



**ARP GEOTECHNICAL LIMITED**  
**CHARTERED CONSULTING ENGINEERS**

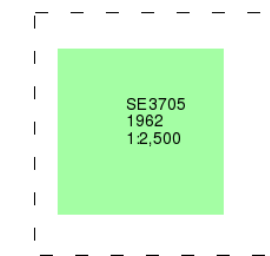
### Ordnance Survey Plan

**Published 1962**

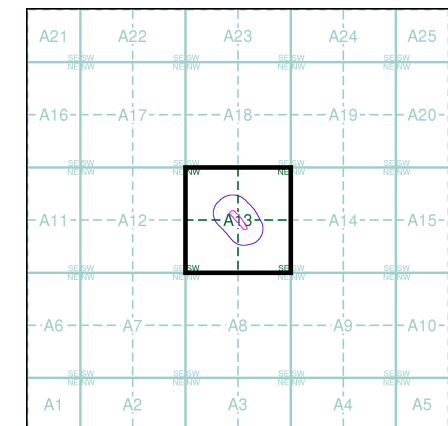
**Source map scale - 1:2,500**

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

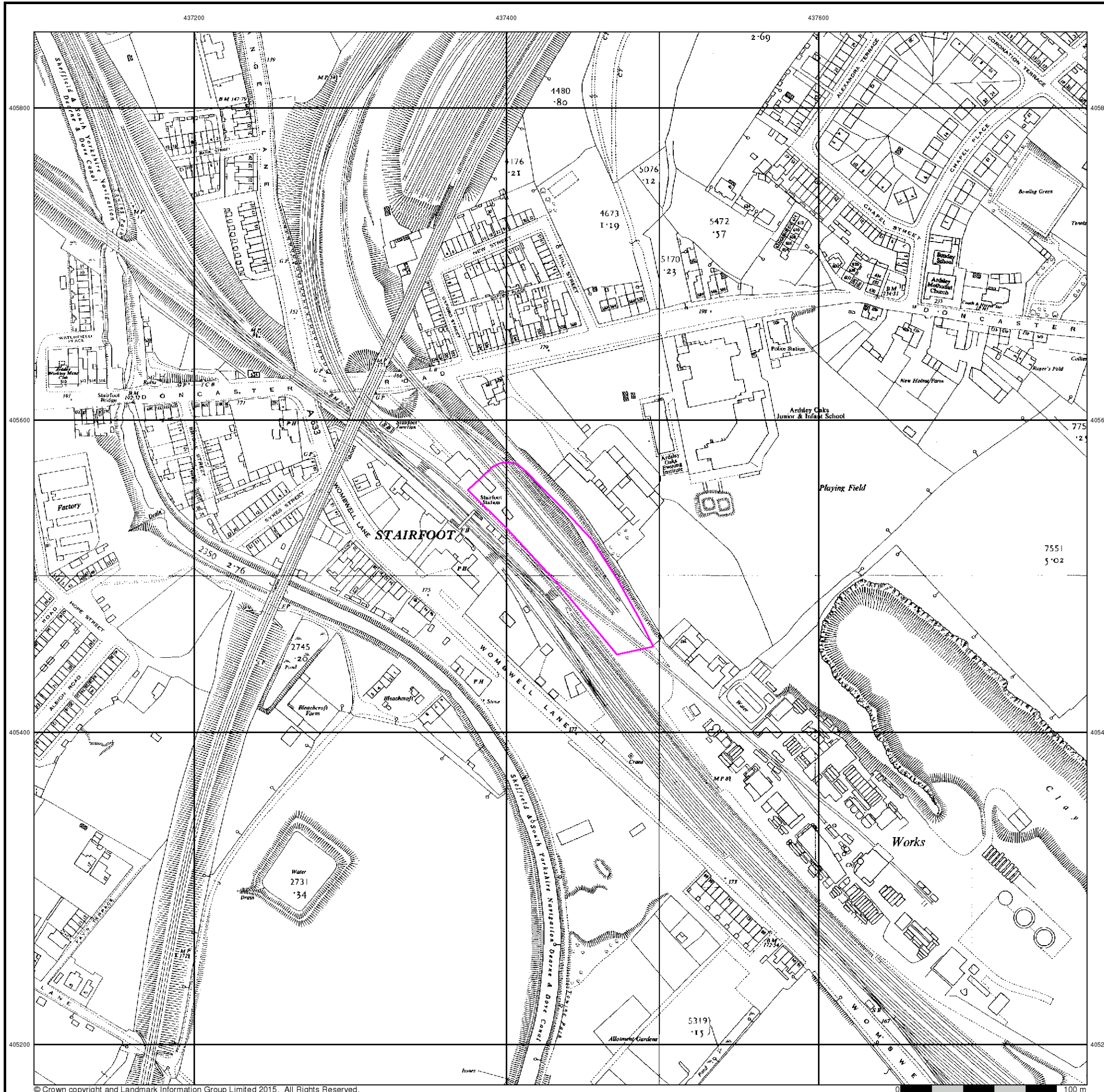
Order Number: 82204602\_1\_1  
 Customer Ref: BLD/01  
 National Grid Reference: 437440, 405510  
 Slice: A  
 Site Area (Ha): 0.48  
 Search Buffer (m): 100

### Site Details

Land South of Doncaster Road, Stairfoot, BARNSELY, South Yorkshire



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





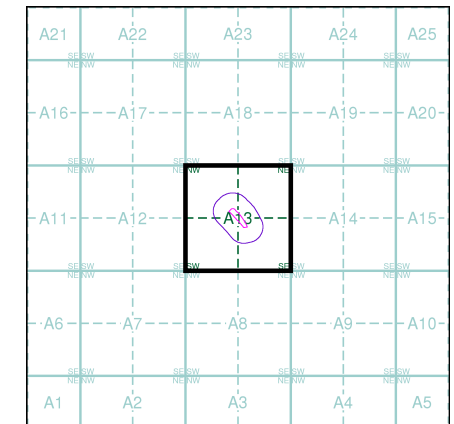
**Ordnance Survey Plan**  
**Published 1967 - 1990**  
**Source map scale - 1:1,250**

