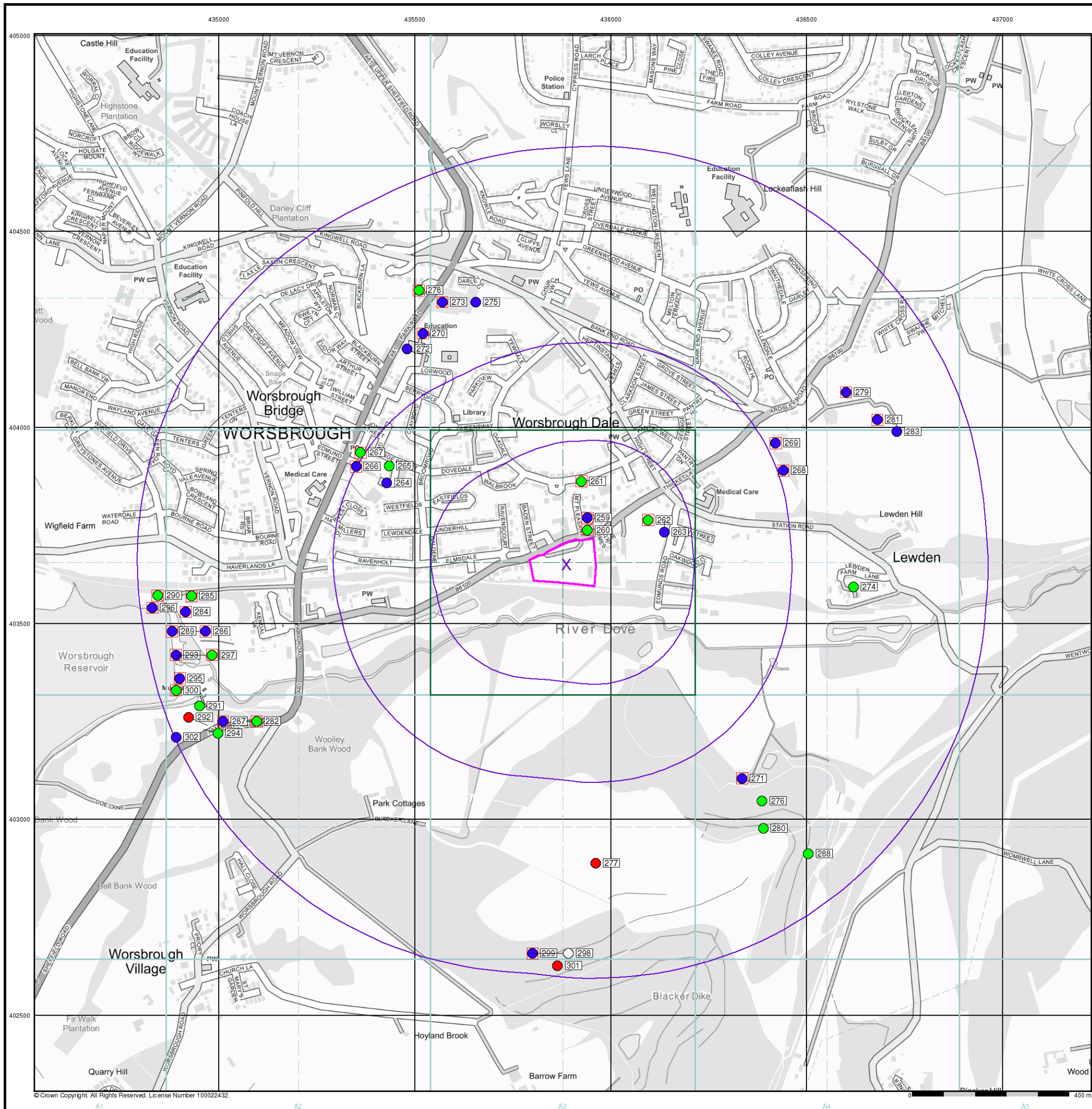


### Order Details

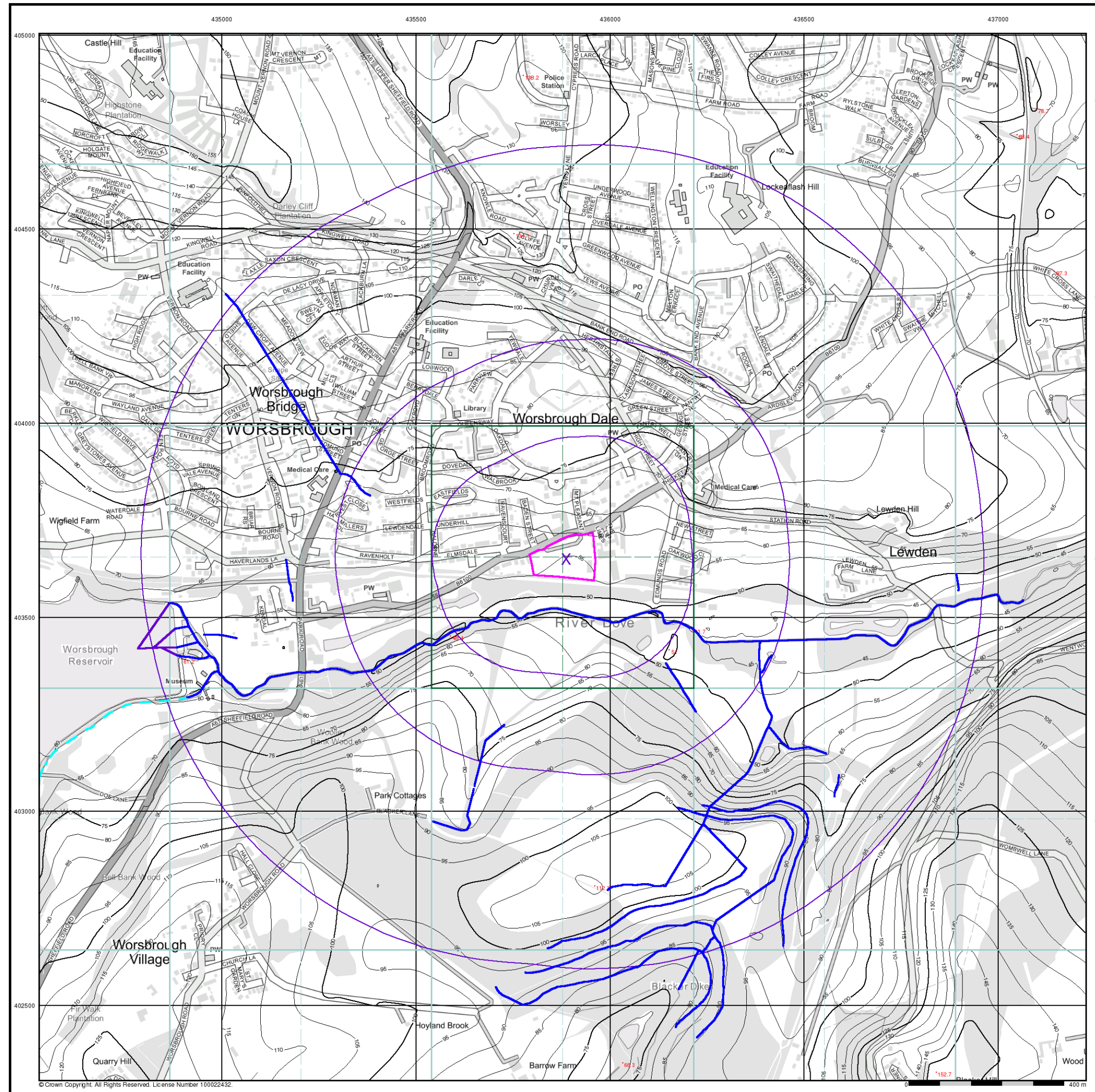
Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660



© Crown Copyright. All Rights Reserved. License Number 100022432.



# Envirocheck®

LANDMARK INFORMATION GROUP®

### General

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

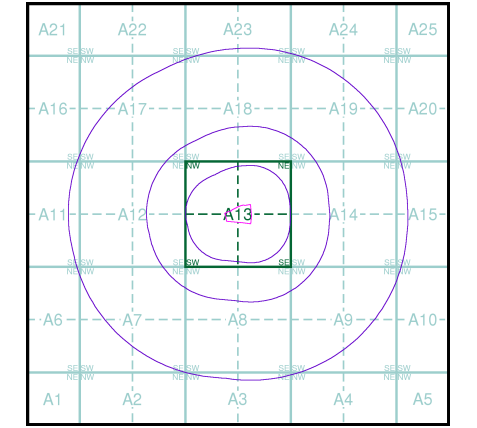
### OS Water Network Data

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

### Contours (height in meters)

- Standard Contour 105 MLW Mean Low Water
- Master Contour 100 MHW Mean High Water
- Spot Height 167.3

### OS Water Network Map - Slice A



### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000




### Site Details

Site at 435880, 403660

**Landmark**  
 INFORMATION GROUP

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

### General

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

### Risk of Flooding from Surface Water

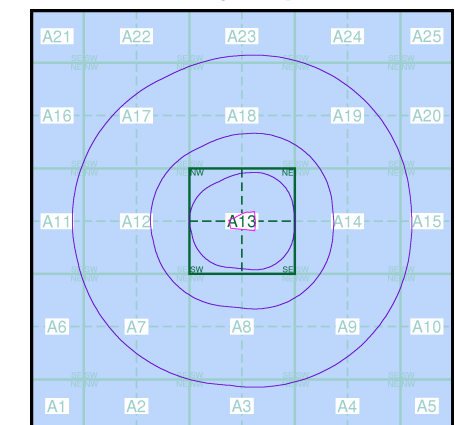
-  High - 30 Year Return
-  Medium - 100 Year Return
-  Low - 1000 Year Return

### Suitability

See the suitability map below

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

### EANRW Suitability Map - Slice A

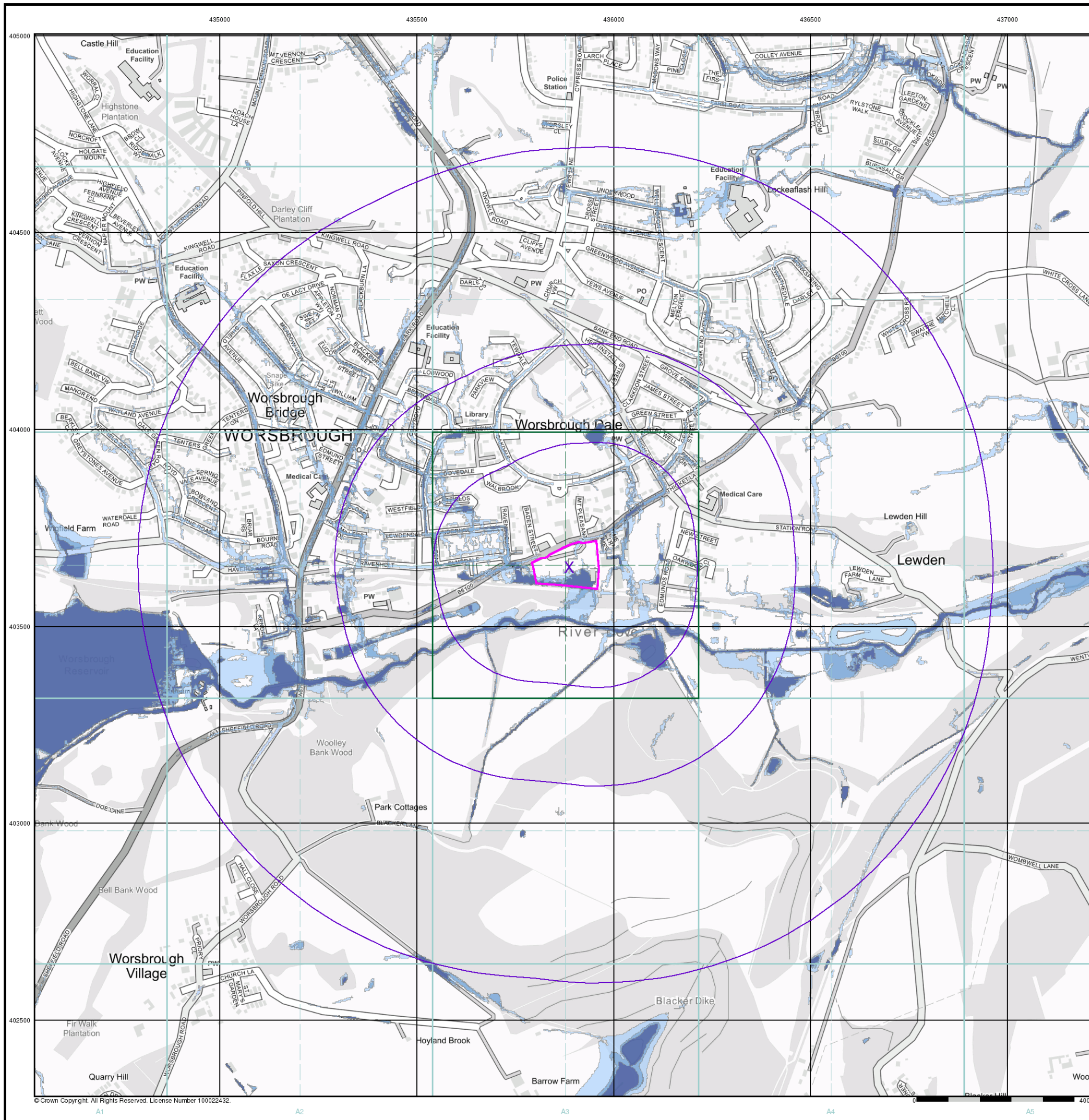


### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660



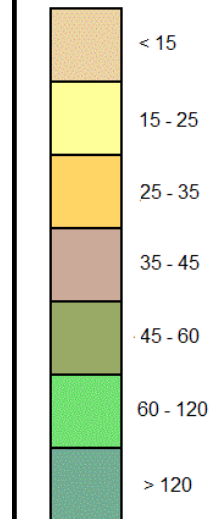
© Crown Copyright. All Rights Reserved. License Number 100022432.

## General

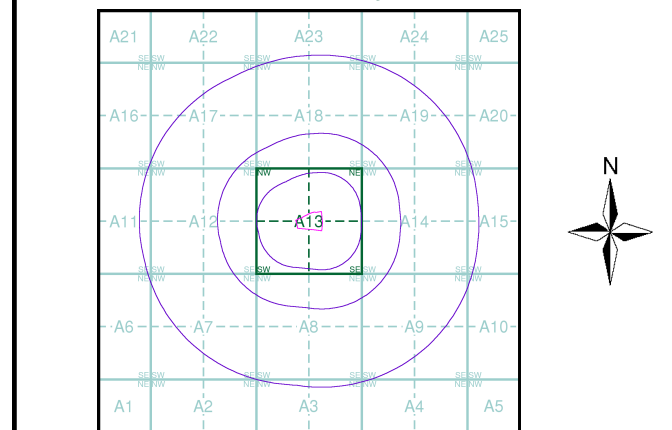
- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

## Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg



## Estimated Soil Chemistry Arsenic - Slice A

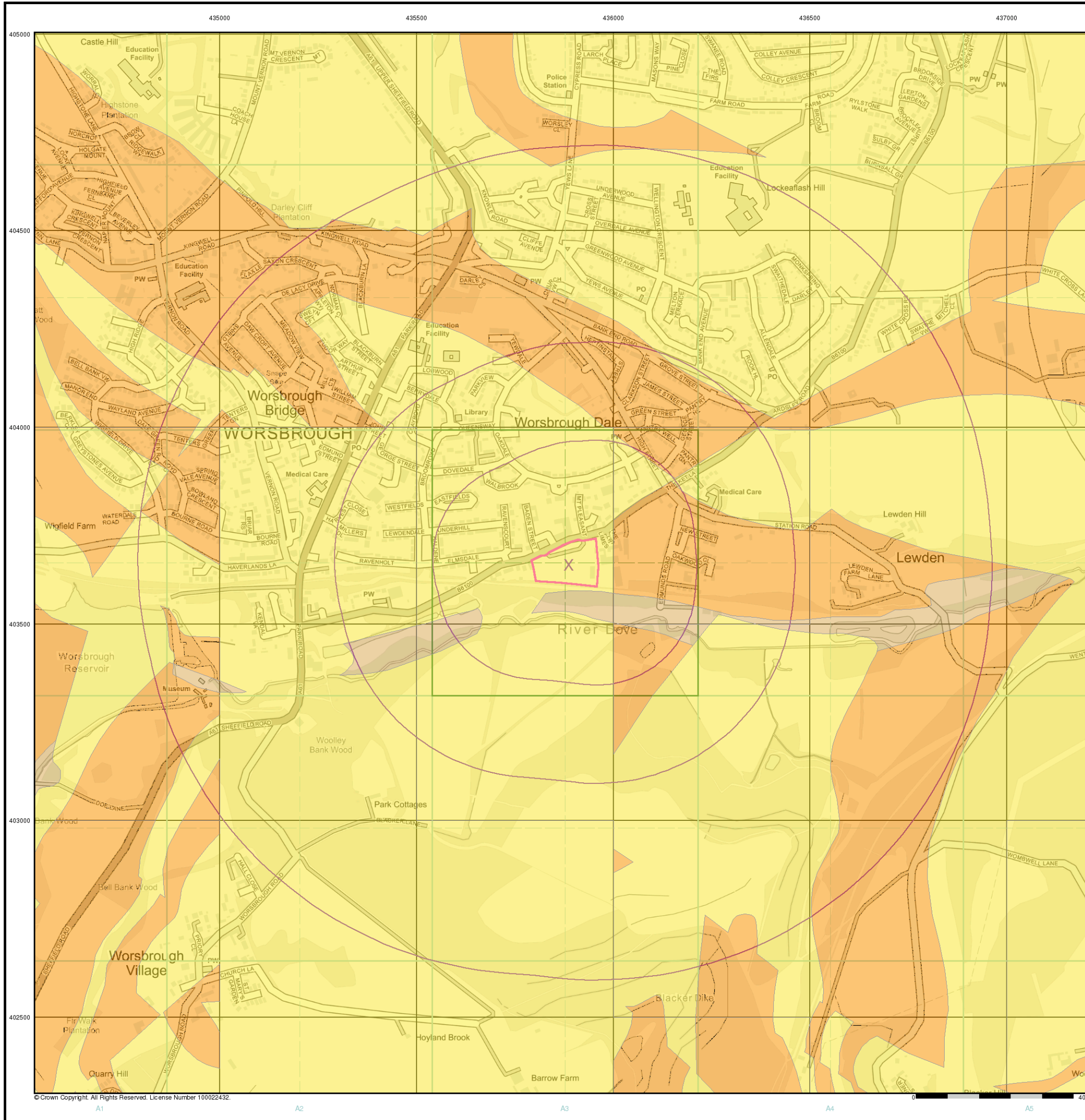


## Order Details

Order Details: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

## Site Details

Site at 435880, 403660



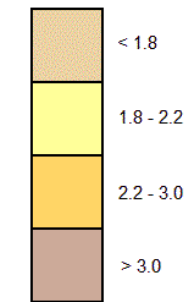
© Crown Copyright. All Rights Reserved. License Number 100022432.

### General

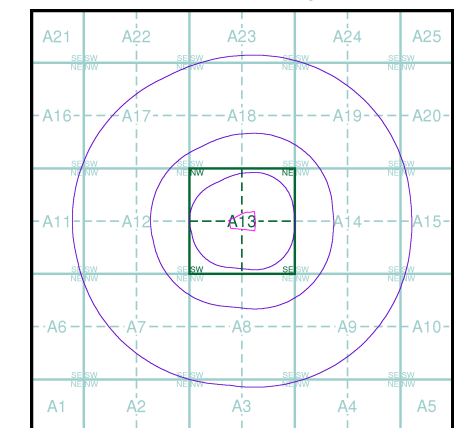
- ⬢ Specified Site
- ⬢ Specified Buffer(s)
- X Bearing Reference Point

### Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg



### Estimated Soil Chemistry Cadmium - Slice A

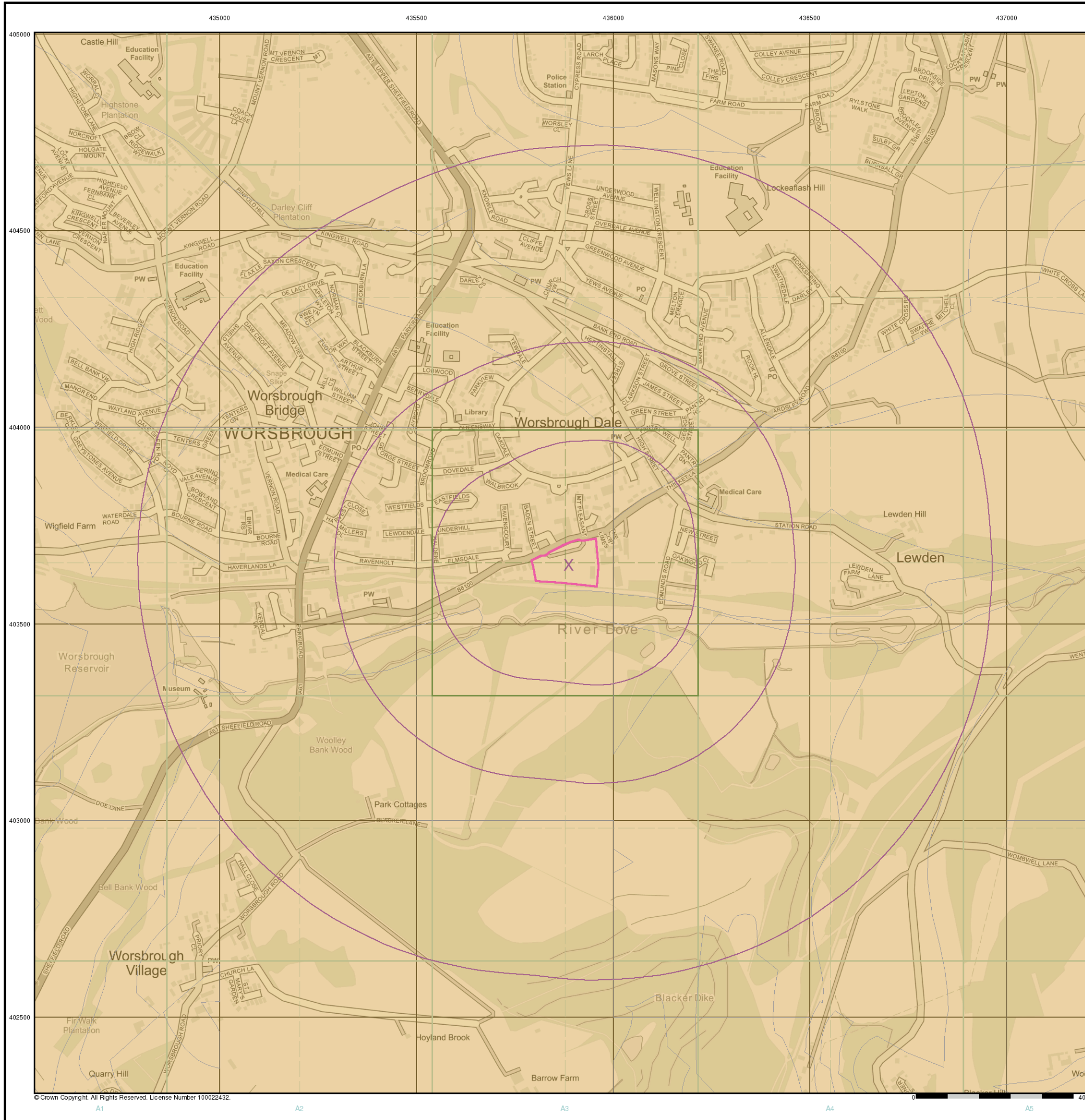


### Order Details

Order Details: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660



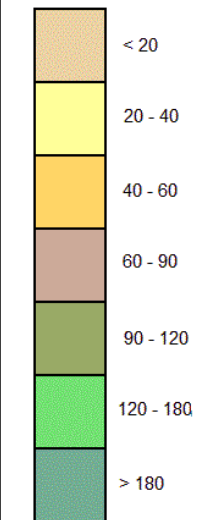
© Crown Copyright. All Rights Reserved. License Number 100022432.

