Longfield Solar Farm

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Prepared by	Checked by	Verified by	Approved by
MN	KB	EP	NT
Environmental Consultant	Principal Consultant	Associate	Technical Director

Prepared for:

Longfield Solar Farm Ltd

Prepared by:

AECOM Limited
Midpoint, Alencon Link
Basingstoke
Hampshire RG21 7PP
United Kingdom

T: +44(0)1256 310200
aecom.com

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The site reconnaissance consisted of a general external inspection of the site aimed at identifying any obvious signs of potential sources of ground contamination affecting the site. An environmental compliance audit and/or detailed structural inspection of existing buildings were outside the project brief. Similarly, the site visit excluded detailed consideration of the ecological or archaeological aspects of the site, and if such are believed to be of potential significance then it is recommended that specialist advice is sought.

Any risks identified in this Report are perceived risks, based on the information reviewed during the desk study and therefore partially based on conjecture from available information. The study is limited by the non-intrusive nature of the work and actual risks can only be assessed following a physical investigation of the site.

The opinions expressed in this report and the comments and recommendations given are based on a desk assessment of readily available information and an initial site reconnaissance by an AECOM Engineer. At this stage intrusive investigations have yet to be undertaken at site to establish actual ground and groundwater conditions and to provide data for an assessment of the geo-environmental status of the site.

Reference to historical Ordnance Survey (OS) maps and/or data provides invaluable information regarding the land use history of a site. However, it should be noted that historical evidence will be incomplete for the period pre-dating the first edition and between the release of successive maps and/or data.

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Executive Summary

On the instructions of Longfield Solar Energy Farm Ltd, AECOM Limited has undertaken a Tier 1 Preliminary Risk Assessment (PRA) of the DCO Site, to support the Application.

The Scheme will comprise the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) array electricity generating facility and energy storage facility with a total capacity exceeding 50 megawatts (MW) and export connection to the National Grid. The purpose of this report is to determine whether potentially contaminative land uses have taken place within, or in close proximity to the DCO Site which could have led to the contamination of underlying soils or groundwater.

The DCO Site comprises agricultural fields, with the River Ter and the Boreham Tributary flowing across the northern and south-western extent of the DCO Site, respectively.

The anticipated geology includes quaternary deposits over sedimentary bedrock of the London Clay Formation. The superficial deposits are classified as Secondary Aquifers and the solid geology of the London Clay Formation is classified as Unproductive Strata.

The indicative floodplain map for the area, published by the EA, shows that the risk of surface water flooding at the DCO Site is generally very low (annual chance of flooding of less than 0.1%) with isolated patches of low (chance of flooding of between 0.1% and 1%), medium (chance of flooding of between 1% and 3%) and high risk (chance of flooding of greater than 3.3%) generally associated with the River Ter in the northern part of the DCO Site and its tributaries, as well as isolated patches across the DCO Site.

Based on a review of historical maps, the DCO Site was undeveloped land/agricultural fields since the earliest available historical maps (late 1800's), with part of the DCO Site used as orchard or nursery between the 1920s and 1950s. From the 1920's to 1940's Boreham Rifle Range is shown in the southern part of the DCO Site.

Potential contaminative sources identified locally on-site may be associated with historical pits, of small size, scattered across the DCO Site or bordering the DCO Site, which may have been filled with a variety of (potentially unlicensed) waste materials. Off-site sources may include farmland, with farm buildings and yards where fuel and agricultural materials were/are stored, shown at various locations adjacent to the DCO Site.

The potential risks that have been identified have been assessed by the preliminary risk assessment as being very low to low.

The information collected as part of this PRA suggests that there are no significant constraints with regards to contamination of soil and groundwater that would limit the development of the DCO Site.

The requirement for a detailed Unexploded Ordnance (UXO) Assessment may need be considered prior to the commencement of any intrusive works. The regional

unexploded bomb (UXB) mapping published by Zetica shows that the DCO Site lies within a zone that experiences a low risk of UXB, however the DCO Site is in close proximity (250m) to a former airfield, which is considered a wartime site of interest, and ordnance was reported to have been identified to the south of the DCO Site.

1. Introduction

1.1 Term of Appointment

1.1.1 On the instructions of Longfield Solar Energy Farm Ltd (the Client), AECOM Limited (AECOM) has undertaken a Tier 1 Preliminary Risk Assessment (PRA) of the site known as Longfield Solar Farm (the "Scheme").

