



**ENVIRONMENTAL
MANAGEMENT SOLUTIONS**

Phase One Desk Study Report

Integral UK Ltd

Skylon Plots N16, N17, N18, N20, N21 and N22
Rotherwas
Hereford

EMS5268a

Environmental
Management Solutions
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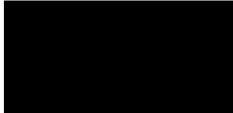
Integral UK Ltd

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Phase 1 Desk Study Report

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1. Introduction

Environmental Management Solutions Limited (EMS) have been instructed by Mr Harry Rouse of Integral UK Ltd, Plough Lane, Hereford, HR4 0LE to undertake a Phase 1 Desk Study investigation for a site known as Skylon Plots N16, N17, N18, N20, N21 and N22, Rotherwas, Hereford.

The site is located at National Grid Reference 353199 238012. Site location plans are included within Appendix A of this report.

The desk study includes a review of environmental database information provided by Groundsure, historical maps and a previous investigation report undertaken for the site. A site walkover survey has been undertaken. Relevant pollutant source, pathway and receptor linkages have been considered and a tabular conceptual model has been produced to allow an assessment of the level of risk to each receptor. Recommendations have been given for intrusive investigation of the site.

2. Objectives of the investigation

2.1 Objectives of the investigation

The objectives of this desk study were:

- to provide information on past and current uses of the site and surrounding area and the nature of any related hazards and physical constraints;
- to identify current and likely future receptors, potential sources of contamination and likely pathways, and any features of immediate concern, including those that could be introduced in future;
- to provide information on the geology, geochemistry, soil, hydrogeology and hydrology of the site;
- to identify potentially different sub-areas (zones) of a site, based on differing ground conditions; potential contamination; and past, present and future uses;
- to produce an initial conceptual model for the site as a whole and/or for zones within the site;
- to provide information for a preliminary risk assessment;
- to provide data to assist in the design of potential subsequent exploratory and main investigations and to give an early indication of possible remedial requirements;
- to provide information relevant to worker health and safety and to the protection of the environment during field investigations;
- to identify any need to involve regulatory bodies prior to intrusive investigation;

- to provide preliminary geotechnical information regarding the site and guide any intrusive geotechnical investigation.

2.2 Scope of work

The scope of work was developed in accordance with the Environment Agency and Department for Environment Food and Rural Affairs (DEFRA) document 'Model Procedures for the Management of Land Contamination' Contaminated Land Report (CLR) 11, dated 2004 and the British Standards Institution publication 'BS 10175:2011+A1:2013 – Investigation of Potentially Contaminated Sites – Code of Practice.

2.3 Management limitations

- The report has been prepared under the express instructions and solely for the use of the Client and Herefordshire Council, and their respective agents.
- The findings of this report represent the professional opinion of experienced contaminated land consultants. EMS does not provide legal advice and the advice of lawyers may also be required.
- All work carried out in preparing this report has utilised and is based upon EMS's current professional knowledge and understanding of current relevant UK standards and codes, technology and legislation. Changes in this legislation and guidance may occur at any time in the future and cause any conclusions to become inappropriate or incorrect. EMS does not accept responsibility for advising the Client or other interested parties of the facts or implications of any such changes.
- The report is limited to the site boundaries identified by the Client and confirmed within this report.
- The extent of the investigation was designed in-line with the Client's budget, which is considered suitable, and not limiting, for the proposed development.
- This report represents the conditions and findings on the date of desk study. Over time, site conditions may alter.

3. Previous Reports

3.1 Previous Phase 1 Desk Study Report

Amey Consulting undertook a Phase 1 Environmental Risk Assessment (report number: 00551392/Contam/008, Issue 01, dated 16th April 2009) for the site which is referred to as Plots 3, 4 and 5.

The report describes the site and site surroundings (as of 2009) and the site history; predominantly undeveloped, but surrounded by a former munitions factory, with a railway crossing the site at one stage.

The report identified the following sources:

- Heavy metals and hydrocarbons from off-site runoff from former and current industrial premises

- Hydrocarbon and metals from run-off from nearby highways
- Asbestos containing materials from surrounding industrial units and asbestos fibres from vehicle brakes from the highways and former railway which used to cross part of the site
- Any spillages (metals, hydrocarbons and solvents) from the surrounding industrial land uses.

Identified receptors included site users, construction workers, controlled waters, ecological receptors and built structures.

Potential pollutant pathways were identified as: ingestion, inhalation, dermal contact and dust and vapours for site users and construction workers; lateral and vertical seepage and surface runoff for controlled waters; direct contact, stomatal diffusion and root uptake for ecological receptors; and direct contact for built structures.

The report concluded that potentially significant pollutant linkages existed. An intrusive ground investigation was recommended.

3.2 Previous Ground Investigation Report

A Phase II Preliminary Contamination Investigation (report number: 00551392/Contam/014 Revision 1, dated April 2009) was carried out for the site (again, referred to as Plots 3, 4 and 5) by Amey Consulting.

Twenty machine excavated trial pits, six hand excavated trial pits and three cable percussion method boreholes with monitoring standpipes were undertaken at the site in 2008. The exploratory holes recorded limited Made Ground in nine holes and topsoil in the remaining holes. River Terrace Deposits were initially encountered as clay/silt and were underlain by gravels. Groundwater levels in the exploratory holes were found to be between 2.60 m and 3.30 m below ground level. Groundwater monitoring in the borehole standpipes found groundwater levels between 2.61 m and 2.85 m.

Twenty eight samples were analysed for heavy metals, inorganic compounds, total petroleum hydrocarbons (TPH CWG), polychlorinated biphenyls (PCBs) and speciated polycyclic aromatic hydrocarbons (PAH). Volatile organic compounds were measured by PID headspace testing in the field. Leachate testing was also undertaken.

The report identified one indeno(1,2,3-cd)pyrene and benzo(ghi)pyrene hotspot in trial pit TP1/4/1 at 0.20 m to 0.30 m. However, the soil screening values used for analysis of these PAHs are not current and may have even been erroneous at the time of issue of the Amey report. The recorded concentrations, the Amey screening criteria and the current screening criteria for a commercial land use are shown in the table below:

Determinand	Recorded concentration (mg/kg)	Amey screening criteria (mg/kg)	Current screening criteria (ATRISK SSV, mg/kg)
Indeno(1,2,3-cd)pyrene	0.7	0.368	142
Benzo(ghi)pyrene	1.5	0.12	1440

As shown in the table above the soils tested are suitable for a commercial land use by current standards (ATRISK SSV). Review of the chemical analysis shows that the soils tested across the site are suitable for a commercial land use.

Leachate testing undertaken on samples taken from across the site exceeded Drinking Water Standards (DWS) for TPH at multiple locations and Environmental Quality Standards (EQS) for anthracene in four locations. DWS and EQS are generally considered conservative. Additionally, the soils characterised by the ground investigation are considered broadly similar to those in surrounding sites. Removal or other remediation of these soils would be unlikely to have a positive effect on groundwater quality. Furthermore, building footprints and hardstanding in any proposed development will reduce percolation through the soils therefore reducing the potential for leaching of contamination into the groundwater.

The report suggests a Design Sulphate classification of DS-1, together with an Aggressive Chemical Environment for Concrete (ACEC) classification of AC-1s for the design of buried concrete.

Groundwater monitoring indicated some groundwater contamination in BH1/4/1 located in the south-west corner of the site. A benzo(a)pyrene concentration of 0.09 µg/l was recorded in December 2008 exceed the DWS value of 0.01 µg/l. However, this exceedance was not encountered in the earlier round of groundwater sampling in September 2008 and DWS are considered conservative.

Ground gas monitoring was undertaken using a series of spike tests at each trial pit location. The worst case result was 4.6 % carbon dioxide. However, it is worth noting that spike testing is not an effective method for ground gas monitoring.

The report concluded that there were no risks to human health or controlled waters as the majority of the site was likely to be covered by hardstanding or structures. Where landscaping was present it was recommended that treatment or removal of contaminated soils was undertaken.

4. Land use and setting

4.1 Current land use

The site was inspected on 21st July 2015 by an experienced Geo-Environmental Engineer. Selected photographs of the site have been included as Appendix B. Plans showing the existing layout of the site are included in Appendix A.

The site comprises a broadly rectangular field orientated in the largest dimension approximately east to west. The site is bound on all sides by post and wire fencing and measures approximately 220 m by 120 m. The site is accessed from Vincent Carey Road with double steel gates preventing vehicular access in the centre of the western boundary.

The site is largely covered by rough mown grass with two mature oak trees in the east. A macadam surfaced access road with pavements and street lighting is present running from the centre of the western boundary, eastwards across approximately one quarter of the site. An approximately 30 m margin exists along the northern boundary where clinker is frequently visible and the grass is patchy with some bramble and other scrub. This is the likely location of the former railway line (see Section 5.1). At the west end of this margin there is an isolated area of land raise (approximately 1 m) where clinker is also visible on the surface. From the approximate centre of the northern boundary is a narrow (approximately 8 m wide) strip of

slightly raised ground where, again, surface clinker is visible. This is the likely location of the former railway siding (see Section 5.1). This strip runs in a south-east direction towards the north-east corner of the site. What appears to be an abandoned macadam surfaced access road is present in the south-east corner of the site forming a rough semi-circle. Within this semi-circle on the east side is a concrete pad which may be a former building floor slab. On this pad is a raised area which may be an above ground storage tank base or a base for plant or machinery. No staining was observed on the concrete pad.

In the north-east corner of the site a small swale is present with four 600 mm diameter surface water drainage pipes entering it passing under the cycle path to the north of the site. Examination of a layout drawing shows this is part of a proposed swale system which will run to a balancing pond some distance to the north of the site. The swale was rubble at the base and was dry at the time of inspection.

Two former borehole standpipes were observed in the central north and south-west parts of the site and are likely to be from Amey Consulting's intrusive investigation of the site in 2009.

4.2 Tanks and associated structures

A potential tank base may exist in the south-east part of the site as described above. However, this feature may be a base for plant or machinery.

A possible soakaway is present in the centre of the eastern half of the southern site boundary, comprising two manhole covers with a vent/observation pipe and a steel potential meter or control box adjacent.

There are no historical tanks within 250 m as recorded on the Historical Tank Database included in the Groundsure report. However, there are fuel tanks are likely to be present at the fuel station to the south of the site.

4.3 Services

No overhead services were noted during the site inspection. A large number of manhole covers were noted on the south-west boundary and the central and central-southern parts of the site. These are potentially foul or surface water sewers from a previous site land use. Service plans have been provided by the client and show underground electrical cables and gas and water pipes crossing the site.

4.4 Condition

No visual evidence of contamination, such as oil staining, was identified by the site walkover survey.

4.5 Surrounding land use

To the immediate north of the site is a macadam surfaced cycle path followed by a narrow strip of trees. Following this is open land which is currently undergoing groundworks in preparation for construction. Adjacent to the north-east corner is a small electricity sub-station and sewage pumping station. To the east and west are Chapel Lane and Vincent Carey Road, respectively, followed by the various buildings of Rotherwas Industrial Estate. To the south is Holme Lacy Road followed by Rotherwas Service Station which is a petrol station and a garage.

The current industrial data lists nine relevant premises within 100 m of the site which are summarised in the following table:

Land use	Distance and direction
Electricity substation	12 m north-east
Vehicle cleaning services	33 m south
Vehicle repair, testing and servicing	33 m south
Petrol station (2 entries)	33 m south
Second-hand vehicles	40 m west
Brewery plastics	57 m west
Electricity substation	70 m east
Precision engineers	84 m south
Supplier of general purpose machinery	92 m east

Further industrial land uses are present within 250 m of the site, including sub-stations, typical of an industrial area in which the site is situated.

There is one fuel station entry within 500 m of the site: Rotherwas Service Station, 27 m south of the site and marked as open and listed in the preceding table at 33 m south.

There are seven records of Part B Activities listed within 250 m of the site which are a mix of current, revoked and historical permits. The current processes are 33 m south at Rotherwas Service Station listed as vapour recovery and waste oil burning 222 m east of the site.

4.6 Future land use

A commercial use for the site is proposed although no specific plans have been provided by the Client.

4.7 Geological information

BGS 1:50,000 scale geological mapping indicates the site to be underlain by the Raglan Mudstone Formation (interbedded siltstone and mudstone) of Silurian age. Superficial deposits comprising River Terrace Deposits are anticipated to overlie the Raglan Mudstone Formation.

Based on the anticipated ground conditions the British Geological Survey (via their natural ground stability dataset) describes the following levels of ground stability hazard at the site:

Hazard Type	Hazard Rating
Shrinking/swelling clays	Negligible
Landslides	Very low
Soluble Rocks	Negligible
Compressible Ground	Negligible
Collapsible Rocks	Very low
Running Sand	Very low

The BGS indicate that the site is not in an area where radon protective measures are required within new dwellings or extensions.

4.8 Mining

The site is not in an area affected by coal mining.

Although the Groundsure reports mentions the presence of vein minerals in the region (subject to rare, localised and minor mining) the potential for the site to be affected by non-coal related mining activities is considered by EMS to be negligible.

4.9 Landfills and infilled land

There is one Environment Agency historic landfill within 1000 m of the site. This is located 750 m to the south-east and is recorded as receiving inert waste. The same site is also recorded at 870 m south-east. The site is a railway cutting at Dinedor. No dates for the site's operation or closure are recorded.

There are no BGS, Department of the Environment, Local Authority or Historic Mapping records of any other landfills within 1500 m of the site.

There are five Other Waste Sites located within 500 m the site. Three are historical for a scrap yard dated between 1982 and 1996 at distances between 208 m and 210 m north-east. One is for a waste transfer station and storage yard 240 m north of the site which is used partially for shot blasting, skip storage, concrete crushing and soil screening. A further waste transfer station is present 367 m north-east and is the household waste site on Chapel Road.

Eight records of Environment Agency waste sites exist within 400 m of the site. Within 200 m of the site are three waste transfer stations, one at 89 m south-east and two at 92 m east of the site. Further waste transfer stations are present between 219 m and 255 m from the site. A permit for the treatment of waste to produce soil is located 251 m to the north of the site.

4.10 Hydrogeology and hydrology

The Raglan Mudstone Formation, Alluvium and River Terrace Deposits are all listed as Secondary-A-Aquifers.

There are two groundwater abstractions within 1000 m of the site. One is 928 m to the east for general farming and domestic use from a well at Sink Green under the name of Jones Bros. The other is 964 m to the south for general farming and domestic use from a well at Prospect House under the name Peyton.

There are two surface water abstraction licenses within 1000 m of the site. One 839 m to the north-east for spray irrigation from the River Wye for H P Bulmer and Co Ltd and one 945 m north-west for Thorn Lighting Ltd for general use.

The site is not within a source protection zone.

The closest identified surface water body is a secondary river 169 m west of the site described as a drain.

4.11 Ecologically sensitive sites

The River Wye, located approximately 687 m to the north-east of the site, is a site of special scientific interest (SSSI) and a special area of conservation (SAC). The SSSI supports various species of lamprey, shad and other fish as well as Common Otter, Atlantic Stream Crayfish and Freshwater Pearl Mussel. No other SSSIs exist within 1000 m of the site.

4.12 Flood information

The EA flood mapping service indicates the site to be in an area of low risk of flooding.

5. Site history

5.1 History of the site

The history of the site has been inferred from historical map editions (Appendix D) which were taken from the Amey Consulting Phase 1 Environmental Risk Assessment report.

The site history has been traced back to 1888. At this time the site comprised an open field with some trees marked in the south-east corner. A stream crosses the site in the eastern half running from an off-site spring to the south-east through the site in an approximately northerly direction to feed a fish pond about 200 m to the north and north-east of the site. A railway line runs just inside the northern boundary. More widely, the site is situated in countryside with the Holme Lacy Road running outside and parallel to the southern boundary.

No significant change takes place until mapping dated 1928 where some fence lines are constructed which create a corridor running from the centre of the site to the south-east corner. The stream is now no longer marked and is assumed to have been backfilled. It is assumed that this mapping is not complete for reasons of national security at the time as it is known that a munitions factory was constructed at Rotherwas around 1916. Examination of later mapping editions shows this corridor was for a railway siding.

By 1931 a small pond or quarry appears 200 m to the south-east of the site measuring approximately 50 m by 50 m.

No significant changes are recorded on mapping until between 1970 and 1973. This edition reveals the full extent of the munitions factory, although it was in place initially by around 1916 and expanded during the Second World War. The munitions factory is predominantly to the

north-west of the site but some buildings associated with it are present to the north and south of the site. These are typically isolated buildings with protective bunds to mitigate any accidental explosions. There are no buildings of this kind shown on the site itself. 1970 mapping shows the railway siding running from the railway line, which has expanded to four tracks, across the eastern half of the site, exiting at the south-east corner. The siding appears to have been removed by 1973 along with the railway line in the north. A small building is shown on mapping from 1973 at the latest in the centre of the eastern half of the site adjacent to the location of the railway siding. An access road appears to run from the south-east corner of the site to this building, then turns south-west to exit the site in the approximate centre of the southern boundary. The remainder of the site remains unchanged at this time. Rotherwas Industrial Estate is becoming established with various works and warehouses built to the west, south-west, north-west and east of the site.

By 1977 the site itself has changed little. An electricity sub-station has been constructed adjacent to the north-east corner of the site and Chapel Road now runs off site, along the eastern boundary.

By 1985 the small pond or quarry 200 m to the south-east has been backfilled.

A section of the fish pond 200 m north of the site has been backfilled by 1988. The portion backfilled measures approximately 200 m by 40 m.

By 1991 the small building on the site has been removed.

The access road is no longer marked by 2007.

5.2 Archaeological Report

A review of an archaeological report entitled 'Rotherwas Royal Ordnance Factory Management Study' Volumes I and II by Gifford and Partners Ltd (ref. B2664.R02 Rev B, dated 23/02/2000) provides some supplementary information on the history of the site.

The site lies within what was known as the Central Section of the munitions factory. This section was not directly involved in the use of explosives. Instead, it was used for administration, welfare and for various workshops including painting and joinery. Three mess buildings were present along with a locomotive shed, pump house, workshops and coal bunkers.

From examining the maps included within the report the locations of these land uses do not appear to be on the area of the site in question which seems to remain largely undeveloped. Although the mapping is by no means comprehensive.

6. Conceptual model

6.1 Potential Sources

The desk study has revealed a number of potential contaminant sources related to the history and current use of the site:

- The historical site usage as part of a munitions factory.

- The historical railway siding running through the eastern half of the site and the railway line running along the northern boundary.
- The potential tank base in south-east of site.
- The electricity substation present from 1977.
- The petrol station 33 m to the south.
- Made Ground is likely to be present where the section of the fish pond 200 m to the north was backfilled by 1988 and the small pond or quarry 200 m to the south-east backfilled by 1985. These may be a source of ground gases.

The potential source areas and contaminants of concern are presented in the following tables.

Potential Source Area On-Site	Potential Contaminants
Historical usage as a munitions factory.	Asbestos, heavy metals, PAH, aliphatic and aromatic hydrocarbons from any spills or leaks from vehicles or machinery. Contaminants related to explosive are not a concern as explosives were not handled in this part of the factory.
Historical railway line and railway siding.	Asbestos, heavy metals, PAH, aliphatic and aromatic hydrocarbons.
Potential tank base.	Aliphatic and aromatic hydrocarbons from any spills or leaks.

Potential Source Area Off-Site	Potential Contaminants
The electricity substation adjacent to the north-east corner of the site.	Heavy metals, PAH, aliphatic and aromatic hydrocarbons and polychlorinated biphenyls (PCBs) from any spills or leaks of coolant, lubricants or battery liquids.
The petrol station 33 m south of the site.	Aliphatic and aromatic hydrocarbons from any fuel spillages or leaks. Lead from former fuel additives.
Made Ground associated with the backfilled pond 200 m to the north.	Dependent on the nature of any made ground. Carbon dioxide and methane related to decomposition of organic materials in any fill.
Made Ground associated with the backfilled small pond or quarry 200 m to the south-east.	Dependent on the nature of any made ground. Carbon dioxide and methane related to decomposition of organic materials in any fill.

6.2 Potential receptors

Human Health:

A commercial use is proposed for the site. Users and workers on the site may be exposed to contamination.

Construction workers may be exposed to contamination during redevelopment.

Residents of neighbouring properties may be affected by dust or surface water from the site.

Controlled Waters:

The River Terrace Deposits and Raglan Mudstone Formation which underlie the site are listed as Secondary-A-Aquifers.

The closest identified groundwater abstraction is 928 m to the east for general farming and domestic use. The closest identified surface water abstraction is 839 m to the north-east for spray irrigation.

The site is not within a source protection zone.

The closest identified surface water body is secondary river 169 m west of the site.

Sensitive Sites:

The River Wye, located approximately 687 m to the north-east of the site, is a site of special scientific interest (SSSI) and a special area of conservation (SAC).

Buildings:

Buried structures associated with proposed buildings are considered to be a receptor to attack from potential chemical agents, in particular sulphates and acids, within the soils and groundwater. Buildings may be considered receptors for bulk ground gases, including methane explosion.

6.3 Potential pathways

The following pathways should be considered as methods of contamination transfer to receptors:

- 1) Intake of contamination by ingestion, inhalation, or direct contact with soils: Construction workers and users of the site may be at risk from these pathways.
- 2) Intake of contamination by inhalation of vapours: A pathway of migration of bulk ground gases and volatile organic contaminants through permeable natural or manmade materials or preferential pathways onto the site from on site and off site sources is considered to be potentially active.
- 3) Leaching of contamination – vertically: A pathway of vertical leaching to the underlying Secondary-A-Aquifers (River Terrace Deposits and Raglan Mudstone Formation) is considered to be active.

4) Movement of contamination – horizontally: Migration of possible perched groundwater potentially impacted by contaminants at shallow depths from on-site and off-site sources through shallow permeable deposits, or via preferential pathways, is considered to be potentially active. Pathways to future site users via inhalation of indoor and outdoor air originating from a potentially impacted shallow perched groundwater source are also considered to be potentially active. Any pathway to the River Wye SSSI is considered to be limited as it is 687 m from the site.

5) Future construction works: Excavation works, construction vehicles and workmen all form pathways for disturbance and transfer of contamination. For example, intermixing of contaminated surface strata during underground service construction. Air borne dispersion of dust requires particular consideration during construction works during dry spells.

6) Buildings and structures: Certain chemical agents, predominantly sulphates, acids and hydrocarbons present within made ground and contaminated waters under the site, may be destructive to buried services and pipe work associated with the storage facility. Buildings or structures are also possible receptors for build-up of ground gases – which may cause suffocation or explosion.

6.4 Possible pollutant linkages and preliminary risk assessment

The preliminary risk assessment is designed to assess the risks from all pollutant linkages identified by the Phase I investigation. An explanatory risk matrix has been developed within the document 'Guidelines for Environmental Risk Assessment and Management' (DETR and EA 2000). This matrix is shown below:

Consequence Probability	<i>Severe</i>	<i>Moderate</i>	<i>Mild</i>	<i>Negligible</i>
<i>High</i>	High	High	Medium/Low	Near Zero
<i>Medium</i>	High	Medium	Low	Near Zero
<i>Low</i>	High/Medium	Medium/Low	Low	Near Zero
<i>Negligible</i>	High/Medium/Low	Medium/Low	Low	Near Zero

A tabular conceptual model is detailed below. In some cases the risk level is considered medium. This is due to the limited information which can be provided by a desk study alone, thus worst case scenarios are assumed until evidence is provided to show otherwise.

Contaminant	Pathway	Receptor	Risk
Heavy metals and inorganics within upper strata; principally Made Ground	Direct contact, dust inhalation and ingestion of soil. Will be limited by importation of soils to raise site levels	Future site users	Low to medium. Possible made ground and spillage or leaks from the potential tank base or petrol station may have incorporated heavy metals into the soil – no intrusive investigation has yet been undertaken.
Heavy metals and inorganics within upper strata; principally Made Ground	Direct contact, inhalation and ingestion of soil	Construction workers	Low to medium. Possible made ground and spillage or leaks from the potential tank base or petrol station may have incorporated heavy metals into the soil – no intrusive investigation has yet been undertaken.
Heavy metals and inorganics within upper strata; principally Made Ground	Direct contact	Structures and services.	Medium. Water pipes may be at risk from exposure to heavy metals.
Heavy metals and inorganics within upper strata; principally Made Ground	Horizontal and vertical migration	River Terrace Deposits and Raglan Mudstone Formation (Secondary-A-Aquifers)	Low to medium. These contaminants tend to have relatively low mobility in water.
Heavy metals and inorganics within upper strata; principally Made Ground	Horizontal and vertical migration	Nearest surface water body – secondary river 169 m west of the site	Low. These contaminants tend to have relatively low mobility. The river is some distance from the site.
Polycyclic aromatic hydrocarbons, phenol, aromatic and aliphatic hydrocarbons within upper strata; both Made Ground and impacted natural soils	Direct contact, dust inhalation and ingestion. Will be limited by importation of soils to raise site levels	Future site users	Low to medium. Possible made ground, any spills associated with the site usage or leaks from the potential tank base or petrol station and the substation may have incorporated organic chemicals into the soil – no intrusive investigation has yet been undertaken.
Polycyclic aromatic hydrocarbons, phenol, aromatic and aliphatic hydrocarbons within upper strata; both Made Ground and impacted natural soils	Direct contact, inhalation and ingestion	Construction workers	Low to medium. Possible made ground, any spills associated with the site usage or leaks from the potential tank base or petrol station and the substation may have incorporated organic chemicals into the soil – no intrusive investigation has yet been undertaken.

Contaminant	Pathway	Receptor	Risk
Polycyclic aromatic hydrocarbons, phenol, aromatic and aliphatic hydrocarbons within upper strata; both Made Ground and impacted natural soils	Direct contact	Structures and services.	Medium. Possible made ground, any spills associated with the site usage or leaks from the potential tank base or petrol station and the substation may have incorporated organic chemicals into the soil – no intrusive investigation has yet been undertaken.
Polycyclic aromatic hydrocarbons, phenol, aromatic and aliphatic hydrocarbons within upper strata; both Made Ground and impacted natural soils	Volatile inhalation	Future site users	Medium. Possible made ground, any spills associated with the site usage or leaks from the potential tank base or petrol station and the substation may have incorporated organic chemicals into the soil – no intrusive investigation has yet been undertaken.
Polycyclic aromatic hydrocarbons, phenol, aromatic and aliphatic hydrocarbons within upper strata; both Made Ground and impacted natural soils	Horizontal and vertical migration	River Terrace Deposits and Raglan Mudstone Formation (Secondary-A-Aquifers)	Medium. Possible made ground, any spills associated with the site usage or leaks from the potential tank base or petrol station and the substation may have incorporated organic chemicals into the soil – no intrusive investigation has yet been undertaken.
Polycyclic aromatic hydrocarbons, phenol, aromatic and aliphatic hydrocarbons within upper strata; both Made Ground and impacted natural soils	Horizontal and vertical migration	Nearest surface water body – secondary river 169 m west of the site	Low to medium Possible made ground, any spills associated with the site usage or leaks from the potential tank base or petrol station and the substation may have incorporated organic chemicals into the soil – no intrusive investigation has yet been undertaken.
Sulphates from made ground beneath site	Direct contact	Water pipes	Medium.
Asbestos if present within made ground beneath site	Inhalation of fibres	Future site users	Medium for future site users. Demolition of any former structures at the site and any resulting made ground may have incorporated asbestos containing materials into the ground.
Asbestos if present within made ground beneath site	Inhalation of fibres	Construction workers	Medium for construction workers. Demolition of any former structures at the site and any resulting made ground may have incorporated asbestos containing materials into the ground.
Aggressive pH from made ground beneath site	Direct contact	Water pipes	Medium. Pipes may be at risk from aggressive ground conditions.

6.5 Preliminary Ground Gas Risk Assessment

Source	Pollutant	Receptors	Pathway	Hazard Severity	Likelihood	Risk
Deep Made Ground beneath the site (general areas)	Carbon dioxide possibly methane if extensive organic material present	Human health and structures	Migration, volatilisation into indoor and outdoor air space and accumulation. Ground gas release from Made Ground tends to lack driving force.	Effect on human health (severe) Effect on structures (severe)	Low. Deep or putrescible Made Ground is not expected to be present at the site.	LOW To be confirmed by intrusive site investigation.
Historical backfilled fish pond 200 m to the north of the site (backfilled in 1988).	Carbon dioxide and methane	Human health and structures	Migration, volatilisation into indoor and outdoor air space and accumulation.	Effect on human health (severe) Effect on structures (severe)	Low. The pond has been backfilled for a number of years allowing any gas production to reduce significantly. It is also some distance from the site. EMS have investigated this pond for another client and significant organic material is not present.	LOW
Historical backfilled small pond or quarry 200 m to the south-east of the site (backfilled by 1985).	Carbon dioxide and methane	Human health and structures	Migration, volatilisation into indoor and outdoor air space and accumulation.	Effect on human health (severe) Effect on structures (severe)	Low. The former pond or quarry has been developed over, is not recorded as a landfill and due to its small size, the time since it was backfilled and the low sensitivity of the proposed end use, is not considered a significant source of ground gas.	LOW
Natural soils and rocks.	Radon	Human Health	Migration, volatilisation into indoor and outdoor air space and accumulation.	Effect on human health (severe)	Low. The site is not within an area where radon protective measures are required.	LOW

7. Conclusions/recommendations

7.1 Conclusions

The desk study has revealed potentially active pollutant linkages related to the potential for Made Ground to exist in some parts of the site and spills or leaks of fuels, lubricants and coolants related to former site usages, potential tank base and an adjacent electricity substation and off-site petrol station. Asbestos is also a potential soil contaminant. Due to these linkages it is recommended that an intrusive investigation of soils beneath the site is undertaken.

7.2 Recommendations – Contamination

Prior to development at EMS recommend that intrusive investigation of the site by machine excavated trial pits is undertaken to allow inspection and sampling of the soils.

It is recommended that this desk study report is passed to the relevant Environmental Health Department of Herefordshire Council for comment as soon as possible.

7.3 Recommendations – Geotechnical

The superficial deposits of the River Terrace Deposits are likely to be suitable to support conventional pad/strip foundations. It is recommended that intrusive investigation in the form of trial pits is undertaken in order to confirm ground conditions beneath the site.

7.4 Soakaway Drainage

Published geological maps suggest that the site is underlain by River Terrace Deposits which may contain granular strata. As long as groundwater levels in these soils are not too elevated it is likely that use of soakaway drainage will be possible. It is recommended that machine excavated trial pits are undertaken at the site to reveal the nature of the soils present and give an indication of groundwater levels.

7.5 Recommendations – Waste

If soil waste is to be removed from site it may require Waste Acceptance Classification (WAC) testing prior to removal by a fully licensed waste carrier to a suitably licensed facility. WAC sampling and analysis has an extended turnaround time due to the test methods required by the guidance; a minimum of three weeks should be included in development timescales to allow for WAC results to be obtained. If materials are to be re-used on site, this must be undertaken in accordance with all current waste and re-use (WRAP) guidance.

Appendices

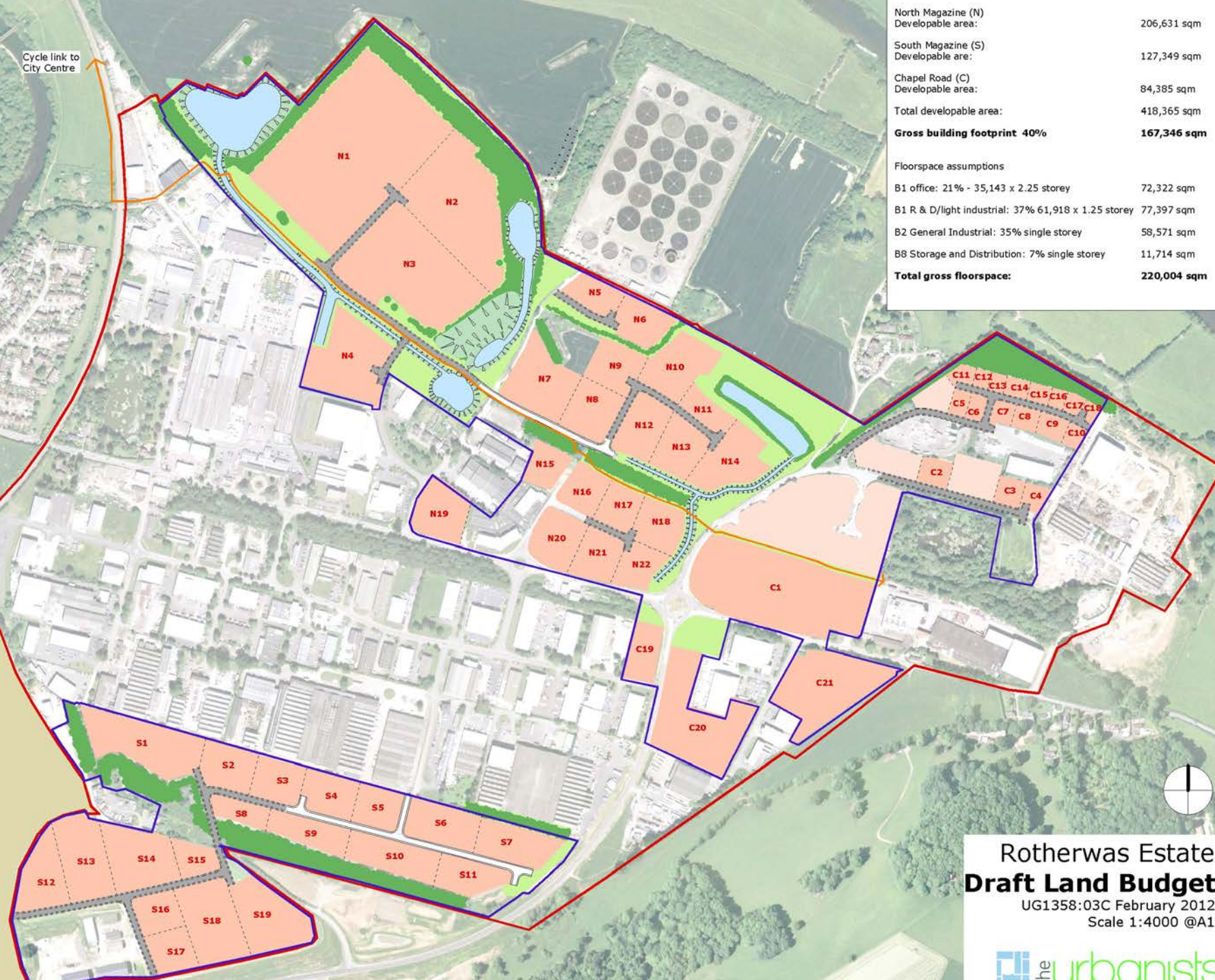
- a) Site Plans**
- b) Photographic Record**
- c) Environmental Data**
- d) Historical Maps**

Appendix A – Site Plans



Overall Development Area and Floorspace

North Magazine (N)	
Developable area:	206,631 sqm
South Magazine (S)	
Developable area:	127,349 sqm
Chapel Road (C)	
Developable area:	84,385 sqm
Total developable area:	418,365 sqm
Gross building footprint 40%	167,346 sqm
Floorspace assumptions	
B1 office: 21% - 35,143 x 2.25 storey	72,322 sqm
B1 R & D/light industrial: 37% 61,918 x 1.25 storey	77,397 sqm
B2 General Industrial: 35% single storey	58,571 sqm
B8 Storage and Distribution: 7% single storey	11,714 sqm
Total gross floorspace:	220,004 sqm



Rotherwas Estate Draft Land Budget

UG1358:03C February 2012
Scale 1:4000 @A1

Appendix B – Photographic Record



View east of the site access.



View north-east of the north-west corner of the site and the area of raised land.



View east of the margin along the northern boundary (former railway line location).



View south-east across the site.



View south across the site with the petrol station (off-site) in the background.



View south-east along the line of the former railway siding.



View north-west along the line of the former railway siding.



View south-east of south-east corner of the site including the former access road.



View south-west across the site including the former access road.



View north-east across the site with the north-east corner in the background.



View west along the northern boundary of the former railway line location.



View west along the southern boundary including former access road.



View west across the site.



View west of the access road on the west side of the site.



The potential tank base in the south-east part of the site.



The swale in the north-east corner of the site.



The potential soakaway on the east half of the southern boundary.



The electricity sub-station adjacent to the north-east corner of the site.



The sewage pumping station adjacent to the north-east corner of the site.

Appendix C – Environmental Data



Environmental Management Solutions Ltd EMS	Groundsure Reference:	GS-2246342
Sigeric Business Park, HOLME LACY ROAD, HEREFORD, HR2 6BQ	Your Reference:	EMS5268
	Report Date	17 Jul 2015
	Report Delivery Method:	Email - pdf

Groundsure Enviroinsight

Address: Skylon Plots 16, 17, 18, 20, 21 and 22,

Dear Sir/ Madam,

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

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

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Groundsure Enviroinsight

Address: Skylon Plots 16, 17, 18, 20, 21 and 22,
Date: 17 Jul 2015
Reference: GS-2246342
Client: Environmental Management Solutions Ltd EMS

NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 12-Sep-2009
Grid Reference: 353196,238014
Site Size: 3.17ha

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Overview of Findings

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

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	1	2	5	22
1.2 Additional Information – Historical Tank Database	0	0	0	32
1.3 Additional Information – Historical Energy Features Database	0	3	13	11
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	0
1.6 Potentially Infilled Land	0	0	13	18
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	2
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	1
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	1	6	5
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	1	1
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	0
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-5000
3.1 Landfill Sites						
3.1.1 Environment Agency Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency Historic Landfill Sites	0	0	0	0	2	2
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	4	1	Not searched	Not searched
3.2.2 Environment Agency Licensed Waste Sites	0	0	7	5	12	4

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	8	23	Not searched
4.2 Records of Petrol and Fuel Sites	0	1	0	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Are there any records of Artificial Ground and Made Ground present beneath the study site?	No
5.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site?	Yes
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	0-500m					
6.1 Are there any records of Strata Classification in the Superficial Geology within 500m of the study site?	Yes					
6.2 Are there any records of Strata Classification in the Bedrock Geology within 500m of the study site?	Yes					
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	2	10
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	2	1
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	2
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	0	2	Not searched	Not searched
	On-site	0-50m	51-250	251-500	501-1000	1000-1500

Section 6: Hydrogeology and Hydrology

0-500m

6.9 Is there any Environment Agency information on river quality within 1500m of the study site?	No	No	No	No	No	Yes
6.10 Detailed River Network entries within 500m of the site	0	0	3	2	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Are there any Environment Agency Zone 2 floodplains within 250m of the study site?	Yes
7.2 Are there any Environment Agency Zone 3 floodplains within 250m of the study site?	Yes
7.3 What is the Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site?	Low
7.4 Are there any Flood Defences within 250m of the study site?	No
7.5 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
7.6 Are there any areas used for Flood Storage within 250m of the study site?	No
7.7 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Potential at Surface
7.8 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	Moderate

Section 8: Designated Environmentally Sensitive Sites

On-site 0-50m 51-250 251-500 501-1000 1000-2000

8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	1	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	2	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	1	3	2
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	1
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	1	0	1	0	0	4
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards

9.1 What is the maximum risk of natural ground subsidence?

Very Low

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

Negligible

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

Very Low

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

Negligible

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

Negligible

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

Very Low

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

Very Low

9.2 Radon

9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?

The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?

No radon protective measures are necessary.