### General

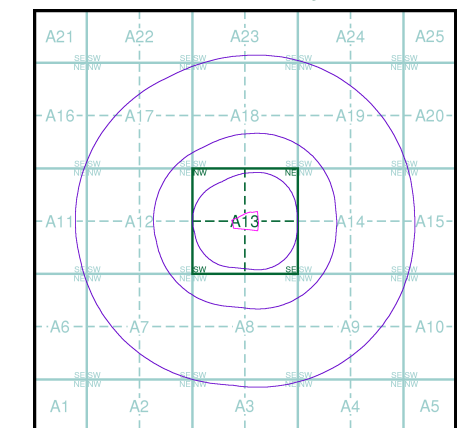
- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

### Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg



### Estimated Soil Chemistry Chromium - Slice A

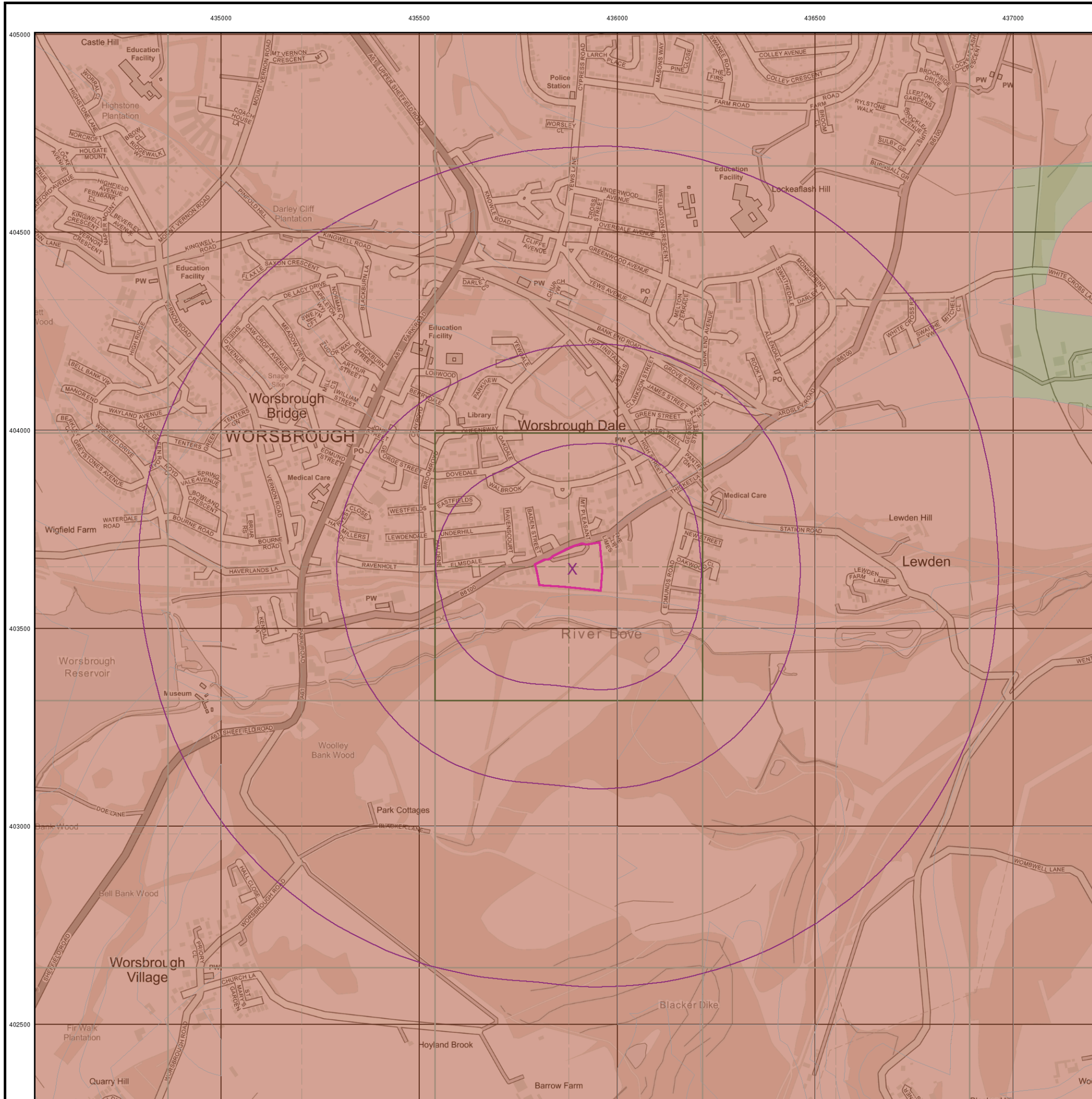


### Order Details

Order Details: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660

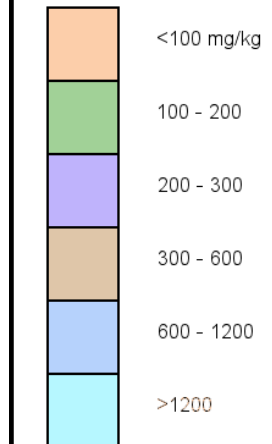


## General

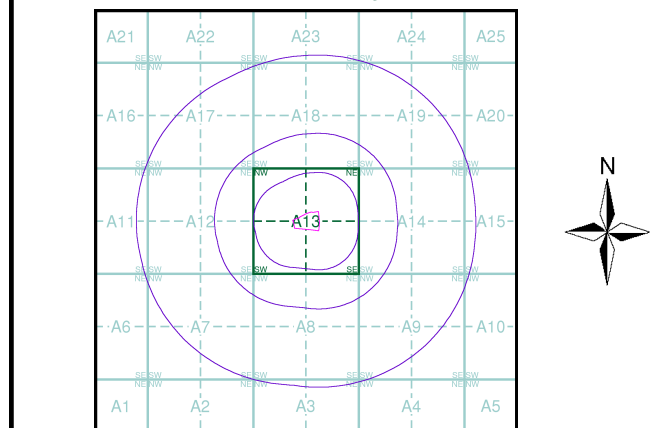
- ✱ Specified Site
- Specified Buffer(s)
- ✕ Bearing Reference Point

## Estimated Soil Chemistry Lead

Lead Concentrations mg/kg



## Estimated Soil Chemistry Lead - Slice A

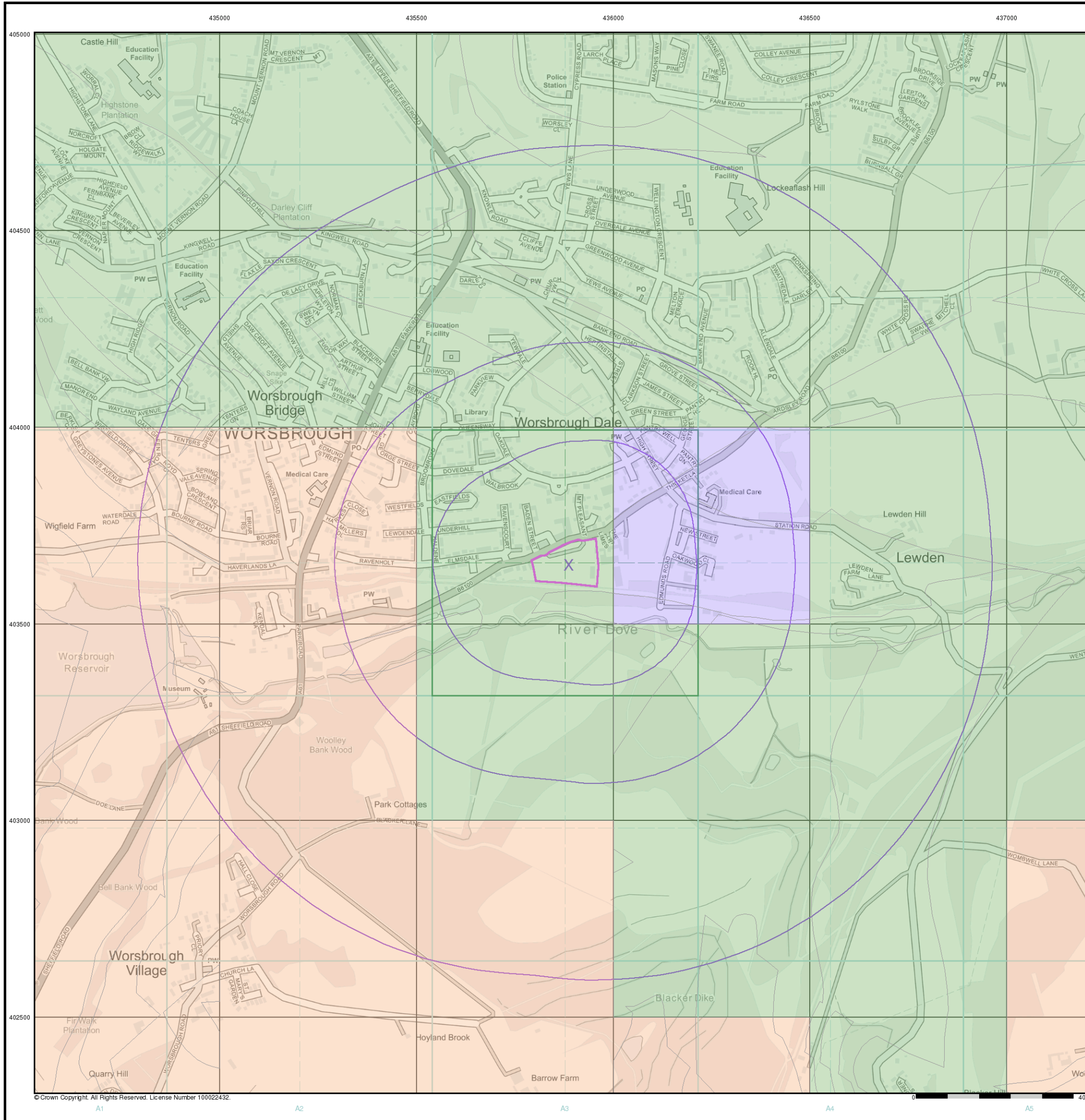


## Order Details

Order Details: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

## Site Details

Site at 435880, 403660

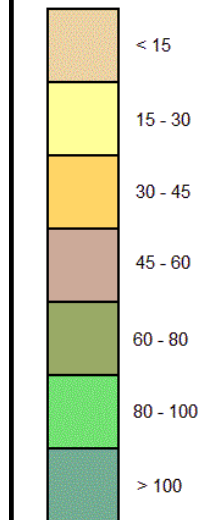


## General

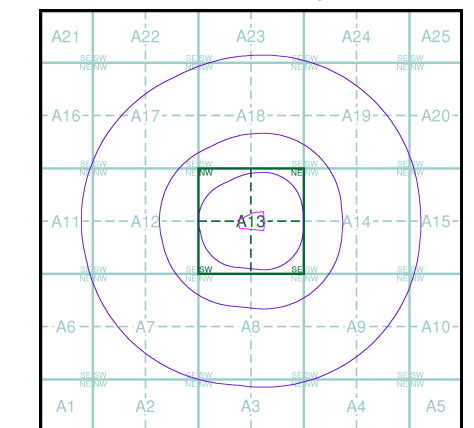
- ⬮ Specified Site
- ⬮ Specified Buffer(s)
- X Bearing Reference Point

## Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg



## Estimated Soil Chemistry Nickel - Slice A

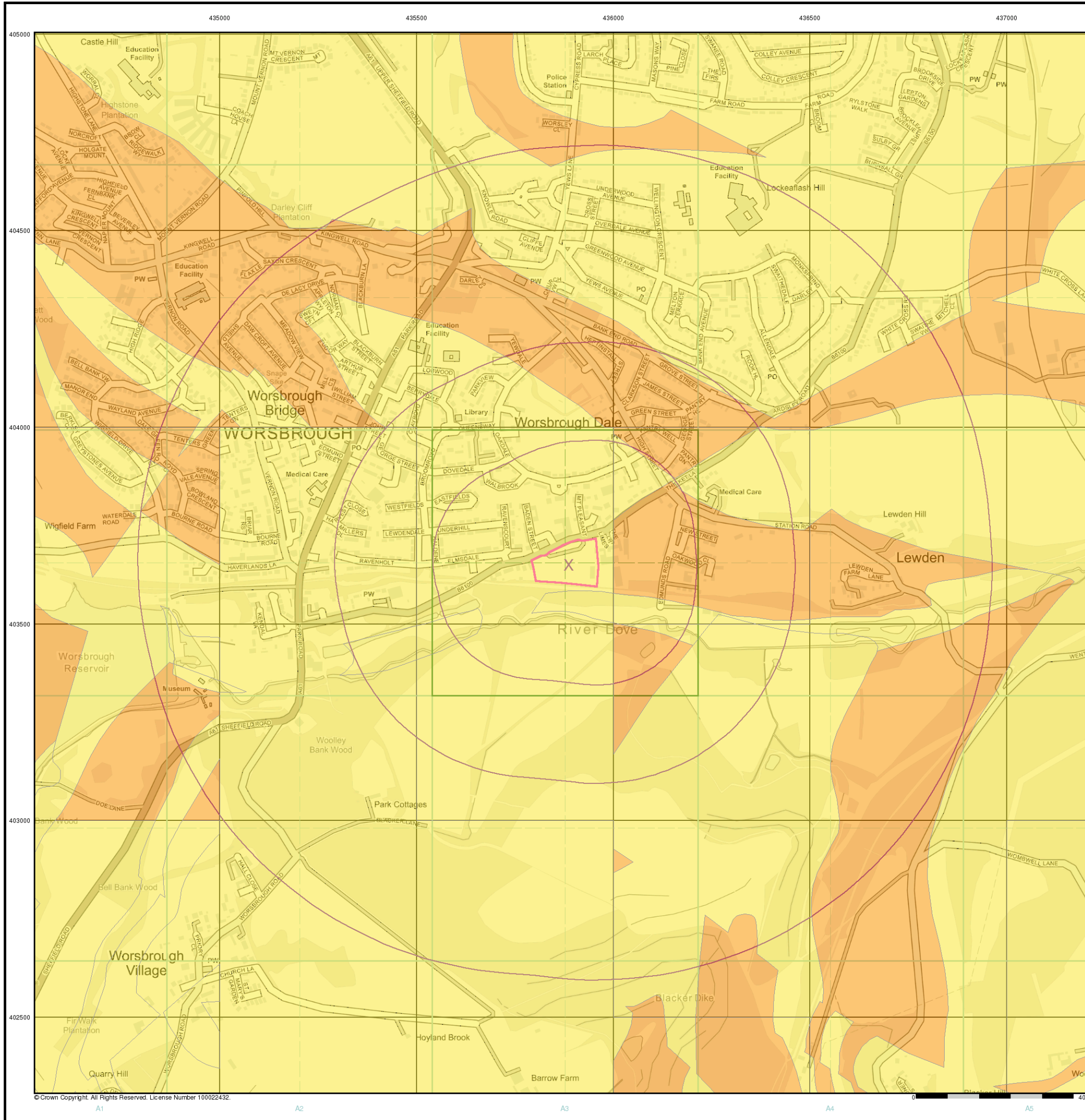


## Order Details

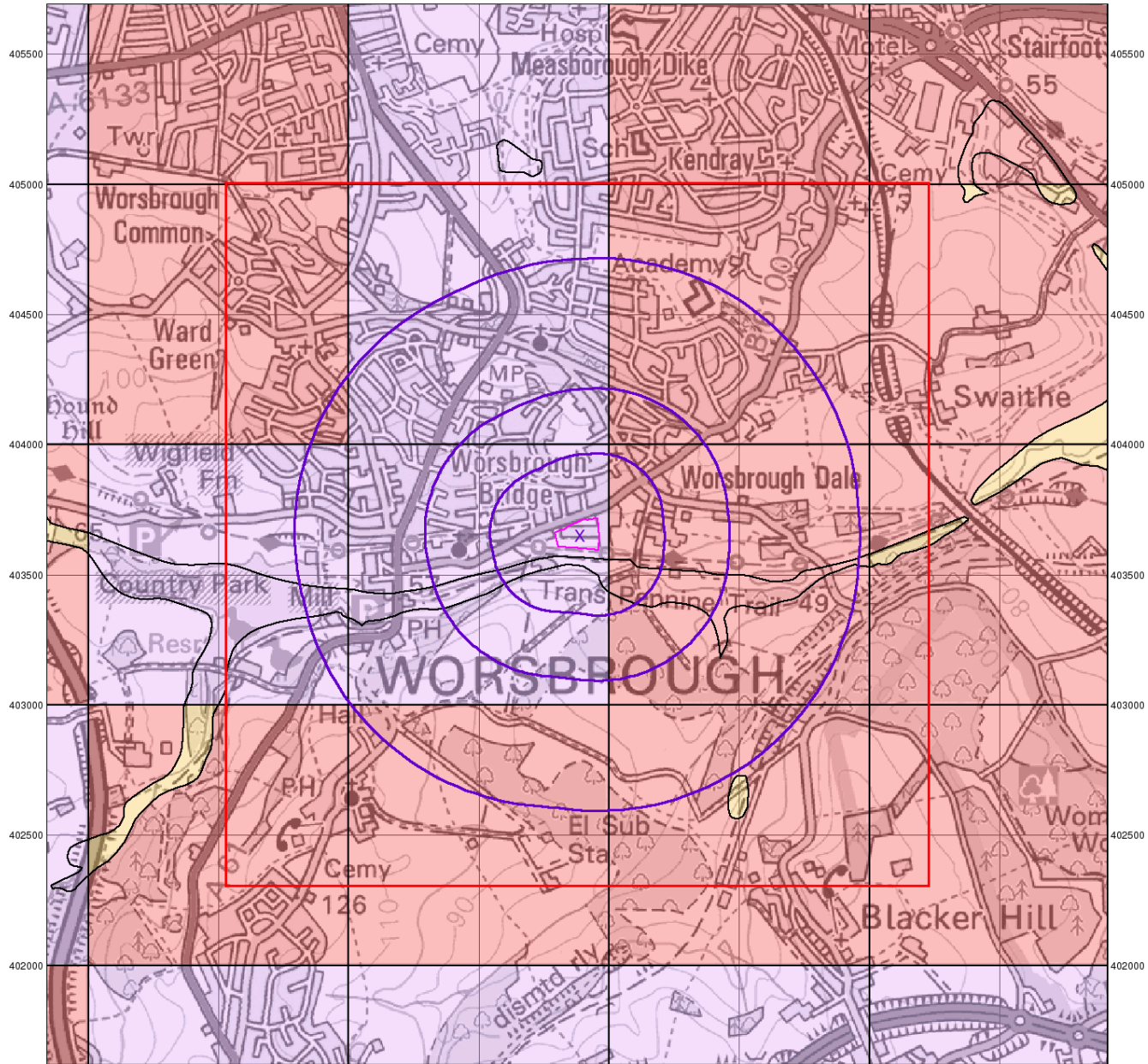
Order Details: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

## Site Details

Site at 435880, 403660



434000 434500 435000 435500 436000 436500 437000 437500



© Crown Copyright. All Rights Reserved. License Number 100022432

0 1 km

# Envirocheck®

LANDMARK INFORMATION GROUP®

## Groundwater Vulnerability

### General

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

### Agency and Hydrological

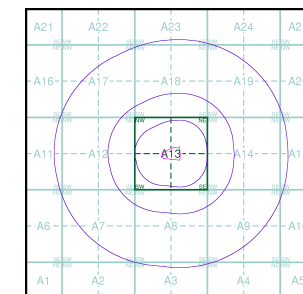
#### Bedrock Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer
- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