1.2 Background and Proposed Development

1.2.1 The Scheme will comprise the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) array electricity generating facility and energy storage facility with a total capacity exceeding 50 megawatts (MW) and export connection to the National Grid. The Scheme will be located on the DCO Site and is the subject of the DCO Application.

1.2.2 A site location map is included in Appendix A as Figure 1. The Figure shows the maximum area of land potentially required for the construction, operation and maintenance of the Scheme and includes land required for permanent and temporary purposes.

1.2.3 The DCO Site comprises an area of 459 ha and is formed by the Solar Farm Site, the Grid Connection Route, and the Bulls Lodge Substation Site.

1.2.4 The Solar Farm Site is a 432 ha area within the DCO Site comprising the:

- Solar PV Array Works Area,
- Longfield Substation,
- Battery Energy Storage System (BESS) Compound,
- Ancillary Infrastructure, and
- Landscape Works Area.

1.2.5 The Scheme will be located within this area, with the exception of the Bulls Lodge Substation Extension (and works associated with these parts of the Scheme) and the Grid Connection Cables which comprise the medium voltage distribution cables that will take the generated electricity to the Bulls Lodge Substation for export to the National Grid.

1.2.6 The Solar PV Works Area will be fenced and protected via security measures such as CCTV and Emergency lighting. Internal access tracks, habitat management and drainage will also be provided within the fenced areas on the Solar Farm Site.

Refer to ***PEI Report Volume 1 Chapter 2: The Scheme*** for further details.

1.3 Report Objectives

1.3.1 The primary objective of this report is to determine whether potentially contaminative uses have taken place within, or in close proximity to the DCO Site which could have led to the contamination of underlying soils or groundwater. This report aims to identify and evaluate potential land quality risks and development constraints associated with the Scheme and to construct an initial conceptual site model that can be used to inform future decision making and design future ground investigation (if needed).

1.3.2 This report is prepared to support a DCO Application under the requirements of Planning Act 2008 (as amended) (Ref 1), the National Planning Policy Framework (2012) (Ref 2), and considers the potential implications of Part 2A of the Environmental Protection Act 1990 (Part 2A) (Ref 3) and the associated Contaminated Land (England) Regulations 2006 (as amended) (Ref 4). Relevant legislation is described in ***Chapter 1: Introduction*** of the PEI Report.

1.3.3 The planning policies from relevant National Policy Statements (NPS) that have been considered in this assessment include:

- NPS for Energy (NPS EN-1) (Ref 5), with particular reference to sections 5.3 Biodiversity and Geological Conservation and 5.15 Water Quality and Resources;
- NPS for Renewable Energy (NPS EN-3) (Ref 6) although this technology specific NPS does not cover solar developments it highlights the importance of considering potential impacts on geological conservation and water resources, and taking into account climate change; and
- NPS for Electricity Networks Infrastructure (NPS EN-5), (Ref 7), with particular reference to impact of electricity networks on soils and geological conservation.

1.3.4 This report has been prepared in general accordance with the technical guidance and procedures described in the UK Government guidance Land Contamination: Risk Management (2019) (Ref 8) and its predecessor, Model Procedures for the Management of Land Contamination, Contaminated Land Report (CLR) 11 (Ref 9); British Standard (BS) 5930:2015+A1:2020 Code of Practice for Ground Investigations (BSI) (Ref 10) and BS 10175:2011 (as amended) Investigation of Potentially Contaminated Sites – Code of Practice (BSI) (Ref 11) to:

- Describe the geology, hydrogeology and shallow mining potential;
- Describe the environmental setting/sensitivity and current/historical land use of the DCO Site and surrounding area;
- Describe the findings of a site reconnaissance visit;
- Summarise the history of the DCO Site;
- Summarise the underlying geology and hydrogeology;
- Summarise the findings of any historical ground investigation work;
- Provide an initial Conceptual Model (CM) for the prevailing ground conditions; and
- Using the source-pathway-receptor model present a preliminary qualitative risk assessment of potential land contamination risks to human (chronic), environmental, or controlled water receptors from contamination sources on or in the vicinity of the DCO Site, via pathways.