Section 10: Mining

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

No

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

Yes

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

No

Using this report

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

1. Historical Industrial Sites

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

2. Environmental Permits, Incidents and Registers

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

3. Landfills and Other Waste Sites

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

4. Current Land Uses

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

5. Geology

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

6. Hydrogeology and Hydrology

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

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

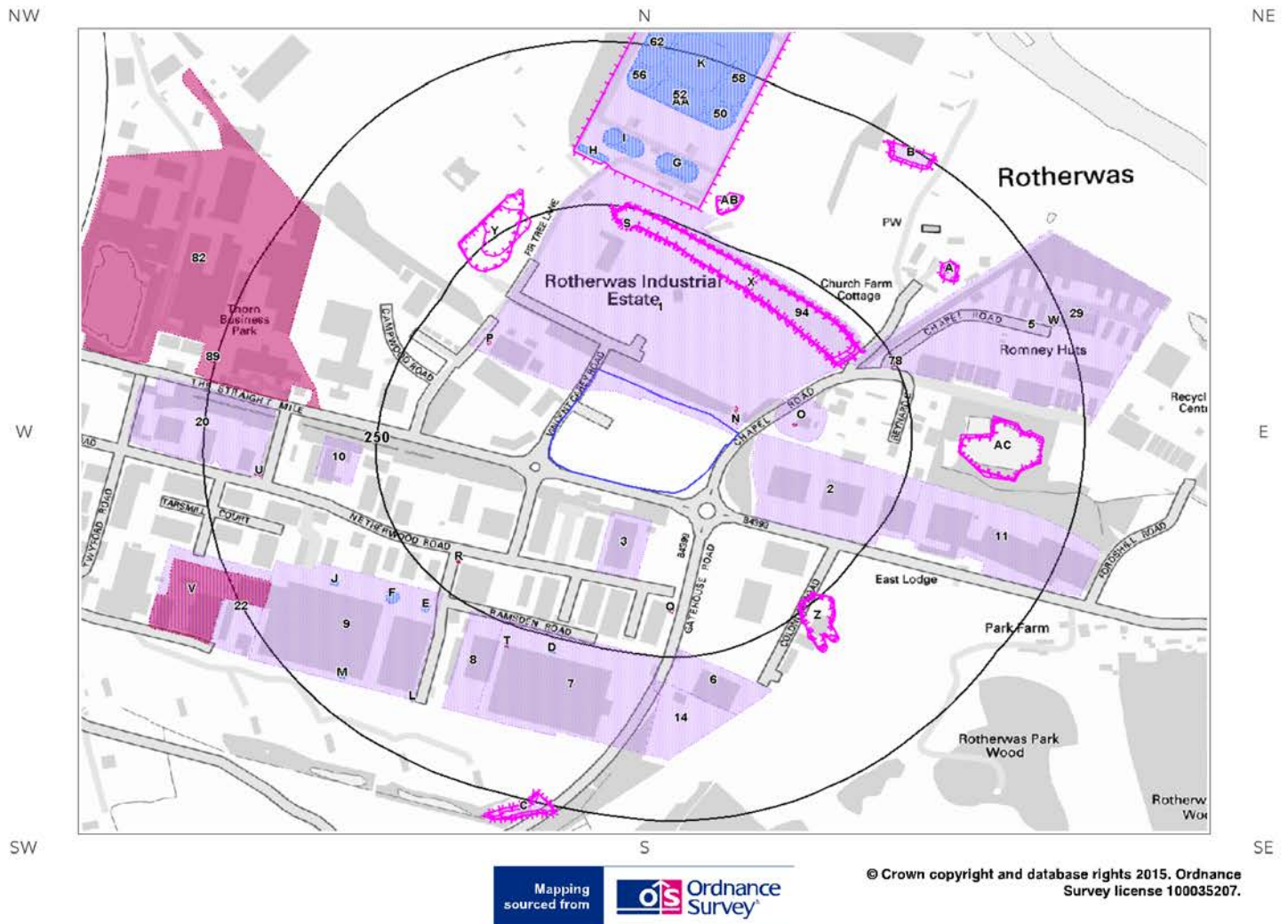
Note: Maps

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

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

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

1. Historical Land Use



Historical 1:10,000 and 1:10,560 scale mapping



Site Outline

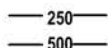


Industrial Land Use



Potentially Infilled Land

Historical 1:2,500, 1:1,250 and 1:500 scale mapping



Search Buffers (m)



Energy Features



Petrol Stations



Tanks



Garages

1. Historical Industrial Sites

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

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

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 30

ID	Distance [m]	Direction	Use	Date
1	0	On Site	Industrial Estate	1983
2	26	E	Unspecified Works	1983
3	43	S	Unspecified Works	1983
4O	54	E	Unspecified Works	1983
5	195	NE	Unspecified Depots	1983
6	236	S	Unspecified Warehouse	1983
7	242	S	Unspecified Warehouse	1983
8	245	SW	Unspecified Works	1983
9	257	SW	Unspecified Warehouses	1983
10	269	W	Unspecified Works	1983
11	276	E	Unspecified Works	1983
12AA	282	NE	Sewage Works	1983
13E	282	SW	Unspecified Tank	1983
14	286	S	Unspecified Depot	1983
15F	301	SW	Unspecified Tank	1983
16G	315	NE	Unspecified Tanks	1983
17I	330	N	Unspecified Tanks	1983
18A	377	NE	Old Gravel Pit	1887
19A	378	NE	Old Gravel Pit	1886
20	399	W	Unspecified Works	1983
21K	406	NE	Unspecified Tanks	1983
22	437	SW	Unspecified Works	1983
23B	470	NE	Unspecified Pit	1963
24B	471	NE	Unspecified Ground Workings	1945
25B	471	NE	Unspecified Ground Workings	1928
26V	484	W	Unspecified Works	1983
27C	485	S	Unspecified Pit	1963
28C	486	S	Unspecified Pit	1928
29	487	E	Unspecified Depot	1983
30C	488	S	Unspecified Ground Workings	1945

1.2 Additional Information – Historical Tank Database

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

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

32

ID	Distance (m)	Direction	Use	Date
31D	269	S	Unspecified Tank	1995
32D	270	S	Unspecified Tank	1961
33D	270	S	Unspecified Tank	1961
34D	270	S	Unspecified Tank	1989
35T	278	S	Unspecified Tank	1995
36E	285	SW	Unspecified Tank	1961
37F	303	SW	Unspecified Tank	1961
38G	311	NE	Tanks	1996
39G	311	NE	Tanks	1987
40H	315	N	Tanks	1996
41H	317	N	Tanks	1987
42G	317	NE	Tanks	1982
43I	326	N	Tanks	1996
44I	327	N	Tanks	1987
45I	343	N	Unspecified Tank	1982
46J	359	SW	Unspecified Tank	1995
47J	360	SW	Unspecified Tank	1989
48J	361	SW	Unspecified Tank	1961
49K	404	NE	Tanks	1996
50	404	NE	Unspecified Tank	1987
51K	407	NE	Tanks	1982
52	408	N	Tanks	1987
53L	413	SW	Unspecified Tank	1995
54L	414	SW	Unspecified Tank	1961
55L	414	SW	Unspecified Tank	1989
56	428	N	Unspecified Tank	1987
57M	445	SW	Unspecified Tank	1995
58	445	NE	Tanks	1987
59M	446	SW	Unspecified Tank	1989
60M	447	SW	Unspecified Tank	1961
61K	448	N	Tanks	1987
62	466	N	Tanks	1987

1.3 Additional Information – Historical Energy Features Database

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

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

27

ID	Distance (m)	Direction	Use	Date
63N	8	NE	Electricity Substation	1996
64N	10	NE	Electricity Substation	1987
65N	24	NE	Electricity Substation	1982
66O	78	E	Electricity Substation	1996
67O	78	E	Electricity Substation	1987
68P	152	NW	Electricity Substation	1987
69P	153	NW	Electricity Substation	1992
70Q	175	S	Electricity Substation	1989
71Q	175	S	Electricity Substation	1995
72Q	175	S	Electricity Substation	1961
73Q	175	S	Electricity Substation	1961
74R	200	SW	Electricity Substation	1995
75R	201	SW	Electricity Substation	1989
76S	217	N	Electricity Substation	1996
77S	219	N	Electricity Substation	1987
78	246	NE	Electricity Substation	1987
79T	278	S	Electricity Substation	1989
80T	279	S	Electricity Transformer	1961
81T	279	S	Electricity Transformer	1961
82	338	W	Electricity Works	1971
83U	417	W	Electricity Substation	1995
84U	419	W	Electricity Substation	1961
85U	419	W	Electricity Substation	1989
86V	445	SW	Electricity Works	1971
87W	481	E	Electricity Substation	1996
88W	482	E	Electricity Substation	1987
89	499	W	Electricity Substation	1983

1.4 Additional Information – Historical Petrol and Fuel Site Database

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

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

0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

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

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

Database searched and no data found.

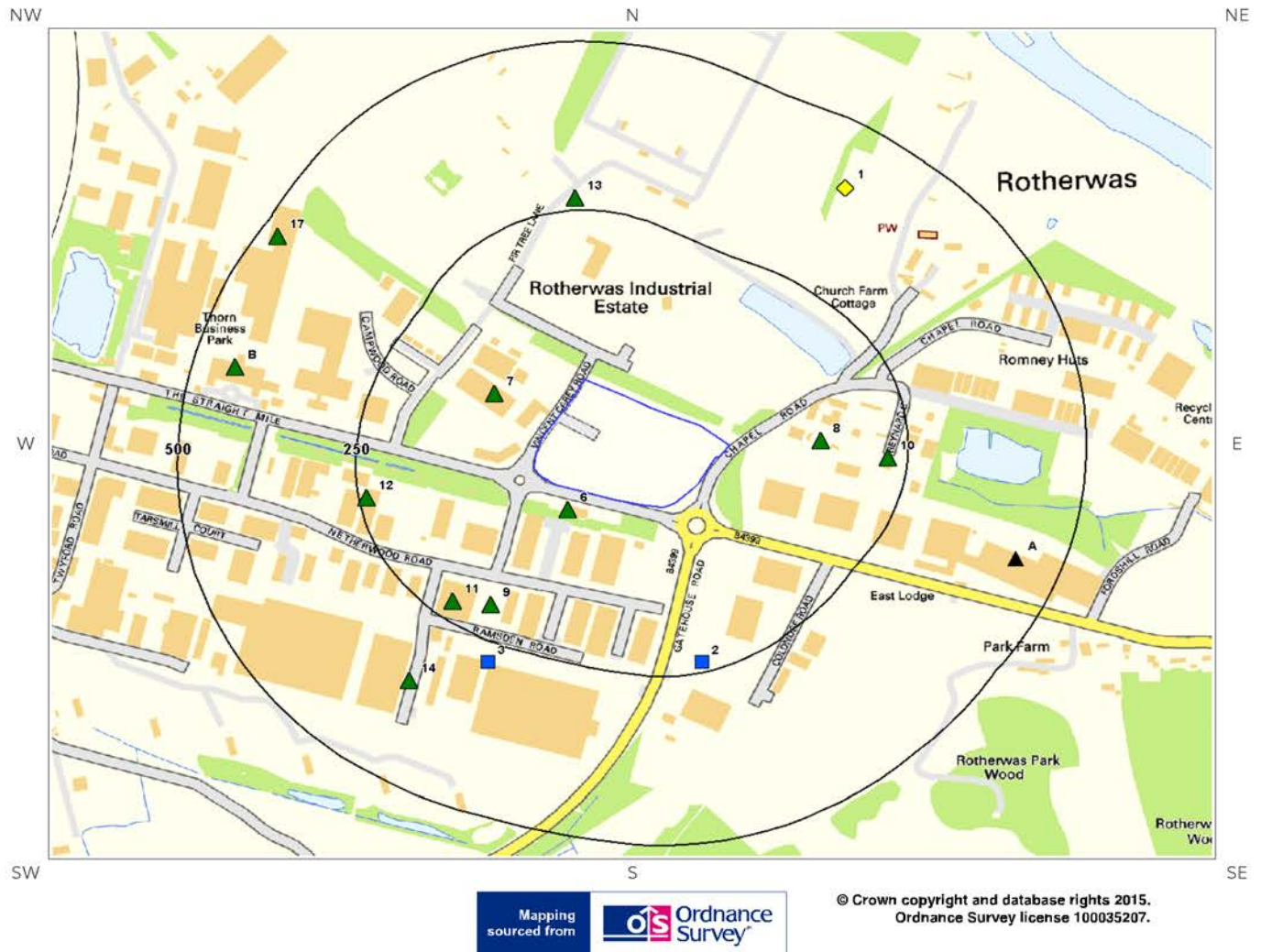
1.6 Potentially Infilled Land















Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 31

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

ID	Distance(m)	Direction	Use	Date
90X	173	NE	Fish Pond	1887
91X	174	NE	Water Body	1945
92X	174	NE	Fish Pond	1886
93X	175	NE	Fish Pond	1903
94	176	NE	Pond	1983
95X	176	NE	Water Body	1928
96Y	211	NW	Pond	1963
97Y	212	NW	Pond	1928
98Y	212	NW	Pond	1945
99Y	224	NW	Pond	1983
100Z	237	SE	Pond	1963
101Z	239	SE	Pond	1945
102Z	241	SE	Pond	1928
103AA	282	NE	Sewage Works	1983
104AB	287	NE	Pond	1928
105AB	287	NE	Pond	1945
106AB	289	NE	Pond	1963
107AC	318	E	Pond	1963
108AC	318	E	Pond	1983
109AC	321	E	Pond	1945
110AC	322	E	Pond	1928
111A	377	NE	Old Gravel Pit	1887
112A	378	NE	Old Gravel Pit	1886
113A	380	NE	Pond	1903
114A	380	NE	Pond	1945
115B	470	NE	Unspecified Pit	1963
116B	471	NE	Unspecified Ground Workings	1928
117B	471	NE	Unspecified Ground Workings	1945
118C	485	S	Unspecified Pit	1963
119C	486	S	Unspecified Pit	1928
120C	488	S	Unspecified Ground Workings	1945

2. Environmental Permits, Incidents and Registers Map



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

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency and Local Authorities reveal the following information:

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

0

Database searched and no data found.

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

2

The following Part A(1) and IPPC Authorised Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
18A	436	SE	353740 237850	Operator: Dragon Recycling Solutions Ltd Installation Name: Mercury Retort Process: NON-FERROUS METALS; PRODUCING ETC CADMIUM/MERCURY AND ALLOYS CONTAINING >0.05 PERCENT	Permit Number: RP3035HA Original Permit Number: RP3035HA EPR Reference: - Issue Date: 28/1/2011 Effective Date: 28/1/2011 Last date noted as effective: 2015-04-01 Status: Superseded
19A	436	SE	353740 237850	Operator: Dragon Recycling Solutions Limited Installation Name: Mercury Retort Process: NON-FERROUS METALS; PRODUCING ETC CADMIUM/MERCURY AND ALLOYS CONTAINING >0.05 PERCENT	Permit Number: PP3831VN Original Permit Number: RP3035HA EPR Reference: - Issue Date: - Effective Date: 3/7/2014 Last date noted as effective: 2015-04-01 Status: Surrender Effective

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

1

The following List 2 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
1	405	NE	353500 238400	Name: Thorn Lighting, Holme Lacy Rd. Rotherwas, Hereford Status: Not Active Receiving Water: River Wye Authorised Substances: Chromium, Copper, Lead, Nickel, Zinc

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

12

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

ID	Distance (m)	Direction	NGR	Details
6	33	S	353112 237923	Address: Rotherwas Service Station Ltd, Rotherwas Service Station, Holme Lacy Road, Hereford, HR2 6BQ Process: Vapour Recovery Status: Current Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
7	91	NW	353009 238094	Address: Bathgate Flooring Ltd, Fir Tree Road, Rotherwas Ind Estate, Hereford, HR2 6LA Process: Timber Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
8	127	E	353466 238024	Address: Tarmac Western Ltd, Rotherwas, Hereford, HR2 6LD Process: Cement Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

ID	Distance (m)	Direction	NGR	Details
9	203	SW	353004 237781	Address: Rexam Packaging, Lower Rd, Hereford, HR2 6JG Process: Print/paint/ink/dyes Process, Process:packaging/foam Process Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
10	222	E	353560 237999	Address: Hereford Car and Commercial Services, Reynard Close, Rotherwas Industrial Estate, Hereford, HR2 6JH Process: Waste Oil Burner Status: Current Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
11	224	SW	352951 237787	Address: KGD Industrial Services, Netherton Road, Rotherwas Ind Estate, Hereford, HR2 6JU Process: Pickling of Stainless Steel with Acid Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
12	240	W	352830 237940	Address: Keg Services, Rotherwas, Kegs & Casks, Hereford, Herefordshire, HR2 6JU Process: Thermal Spraying Status: Revoked Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
13	266	N	353122 238384	Address: Polyfords (Plastics), Fir Tree Lane, Rotherwas, Hereford, HR2 6LA Process: Printing Status: Revoked Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
14	356	SW	352890 237670	Address: Alfaplas Ltd, Rotherwas, Hereford, HR2 6LR Process: Printing On Flexible Packaging Status: Current Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
15B	440	W	352646 238133	Address: Thorn Lighting, Holme Lacy Road, Hereford, HR2 6DA Process: Foundry, Powder Coating Status: Revoked Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
16B	441	W	352645 238133	Address: Barton Aluminium, Rotherwas, Hereford, HR2 6JS Process: Foundry & Casting Process Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
17	474	NW	352705 238327	Address: Longma Bio Fuels Ltd, Unit 5B, Thorn Bussiness Park, Rotherwas Ind Estate, Hereford, HR2 6JT Process: Burning Waste Cooking Oil in Appliance 0.4-3MW Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

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

2

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

ID	Distance (m)	Direction	NGR	Details
2	234	S	353300 237700	<p>Address: TREVOR OAKLEY TRANSPORT ROTHERWAS E, TREVOR OAKLEY TRANSPORT ROTHERWA, ROTHERWAS EST, UNKNOWN, UNKNOWN, UNKNOWN</p> <p>Effluent Type: UNSPECIFIED</p> <p>Permit Number: AH4004901</p> <p>Permit Version: 1</p> <p>Receiving Water: Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/07/1974 Effective Date: 25-Jul-1974 Revocation Date: 08/04/1994</p>
3	279	S	353000 237700	<p>Address: PROPERTY SERVICES AGENCY BUILDING 2, PROPERTY SERVICES AGENCY BUILDIN, BUILDING 214/215 HOLME LACY ROAD, HOLME LACY ROAD ROTHERWAS HEREFO, ROTHERWAS HEREFORD, HEREFORD</p> <p>Effluent Type: UNSPECIFIED</p> <p>Permit Number: AH4004801</p> <p>Permit Version: 1</p> <p>Receiving Water: Status: CONSENT EXPIRED - TIME LIMIT Issue date: 01/04/1974 Effective Date: 01-Apr-1974 Revocation Date: 19/10/1992</p>

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

0

Database searched and no data found.

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

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

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

0

Database searched and no data found.

2.3 Environment Agency Recorded Pollution Incidents

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

0

Database searched and no data found.

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

0

Database searched and no data found.

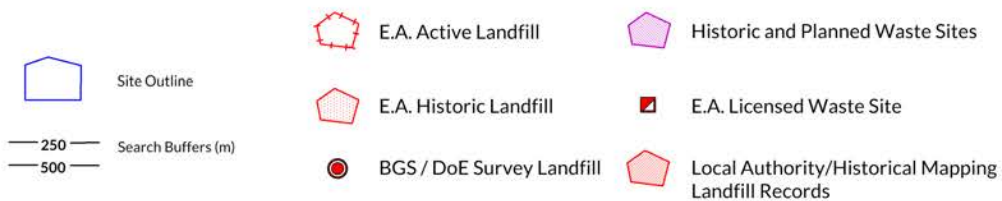
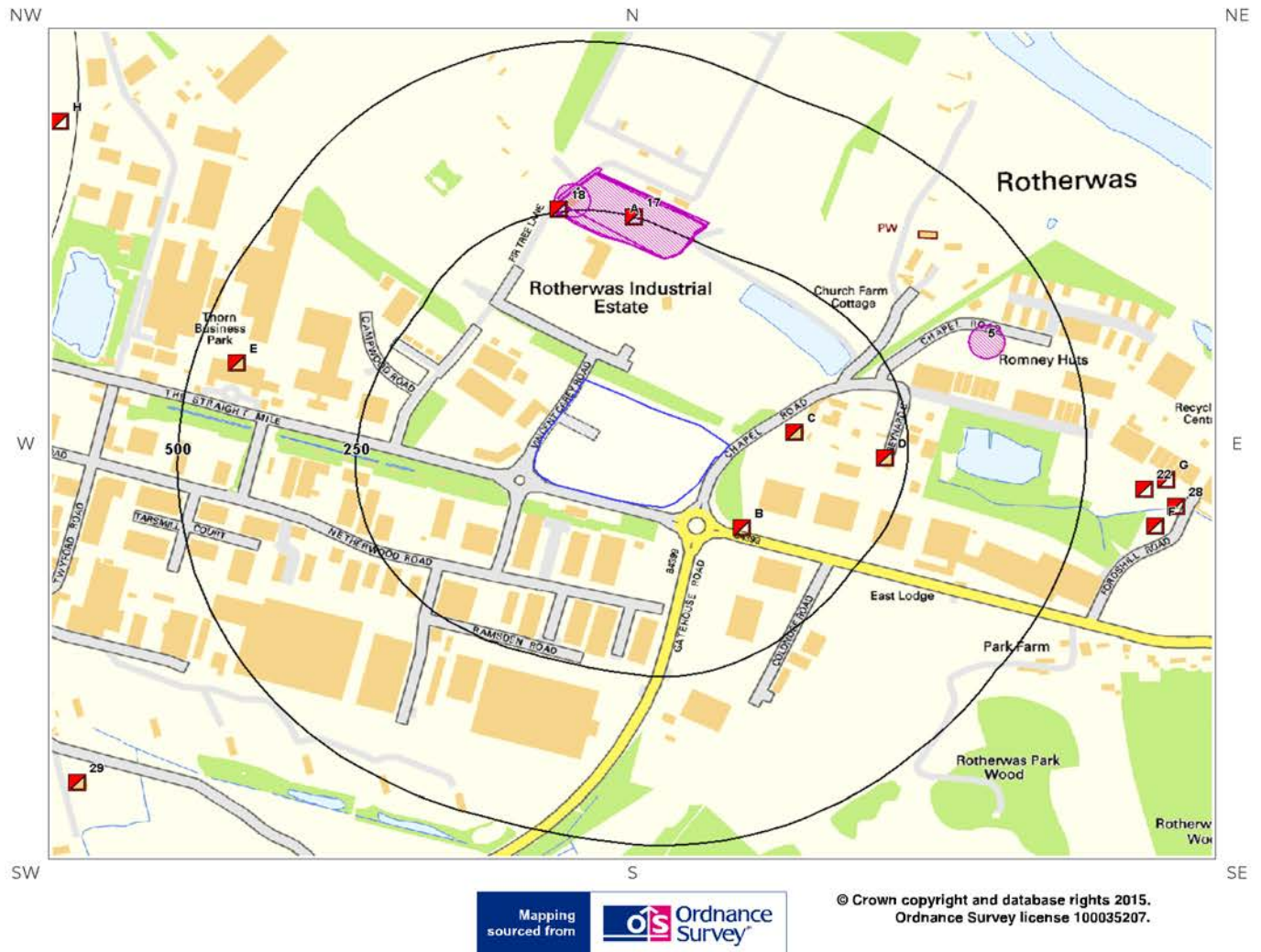
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

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

0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site:

4

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

ID	Distance (m)	Direction	NGR	Details	
Not shown	750	SE	354100 237500	Site Address: Railway Cutting, Dinedor Waste Licence: - Site Reference: - Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -
Not shown	870	SE	354100 237500	Site Address: Railway Cutting, Dinedor Waste Licence: - Site Reference: - Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -
Not shown	1040	SE	354100 237500	Site Address: Railway Cutting, Dinedor Waste Licence: - Site Reference: - Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -
Not shown	1246	W	351600 237900	Site Address: Lower Bullingham, Withy Brook, Hereford, Herefordshire Waste Licence: - Site Reference: 1.019.00, 3200/0421 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: - Last Recorded: -

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

0

Database searched and no data found.

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

0

Database searched and no data found.

3.2 Other Waste Sites

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

5

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

ID	Distance (m)	Direction	NGR	Details		
1A	208	NE	353198 238358	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1996	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
2A	209	NE	353198 238359	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1987	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
3A	210	NE	353204 238364	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1982	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
4	240	N	353118 238382	Type of Site: Waste Transfer Station & Storage Yard Site Address: Fir Tree Lane, Rotherwas Industrial Estate, Hereford & Worcester, HR2 6LA	Planning Application Reference: DCCE2008/2409/F Date: -	Further Details: Scheme comprises use of land for mixed use comprising storage (B8) lorry parking and the sui generis use of processing of nonferrous metals (including shot blasting) and non-hazardous materials. An application (ref: DCCE2008/2409/F) for detailed planning permission was withdrawn from Herefordshire C.C. Planning decision obtained Data Source: Historic Planning Application Data Type: Point

ID	Distance (m)	Direction	NGR	Details
5	367	NE	353699 238173	<p>Further Details: Scheme comprises relocation and construction of the existing waste transfer station and nearby house waste site and provision of a materials reclamation facility in existing transfer building with an extension of 390 sqm. Scheme includes the construction of an amenity building containing toilets mess/changing room of 28 sqm, three roller shutter doors and 28 parking spaces. Construction - block, brick, profiled steel cladding walls; steel cladding roof; double glazed, upvc framed windows; roller shutter doors; steel frame. Detailed plans approved by Hereford City Council on the 24th May, 2000. Please note that the site is now owned by Severn Waste Services. Contract awarded to C J Pearce Ltd mid December, 2001. Data Source: Historic Planning Application Data Type: Point</p> <p>Type of Site: Waste Transfer Station Site Address: Chapel Road, Rotherwas Industrial Estate, HEREFORD, Hereford & Worcester, HR2 6LD</p> <p>Planning Application Reference: CE2000/0099.N Date: 17/01/2002</p>

3.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site:

28

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

ID	Distance (m)	Direction	NGR	Details
10B	89	SE	353356 237898	<p>Site Address: Rotherwas Household Waste Stn, Chapel Road, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6LD Type: Special Waste Transfer Station Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MER003 EPR reference: EA/EPR/XP3095FM/V003 Operator: Mercia Waste Management Ltd Waste Management licence No: 30233 Annual Tonnage: 70500.0</p> <p>Issue Date: 20/07/2000 Effective Date: - Modified: 12/05/2012 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified</p> <p>Site Name: Rotherwas Household Waste Site, Transfer Station & M R F Correspondence Address: -, -</p>

ID	Distance (m)	Direction	NGR	Details	
11B	89	SE	353356 237898	Site Address: Rotherwas Household Waste Stn, Chapel Road, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6LD Type: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MER003 EPR reference: - Operator: Mercia Waste Management Ltd Waste Management licence No: 30233 Annual Tonnage: 70500.0	Issue Date: 20/07/2000 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: "Rotherwas Household Waste Site, Transfer Station & M R F" Correspondence Address: -, 106, High Street, Evesham, Worcestershire, WR11 4EL
12C	92	E	353429 238039	Site Address: Rotherwas Transfer Facility, Chapel Road, Hereford, Herefordshire, HR2 6LD Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BEA005 EPR reference: EA/EPR/MP3095FW/A001 Operator: Beacon Waste Ltd Waste Management licence No: 30203 Annual Tonnage: 75000.0	Issue Date: 13/01/1998 Effective Date: - Modified: 07/03/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Rotherwas Transfer Facility Correspondence Address: -, -
13C	92	E	353429 238039	Site Address: Rotherwas Transfer Facility, Chapel Road, Hereford, Herefordshire, HR2 6LD Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BEA005 EPR reference: - Operator: Beacon Waste Ltd Waste Management licence No: 30203 Annual Tonnage: 75000.0	Issue Date: 13/01/1998 Effective Date: - Modified: 07/03/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Rotherwas Transfer Facility Correspondence Address: -, 106, High Street, Evesham, Worcestershire, WR11 4EL
14D	219	E	353557 238002	Site Address: Quickskip Transfer Stn, Raynards Close, Rotherwas Ind Est, Hereford, HR2 6JH Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LIV001 EPR reference: - Operator: Lively Joseph Waste Management licence No: 30026 Annual Tonnage: 24999.0	Issue Date: 28/04/1989 Effective Date: - Modified: 01/02/2005 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Quickskip Transfer Station Correspondence Address: -, Unit 18, Thorn Business Park, Rotherwas, Hereford, HR2 6JT
15D	219	E	353557 238002	Site Address: Quickskip Transfer Stn, Reynard Close, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6JH Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LIV001 EPR reference: EA/EPR/FP3199FD/V002 Operator: Lively Joseph Henry Waste Management licence No: 30026 Annual Tonnage: 24999.0	Issue Date: 28/04/1989 Effective Date: - Modified: 01/02/2005 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Quickskip Transfer Station Correspondence Address: -, -

ID	Distance (m)	Direction	NGR	Details
16D	219	E	353557 238002	<p>Site Address: Quickskip Transfer Stn, Raynards Close, Rotherwas Ind Est, Hereford, HR2 6JH</p> <p>Type: Household, Commercial & Industrial Waste T Stn</p> <p>Size: >= 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: QUI001</p> <p>EPR reference: -</p> <p>Operator: Lively J</p> <p>Waste Management licence No: 30026</p> <p>Annual Tonnage: 93750.0</p> <p>Issue Date: 28/04/1989</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Quickskip Transfer Station</p> <p>Correspondence Address: -, Reynard Close, Rotherwas Ind Est, Hereford, HR2 6JH</p>
17	251	N	353204 238359	<p>Site Address: Fir Tree Lane, Unit 285, Rotherwas Industrial Estate, Rotherwas, Hereford, Herefordshire, HR2 6LA</p> <p>Type: Treatment of waste to produce soil <75,000 tpy</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: QU 001</p> <p>EPR reference: EA/EPR/BB3402XZ/A001</p> <p>Operator: Quickskip Hereford Limited</p> <p>Waste Management licence No: 401273</p> <p>Annual Tonnage: 0.0</p> <p>Issue Date: 17/04/2014</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Fir Tree Lane Site</p> <p>Correspondence Address: -, -</p>
18	255	N	353099 238370	<p>Site Address: Waste Reclamation Centre, Fir Tree Lane, Rotherwas Ind Est, Evesham, Herefordshire, HR2 6LA</p> <p>Type: Household, Commercial & Industrial Waste T Stn</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: BEA004</p> <p>EPR reference: EA/EPR/WP3999FU/S004</p> <p>Operator: Beacon Waste Ltd</p> <p>Waste Management licence No: 30085</p> <p>Annual Tonnage: 0.0</p> <p>Issue Date: 02/03/1993</p> <p>Effective Date: -</p> <p>Modified: 17/05/2010</p> <p>Surrendered Date: 09/07/2012</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Surrendered</p> <p>Site Name: Waste Reclamation Centre</p> <p>Correspondence Address: -, -</p>
19E	441	W	352648 238142	<p>Site Address: Quickskip (Hereford), Unit 18, Thorn Business Park, Rotherwas, Hereford, Herefordshire, HR2 6JT</p> <p>Type: Special Waste Transfer Station</p> <p>Size: >= 25000 tonnes < 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: QUI002</p> <p>EPR reference: EA/EPR/TP3595FH/V005</p> <p>Operator: Lively Joseph Henry</p> <p>Waste Management licence No: 30271</p> <p>Annual Tonnage: 75000.0</p> <p>Issue Date: 15/10/2002</p> <p>Effective Date: -</p> <p>Modified: 13/08/2014</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Modified</p> <p>Site Name: Quickskip (Hereford) Transfer Station</p> <p>Correspondence Address: -, -</p>
20E	441	W	352648 238142	<p>Site Address: Quickskip Recycling Centre, Thorn Business Park, Rotherwas, Hereford, Herefordshire, HR2 6JT</p> <p>Type: Household, Commercial & Industrial Waste T Stn</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: QUI002</p> <p>EPR reference: -</p> <p>Operator: Lively Joseph Henry</p> <p>Waste Management licence No: 30271</p> <p>Annual Tonnage: 24999.0</p> <p>Issue Date: 15/10/2002</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Quickskip Recycling Centre</p> <p>Correspondence Address: -, Reynard Close, Rotherwas Industrial Est, Hereford, HR2 6JH</p>

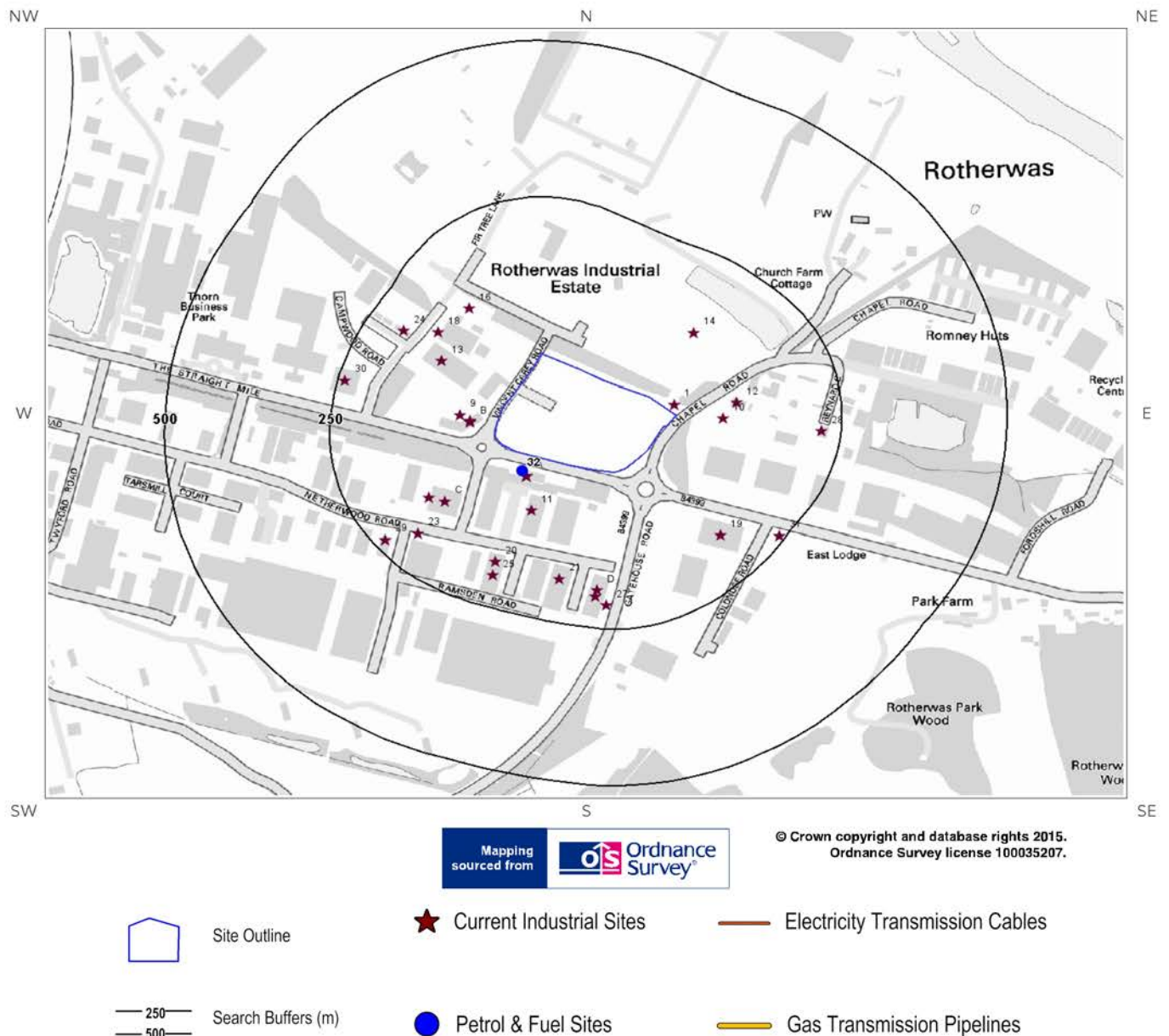
ID	Distance (m)	Direction	NGR	Details
21E	441	W	352648 238142	<p>Site Address: Quickskip (Hereford), Unit 18, Thorn Business Park, Rotherwas, Hereford, Herefordshire, HR2 6JT Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: QUI002 EPR reference: EA/EPR/TP3595FH/V004 Operator: Lively Joseph Henry Waste Management licence No: 30271 Annual Tonnage: 75000.0</p> <p>Issue Date: 15/10/2002 Effective Date: - Modified: 24/06/2014 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Quickskip (Hereford) Transfer Station Correspondence Address: -, -</p>
22	585	E	353920 237956	<p>Site Address: Eastside Recycling Facility, Fordshill Road, Rotherwas Ind Est, Hereford, HR2 6NS Type: Metal Recycling Site (Vehicle Dismantler) Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: AML001 EPR reference: EA/EPR/AB3604XD/A001 Operator: Avalon Metals Limited Waste Management licence No: 400738 Annual Tonnage: 73500.0</p> <p>Issue Date: 28/01/2014 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Eastside Recycling Facility Correspondence Address: -, -</p>
23F	608	E	353935 237901	<p>Site Address: Greenapple Sludge, Fordshill Road, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6NS Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GRE001 EPR reference: EA/EPR/RP3599FV/S002 Operator: Greenapple Sludge Ltd Waste Management licence No: 30109 Annual Tonnage: 0.0</p> <p>Issue Date: 14/09/1993 Effective Date: - Modified: - Surrendered Date: 27/05/2011 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Greenapple Sludge Correspondence Address: -, -</p>
24F	608	E	353935 237901	<p>Site Address: Greenapple Sludge, Fordshill Road, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6NS Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GRE001 EPR reference: RP3599FV/A001 Operator: Greenapple Sludge Waste Management licence No: 30109 Annual Tonnage: 24999.0</p> <p>Issue Date: 14/09/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Greenapple Sludge Correspondence Address: -, -</p>
25G	613	E	353950 237970	<p>Site Address: Lloyd George House, Fordshill Road, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6NS Type: HCI Waste TS + treatment + asbestos Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EAS005 EPR reference: EA/EPR/DP3395FN/A001 Operator: Eastside 2000 Ltd. Waste Management licence No: 30391 Annual Tonnage: 75000.0</p> <p>Issue Date: 01/12/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Eastside Recycling Facility Correspondence Address: -, -</p>

ID	Distance (m)	Direction	NGR	Details
26G	613	E	353950 237970	<p>Site Address: Fordshill Road, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6DS</p> <p>Type: Special Waste Transfer Station</p> <p>Size: >= 25000 tonnes < 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: EAS005</p> <p>EPR reference: -</p> <p>Operator: Eastside 2000 Ltd.</p> <p>Waste Management licence No: 30391</p> <p>Annual Tonnage: 0.0</p> <p>Issue Date: 01/12/2006</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Eastside Recycling Facility</p> <p>Correspondence Address: -, Eastside Recycling Facility, Fordshill Road, Rotherwas Ind Estate, Hereford, Herefordshire, HR2 6DS</p>
27G	613	E	353950 237970	<p>Site Address: Fordshill Road, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6DS</p> <p>Type: -</p> <p>Size: >= 25000 tonnes < 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: EAS005</p> <p>EPR reference: -</p> <p>Operator: Eastside 2000 Ltd.</p> <p>Waste Management licence No: 30391</p> <p>Annual Tonnage: 0.0</p> <p>Issue Date: 01/12/2006</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Eastside Recycling Facility</p> <p>Correspondence Address: -, Eastside Recycling Facility, Fordshill Road, Rotherwas Ind Estate, Hereford, HR2 6DS</p>
28	631	E	353964 237930	<p>Site Address: -</p> <p>Type: Mobile Plant for remediation of land</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: WYE017</p> <p>EPR reference: EA/EPR/CB3509CT/A001</p> <p>Operator: Wye Valley Demolition Limited</p> <p>Waste Management licence No: 105599</p> <p>Annual Tonnage: 0.0</p> <p>Issue Date: 10/02/2015</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: S R 2008 No.27</p> <p>Correspondence Address: -, -</p>
29	791	SW	352425 237521	<p>Site Address: City Spares M R S Site, Watery Lane, Lower Bullingham, Herefordshire, HR2 6JW</p> <p>Type: Metal Recycling Site (Vehicle Dismantler)</p> <p>Size: >= 25000 tonnes < 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: MOR001</p> <p>EPR reference: EA/EPR/JP3399FM/A001</p> <p>Operator: Morris F G</p> <p>Waste Management licence No: 30137</p> <p>Annual Tonnage: 32400.0</p> <p>Issue Date: 06/07/1994</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: City Spares M R S Site</p> <p>Correspondence Address: -, -</p>
30H	823	NW	352400 238500	<p>Site Address: Unit 3, Thorn Business Park, Rotherwas Ind Est, Hereford, Herefordshire, HR2 6JT</p> <p>Type: Physical Treatment Facility</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: AWW001</p> <p>EPR reference: EA/EPR/BP3699LK/A001</p> <p>Operator: Amey Wye Valley Ltd</p> <p>Waste Management licence No: 100581</p> <p>Annual Tonnage: 1499.0</p> <p>Issue Date: 30/06/2009</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Amey Wye Valley Ltd</p> <p>Correspondence Address: -, -</p>
31H	823	NW	352400 238500	<p>Site Address: Land Adjacent To Unit 3, Thorn Business Park, Rotherwas Ind Estate, Hereford, Herefordshire, HR2 6JT</p> <p>Type: Physical Treatment Facility</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: BAL165</p> <p>EPR reference: EA/EPR/BB3502TF/T001</p> <p>Operator: Balfour Beatty Living Places Ltd</p> <p>Waste Management licence No: 100581</p> <p>Annual Tonnage: 4999.0</p> <p>Issue Date: 30/06/2009</p> <p>Effective Date: 13/05/2014</p> <p>Modified: 28/07/2011</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Transferred</p> <p>Site Name: Land Adjacent To Unit 3</p> <p>Correspondence Address: -, -</p>

ID	Distance (m)	Direction	NGR	Details
32H	823	NW	352400 238500	<p>Site Address: Land Adjacent To Unit 3, Thorn Business Park, Rotherwas Ind Estate, Hereford, Herefordshire, HR2 6JT</p> <p>Type: Physical Treatment Facility</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: AWW001</p> <p>EPR reference: EA/EPR/BP3699LK/V002</p> <p>Operator: Amey Wye Valley Limited</p> <p>Waste Management licence No: 100581</p> <p>Annual Tonnage: 4999.0</p> <p>Issue Date: 30/06/2009</p> <p>Effective Date: -</p> <p>Modified: 28/07/2011</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Modified</p> <p>Site Name: Land Adjacent To Unit 3</p> <p>Correspondence Address: -, -</p>
33H	823	NW	352400 238500	<p>Site Address: Land Adjacent To Unit 3, Thorn Business Park, Rotherwas Ind Estate, Hereford, Herefordshire, HR2 6JT</p> <p>Type: Physical Treatment Facility</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: BAL165</p> <p>EPR reference: EA/EPR/BB3502TF/T001</p> <p>Operator: Balfour Beatty Living Places Limited</p> <p>Waste Management licence No: 100581</p> <p>Annual Tonnage: 4999.0</p> <p>Issue Date: 30/06/2009</p> <p>Effective Date: 13/05/2014</p> <p>Modified: 28/07/2011</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Transferred</p> <p>Site Name: Land Adjacent To Unit 3</p> <p>Correspondence Address: -, -</p>
Not shown	1053	N	352973 239158	<p>Site Address: Eign Waste Management Centre, Outfall Road, Hereford, Herefordshire, HR1 1TG</p> <p>Type: Biological Treatment Facility</p> <p>Size: >= 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: UNI009</p> <p>EPR reference: -</p> <p>Operator: United Utilities Industrial Ltd</p> <p>Waste Management licence No: 30129</p> <p>Annual Tonnage: 234000.0</p> <p>Issue Date: 26/05/1994</p> <p>Effective Date: 06/03/2004</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Transferred</p> <p>Site Name: Eign Waste Management Centre</p> <p>Correspondence Address: -, United Utilities Industrial Ltd, Dawson House, Great Sankey, Warrington, WA5 3LW</p>
Not shown	1053	N	352973 239158	<p>Site Address: Eign Waste Management Centre, Outfall Road, Hereford, Herefordshire, HR1 1TG</p> <p>Type: Biological Treatment Facility</p> <p>Size: >= 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: WEL001</p> <p>EPR reference: -</p> <p>Operator: Welsh Water Industrial Services</p> <p>Waste Management licence No: 30129</p> <p>Annual Tonnage: 234000.0</p> <p>Issue Date: 26/05/1994</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Eign Waste Management Centre</p> <p>Correspondence Address: -, Alexandra Gate, P O Box 295, Rover Way, Cardiff, CF24 5UE</p>
Not shown	1194	NW	352090 238704	<p>Site Address: Eign Waste Treatment Centre, Outfall Road, Hereford, Herefordshire, HR1 1TG</p> <p>Type: Biological Treatment Facility</p> <p>Size: >= 75000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: UNI052</p> <p>EPR reference: EA/EPR/YP3999FG/V003</p> <p>Operator: Tradebe Gwent Ltd</p> <p>Waste Management licence No: 30129</p> <p>Annual Tonnage: 24999.0</p> <p>Issue Date: 26/05/1994</p> <p>Effective Date: 02/11/2007</p> <p>Modified: 01/04/2010</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Modified</p> <p>Site Name: Eign Waste Treatment Centre</p> <p>Correspondence Address: -, -</p>

ID	Distance (m)	Direction	NGR	Details	
Not shown	1218	NW	352000 238600	Site Address: Outfall Works Road, Hereford, Herefordshire, HR1 1RY Type: Landfill Gas Engine (<3 mW) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: DCW001 EPR reference: EA/EPR/UP3735GH/V002 Operator: Dwr Cymru (welsh Water) Waste Management licence No: 400043 Annual Tonnage: 0.0	Issue Date: 27/03/2013 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Eign Waste Water Treatment Works Correspondence Address: -, -