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)**

SE3705NW 1973 1:1,250	SE3705NE 1967 1:1,250
SE3705SW 1972 1:1,250	SE3705SE 1990 1:1,250

**Historical Map - Segment A13**

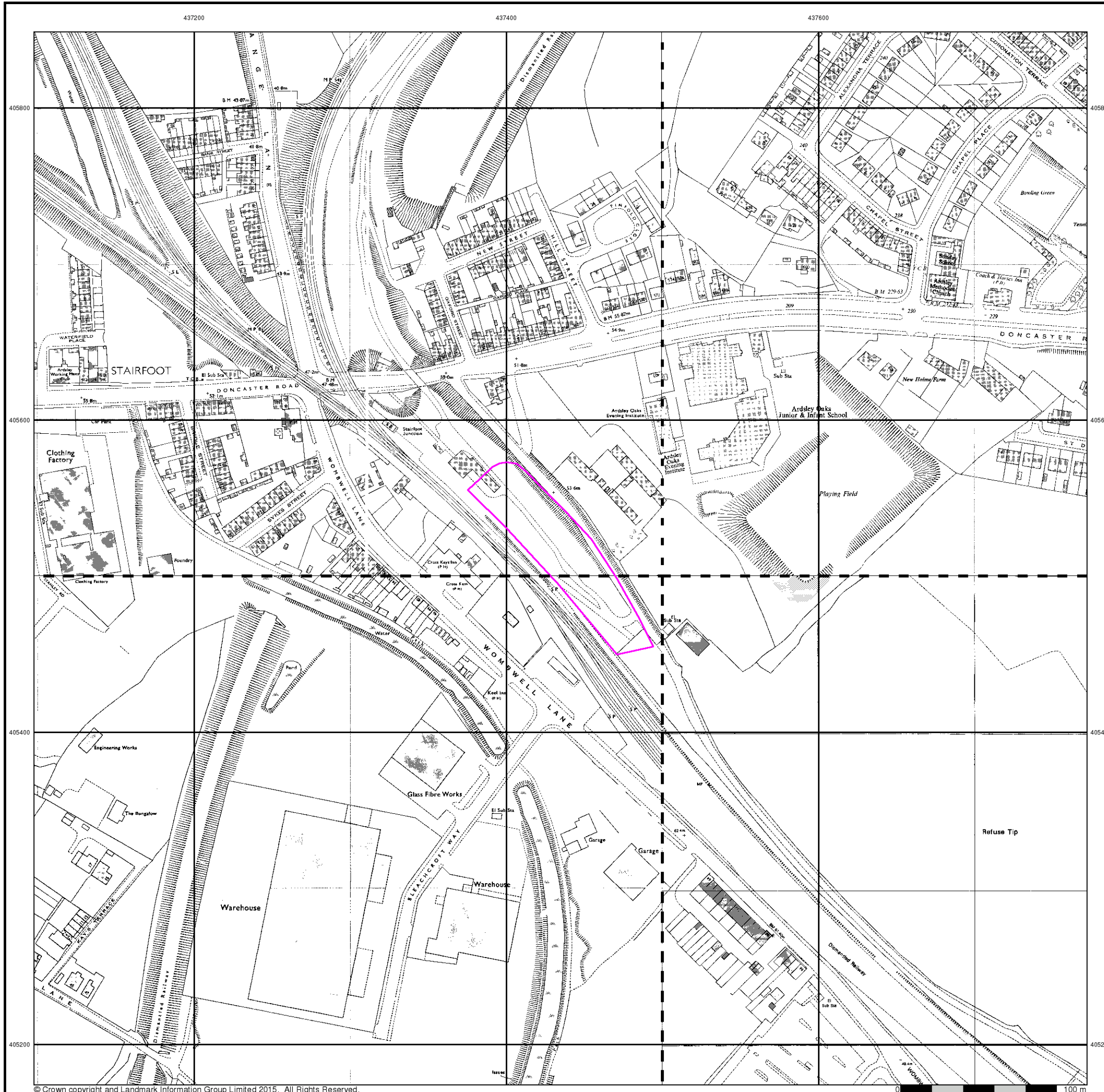


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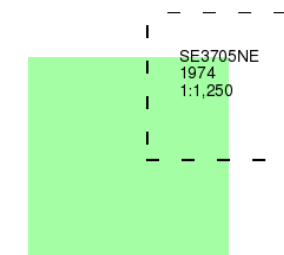
## Supply of Unpublished Survey Information

**Published 1974**

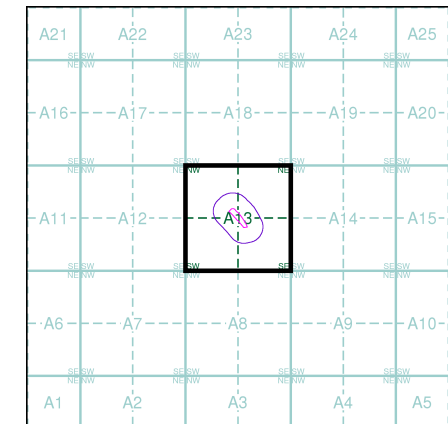
**Source map scale - 1:1,250**

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a 'work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