#### Superficial Aquifers

- Unproductive Aquifer
- Soluble Rock

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

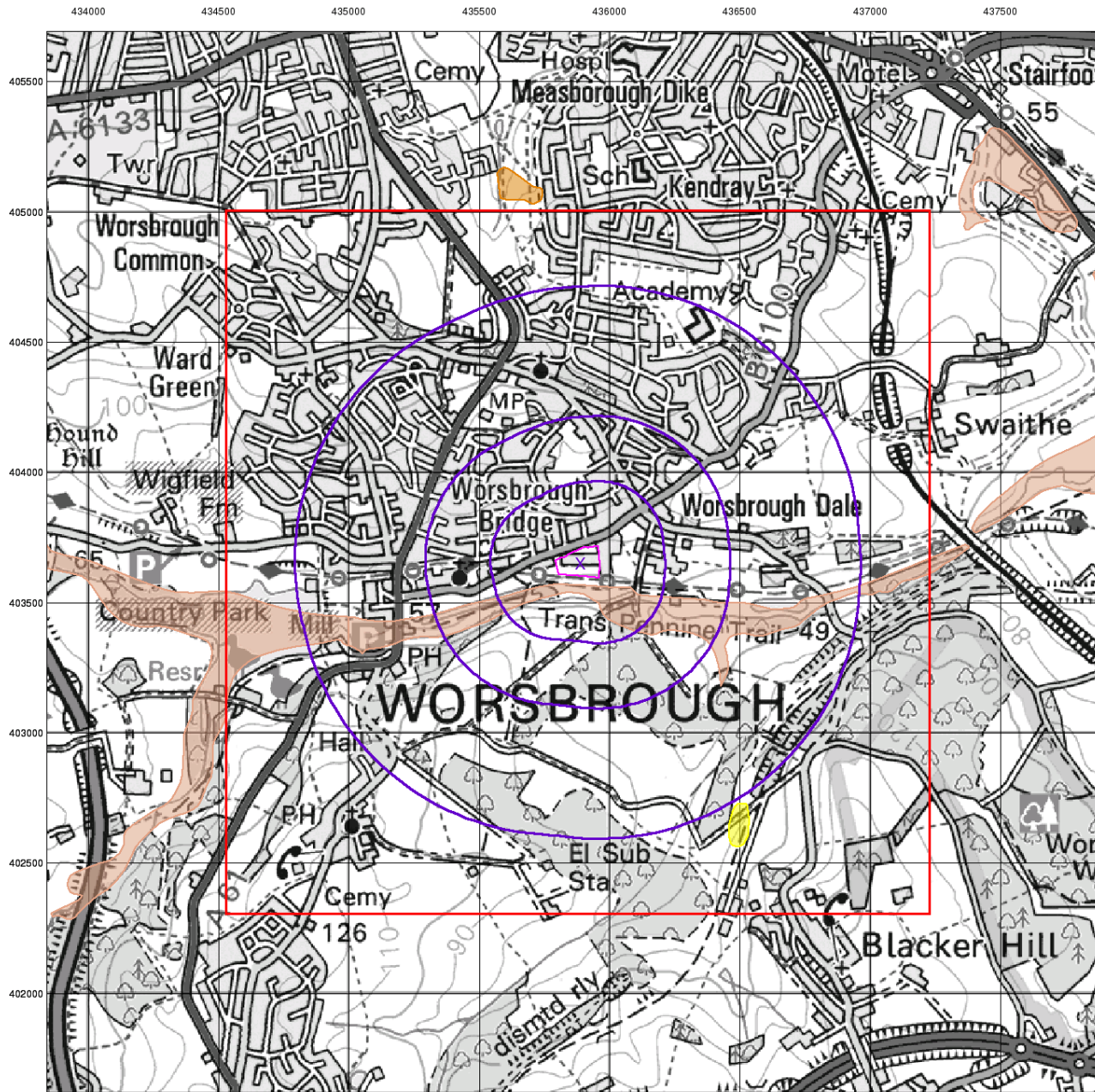
### Site Details

Site at 435880, 403660

**Landmark®**  
 INFORMATION GROUP

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





© Crown Copyright. All Rights Reserved. License Number 100022432

# Envirocheck®

LANDMARK INFORMATION GROUP®

## Superficial Aquifer Designation

### General

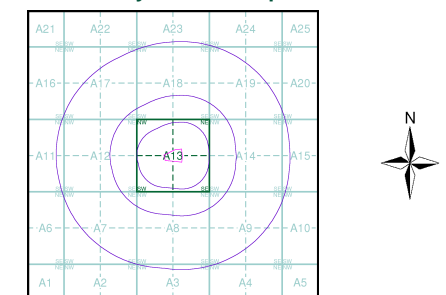
- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Slice
- B Map ID

### Agency and Hydrological

#### Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

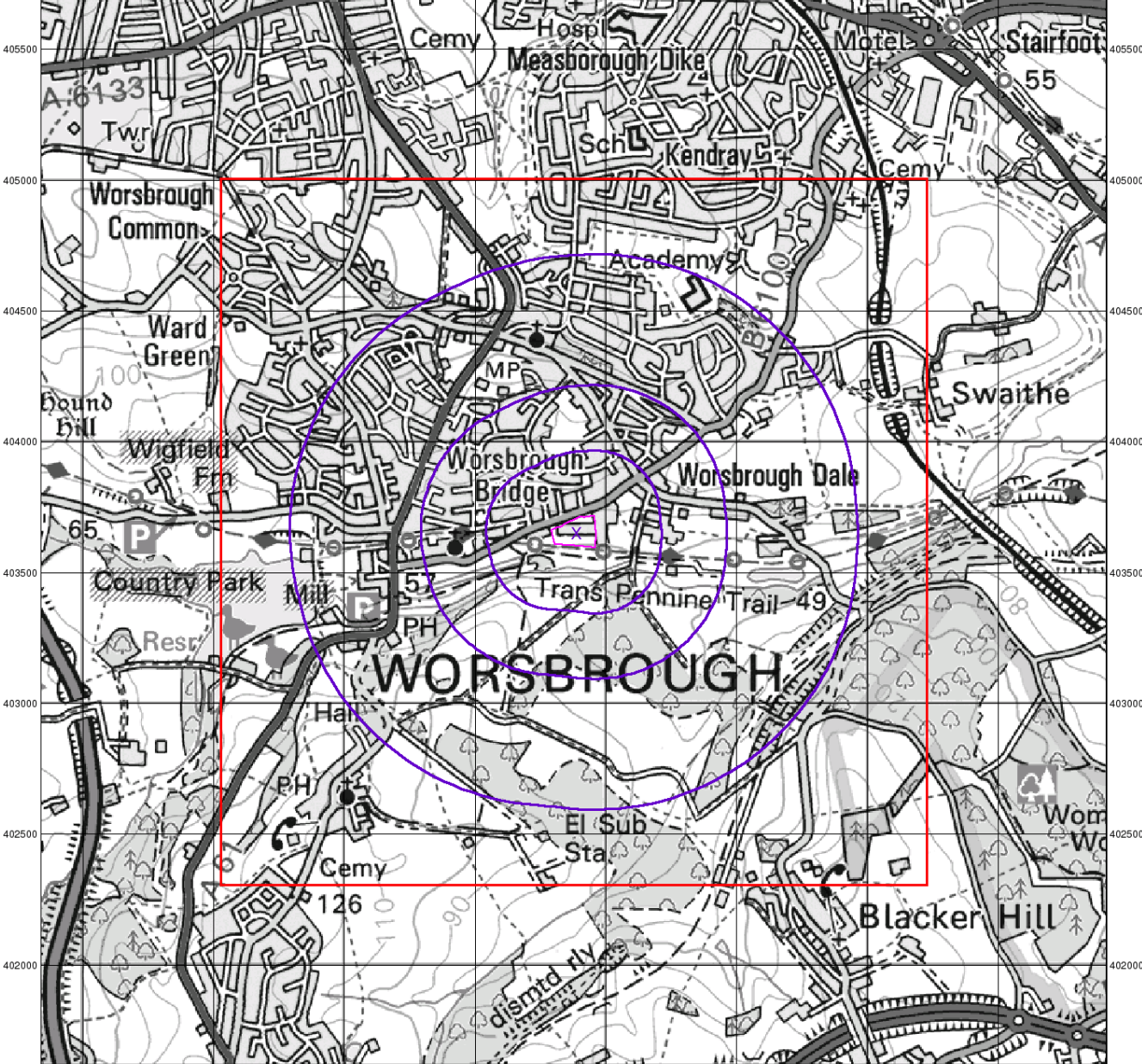
### Site Details

Site at 435880, 403660

**Landmark®**  
 INFORMATION GROUP

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

434000 434500 435000 435500 436000 436500 437000 437500



© Crown Copyright. All Rights Reserved. License Number 100022432

# Envirocheck®

LANDMARK INFORMATION GROUP®

## Source Protection Zones

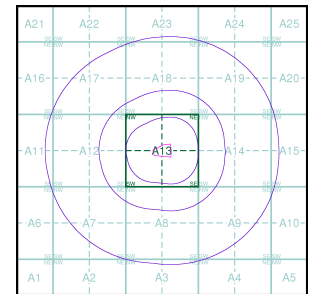
### General

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

### Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

## Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 291577021\_1\_1  
 Customer Ref: 46967  
 National Grid Reference: 435890, 403650  
 Slice: A  
 Site Area (Ha): 1.54  
 Search Buffer (m): 1000

### Site Details

Site at 435880, 403660

**Landmark®**  
 INFORMATION GROUP

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





## 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

Mrs K Betson, Eastwood & Partners Ltd, St Andrews House, 23 Kingfield Road, Sheffield, S11 9AS

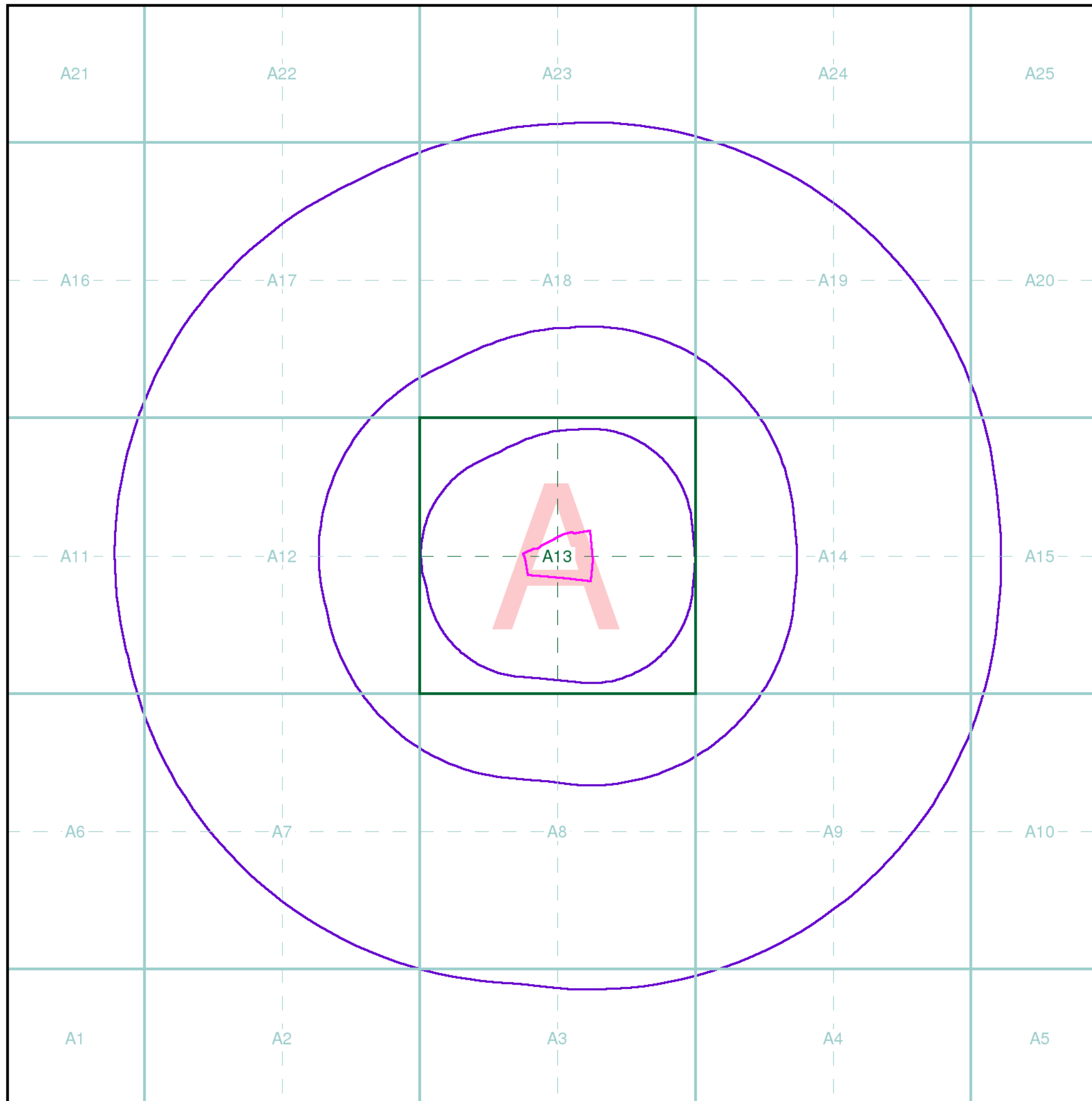
## Order Details

Order Number: 291577021\_1\_1  
Customer Ref: 46967  
National Grid Reference: 435890, 403650  
Site Area (Ha): 1.54  
Search Buffer (m): 1000

## Site Details

Site at 435880, 403660

Full Terms and Conditions can be found on the following link:  
<http://www.landmarkinfo.co.uk/Terms/Show/515>





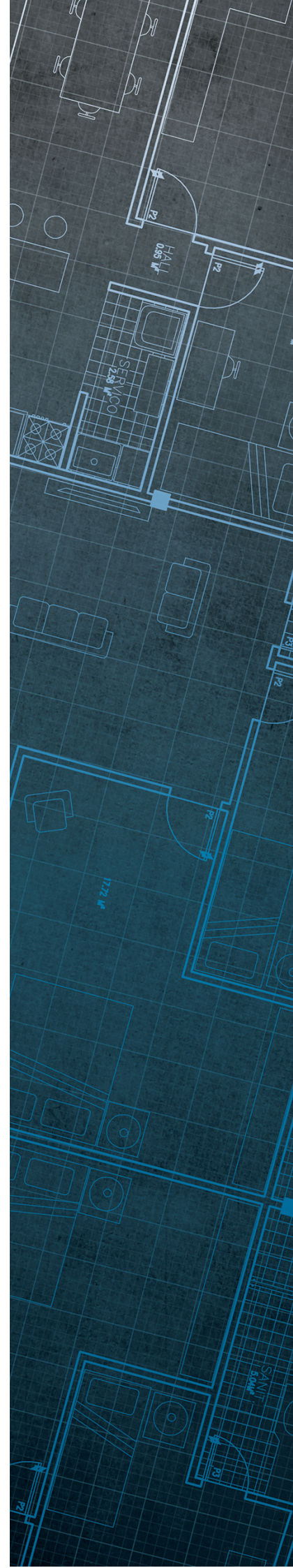
The Coal  
Authority

# Consultants Coal Mining Report

West Street  
Worsbrough Bridge  
Barnsley  
S70 5NU

Date of enquiry: 22 February 2022  
Date enquiry received: 22 February 2022  
Issue date: 22 February 2022

Our reference: 51002947452001  
Your reference: 46967



# Consultants

# Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

## Client name

EASTWOOD & PARTNERS (CONSULTING ENGINEERS) LTD

## Enquiry address

West Street  
Worsbrough Bridge  
Barnsley  
S70 5NU

## How to contact us

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

200 Lichfield Lane  
Mansfield  
Nottinghamshire  
NG18 4RG

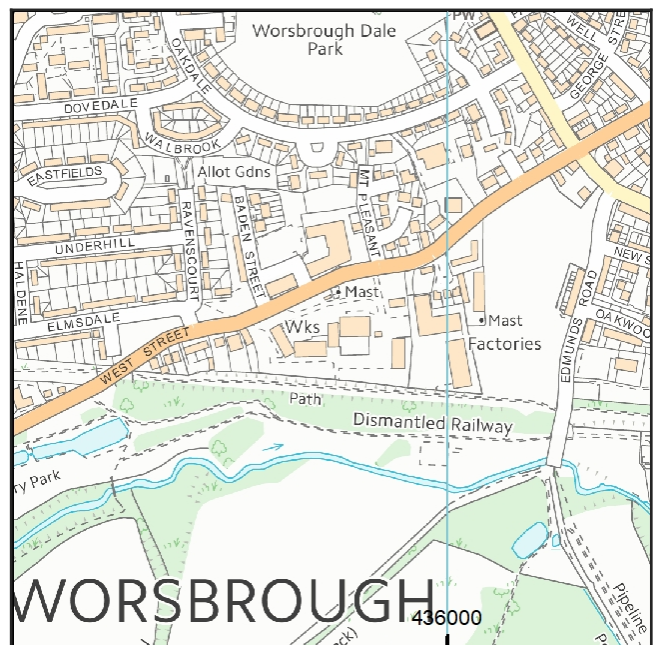
[www.groundstability.com](http://www.groundstability.com)

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2018. All rights reserved.

Ordnance Survey Licence number: 100020315

# Section 1 – Mining activity and geology

## Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
unnamed	BARNSLEY	Coal	6Y19	57	Beneath Property	1.0	South-West	262	1877
EDMUNDS	TOP HARD BARNSLEY	Coal	5QQU	85	East	4.4	North-East	262	1856
EDMUNDS	TOP HARD BARNSLEY	Coal	5QQT	103	East	4.9	North-East	262	1891
unnamed	BARNSLEY	Coal	6Y59	105	East	5.4	North-East	262	1891
BARROW	LIDGETT	Coal	6Y89	180	Beneath Property	4.5	North-East	117	1969
unnamed	LIDGETT	Coal	5QRA	191	East	4.3	North-East	101	1967
BARROW	LOW FENTON	Coal	6Y8A	296	West	3.1	North-East	124	1948
BARROW	TOP FENTON	Coal	6Y3A	309	Beneath Property	4.6	North-East	102	1943
BARROW	LOW FENTON	Coal	6Y9A	319	North	4.2	North-East	124	1955
BARROW	TOP FENTON	Coal	5QRG	320	East	4.0	North-East	100	1944
BARROW	PARKGATE	Coal	6Y3B	329	Beneath Property	4.7	North-East	175	1930
BARROW	TOP FENTON	Coal	5QRF	336	South-East	5.0	North-East	100	1933
BARNSLEY	PARKGATE	Coal	6Y4B	336	South	5.1	North-East	160	1917
BARNSLEY	PARKGATE	Coal	5QRD	343	East	3.3	North-East	142	1935
BARNSLEY	PARKGATE	Coal	5QRC	345	South-East	4.5	North-East	147	1922
BARROW	MIDDLETON MAIN	Coal	6Y1C	356	Beneath Property	4.8	North-East	132	1944
BARROW	THORNCLIFFE	Coal	5QRI	356	North-East	4.4	East	137	1943
BARROW	THORNCLIFFE	Coal	5QRL	357	South-East	0.0	East	132	1928
BARROW	MIDDLETON MAIN	Coal	6Y2C	375	South	5.2	North-East	132	1903
BARROW	THORNCLIFFE	Coal	5QRK	386	North	0.0	East	132	1942
BARROW	SILKSTONE	Coal	6Y5C	406	Beneath Property	4.7	North-East	200	1913
BARROW	SILKSTONE	Coal	6Y8C	423	North	3.8	East	90	1910

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
BARROW	SILKSTONE	Coal	6Y7C	433	South	5.2	North-East	160	1900
BARROW	SILKSTONE	Coal	5Q16	456	East	4.9	North-East	90	1919

### Probable unrecorded shallow workings

Yes.

### Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

### Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	435403-004	435841 403645	Unfilled but covered. Re-covered with a reinforced concrete cap in 2020	Coal	

### Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

M698	16351	NE1075
FGB778	NE873	13713
PO0	14372	NE662

**Please contact us on 0345 762 6848** to determine the exact abandoned mine plans you require based on your needs.

### Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
KENTS THIN	Coal	Yes	Within	N/A	101

### Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

### Opencast mines

Please refer to the "Summary of findings" map (on separate sheet) for details of any opencast areas within 500 metres of the enquiry boundary.

### **Coal Authority managed tips**

None recorded within 500 metres of the enquiry boundary.

## Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

### Site investigations

Distance to site investigation (m)	Direction
39.4	North-West

See Section 4 for further information.

### Remediated sites

None recorded within 50 metres of the enquiry boundary.

### Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

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

### Mine gas

None recorded within 500 metres of the enquiry boundary.

### Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

## Section 3 – Licensing and future mining activity

### Future underground mining

None recorded.

### Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

### Court orders

None recorded.

### Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

### Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

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

### Payments to owners of former copyhold land

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

## Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

### Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

### Site investigations

The site is within an area of previous interest. It is close to where the Coal Authority has received information relating to past site investigations.

The site requires further investigation and may influence how you approach your risk assessment.

**For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at [groundstability@coal.gov.uk](mailto:groundstability@coal.gov.uk).**

## Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at [groundstability@coal.gov.uk](mailto:groundstability@coal.gov.uk)**.

### Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

### Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

### Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

### Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

### Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

### Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

### Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

### **Opencast mines**

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

### **Coal Authority managed tips**

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

### **Site investigations**

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

### **Remediated sites**

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

### **Coal mining subsidence**

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

### **Mine gas**

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission.