4. Current Land Use Map



4. Current Land Uses

4.1 Current Industrial Data

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

31

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	12	NE	Electricity Sub Station	353335 238038	HR2	Electrical Features	Infrastructure and Facilities
2A	33	S	Rotherwas Service Station	353111 237923	Holme Lacy Road, Hereford, HR2 6BQ	Vehicle Cleaning Services	Personal, Consumer and Other Services
3A	33	S	Rotherwas Service Station Ltd	353111 237923	Holme Lacy Road, Hereford, HR2 6BQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
4A	33	S	Rotherwas Service Station	353111 237923	Holme Lacy Road, Hereford, HR2 6BQ	Petrol and Fuel Stations	Road and Rail
5A	33	S	Rotherwas Service Station	353111 237923	Holme Lacy Road, Hereford, HR2 6BQ	Petrol and Fuel Stations	Road and Rail
6B	40	W	webuyanycar.com	353027 238010	Rural Enterprise Centre, Vincent Carey Road, Rotherwas Industrial Estate, Hereford, HR2 6FE	Secondhand Vehicles	Motoring
7B	41	W	Rural Enterprise Centre	353027 238010	Vincent Carey Road, Rotherwas Industrial Estate, Hereford, HR2 6FE	Business Parks and Industrial Estates	Industrial Features
8B	41	W	Evans EasySpace	353027 238012	Rural Enterprise Centre, Vincent Carey Rd, Rotherwas Ind Est, Hereford, HR2 6FE	Business Parks and Industrial Estates	Industrial Features
9	57	W	Brewery Plastics	353012 238021	19 Rural Enterprise Centre, Vincent Carey Road, Rotherwas Industrial Estate, Hereford, HR2 6FE	Food and Beverage Industry Machinery	Industrial Products
10	70	E	Electricity Sub Station	353409 238016	HR2	Electrical Features	Infrastructure and Facilities
11	84	S	Acorn Developments	353119 237868	Unit 3 Wallbrook Court, Netherwood Road, Rotherwas Industrial Estate, Hereford, HR2 6JG	Precision Engineers	Engineering Services
12	92	E	Hereford Low Loaders	353428 238041	2, Chapel Road, Rotherwas Industrial Estate, Hereford, HR2 6LD	General Purpose Machinery	Industrial Products
13	120	NW	Ski Tyres	352983 238107	Fir Tree Lane, Rotherwas Industrial Estate, Hereford, HR2 6LA	Vehicle Parts and Accessories	Motoring

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
14	123	NE	Rotherwas Industrial Estate	353365 238152	HR2	Business Parks and Industrial Estates	Industrial Features
15C	126	SW	T R P Polymer Solutions	352988 237883	Netherwood Road, Rotherwas Industrial Estate, Hereford, HR2 6JU	Rubber, Silicones and Plastics	Industrial Products
16	131	NW	Refuse Tip (Public)	353026 238191	HR2	Refuse Disposal Facilities	Infrastructure and Facilities
17C	139	SW	Electricity Sub Station	352965 237889	HR2	Electrical Features	Infrastructure and Facilities
18	151	NW	Electricity Sub Station	352978 238153	HR2	Electrical Features	Infrastructure and Facilities
19	173	SE	Arctic Circle Ltd	353405 237828	Coldnose Court, Coldnose Road, Rotherwas Industrial Estate, Hereford, HR2 6JL	Cooling and Refrigeration	Industrial Products
20	177	S	Sheridan Engineering Hereford Ltd	353064 237787	Unit 4, Parkwood Court, Rotherwas Industrial Estate, Hereford, HR2 6NU	Precision Engineers	Engineering Services
21	180	S	A K Industries Ltd	353161 237759	Unit 1-2, Foxwood Court, Rotherwas Industrial Estate, Hereford, HR2 6JQ	Rubber, Silicones and Plastics	Industrial Products
22D	189	S	Chris Bullock Joinery Ltd	353218 237741	Unit 3, Foxwood Court, Rotherwas Industrial Estate, Hereford, HR2 6JQ	General Construction Supplies	Industrial Products
23	190	SW	Electricity Sub Station	352948 237832	HR2	Electrical Features	Infrastructure and Facilities
24	194	NW	Commercial Vehicle Repairs	352926 238155	2 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, Hereford, HR2 6LA	Vehicle Repair, Testing and Servicing	Repair and Servicing
25	199	S	T & P Productions	353060 237765	Unit 5, Parkwood Court, Rotherwas Industrial Estate, Hereford, HR2 6NU	Precision Engineers	Engineering Services
26D	199	S	P K Precision Engineering	353215 237731	Unit 4-5, Foxwood Court, Rotherwas Industrial Estate, Hereford, HR2 6JQ	Precision Engineers	Engineering Services
27	211	S	Electricity Sub Station	353233 237717	HR2	Electrical Features	Infrastructure and Facilities
28	220	E	Hereford Car & Commercials	353557 237995	Reynard Close, Rotherwas Industrial Estate, Hereford, HR2 6JH	Vehicle Repair, Testing and Servicing	Repair and Servicing
29	233	SW	Moldmasters UK Ltd	352898 237821	Netherwood Road, Rotherwas Industrial Estate, Hereford, HR2 6JU	Electronic Equipment	Industrial Products
30	240	W	H F T Forklifts	352837 238075	Infinity House, Fir Tree Lane, Rotherwas Industrial Estate, Hereford, HR2 6LA	Lifting and Handling Equipment	Industrial Products
31	240	SE	Electricity Sub Station	353494 237828	HR2	Electrical Features	Infrastructure and Facilities

4.2 Petrol and Fuel Sites

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

1

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

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
32	27	S	353106 237931	Murco	Rotherwas Service Station, Holme Lacy Road, Holme Lacy Road, Hereford, Herefordshire, HR2 6BQ	Yes	Open

4.3 National Grid High Voltage Underground Electricity Transmission Cables

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

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

0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

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

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

0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

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

5.2 Superficial Ground and Drift Geology

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

Lex Code	Description	Rock Type
RTD1	RIVER TERRACE DEPOSITS, 1	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]

5.3 Bedrock and Solid Geology

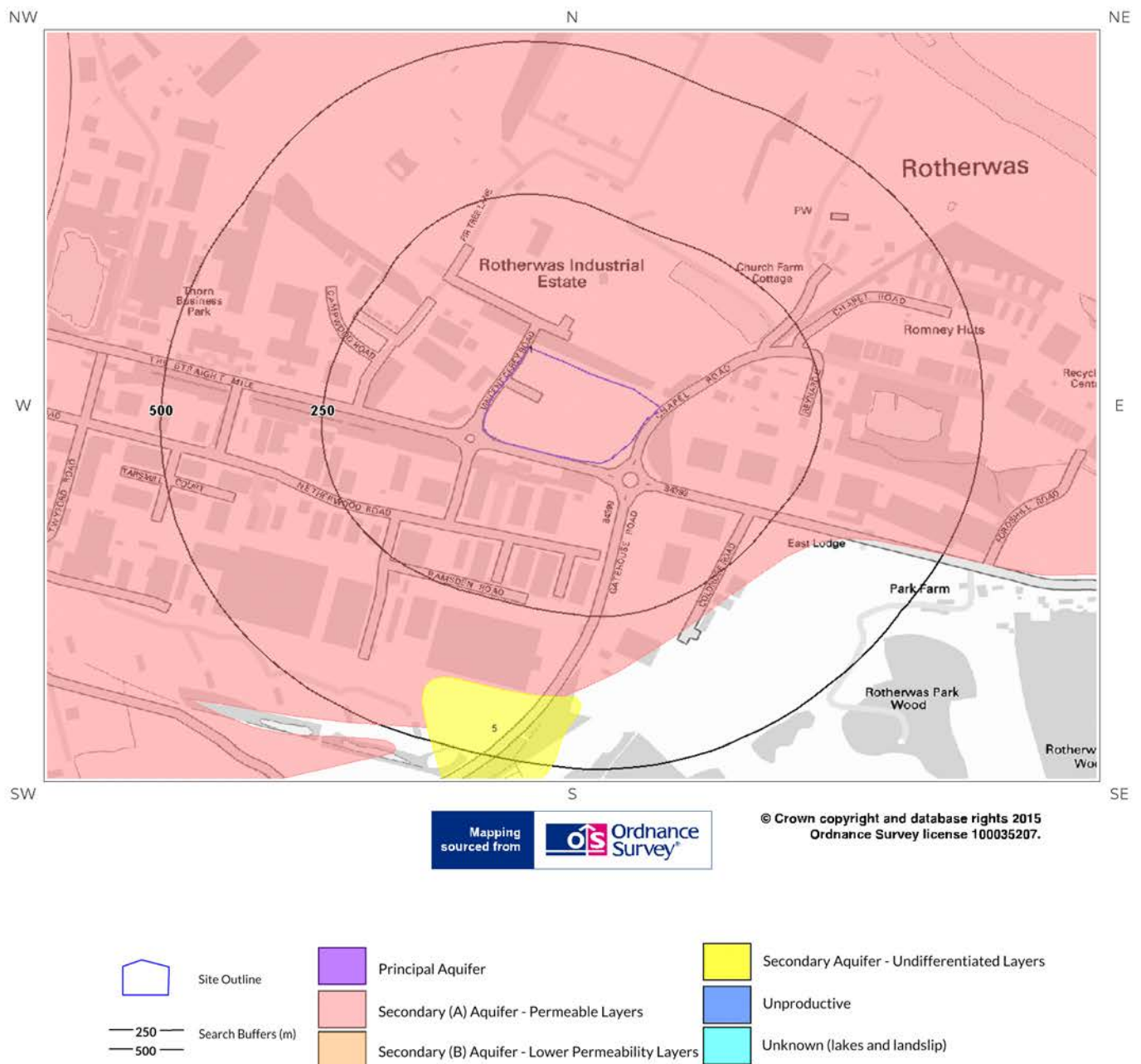
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
RG-SIMD	RAGLAN MUDSTONE FORMATION	SILTSTONE AND MUDSTONE, INTERBEDDED

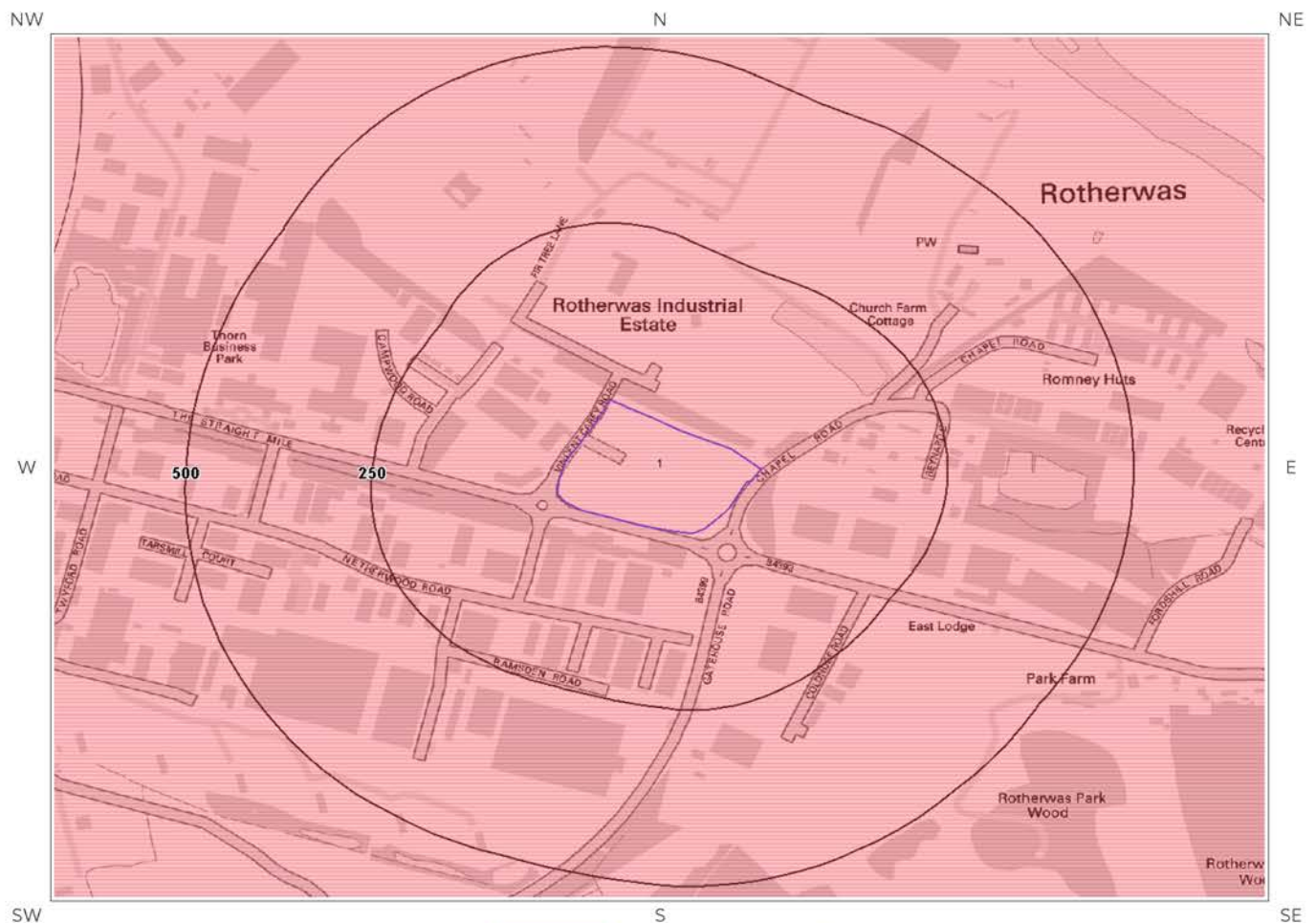
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



6b. Aquifer Within Bedrock Geology and Abstraction Licenses

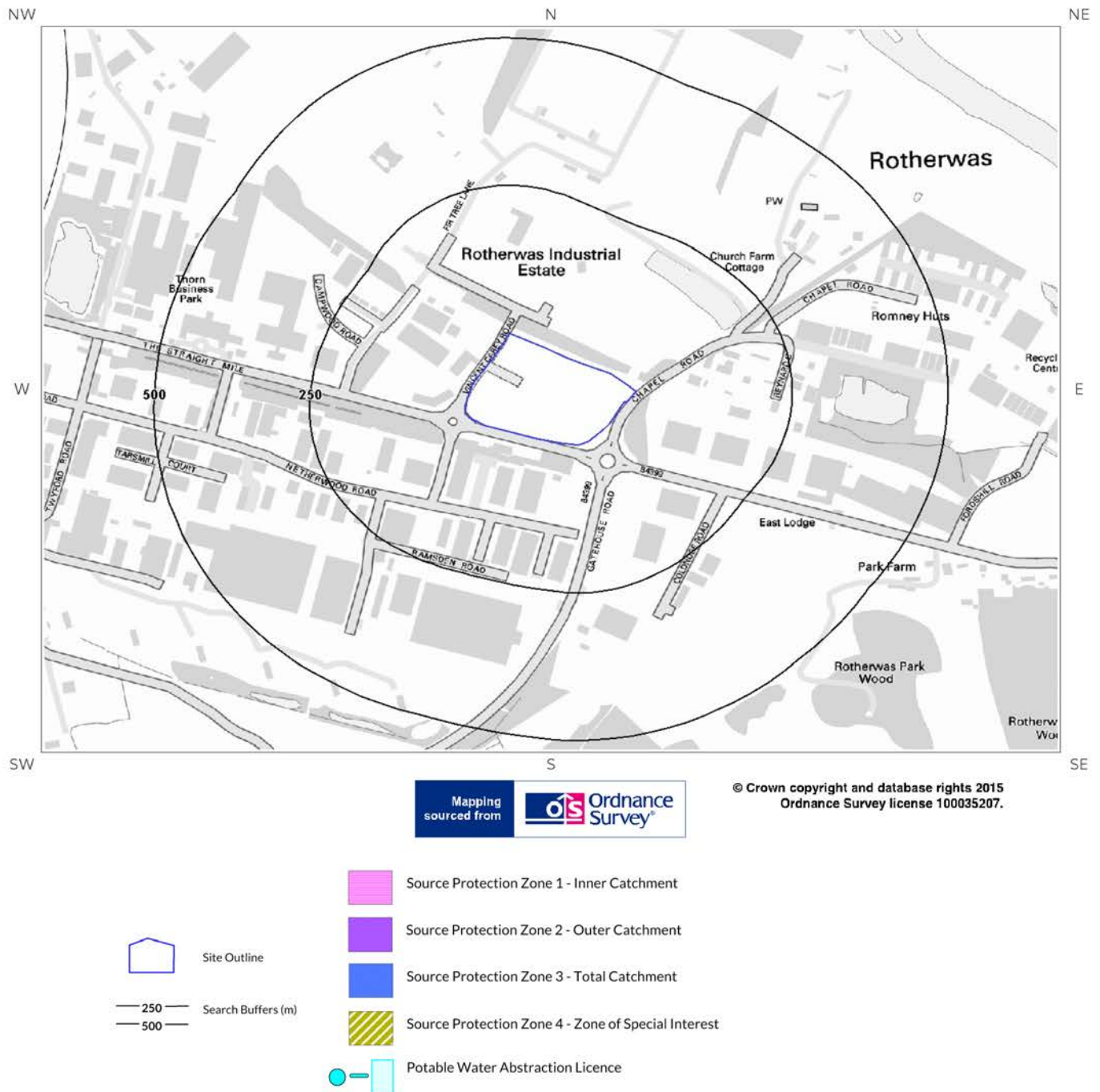


Mapping sourced from **Ordnance Survey**

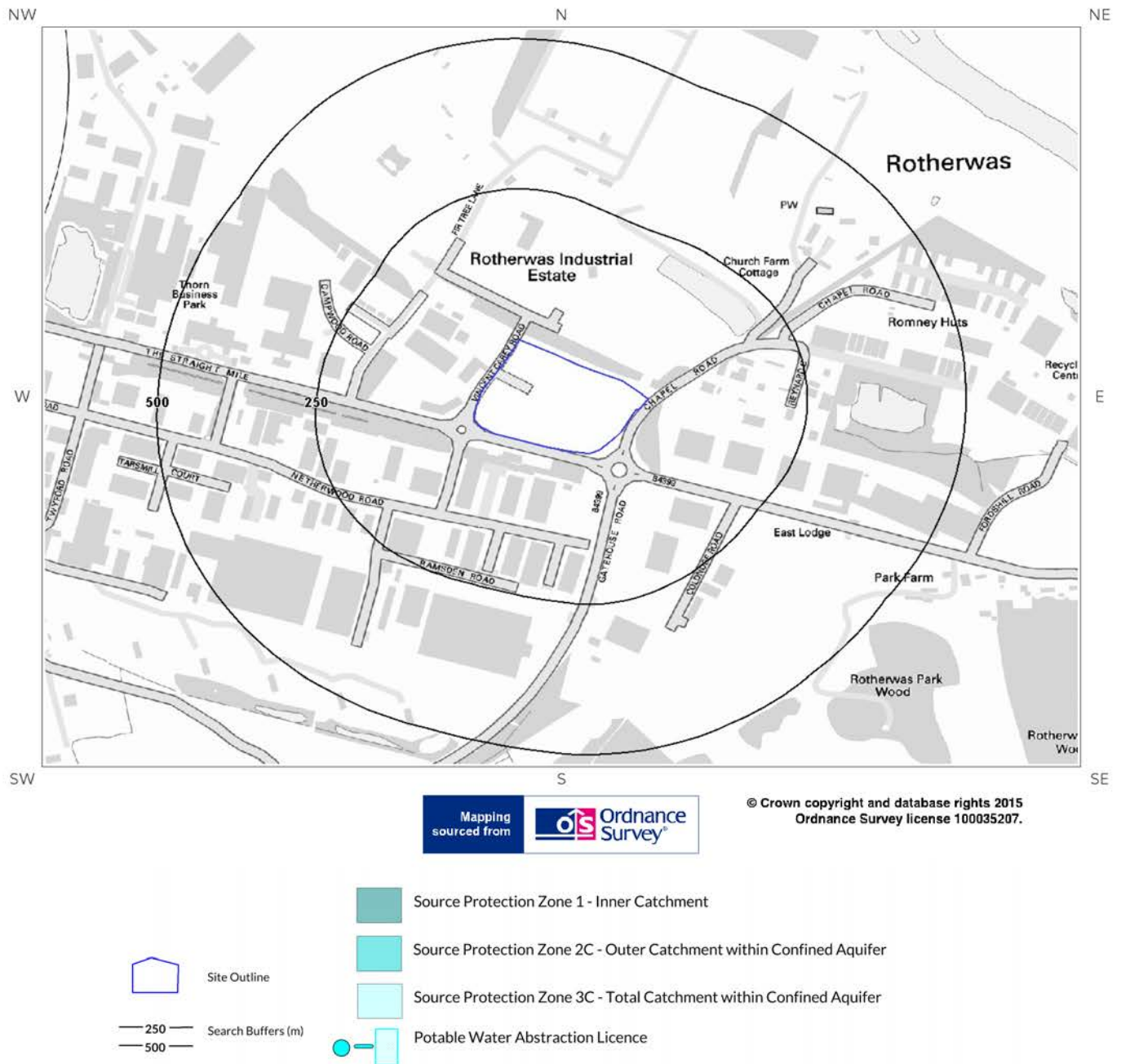
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Ordnance Survey license 100035207.



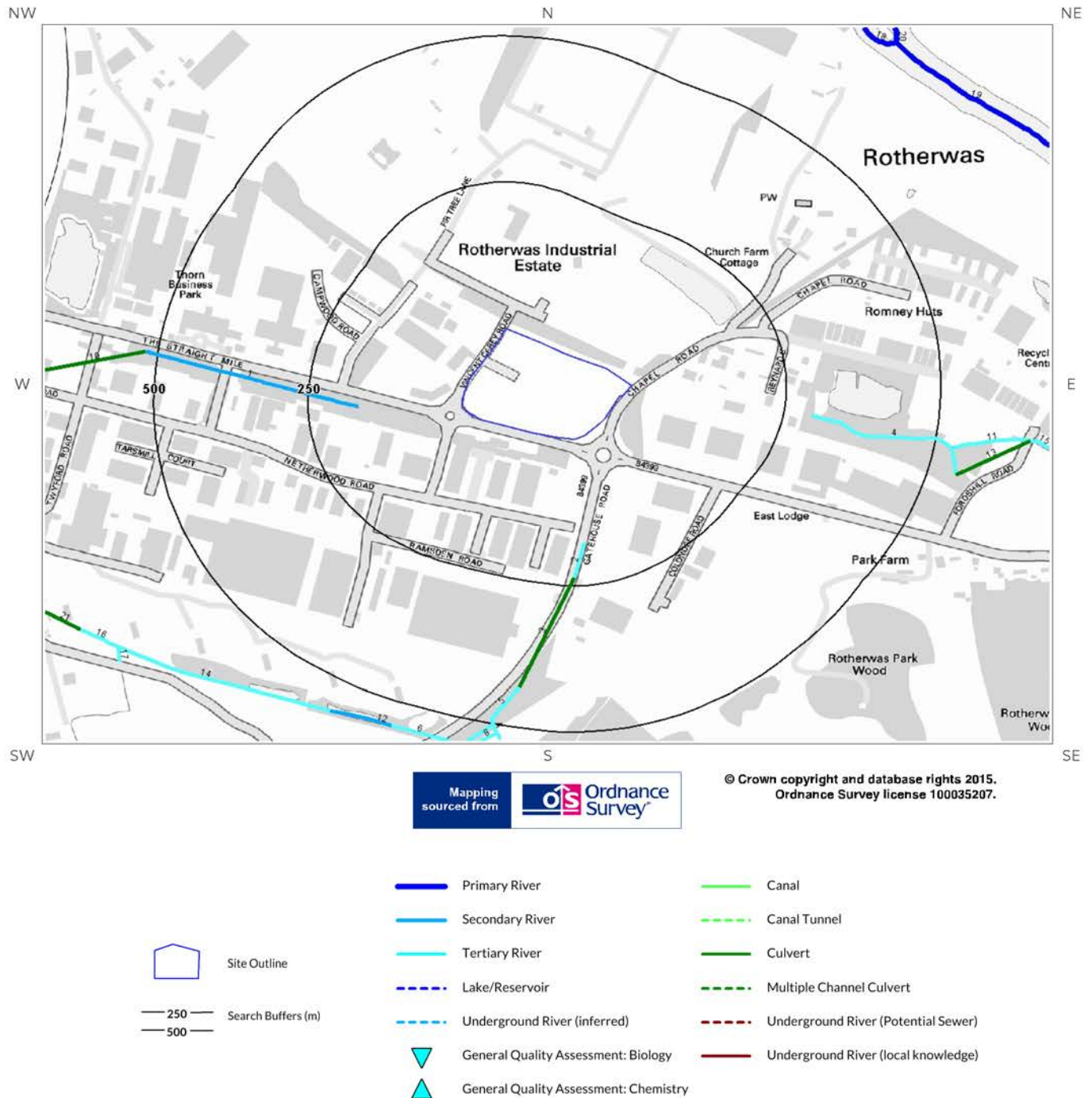
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses



6d. Hydrogeology – Source Protection Zones within confined aquifer



6e. Hydrology – Detailed River Network and River Quality



6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

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

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

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

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	384	S	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

6.2 Aquifer within Bedrock Deposits

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

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

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

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

6.3 Groundwater Abstraction Licences

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

Yes

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

ID	Distance (m)	Direction	NGR	Details
Not shown	928	E	354210 237700	Licence No: 19/55/18/0110 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Sink Green Data Type: Point Name: Jones Bros Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:
Not shown	964	S	353570 237020	Licence No: 19/55/18/0197 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Prospect House Data Type: Point Name: Peyton Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/6/1993 Version End Date:
Not shown	1240	S	353420 236700	Licence No: 19/55/18/0047 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Glebe Farm Data Type: Point Name: Cleland Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:
Not shown	1264	NE	353820 239200	Licence No: 19/55/18/0321 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well Near Field Farm Data Type: Point Name: Bulmers Annual Volume (m³): 5989.8 Max Daily Volume (m³): 16.36 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 31/3/1966 Version End Date:
Not shown	1289	NE	354490 238600	Licence No: 19/55/18/0321 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Field Farm Data Type: Point Name: Bulmers Annual Volume (m³): 5989.8 Max Daily Volume (m³): 16.36 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 31/3/1966 Version End Date:
Not shown	1642	SW	351670 237120	Licence No: 19/55/18/0131 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Borehole At Pen-y-bryn Data Type: Point Name: Thomas Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1732	E	355070 238090	<p>Licence No: 19/55/18/0042 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Eaw Groundwater Point: Well At Hampton Bishop Data Type: Point Name: Buccaneer Holdings Limited</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 100 Version Start Date: 7/9/1995 Version End Date:</p>
Not shown	1734	E	355070 237910	<p>Licence No: 19/55/18/0066 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Hampton Bishop Data Type: Point Name: Richards</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 100 Version Start Date: 4/2/1993 Version End Date:</p>
Not shown	1742	E	355080 237960	<p>Licence No: 19/55/18/0136 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Crabtree Hall Data Type: Point Name: Webster</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:</p>
Not shown	1771	E	355110 238040	<p>Licence No: 19/55/18/0136 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Beverley Data Type: Point Name: Webster</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:</p>
Not shown	1771	E	355110 238040	<p>Licence No: 19/55/18/0042 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Eaw Groundwater Point: Well At Beverley Data Type: Point Name: Buccaneer Holdings Limited</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 100 Version Start Date: 7/9/1995 Version End Date:</p>
Not shown	1928	SE	355070 237170	<p>Licence No: 19/55/12/0312 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Hampton Bishop Data Type: Point Name: Taysom</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:</p>

6.4 Surface Water Abstraction Licences

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

Yes

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

ID	Distance (m)	Direction	NGR	Details
Not shown	839	NE	353540 238860	Licence No: 19/55/18/0376 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: Reach On The River Wye Near Field Farm Data Type: Line Name: H P Bulmer & Co Ltd Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 1/3/1989 Version End Date:
Not shown	945	NW	352280 238540	Licence No: 19/55/18/0391 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Eaw Surface Water Point: River Wye At Rotherwas Industrial Estate Data Type: Point Name: Thorn Lighting Ltd Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 1/8/1989 Version End Date:
Not shown	1689	E	355020 237860	Licence No: 19/55/18/0387 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: Reach On The River Wye At Whitehall Farm Data Type: Line Name: Whitehall Farms Ltd Annual Volume (m³): 9092 Max Daily Volume (m³): 454.6 Application No: - Original Start Date: 22/5/1972 Expiry Date: - Issue No: 100 Version Start Date: 1/4/2003 Version End Date:

6.5 Potable Water Abstraction Licences

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

Yes

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distance (m)	Direction	NGR	Details
Not shown	1732	E	355070 238090	Licence No: 19/55/18/0042 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Eaw Groundwater Point: Well At Hampton Bishop Data Type: Point Name: Buccaneer Holdings Limited Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1771	E	355110 238040	Licence No: 19/55/18/0042 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Eaw Groundwater Point: Well At Beverley Data Type: Point Name: Buccaneer Holdings Limited Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:

6.6 Source Protection Zones

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

No

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

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

No

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

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

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

Yes

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.
254	E	Minor Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.
320	SE	Minor Aquifer/High Leaching Potential	H3	Coarse textured or moderately shallow soils which readily transmit non-adsorbed pollutants and liquid discharges but have some ability to attenuate adsorbed pollutants because of their clay or organic matter content.

6.9 River Quality

Is there any Environment Agency information on river quality within 1500m of the study site?

Yes

6.9.1 Biological Quality:

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

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

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
Not shown	1262	SE	354300 237200	River Name: Wye Reach: Conf.fownhope Bk. - Nr.dinedor Court End/Start of Stretch: Start of Stretch NGR	A	A	A	A	A
Not shown	1262	SE	354300 237200	River Name: Wye Reach: Nr.dinedor Court - Conf.eign Brook End/Start of Stretch: End of Stretch NGR	A	A	A	A	A
Not shown	1430	NW	352200 239200	River Name: Wye Reach: Conf.eign Bk. - Conf.cage Bk. End/Start of Stretch: End of Stretch NGR	B	B	B	B	A
Not shown	1430	NW	352200 239200	River Name: Wye Reach: Nr.dinedor Court - Conf.eign Brook End/Start of Stretch: Start of Stretch NGR	A	A	A	A	A
Not shown	1430	NW	352200 239200	River Name: Eign Brook Reach: Conf.r.wye - Above S.s.o End/Start of Stretch: End of Stretch NGR	D	D	D	D	D

6.9.2 Chemical Quality:

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

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

ID	Distance (m)	Direction	NGR	River Quality Grade	Chemical Quality Grade				
					2005	2006	2007	2008	2009
Not shown	1262	SE	354300 237200	River Name: Wye Reach: Conf.fownhope Bk. - Nr.dinedor Court End/Start of Stretch: Start of Stretch NGR	A	A	A	A	A
Not shown	1262	SE	354300 237200	River Name: Wye Reach: Nr.dinedor Court - Conf.eign Brook End/Start of Stretch: End of Stretch NGR	A	A	B	B	A
Not shown	1430	NW	352200 239200	River Name: Wye Reach: Nr.dinedor Court - Conf.eign Brook End/Start of Stretch: Start of Stretch NGR	A	A	B	B	A
Not shown	1430	NW	352200 239200	River Name: Wye Reach: Conf.eign Bk. - Conf.cage Bk. End/Start of Stretch: End of Stretch NGR	A	A	A	A	A

6.10 Detailed River Network

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

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

ID	Distance (m)	Direction	Details	
1	169	W	River Name: Drain Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
2	177	S	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
3	236	S	River Name: - Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
4	296	E	River Name: Red Brook Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
5	432	S	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined

6.11 Surface Water Features

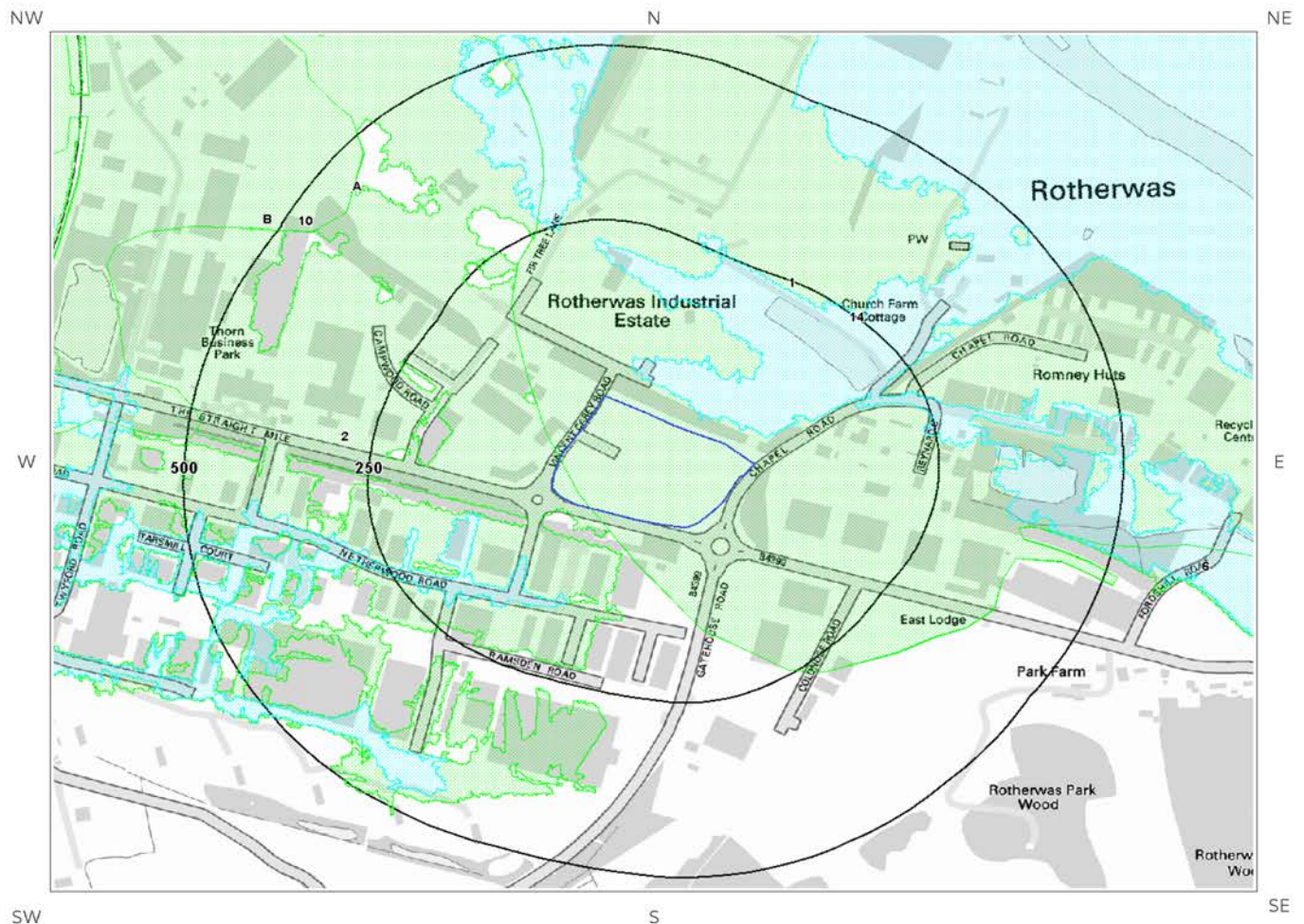
Are there any surface water features within 250m of the study site?

Yes

The following surface water records are not represented on mapping:

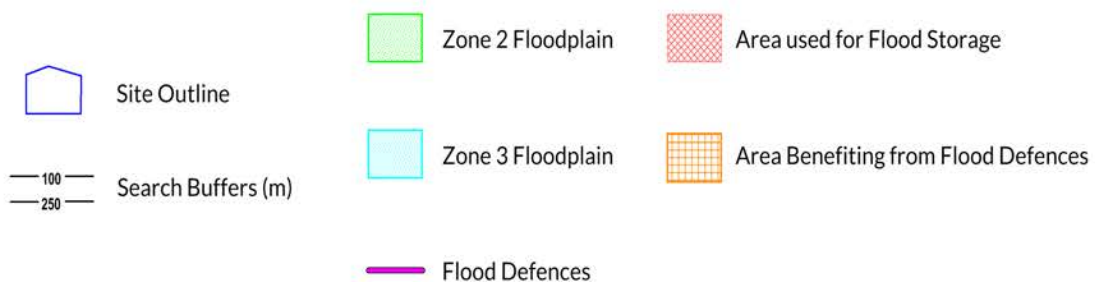
Distance (m)	Direction
173	NE

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

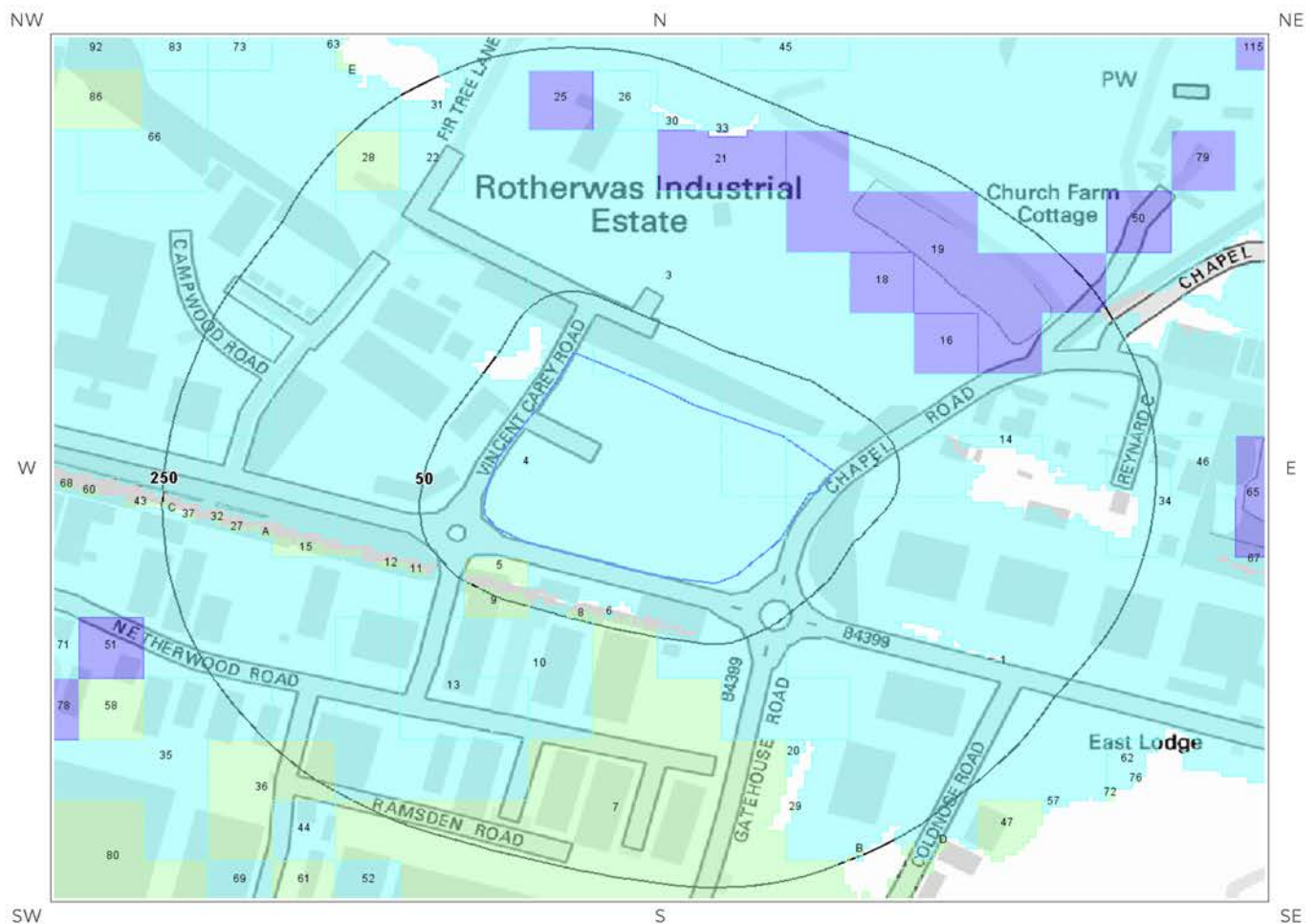


Mapping sourced from **Ordnance Survey**

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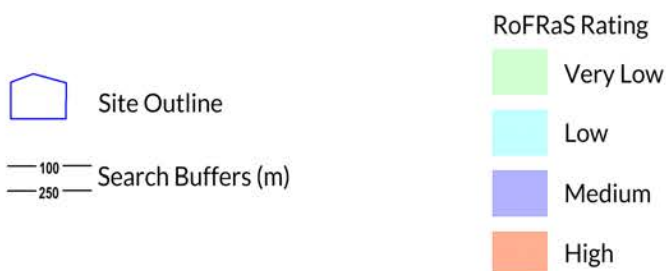


7b. Environment Agency Risk of Flooding from Rivers and the Sea (RoFRaS) Map



Mapping sourced from  Ordnance Survey

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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency Zone 2 floodplain?

Yes

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

ID	Distance (m)	Direction	Update	Type
1	0	On Site	18-Jun-2015	Zone 2 - (Fluvial / Tidal Models)
2	0	On Site	18-Jun-2015	Zone 2 - (Fluvial / Tidal Models)
3	23	S	18-Jun-2015	Zone 2 - (Fluvial / Tidal Models)

7.2 River and Coastal Zone 3 Flooding

Is the site within 250m of an Environment Agency Zone 3 floodplain?

Yes

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

ID	Distance (m)	Direction	Update	Type
1	19	N	26-May-2015	Zone 3 - (Fluvial Models)

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

What is the highest risk of flooding onsite?

Low

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

RoFRaS data for the study site indicates the property is in an area with a Low (greater than 1 in 1000 but less than 1 in 100) chance of flooding in any given year.

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

ID	Distance (m)	Direction	RoFRaS flood Risk
1	0.0	On Site	Low
2	0.0	On Site	Low
3	0.0	On Site	Low
4	0.0	On Site	Low
5	11.0	S	Very Low
6	37.0	S	Low
7	39.0	S	Very Low
8	41.0	S	Very Low
9	41.0	S	Very Low
10	41.0	S	Low

7.4 Flood Defences

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

No

Database searched and no data found.