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



### Historical Map - Segment A13

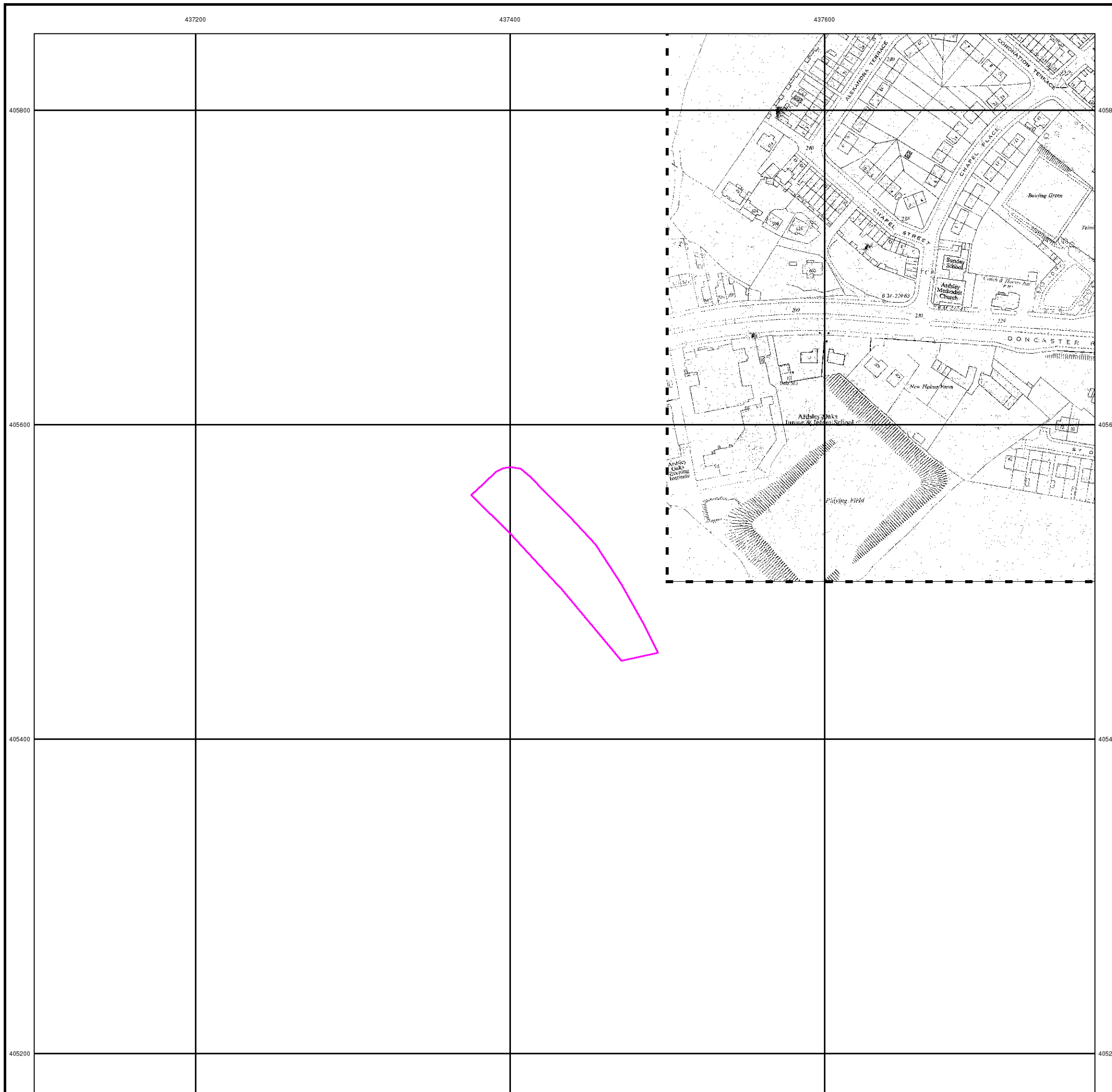


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**Additional SIMs**

**Published 1977 - 1983**

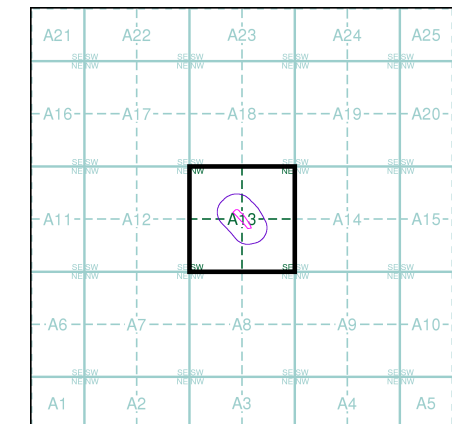
**Source map scale - 1:1,250**

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)**

SE3705NW	SE3705NE
1982	1977
1:1,250	1:1,250
SE3705SW	SE3705SE
1982	1983
1:1,250	1:1,250

**Historical Map - Segment A13**

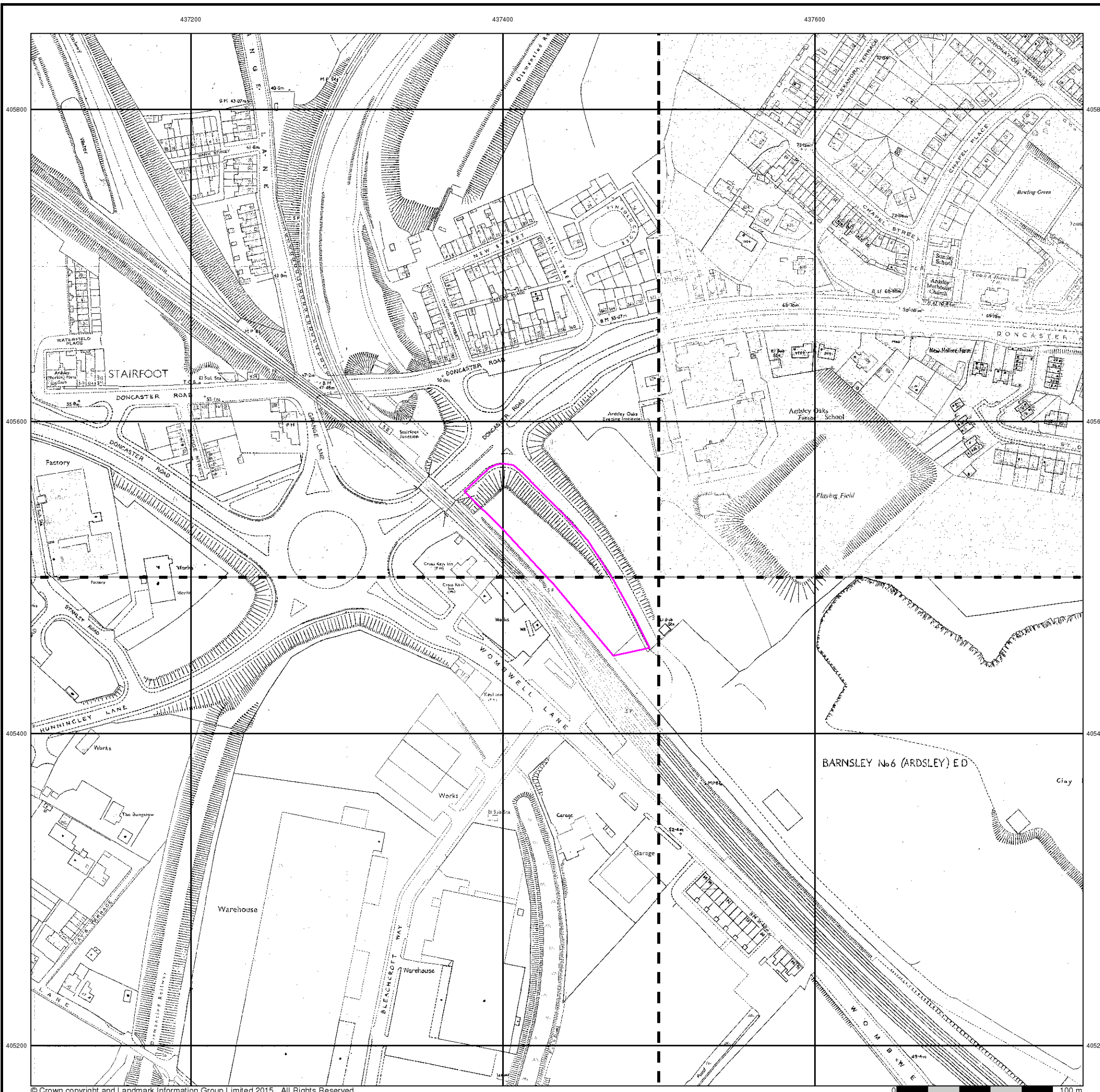


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**Site Details**

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**Additional SIMs**