1.4 Source of Information

1.4.1 This report has been prepared using a combination of published records (e.g. British Geological Survey (BGS), Environment Agency, Department for

Environment, Food & Rural Affairs (Defra)), a previous ground conditions report (report named "Land at Leylands and Porridge Pot Farms, Terling" (Ref 12)) and other sources such as the Local Authority Environmental Health Contaminated Land Officer. These include statutory records and historical mapping supplied within a Envirocheck® Report (Ref 13), published geological and hydrogeological mapping, historical borehole records, correspondence with the Environmental Health Officer for Braintree District Council and observations made during the site reconnaissance, completed on 10 March 2021. The site reconnaissance included a visual walkover (non-intrusive survey) of the DCO Site to identify the range of activities undertaken on the DCO Site and any obvious potential sources of ground contamination at the time of writing.

1.4.2 Specific information sources are referenced throughout the document and a bibliography is included in Section 13 of this report.

2. Site Setting

2.1 Location

2.1.1 The DCO Site is located adjacent to the north of the A12, between the village of Boreham and Hatfield Peverel; 1.1km to the west of Terling village, in the county of Essex. The DCO Site is within the administrative areas of Chelmsford and Braintree.

2.2 Description and Setting

2.2.1 The DCO Site covers an area of approximately 459 hectares (ha) including cable corridors and is defined by the red line boundary shown in Figure 1 in Appendix A. This shows the expected area of land required for the construction, operation and maintenance, and decommissioning of the Scheme. It includes land required for temporary and permanent uses. It is important to note that this may be subject to change as the design and EIA progress and comments from stakeholders and the public during the statutory consultation are taken into account, however, significant change is not anticipated.

2.2.2 The DCO Site consists of agricultural fields mainly under arable production, with some small parcels of pasture, interspersed with individual trees, hedgerows, linear tree belts, small woodland blocks and farm access tracks. Several small ponds are scattered across the DCO Site. The fields are separated by a few minor roads and tracks. The existing Bulls Lodge Substation is in the south-western corner of the DCO Site.

2.2.3 The River Ter flows west to east through the northern extent of the DCO Site. Boreham Tributary flows in a southern direction adjoining the DCO Site to the west at Russell Green; and then crosses the southern part of the DCO Site, north of the A12. In addition to the Water Framework Directive (WFD) designated River Ter and Boreham Tributary, there are several undesignated tributaries of these waterbodies present within the DCO Site. These are predominantly unnamed agricultural ditches and springs on the basis of mapping, some of which provide connectivity between the DCO Site, the River Ter and Boreham Tributary

2.2.4 The topography of the DCO Site is shaped by the River Ter, which flows west to east through the northern extent of the DCO Site (see ***PEI Report Volume 1: Chapter 9 Drainage, Flood Risk and Surface Water*** and Figure 9-1). The land rises gently from the River Ter valley bottom to the north and south-west. The river in the valley bottom within the DCO Site is between approximately 20m and 30m above ordnance datum (AOD), rising to around 65m AOD at the northern boundary and 50m AOD at the south-western boundary. To the east of the DCO Site, the River Ter changes course to flow south towards Hatfield Peverel. As such the land to the south-east of the DCO Site falls in elevation towards the river, with this corner of the DCO Site adjacent to the A12 being at approximately 40m AOD close to Toppinghoe Hall. Land also falls in elevation to the south-west of the DCO Site along the Boreham Tributary watercourse and towards the Bulls Lodge Substation, which is at 30m AOD. Relevant features immediately surrounding the DCO Site are summarised in Table 2.1.

Table 2-1 Features Surrounding the DCO Site

Direction	Summary
North	The DCO Site is bound by agricultural land. The residential settlement of Fuller Street is located from approximately 260m north of the DCO Site. The village of Terling is approximately 1.1km to the east of the northern extent of the DCO Site. The River Ter flows west to east through the northern extent of the DCO Site.
East	The DCO Site is bound by Terling Hall Road, with agricultural land beyond. Several farmhouses are located on Terling Hall Road. Works (for timber products) are indicated 100m east of the southern part of the DCO Site, in Chantry Lane (source: Envirocheck® Report 60640215_EC_B_SiteSenSeg2500).
South	The A12 and the Anglia Railway are located 120m south of the DCO Site (at the closest point), with the villages of Hatfield Peveral and Boreham to the south of the A12. A scrap yard and Boreham Industrial Estate are indicated 50m and 100m south of the DCO Site respectively (source: Envirocheck® Report 60640215_EC_B_SiteSenSeg2500).
West	Most of the western edge of the DCO Site is bound by Boreham Road and Waltham Road, with agricultural land beyond and a few farms situated along these roads. Several large waterbodies derived from historical quarries are present from 50m west of the DCO Site, between Russell Green and the southern part of the DCO Site, along the course of the Boreham Tributary. Bulls Lodge Quarry (operative) is an area of sand and gravel production operation, extending from approximately 250m west of the DCO Site, and located partially over an old airfield (Boreham airfield). Two historical landfills (Great Holts Farm landfill and Wallace Lane landfill) are present 275m and 315m west of the southern part of the DCO Site, on Wallace's Lane, Boreham. Further details are included in Section 2.6.3.