7.5 Areas benefiting from Flood Defences

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

No

7.6 Areas benefiting from Flood Storage

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

No

7.7 Groundwater Flooding Susceptibility Areas

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

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

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

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

Potential at Surface

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

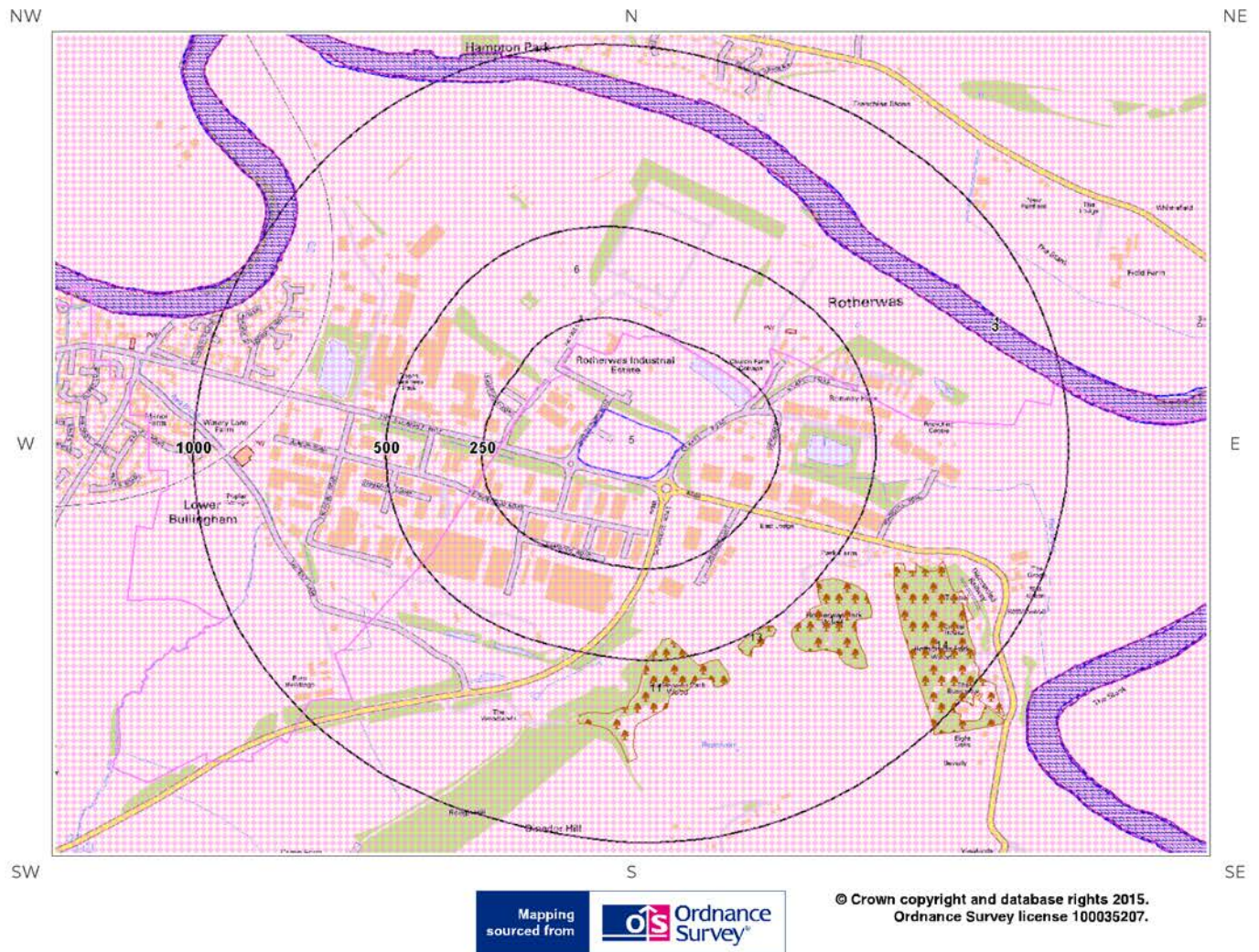
7.8 Groundwater Flooding Confidence Areas

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

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

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

8. Designated Environmentally Sensitive Sites Map



8. Designated Environmentally Sensitive Sites

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

Yes

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

1

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

ID	Distance (m)	Direction	SSSI Name	Data Source
3	687	NE	River Wye	Natural England

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

0

Database searched and no data found.

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

2

The following Special Area of Conservation (SAC) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SAC Name	Data Source
1	683	NE	River Wye / Afon Gwy (England)	Natural Resources Wales
2	687	NE	River Wye	Natural England

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

6

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

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
11	442	S	UNKNOWN	Ancient and Semi-Natural Woodland
12	503	SE	UNKNOWN	Ancient and Semi-Natural Woodland
13	504	SE	UNKNOWN	Ancient and Semi-Natural Woodland
14	635	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1601	SW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1891	SW	UNKNOWN	Ancient and Semi-Natural Woodland

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

1

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

ID	Distance (m)	Direction	LNR Name	Data Source
Not shown	1692	N	Tupsley Quarry	Natural England

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

6

The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NVZ Name	Data Source
5	0	On Site	Existing	DEFRA
6	136	NW	Existing	DEFRA
Not shown	1358	N	Existing	DEFRA
Not shown	1882	N	Existing	DEFRA
Not shown	1882	N	Existing	DEFRA
Not shown	1921	N	Existing	DEFRA

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

0

Database searched and no data found.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

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

9.1.1 Shrink Swell

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

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

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

9.1.2 Landslides

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

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

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

9.1.3 Soluble Rocks

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

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

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

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

9.1.4 Compressible Ground

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

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

Hazard
No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

9.1.5 Collapsible Rocks

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

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

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

9.1.6 Running Sand

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

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

Hazard
Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

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

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing

ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

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

No

Database searched and no data found.

10.2 Non-Coal Mining

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

Yes

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

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Berwyn Hills	Vein Mineral	Rare and localised small scale mining may have occurred.

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

10.3 Brine Affected Areas

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

No

Guidance: No Guidance Required.

Contact Details

Groundsure Helpline
Telephone: 08444 159 000
info@groundsure.com



British Geological Survey Enquiries
Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:
Web: www.bgs.ac.uk
BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk



Environment Agency
National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 08708 506 506
Web: www.environment-agency.gov.uk
Email: enquiries@environment-agency.gov.uk



Public Health England
Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe
Email: enquiries@phe.gov.uk
Main switchboard: 020 7654 8000



The Coal Authority
200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk



Ordnance Survey
Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505



Local Authority
Authority: Herefordshire Council
Phone: 01432 260 000
Web: <https://www.herefordshire.gov.uk/>
Address: 35 Hafod Road, Brockington, Herefordshire, HR1 1SH

Gemapping PLC
Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444



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

PointX © Database Right/Copyright, Thomson Directories Limited © Copyright Link Interchange Network Limited © Database Right/Copyright and Ordnance Survey © Crown Copyright and/or Database Right. All Rights Reserved. Licence Number [03421028].

This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.

Standard Terms and Conditions

1 Definitions

In these terms and conditions unless the context otherwise requires:

“Beneficiary” means the person or entity for whose benefit the Client has obtained the Services.

“Client” means the party or parties entering into a Contract with Groundsure.

“Commercial” means any building or property which is not Residential.

“Confidential Information” means the contents of this Contract and all information received from the Client as a result of, or in connection with, this Contract other than

(i) information which the Client can prove was rightfully in its possession prior to disclosure by Groundsure and

(ii) any information which is in the public domain (other than by virtue of a breach of this Contract).

“Support Services” means Support Services provided by Groundsure including, without limitation, interpreting third party and in-house environmental data, providing environmental support advice, undertaking environmental audits and assessments, Site investigation, Site monitoring and related items.

“Contract” means the contract between Groundsure and the Client for the provision of the Services, and which shall incorporate these terms and conditions, the Order, and the relevant User Guide.

“Third Party Data Provider” means any third party providing Third Party Content to Groundsure.

“Data Reports” means reports comprising factual data with no accompanying interpretation.

“Fees” has the meaning set out in clause 5.1.

“Groundsure” means Groundsure Limited, a company registered in England and Wales under number 03421028.

“Groundsure Materials” means all materials prepared by Groundsure and provided as part of the Services, including but not limited to Third Party Content, Data Reports, Mapping, and Risk Screening Reports.

“Intellectual Property” means any patent, copyright, design rights, trade or service mark, moral rights, data protection rights, know-how or trade mark in each case whether registered or not and including applications for the same or any other rights of a similar nature anywhere in the world.

“Mapping” means a map, map data or a combination of historical maps of various ages, time periods and scales.

“Order” means an electronic, written or other order form submitted by the Client requesting Services from Groundsure in respect of a specified Site.

“Ordnance Survey” means the Secretary of State for Business, Innovation and Skills, acting through Ordnance Survey, Adanac Drive, Southampton, SO16 0AS, UK.

“Order Website” means the online platform through which Orders may be placed by the Client and accepted by Groundsure.

“Report” means a Risk Screening Report or Data Report for Commercial or Residential property.

“Residential” means any building or property used as or intended to be used as a single dwelling.

“Risk Screening Report” means a risk screening report comprising factual data with an accompanying interpretation by Groundsure.

“Services” means any Report, Mapping and/or Support Services which Groundsure has agreed to provide by accepting an Order pursuant to clause 2.6.

“Site” means the area of land in respect of which the Client has requested Groundsure to provide the Services.

“Third Party Content” means data, database information or other information which is provided to Groundsure by a Third Party Data Provider.

“User Guide” means the user guide, as amended from time to time, available upon request from Groundsure and on the website (www.Groundsure.com) and forming part of this Contract.

2 Scope of Services, terms and conditions, requests for insurance and quotations

2.1 Groundsure agrees to provide the Services in accordance with the Contract.

2.2 Groundsure shall exercise reasonable skill and care in the provision of the Services.

2.3 Subject to clause 7.3 the Client acknowledges that it has not relied on any statement or representation made by or on behalf of Groundsure which is not set out and expressly agreed in writing in the Contract and all such statements and representations are hereby excluded to the fullest extent permitted by law.

2.4 The Client acknowledges that terms and conditions appearing on a Client's order form, printed stationery or other communication, or any terms or conditions implied by custom, practice or course of dealing shall be of no effect, and that this Contract shall prevail over all others in relation to the Order.

2.5 If the Client or Beneficiary requests insurance in conjunction with or as a result of the Services, Groundsure shall use reasonable endeavours to recommend such insurance, but makes no warranty that such insurance shall be available from insurers or that it will be offered on reasonable terms. Any insurance purchased by the Client or Beneficiary shall be subject solely to the terms of the policy issued by insurers and Groundsure will have no liability therefor. In addition you acknowledge and agree that Groundsure does not act as an agent or broker for any insurance providers. The Client should take (and ensure that the Beneficiary takes) independent advice to ensure that the insurance policy requested or offered is suitable for its requirements.

2.6 Groundsure's quotations or proposals are valid for a period of 30 days only unless an alternative period of time is explicitly stipulated by Groundsure. Groundsure reserves the right to withdraw any quotation or proposal at any time before an Order is accepted by Groundsure. Groundsure's acceptance of an Order shall be binding only when made in writing and signed by Groundsure's authorised representative or when accepted through the Order Website.

3 The Client's obligations

3.1 The Client shall comply with the terms of this Contract and

(i) procure that the Beneficiary or any third party relying on the Services complies with and acts as if it is bound by the Contract and

(ii) be liable to Groundsure for the acts and omissions of the Beneficiary or any third party relying on the Services as if such acts and omissions were those of the Client.

3.2 The Client shall be solely responsible for ensuring that the Services are appropriate and suitable for its and/or the Beneficiary's needs.

3.3 The Client shall supply to Groundsure as soon as practicable and without charge all requisite information (and the Client warrants that such information is accurate, complete and appropriate), including without limitation any environmental information relating to the Site and shall give such assistance as Groundsure shall reasonably require in the provision of the Services including, without limitation, access to the Site, facilities and equipment.

3.4 Where the Client's approval or decision is required to enable Groundsure to carry out work in order to provide the Services, such approval or decision shall be given or procured in reasonable time and so as not to delay or disrupt the performance of the Services.

3.5 Save as expressly permitted by this Contract the Client shall not, and shall procure that the Beneficiary shall not, re-sell, alter, add to, or amend the Groundsure Materials, or use the Groundsure Materials in a manner for which they were not intended. The Client may make the Groundsure Materials available to a third party who is considering acquiring some or all of, or providing funding in relation to, the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.

3.6 The Client is responsible for maintaining the confidentiality of its user name and password if using the Order Website and the Client acknowledges that Groundsure accepts no liability of any kind for any loss or damage suffered by the Client as a consequence of using the Order Website.

4 Reliance

4.1 The Client acknowledges that the Services provided by Groundsure consist of the presentation and analysis of Third Party Content and other content and that information obtained from a Third Party Data Provider cannot be guaranteed or warranted by Groundsure to be reliable.

4.2 In respect of Data Reports, Mapping and Risk Screening Reports, the following classes of person and no other are entitled to rely on their contents;

- (i) the Beneficiary,
- (ii) the Beneficiary's professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate),
- (iv) the first purchaser or first tenant of the Site, and
- (v) the professional advisers and lenders of the first purchaser or tenant of the Site.

4.3 In respect of Support Services, only the Client, Beneficiary and parties expressly named in a Report and no other parties are entitled to rely on its contents.

4.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise expressly agreed in writing, no other person or entity of any kind is entitled to rely on any Services or Report issued or provided by Groundsure. Any party considering such Reports and Services does so at their own risk.

5 Fees and Disbursements

5.1 Groundsure shall charge and the Client shall pay fees at the rate and

frequency specified in the written proposal, Order Website or Order acknowledgement form, plus (in the case of Support Services) all proper disbursements incurred by Groundsure. The Client shall in addition pay all value added tax or other tax payable on such fees and disbursements in relation to the provision of the Services (together "Fees").

5.2 The Client shall pay all outstanding Fees to Groundsure in full without deduction, counterclaim or set off within 30 days of the date of Groundsure's invoice or such other period as may be agreed in writing between Groundsure and the Client ("Payment Date"). Interest on late payments will accrue on a daily basis from the Payment Date until the date of payment (whether before or after judgment) at the rate of 8% per annum.

5.3 The Client shall be deemed to have agreed the amount of any invoice unless an objection is made in writing within 28 days of the date of the invoice. As soon as reasonably practicable after being notified of an objection, without prejudice to clause 5.2 a member of Groundsure's management team will contact the Client and the parties shall then use all reasonable endeavours to resolve the dispute within 15 days.

6 Intellectual Property and Confidentiality

6.1 Subject to

(i) full payment of all relevant Fees and

(ii) compliance with this Contract, the Client is granted (and is permitted to sub-licence to the Beneficiary) a royalty-free, worldwide, non-assignable and (save to the extent set out in this Contract) non-transferable licence to make use of the Groundsure Materials.

6.2 All Intellectual Property in the Groundsure Materials are and shall remain owned by Groundsure or Groundsure's licensors (including without limitation the Third Party Data Providers) the Client acknowledges, and shall procure acknowledgement by the Beneficiary of, such ownership. Nothing in this Contract purports to transfer or assign any rights to the Client or the Beneficiary in respect of such Intellectual Property.

6.3 Third Party Data Providers may enforce any breach of clauses 6.1 and 6.2 against the Client or Beneficiary.

6.4 The Client shall, and shall procure that any recipients of the Groundsure Materials shall:

(i) not remove, suppress or modify any trade mark, copyright or other proprietary marking belonging to Groundsure or any third party from the Services;

(ii) use the information obtained as part of the Services in respect of the subject Site only, and shall not store or reuse any information obtained as part of the Services provided in respect of adjacent or nearby sites;

(iii) not create any product or report which is derived directly or indirectly from the Services (save that those acting in a professional capacity to the Beneficiary may provide advice based upon the Services);

(iv) not combine the Services with or incorporate such Services into any other information data or service;

(v) not reformat or otherwise change (whether by modification, addition or enhancement), the Services (save that those acting for the Beneficiary in a professional capacity shall not be in breach of this clause 6.4(v) where such reformatting is in the normal course of providing advice based upon the Services);

(vi) where a Report and/or Mapping contains material belonging to Ordnance Survey, acknowledge and agree that such content is protected by Crown Copyright and shall not use such content for any purpose outside of receiving the Services; and

(vii) not copy in whole or in part by any means any map prints or run-on copies containing content belonging to Ordnance Survey (other than that contained within Ordnance Survey's OS Street Map) without first being in possession of a valid Paper Map Copying Licence from Ordnance Survey,

6.5 Notwithstanding clause 6.4, the Client may make reasonable use of the Groundsure Materials in order to advise the Beneficiary in a professional capacity. However, Groundsure shall have no liability in respect of any advice, opinion or report given or provided to Beneficiaries by the Client.

6.6 The Client shall procure that any person to whom the Services are made available shall notify Groundsure of any request or requirement to disclose, publish or disseminate any information contained in the Services in accordance with the Freedom of Information Act 2000, the Environmental Information Regulations 2004 or any associated legislation or regulations in force from time to time.

7.Liability: Particular Attention Should Be Paid To This Clause

7.1 This Clause 7 sets out the entire liability of Groundsure, including any liability for the acts or omissions of its employees, agents, consultants, subcontractors and Third Party Content, in respect of:

(i) any breach of contract, including any deliberate breach of the Contract by Groundsure or its employees, agents or

subcontractors;

(ii) any use made of the Reports, Services, Materials or any part of them; and

(iii) any representation, statement or tortious act or omission (including negligence) arising under or in connection with the Contract.

7.2 All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.

7.3 Nothing in the Contract limits or excludes the liability of the Supplier for death or personal injury resulting from negligence, or for any damage or liability incurred by the Client or Beneficiary as a result of fraud or fraudulent misrepresentation.

7.4 Groundsure shall not be liable for

(i) loss of profits;

(ii) loss of business;

(iii) depletion of goodwill and/or similar losses;

(iv) loss of anticipated savings;

(v) loss of goods;

(vi) loss of contract;

(vii) loss of use;

(viii) loss or corruption of data or information;

(ix) business interruption;

(x) any kind of special, indirect, consequential or pure economic loss, costs, damages, charges or expenses;

(xi) loss or damage that arise as a result of the use of all or part of the Groundsure Materials in breach of the Contract;

(xii) loss or damage arising as a result of any error, omission or inaccuracy in any part of the Groundsure Materials where such error, omission or inaccuracy is caused by any Third Party Content or any reasonable interpretation of Third Party Content;

(xiii) loss or damage to a computer, software, modem, telephone or other property; and

(xiv) loss or damage caused by a delay or loss of use of Groundsure's internet ordering service.

7.5 Groundsure's total liability in relation to or under the Contract shall be limited to £10 million for any claim or claims.

7.6 Groundsure shall procure that the Beneficiary shall be bound by limitations and exclusions of liability in favour of Groundsure which accord with those detailed in clauses 7.4 and 7.5 (subject to clause 7.3) in respect of all claims which the Beneficiary may bring against Groundsure in relation to the Services or other matters arising pursuant to the Contract.

8 Groundsure's right to suspend or terminate

8.1 If Groundsure reasonably believes that the Client or Beneficiary has not provided the information or assistance required to enable the proper provision of the Services, Groundsure shall be entitled to suspend all further performance of the Services until such time as any such deficiency has been made good.

8.2 Groundsure shall be entitled to terminate the Contract immediately on written notice in the event that:

(i) the Client fails to pay any sum due to Groundsure within 30 days of the Payment Date; or

(ii) the Client (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an administration order made against it or if a receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Client is struck off the Register of Companies or dissolved; or

(iii) the Client being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Client shall enter into a composition or arrangement with the Client's creditors or shall suffer distress or execution to be levied on his goods; or

(iv) the Client or the Beneficiary breaches any term of the Contract (including, but not limited to, the obligations in clause 4) which is incapable of remedy or if remediable, is not remedied within five days of notice of the breach.

9. Client's Right to Terminate and Suspend

9.1 Subject to clause 10.1, the Client may at any time upon written notice terminate or suspend the provision of all or any of the Services.

9.2 In any event, where the Client is a consumer (and not a business) he/she hereby expressly acknowledges and agrees that:

(i) the supply of Services under this Contract (and therefore the performance of this Contract) commences immediately upon Groundsure's acceptance of the Order; and

(ii) the Reports and/or Mapping provided under this Contract are

- (a) supplied to the Client's specification(s) and in any event
- (b) by their nature cannot be returned.

10 Consequences of Withdrawal, Termination or Suspension

10.1 Upon termination of the Contract:

(i) Groundsure shall take steps to bring to an end the Services in an orderly manner, vacate any Site with all reasonable speed and shall deliver to the Client and/or Beneficiary any property of the Client and/or Beneficiary in Groundsure's possession or control; and

(ii) the Client shall pay to Groundsure all and any Fees payable in respect of the performance of the Services up to the date of termination or suspension. In respect of any Support Services provided, the Client shall also pay Groundsure any additional costs incurred in relation to the termination or suspension of the Contract.

11 Anti-Bribery

11.1 The Client warrants that it shall:

(i) comply with all applicable laws, statutes and regulations relating to anti-bribery and anti-corruption including but not limited to the Bribery Act 2010;

(ii) comply with such of Groundsure's anti-bribery and anti-corruption policies as are notified to the Client from time to time; and

(iii) promptly report to Groundsure any request or demand for any undue financial or other advantage of any kind received by or on behalf of the Client in connection with the performance of this Contract.

11.2 Breach of this Clause 11 shall be deemed a material breach of this Contract.

12 General

12.1 The Mapping contained in the Services is protected by Crown copyright and must not be used for any purpose other than as part of the Services or as specifically provided in the Contract.

12.2 The Client shall be permitted to make one copy only of each Report or Mapping Order. Thereafter the Client shall be entitled to make unlimited copies of the Report or Mapping Order only in accordance with an Ordnance Survey paper map copy license available through Groundsure.

12.3 Groundsure reserves the right to amend or vary this Contract. No amendment or variation to this Contract shall be valid unless signed by an authorised representative of Groundsure.

12.4 No failure on the part of Groundsure to exercise, and no delay in exercising, any right, power or provision under this Contract shall operate as a waiver thereof.

12.5 Save as expressly provided in this Contract, no person other than the persons set out therein shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Contract.

12.6 The Secretary of State for Business, Innovation and Skills ("BIS") or BIS' successor body, as the case may be, acting through Ordnance Survey may enforce a breach of clause 6.4(vi) and clause 6.4(vii) of these terms and conditions against the Client in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.

12.7 Groundsure shall not be liable to the Client if the provision of the Services is delayed or prevented by one or more of the following circumstances:

- (i) the Client or Beneficiary's failure to provide facilities, access or information;
- (ii) fire, storm, flood, tempest or epidemic;
- (iii) Acts of God or the public enemy;
- (iv) riot, civil commotion or war;
- (v) strikes, labour disputes or industrial action;
- (vi) acts or regulations of any governmental or other agency;
- (vii) suspension or delay of services at public registries by Third Party Data Providers;
- (viii) changes in law; or
- (ix) any other reason beyond Groundsure's reasonable control.

In the event that Groundsure is prevented from performing the Services (or any part thereof) in accordance with this clause 12.6 for a period of not less than 30 days then Groundsure shall be entitled to terminate this Contract immediately on written notice to the Client.

12.8 Any notice provided shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.

12.9 Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email (save to the extent such day is not a working day where it shall be deemed to have been delivered on the next working day) and on the second working day after the day of posting if sent by first class post.

12.10 The Contract constitutes the entire agreement between the parties and shall supersede all previous arrangements between the parties relating to the subject matter hereof.

12.11 Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be tainted or impaired.

12.12 This Contract shall be governed by and construed in accordance with English law and any proceedings arising out of or connected with this Contract shall be subject to the exclusive jurisdiction of the English courts.

12.13 Groundsure is an executive member of the Council of Property Search Organisation (CoPSO) and has signed up to the Search Code administered by the Property Codes Compliance Board (PCCB). All Risk Screening Reports shall be supplied in accordance with the provisions of the Search Code.

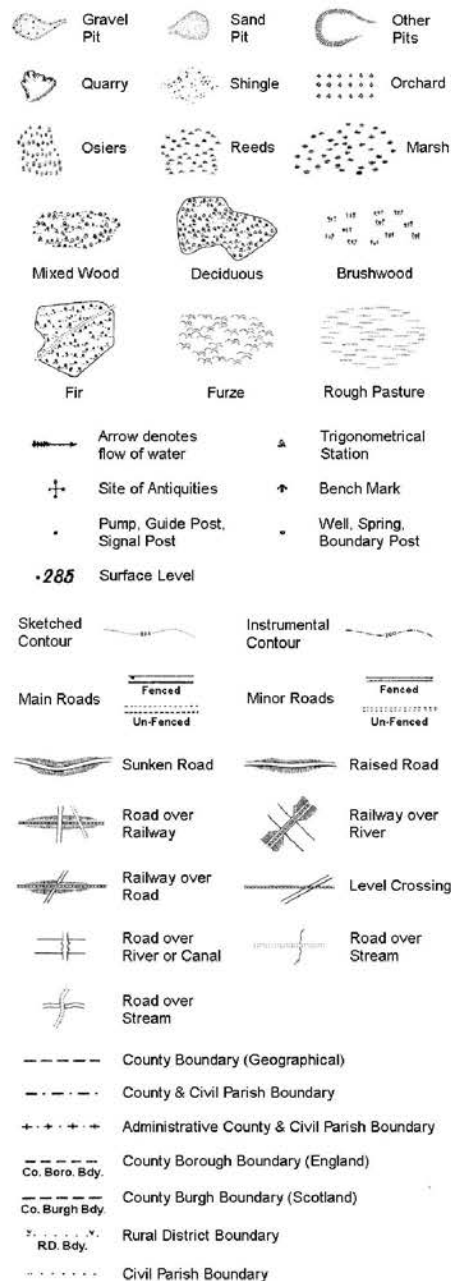
12.14 If the Client or Beneficiary has a complaint about the Services, written notice should be given to the Compliance Officer at Groundsure who will respond in a timely manner.

12.15 The Client agrees that it shall, and shall procure that each Beneficiary shall, treat in confidence all Confidential Information and shall not, and shall procure that each Beneficiary shall not (i) disclose any Confidential Information to any third party other than in accordance with the terms of this Contract; and (ii) use Confidential Information for a purpose other than the exercise of its rights and obligations under this Contract. Subject to clause 6.6, nothing shall prevent the Client or any Beneficiary from disclosing Confidential Information to the extent required by law. © Groundsure Limited June 2013

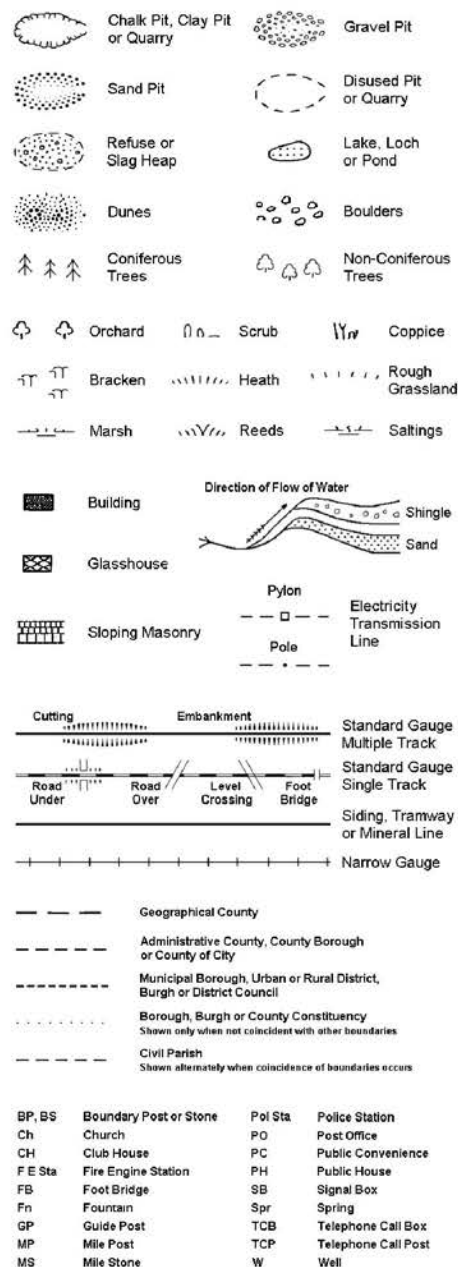
Appendix D – Historical Maps

Historical Mapping Legends

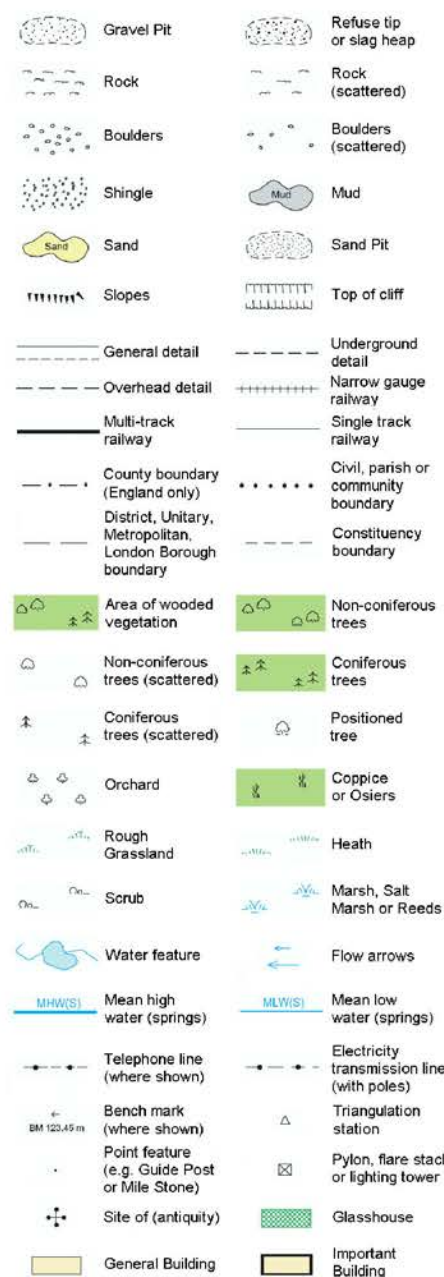
Ordnance Survey County Series and Ordnance Survey Plan 1:10,560



Ordnance Survey Plan 1:10,000



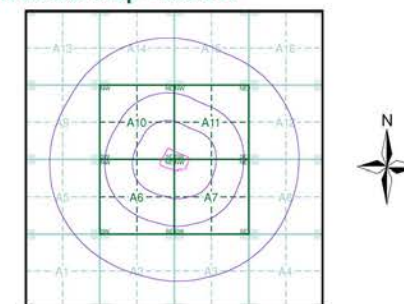
1:10,000 Raster Mapping



Ordnance Survey mapping included:

Mapping Type	Scale	Date	Pg
Herefordshire	1:10,560	1888 - 1890	2
Herefordshire	1:10,560	1905	3
Herefordshire	1:10,560	1930 - 1931	4
Herefordshire	1:10,560	1938 - 1953	5
Ordnance Survey Plan	1:10,560	1964	6
Ordnance Survey Plan	1:10,560	1970	7
Ordnance Survey Plan	1:10,000	1985	8
10K Raster Mapping	1:10,000	2000	9
10K Raster Mapping	1:10,000	2007	10

Historical Map - Slice A



Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 1000

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA

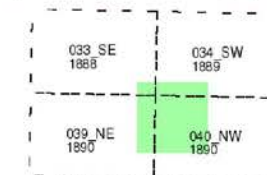
Herefordshire

Published 1888 - 1890

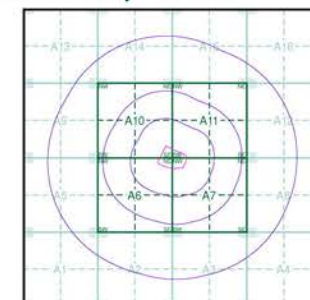
Source map scale - 1:10,560

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 1939, 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

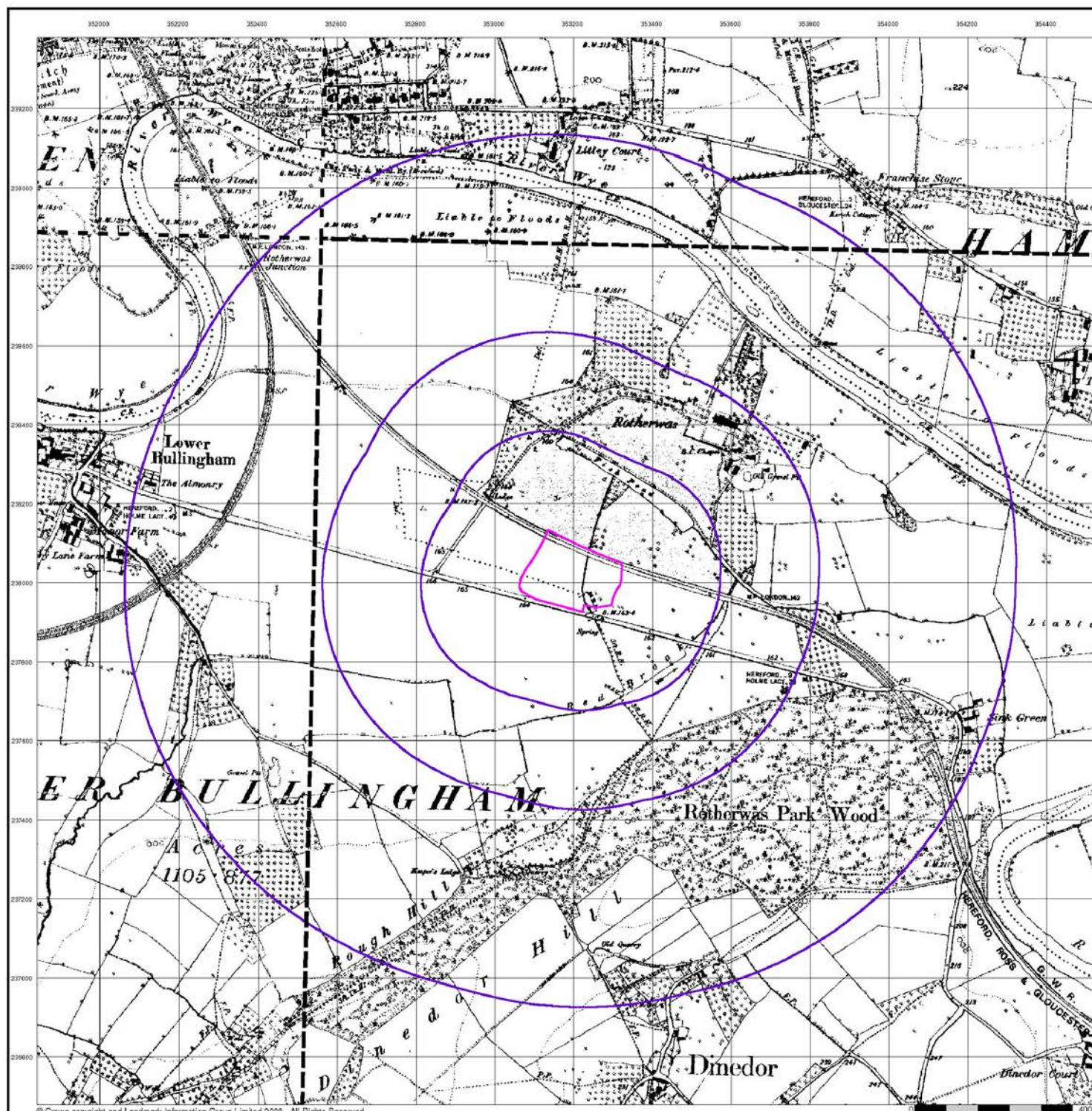


Order Details

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 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 1000

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



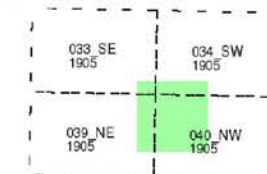
Herefordshire

Published 1905

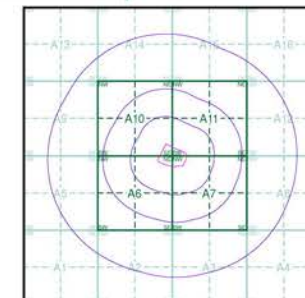
Source map scale - 1:10,560

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 1939, 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.

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Historical Map - Slice A

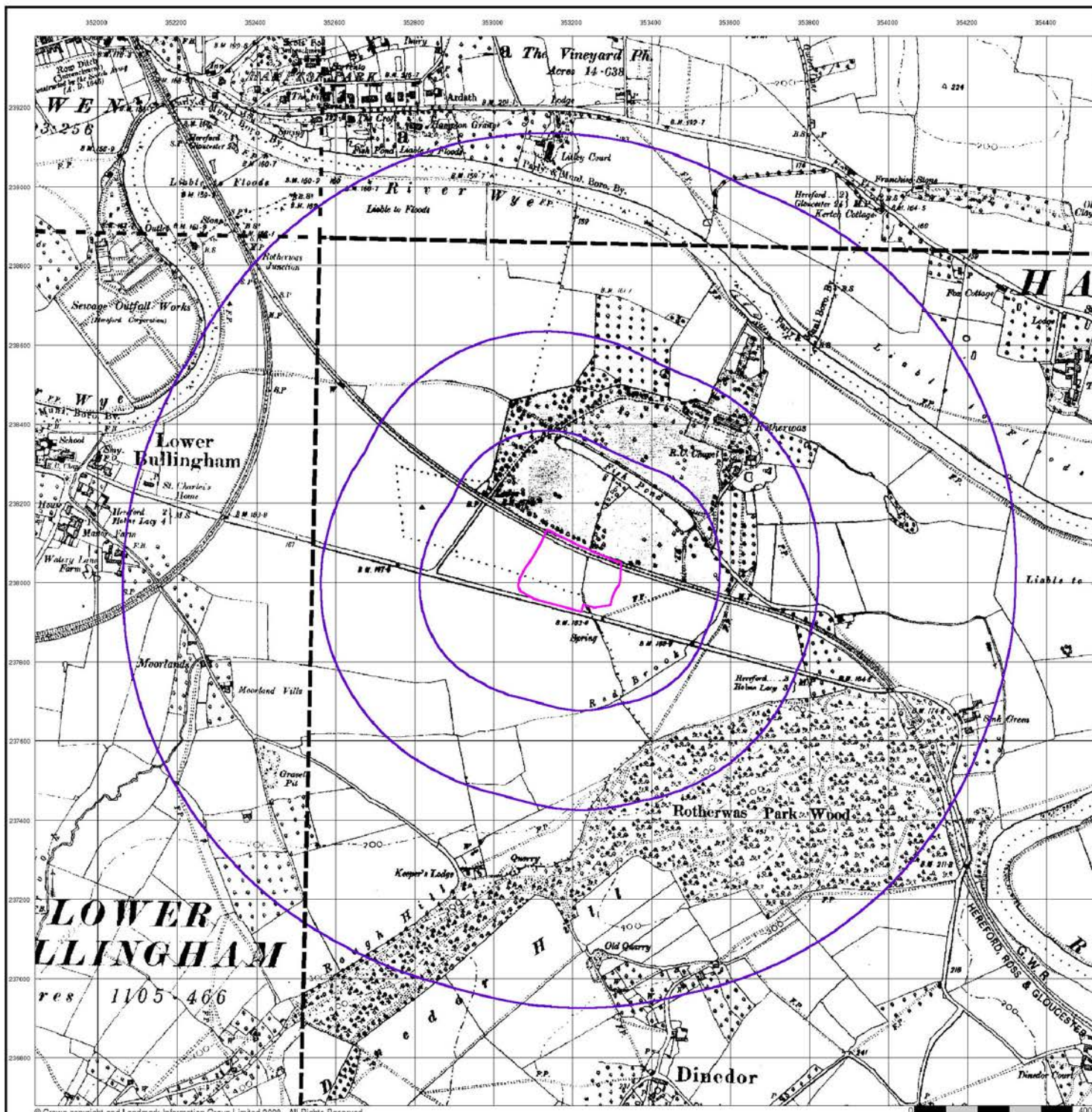


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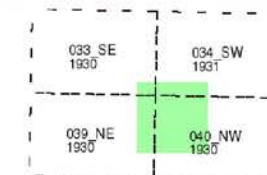
Herefordshire

Published 1930 - 1931

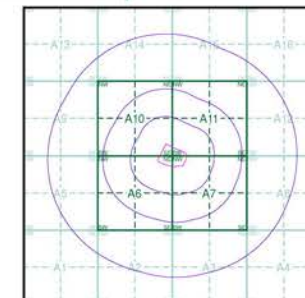
Source map scale - 1:10,560

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 1939, 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

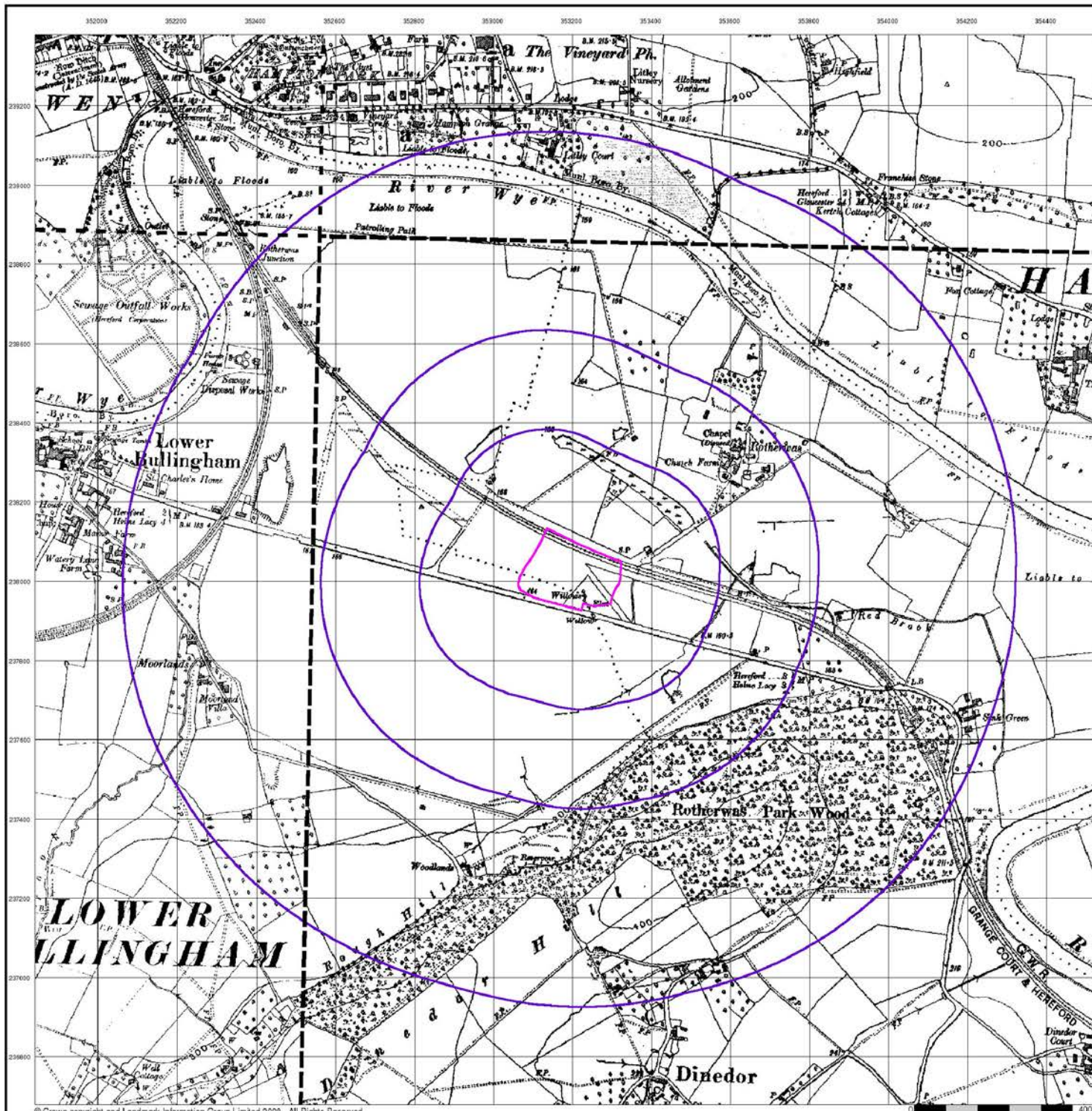


Order Details

Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 1000

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



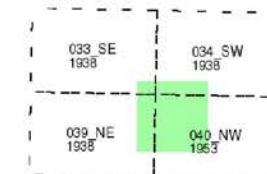
Herefordshire

Published 1938 - 1953

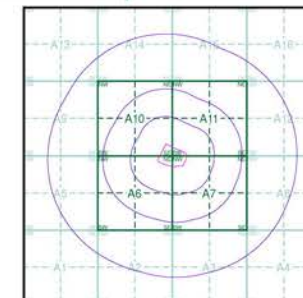
Source map scale - 1:10,560

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 1939, 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