**Published 1990 - 1992**

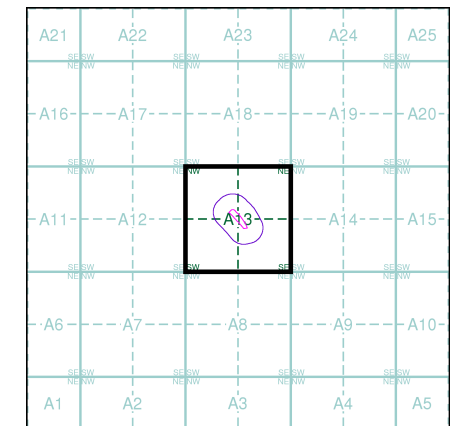
**Source map scale - 1:1,250**

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**Map Name(s) and Date(s)**

SE3705NW	SE3705NE
1990	1992
1:1,250	1:1,250
SE3705SW	
1990	
1:1,250	

**Historical Map - Segment A13**

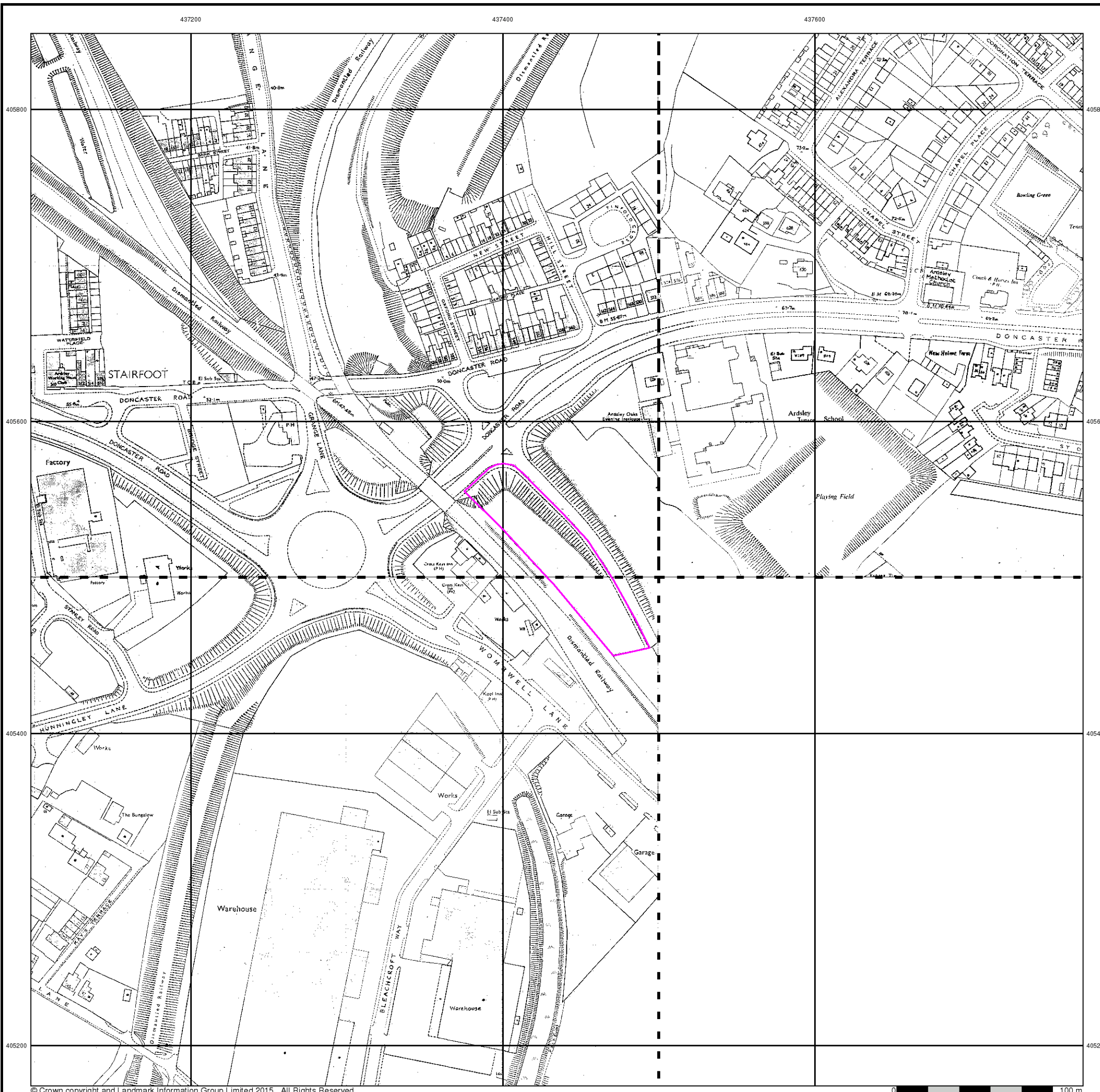


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 Slice: A  
 Site Area (Ha): 0.48  
 Search Buffer (m): 100

**Site Details**

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### Large-Scale National Grid Data

**Published 1993**

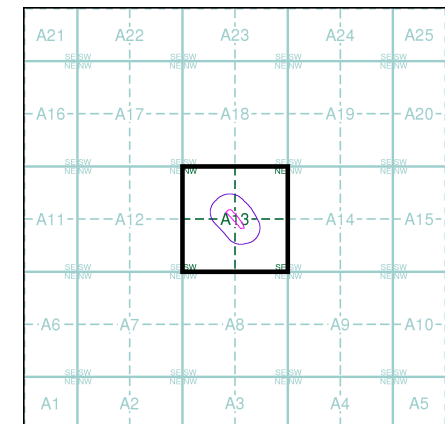
**Source map scale - 1:1,250**

'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)