### **Mine water treatment schemes**

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

### **Future underground mining**

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

### **Coal mining licensing**

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

### **Court orders**

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

### **Section 46 notices**

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

### **Withdrawal of support notices**






Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

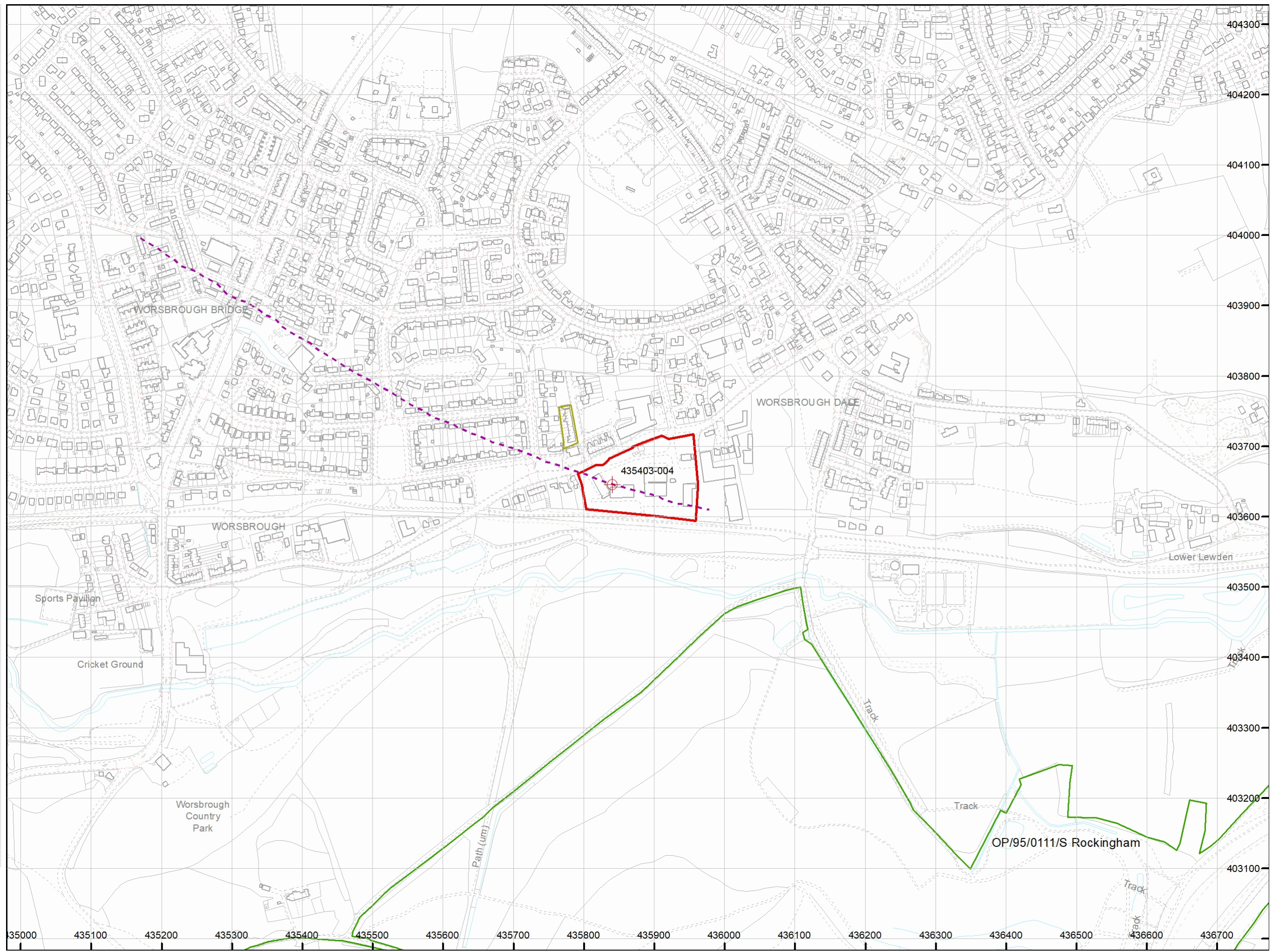
### **Payment to owners of former copyhold land**

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

**Key**

- Approximate position of the enquiry boundary shown 
- Disused mine shaft 
- Outcrop (Conjectured) 
- Opencast mine licence area 
- Site investigations 



**How to contact us**  
 0345 762 6848 (UK)  
 +44 (0)1623 637 000 (International)  
[www.groundstability.com](http://www.groundstability.com)



The Coal  
Authority

Issued by:

The Coal Authority, Property Search Services, 200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire, NG18 4RG  
Website: [www.groundstability.com](http://www.groundstability.com) Phone: 0345 762 6848

**EASTWOOD & PARTNERS  
(CONSULTING ENGINEERS) LTD  
ST ANDREWS HOUSE  
23 KINGFIELD ROAD  
SHEFFIELD  
S11 9AS**

Our reference:	<b>51002947452002</b>
Your reference:	<b>46967</b>
Date of your enquiry:	<b>22 February 2022</b>
Date we received your enquiry:	<b>22 February 2022</b>
Date of issue:	<b>22 February 2022</b>

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

### **Shaft Plan and Data Sheets**

**WEST STREET, WORSBROUGH BRIDGE, BARNSELY, S70 5NU**

I refer to the enquiry dated 22 February 2022, received 22 February 2022, in connection with the above.

As requested I enclose the mine entry data sheet(s) held for the mine entry/entries referred to.

### **Mine Entry Data**

Shaft/adit:	Shaft
Reference:	435403-004
Source:	4th Ed. 1/2500 O.S. 1st and NG Ed. Geological
Colliery name:	Darley Main
Entry name:	No.2 Pit
Date abandoned:	Unknown
Depth of superficial deposits (m):	Unknown
Depth of shaft (m):	78.0
Diameter of shaft (m):	Unknown
Probable adit azimuth:	Not Applicable
Treatment details:	Unfilled but covered. Re-covered with a reinforced concrete cap in 2020
Conveyance:	Not Applicable
Easting:	435841
Northing:	403645
Other information:	None

## Location map

Approximate position of enquiry



Reproduced by permission of Ordnance Survey on behalf of HMSO.  
© Crown copyright and database right 2018. All rights reserved.  
Ordnance Survey Licence number: 100020315

This plan shows the approximate location of the disused mine entry / entries referred to in the attached mining report. For reasons of clarity, mine entry symbols may not be drawn to the same scale as the plan.

Property owners have the benefit of statutory protection (under the Coal Mining Subsidence Act 1991). This contains provision for the making good, to the reasonable satisfaction of the owner, of physical damage from disused coal mine workings including disused coal mine entries. A leaflet setting out the rights and obligations of either the Coal Authority or other responsible persons under the 1991 Act can be obtained by visiting [www.groundstability.com](http://www.groundstability.com).

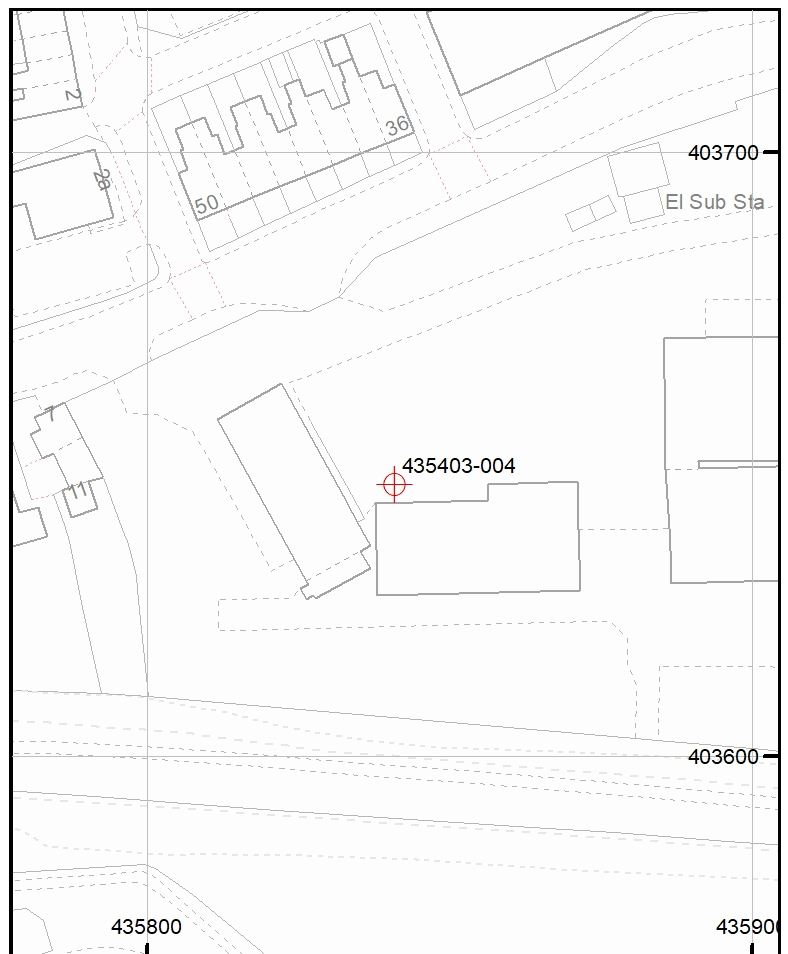
If you wish to discuss the relevance of any of the information contained in this report, you should seek the advice of a qualified mining engineer or surveyor. If you or your advisor wish to examine the source plans from which the information has been taken, these are available to view, free of charge, at our Head Office in Mansfield. To book an appointment please ring 01623 637225. Should you or your advisor wish to carry out a physical investigation that may enter, disturb or interfere with any disused mine entry, prior permission of the owner must be sought. For coal mine entries, the owner will normally be the Coal Authority.

The Coal Authority, regardless of responsibility and in conjunction with other public bodies, provide an emergency call out facility in coalfield areas to assess the public safety implications of mining features (including disused mine entries).

Our emergency telephone number is 0800 288 4242.

### Key

Disused Adit or Mineshaft



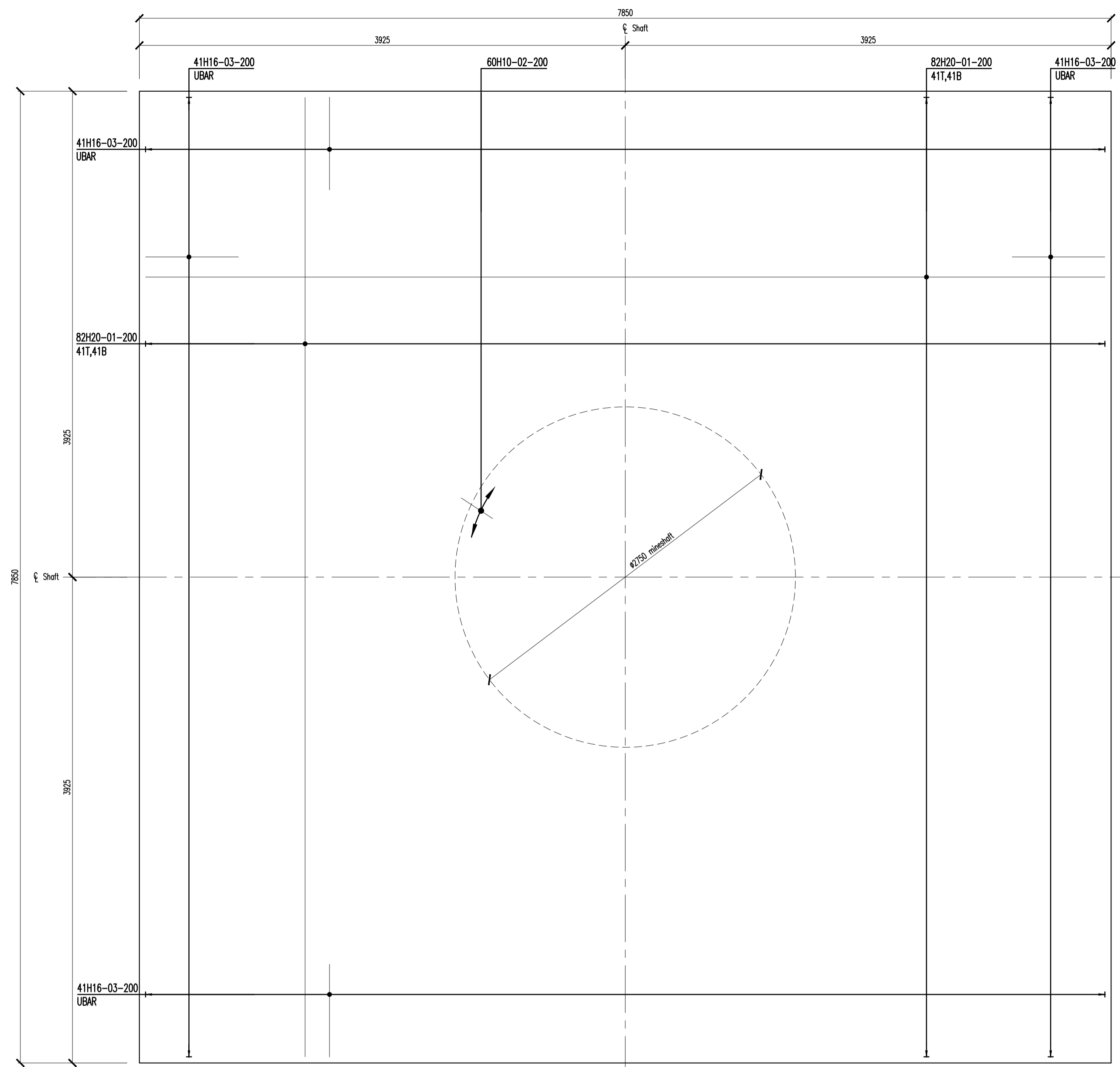
GENERAL NOTES

1. This drawing is to be read in conjunction with all relevant engineer's and Architect's drawings and specifications.
2. All dimensions are given in Millimetres.
3. Contractor to be responsible for design, erection and support of any formwork required.
4. Concrete specification (in accordance with BS8500): -  
Strength Class - C32/40  
Exposure Class - XD3  
Max W/C content - 0.45  
min cement/combination content - 360  
Cement/Combination types - IIB-V, IIIA  
intended working life of at least 100 years
5. Minimum cover to all reinforcement to be 75mm
6. Cap is to be placed centrally over mineshaft.
7. Cap must not be loaded until the concrete has reached its 28 day strength

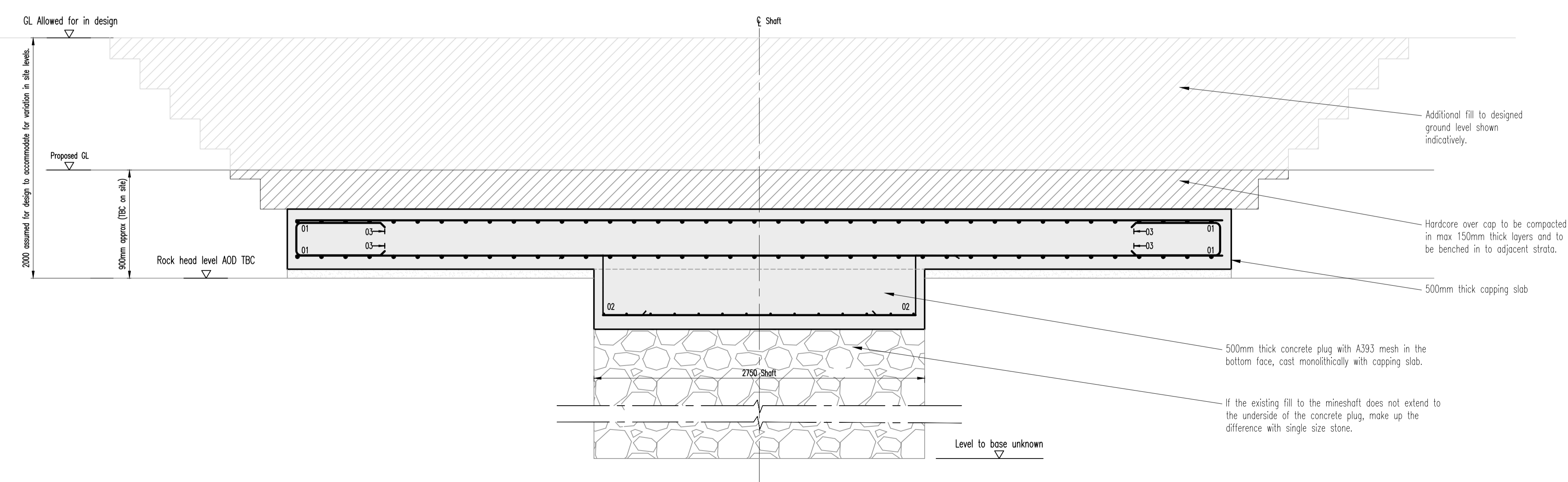
NOTE: This drawing is subject to approval by the Coal Authority. Works should not proceed until approval has been received.

Member	Bar Mark	Type and size	No. of Mbrs.	No. of Bars in each	Total No.	Length of each bar mm †	Shape Code	A* mm	B* mm	C* mm	D* mm	ER* mm	Rev
Mineshaft Cap	01	H 20	1	164	164	7750	00	7750					
	02	H 10	1	60	60	1475	23	500	500	500			
	03	H 16	1	164	164	1775	21	750	320	750			

This schedule to comply with BS8666 (2005) \* Specified in Multiples of 5mm † Specified in Multiples of 25mm



1 MINESHAFT CAP PLAN  
1:25



2 MINESHAFT CAP SECTION  
1:25

Rev	By	Date	Description	Chk
A	NW	01.12.20	As Built Issue	MA
/	MA	11.06.20	Issued for approval	MA

**WALKER INGRAM ASSOCIATES**  
Consulting Engineers

Office: G4 • Flexspace • Monckton Road • Wakefield • WF2 7AS  
T: 01924 792312 • E: office@walkergram.co.uk • W: www.walkergram.co.uk

Client: LONGLEYS (BARNSELY) LTD

Project: DEARNE & DOVE WORKS, BARNSELY  
MINESHAFT CAP

Title: MINESHAFT CAP PLAN AND SECTION

Scale	Drawn	Checked	Date
1:20	MA	MA	JUN.20

Drawing Status: AS BUILT

Job No.	Drawing No.	Revision
100.058	1000	A

## **Appendix 2**

Exploratory Hole Location Plan, Drawing 48404/001A





Trial Pit Logs, TP01 to TP14

Trial Trench Logs, TT01 to TT03

Borehole Logs, BH01 to BH08, BH01A, BH01B Site

Photographs

INFORMATION WITHIN THIS DRAWING IS NOT NECESSARILY PRODUCED TO SCALE.  
ALWAYS USE FIGURED DIMENSIONS AND CO-ORDINATES - IF IN DOUBT, ASK.

-  Approximate location of trial pit excavated by Eastwood Consulting Engineers on 10th March 2022.
-  Approximate location of borehole drilled by Eastwood Consulting Engineers on 4th and 5th April 2022.
-  Approximate location of borehole with gas and groundwater monitoring installation drilled on 4th and 5th April 2022.
-  Trial trenches around mineshaft capping excavated by Eastwood Consulting Engineers on 4th April 2022.
- 1.9 Depth to base of made ground.
- Site boundary.

A	First Issue.			
REV	DESCRIPTION	SIG	CHK	DATE

## HOOBER HOMES

## DEARNE AND DOVE WORKS, WEST STREET, WORSBROUGH

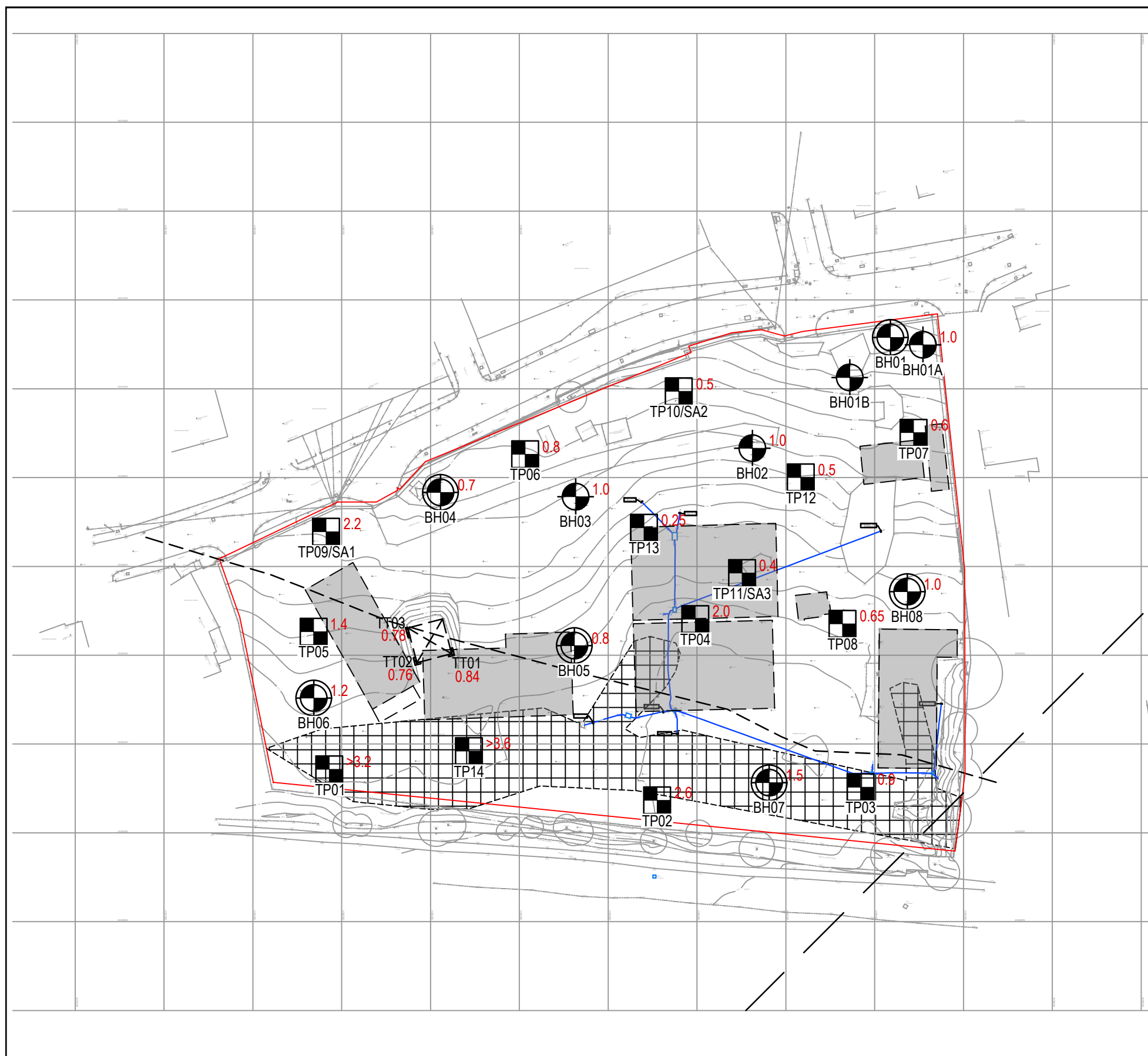
## EXPLORATORY HOLE LOCATION PLAN



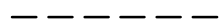





St Andrew's House  
23 Kingfield Road  
Sheffield, S11 9AS

T: 0114 255 4554  
E: mail@eastwoodce.com  
eastwoodce.com

SCALE WHEN PLOTTED AT A3 <b>1:1000</b>			DRAWING STATUS <b>PRELIMINARY</b>	
DRAWN	CHECKED	DATE	DRAWING NUMBER	REV
AS	SRI	06.05.2022	48404/001	A



-  Approximate location of The Worsbrough Fault Line.
-  Approximate location of surface water drainage runs.
-  Approximate location of inferred coal seam outcrop on site.
-  Approximate extent of former buildings.
-  Mineshaft.
-  Approximate extent of former infilled canal.

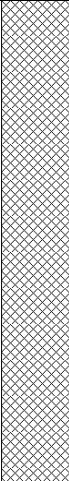
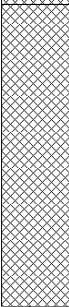
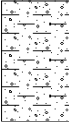

Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 54.20	Date 10/03/2022
Location: West Street, Worsbrough		Dimensions: <span style="border: 1px solid black; padding: 2px 10px;">m</span>		Scale 1:25
Client: Hooper Homes		Depth: <span style="border: 1px solid black; padding: 2px 10px;">E</span>		Logged
		3.20m		

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.10 - 0.20	ES				[Cross-hatched pattern]	MADE GROUND: Loose dark brown clayey gravelly SAND. Gravel is fine to coarse angular to sub angular sandstone, brick, plastic and glass.
			0.60	53.60		MADE GROUND: Light yellow slightly clayey sandy GRAVEL. Gravel is fine to coarse angular to sub angular sandstone (Type 1 sub-base).
1.00 - 1.10	ES				[Cross-hatched pattern]	MADE GROUND: Dark brown grey slightly clayey sandy GRAVEL. Gravel is fine to coarse angular to sub angular sandstone, brick, clinker, coal, slate and brown clay lumps.
			0.70	53.50		
1.80 - 1.90	ES				[Cross-hatched pattern]	MADE GROUND: Soft dark grey slightly gravelly sandy clayey SILT with frequent decaying roots. Gravel is fine to coarse angular to sub angular brick, clinker, sandstone, metal.
			1.60	52.60		
2.60 - 2.70	ES				[Cross-hatched pattern]	<i>Wet and gravelly.</i>
			3.20	51.00		
						Trialpit Complete at 3.200m

Remarks: Pit terminated due to repeated side collapse. Fast groundwater ingress from 2.7 m bgl.