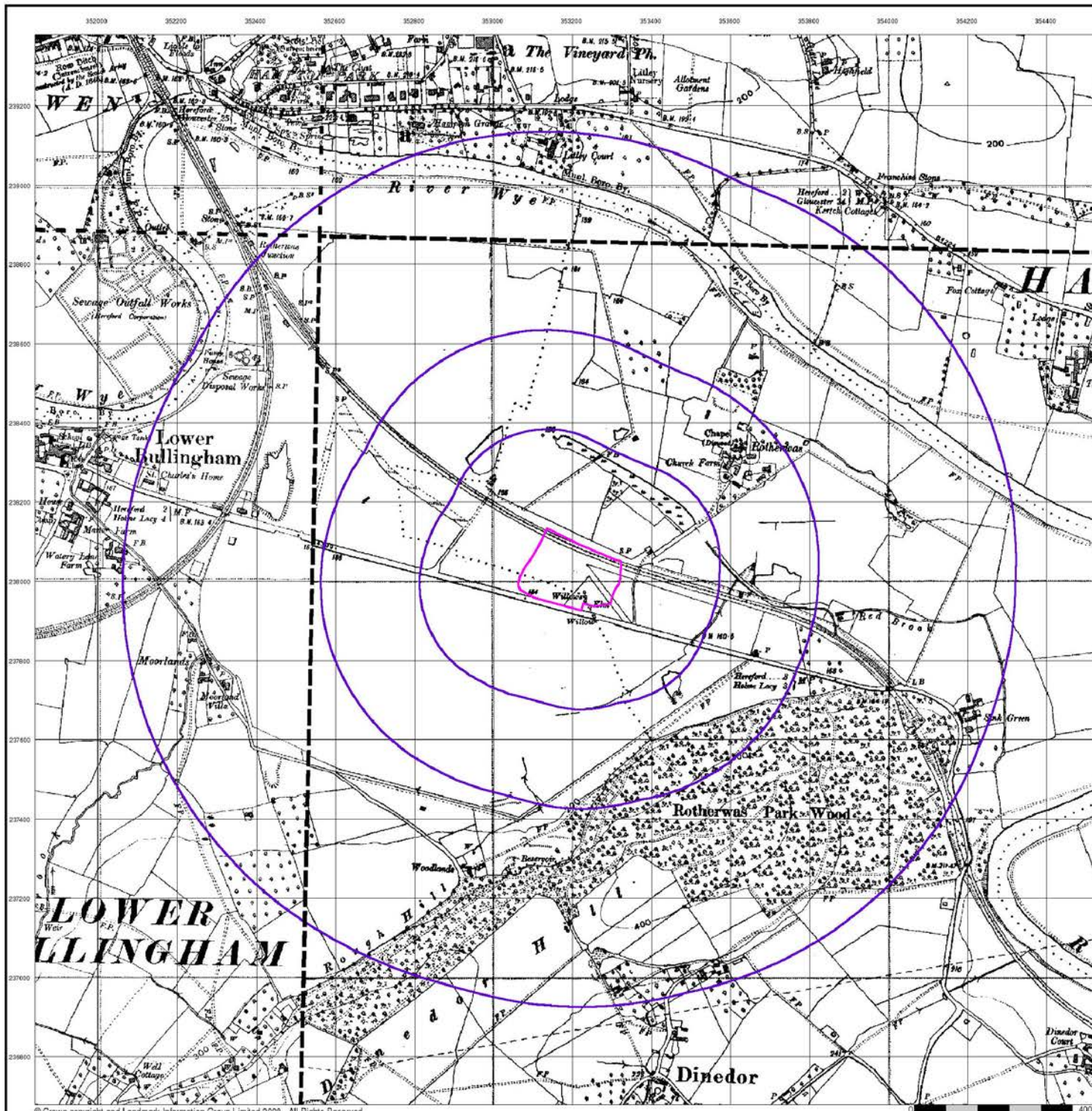


Order Details

Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 1000

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



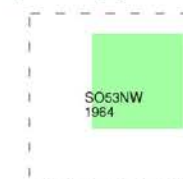
Ordnance Survey Plan

Published 1964

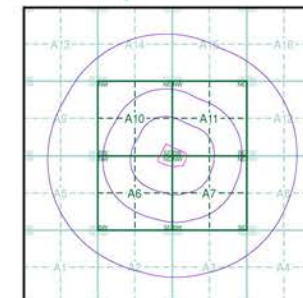
Source map scale - 1:10,560

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 1939, 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

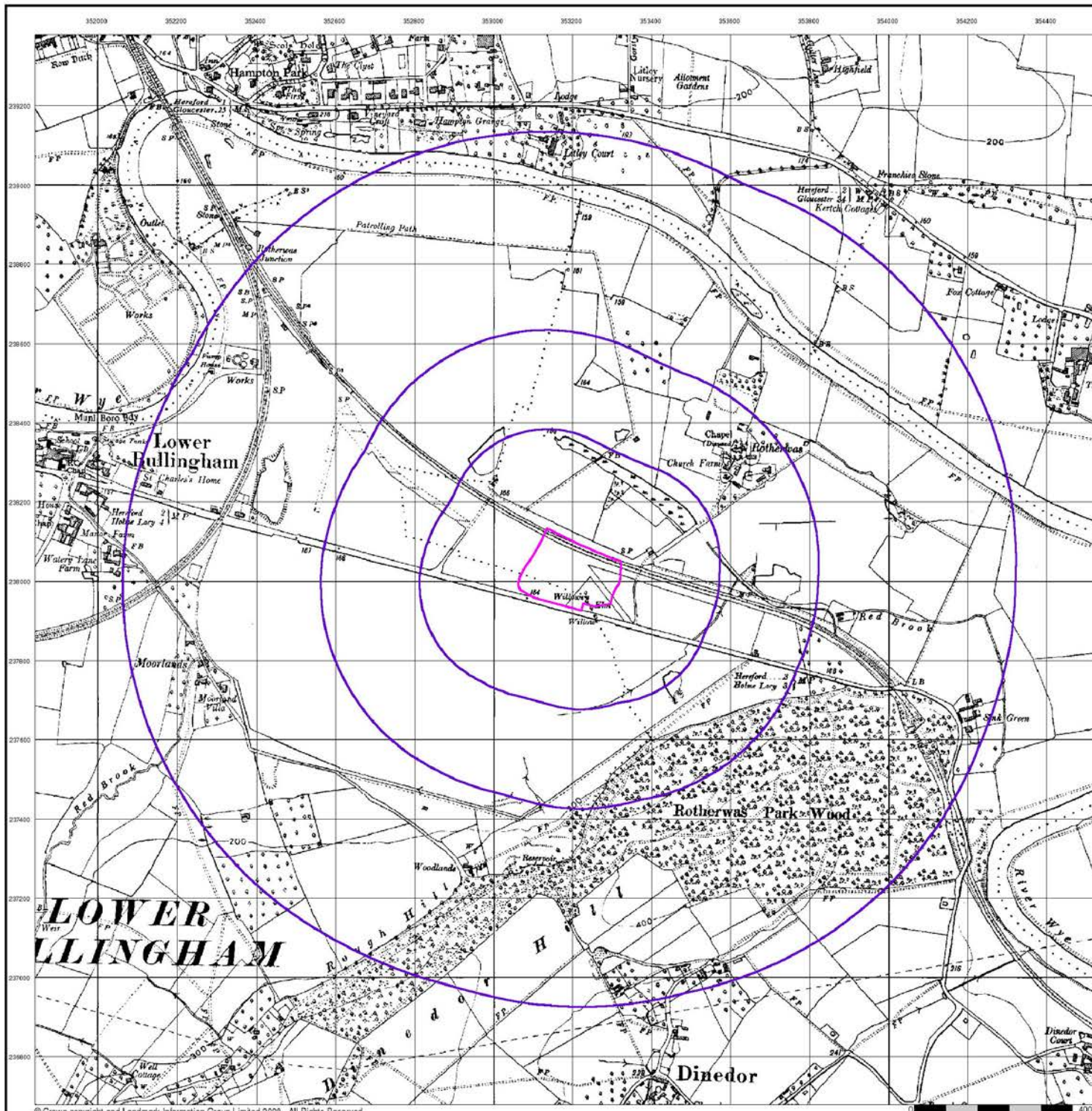


Order Details

Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 1000

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



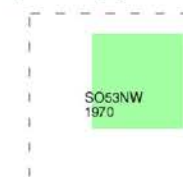
Ordnance Survey Plan

Published 1970

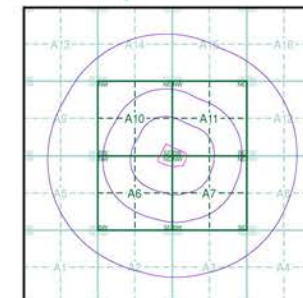
Source map scale - 1:10,560

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 1939, 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

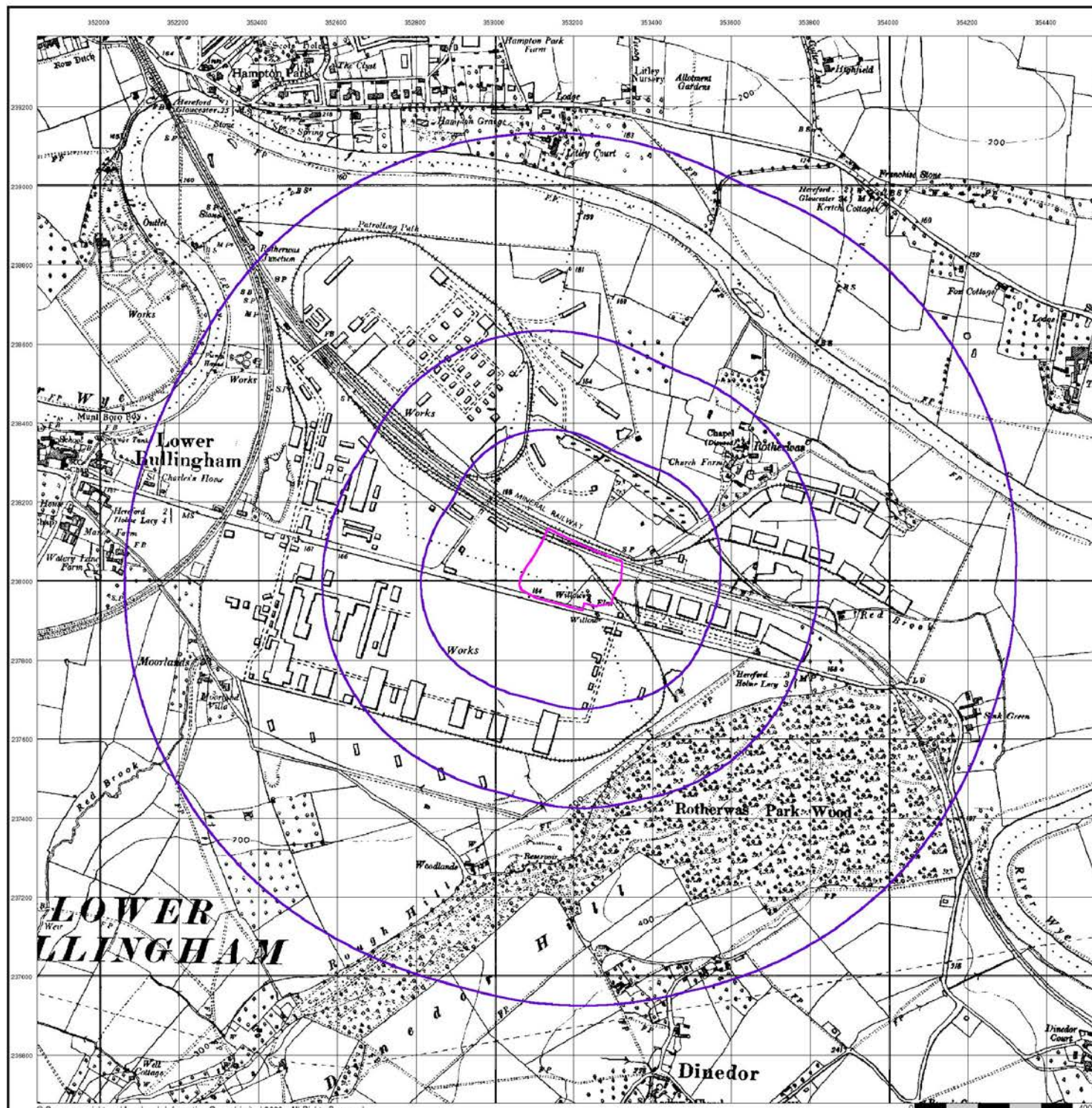


Order Details

Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 1000

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



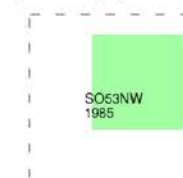
Ordnance Survey Plan

Published 1985

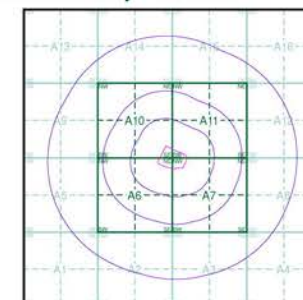
Source map scale - 1:10,000

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 1939, 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

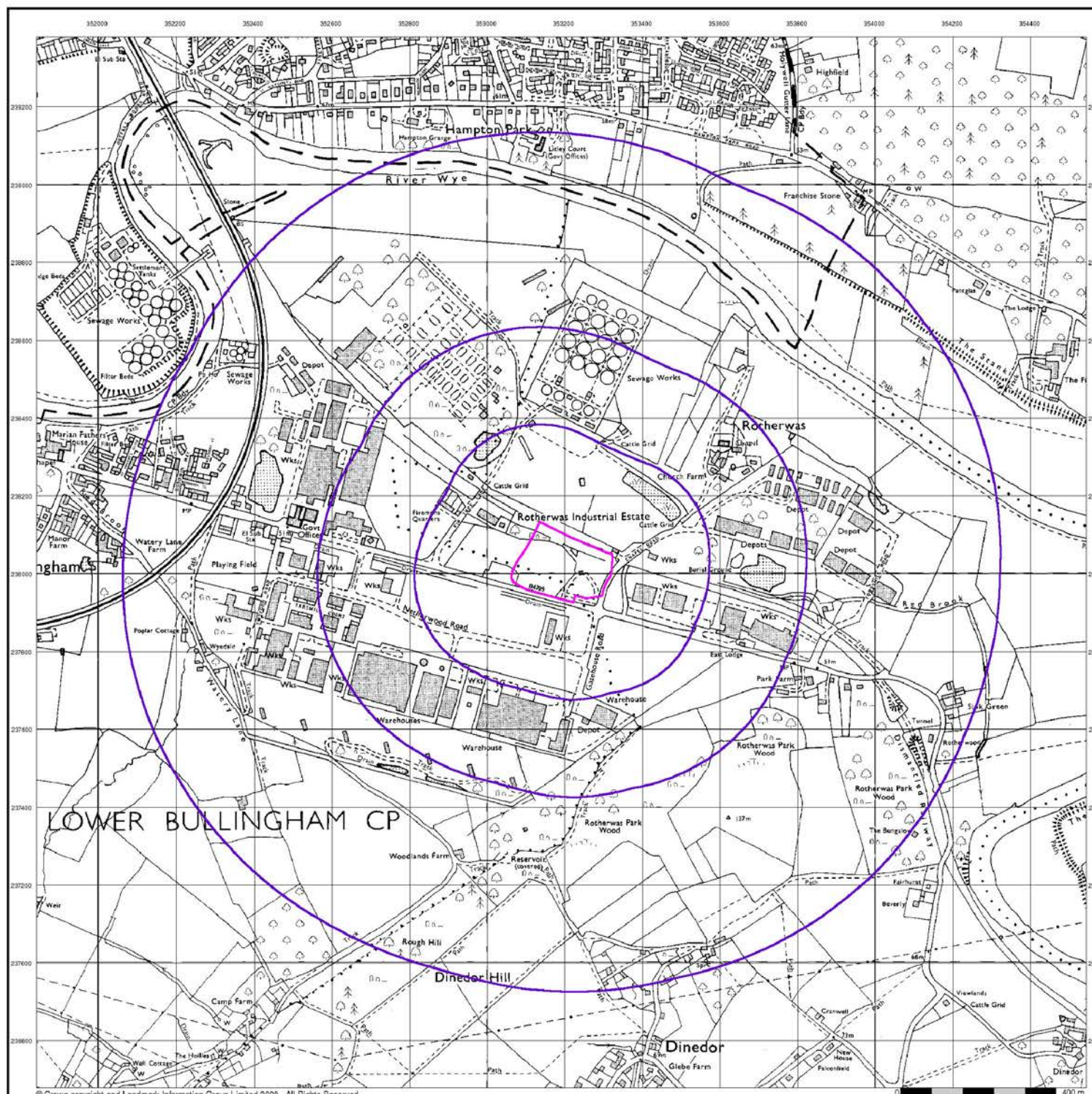


Order Details

Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 1000

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



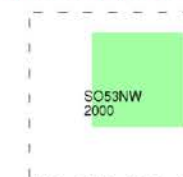
10K Raster Mapping

Published 2000

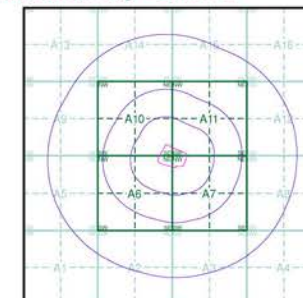
Source map scale - 1:10,000

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 includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 1000

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



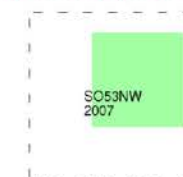
10K Raster Mapping

Published 2007

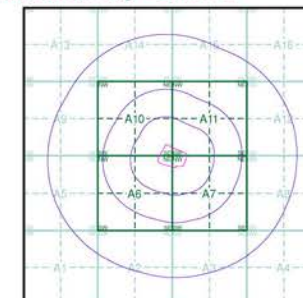
Source map scale - 1:10,000

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 includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 1000

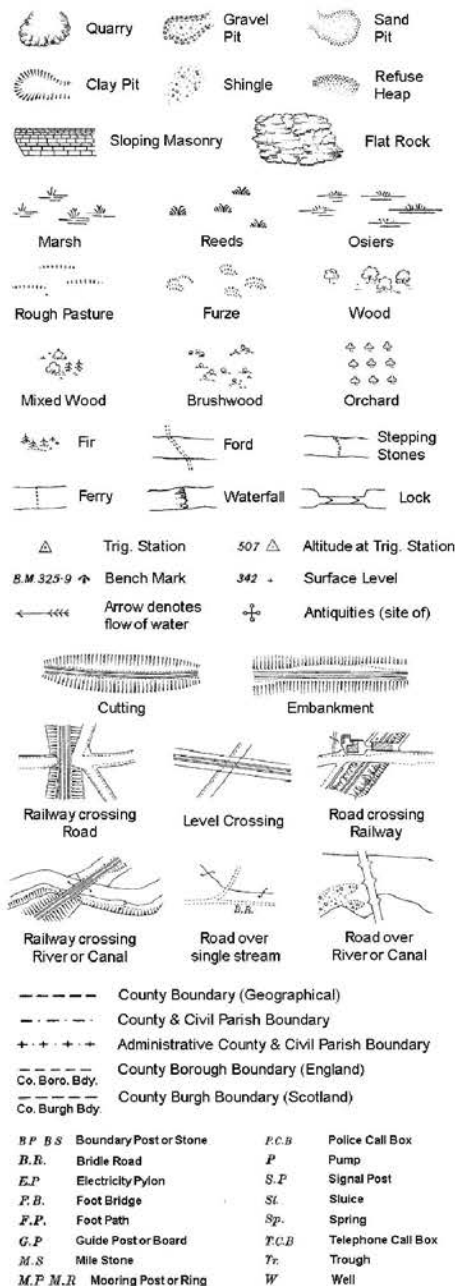
Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA

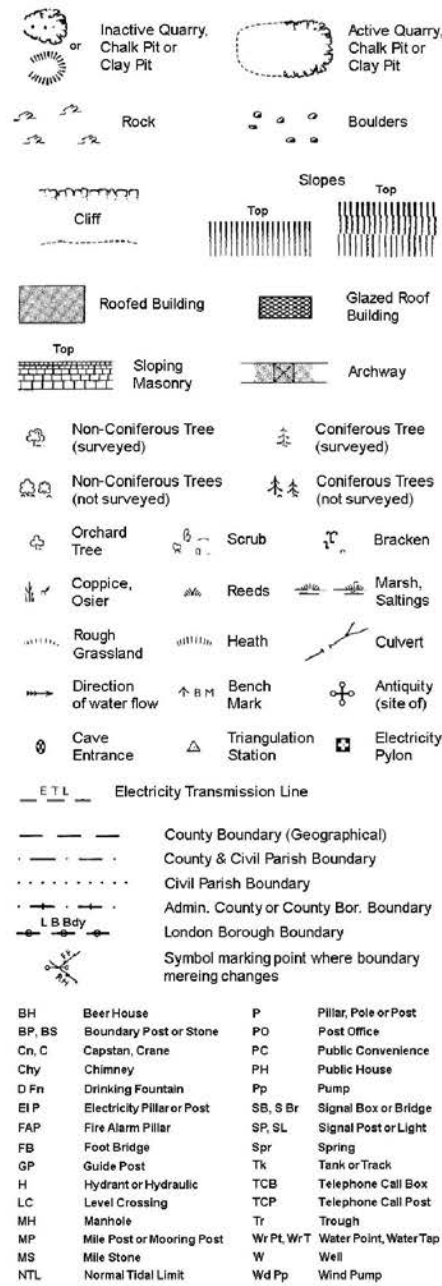


Historical Mapping Legends

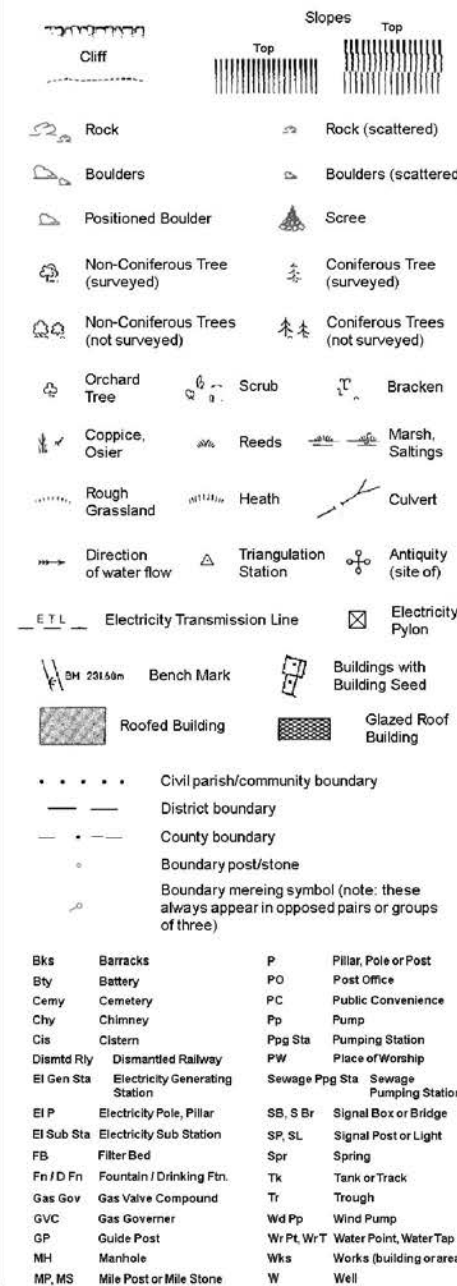
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



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



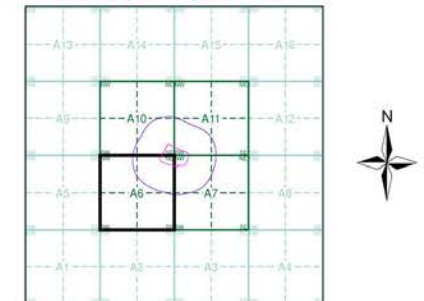
Large-Scale National Grid Data 1:2,500 and 1:1,250



Ordnance Survey mapping included:

Mapping Type	Scale	Date	Pg
Herefordshire	1:2,500	1888	2
Herefordshire	1:2,500	1904	3
Herefordshire	1:2,500	1928 - 1929	4
Ordnance Survey Plan	1:2,500	1972 - 1973	5
Additional SIMs	1:2,500	1977 - 1983	6
Ordnance Survey Plan	1:2,500	1988 - 1991	7
Additional SIMs	1:1,250	1992	8
Large-Scale National Grid Data	1:2,500	1993	9
Large-Scale National Grid Data	1:1,250	1993	10
Large-Scale National Grid Data	1:2,500	1995	11

Historical Map - Segment A6



Order Details

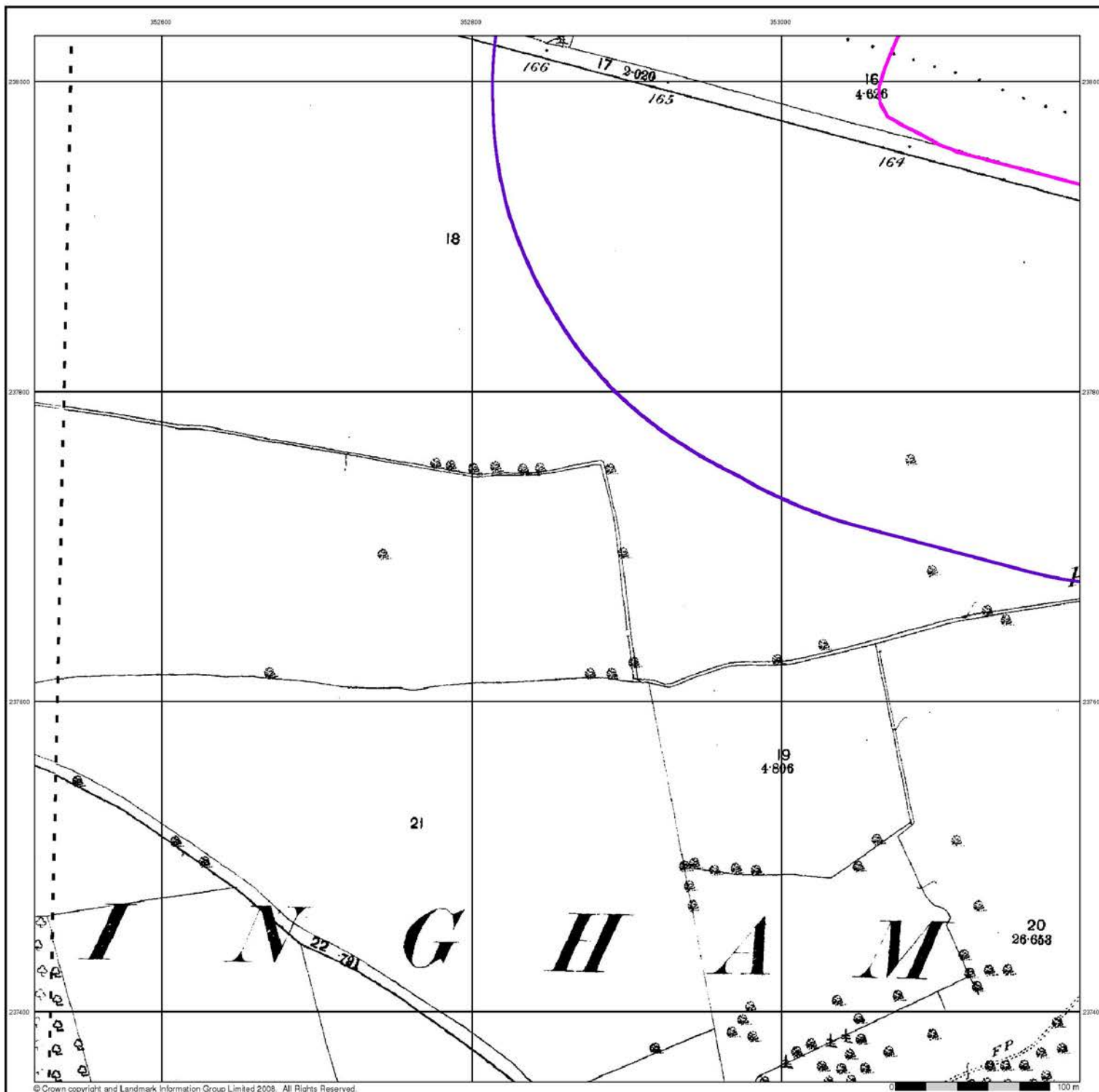
Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



Tel: 0870 850 6670
 Fax: 0870 850 6671
 Web: www.envirocheck.co.uk



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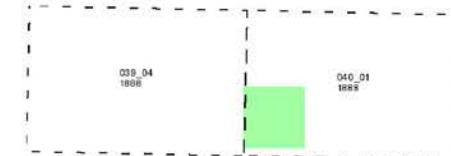
Herefordshire

Published 1888

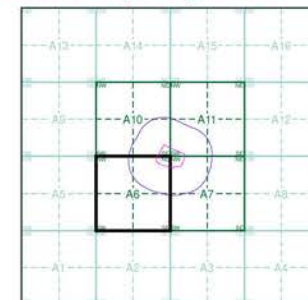
Source map scale - 1:2,500

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 A6

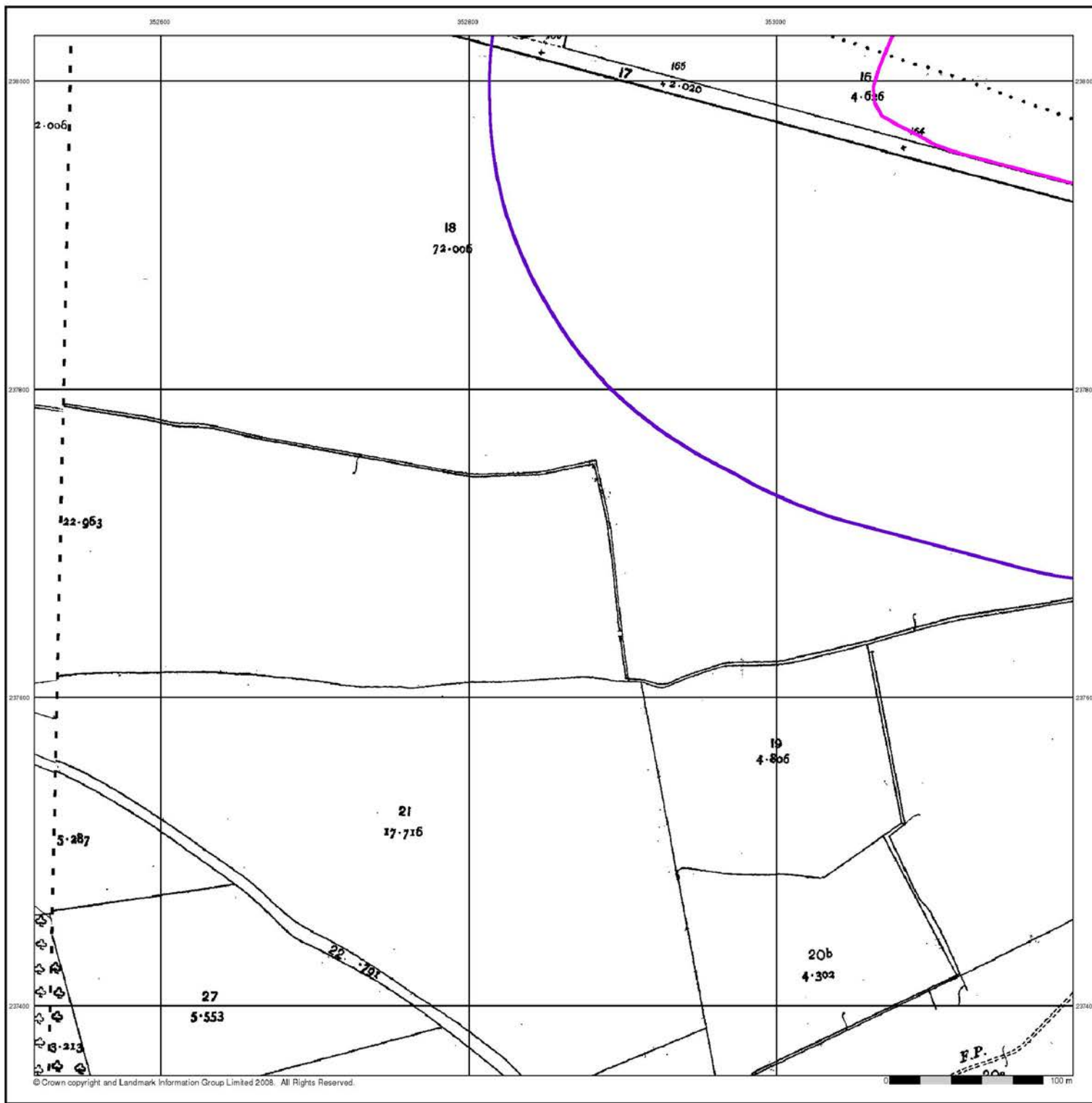


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



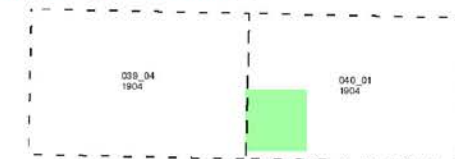
Herefordshire

Published 1904

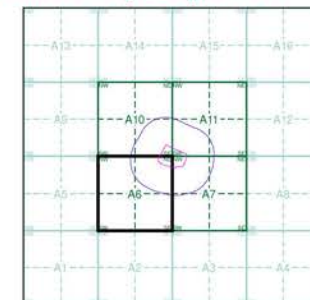
Source map scale - 1:2,500

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 A6

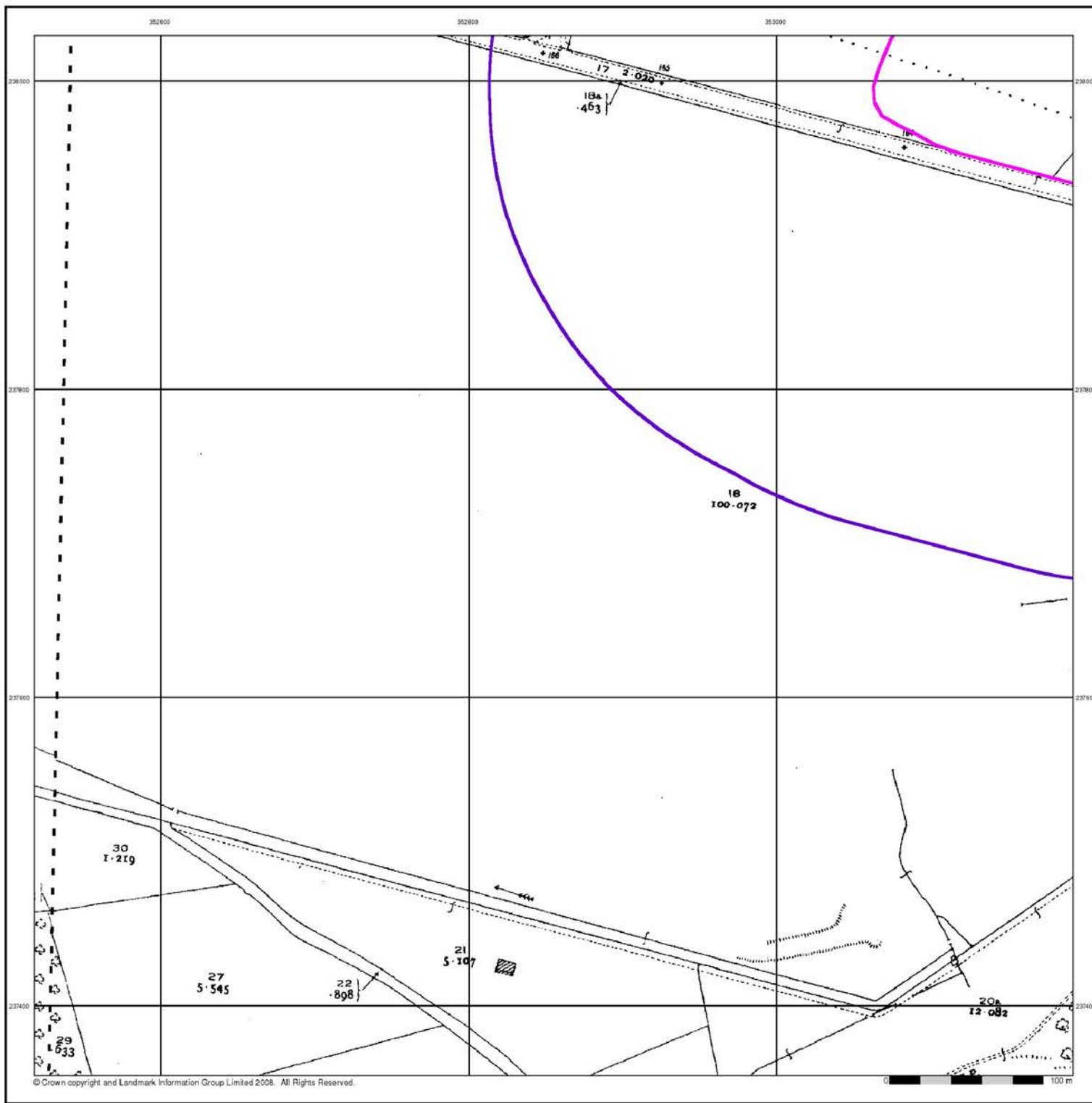


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



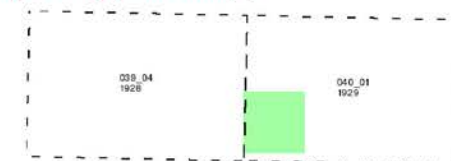
Herefordshire

Published 1928 - 1929

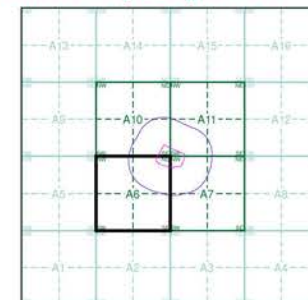
Source map scale - 1:2,500

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 A6



Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



Ordnance Survey Plan

Published 1972 - 1973

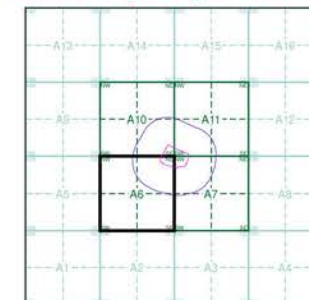
Source map scale - 1:2,500

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)

SO6238 1973	SO6338 1973
SO6237 1972	SO6337 1972

Historical Map - Segment A6



Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA

Additional SIMs

Published 1977 - 1983

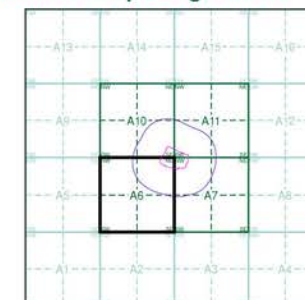
Source map scale - 1:2,500

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)