SE3705NW 1993 1:1,250	SE3705NE 1993 1:1,250
SE3705SW 1993 1:1,250	SE3705SE 1993 1:1,250

### Historical Map - Segment A13

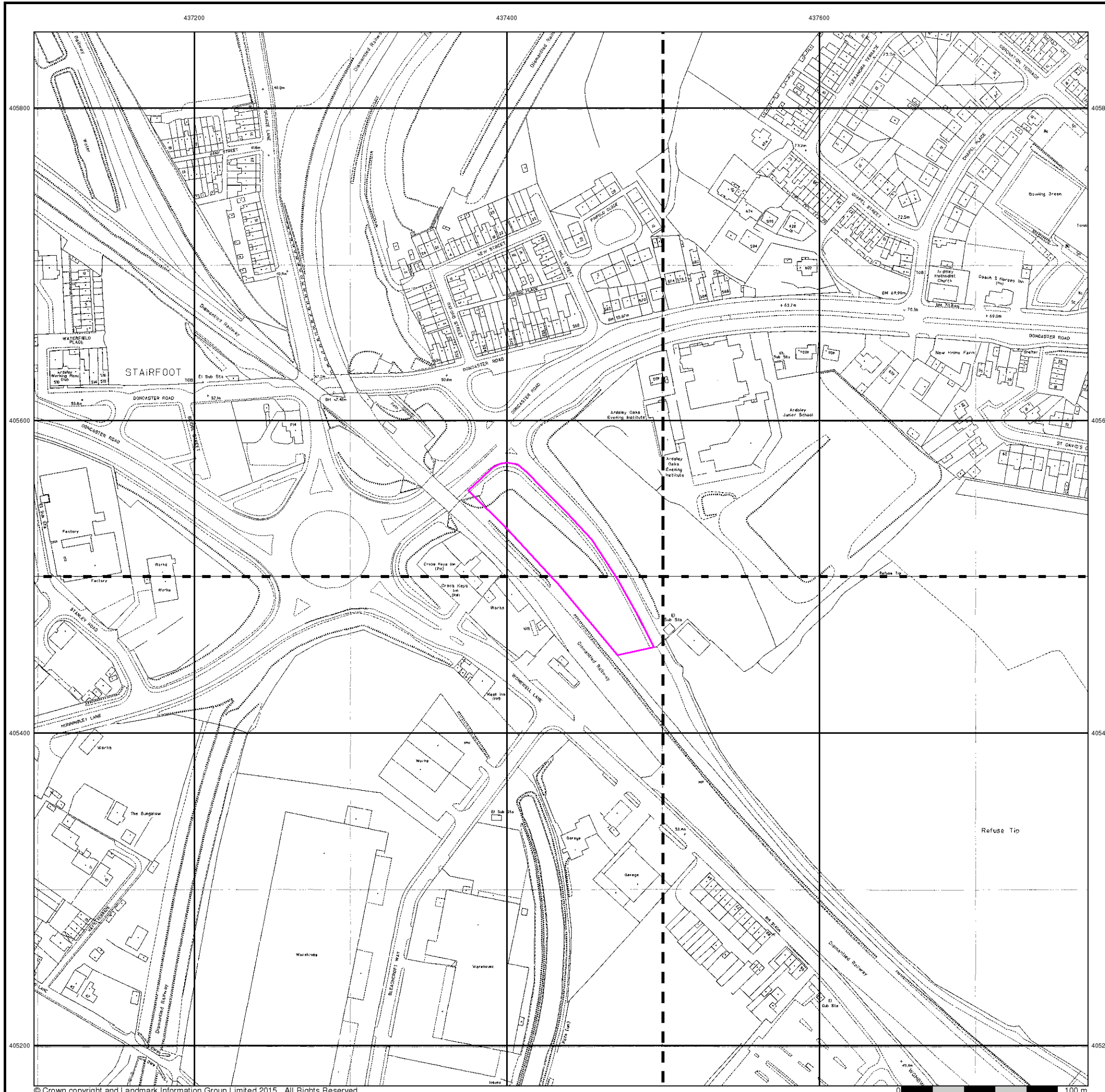


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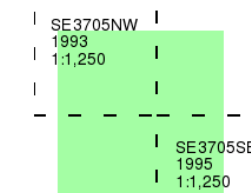
### Large-Scale National Grid Data

**Published 1993 - 1995**

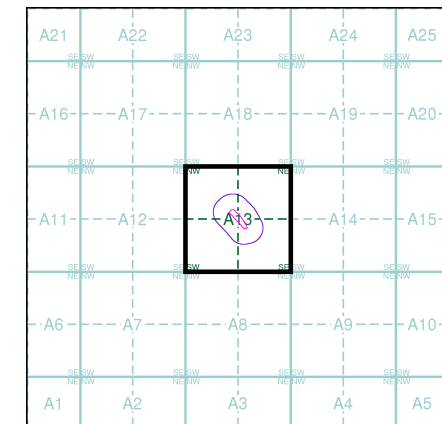
**Source map scale - 1:1,250**

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



### Historical Map - Segment A13



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**APPENDIX C**

**LANDMARK GEOLOGY MAPS**

# Geology 1:50,000 Maps Legends

## Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WMGR	Infilled Ground	Artificial Deposit	Cenozoic - Cenozoic
	MGR	Made Ground (Undivided)	Artificial Deposit	Holocene - Holocene
	WGR	Worked Ground (Undivided)	Void	Holocene - Holocene
	SLIP	Landslide Deposit	Unknown/Unclassified Entry	Quaternary - Quaternary

## Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay and Silt	Flandrian - Flandrian
	TILMP	Till, Mid Pleistocene	Diamicton	Ipswichian - Cromerian
	HEAD	Head	Diamicton	Quaternary - Quaternary

## Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ACR	Ackton Rock	Sandstone	Bolsoviaian - Bolsoviaian
	GH	Glass Houghton Rock	Sandstone	Bolsoviaian - Bolsoviaian
	MXR	Mexborough Rock	Sandstone	Bolsoviaian - Bolsoviaian
	PMCM	Pennine Middle Coal Measures Formation	Mudstone, Siltstone and Sandstone	Bolsoviaian - Duckmantian
	OR	Oaks Rock	Sandstone	Duckmantian - Duckmantian
	PMCM	Pennine Middle Coal Measures Formation	Sandstone	Bolsoviaian - Duckmantian
	WE	Woolley Edge Rock	Sandstone	Duckmantian - Duckmantian
	ABR	Abdy Rock	Sandstone	Duckmantian - Duckmantian
	KNR	Kent's Rock	Sandstone	Duckmantian - Duckmantian
		Faults		
		Rock Segments		



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## Geology 1:50,000 Maps

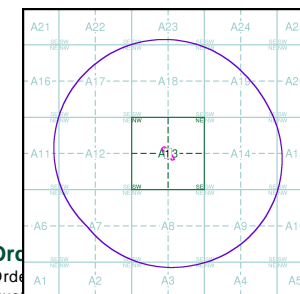
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

## Geology 1:50,000 Maps Coverage

Map ID:	1
Map Sheet No:	087
Map Name:	Barnsley
Map Date:	2008
Bedrock Geology:	Available
Superficial Geology:	Available
Artificial Geology:	Not Available
Faults:	Not Supplied
Landslip:	Available
Rock Segments:	Not Supplied

## Geology 1:50,000 Maps - Slice A



Ord

Order

Customer Reference: 437440

National Grid Reference: 437440, 405510

Slice: A

Site Area (Ha): 0.48

Search Buffer (m): 1000

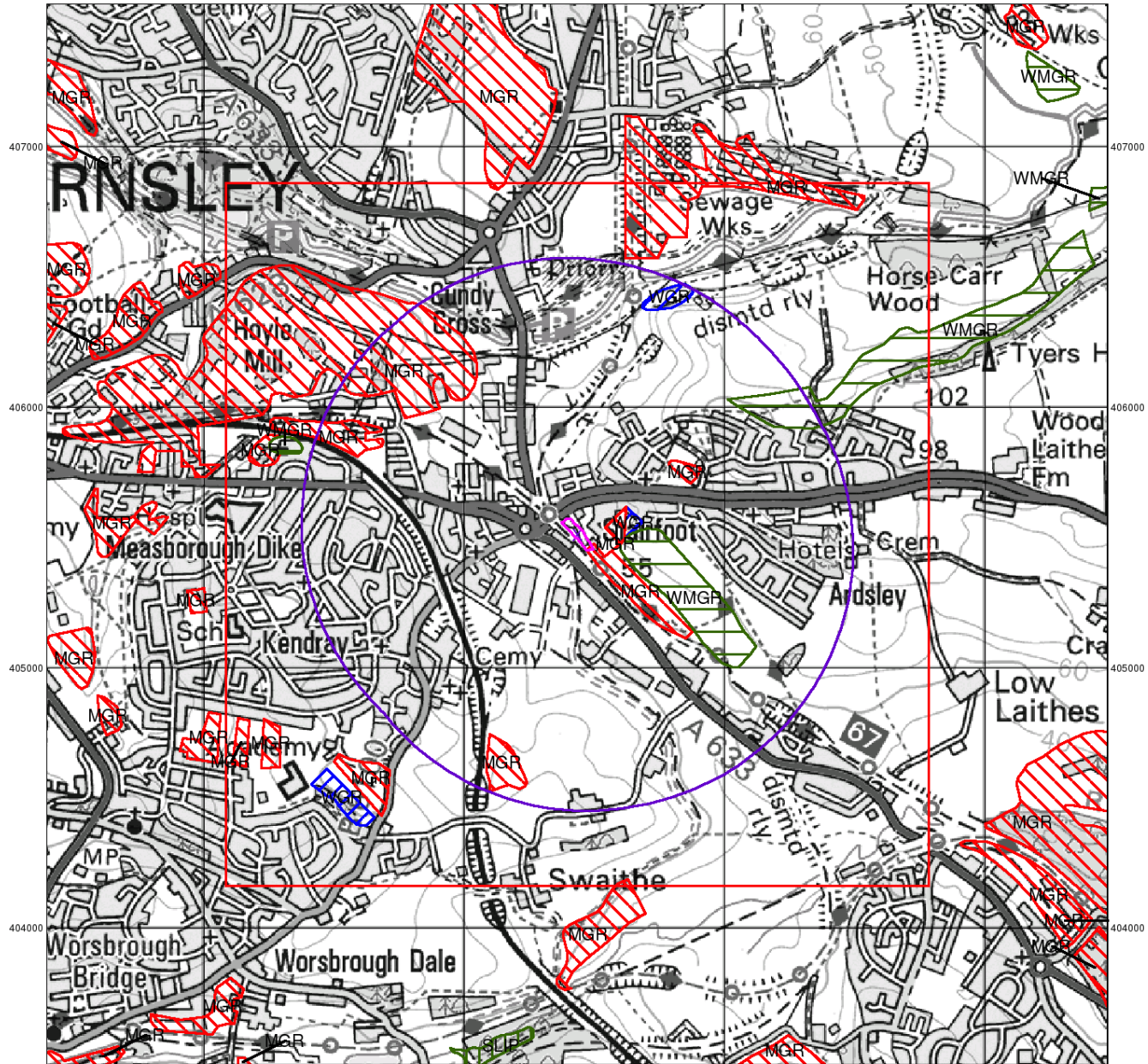
## Site Details:

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436000 437000 438000 439000



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### Artificial Ground and Landslip

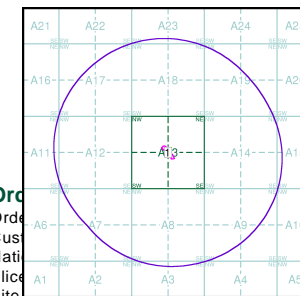
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

### Artificial Ground and Landslip Map - Slice A



Search Buffer (m): 1000

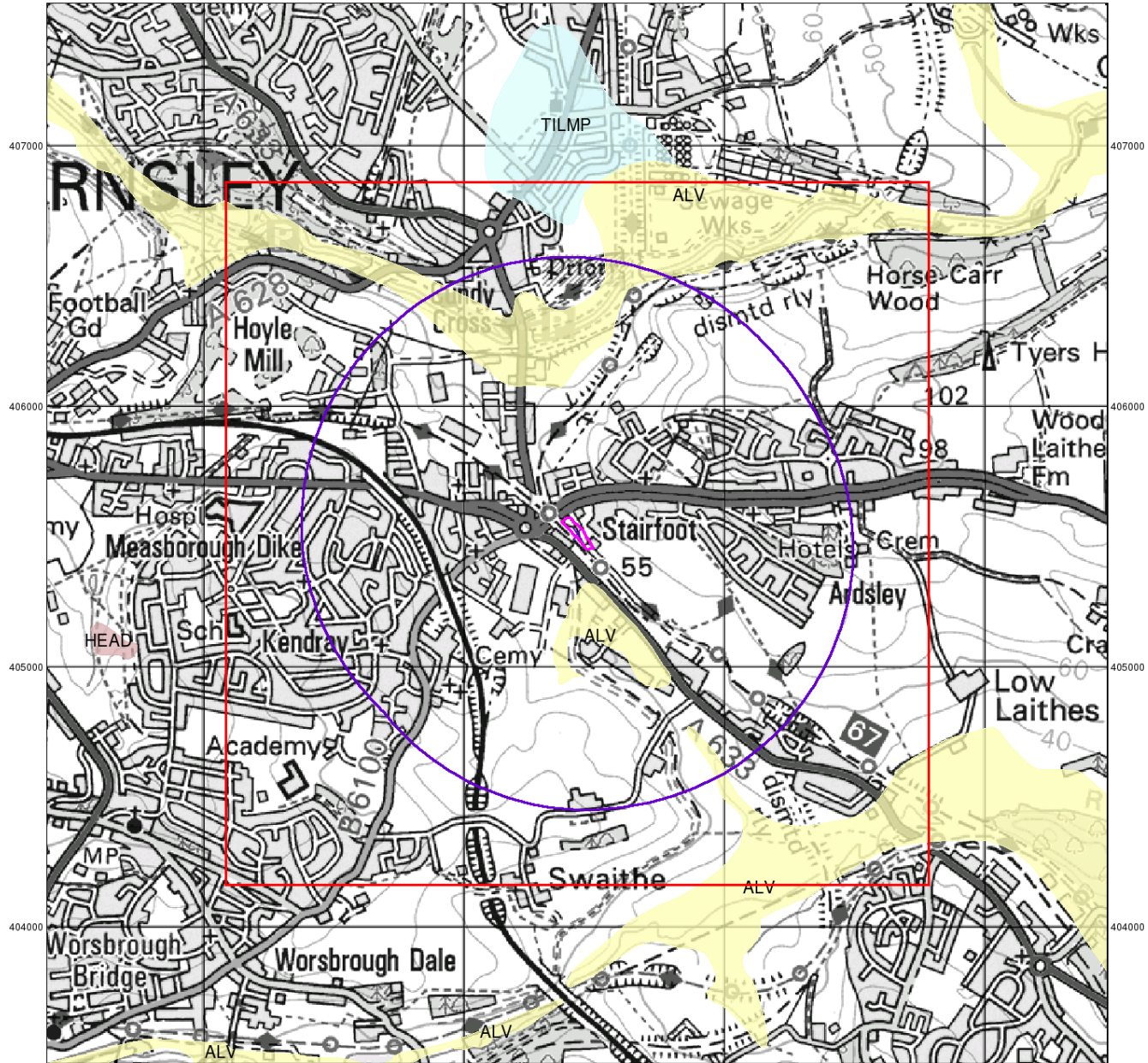
### Site Details:

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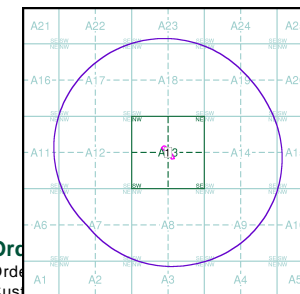
**Superficial Geology**