3. Geological and Environmental Setting

3.1 Introduction

3.1.1 The environmental setting including the topography, geology, hydrogeology and hydrology are the key factors that influence the way in which contaminants in the soil or groundwater can be transported on-site or off-site, and also the way in which contamination can affect applicable receptors including controlled waters and users of the DCO Site and surrounding areas.

3.1.2 The environmental setting of the DCO Site has been assessed by making reference to the information sources detailed in Section 1.4.

3.2 Geology and Soils

Published Geology & Exploratory Hole Records

3.2.1 AECOM has reviewed publicly available information. The published 1:50,000 scale geological map of the area produced by the BGS (Sheet 241, Chelmsford, 1975) (Ref 14) and the BGS Geoindex Onshore online geological mapping (Ref 15) (accessed February 2021) indicates that the DCO Site is underlain by the geological succession summarised in Table 3-1. Extracts of the superficial deposit and bedrock maps are included in the Envirocheck® Report (Appendix B).

Table 3-1 Geological Strata Present from Published Mapping

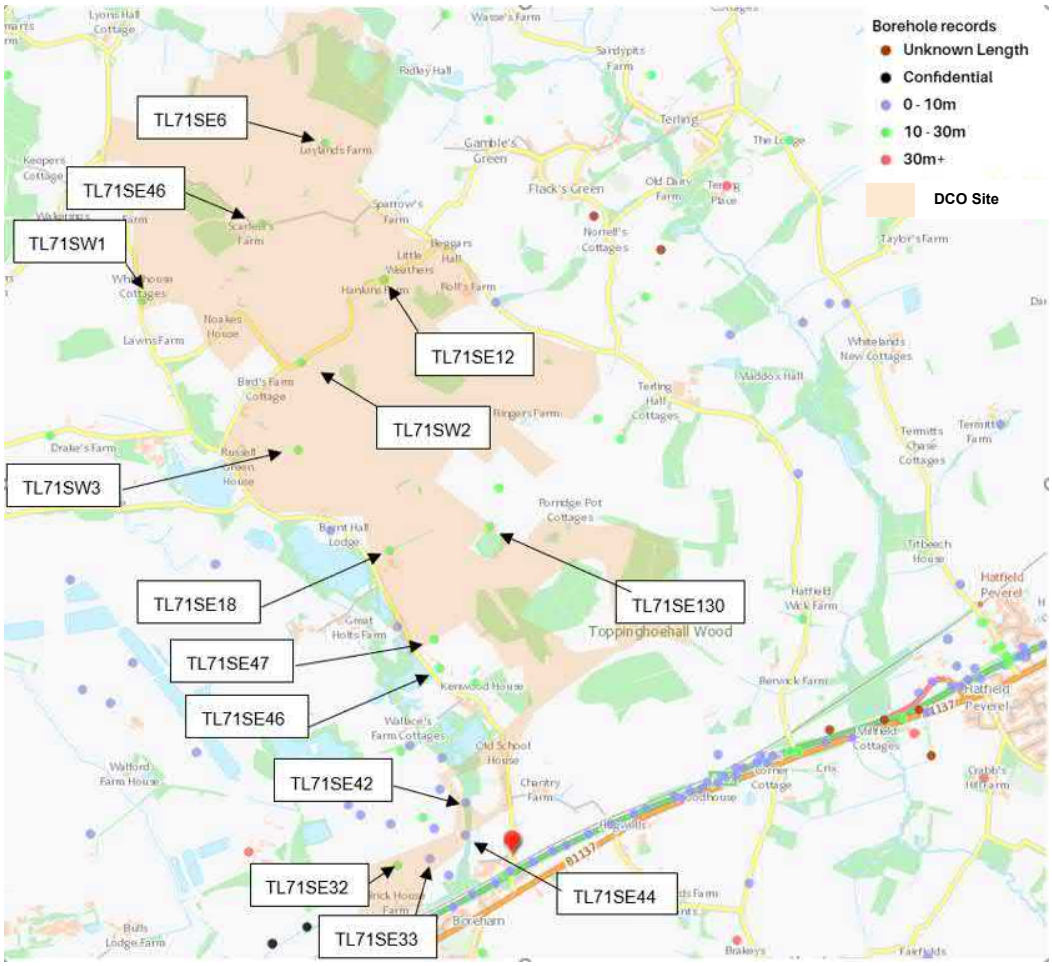
Age	*Group*	*Geological Stratum*	*Stratum*	*Description*	*Anticipated Thickness (m)*
Up to 2 million years ago (Quaternary Period)	N/A	Alluvium	Superficial deposits	Clay, silt, sand and gravel.	Variable
Up to 3 million years ago (Quaternary Period)	N/A	Head	Superficial deposits	Clay, silt, sand and gravel	Variable
Up to 3 million years ago (Quaternary Period)	N/A	Brickearth (Glaciofluvial Deposits)	Superficial deposits	Clay, silt and sand	Variable
Up to 2 million years ago (Quaternary Period)	Albion Glacigenic Group	Boulder Clay (Lowestoft Formation – Glaciofluvial Deposits)	Superficial deposits	Diamicton	Extremely variable. It is thickest in buried valleys where locally up to 60m may be present.
Up to 2 million years ago (Quaternary	N/A	Glacial Sand and Gravel	Superficial deposits	Sand and gravel	Variable