SO5238 1983	SO5338 1977
SO6237 1982	SO6337 1982

Historical Map - Segment A6

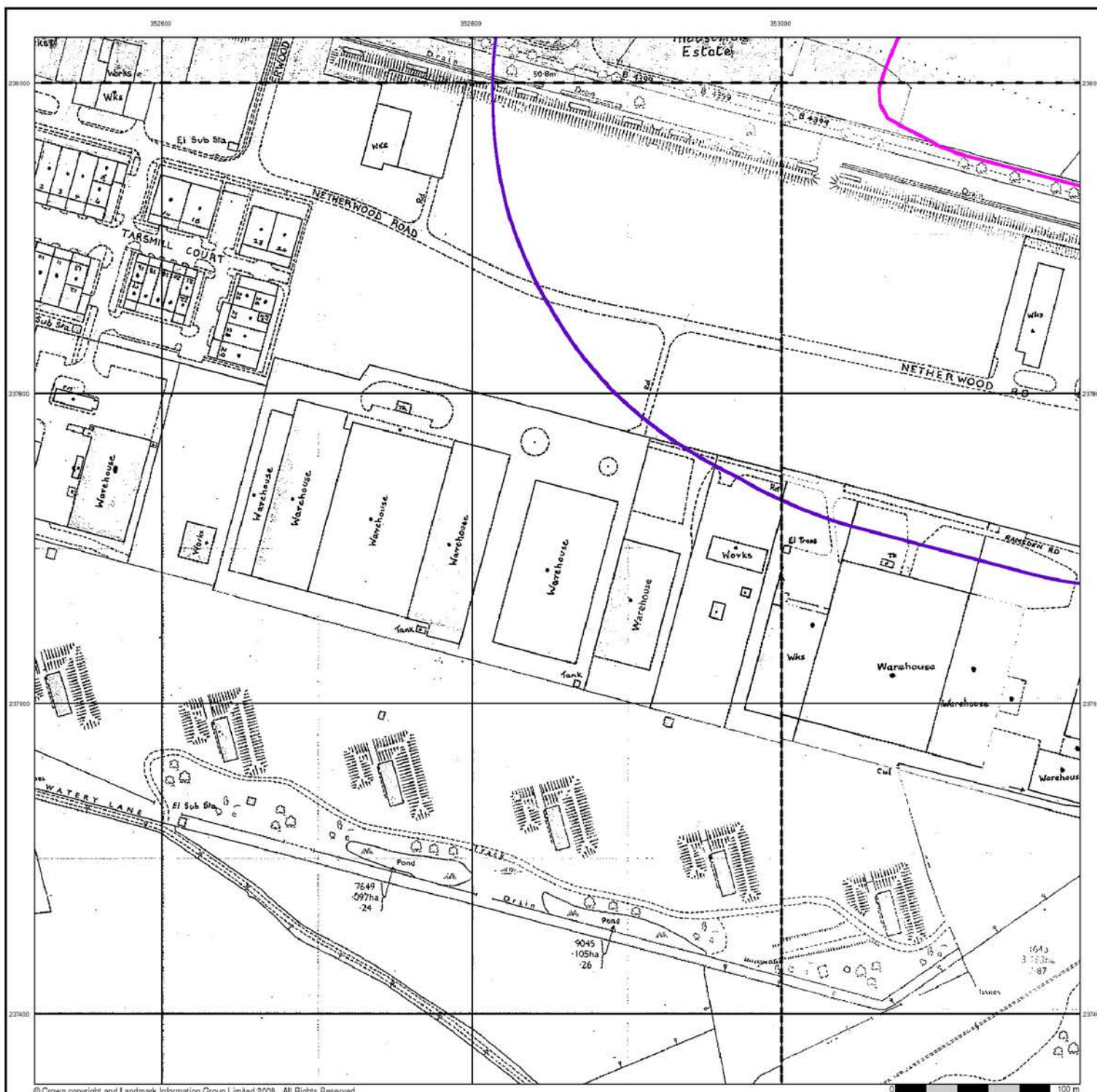


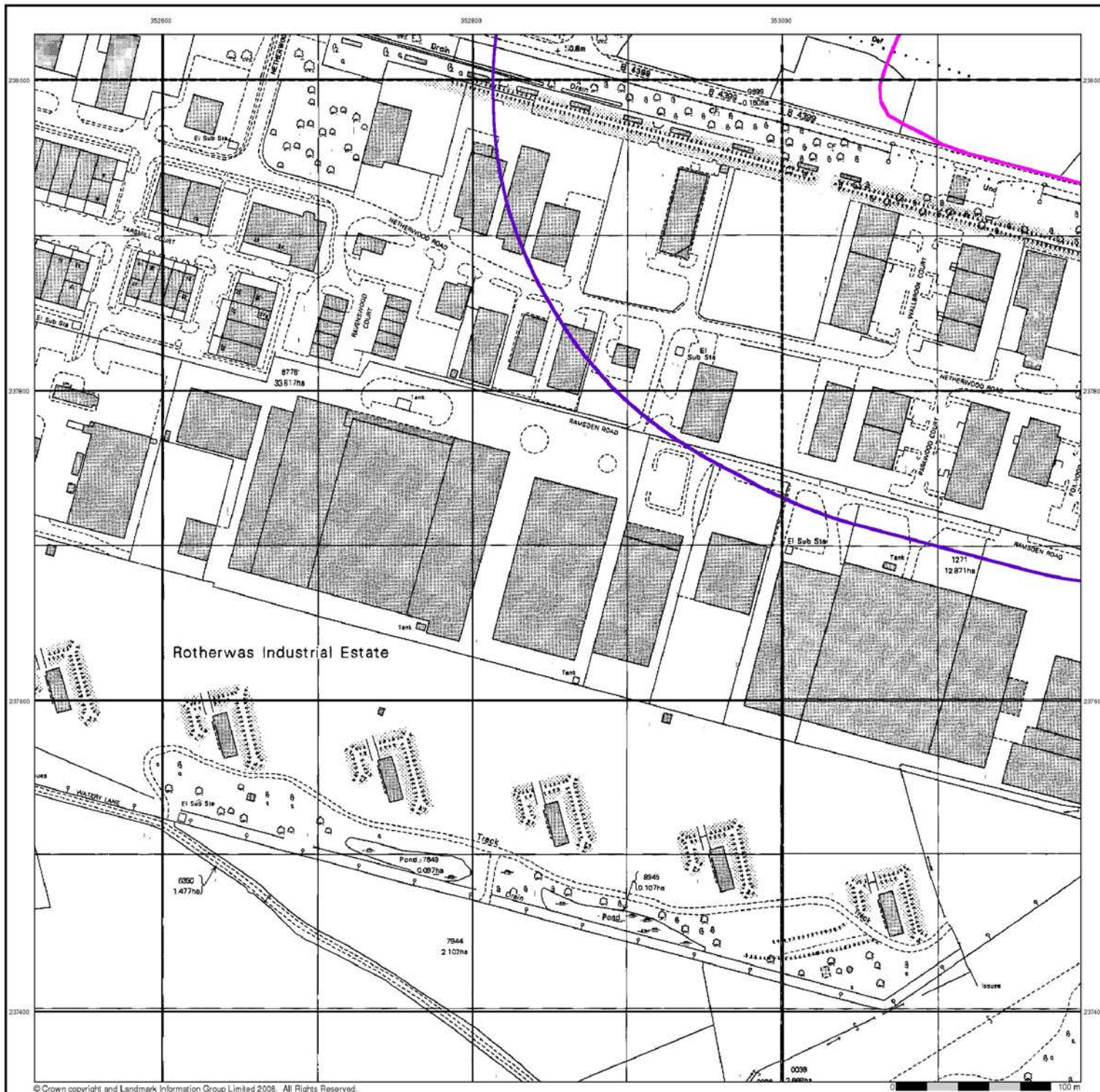
Order Details

Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA





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Ordnance Survey Plan

Published 1988 - 1991

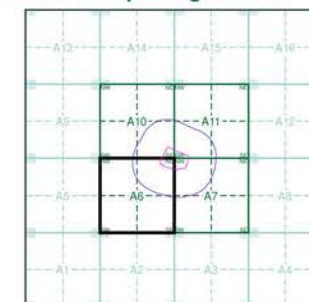
Source map scale - 1:2,500

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)

SO6238 1988	SO6338 1988
SO6237 1991	SO6337 1991

Historical Map - Segment A6

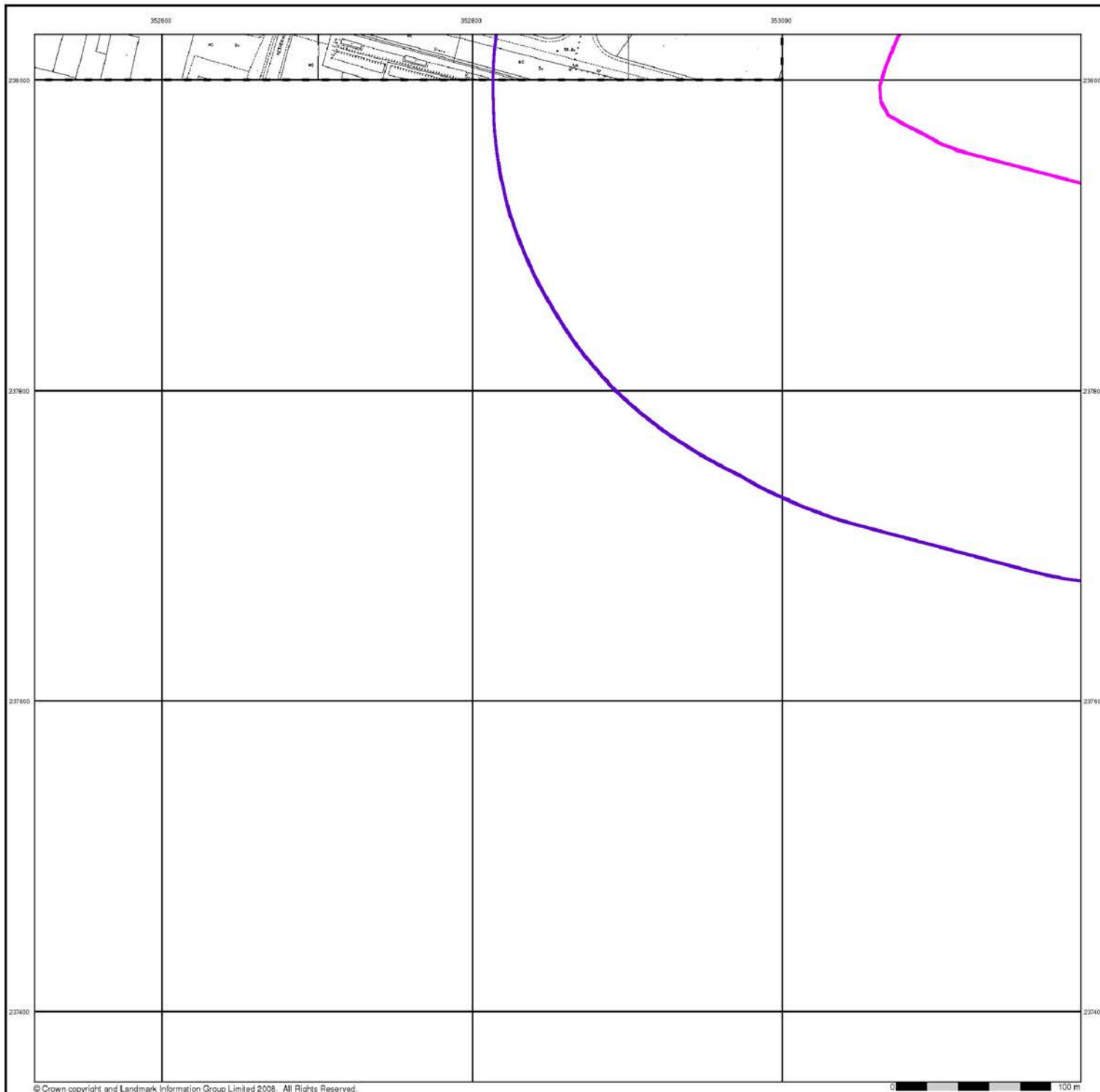


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



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Additional SIMs

Published 1992

Source map scale - 1:1,250

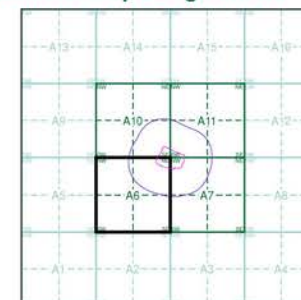
The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps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

Map Name(s) and Date(s)

SO5238SE
1992



Historical Map - Segment A6



Order Details

Order Number: 24915659_1_1
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National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA

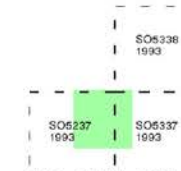
Large-Scale National Grid Data

Published 1993

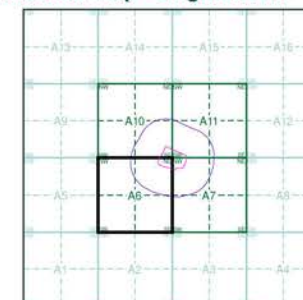
Source map scale - 1:2,500

'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 A6

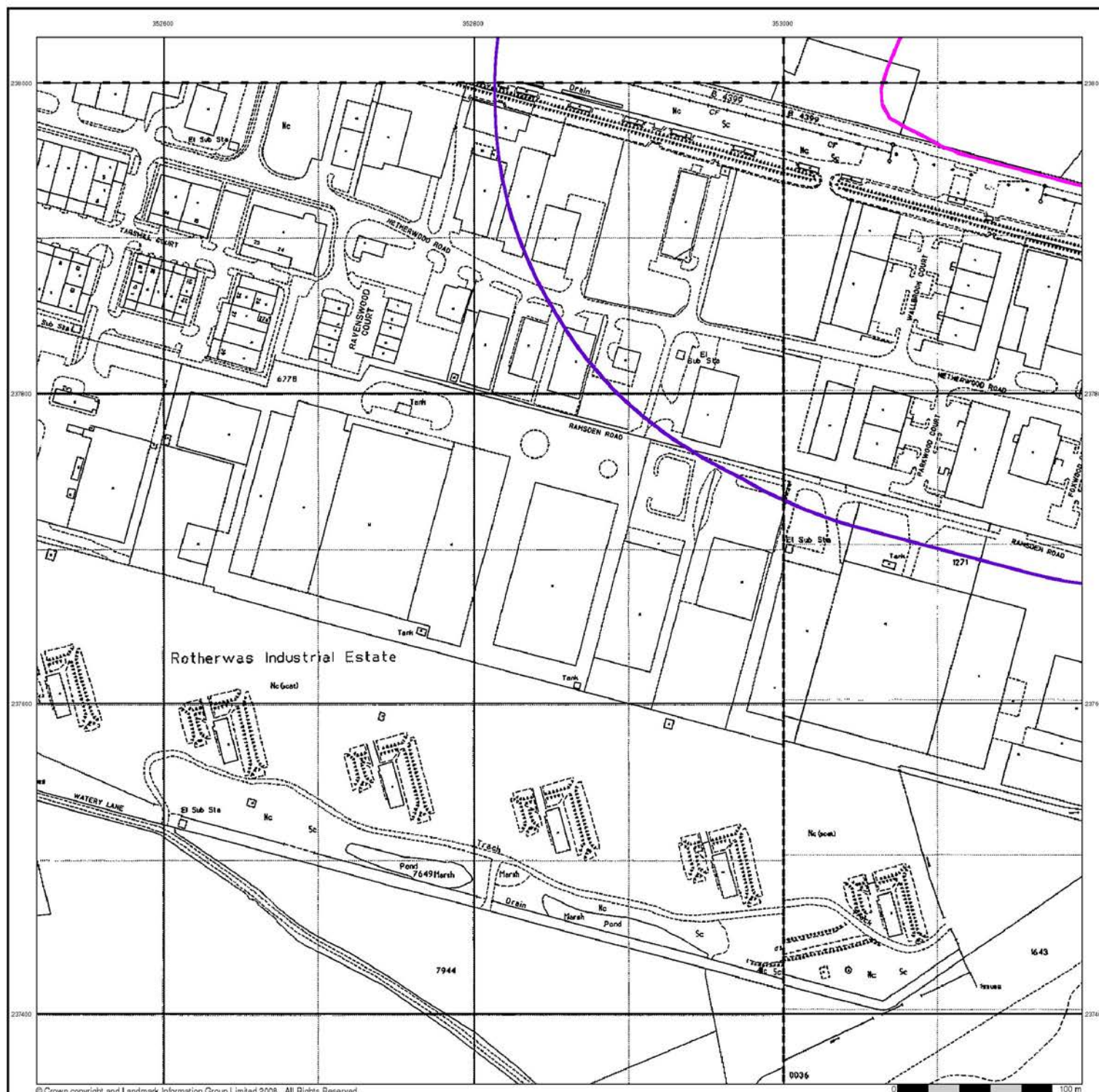


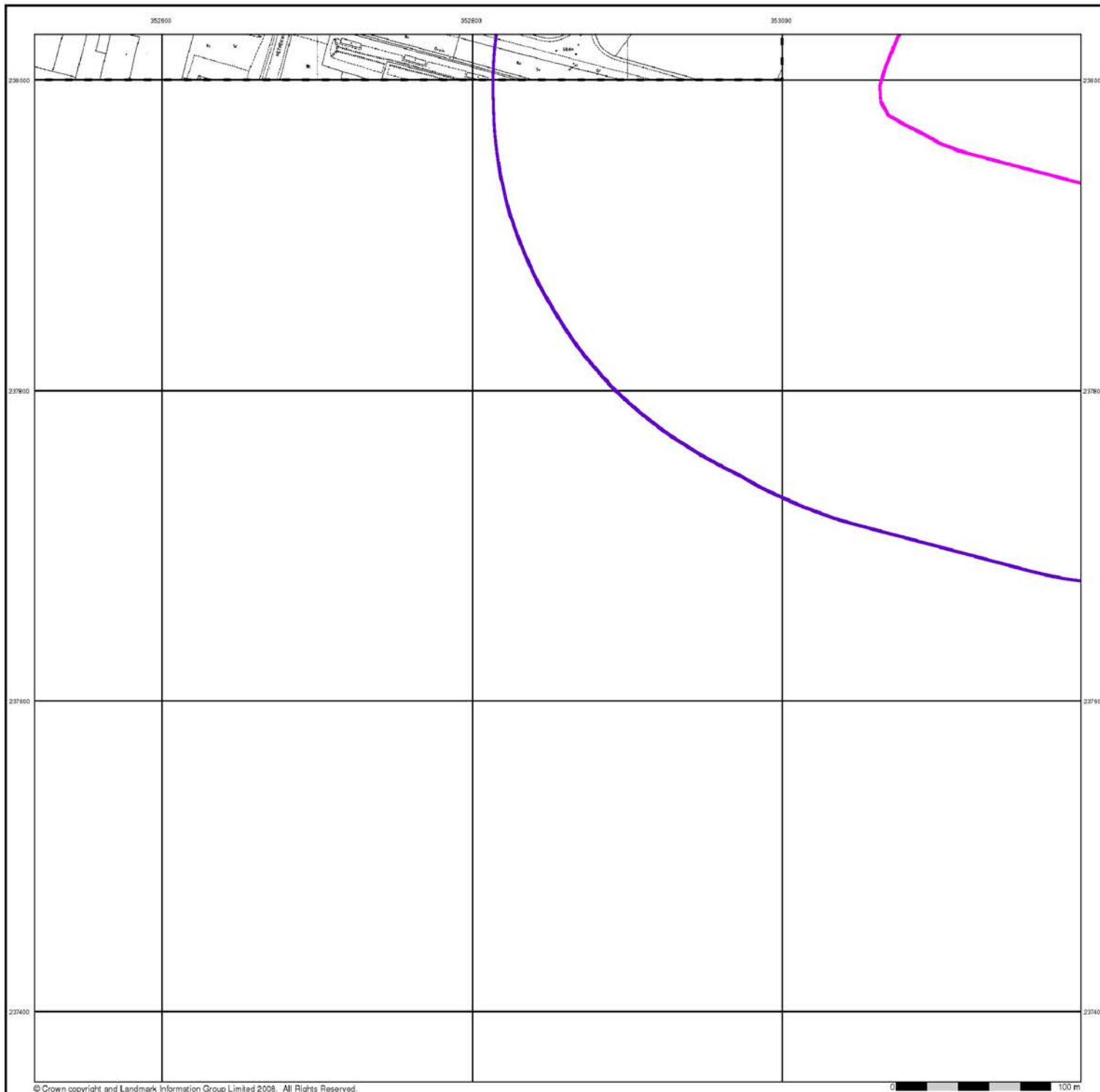
Order Details

Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 250

Site Details

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0 100 m



Large-Scale National Grid Data

Published 1993

Source map scale - 1:1,250

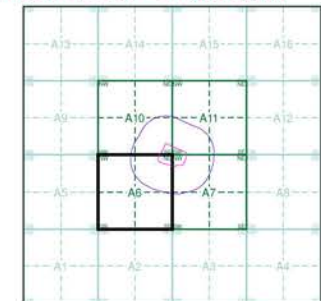
'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic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

Map Name(s) and Date(s)

SO5238SE
1993



Historical Map - Segment A6



Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

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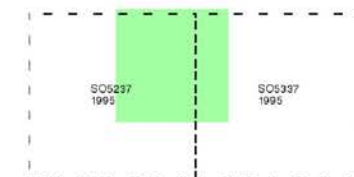
Large-Scale National Grid Data

Published 1995

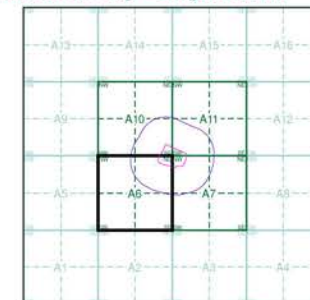
Source map scale - 1:2,500

'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 A6



Order Details

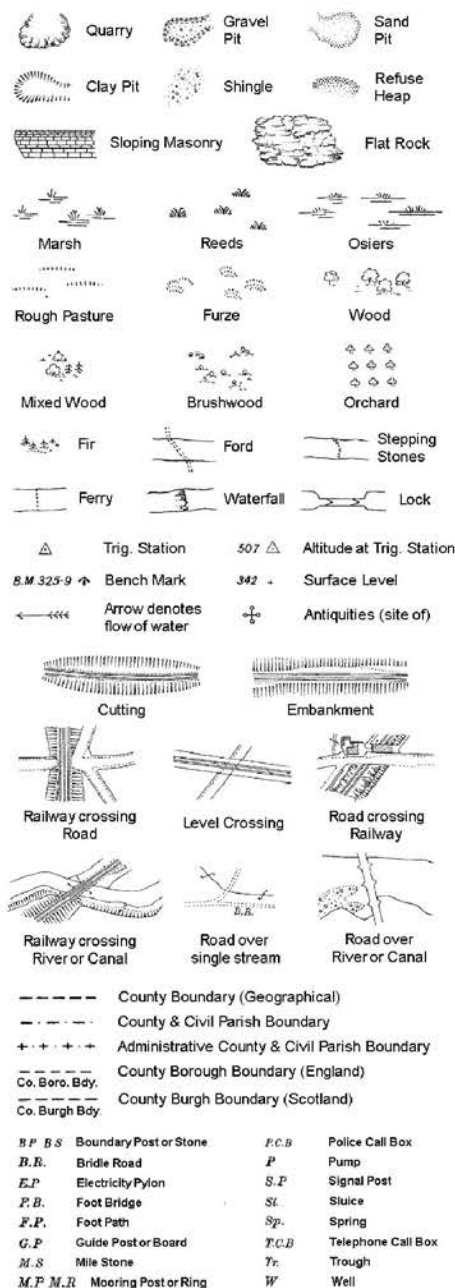
Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

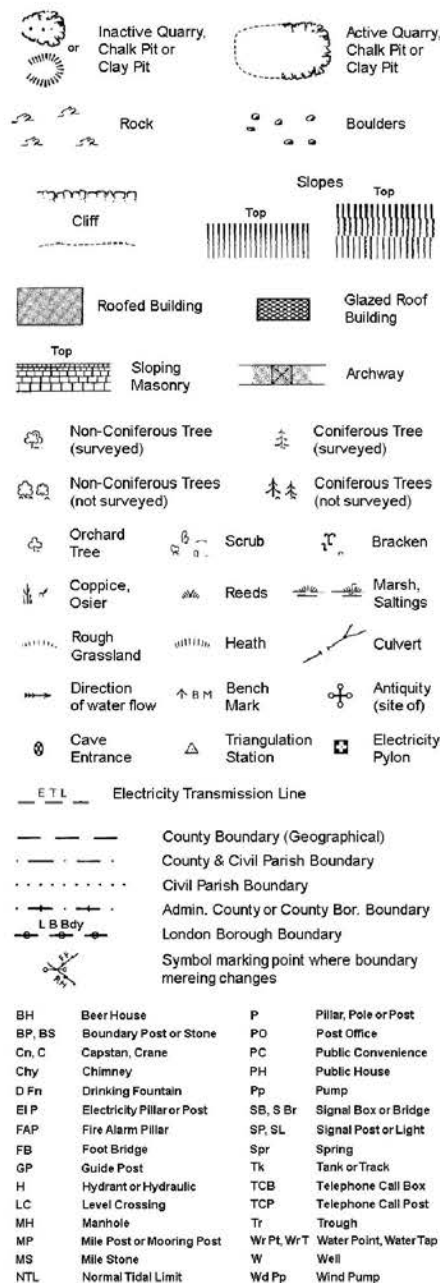
8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA

Historical Mapping Legends

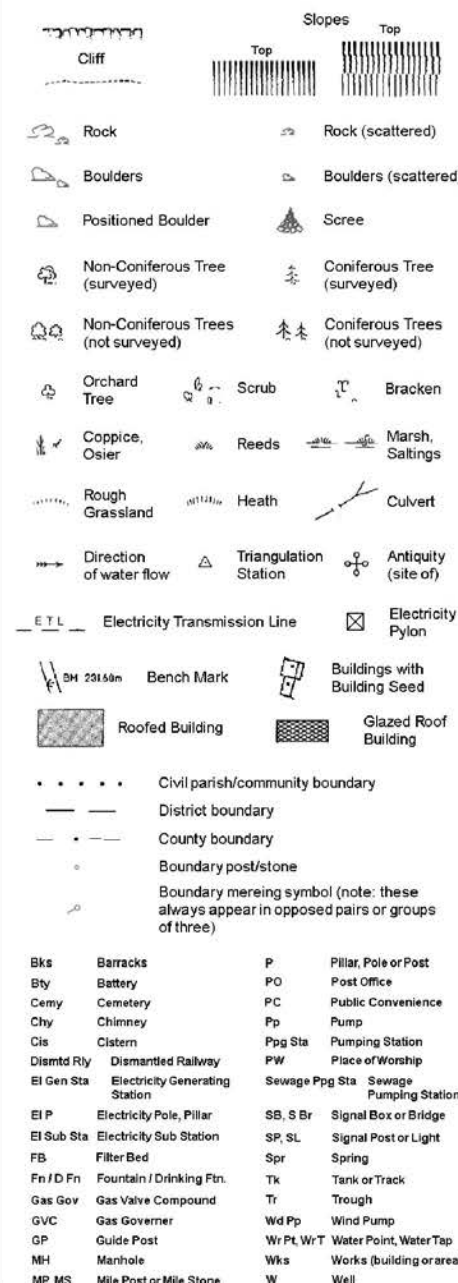
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



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



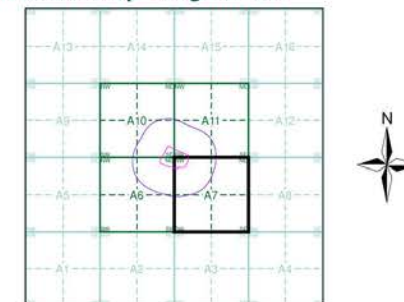
Large-Scale National Grid Data 1:2,500 and 1:1,250



Ordnance Survey mapping included:

Mapping Type	Scale	Date	Pg
Herefordshire	1:2,500	1888	2
Herefordshire	1:2,500	1904	3
Herefordshire	1:2,500	1929	4
Ordnance Survey Plan	1:2,500	1972 - 1973	5
Additional SIMs	1:2,500	1977 - 1982	6
Ordnance Survey Plan	1:2,500	1988 - 1991	7
Large-Scale National Grid Data	1:2,500	1993	8
Large-Scale National Grid Data	1:2,500	1995	9

Historical Map - Segment A7



Order Details

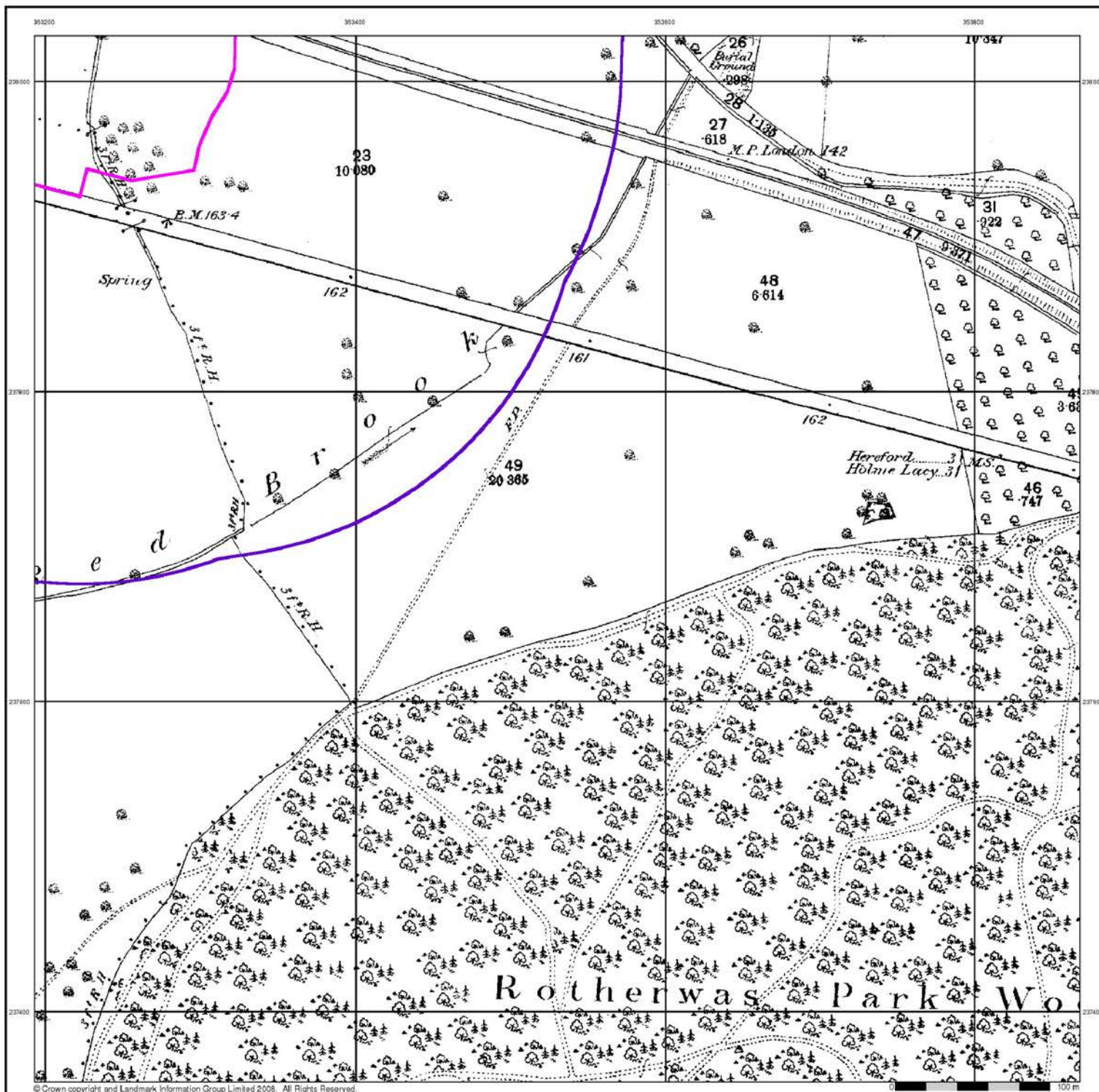
Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HERFORD, HR2 6LA



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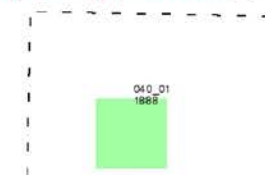
Herefordshire

Published 1888

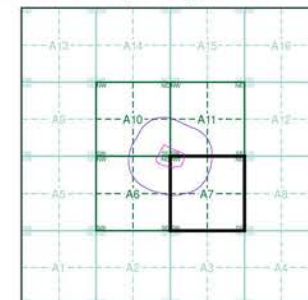
Source map scale - 1:2,500

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 A7

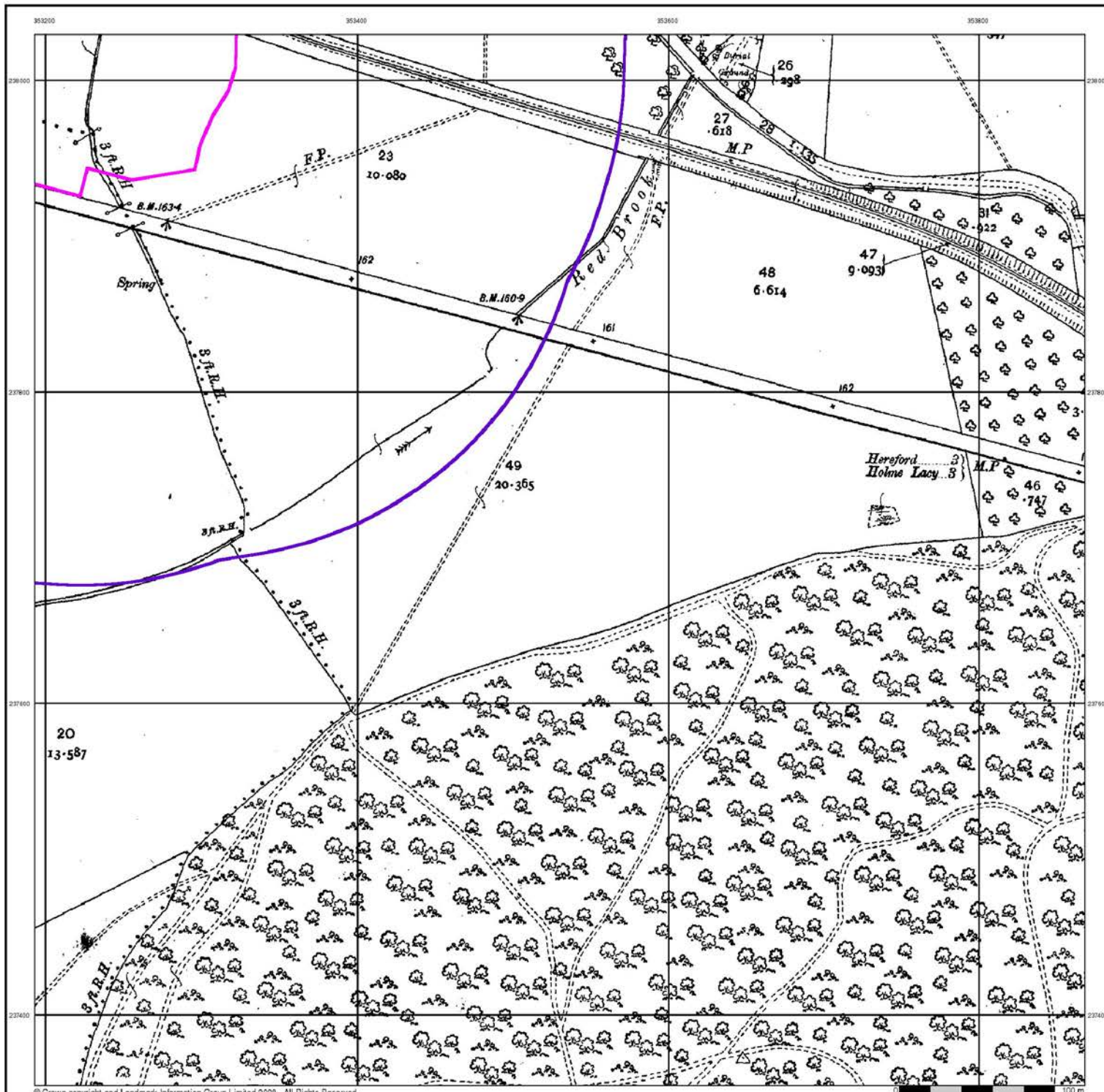


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



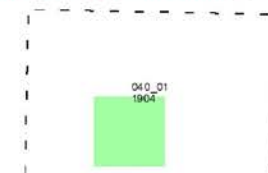
Herefordshire

Published 1904

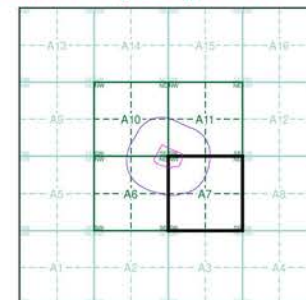
Source map scale - 1:2,500

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 A7

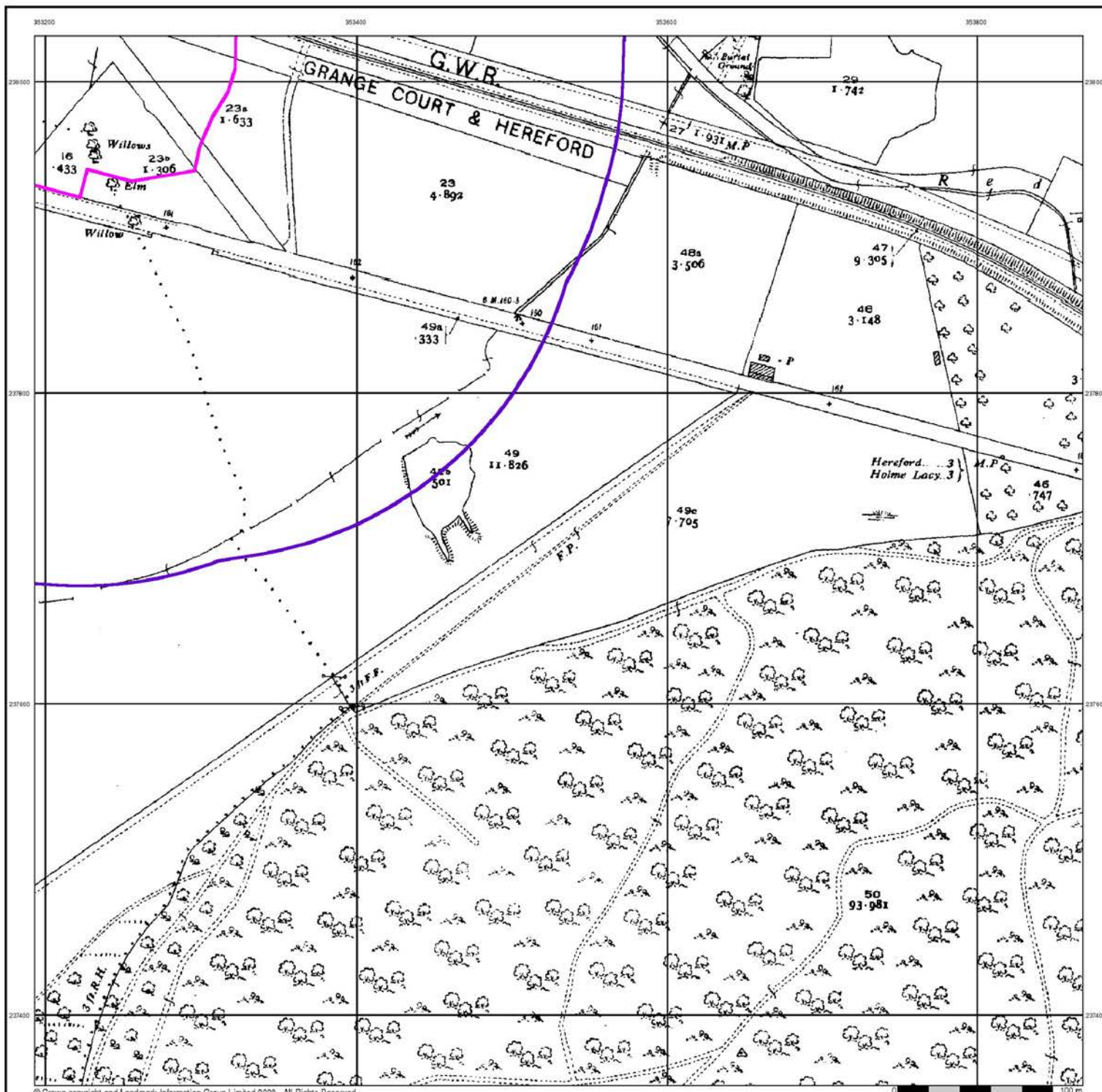


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



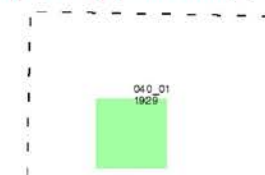
Herefordshire

Published 1929

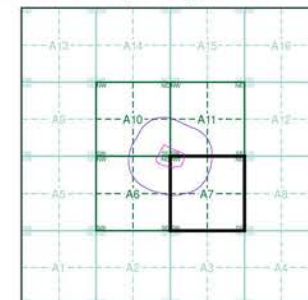
Source map scale - 1:2,500

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 A7

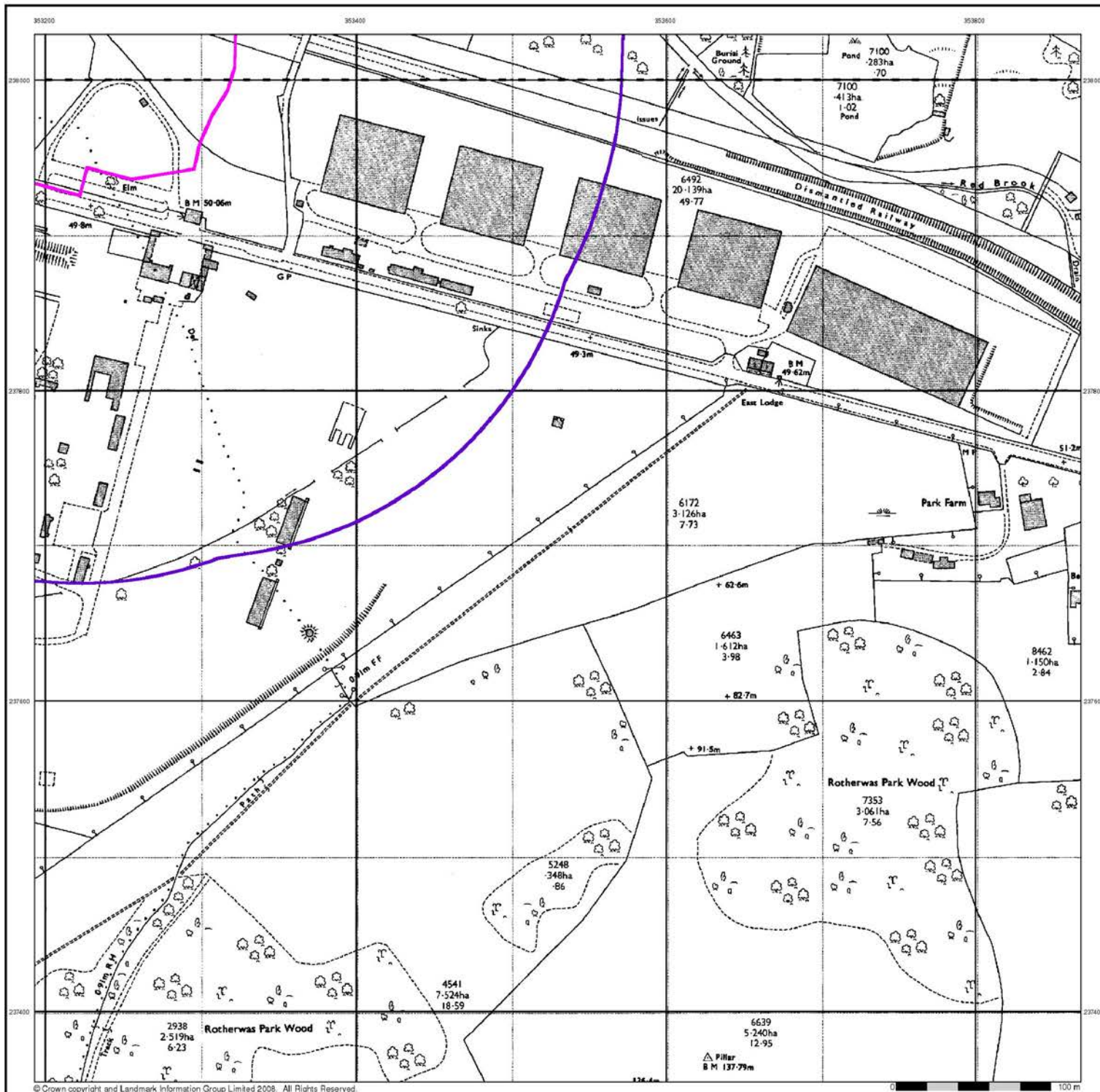


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



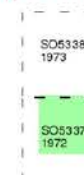
Ordnance Survey Plan

Published 1972 - 1973

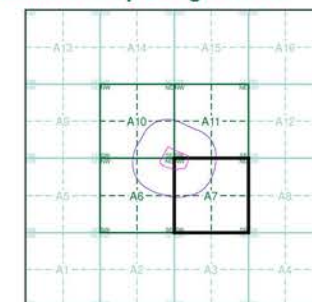
Source map scale - 1:2,500

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 A7

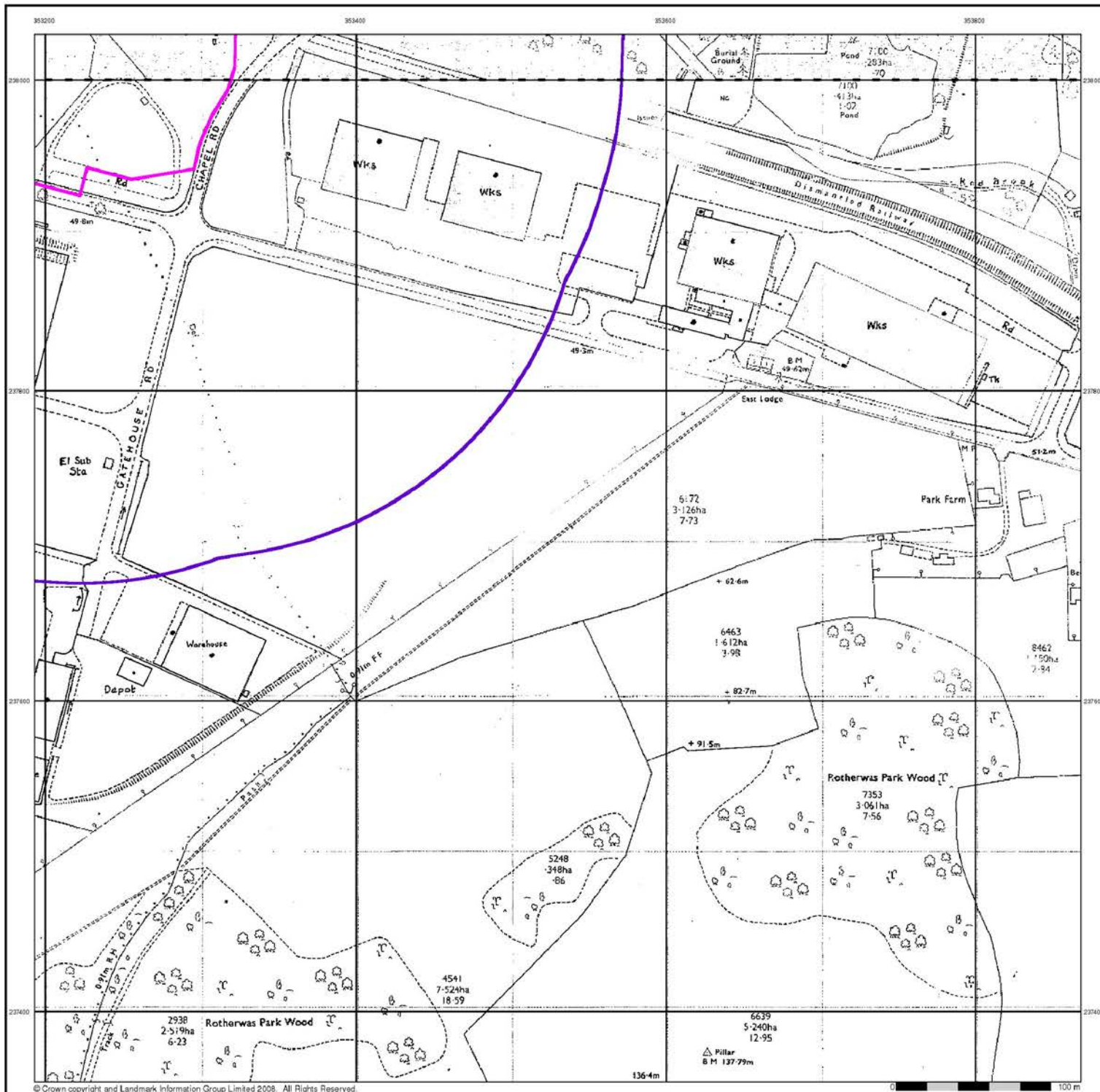


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



Additional SIMs

Published 1977 - 1982

Source map scale - 1:2,500

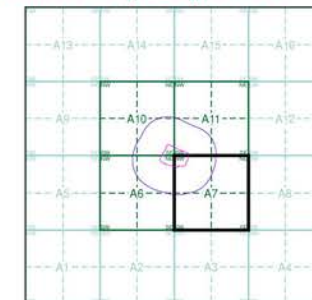
The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps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