Stability:

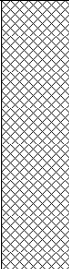
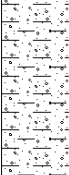


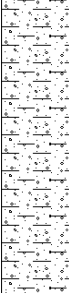
Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 53.50	Date 10/03/2022
Location: West Street, Worsbrough			Dimensions: <span style="border: 1px solid black; padding: 2px 10px;">m</span>	Scale 1:25
Client: Hooper Homes			Depth: <span style="border: 1px solid black; padding: 2px 10px;">E</span>	Logged
			3.30m	

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.20 - 0.30	ES					MADE GROUND: Loose dark brown clayey gravelly SAND with low boulder content. Gravel is fine to coarse angular to sub angular sandstone, brick, plastic, glass, coal, cement bound asbestos, wood, ceramics. Boulders of sandstone (max 0.4 x 0.3 x 0.3)
1.70 - 1.80	ES		1.60	51.90		MADE GROUND: Grey ashy sandy GRAVEL. Gravel is fine to coarse, angular clinker, coal, brick and slag.
2.70 2.70 2.70 2.80	ES	HVP=43 HVP=51 HVP=54	2.60	50.90		Soft to firm orange mottled grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub angular sandstone.
			3.00	50.50		Firm grey brown CLAY.
			3.30	50.20		Trialpit Complete at 3.300m

Remarks: Fast groundwater ingress at the base of the made ground at 2.5 m. Slight sheen. HSV (19 mm) results indicate the undrained shear strength in kPa.

Stability:






Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 53.07	Date 10/03/2022
Location: West Street, Worsbrough			Dimensions: <span style="border: 1px solid black; padding: 2px 10px;">m</span>	Scale 1:25
Client: Hooper Homes			Depth: <span style="border: 1px solid black; padding: 2px 10px;">E</span> 3.90m	Logged

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.10 - 0.20	ES					MADE GROUND: Loose dark brown slightly clayey gravelly SAND with medium cobble content. Gravel is fine to coarse angular to sub angular sandstone, mudstone, brick, rare ceramics, rare glass and rare metal.
1.00 - 1.10	ES		0.90	52.17		Firm orange brown slightly gravelly sandy CLAY. Gravel is fine to coarse sub angular sandstone and rare coal.
1.70 - 1.80	ES		1.50	51.57		Becomes gravelly with medium cobble content.
2.80 - 2.90	ES		2.70	50.37		Stiff grey slightly sandy slightly gravelly silty CLAY. Gravel is fine to coarse sub angular sandstone and rare coal.
			2.90	50.17		Stiff orange brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub angular sandstone
			3.90	49.17		Gravelly with high cobble content
Trialpit Complete at 3.900m						

Remarks: Limit of excavator reached. Slight groundwater ingress at 1.7 m.

Stability:

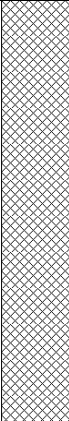

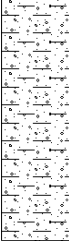
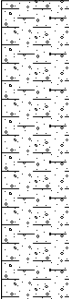

Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 53.60	Date 10/03/2022
Location: West Street, Worsbrough			Dimensions: <span style="border: 1px solid black; padding: 2px 10px;">m</span>	Scale 1:25
Client: Hooper Homes			Depth: 2.40m	Logged

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.20 - 0.30	ES					MADE GROUND: Dark brown grey slightly clayey sandy GRAVEL. Gravel is fine to coarse angular to sub angular sandstone, brick, metal, plastic, glass, fabric, clinker and coal.
1.50 - 1.60	ES		1.40	52.20		MADE GROUND: Dark grey sandy slightly gravelly CLAY with low cobble content. Gravel and cobbles are fine to coarse sub angular sandstone and brick. (slight hydrocarbon odour)
1.70 - 1.80	ES					
			2.00	51.60		Firm orange brown grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, angular sandstone.
			2.40	51.20		Trialpit Complete at 2.400m

Remarks: Pit terminated due to fast groundwater ingress at 1.2 m with oily sheen.

Stability:

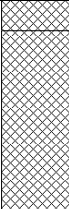
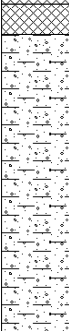
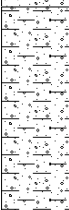
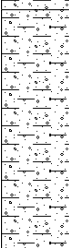
Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 55.50	Date 10/03/2022
Location: West Street, Worsbrough			Dimensions: <input type="text"/> m	Scale 1:25
Client: Hooper Homes			Depth: <input type="text"/> m 3.50m	Logged

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.10 - 0.20	ES					MADE GROUND: Loose dark brown slightly clayey gravelly SAND with low cobble content. Gravel is fine to coarse angular to sub angular sandstone, brick, ceramics, glass and metal with occasional firm orange grey clay lumps.
1.40 - 1.50	ES		1.40	54.10		Medium dense dark grey black GRAVEL. Gravel is fine to coarse, angular coal.
2.00 - 2.10	ES	HVP=27 HVP=28 HVP=34	1.70	53.80		Soft to firm orange mottled grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub angular sandstone.
2.00			2.50	53.00		Very stiff grey mottled brown slightly sandy gravelly CLAY. Gravel is fine to coarse sub angular sandstone and coal.
2.00						
3.00 - 3.10	ES		3.50	52.00		Trialpit Complete at 3.500m

Remarks: Target depth achieved. Dry. HSV (19 mm) results indicate the undrained shear strength in kPa.

Stability:


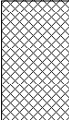
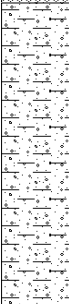
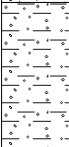
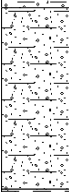

Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 57.50	Date 10/03/2022
Location: West Street, Worsbrough			Dimensions: <span style="border: 1px solid black; padding: 2px 10px;">m</span>	Scale 1:25
Client: Hooper Homes			Depth: <span style="border: 1px solid black; padding: 2px 10px;">E</span> 3.30m	Logged

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.40 - 0.50	ES		0.10	57.40		MADE GROUND: Light yellow slightly clayey sandy GRAVEL. Gravel is fine to coarse angular to sub angular sandstone (Type 1 sub-base).
						MADE GROUND: Loose dark grey brown slightly clayey gravelly SAND. Gravel is fine to coarse angular to sub angular coal, brick, sandstone and rare metal.
1.10 - 1.20	ES	HVP=38 HVP=39 HVP=52	0.70	56.80		MADE GROUND: Reworked firm brown grey slightly gravelly CLAY. Gravel is fine to medium angular brick and coal.
			0.80	56.70		Firm orange mottled grey slightly gravelly slightly sandy CLAY. Gravel is fine to coarse sub angular sandstone.
1.90 - 2.00	ES		1.80	55.70		Firm grey mottled orange sandy gravelly CLAY. Gravel is fine to coarse sub angular sandstone.
2.50		HVP=108	2.50	55.00		Stiff grey slightly sandy gravelly CLAY with high boulder content. Gravel is fine to coarse sub angular sandstone and coal. Boulders of sandstone (max 0.5 x 0.5 x 0.2).
2.50		HVP=108				
2.50		HVP=110				
			3.30	54.20		Trialpit Complete at 3.300m

Remarks: Slow progression at base in hard clay. Dry. HSV (19 mm) results indicate the undrained shear strength in kPa.

Stability:

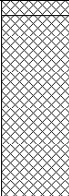
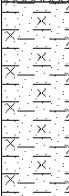
Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 57.50	Date 10/03/2022
Location: West Street, Worsbrough			Dimensions: <input type="text"/> m	Scale 1:25
Client: Hooper Homes			Depth: 3.00m	Logged

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description	
Depth (m)	Type	Results					
0.30 - 0.40	ES		0.20	57.30		MADE GROUND: Brown sandy GRAVEL. Gravel is fine to coarse angular sandstone.	
			0.60	56.90		MADE GROUND: loose dark brown grey ashy sandy GRAVEL. Gravel is fine to coarse angular coal, clinker, slag, brick and concrete.	
1.00 - 1.10	ES		1.60	55.90		Firm orange brown slightly gravelly slightly sandy CLAY. Gravel is fine to coarse sub angular sandstone and rare coal.	1
			2.10	55.40		Stiff grey brown gravelly CLAY with medium cobble content. Gravel and cobbles are fine to coarse angular to sub angular sandstone.	2
2.30 - 2.40	ES		2.70	54.80		Wet brown clayey gravelly fine to coarse grained SAND. Gravel is fine to coarse angular sandstone.	
			3.00	54.50		Very stiff grey slightly sandy gravelly CLAY with medium cobble content and low boulder content. Gravel is fine to coarse sub angular sandstone and coal. Boulders of sandstone (max 0.3 x 0.4 x 0.2).	3
Trialpit Complete at 3.000m							4

Remarks: Target depth achieved. Dry

Stability:

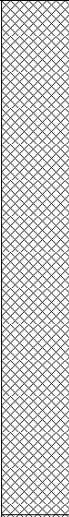
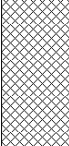
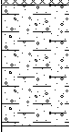
Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 54.20	Date 10/03/2022
Location: West Street, Worsbrough			Dimensions: <input type="text"/> m	Scale 1:25
Client: Hooper Homes			Depth: 1.30m	Logged

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.30 - 0.40	ES		0.05	54.15		MADE GROUND: Brown sandy GRAVEL. Gravel is fine to coarse angular sandstone and brick. MADE GROUND: Loose dark brown grey sandy GRAVEL. Gravel is fine to coarse angular sandstone, brick, coal, clinker, glass and metal.
0.80 - 0.90	ES		0.65	53.55		Soft to firm grey slightly sandy silty CLAY.
			1.30	52.90		Trialpit Complete at 1.300m

Remarks: Pit terminated due to fast groundwater ingress at 1.1 m bgl.

Stability:


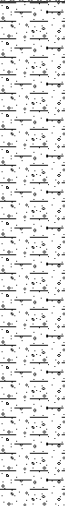

Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 56.40	Date 04/04/2022
Location: West Street, Worsbrough			Dimensions: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; vertical-align: middle;"></span> m	Scale 1:25
Client: Hooper Homes			Depth: 2.60m	Logged JRH

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.30 - 0.40	ES					MADE GROUND: Black ashy gravelly SAND with small inclusions of slightly gravelly clay. Gravel is subrounded to angular fine to coarse of coal, clay pipe fragments, brick, sandstone, clinker, quartzite, shale and glass.
						1.0-1.2 m bgl - Soft yellowish brown sandy CLAY.
1.90 - 2.00	ES		1.70	54.70		MADE GROUND: Soft yellowish brown mottled orange and light grey very sandy CLAY with occasional coarse sand of coal.
						2.0-2.2 m bgl - Large 1 m dia. 0.2 m thick boulder of sandstone
2.50 - 2.60	D		2.20	54.20		Firm yellowish brown mottled orange and light grey very gravelly sandy CLAY. Gravel is subangular fine to coarse of coal, mudstone and sandstone.
			2.60	53.80		Trialpit Complete at 2.600m

Remarks: Terminated at target depth for infiltration test. Faint hydrocarbon odour coming from pit. Dry. Backfilled with arisings.

Stability: Instabilities in ashy made ground.

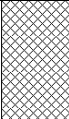
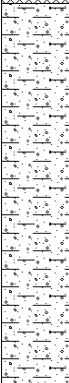

Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 57.90	Date 04/04/2022
Location: West Street, Worsbrough			Dimensions: <input type="text"/> m	Scale 1:25
Client: Hooper Homes			Depth: <input type="text"/> m 2.50m	Logged JRH

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.20 - 0.30	ES		0.50	57.40		MADE GROUND: Dark brown clayey gravelly SAND with rare fragments of ceramic, clay pipe. Gravel is subrounded to subangular fine to coarse of limestone, brick and sandstone.
0.60 - 0.70	ES					Soft yellowish brown mottled orange and light grey slightly gravelly very sandy CLAY. Gravel is subangular fine to coarse of sandstone.
2.20 - 2.30	ES		2.20	55.70		Extremely weak weathered brown SANDSTONE, recovered as subangular sandstone cobbles with much stiff sandy gravelly clay.
			2.50	55.40		Trialpit Complete at 2.500m

Remarks: Terminated at target depth for infiltration test. Groundwater resting in base of pit. Backfilled with arisings.

Stability: Stable.


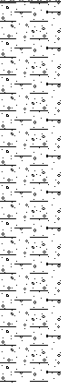

Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 54.60	Date 04/04/2022
Location: West Street, Worsbrough			Dimensions: <span style="border: 1px solid black; padding: 2px 10px;"> </span> m	Scale 1:25
Client: Hooper Homes			Depth: 1.80m	Logged JRH

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.30	ES		0.40	54.20		MADE GROUND: Dark brown clayey gravelly SAND with rare fragments of ceramic, clay pipe. Gravel is subrounded to subangular fine to coarse of limestone, brick and sandstone.
0.90 - 1.00	ES					Firm grey mottled brown gravelly sandy CLAY with moderate hydrocarbon odour. Gravel is subrounded to subangular fine to coarse of sandstone. <i>0.4 - 0.8 m bgl - Trench of limestone cobbles and brick running southwards through pit.</i>
			1.70	52.90		Extremely weak weathered brown SANDSTONE, recovered as subangular sandstone cobbles with much stiff sandy gravelly clay. Trialpit Complete at 1.800m
			1.80	52.80		

Remarks: Terminated at target depth for infiltration test. Dry. Backfilled with arisings.

Stability: Stable.





Project Name Dearne and Dove Works, Worsbrough	Project No. 48404	Co-ords: - Level: 56.30	Date 04/04/2022
Location: West Street, Worsbrough		Dimensions: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; vertical-align: middle;"></span> m	Scale 1:25
Client: Hooper Homes		Depth: 3.20m	Logged JRH

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.40 - 0.50	ES		0.50	55.80		MADE GROUND: Black gravelly SAND with layers of approximately 0.1 m thick alternately rich in ash, crushed brick and clinker. Gravel is subrounded to angular fine to coarse of coal, clay pipe fragments, brick, sandstone, clinker, quartzite, shale and glass.  <i>0.4 m bgl - Metal 10 mm pipe in northeast corner of pit.</i>
1.20 - 1.30	ES		1.80	54.50		Firm grey mottled brown slightly gravelly very sandy CLAY with rare subrounded sandstone cobbles and faint organic odour. Gravel is subrounded to subangular fine to coarse of sandstone.  <i>1.7 - 1.8 m bgl - Frequent sandstone cobbles.</i>
			3.20	53.10		Extremely weak weathered brown SANDSTONE, recovered as subangular sandstone cobbles with much stiff sandy gravelly clay.
Trialpit Complete at 3.200m						

Remarks: Terminated at 3.2 m bgl on competent sandstone bedrock. Slightly groundwater ingress at 1.2 m bgl and 1.8 m bgl. Backfilled with arisings.

Stability: Some instabilities in made ground to 0.5m, and small scale instabilities in natural ground.


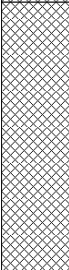
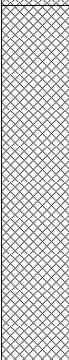
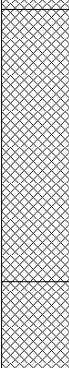
Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 55.50	Date 04/04/2022
Location: West Street, Worsbrough			Dimensions: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; vertical-align: middle;"></span> m	Scale 1:25
Client: Hooper Homes			Depth: 3.80m	Logged JRH

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.10 - 0.20	ES		0.25	55.25		MADE GROUND: Brown gravelly very clayey SAND with 2 x 15 mm dia. 0.5 m long metal rods with bolt heads. Gravel is subangular fine to coarse of brick, sandstone, limestone and quartzite.
1.00 - 1.10	ES					Brown gravelly very clayey SAND with occasional sandstone cobbles. Gravel is subrounded to subangular fine to coarse of sandstone.
1.60 - 1.70	D					1.0 m bgl - 0.5 m dia. sandstone boulder.
1.60 - 1.70	D					1.5 m bgl - Cobble content increasing to frequent.
2.80 - 2.90	D		2.70	52.80		Stiff greyish brown gravelly CLAY. Gravel is subangular fine to coarse of mudstone and sandstone.
2.90		HVP=101				
2.90		HVP=108				
2.90		HVP=113				
3.30		HVP=108				
3.30		HVP=114				
3.30		HVP=132				
			3.80	51.70		Trialpit Complete at 3.800m

Remarks: Terminated at 3.8 m bgl on maximum reach of excavator. Dry. Backfilled with arisings. HVP= Hand shear vane result indicating undrained shear strength in kN/m2

Stability: Stable.





Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 54.09	Date 04/04/2022
Location: West Street, Worsbrough			Dimensions: <span style="border: 1px solid black; padding: 2px 10px;">m</span>	Scale 1:25
Client: Hooper Homes			Depth: <span style="border: 1px solid black; padding: 2px 10px;">E</span> 3.60m	Logged

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.60 - 0.70	ES		0.10	53.99		MADE GROUND: Dark brown slightly clayey sandy GRAVEL. Gravel is fine to coarse angular to sub angular sandstone, brick, glass and plastic.
			0.30	53.79		MADE GROUND: Brown slightly clayey sandy GRAVEL. Gravel is coarse angular brick and rare concrete.
1.20 - 1.30	ES		1.20	52.89		MADE GROUND: Dark grey slightly ashy slightly clayey gravelly SAND with medium cobble content. Gravel and cobbles are fine to coarse angular to sub angular brick, metal, glass, rope, plastic, concrete and material.
						MADE GROUND: Loose red brown grey ashy gravelly SAND. Gravel is fine to coarse angular clinker, coal and rare metal.
2.60 - 2.70	ES		2.40	51.69		MADE GROUND: Loose orange brown sandy silty GRAVEL. Gravel is fine to coarse angular clinker, brick and metal.
						MADE GROUND: Dark grey clayey SILT. (Slight hydrocarbon odour)
3.30 - 3.40	ES		3.30	50.79		MADE GROUND: Dark grey clayey SILT. (Slight hydrocarbon odour)
			3.60	50.49		Trialpit Complete at 3.600m

Remarks: Limit of excavator reached. Fast groundwater ingress at 2.4 m bgl. Unstable pit sides from 1.3 m.

Stability:




Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 54.23	Date 04/04/2022
Location: West Street, Worsbrough			Dimensions: <input type="text"/> m	Scale 1:25
Client: Hooper Homes			Depth: <input type="text"/> m 0.95m	Logged

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.25			53.98		MADE GROUND: Light yellow brown slightly clayey sandy GRAVEL with medium cobble content. Gravel and cobbles are fine to coarse angular to sub angular limestone (sub-base)	
					CONCRETE	
0.84			53.39		Firm brown grey sandy slightly gravelly CLAY. Gravel is fine to coarse, angular sandstone.	
0.95			53.28			
Trialpit Complete at 0.950m						

Remarks: Target depth achieved. Fast groundwater ingress from 0.9 m.

Stability:


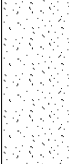


Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 54.20	Date 04/04/2022
Location: West Street, Worsbrough			Dimensions: <input type="text"/> m	Scale 1:25
Client: Hooper Homes			Depth: <input type="text"/> m 0.90m	Logged

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
			0.20	54.00		MADE GROUND: Light yellow brown slightly clayey sandy GRAVEL with medium cobble content. Gravel and cobbles are fine to coarse angular limestone (sub-base)
						CONCRETE
			0.76	53.44		Firm brown grey sandy slightly gravelly CLAY. Gravel is fine to coarse, angular sandstone.
			0.90	53.30		Trialpit Complete at 0.900m

Remarks: Target depth achieved

Stability:

Project Name Dearne and Dove Works, Worsbrough		Project No. 48404	Co-ords: - Level: 54.18	Date 04/04/2022
Location: West Street, Worsbrough			Dimensions: <span style="float: right;">m</span>	Scale 1:25
Client: Hooper Homes			Depth: 1.00m	Logged

Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
0.20			53.98		MADE GROUND: Light yellow brown slightly clayey sandy GRAVEL with medium cobble content. Gravel and cobbles are fine to coarse angular limestone (sub-base)	
					CONCRETE	
0.78			53.40		Firm brown grey sandy slightly gravelly CLAY. Gravel is fine to coarse, angular sandstone.	
1.00			53.18		Trialpit Complete at 1.000m	1

Remarks: Target depth achieved

Stability:

# Rotary Core Log

Borehole No.

**BH01**

Sheet 1 of 1

Project Name: Dearne and Dove Works, Worsbrough	Project No. 48404	Co-ords: -	Hole Type RO
Location: West Street, Worsbrough		Level: 59.80	Scale 1:50
Client: Hooper Homes		Dates: 04/04/2022 -	Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
										Made Ground	
							1.00	58.80		Sandy CLAY	1
							3.00	56.80		Fractured SANDSTONE	3
							6.00	53.80		Soft push - loss of water flush	6
							7.50	52.30		Soild	8
							8.50	51.30		End of borehole at 8.50 m	9

Remarks  
Borehole terminated due to loss of water flush.

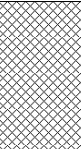
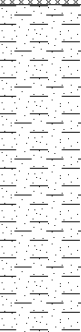
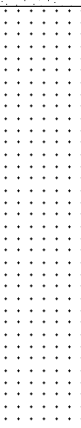
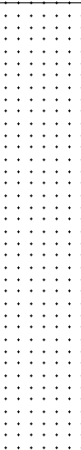
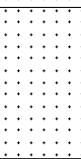
# Rotary Core Log

Borehole No.

**BH01a**

Sheet 1 of 1

Project Name:	Dearne and Dove Works, Worsbrough	Project No.	48404	Co-ords:	-	Hole Type	RO
Location:	West Street, Worsbrough	Level:	59.50	Scale	1:50	Logged By	
Client:	Hooper Homes	Dates:	04/04/2022 -				

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							1.00	58.50		MADE GROUND	1
							3.20	56.30		Sandy CLAY	2
							6.00	53.50		SANDSTONE	3
							9.00	50.50		Fractured SANDSTONE - loss of water flush	4
							10.00	49.50		Solid	5
										End of borehole at 10.00 m	6

Remarks  
Borehole terminated due to loss of water flush

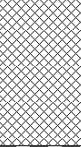

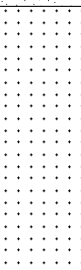
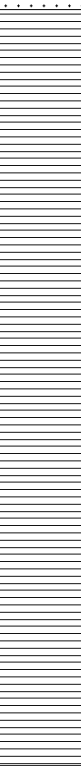
# Rotary Core Log

Borehole No.