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

**Superficial Geology Map - Slice A**



Ord  
 Ord  
 Cus

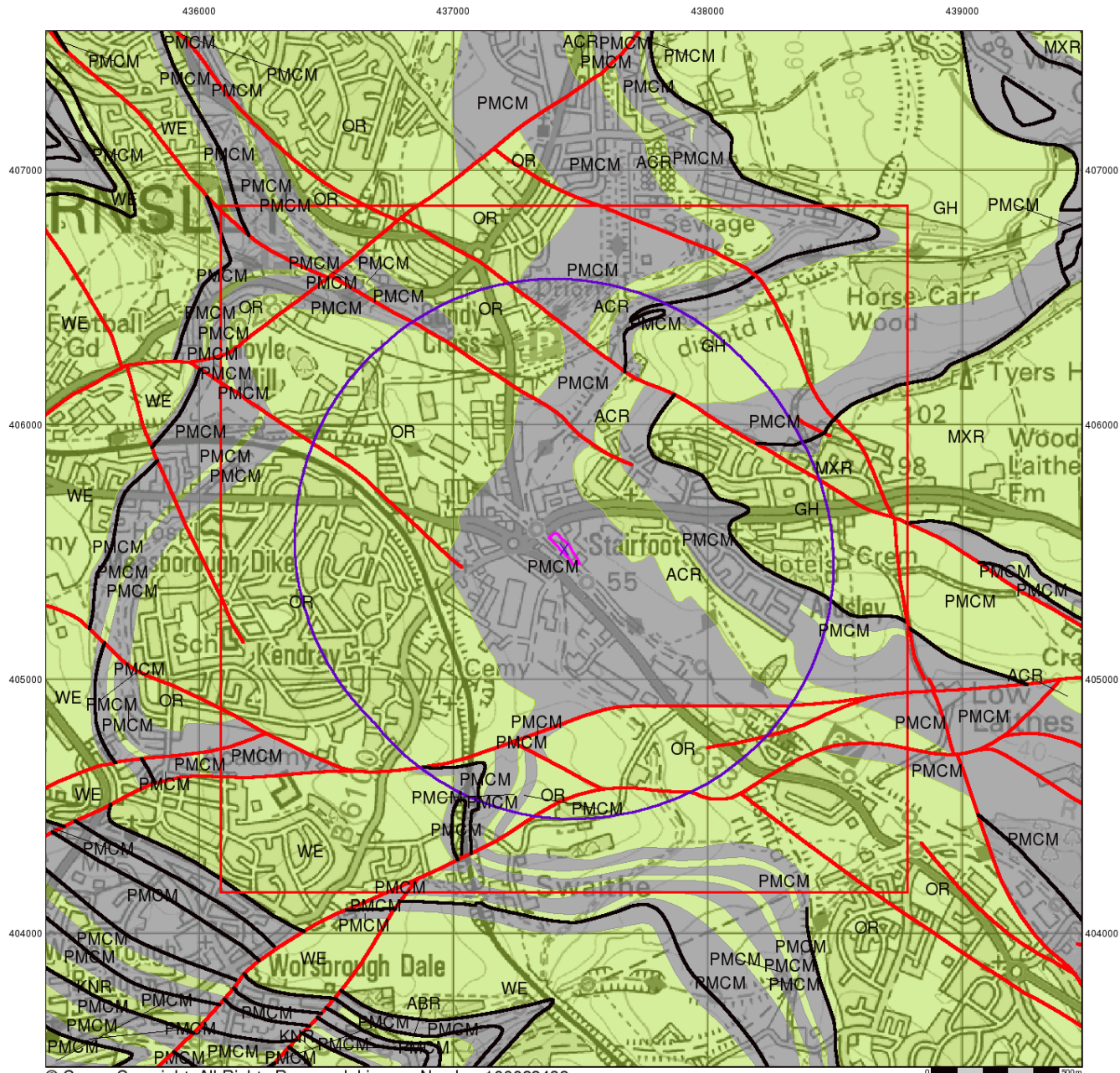
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### Bedrock and Faults

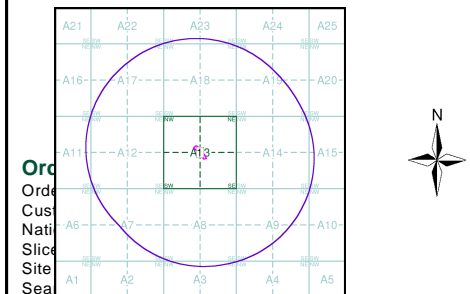
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

### Bedrock and Faults Map - Slice A

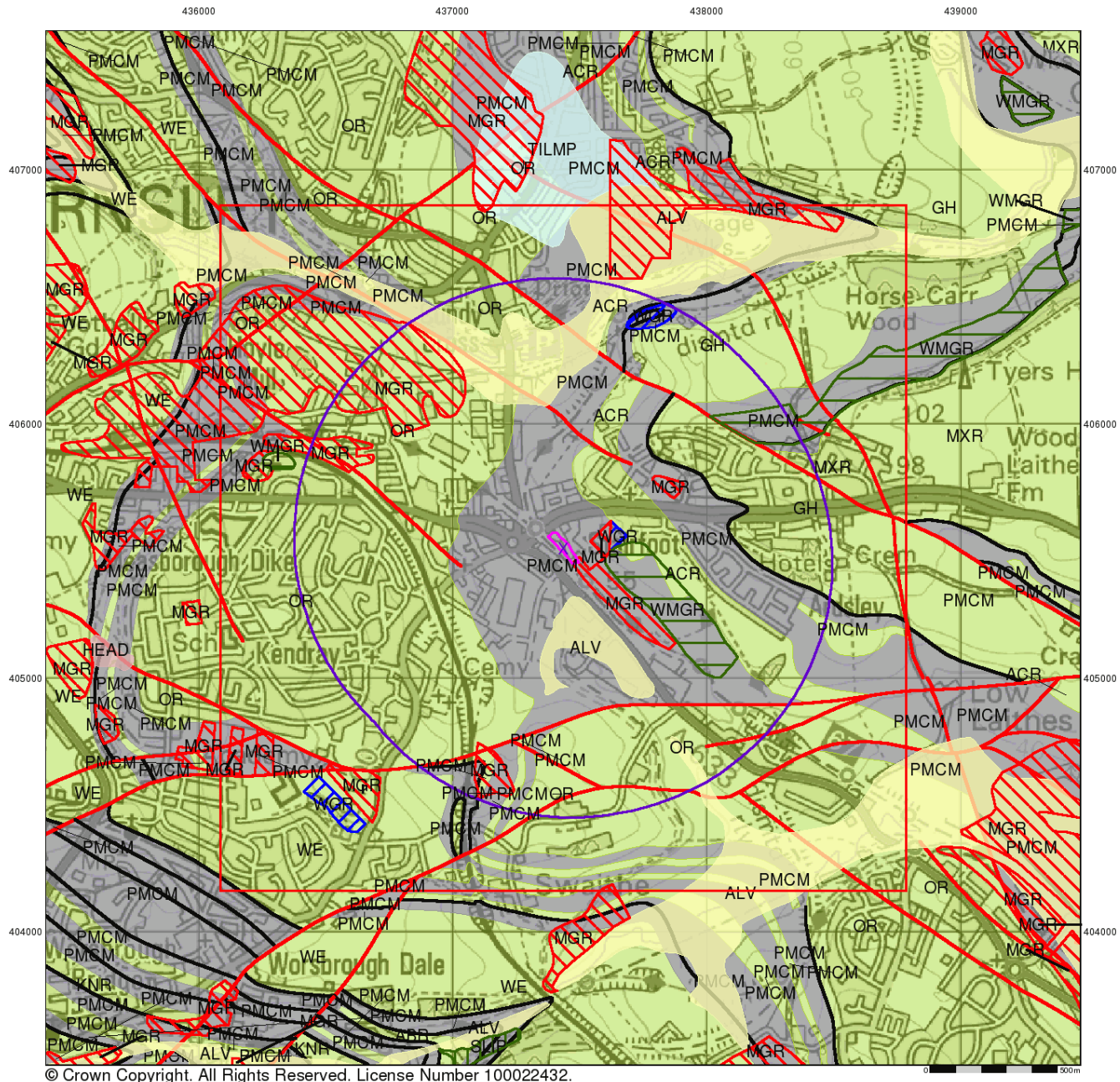


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### Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