Map Name(s) and Date(s)

SO6338
1977

SO5337
1982

Historical Map - Segment A7

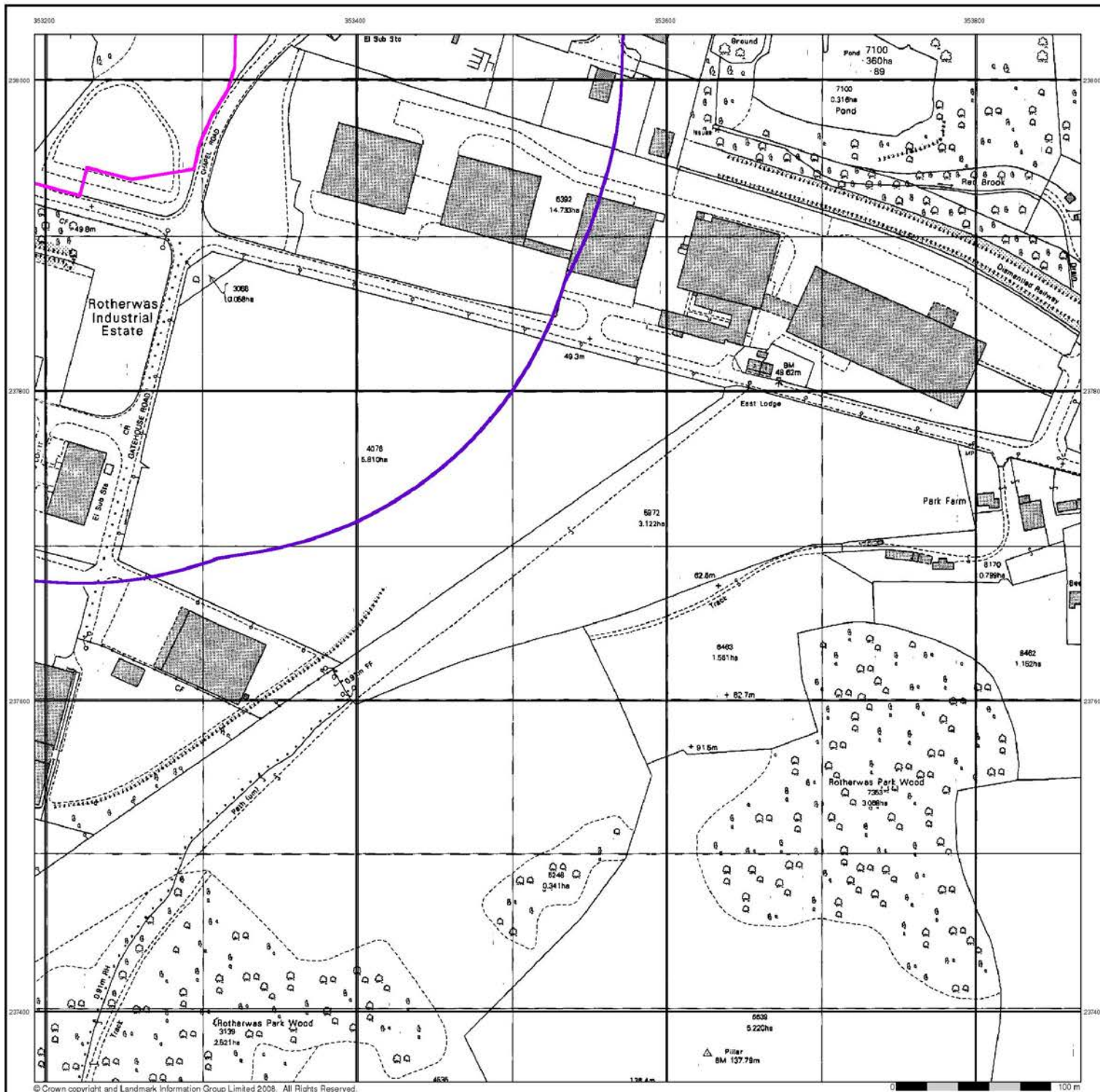


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



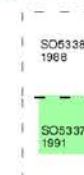
Ordnance Survey Plan

Published 1988 - 1991

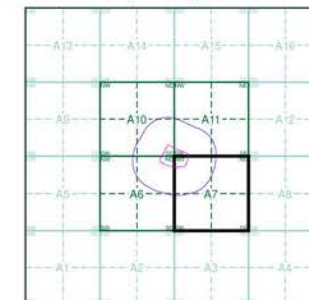
Source map scale - 1:2,500

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 A7

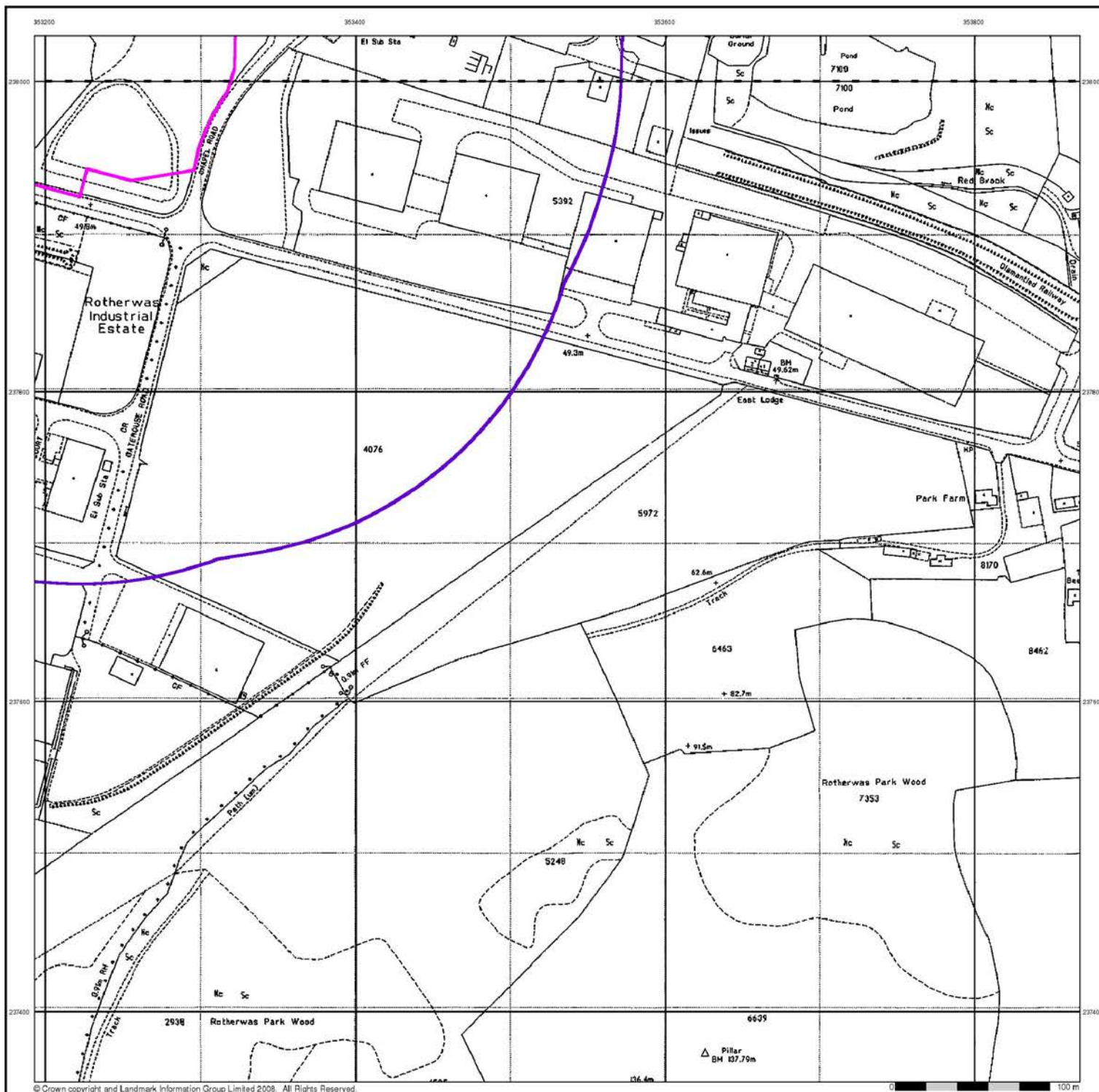


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

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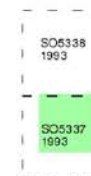
Large-Scale National Grid Data

Published 1993

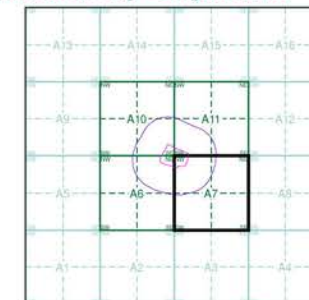
Source map scale - 1:2,500

'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 A7



Order Details

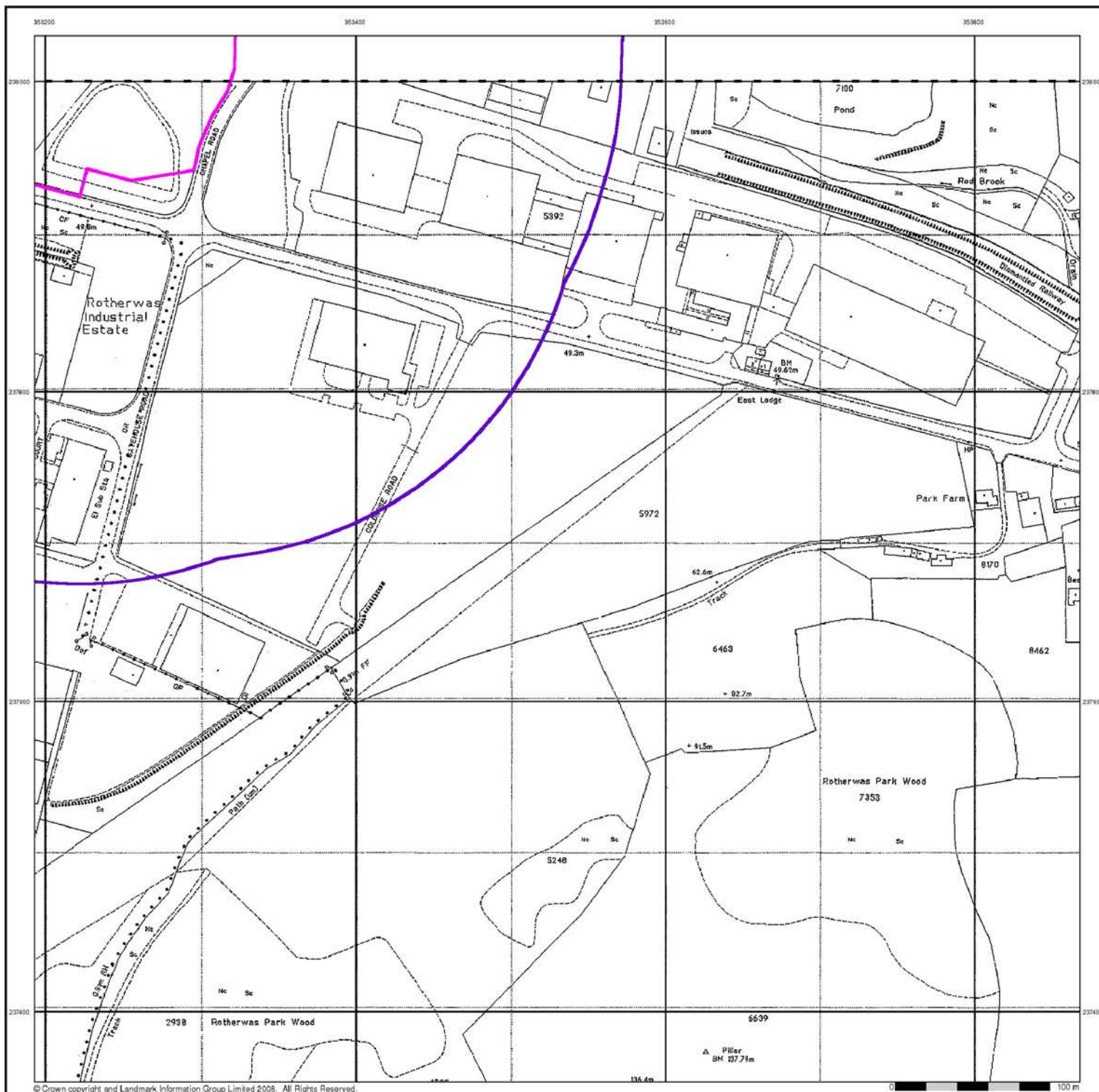
Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



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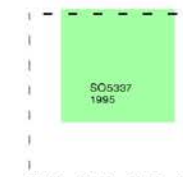
Large-Scale National Grid Data

Published 1995

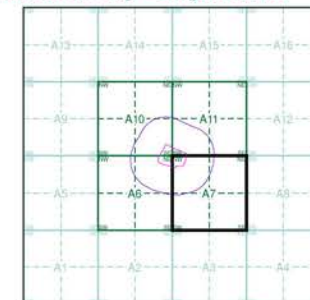
Source map scale - 1:2,500

'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 A7



Order Details

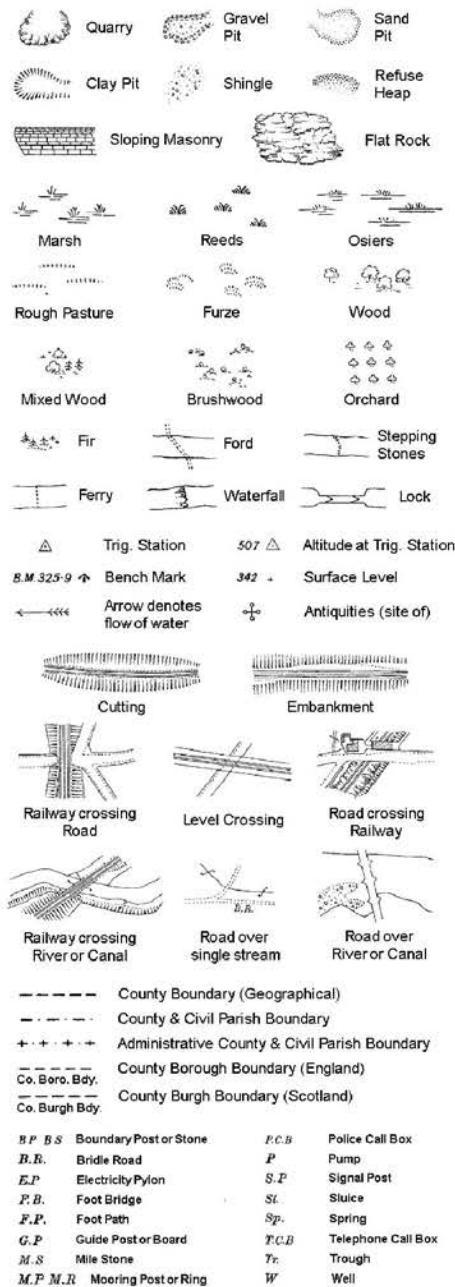
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Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

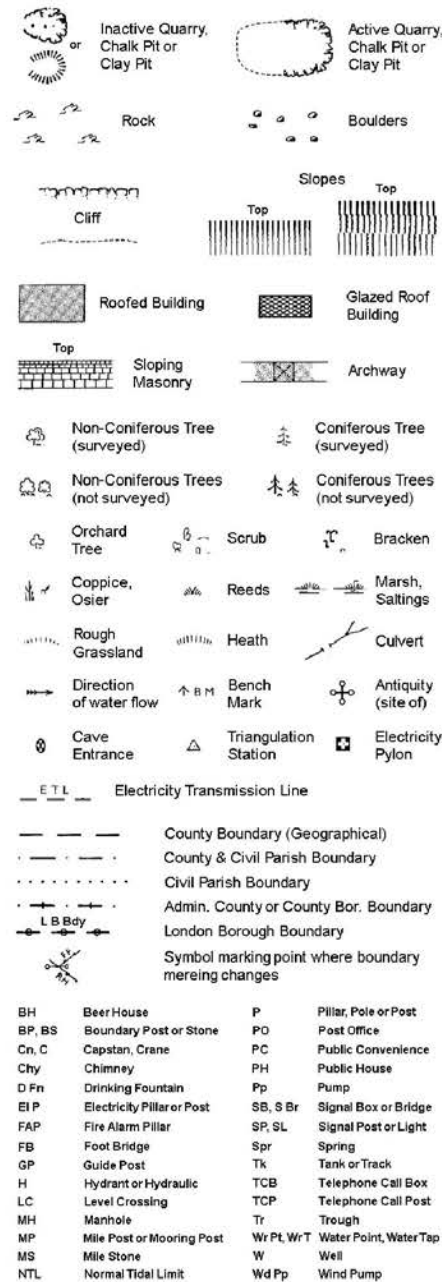
8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA

Historical Mapping Legends

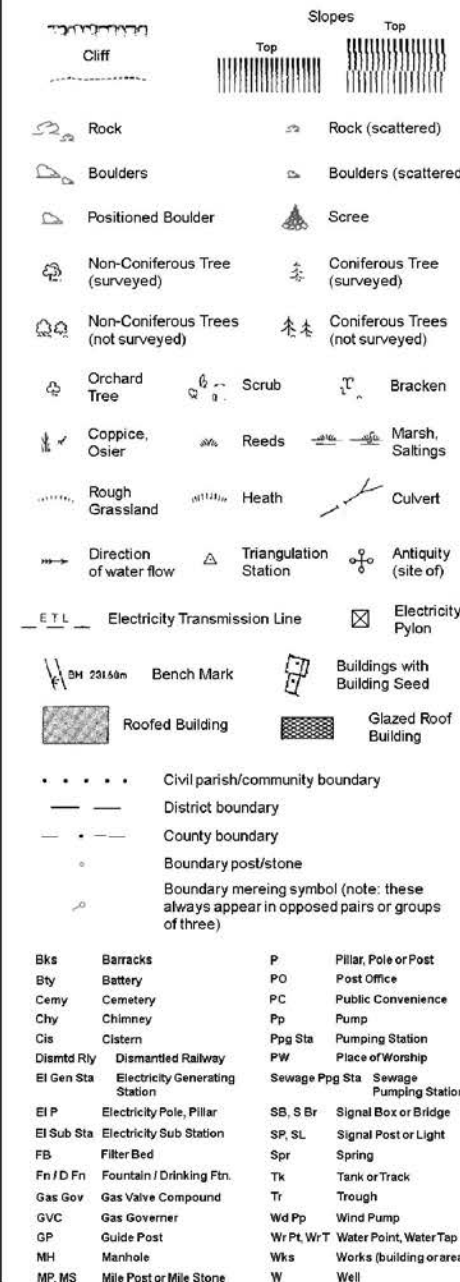
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



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



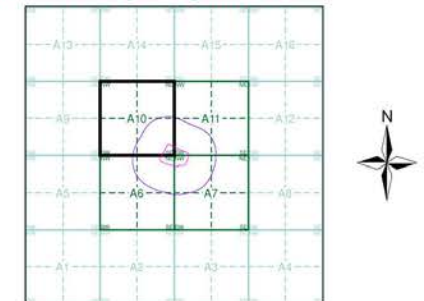
Large-Scale National Grid Data 1:2,500 and 1:1,250



Ordnance Survey mapping included:

Mapping Type	Scale	Date	Pg
Herefordshire	1:2,500	1888	2
Herefordshire	1:2,500	1904	3
Herefordshire	1:2,500	1928 - 1929	4
Ordnance Survey Plan	1:2,500	1973	5
Additional SIMs	1:2,500	1977 - 1983	6
Ordnance Survey Plan	1:2,500	1988	7
Additional SIMs	1:1,250	1992	8
Large-Scale National Grid Data	1:1,250	1993	9
Large-Scale National Grid Data	1:2,500	1993	10

Historical Map - Segment A10



Order Details

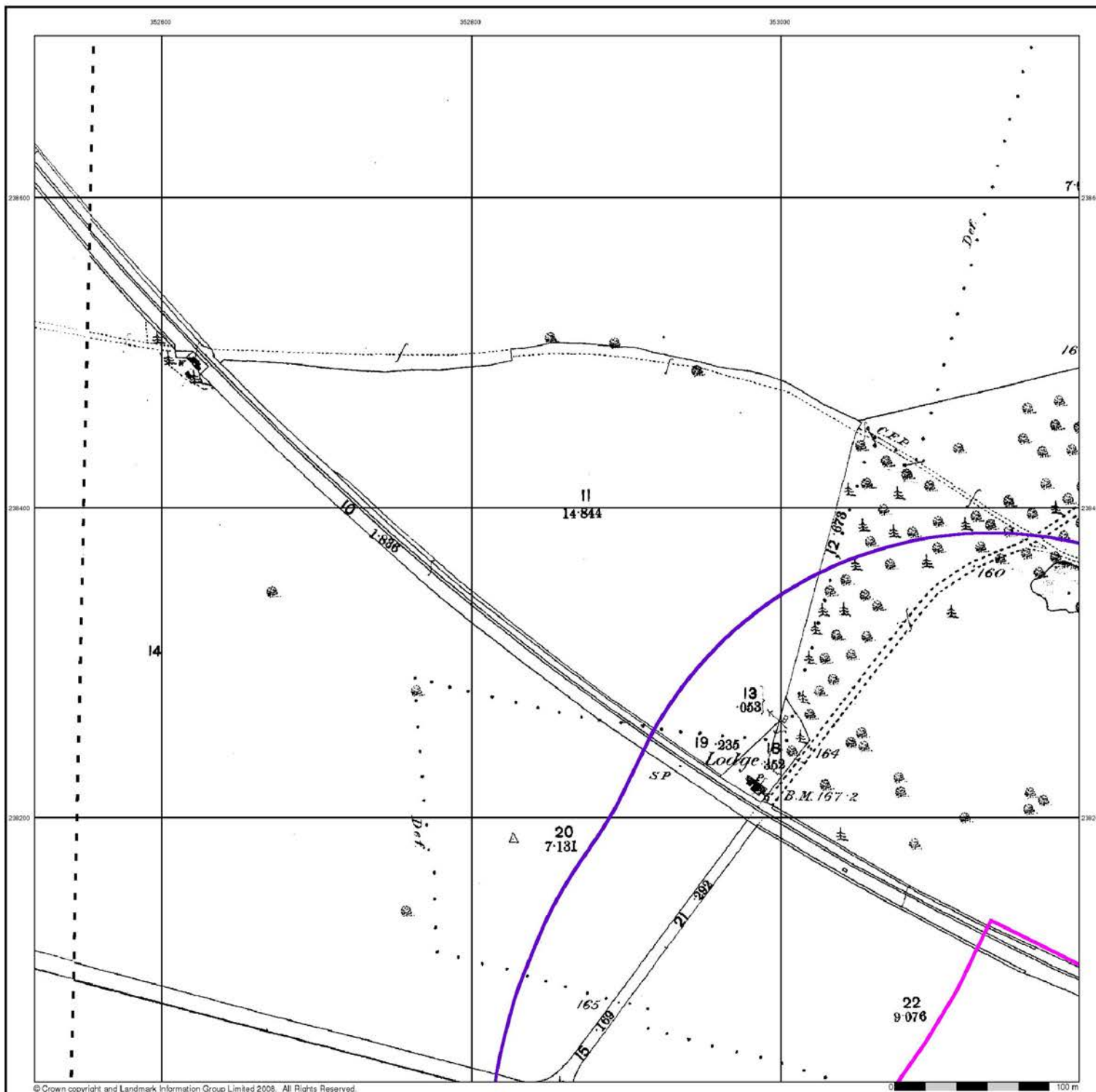
Order Number: 24915659_1_1
 Customer Ref: 551392 Plots 3-5
 National Grid Reference: 353190, 238020
 Slice: A
 Site Area (Ha): 3.47
 Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



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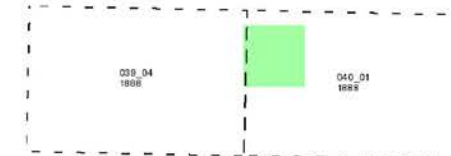
Herefordshire

Published 1888

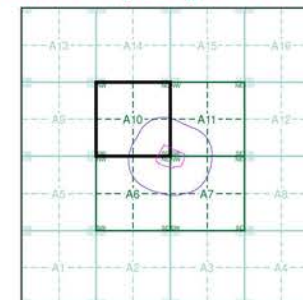
Source map scale - 1:2,500

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 A10

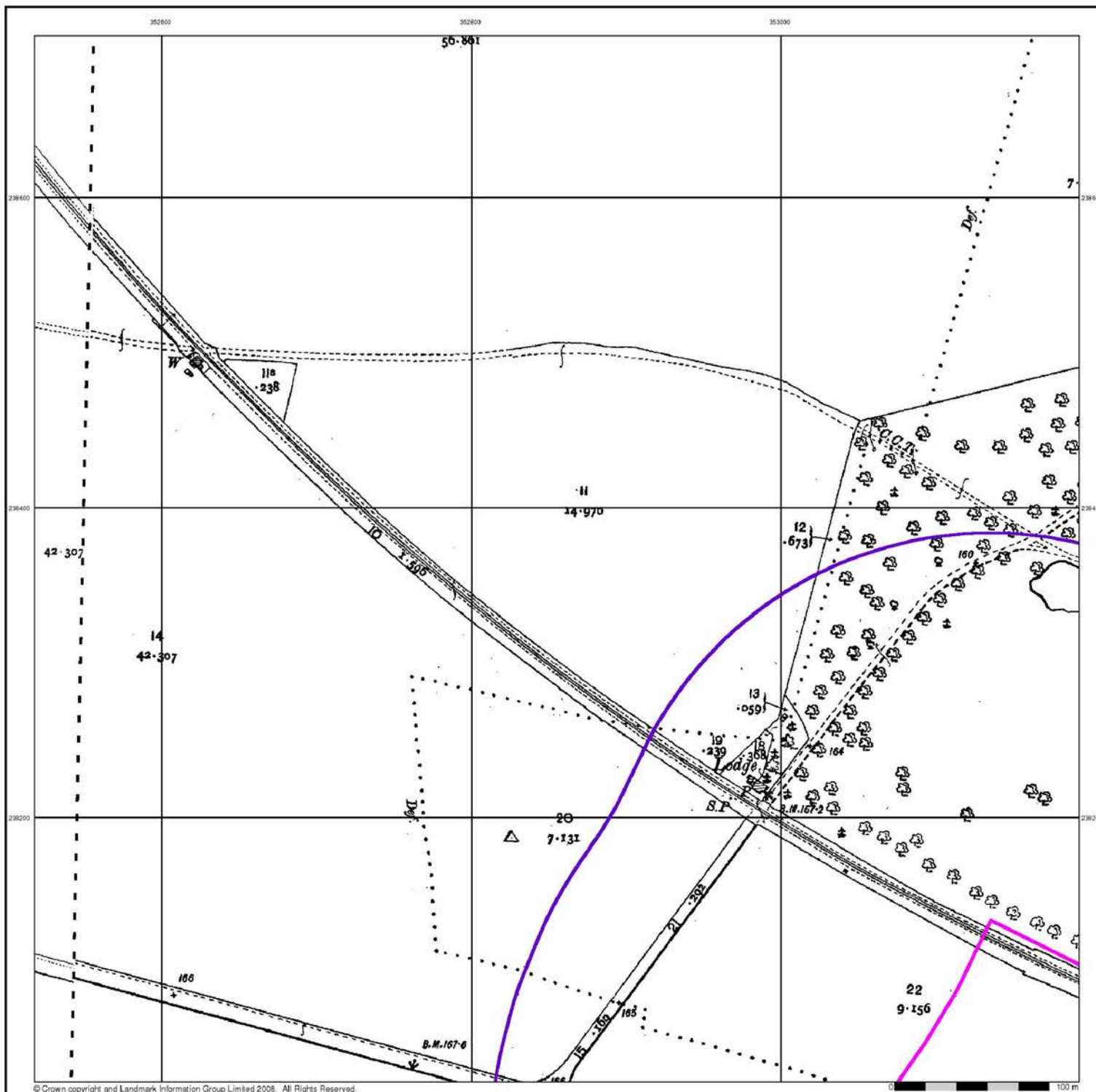


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



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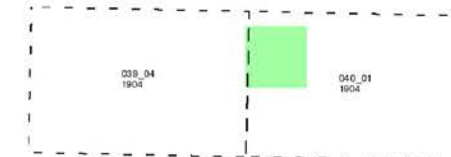
Herefordshire

Published 1904

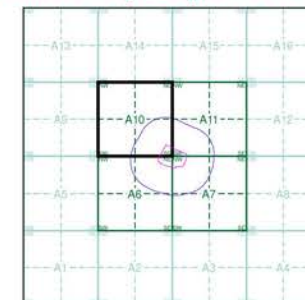
Source map scale - 1:2,500

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 A10



Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



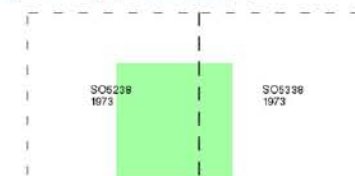
Ordnance Survey Plan

Published 1973

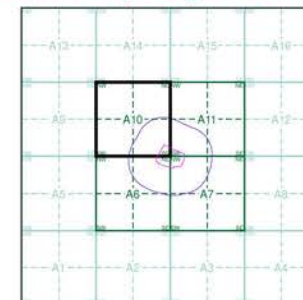
Source map scale - 1:2,500

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 A10

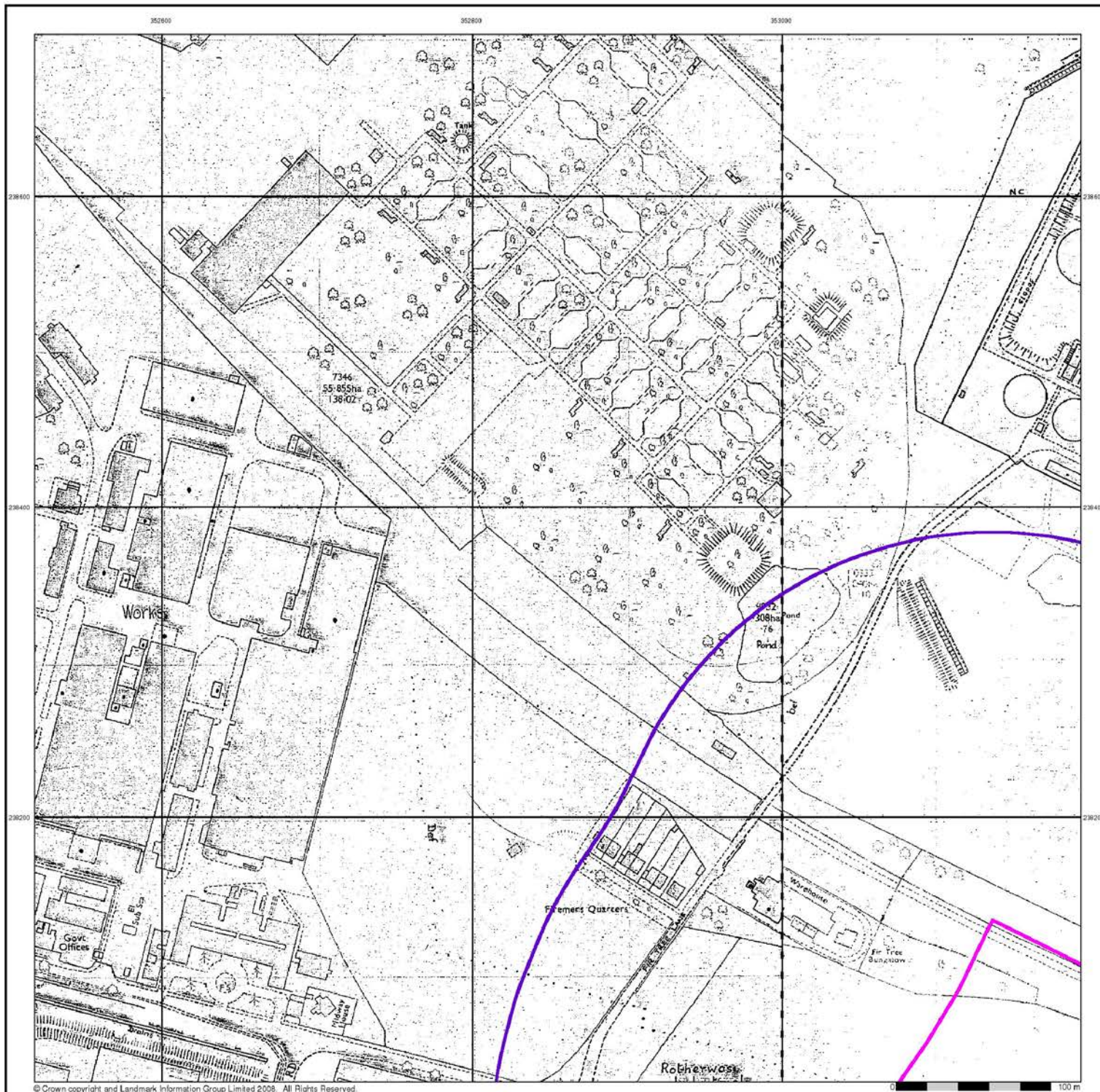


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
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Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



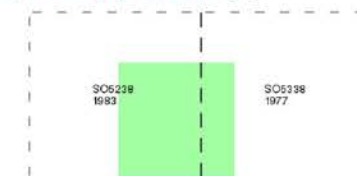
Additional SIMs

Published 1977 - 1983

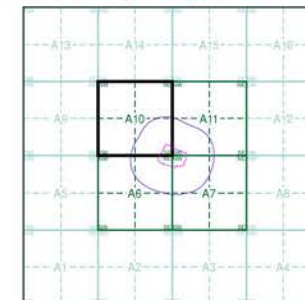
Source map scale - 1:2,500

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 A10

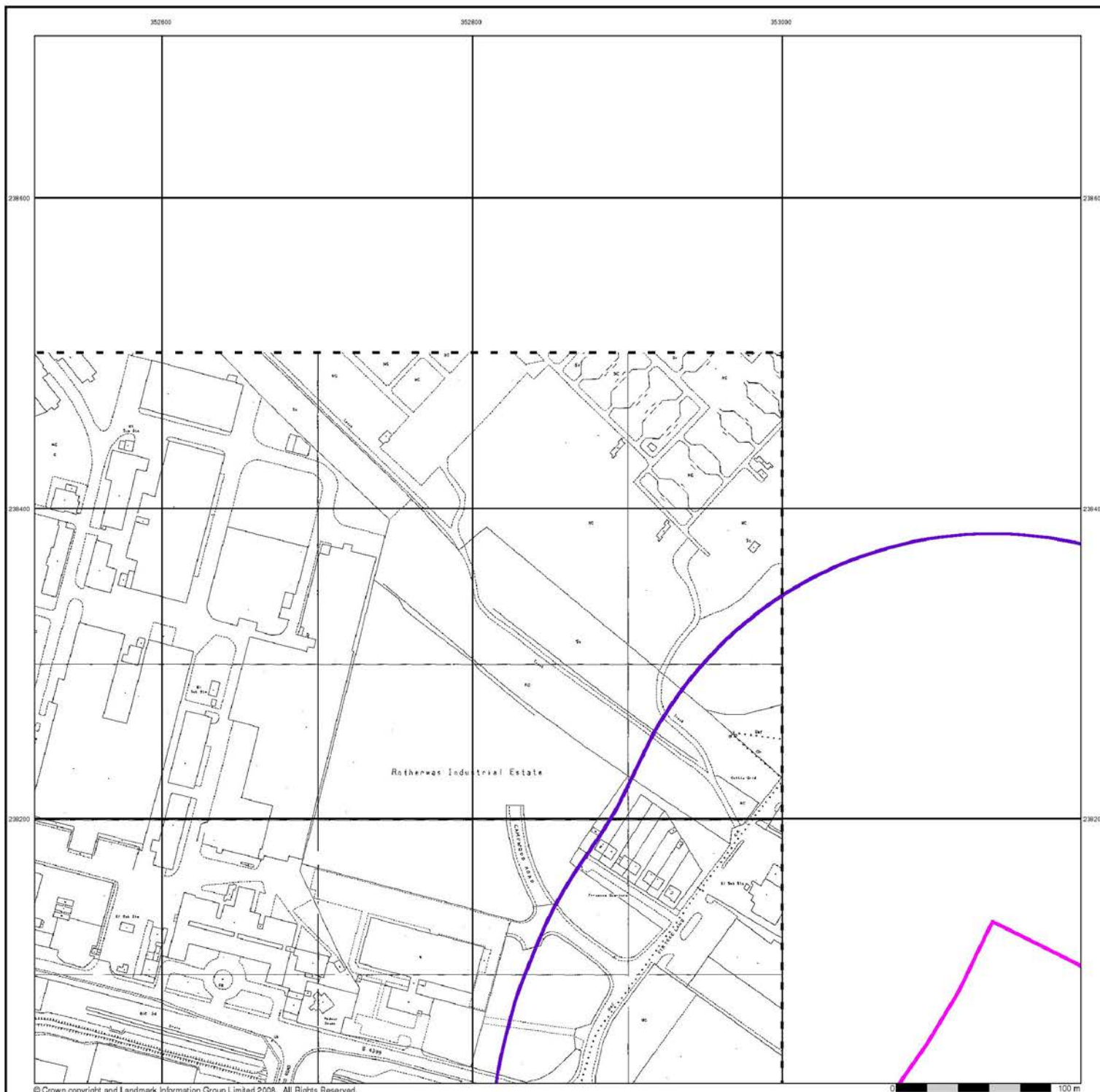


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



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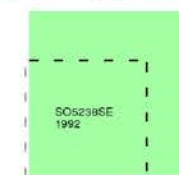
Additional SIMs