**BH01b**

Sheet 1 of 2

Project Name:	Dearne and Dove Works, Worsbrough	Project No.	48404	Co-ords:	-	Hole Type	RO
Location:	West Street, Worsbrough	Level:	58.90	Scale	1:50	Logged By	
Client:	Hooper Homes	Dates:	04/04/2022 -				

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							1.00	57.90		MADE GROUND	
							3.20	55.70		SANDY CLAY	1 2 3
							5.00	53.90		SANDSTONE	4
										MUDSTONE	5 6 7 8 9 10

Continued on next sheet

Remarks	Target depth achieved
---------	-----------------------

# Rotary Core Log

Borehole No.

**BH01b**

Sheet 2 of 2

Project Name:	Dearne and Dove Works, Worsbrough	Project No.	48404	Co-ords:	-	Hole Type	RO
Location:	West Street, Worsbrough	Level:	58.90	Scale	1:50	Logged By	
Client:	Hooper Homes	Dates:	04/04/2022 -				

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							13.00	45.90			11
							13.30	45.60	COAL		12
									MUDSTONE		13
											14
											15
											16
											17
							18.00	40.90			18
										End of borehole at 18.00 m	19
											20

Remarks  
Target depth achieved

# Rotary Core Log

Borehole No.

**BH02**

Sheet 1 of 2

Project Name: Dearne and Dove Works,  
Worsbrough

Project No.  
48404

Co-ords: -

Hole Type  
RO

Location: West Street, Worsbrough

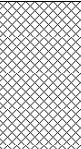
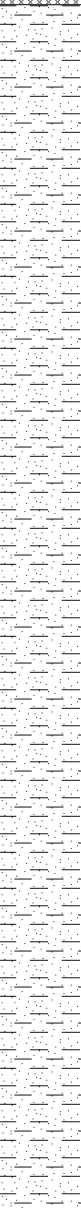
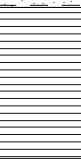
Level: 56.80

Scale  
1:50

Client: Hooper Homes

Dates: 04/04/2022 -

Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							1.00	55.80		MADE GROUND	
										Sandy CLAY	1 2 3 4 5 6 7 8
							9.00	47.80		MUDSTONE	9 10

Continued on next sheet

Remarks  
Borehole terminated due to loss of water flush.

# Rotary Core Log

Borehole No.

**BH02**

Sheet 2 of 2

Project Name:	Dearne and Dove Works, Worsbrough	Project No.	48404	Co-ords:	-	Hole Type	RO
Location:	West Street, Worsbrough	Level:	56.80	Scale	1:50	Logged By	
Client:	Hooper Homes	Dates:	04/04/2022 -				

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							10.50	46.30			
							10.80	46.00	■	COAL	
										MUDSTONE	11
											12
							13.50	43.30		Soft push - Loss of water flush	13
											14
							14.50	42.30	●	Solid	15
							15.50	41.30		End of borehole at 15.50 m	16
											17
											18
											19
											20

Remarks  
Borehole terminated due to loss of water flush.

# Rotary Core Log

Borehole No.

**BH03**

Sheet 1 of 3

Project Name: Dearne and Dove Works,  
Worsbrough

Project No.  
48404

Co-ords: -

Hole Type  
RO

Location: West Street, Worsbrough

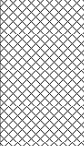
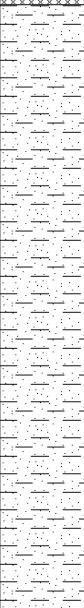



Level: 56.86

Scale  
1:50

Client: Hooper Homes

Dates: 04/04/2022 -

Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							1.00	55.86		MADE GROUND	
										Sandy CLAY	1
							5.00	51.86		Weak MUDSTONE	5
							6.50	50.36		COAL	
							6.80	50.06		MUDSTONE	7
Continued on next sheet										10	

Remarks  
Borehole terminated due to partial loss of water flush



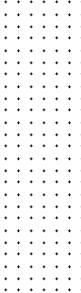
# Rotary Core Log

Borehole No.

**BH03**

Sheet 3 of 3

Project Name:	Dearne and Dove Works, Worsbrough	Project No.	48404	Co-ords:	-	Hole Type	RO
Location:	West Street, Worsbrough	Level:	56.86	Scale	1:50	Logged By	
Client:	Hooper Homes	Dates:	04/04/2022 -				

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							22.00	34.86			21
										End of borehole at 22.00 m	22
											23
											24
											25
											26
											27
											28
											29
											30

Remarks  
Borehole terminated due to partial loss of water flush

# Rotary Core Log

Borehole No.

**BH04**

Sheet 1 of 2

Project Name:	Dearne and Dove Works, Worsbrough	Project No.	48404	Co-ords:	-	Hole Type	RO
Location:	West Street, Worsbrough	Level:	57.10	Scale	1:50	Logged By	
Client:	Hooper Homes	Dates:	04/04/2022 -				

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							0.70	56.40		MADE GROUND	
										Sandy CLAY	1
							4.00	53.10		COAL	4
							4.30	52.80		Soft MUDSTONE	5
							10.00	47.10			10

Continued on next sheet

Remarks  
Borehole terminated due to partial loss of water flush.

# Rotary Core Log

Borehole No.

**BH04**

Sheet 2 of 2

Project Name:	Dearne and Dove Works, Worsbrough	Project No.	48404	Co-ords:	-	Hole Type	RO
Location:	West Street, Worsbrough	Level:	57.10	Scale	1:50	Logged By	
Client:	Hooper Homes	Dates:	04/04/2022 -				

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
Well										MUDSTONE	11
							16.00	41.10			12
											13
											14
											15
											16
										Fractured SANDSTONE - Partial loss of water flush	17
							18.00	39.10			18
										End of borehole at 18.00 m	19
											20

Remarks  
Borehole terminated due to partial loss of water flush.

# Rotary Core Log

Borehole No.

**BH05**

Sheet 1 of 3

Project Name: Dearne and Dove Works,  
Worsbrough

Project No.  
48404

Co-ords: -

Hole Type  
RO

Location: West Street, Worsbrough

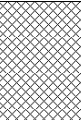


Level: 54.50

Scale  
1:50

Client: Hooper Homes

Dates: 04/04/2022 -

Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							0.80	53.70		MADE GROUND	
										CLAY	1 2 3 4 5
							6.00	48.50		Soft MUDSTONE	6 7 8 9 10
Continued on next sheet											

Remarks  
Target depth achieved

# Rotary Core Log

Borehole No.

**BH05**

Sheet 2 of 3

Project Name: Dearne and Dove Works,  
Worsbrough

Project No.  
48404

Co-ords: -

Hole Type  
RO

Location: West Street, Worsbrough

Level: 54.50

Scale  
1:50

Client: Hooper Homes

Dates: 04/04/2022 -

Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							11.00	43.50		COAL	11
							11.30	43.20		MUDSTONE	12
							13.00	41.50		SANDSTONE	13
							16.00	38.50		MUDSTONE / SANDSTONE	16
										Continued on next sheet	20

Remarks  
Target depth achieved

# Rotary Core Log

Borehole No.

**BH05**

Sheet 3 of 3

Project Name: Dearne and Dove Works,  
Worsbrough

Project No.  
48404

Co-ords: -

Hole Type  
RO

Location: West Street, Worsbrough

Level: 54.50

Scale  
1:50

Client: Hooper Homes

Dates: 04/04/2022 -

Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							30.00	24.50			21
											22
											23
											24
											25
											26
											27
											28
											29
											30

End of borehole at 30.00 m

Remarks  
Target depth achieved

# Rotary Core Log

Borehole No.

**BH06**

Sheet 1 of 3

Project Name: Dearne and Dove Works,  
Worsbrough

Project No.  
48404

Co-ords: -

Hole Type  
RO

Location: West Street, Worsbrough

Level: 54.60

Scale  
1:50

Client: Hooper Homes

Dates: 04/04/2022 -

Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
										MADE GROUND	
							1.20	53.40		Sandy CLAY Soft MUDSTONE / CLAY	1 2 3 4 5 6 7
							7.50	47.10		COAL	
							7.80	46.80		MUDSTONE / SANDSTONE	8 9 10
										Continued on next sheet	

Remarks  
Target depth achieved

# Rotary Core Log

Borehole No.

**BH06**

Sheet 2 of 3

Project Name: Dearne and Dove Works,  
Worsbrough

Project No.  
48404

Co-ords: -

Hole Type  
RO

Location: West Street, Worsbrough

Level: 54.60

Scale  
1:50

Client: Hooper Homes

Dates: 04/04/2022 -

Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20

Continued on next sheet

Remarks

Target depth achieved

# Rotary Core Log

Borehole No.

**BH06**

Sheet 3 of 3

Project Name: Dearne and Dove Works, Worsbrough	Project No. 48404	Co-ords: -	Hole Type RO
Location: West Street, Worsbrough		Level: 54.60	Scale 1:50
Client: Hooper Homes		Dates: 04/04/2022 -	Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
											21
											22
											23
											24
											25
											26
											27
											28
											29
							30.00	24.60		End of borehole at 30.00 m	30

Remarks  
Target depth achieved

# Rotary Core Log

Borehole No.

**BH07**

Sheet 1 of 3

Project Name: Dearne and Dove Works,  
Worsbrough

Project No.  
48404

Co-ords: -

Hole Type  
RO

Location: West Street, Worsbrough

Level: 53.20

Scale  
1:50

Client: Hooper Homes

Dates: 04/04/2022 -

Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							1.50	51.70		MADE GROUND	1
							5.00	48.20		Sandy CLAY	2
							8.00	45.20		Soft MUDSTONE / CLAY	3
										MUDSTONE	4
											5
											6
											7
											8
											9
											10

Continued on next sheet

Remarks  
Target depth achieved

# Rotary Core Log

Borehole No.

**BH07**

Sheet 2 of 3

Project Name: Dearne and Dove Works, Worsbrough	Project No. 48404	Co-ords: -	Hole Type RO
Location: West Street, Worsbrough		Level: 53.20	Scale 1:50
Client: Hooper Homes		Dates: 04/04/2022 -	Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							11.00	42.20			
							11.30	41.90			
										MUDSTONE / SANDSTONE	11
											12
											13
											14
											15
											16
											17
											18
											19
											20

Continued on next sheet

Remarks Target depth achieved	
----------------------------------	--

# Rotary Core Log

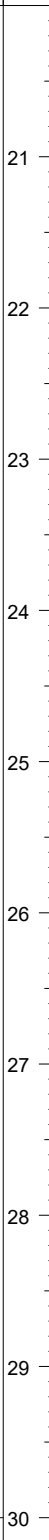
Borehole No.

**BH07**

Sheet 3 of 3

Project Name: Dearne and Dove Works, Worsbrough	Project No. 48404	Co-ords: -	Hole Type RO
Location: West Street, Worsbrough		Level: 53.20	Scale 1:50
Client: Hooper Homes		Dates: 04/04/2022 -	Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description
				TCR	SCR	RQD				
							30.00	23.20		End of borehole at 30.00 m



Remarks  
Target depth achieved

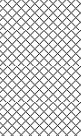


# Rotary Core Log

Borehole No.

**BH08**

Sheet 1 of 3

Project Name: Dearne and Dove Works, Worsbrough	Project No. 48404	Co-ords: -	Hole Type RO
Location: West Street, Worsbrough		Level: 54.80	Scale 1:50
Client: Hooper Homes		Dates: 04/04/2022 -	Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							1.00	53.80		MADE GROUND	
										Sandy CLAY	1 2 3 4 5
							6.00	48.80		Soft MUDSTONE	6 7 8 9
							10.00	44.80			10

Continued on next sheet

Remarks Target depth achieved	
----------------------------------	--

# Rotary Core Log

Borehole No.

**BH08**

Sheet 2 of 3

Project Name: Dearne and Dove Works, Worsbrough	Project No. 48404	Co-ords: -	Hole Type RO
Location: West Street, Worsbrough		Level: 54.80	Scale 1:50
Client: Hooper Homes		Dates: 04/04/2022 -	Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
[Pattern]									[Pattern]	MUDSTONE	11
							13.00	41.80	[Pattern]	COAL	13
							13.30	41.50	[Pattern]	MUDSTONE / SANDSTONE	14
									[Pattern]		15
									[Pattern]		16
									[Pattern]		17
									[Pattern]		18
									[Pattern]		19
									[Pattern]		20

Continued on next sheet

Remarks Target depth achieved	
----------------------------------	--

# Rotary Core Log

Borehole No.

**BH08**

Sheet 3 of 3

Project Name: Dearne and Dove Works, Worsbrough	Project No. 48404	Co-ords: -	Hole Type RO
Location: West Street, Worsbrough		Level: 54.80	Scale 1:50
Client: Hooper Homes		Dates: 04/04/2022 -	Logged By

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							30.00	24.80			21
											22
											23
											24
											25
											26
											27
											28
											29
											30

End of borehole at 30.00 m


Remarks  
Target depth achieved



View from the site entrance looking east



Sub-station and electricity supply in the north of the site

Prepared	SRI	Checked	KE	Date	10/03/22	Photo No. 1 & 2
			<p><b>HOOBER HOMES</b></p> <p><b>WEST STREET, WORSBROUGH</b></p> <p><b>SITE PHOTOGRAPHS</b></p>			



Partly demolished building in the south east



Stockpiles of building rubble in the north east


Prepared	SRI	Checked	KE	Date	10/03/22	Photo No. 3 & 4
			<b>HOOBER HOMES</b> <b>WEST STREET, WORSBROUGH</b> <b>SITE PHOTOGRAPHS</b>			



View looking west from the eastern boundary



Example of possible ACM fragments within surface soils


Prepared	SRI	Checked	KE	Date	10/03/22	Photo No. 5 & 6
			<b>HOOBER HOMES</b>  <b>WEST STREET, WORSBROUGH</b>  <b>SITE PHOTOGRAPHS</b>			



**Mine shaft cap in the west**



**View east along the southern boundary**

Prepared	SRI	Checked	KE	Date	10/03//22	Photo No. 7 & 8
			<b>HOOBER HOMES</b>  <b>WEST STREET, WORSBROUGH</b>  <b>SITE PHOTOGRAPHS</b>			



**Trial Pit 01 in the south west corner**



**TP02 in the south**

Prepared	SRI	Checked	KE	Date	10/03/2022	Photo No. 9 & 10
----------	-----	---------	----	------	------------	------------------

**Eastwood**  
CONSULTING ENGINEERS


**HOOBER HOMES**  
**WEST STREET, WORSBROUGH**  
**SITE PHOTOGRAPHS**



TP03 in the south west



TP04 in the east

Prepared	SRI	Checked	KE	Date	10/03/22	Photo No. 11 & 12
			<p><b>HOOBER HOMES</b></p> <p><b>WEST STREET, WORSBROUGH</b></p> <p><b>SITE PHOTOGRAPHS</b></p>			



TP05 in the west

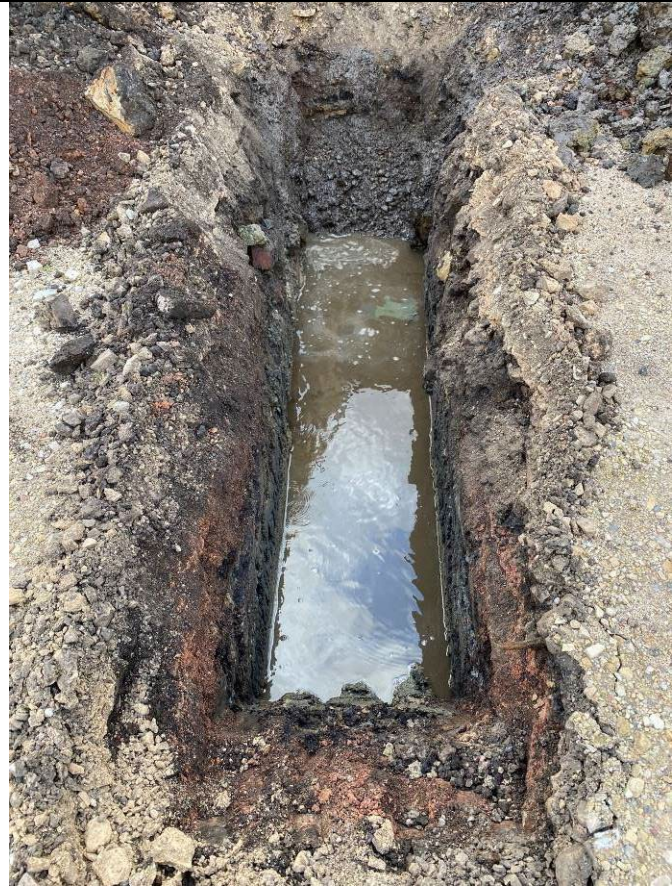


TP06 in the north

Prepared	SRI	Checked	KE	Date	10/03/22	Photo No. 12 & 14
			<p><b>HOOBER HOMES</b></p> <p><b>WEST STREET, WORSBROUGH</b></p> <p><b>SITE PHOTOGRAPHS</b></p>			



TP07 in the north east



TP08 in the east


Prepared	SRI	Checked	KE	Date	10/03/22	Photo No. 15 & 16
		<p><b>HOOBER HOMES</b></p> <p><b>WEST STREET, WORSBROUGH</b></p> <p><b>SITE PHOTOGRAPHS</b></p>				



**TP09 in the north west**



**TP10 in the north**


Prepared	SRI	Checked	KE	Date	04/04/22	Photo No. 17 & 18
			<b>HOOBER HOMES</b> <b>WEST STREET, WORSBROUGH</b> <b>SITE PHOTOGRAPHS</b>			



TP12 in the north east



TP13 in the north


Prepared	SRI	Checked	KE	Date	04/04/22	Photo No. 19 & 20
			<b>HOOBER HOMES</b> <b>WEST STREET, WORSBROUGH</b> <b>SITE PHOTOGRAPHS</b>			



TP14 in the south west



TP14 soil arisings


Prepared	SRI	Checked		Date	04/04/22	Photo No. 21 & 22
			<p><b>HOOBER HOMES</b></p> <p><b>WEST STREET, WORSBROUGH</b></p> <p><b>SITE PHOTOGRAPHS</b></p>			



TT01



TT01


Prepared	SRI	Checked	KE	Date	04/04/22	Photo No. 23 & 24
			<p><b>HOOBER HOMES</b></p> <p><b>WEST STREET, WORSBROUGH</b></p> <p><b>SITE PHOTOGRAPHS</b></p>			



TT02



TT03


Prepared	SRI	Checked	KE	Date	04/04/22	Photo No. 25 & 26
			<p><b>HOOBER HOMES</b></p> <p><b>WEST STREET, WORSBROUGH</b></p> <p><b>SITE PHOTOGRAPHS</b></p>			



**Overall mine cap area**



**Backfilled**

Prepared	SRI	Checked	KE	Date	04/04/22	Photo No. 27 & 28
			<p><b>HOOBER HOMES</b></p> <p><b>WEST STREET, WORSBROUGH</b></p> <p><b>SITE PHOTOGRAPHS</b></p>			

### **Appendix 3**

Geotechnical Results - TBC

## **Appendix 4**

Chemical Test Results - Eurofins Chemtest Reports 22-09399-02 and 22-13422-02  
Table of Assessment Values - Residential with Home-grown Produce End Use



# Amended Report

---

**Report No.:** 22-09399-2

**Initial Date of Issue:** 22-Mar-2022      **Date of Re-Issue:** 22-Apr-2022

**Client:** Eastwood & Partners

**Client Address:** St. Andrews House  
23 Kingfield Road  
Sheffield  
South Yorkshire  
S11 9AS

**Contact(s):** Geo  
Kate Edwards  
Sarah Illingworth

**Project:** 46967 West Street, Worsbrough


**Quotation No.:**      **Date Received:** 14-Mar-2022

**Order No.:**      **Date Instructed:** 15-Mar-2022

**No. of Samples:** 15

**Turnaround (Wkdays):** 27      **Results Due:** 22-Apr-2022

**Date Approved:** 22-Apr-2022

**Approved By:**  


**Details:** Stuart Henderson, Technical Manager

---

# Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:		22-09399	22-09399	22-09399	22-09399	22-09399	22-09399	22-09399	22-09399	22-09399
Quotation No.:		Chemtest Sample ID.:		1390166	1390167	1390168	1390169	1390170	1390171	1390172	1390173	
Order No.:		Client Sample Ref.:		MG	MG	MG	MG	MG	MG	MG	MG	MG
		Client Sample ID.:		TP01	TP02	TP02	TP03	TP04	TP04	TP05	TP06	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		0.1	0.2	1.7	0.1	0.2	1.5	0.1	0.4	
		Bottom Depth (m):		0.2	0.3	1.8	0.2	0.3	1.6	0.2	0.5	
		Date Sampled:		10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	
		Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	
Determinand	Accred.	SOP	Units	LOD								
ACM Type	U	2192		N/A	Fibres/Clumps	-	-	-	-	Fibres/Clumps	-	
Asbestos Identification	U	2192		N/A	Amosite	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	Chrysotile	No Asbestos Detected	
Asbestos by Gravimetry	U	2192	%	0.001	0.008					0.12		
Total Asbestos	U	2192	%	0.001	0.008					0.12		
Moisture	N	2030	%	0.020	33	13	15	15	13	39	20	22
Soil Colour	N	2040		N/A	Brown	Brown	Black	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones and Roots	Stones and Roots	Stones	Stones and Roots	Stones and Roots	Stones	Stones and Roots	Stones and Roots
Soil Texture	N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
pH	M	2010		4.0	8.5	8.5	8.1	8.2	8.1	6.4	8.0	8.0
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.036	0.051	0.070	0.042	0.24	0.11	0.096	0.025
Total Sulphur	M	2175	%	0.010	0.21	0.27	1.1	0.36	0.21	0.059	0.47	0.48
Sulphate (Acid Soluble)	U	2430	%	0.010	0.078	0.070	0.077	0.14	0.26	0.084	0.20	0.013
Arsenic	M	2450	mg/kg	1.0	33	34	81	54	36	6.8	59	51
Cadmium	M	2450	mg/kg	0.10	1.4	1.2	1.9	2.2	0.87	< 0.10	0.30	< 0.10
Chromium	M	2450	mg/kg	1.0	42	64	44	23	13	16	16	13
Copper	M	2450	mg/kg	0.50	96	250	190	80	130	19	85	120
Mercury	M	2450	mg/kg	0.10	0.23	0.24	0.34	0.25	0.23	< 0.10	0.45	0.24
Nickel	M	2450	mg/kg	0.50	48	62	86	44	34	14	38	66
Lead	M	2450	mg/kg	0.50	180	160	210	330	450	17	180	280
Selenium	M	2450	mg/kg	0.20	0.60	0.47	2.8	0.86	1.3	0.30	1.0	1.1
Zinc	M	2450	mg/kg	0.50	360	330	580	250	390	46	120	71
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20			63			0.47		
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0			< 1.0			< 1.0		
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0			< 1.0			6.7		
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0			< 1.0			48		
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0			27			83		
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0			71			54		
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0			96			< 1.0		
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0			340			< 1.0		
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0			< 1.0			< 1.0		
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0			530			190		
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0			< 1.0			< 1.0		
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0			< 1.0			19		
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0			< 1.0			< 1.0		