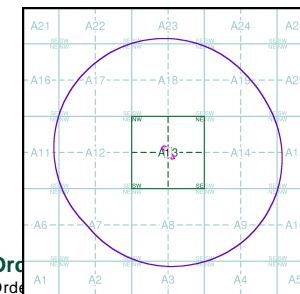
### Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

### Contact

British Geological Survey  
 Kingsley Dunham Centre  
 Keyworth  
 Nottingham  
 NG12 5GG  
 Telephone: 0115 936 3143  
 Fax: 0115 936 3276  
 email: [enquiries@bgs.ac.uk](mailto:enquiries@bgs.ac.uk)  
 website: [www.bgs.ac.uk](http://www.bgs.ac.uk)

### Combined Geology Map - Slice A



Ord

Order: A1 A2 A3 A4 A5  
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**APPENDIX D**

**COAL MINING REPORT**



The Coal  
Authority

Resolving the **impacts** of mining

# CON29M Non-Residential Mining Report

LAND SOUTH OF DONCASTER ROAD  
STAIRFOOT  
BARNESLEY  
SOUTH YORKSHIRE

Date of enquiry: 09 March 2016  
Date enquiry received: 09 March 2016  
Issue date: 09 March 2016

Our reference: 51001112604001  
Your reference: 82204602\_2 |



# CON29M Non-Residential Mining Report

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

## Client name

LANDMARK INFORMATION GROUP LIMITED

## Enquiry address

LAND SOUTH OF DONCASTER ROAD, STAIRFOOT,  
BARNSELY, SOUTH YORKSHIRE

## How to contact us


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

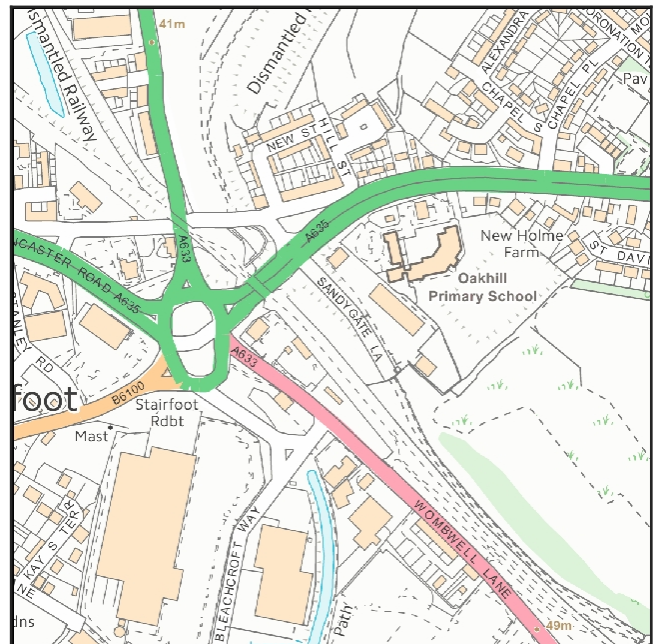
200 Lichfield Lane  
Mansfield  
Nottinghamshire  
NG18 4RG

[www.gov.uk/coalauthority](http://www.gov.uk/coalauthority)

 /company/the-coal-authority

 /thecoalauthority

 /coalauthority



Approximate position of property



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# Summary

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

**For detailed findings, please go to page 4.**

# Detailed findings

## 1. Past underground coal mining

The property is in a surface area that could be affected by underground mining in 8 seams of coal at 190m to 630m depth, and last worked in 1987.

Any movement in the ground due to coal mining activity should have stopped.

## 2. Present underground coal mining

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

## 3. Future underground coal mining

The property is not in an area where the Coal Authority has plans to grant a licence to remove coal using underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

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

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

## 4. Mine entries

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

## 5. Coal mining geology

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

## **6. Past opencast coal mining**

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

## **7. Present opencast coal mining**

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

## **8. Future opencast coal mining**

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

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

## **9. Coal mining subsidence**

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

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

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

## **10. Mine gas**

The Coal Authority has no record of a mine gas emission requiring action.

## **11. Hazards related to coal mining**

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

## **12. Withdrawal of support**

The property is in an area where a notice to withdraw support was given in 1982.

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

## **13. Working facilities order**

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

## **14. Payments to owners of former copyhold land**

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

#### **15. Information from the Cheshire Brine Subsidence Compensation Board**

The property lies outside the Cheshire Brine Compensation District.

## Additional remarks

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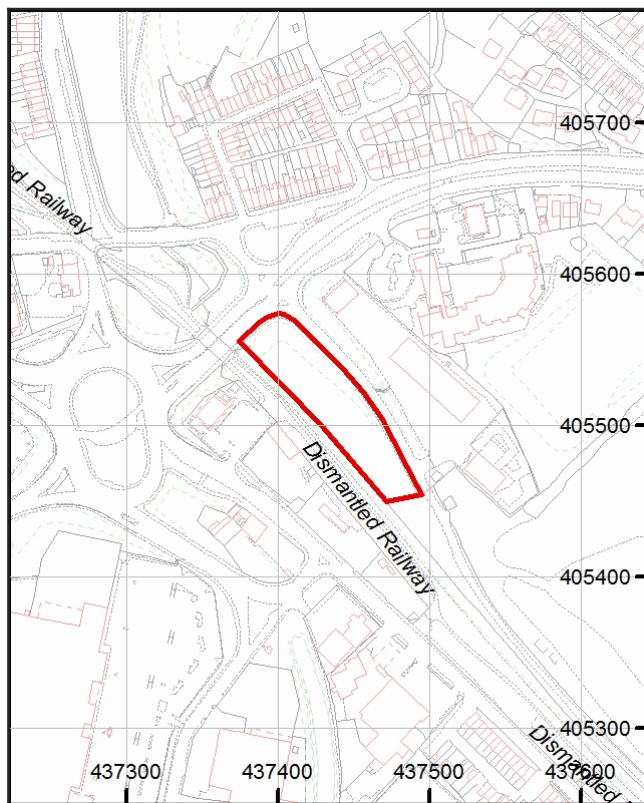
## Alternative formats

If you would like this report in an alternative format, please contact our communications team.

# Enquiry boundary

## Key

Approximate position of enquiry boundary shown




## How to contact us


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**APPENDIX E**

**LANDMARK ENVIROCHECK REPORT**