Published 1992

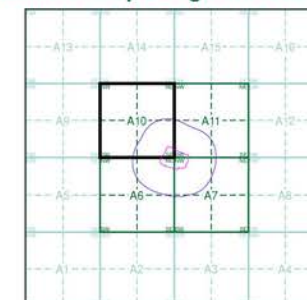
Source map scale - 1:1,250

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 A10



Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
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Site Details

8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



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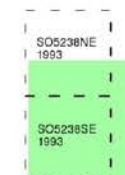
Large-Scale National Grid Data

Published 1993

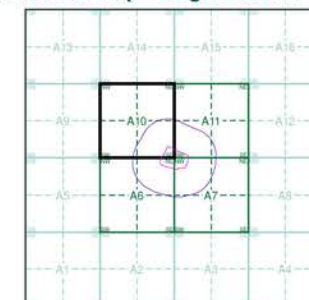
Source map scale - 1:1,250

'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)



Historical Map - Segment A10

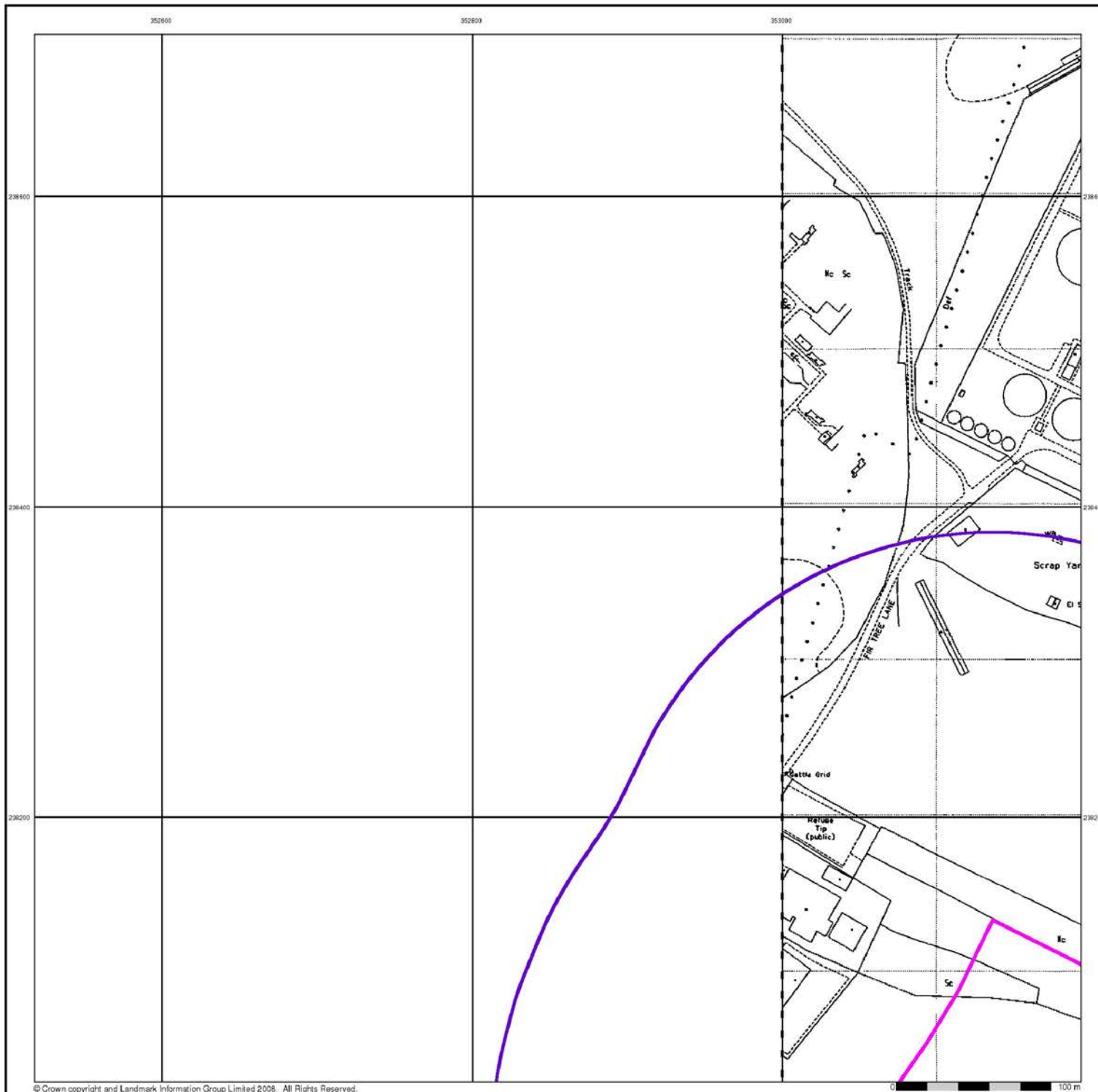


Order Details

Order Number: 24915659_1_1
Customer Ref: 551392 Plots 3-5
National Grid Reference: 353190, 238020
Slice: A
Site Area (Ha): 3.47
Search Buffer (m): 250

Site Details

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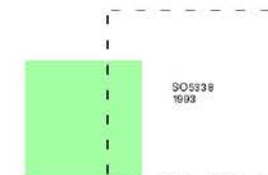
Large-Scale National Grid Data

Published 1993

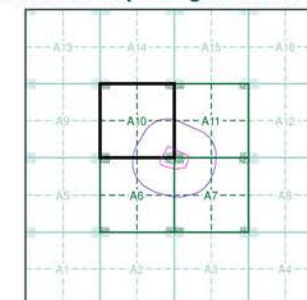
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A10



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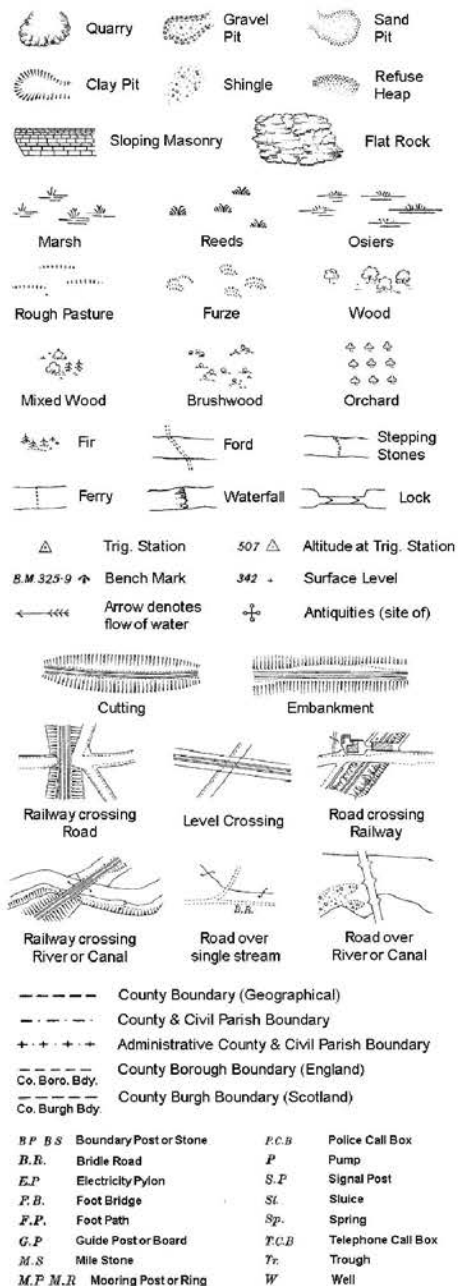
8 Firemans Quarters, Fir Tree Lane, Rotherwas Industrial Estate, HEREFORD, HR2 6LA



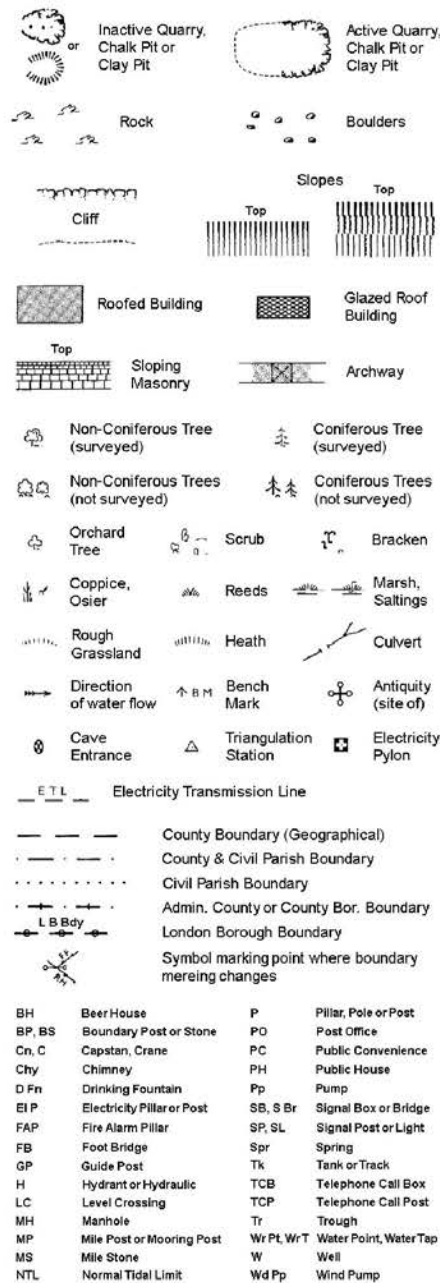
Tel: 0870 850 6670
 Fax: 0870 850 6671
 Web: www.envirocheck.co.uk

Historical Mapping Legends

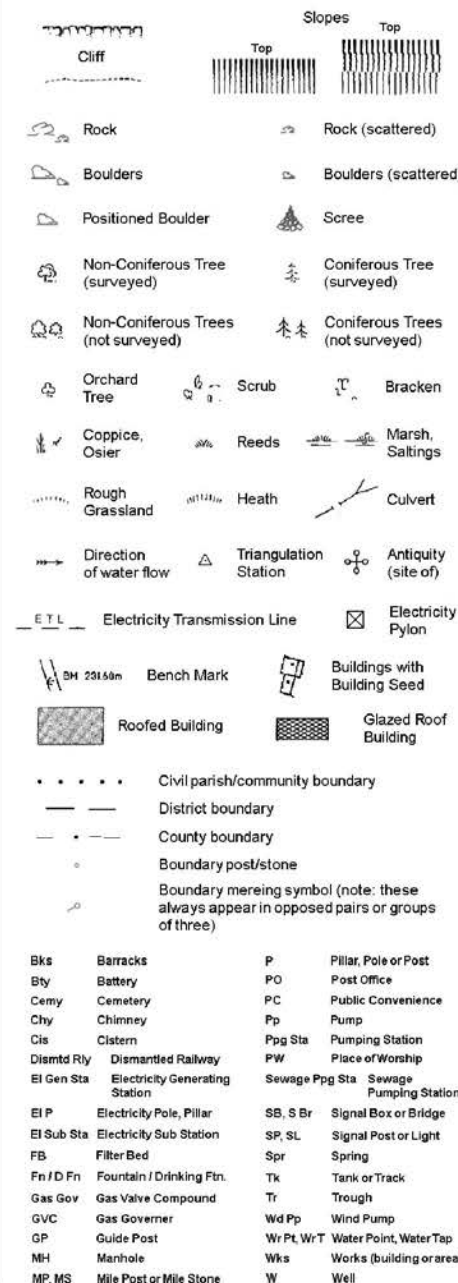
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



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



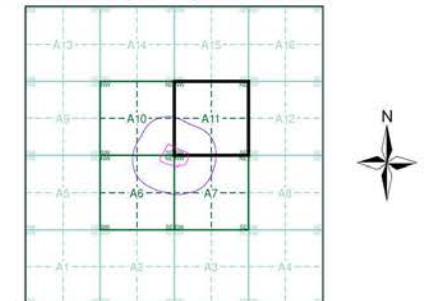
Large-Scale National Grid Data 1:2,500 and 1:1,250



Ordnance Survey mapping included:

Mapping Type	Scale	Date	Pg
Herefordshire	1:2,500	1888	2
Herefordshire	1:2,500	1904	3
Herefordshire	1:2,500	1929	4
Ordnance Survey Plan	1:2,500	1973	5
Additional SIMs	1:2,500	1977	6
Ordnance Survey Plan	1:2,500	1988	7
Large-Scale National Grid Data	1:2,500	1993	8

Historical Map - Segment A11



Order Details

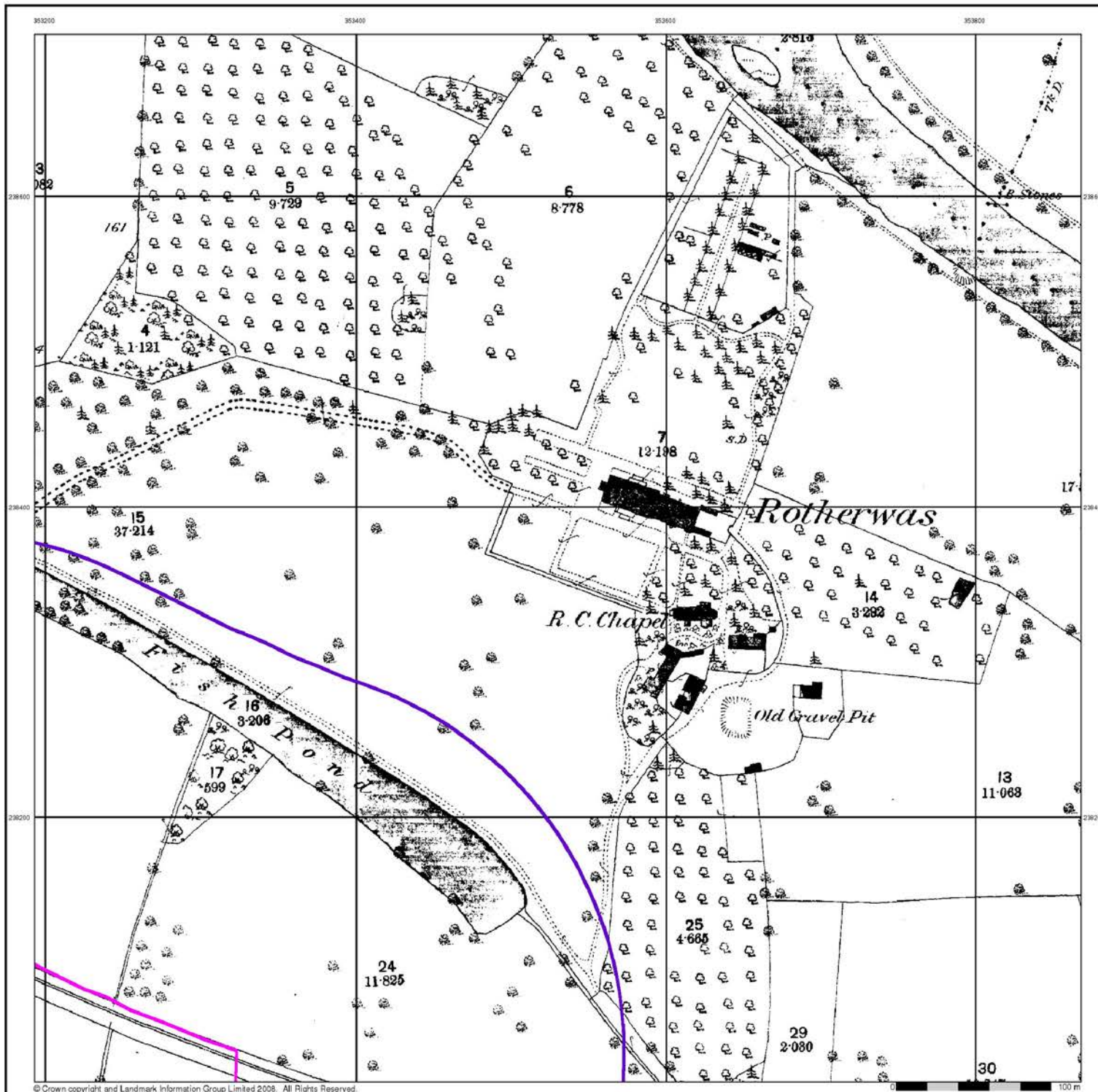
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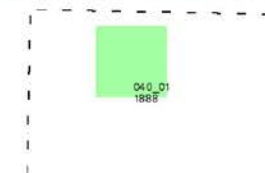
Herefordshire

Published 1888

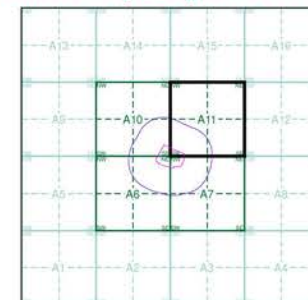
Source map scale - 1:2,500

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 A11

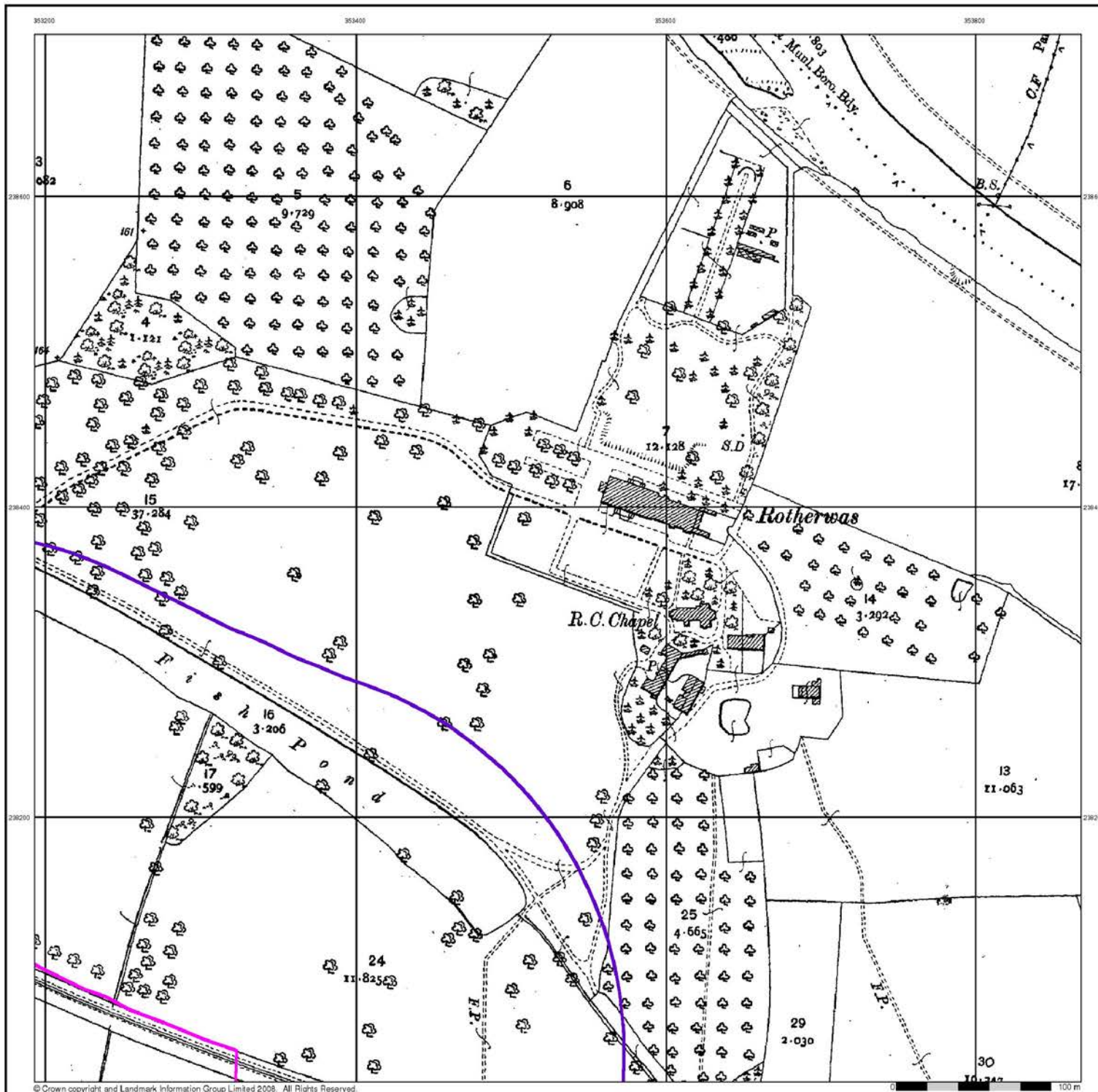


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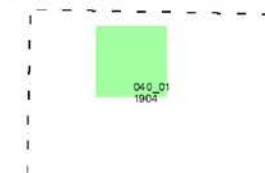
Herefordshire

Published 1904

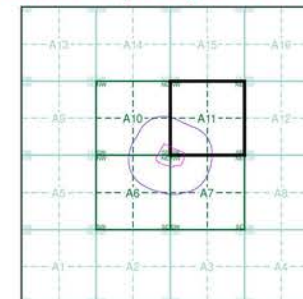
Source map scale - 1:2,500

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.

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Historical Map - Segment A11

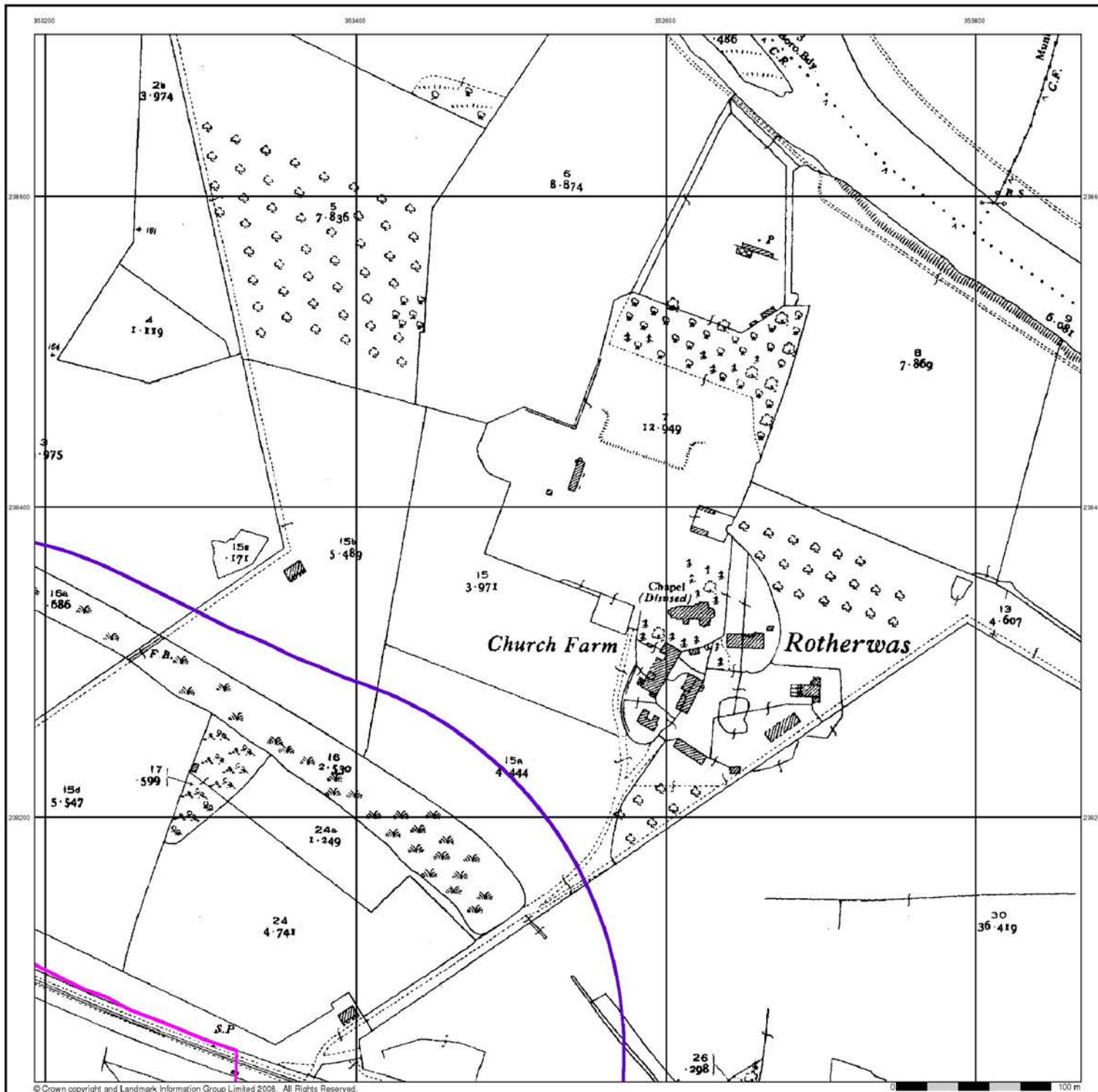


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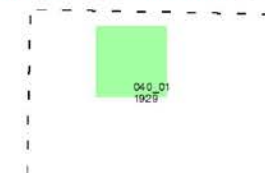
Herefordshire

Published 1929

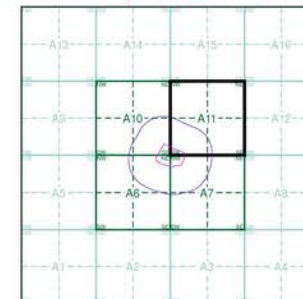
Source map scale - 1:2,500

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Historical Map - Segment A11

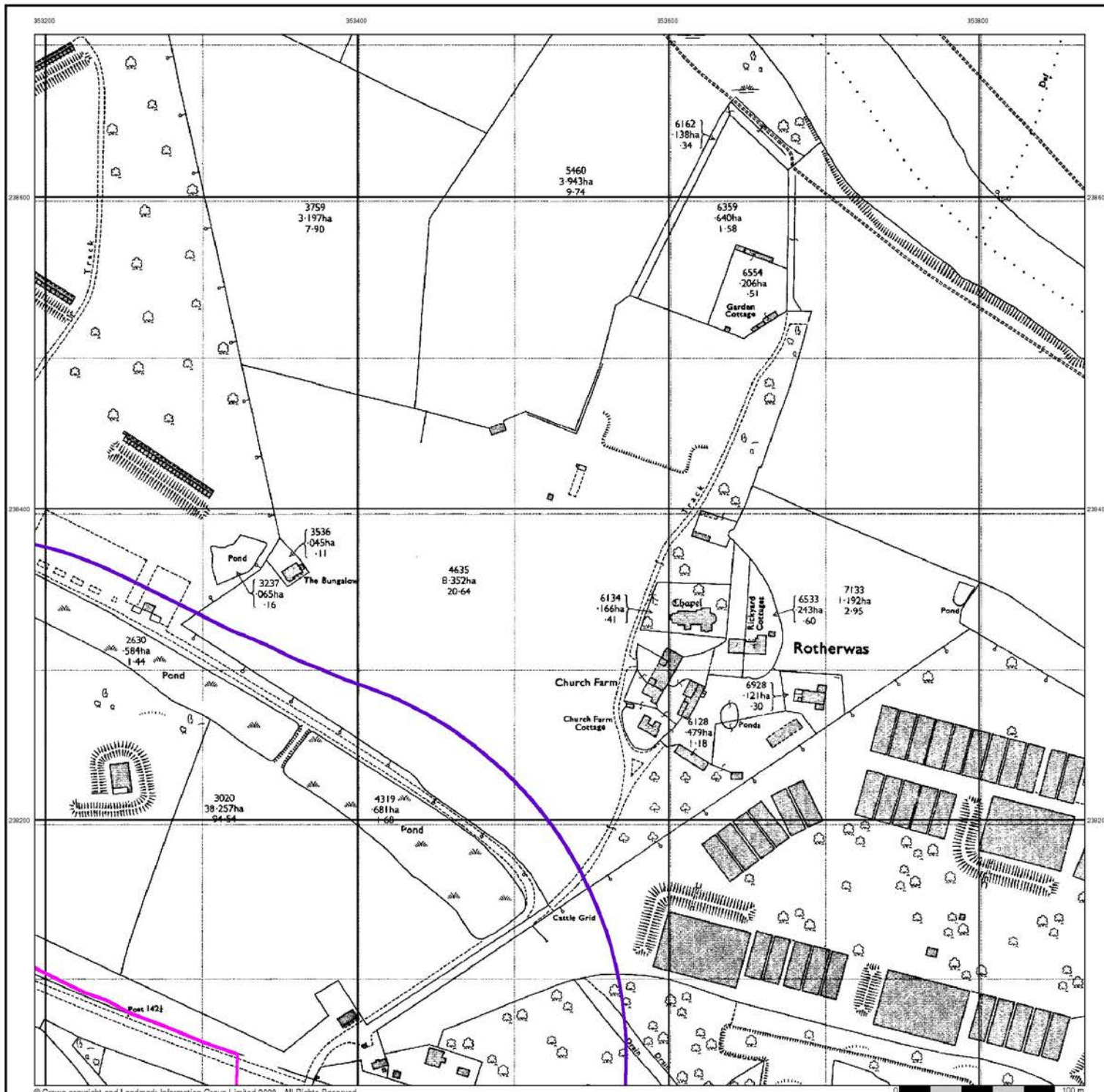


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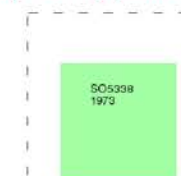
Ordnance Survey Plan

Published 1973

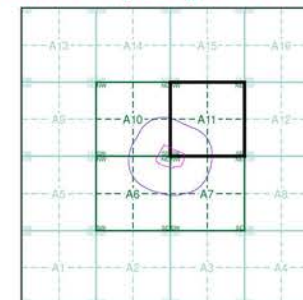
Source map scale - 1:2,500

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 A11

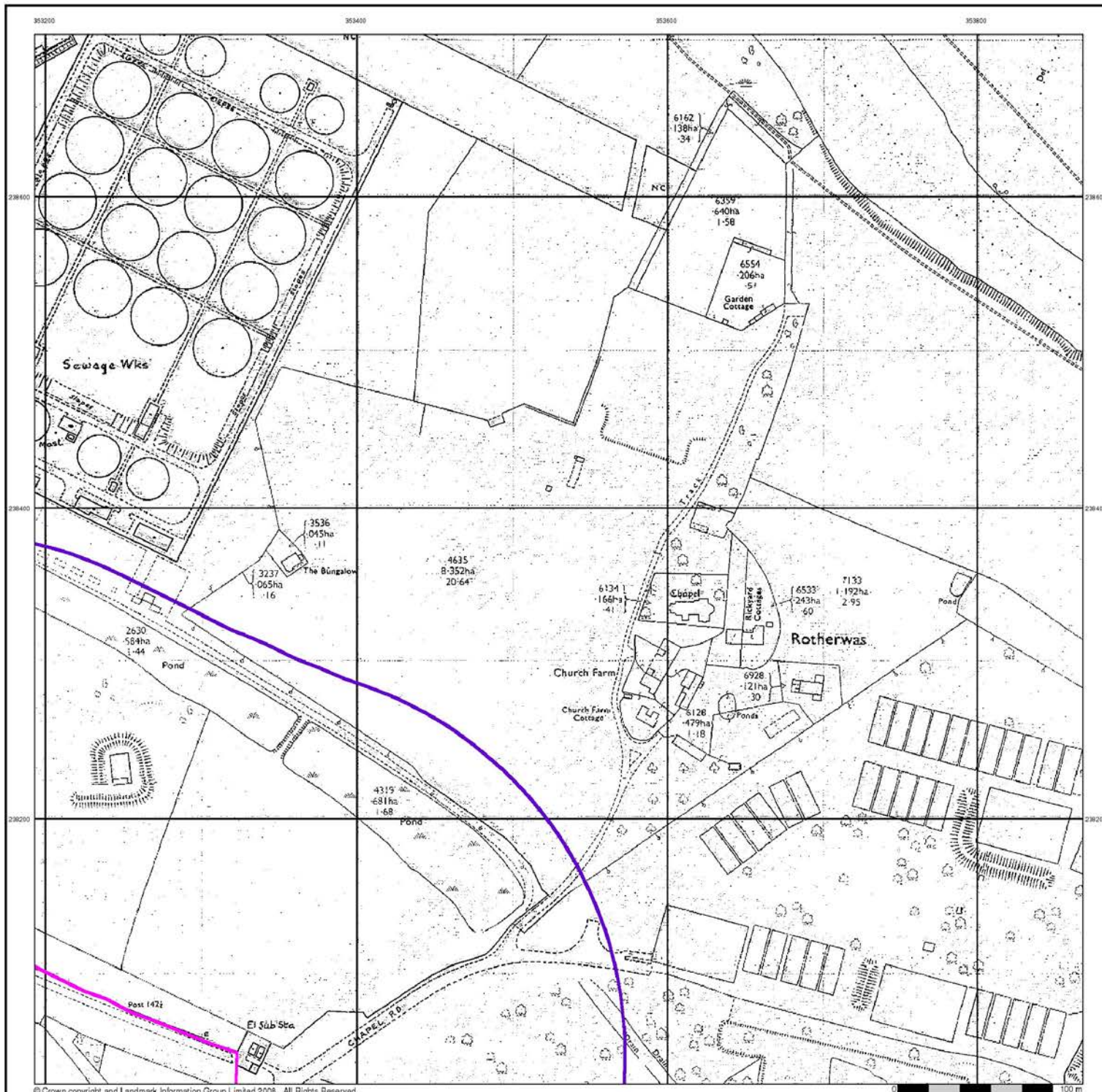


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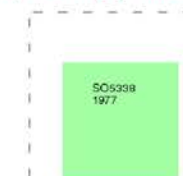
Additional SIMs

Published 1977

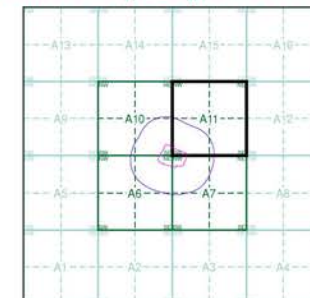
Source map scale - 1:2,500

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 A11

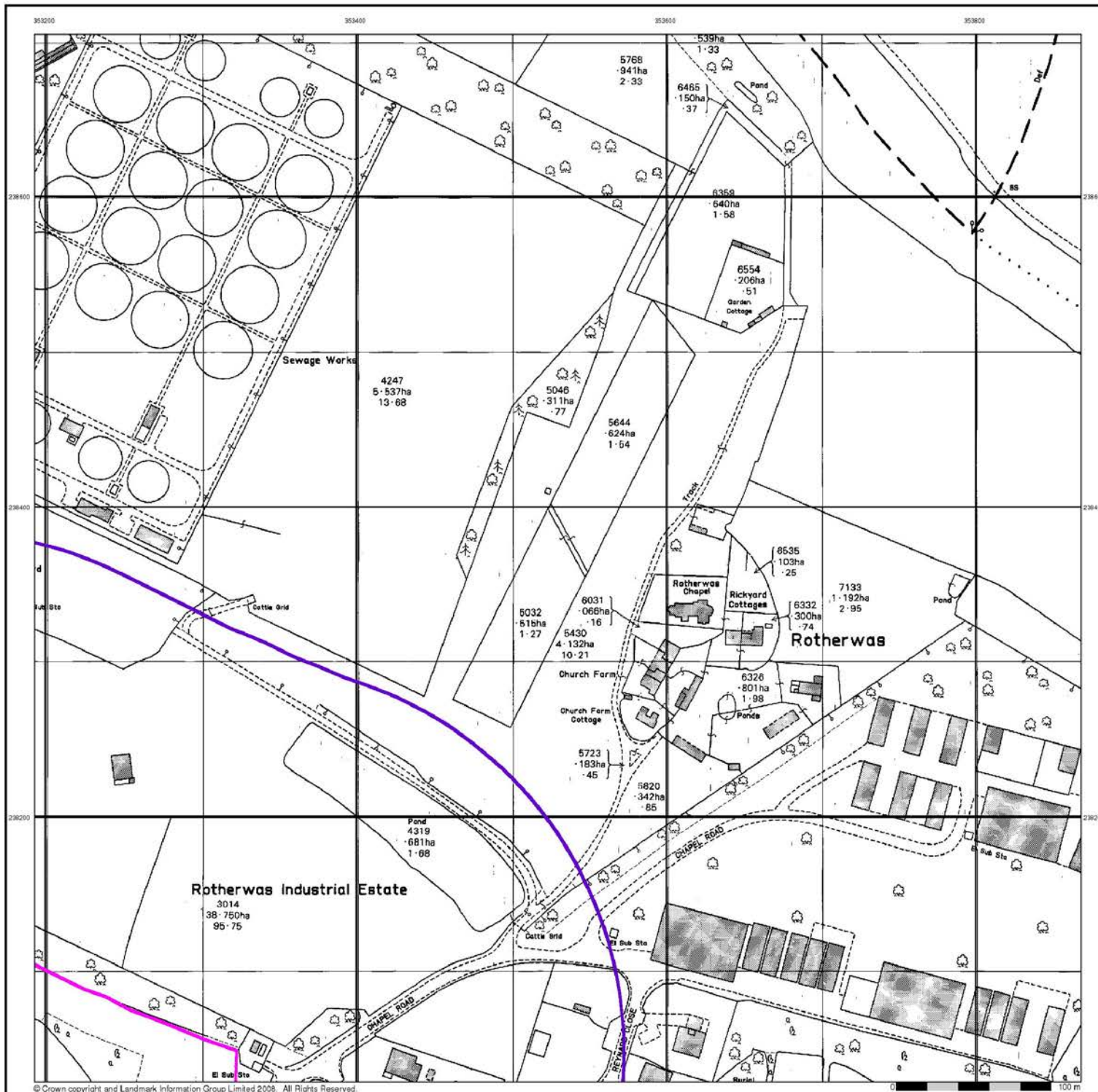


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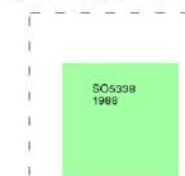
Ordnance Survey Plan

Published 1988

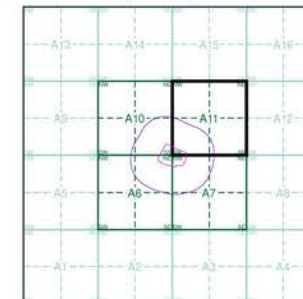
Source map scale - 1:2,500

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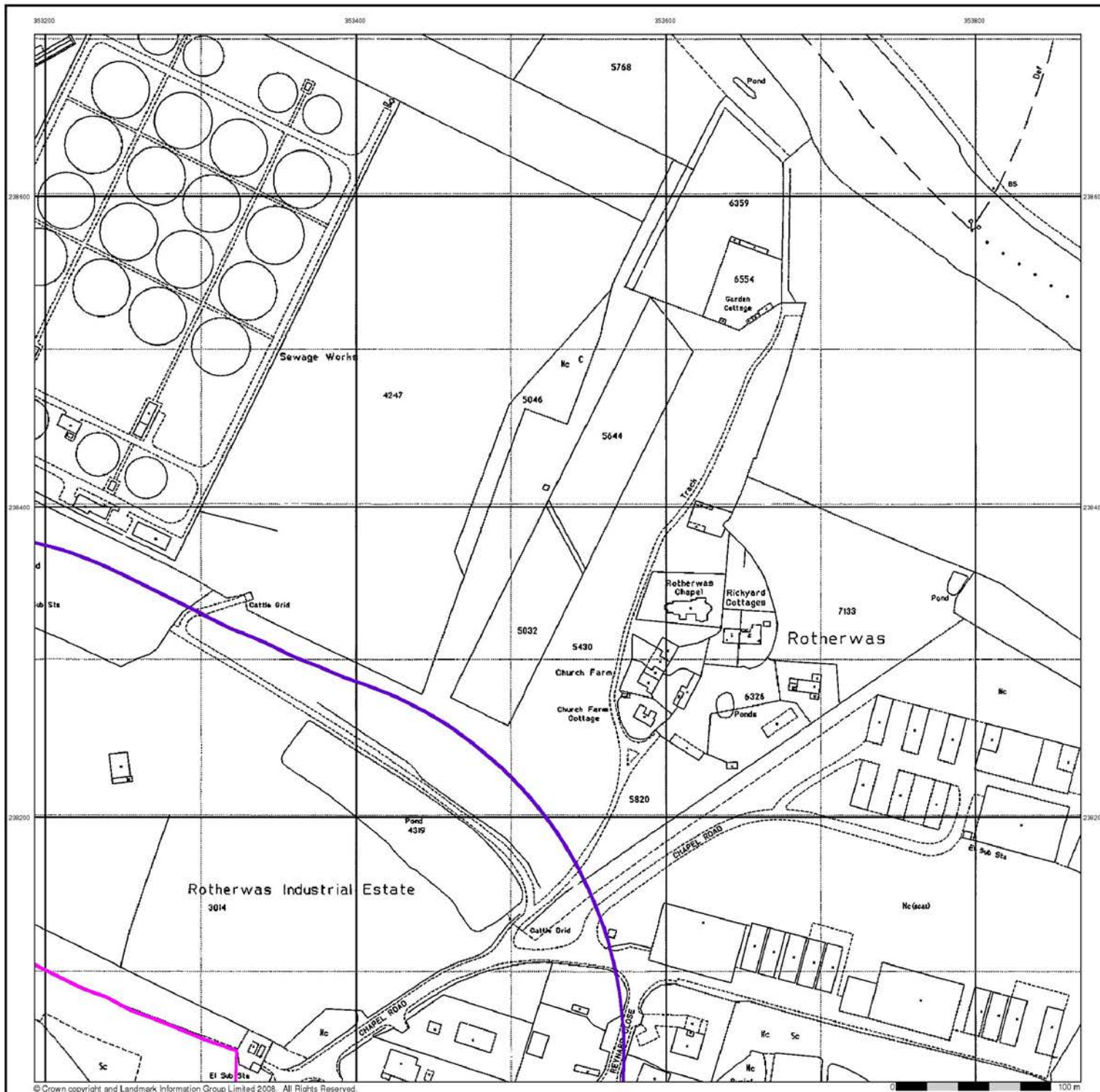


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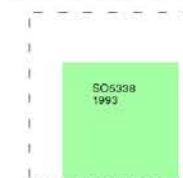
Large-Scale National Grid Data

Published 1993

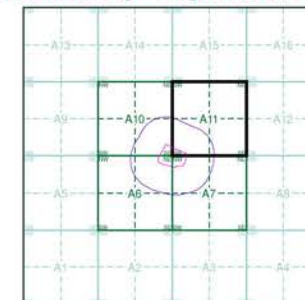
Source map scale - 1:2,500

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