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:		22-09399	22-09399	22-09399	22-09399	22-09399	22-09399	22-09399	22-09399	22-09399
Quotation No.:		Chemtest Sample ID.:		1390166	1390167	1390168	1390169	1390170	1390171	1390172	1390173	
Order No.:		Client Sample Ref.:		MG	MG	MG	MG	MG	MG	MG	MG	MG
		Client Sample ID.:		TP01	TP02	TP02	TP03	TP04	TP04	TP05	TP06	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):		0.1	0.2	1.7	0.1	0.2	1.5	0.1	0.4	
		Bottom Depth (m):		0.2	0.3	1.8	0.2	0.3	1.6	0.2	0.5	
		Date Sampled:		10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022
		Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	
Determinand	Accred.	SOP	Units	LOD								
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0			8.1			< 1.0		
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0			350			85		
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0			1300			2800		
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0			700			28000		
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0			11			3100		
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0			2400			34000		
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0			2900			34000		
Naphthalene	M	2800	mg/kg	0.10	< 0.10	1.1	1.3	0.45	0.23	< 0.10	< 0.10	0.74
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	1.4	0.20	0.16	0.24	< 0.10	< 0.10	0.35
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	1.8	0.60	0.15	0.11	< 0.10	< 0.10	0.16
Fluorene	M	2800	mg/kg	0.10	< 0.10	1.4	0.55	0.14	0.15	< 0.10	< 0.10	0.52
Phenanthrene	M	2800	mg/kg	0.10	2.2	20	9.1	2.1	2.4	< 0.10	1.1	4.1
Anthracene	M	2800	mg/kg	0.10	0.48	9.3	1.7	0.51	0.68	< 0.10	0.22	1.4
Fluoranthene	M	2800	mg/kg	0.10	5.3	74	5.4	4.3	6.6	< 0.10	1.7	5.0
Pyrene	M	2800	mg/kg	0.10	4.7	69	4.8	3.9	6.1	< 0.10	1.6	4.0
Benzo[a]anthracene	M	2800	mg/kg	0.10	3.8	41	3.0	2.7	3.7	< 0.10	1.1	2.9
Chrysene	M	2800	mg/kg	0.10	3.9	40	3.0	2.6	3.7	< 0.10	0.86	2.1
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	5.5	54	3.6	4.0	5.2	< 0.10	1.2	2.4
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	1.9	21	1.3	1.4	1.7	< 0.10	0.21	0.93
Benzo[a]pyrene	M	2800	mg/kg	0.10	4.1	49	2.8	3.4	4.2	< 0.10	0.96	2.2
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	2.6	30	1.6	2.3	2.8	< 0.10	0.61	1.0
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.64	5.3	0.41	0.53	0.58	< 0.10	0.19	0.23
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	2.4	28	1.6	2.3	2.5	< 0.10	0.61	0.93
Total Of 16 PAH's	N	2800	mg/kg	2.0	38	450	41	31	41	< 2.0	10	29
PCB 28	U	2815	mg/kg	0.010								< 0.010
PCB 52	U	2815	mg/kg	0.010								< 0.010
PCB 90+101	U	2815	mg/kg	0.010								< 0.010
PCB 118	U	2815	mg/kg	0.010								< 0.010
PCB 153	U	2815	mg/kg	0.010								< 0.010
PCB 138	U	2815	mg/kg	0.010								< 0.010
PCB 180	U	2815	mg/kg	0.010								< 0.010
Total PCBs (7 Congeners)	U	2815	mg/kg	0.10								< 0.10
Total Phenols	M	2920	mg/kg	0.10			< 0.10			< 0.10		

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:		22-09399	22-09399	22-09399	22-09399	22-09399	22-09399	22-09399	22-09399
Quotation No.:		Chemtest Sample ID.:		1390174	1390175	1390176	1390177	1390178	1390179	1390180	
Order No.:		Client Sample Ref.:		MG	MG	NAT	NAT	NAT	NAT		
		Client Sample ID.:		TP07	TP08	TP04	TP07	TP02	TP05	TP01	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		0.3	0.3	1.7	0.1	2.8	2.0	2.6	
		Bottom Depth (m):		0.4	0.4	1.8	1.1	2.9	2.1	2.7	
		Date Sampled:		10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022
		Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD							
ACM Type	U	2192		N/A	-	Fibres/Clumps	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	Chrysotile	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Asbestos by Gravimetry	U	2192	%	0.001		0.001					
Total Asbestos	U	2192	%	0.001		0.001					
Moisture	N	2030	%	0.020	21	19	12	11	18	20	43
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Black
Other Material	N	2040		N/A	Stones and Roots	Stones and Roots	Stones	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Clay	Clay	Clay	Clay	Sand
pH	M	2010		4.0	7.5	7.8	8.2	7.9	7.5	7.8	7.4
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.022	0.26	0.033	0.036	0.064	1.1	0.43
Total Sulphur	M	2175	%	0.010	0.43	0.27	0.023	0.024	0.026	1.1	0.88
Sulphate (Acid Soluble)	U	2430	%	0.010	0.052	0.086	0.021	0.012	0.052	0.38	0.084
Arsenic	M	2450	mg/kg	1.0	19	41	13	13	5.8	74	24
Cadmium	M	2450	mg/kg	0.10	0.78	0.60	< 0.10	0.15	0.10	1.6	0.72
Chromium	M	2450	mg/kg	1.0	12	32	17	13	15	25	11
Copper	M	2450	mg/kg	0.50	74	110	27	19	20	260	62
Mercury	M	2450	mg/kg	0.10	0.12	0.37	< 0.10	< 0.10	< 0.10	0.27	0.13
Nickel	M	2450	mg/kg	0.50	29	55	34	29	28	67	20
Lead	M	2450	mg/kg	0.50	90	220	20	16	16	910	100
Selenium	M	2450	mg/kg	0.20	0.69	0.67	0.25	0.32	0.28	2.7	0.52
Zinc	M	2450	mg/kg	0.50	320	280	71	53	49	750	340
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	33	13					12
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	27	13	< 1.0				11
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	13	7.7	< 1.0				11
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	18	11	< 1.0				< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	40	70	< 1.0				78
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	4.2	< 1.0				< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	98	110	< 5.0				99
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:		22-09399	22-09399	22-09399	22-09399	22-09399	22-09399	22-09399	22-09399
Quotation No.:		Chemtest Sample ID.:		1390174	1390175	1390176	1390177	1390178	1390179	1390180	
Order No.:		Client Sample Ref.:		MG	MG	NAT	NAT	NAT	NAT		
		Client Sample ID.:		TP07	TP08	TP04	TP07	TP02	TP05	TP01	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		0.3	0.3	1.7	0.1	2.8	2.0	2.6	
		Bottom Depth (m):		0.4	0.4	1.8	1.1	2.9	2.1	2.7	
		Date Sampled:		10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	10-Mar-2022	
		Asbestos Lab:		COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	
Determinand	Accred.	SOP	Units	LOD							
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	16	12	< 1.0				22
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	88	340	< 1.0				88
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0				32
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	100	350	< 5.0				140
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	200	450	< 10				240
Naphthalene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.79	0.27
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.31	0.28
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.17	0.15
Fluorene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.29	0.24
Phenanthrene	M	2800	mg/kg	0.10	0.65	1.3	0.24	< 0.10	< 0.10	2.9	2.9
Anthracene	M	2800	mg/kg	0.10	0.12	0.43	0.14	< 0.10	< 0.10	0.56	0.43
Fluoranthene	M	2800	mg/kg	0.10	0.59	4.3	0.55	< 0.10	< 0.10	5.4	5.9
Pyrene	M	2800	mg/kg	0.10	0.57	4.2	0.49	< 0.10	< 0.10	6.5	4.8
Benzo[a]anthracene	M	2800	mg/kg	0.10	0.39	2.9	0.56	< 0.10	< 0.10	3.6	2.7
Chrysene	M	2800	mg/kg	0.10	0.35	3.0	0.49	< 0.10	< 0.10	5.0	2.9
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	0.43	4.0	0.53	< 0.10	< 0.10	6.6	4.4
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	0.17	1.8	0.45	< 0.10	< 0.10	2.6	1.6
Benzo[a]pyrene	M	2800	mg/kg	0.10	0.28	3.7	0.54	< 0.10	< 0.10	5.3	3.7
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	0.27	2.3	0.40	< 0.10	< 0.10	3.6	2.3
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.13	0.29	0.39	< 0.10	< 0.10	1.1	0.66
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	0.19	1.8	0.46	< 0.10	< 0.10	3.1	2.1
Total Of 16 PAH's	N	2800	mg/kg	2.0	4.1	30	5.2	< 2.0	< 2.0	48	35
PCB 28	U	2815	mg/kg	0.010							
PCB 52	U	2815	mg/kg	0.010							
PCB 90+101	U	2815	mg/kg	0.010							
PCB 118	U	2815	mg/kg	0.010							
PCB 153	U	2815	mg/kg	0.010							
PCB 138	U	2815	mg/kg	0.010							
PCB 180	U	2815	mg/kg	0.010							
Total PCBs (7 Congeners)	U	2815	mg/kg	0.10							
Total Phenols	M	2920	mg/kg	0.10	< 0.10	< 0.10					< 0.10

## Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

## **Report Information**

### **Key**

---

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

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

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

### **Sample Deviation Codes**

---

A - Date of sampling not supplied

B - Sample age exceeds stability time (sampling to extraction)

C - Sample not received in appropriate containers

D - Broken Container

E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### **Sample Retention and Disposal**

---

All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

[customerservices@chemtest.com](mailto:customerservices@chemtest.com)



# Amended Report

---

**Report No.:** 22-13422-2

**Initial Date of Issue:** 20-Apr-2022      **Date of Re-Issue:** 03-May-2022

**Client:** Eastwood & Partners

**Client Address:** St. Andrews House  
23 Kingfield Road  
Sheffield  
South Yorkshire  
S11 9AS

**Contact(s):** Geo  
Kate Edwards  
Sarah Illingworth

**Project:** 46967 West Street, Worsbrough

**Quotation No.:**      **Date Received:** 08-Apr-2022

**Order No.:**      **Date Instructed:** 08-Apr-2022

**No. of Samples:** 12

**Turnaround (Wkdays):** 16      **Results Due:** 04-May-2022

**Date Approved:** 03-May-2022

**Approved By:**

**Details:** Stuart Henderson, Technical  
Manager

---

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:		22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422
Quotation No.:		Chemtest Sample ID.:		1408523	1408524	1408525	1408526	1408527	1408528	1408529	1408530	1408531	1408531
Order No.:		Client Sample Ref.:		MG	MG	MG	MG	MG	MG	MG	MG	MG	MG
		Client Sample ID.:		TP09	TP09	TP11	TP14	TP14	TP14	TP14	TP14	TP12	TP13
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):		0.30	1.90	0.30	0.60	1.20	2.60	3.30	0.40	0.10	
		Bottom Depth (m):		0.40	2.00	0.30	0.70	1.30	2.70	3.40	0.50	0.20	
		Date Sampled:		04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022
		Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD									
ACM Type	U	2192		N/A	-	-	Fibres/Clumps	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	Crocidolite	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Asbestos by Gravimetry	U	2192	%	0.001			0.001						
Total Asbestos	U	2192	%	0.001			0.001						
Moisture	N	2030	%	0.020	16	17	14	15	18	29	54	29	12
Soil Colour	N	2040		N/A	Black	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Clay	Sand	Sand	Sand	Sand	Sand	Sand	Sand
pH	M	2010		4.0	8.2	8.4	8.2	8.1	8.3	8.5	7.7	8.3	8.9
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.077	0.027	0.15	0.20	0.069	0.074	1.5	0.093	0.020
Total Sulphur	M	2175	%	0.010	0.39	0.013	0.22	0.32	0.23	0.64	5.2	0.55	0.089
Sulphate (Acid Soluble)	U	2430	%	0.010	0.11	< 0.010	0.12	0.15	0.13	0.075	0.79	0.26	0.041
Arsenic	M	2455	mg/kg	1.0	42	5.0	19	38	95	50	45	67	17
Cadmium	M	2455	mg/kg	0.10	0.31	< 0.10	0.23	0.74	0.35	0.15	2.4	0.17	0.27
Chromium	M	2455	mg/kg	1.0	20	13	16	88	19	18	23	12	32
Copper	M	2455	mg/kg	0.50	120	19	89	110	110	81	98	57	52
Mercury	M	2455	mg/kg	0.10	0.25	< 0.10	0.13	0.45	< 0.10	< 0.10	0.25	< 0.10	0.17
Nickel	M	2455	mg/kg	0.50	42	16	23	81	75	37	160	34	34
Lead	M	2455	mg/kg	0.50	170	18	270	120	25	14	110	30	57
Selenium	M	2455	mg/kg	0.20	1.3	0.20	0.38	0.58	1.0	1.9	2.6	1.2	< 0.20
Zinc	M	2455	mg/kg	0.50	120	35	87	200	53	60	1300	84	190
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	18	0.77	9.7		5.4		14		
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0		< 1.0		< 1.0		
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0		< 1.0		< 1.0		
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0		< 1.0		< 1.0		
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	8.9	< 1.0	< 1.0		< 1.0		< 1.0		
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	17	< 1.0	< 1.0		< 1.0		19		
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	5.3	< 1.0	< 1.0		< 1.0		190		
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	65	< 1.0	130		< 1.0		920		
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0		< 1.0		< 1.0		
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	96	< 5.0	130		< 5.0		1100		
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0		< 1.0		< 1.0		
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0		< 1.0		< 1.0		
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0		< 1.0		< 1.0		
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0		< 1.0		< 1.0		

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:		22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422
Quotation No.:		Chemtest Sample ID.:		1408523	1408524	1408525	1408526	1408527	1408528	1408529	1408530	1408531
Order No.:		Client Sample Ref.:		MG	MG	MG	MG	MG	MG	MG	MG	MG
		Client Sample ID.:		TP09	TP09	TP11	TP14	TP14	TP14	TP14	TP12	TP13
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):		0.30	1.90	0.30	0.60	1.20	2.60	3.30	0.40	0.10
		Bottom Depth (m):		0.40	2.00	0.30	0.70	1.30	2.70	3.40	0.50	0.20
		Date Sampled:		04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022
		Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD								
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	5.8	< 1.0	< 1.0	< 1.0		17		
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	100	< 1.0	< 1.0	< 1.0		450		
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	810	< 1.0	120	46		2500		
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	59	< 1.0	< 1.0	< 1.0		160		
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	980	< 5.0	120	46		3100		
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	1100	< 10	250	46		4300		
Dichlorodifluoromethane	U	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Chloromethane	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Vinyl Chloride	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Bromomethane	M	2760	µg/kg	20	< 20			< 20		< 20		
Chloroethane	U	2760	µg/kg	2.0	< 2.0			< 2.0		< 2.0		
Trichlorofluoromethane	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,1-Dichloroethene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,1-Dichloroethane	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Bromochloromethane	U	2760	µg/kg	5.0	< 5.0			< 5.0		< 5.0		
Trichloromethane	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,1,1-Trichloroethane	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Tetrachloromethane	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,1-Dichloropropene	U	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Benzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		4.0		
1,2-Dichloroethane	M	2760	µg/kg	2.0	< 2.0			< 2.0		< 2.0		
Trichloroethene	N	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,2-Dichloropropane	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Dibromomethane	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Bromodichloromethane	M	2760	µg/kg	5.0	< 5.0			< 5.0		< 5.0		
cis-1,3-Dichloropropene	N	2760	µg/kg	10	< 10			< 10		< 10		
Toluene	M	2760	µg/kg	1.0	< 1.0			< 1.0		6.1		
Trans-1,3-Dichloropropene	N	2760	µg/kg	10	< 10			< 10		< 10		
1,1,2-Trichloroethane	M	2760	µg/kg	10	< 10			< 10		< 10		
Tetrachloroethene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,3-Dichloropropane	U	2760	µg/kg	2.0	< 2.0			< 2.0		< 2.0		
Dibromochloromethane	U	2760	µg/kg	10	< 10			< 10		< 10		
1,2-Dibromoethane	M	2760	µg/kg	5.0	< 5.0			< 5.0		< 5.0		
Chlorobenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0	< 2.0			< 2.0		< 2.0		

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:		22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422
Quotation No.:		Chemtest Sample ID.:		1408523	1408524	1408525	1408526	1408527	1408528	1408529	1408530	1408531
Order No.:		Client Sample Ref.:		MG	MG	MG	MG	MG	MG	MG	MG	MG
		Client Sample ID.:		TP09	TP09	TP11	TP14	TP14	TP14	TP14	TP12	TP13
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):		0.30	1.90	0.30	0.60	1.20	2.60	3.30	0.40	0.10
		Bottom Depth (m):		0.40	2.00	0.30	0.70	1.30	2.70	3.40	0.50	0.20
		Date Sampled:		04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022
		Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD								
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0			< 1.0		16		
o-Xylene	M	2760	µg/kg	1.0	< 1.0			< 1.0		4.0		
Styrene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Tribromomethane	U	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Isopropylbenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Bromobenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,2,3-Trichloropropane	N	2760	µg/kg	50	< 50			< 50		< 50		
N-Propylbenzene	U	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
2-Chlorotoluene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
4-Chlorotoluene	U	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Tert-Butylbenzene	U	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Sec-Butylbenzene	U	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,3-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
4-Isopropyltoluene	U	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,4-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
N-Butylbenzene	U	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,2-Dichlorobenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50	< 50			< 50		< 50		
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
Hexachlorobutadiene	U	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0	< 2.0			< 2.0		< 2.0		
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0		
N-Nitrosodimethylamine	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Phenol	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2-Chlorophenol	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Bis-(2-Chloroethyl)Ether	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
1,3-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
1,4-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
1,2-Dichlorobenzene	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2-Methylphenol	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Bis(2-Chloroisopropyl)Ether	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Hexachloroethane	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
N-Nitrosodi-n-propylamine	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
4-Methylphenol	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:		22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422
Quotation No.:		Chemtest Sample ID.:		1408523	1408524	1408525	1408526	1408527	1408528	1408529	1408530	1408531
Order No.:		Client Sample Ref.:		MG	MG	MG	MG	MG	MG	MG	MG	MG
		Client Sample ID.:		TP09	TP09	TP11	TP14	TP14	TP14	TP14	TP12	TP13
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):		0.30	1.90	0.30	0.60	1.20	2.60	3.30	0.40	0.10
		Bottom Depth (m):		0.40	2.00	0.30	0.70	1.30	2.70	3.40	0.50	0.20
		Date Sampled:		04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022
		Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD								
Nitrobenzene	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Isophorone	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2-Nitrophenol	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2,4-Dimethylphenol	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Bis(2-Chloroethoxy)Methane	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2,4-Dichlorophenol	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
1,2,4-Trichlorobenzene	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Naphthalene	M	2790	mg/kg	0.50	1.0			< 0.50		1.9		
4-Chloroaniline	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Hexachlorobutadiene	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
4-Chloro-3-Methylphenol	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2-Methylnaphthalene	M	2790	mg/kg	0.50	1.2			< 0.50		1.8		
4-Nitrophenol	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2,4,6-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2,4,5-Trichlorophenol	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2-Chloronaphthalene	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2-Nitroaniline	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Acenaphthylene	M	2790	mg/kg	0.50	2.0			< 0.50		2.3		
Dimethylphthalate	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2,6-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Acenaphthene	M	2790	mg/kg	0.50	< 0.50			< 0.50		1.6		
3-Nitroaniline	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Dibenzofuran	M	2790	mg/kg	0.50	1.0			< 0.50		< 0.50		
4-Chlorophenylphenylether	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2,4-Dinitrotoluene	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Fluorene	M	2790	mg/kg	0.50	0.77			< 0.50		3.0		
Diethyl Phthalate	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
4-Nitroaniline	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Azobenzene	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
4-Bromophenylphenyl Ether	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Hexachlorobenzene	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Pentachlorophenol	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50		
Phenanthrene	M	2790	mg/kg	0.50	17			< 0.50		16		
Anthracene	M	2790	mg/kg	0.50	4.3			< 0.50		11		
Carbazole	M	2790	mg/kg	0.50	0.77			< 0.50		1.2		

## Results - Soil

**Project: 46967 West Street, Worsbrough**

<b>Client: Eastwood &amp; Partners</b>		<b>Chemtest Job No.:</b>		22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	22-13422	
Quotation No.:		<b>Chemtest Sample ID.:</b>		1408523	1408524	1408525	1408526	1408527	1408528	1408529	1408530	1408531	
Order No.:		Client Sample Ref.:		MG	MG	MG	MG	MG	MG	MG	MG	MG	
		Client Sample ID.:		TP09	TP09	TP11	TP14	TP14	TP14	TP14	TP12	TP13	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		0.30	1.90	0.30	0.60	1.20	2.60	3.30	0.40	0.10	
		Bottom Depth (m):		0.40	2.00	0.30	0.70	1.30	2.70	3.40	0.50	0.20	
		Date Sampled:		04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	04-Apr-2022	
		Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM		
<b>Determinand</b>	<b>Accred.</b>	<b>SOP</b>	<b>Units</b>	<b>LOD</b>									
Di-N-Butyl Phthalate	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50			
Fluoranthene	M	2790	mg/kg	0.50	37			< 0.50		96			
Pyrene	M	2790	mg/kg	0.50	32			< 0.50		74			
Butylbenzyl Phthalate	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50			
Benzo[a]anthracene	M	2790	mg/kg	0.50	21			< 0.50		45			
Chrysene	M	2790	mg/kg	0.50	22			< 0.50		47			
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50			
Di-N-Octyl Phthalate	M	2790	mg/kg	0.50	< 0.50			< 0.50		< 0.50			
Benzo[b]fluoranthene	M	2790	mg/kg	0.50	9.8			< 0.50		21			
Benzo[k]fluoranthene	M	2790	mg/kg	0.50	10			< 0.50		19			
Benzo[a]pyrene	M	2790	mg/kg	0.50	9.7			< 0.50		21			
Indeno(1,2,3-c,d)Pyrene	M	2790	mg/kg	0.50	21			< 0.50		22			
Dibenz(a,h)Anthracene	M	2790	mg/kg	0.50	4.1			< 0.50		6.7			
Benzo[g,h,i]perylene	M	2790	mg/kg	0.50	12			< 0.50		21			
Naphthalene	M	2800	mg/kg	0.10	14	41	3.8	6.0	12	< 0.10	16	87	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	5.0	3.4	0.92	0.96	2.0	< 0.10	9.3	18	< 0.10
Acenaphthene	M	2800	mg/kg	0.10	0.63	1.5	0.17	0.85	0.29	< 0.10	3.3	3.9	< 0.10
Fluorene	M	2800	mg/kg	0.10	1.0	1.6	0.40	1.3	0.34	< 0.10	5.4	3.4	< 0.10
Phenanthrene	M	2800	mg/kg	0.10	13	1.3	2.0	18	0.79	< 0.10	23	3.3	3.8
Anthracene	M	2800	mg/kg	0.10	4.1	0.18	1.2	4.2	0.13	< 0.10	12	0.42	0.76
Fluoranthene	M	2800	mg/kg	0.10	41	0.73	5.0	27	0.43	< 0.10	87	1.6	4.0
Pyrene	M	2800	mg/kg	0.10	35	0.72	4.3	22	0.37	< 0.10	67	1.3	3.2
Benzo[a]anthracene	M	2800	mg/kg	0.10	26	0.45	3.2	12	0.13	< 0.10	46	0.76	1.8
Chrysene	M	2800	mg/kg	0.10	24	0.35	2.3	11	0.16	< 0.10	45	0.63	1.5
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	38	0.66	3.7	15	0.20	< 0.10	66	1.2	2.0
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	13	0.21	1.3	5.4	0.12	< 0.10	25	0.38	0.77
Benzo[a]pyrene	M	2800	mg/kg	0.10	32	0.66	3.2	13	0.19	< 0.10	59	0.77	1.7
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	23	0.49	1.6	9.0	0.15	< 0.10	37	0.69	0.90
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	5.1	0.13	0.44	1.7	0.14	< 0.10	7.7	0.12	0.21
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	19	0.36	1.4	7.8	0.18	< 0.10	31	0.66	1.1
Total Of 16 PAH's	N	2800	mg/kg	2.0	290	54	35	160	18	< 2.0	540	120	22
Total Phenols	M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10		< 0.10		0.26		

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:			22-13422	22-13422	22-13422
Quotation No.:		Chemtest Sample ID.:			1408532	1408533	1408534
Order No.:		Client Sample Ref.:			NAT	NAT	NAT
		Client Sample ID.:			TP11	TP12	TP13
		Sample Type:			SOIL	SOIL	SOIL
		Top Depth (m):			0.90	1.20	1.00
		Bottom Depth (m):			1.80	1.30	1.10
		Date Sampled:			04-Apr-2022	04-Apr-2022	04-Apr-2022
		Asbestos Lab:			DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD			
ACM Type	U	2192		N/A	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Asbestos by Gravimetry	U	2192	%	0.001			
Total Asbestos	U	2192	%	0.001			
Moisture	N	2030	%	0.020	19	18	16
Soil Colour	N	2040		N/A	Brown	Brown	Brown
Other Material	N	2040		N/A	None	Stones	Stones
Soil Texture	N	2040		N/A	Clay	Clay	Sand
pH	M	2010		4.0	8.2	8.3	8.4
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.13	0.057	0.16
Total Sulphur	M	2175	%	0.010	0.22	0.015	0.029
Sulphate (Acid Soluble)	U	2430	%	0.010	0.051	0.010	0.035
Arsenic	M	2455	mg/kg	1.0	11	4.4	10
Cadmium	M	2455	mg/kg	0.10	0.34	0.12	0.34
Chromium	M	2455	mg/kg	1.0	20	9.7	25
Copper	M	2455	mg/kg	0.50	18	13	34
Mercury	M	2455	mg/kg	0.10	0.11	< 0.10	< 0.10
Nickel	M	2455	mg/kg	0.50	28	9.9	51
Lead	M	2455	mg/kg	0.50	29	14	26
Selenium	M	2455	mg/kg	0.20	0.68	0.28	0.49
Zinc	M	2455	mg/kg	0.50	56	25	97
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20			
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0		
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0		
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0		
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0		
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0		
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0		
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0		
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0		
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0		
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0		
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0		
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0		
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0		

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:		22-13422	22-13422	22-13422
Quotation No.:		Chemtest Sample ID.:		1408532	1408533	1408534
Order No.:		Client Sample Ref.:		NAT	NAT	NAT
		Client Sample ID.:		TP11	TP12	TP13
		Sample Type:		SOIL	SOIL	SOIL
		Top Depth (m):		0.90	1.20	1.00
		Bottom Depth (m):		1.80	1.30	1.10
		Date Sampled:		04-Apr-2022	04-Apr-2022	04-Apr-2022
		Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD		
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	
Dichlorodifluoromethane	U	2760	µg/kg	1.0		
Chloromethane	M	2760	µg/kg	1.0		
Vinyl Chloride	M	2760	µg/kg	1.0		
Bromomethane	M	2760	µg/kg	20		
Chloroethane	U	2760	µg/kg	2.0		
Trichlorofluoromethane	M	2760	µg/kg	1.0		
1,1-Dichloroethene	M	2760	µg/kg	1.0		
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0		
1,1-Dichloroethane	M	2760	µg/kg	1.0		
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0		
Bromochloromethane	U	2760	µg/kg	5.0		
Trichloromethane	M	2760	µg/kg	1.0		
1,1,1-Trichloroethane	M	2760	µg/kg	1.0		
Tetrachloromethane	M	2760	µg/kg	1.0		
1,1-Dichloropropene	U	2760	µg/kg	1.0		
Benzene	M	2760	µg/kg	1.0		
1,2-Dichloroethane	M	2760	µg/kg	2.0		
Trichloroethene	N	2760	µg/kg	1.0		
1,2-Dichloropropane	M	2760	µg/kg	1.0		
Dibromomethane	M	2760	µg/kg	1.0		
Bromodichloromethane	M	2760	µg/kg	5.0		
cis-1,3-Dichloropropene	N	2760	µg/kg	10		
Toluene	M	2760	µg/kg	1.0		
Trans-1,3-Dichloropropene	N	2760	µg/kg	10		
1,1,2-Trichloroethane	M	2760	µg/kg	10		
Tetrachloroethene	M	2760	µg/kg	1.0		
1,3-Dichloropropane	U	2760	µg/kg	2.0		
Dibromochloromethane	U	2760	µg/kg	10		
1,2-Dibromoethane	M	2760	µg/kg	5.0		
Chlorobenzene	M	2760	µg/kg	1.0		
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0		

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:			22-13422	22-13422	22-13422
Quotation No.:		Chemtest Sample ID.:			1408532	1408533	1408534
Order No.:		Client Sample Ref.:			NAT	NAT	NAT
		Client Sample ID.:			TP11	TP12	TP13
		Sample Type:			SOIL	SOIL	SOIL
		Top Depth (m):			0.90	1.20	1.00
		Bottom Depth (m):			1.80	1.30	1.10
		Date Sampled:			04-Apr-2022	04-Apr-2022	04-Apr-2022
		Asbestos Lab:			DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD			
Ethylbenzene	M	2760	µg/kg	1.0			
m & p-Xylene	M	2760	µg/kg	1.0			
o-Xylene	M	2760	µg/kg	1.0			
Styrene	M	2760	µg/kg	1.0			
Tribromomethane	U	2760	µg/kg	1.0			
Isopropylbenzene	M	2760	µg/kg	1.0			
Bromobenzene	M	2760	µg/kg	1.0			
1,2,3-Trichloropropane	N	2760	µg/kg	50			
N-Propylbenzene	U	2760	µg/kg	1.0			
2-Chlorotoluene	M	2760	µg/kg	1.0			
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0			
4-Chlorotoluene	U	2760	µg/kg	1.0			
Tert-Butylbenzene	U	2760	µg/kg	1.0			
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0			
Sec-Butylbenzene	U	2760	µg/kg	1.0			
1,3-Dichlorobenzene	M	2760	µg/kg	1.0			
4-Isopropyltoluene	U	2760	µg/kg	1.0			
1,4-Dichlorobenzene	M	2760	µg/kg	1.0			
N-Butylbenzene	U	2760	µg/kg	1.0			
1,2-Dichlorobenzene	M	2760	µg/kg	1.0			
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50			
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0			
Hexachlorobutadiene	U	2760	µg/kg	1.0			
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0			
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0			
N-Nitrosodimethylamine	M	2790	mg/kg	0.50			
Phenol	M	2790	mg/kg	0.50			
2-Chlorophenol	M	2790	mg/kg	0.50			
Bis-(2-Chloroethyl)Ether	M	2790	mg/kg	0.50			
1,3-Dichlorobenzene	M	2790	mg/kg	0.50			
1,4-Dichlorobenzene	N	2790	mg/kg	0.50			
1,2-Dichlorobenzene	M	2790	mg/kg	0.50			
2-Methylphenol	M	2790	mg/kg	0.50			
Bis(2-Chloroisopropyl)Ether	M	2790	mg/kg	0.50			
Hexachloroethane	N	2790	mg/kg	0.50			
N-Nitrosodi-n-propylamine	M	2790	mg/kg	0.50			
4-Methylphenol	M	2790	mg/kg	0.50			

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:			22-13422	22-13422	22-13422
Quotation No.:		Chemtest Sample ID.:			1408532	1408533	1408534
Order No.:		Client Sample Ref.:			NAT	NAT	NAT
		Client Sample ID.:			TP11	TP12	TP13
		Sample Type:			SOIL	SOIL	SOIL
		Top Depth (m):			0.90	1.20	1.00
		Bottom Depth (m):			1.80	1.30	1.10
		Date Sampled:			04-Apr-2022	04-Apr-2022	04-Apr-2022
		Asbestos Lab:			DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD			
Nitrobenzene	M	2790	mg/kg	0.50			
Isophorone	M	2790	mg/kg	0.50			
2-Nitrophenol	N	2790	mg/kg	0.50			
2,4-Dimethylphenol	N	2790	mg/kg	0.50			
Bis(2-Chloroethoxy)Methane	M	2790	mg/kg	0.50			
2,4-Dichlorophenol	M	2790	mg/kg	0.50			
1,2,4-Trichlorobenzene	M	2790	mg/kg	0.50			
Naphthalene	M	2790	mg/kg	0.50			
4-Chloroaniline	N	2790	mg/kg	0.50			
Hexachlorobutadiene	M	2790	mg/kg	0.50			
4-Chloro-3-Methylphenol	M	2790	mg/kg	0.50			
2-Methylnaphthalene	M	2790	mg/kg	0.50			
4-Nitrophenol	N	2790	mg/kg	0.50			
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50			
2,4,6-Trichlorophenol	M	2790	mg/kg	0.50			
2,4,5-Trichlorophenol	M	2790	mg/kg	0.50			
2-Chloronaphthalene	M	2790	mg/kg	0.50			
2-Nitroaniline	M	2790	mg/kg	0.50			
Acenaphthylene	M	2790	mg/kg	0.50			
Dimethylphthalate	M	2790	mg/kg	0.50			
2,6-Dinitrotoluene	M	2790	mg/kg	0.50			
Acenaphthene	M	2790	mg/kg	0.50			
3-Nitroaniline	N	2790	mg/kg	0.50			
Dibenzofuran	M	2790	mg/kg	0.50			
4-Chlorophenylphenylether	M	2790	mg/kg	0.50			
2,4-Dinitrotoluene	M	2790	mg/kg	0.50			
Fluorene	M	2790	mg/kg	0.50			
Diethyl Phthalate	M	2790	mg/kg	0.50			
4-Nitroaniline	M	2790	mg/kg	0.50			
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50			
Azobenzene	M	2790	mg/kg	0.50			
4-Bromophenylphenyl Ether	M	2790	mg/kg	0.50			
Hexachlorobenzene	M	2790	mg/kg	0.50			
Pentachlorophenol	N	2790	mg/kg	0.50			
Phenanthrene	M	2790	mg/kg	0.50			
Anthracene	M	2790	mg/kg	0.50			
Carbazole	M	2790	mg/kg	0.50			

## Results - Soil

**Project: 46967 West Street, Worsbrough**

Client: Eastwood & Partners		Chemtest Job No.:		22-13422	22-13422	22-13422	
Quotation No.:		Chemtest Sample ID.:		1408532	1408533	1408534	
Order No.:		Client Sample Ref.:		NAT	NAT	NAT	
		Client Sample ID.:		TP11	TP12	TP13	
		Sample Type:		SOIL	SOIL	SOIL	
		Top Depth (m):		0.90	1.20	1.00	
		Bottom Depth (m):		1.80	1.30	1.10	
		Date Sampled:		04-Apr-2022	04-Apr-2022	04-Apr-2022	
		Asbestos Lab:		DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD			
Di-N-Butyl Phthalate	M	2790	mg/kg	0.50			
Fluoranthene	M	2790	mg/kg	0.50			
Pyrene	M	2790	mg/kg	0.50			
Butylbenzyl Phthalate	M	2790	mg/kg	0.50			
Benzo[a]anthracene	M	2790	mg/kg	0.50			
Chrysene	M	2790	mg/kg	0.50			
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50			
Di-N-Octyl Phthalate	M	2790	mg/kg	0.50			
Benzo[b]fluoranthene	M	2790	mg/kg	0.50			
Benzo[k]fluoranthene	M	2790	mg/kg	0.50			
Benzo[a]pyrene	M	2790	mg/kg	0.50			
Indeno(1,2,3-c,d)Pyrene	M	2790	mg/kg	0.50			
Dibenz(a,h)Anthracene	M	2790	mg/kg	0.50			
Benzo[g,h,i]perylene	M	2790	mg/kg	0.50			
Naphthalene	M	2800	mg/kg	0.10	7.7	37	17
Acenaphthylene	N	2800	mg/kg	0.10	0.55	2.8	1.5
Acenaphthene	M	2800	mg/kg	0.10	0.27	1.3	0.67
Fluorene	M	2800	mg/kg	0.10	0.34	1.5	0.72
Phenanthrene	M	2800	mg/kg	0.10	0.31	0.84	0.78
Anthracene	M	2800	mg/kg	0.10	< 0.10	< 0.10	0.19
Fluoranthene	M	2800	mg/kg	0.10	0.28	0.16	0.73
Pyrene	M	2800	mg/kg	0.10	0.27	0.13	0.58
Benzo[a]anthracene	M	2800	mg/kg	0.10	0.15	< 0.10	0.44
Chrysene	M	2800	mg/kg	0.10	0.13	< 0.10	0.39
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	0.15	< 0.10	0.39
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	0.10	< 0.10	0.11
Benzo[a]pyrene	M	2800	mg/kg	0.10	0.13	< 0.10	0.28
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	0.12	< 0.10	0.25
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.12	< 0.10	0.14
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	< 0.10	< 0.10	0.15
Total Of 16 PAH's	N	2800	mg/kg	2.0	11	44	24
Total Phenols	M	2920	mg/kg	0.10			

## Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquamem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2790	Semi-Volatile Organic Compounds (SVOCs) in Soils by GC-MS	Semi-volatile organic compounds(cf. USEPA Method 8270)	Acetone/Hexane extraction / GC-MS
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

## **Report Information**

### **Key**

---

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

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

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

### **Sample Deviation Codes**

---

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### **Sample Retention and Disposal**

---

All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:


[customerservices@chemtest.com](mailto:customerservices@chemtest.com)

Inorganic Compounds	Human Health - Residential with Homegrown Produce (mg/kg)
Arsenic	37
Cadmium	11
Chromium (III)	910
Chromium (VI)	6
Lead	200
Mercury	1.2
Nickel	180
Selenium	250
Copper	2400
Zinc	3700

Organic Compounds	Human Health - Residential with Homegrown Produce (mg/kg)		
	1% SOM	2.5% SOM	6% SOM
Naphthalene	2.3	5.6	13
Acenaphthene	210	510	1100
Acenaphthylene	170	420	920
Fluorene	170	400	860
Phenanthrene	95	220	440
Anthracene	2400	5400	11000
Fluoranthene	280	560	890
Pyrene	620	1200	2000
Benzo(a)anthracene	7.2	11	13
Chrysene	15	22	27
Benzo(b)fluoranthene	2.6	3.3	3.7
Benzo(k)fluoranthene	77	93	100
Benzo(a)pyrene	2.2	2.7	3.0
Dibenz(a,h)anthracene	0.24	0.28	0.3
Indeno(1,2,3-cd)pyrene	27	36	41
Benzo(g,h,i)perylene	320	340	350
Benzene	0.087	0.17	0.37
Toluene	130	290	660
Ethylbenzene	47	110	260
o-Xylene	60	140	330
m-Xylene	59	140	320
p-Xylene	56	130	310

Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3153. All rights reserved.

Prepared	KB	Checked	KE	Date	06.05.22	Job No	48404
----------	----	---------	----	------	----------	--------	-------

 <p><b>Eastwood</b> CONSULTING ENGINEERS</p> <p>St Andrew's House 23 Kingfield Road Sheffield S11 9AS</p> <p>Tel: (0114) 255 4554 Fax: (0114) 255 4330</p>	<p><b>WEST STREET, WORSBROUGH</b></p> <p><b>HOOBER HOMES</b></p> <p><b>ASSESSMENT CRITERIA – RESIDENTIAL WITH HOMEGROWN PRODUCE</b></p>
---	---

Contaminant	Phytotoxicity			
	pH	pH	pH	pH
	5.0 to 5.5	5.5 to 6.0	6.0 to 7.0	>7.0
Arsenic	50			
Cadmium	3			
Chromium	400			
Lead	300			
Mercury	1			
Nickel	50	60	75	110
Copper	80	100	135	200
Zinc	200	200	200	300


The assessment concentration for lead is the Category 4 Screening Level produced by Contaminated Land: Applications in Real Environments (CL:AIRE) and outlined in Appendix H of their report SP1010. The others have been taken from Nathanail, C. P., McCaffrey, C., Gillett, A., Ogden, R., and Nathanail, J., 2015, 'The LQM/CIEH S4ULs for Human Health Risk Assessment', Land Quality Press, Nottingham. The metals/metalloids are based on a sandy loam soil and 6% soil organic matter. The assessment values are 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. Instead, the modified mean value should be compared with the assessment concentration.

The assessment values for phytotoxicity are the levels at which plant growth is thought to be affected. They 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'.

Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3153. All rights reserved.

<b>Prepared</b>	KB	<b>Checked</b>	KE	<b>Date</b>	06.05.22	<b>Job No</b>	48404
-----------------	----	----------------	----	-------------	----------	---------------	-------

 <p><b>Eastwood</b> CONSULTING ENGINEERS</p> <p>St Andrew's House 23 Kingfield Road Sheffield S11 9AS</p> <p>Tel: (0114) 255 4554 Fax: (0114) 255 4330</p>	<p><b>WEST STREET, WORSBROUGH</b></p> <p><b>HOOBER HOMES</b></p> <p><b>ASSESSMENT CRITERIA – RESIDENTIAL WITH HOMEGROWN PRODUCE</b></p>
---	---

TPH Fraction	Intended Land Use Residential (mg/kg)		
	1% SOM	2.5% SOM	6% SOM
Aliphatic EC 5-6	42	78	160
Aliphatic EC >6-8	100	230	530
Aliphatic EC >8-10	27	65	150
Aliphatic EC >10-12	130 (48) <sup>vap</sup>	330 (118) <sup>vap</sup>	760 (283) <sup>vap</sup>
Aliphatic EC >12-16	1100 (24) <sup>sol</sup>	2400 (59) <sup>sol</sup>	4,300 (142) <sup>sol</sup>
Aliphatic EC >16-35	65,000 (8.48) <sup>f, sol</sup>	92,000 (21) <sup>f, sol</sup>	110,000 <sup>f</sup>
Aliphatic EC >35-44	65,000 (8.48) <sup>f, sol</sup>	92,000 (21) <sup>f, sol</sup>	110,000 <sup>f</sup>
Aromatic EC 5-7	70	140	300
Aromatic EC >7-8	130	290	660
Aromatic EC >8-10	34	83	190
Aromatic EC >10-12	74	180	380
Aromatic EC >12-16	140	330	660
Aromatic EC >16-21	260 <sup>f</sup>	540 <sup>f</sup>	930 <sup>f</sup>
Aromatic EC >21-35	1,100 <sup>f</sup>	1,500 <sup>f</sup>	1,700 <sup>f</sup>
Aromatic EC >35-44	1,100 <sup>f</sup>	1,500 <sup>f</sup>	1,700 <sup>f</sup>

<sup>f</sup> oral, dermal, and inhalation exposure compared with oral HCV

<sup>sol</sup> S4UL presented exceeds the solubility saturation limit, which is presented in brackets


<sup>vap</sup> S4UL presented exceed the vapour saturation limit, which is presented in brackets

The assessment criteria for each of the petroleum hydrocarbon fractions have been taken from Nathanail, C. P., McCaffrey, C., Gillett, A., Ogden, R., and Nathanail, J., 2015, 'The LQM/CIEH S4ULs for Human Health Risk Assessment', Land Quality Press, Nottingham. These are also all based on a sandy loam soil.

Within the Environment Agency Science Report P5-080/TR3, Askari, K. & Pollard, S., 2005 'The UK Approach for Evaluating Human Health Risks from Petroleum Hydrocarbons in Soils' it is stated that the assessment values should not be considered individually; instead the potential additive effects should be calculated. This is achieved by calculating an individual Hazard Quotient (HQ) for each fraction. The HQ is the proportion of the assessment concentration represented by the recorded concentration. The HQs are then added together to form a Hazard Index (HI) and where this exceeds unity a potential significant risk to human health may exist.

Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3153. All rights reserved.

Prepared	KB	Checked	KE	Date	06.05.22	Job No	48404
----------	----	---------	----	------	----------	--------	-------

 <p><b>Eastwood</b> CONSULTING ENGINEERS</p> <p>St Andrew's House 23 Kingfield Road Sheffield S11 9AS</p> <p>Tel: (0114) 255 4554 Fax: (0114) 255 4330</p>	<p><b>WEST STREET, WORSBROUGH</b></p> <p><b>HOOBER HOMES</b></p> <p><b>ASSESSMENT CRITERIA – RESIDENTIAL WITH HOMEGROWN PRODUCE</b></p>
---	---