Age	Group	Geological Stratum	Stratum	Description	Anticipated Thickness (m)
Period – mid Pleistocene)		(Glaciofluvial Deposits)			
Approximately 48 to 56 million years ago (Palaeogene Period)	Thames Group	London Clay Formation	Bedrock	Clay, silt and sand	Up to 150m in eastern part of the London Basin (Essex).

Source: Geological Map BGS Sheet 241, Chelmsford, 1975. BGS Geoindex Onshore online geological mapping (accessed February 2021).

3.2.2 The BGS maintains an archive of historical exploratory borehole records throughout the UK. AECOM has searched the database and those which are considered to provide useful information on the ground profile at the DCO Site are highlighted as part of the extract below. Fourteen boreholes have been referenced in producing this report. Copies of these exploratory hole records are included as Appendix C and relevant information from the records is considered as part of the Preliminary Ground Model in Section 8.

Figure 3-1 Screenshot of relevant exploratory hole locations from BGS GeoIndex Viewer (DCO Site Boundary is shown in beige and is approximate)



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Soils and Soils Chemistry

3.2.3 Natural England reports the Agricultural Land Use Classification to be between Grade 2 (very good) and Grade 3 (good to moderate) (Ref 18). Natural England also reports areas of Agricultural Land Use Classification Grade 1 and Grade 3b across the southern extent of the DCO Site, south and west of Toppinghoehall Wood (Source: Magic Maps; Post 1988 Agricultural Land Classification) (Ref 17). However, these maps represent a generalised pattern of land classification grades and are not sufficiently accurate for use in assessment of individual fields. In additions, these maps do not show subdivisions of Grade 3 which are normally mapped by a more detailed survey. For these reasons, an agricultural land survey was completed at the DCO Site, which should be considered more definitive.

3.2.4 An agricultural land quality survey (Ref 18) was completed by Land Research Associates for a wider area (including the DCO Site), between September and December 2020. The area surveyed has been described as "*a mixture of heavy soils with wetness limitations, gravel soils with droughtiness/stoniness limitations and silty soils which have minor wetness and droughtiness constraints. Land quality is mostly Grade 3, with patches of Grade 2".* The survey did not identify Grade 1 within the DCO Site. Refer to the "Soil Resources and Agricultural Quality of Land North-east of Chelmsford" report (Land Research Associates, December 2020) for further details (Ref. 18).

3.2.5 The BGS Soil Chemistry datasets provide indicative information on regional concentrations of five potentially harmful elements (PHEs): arsenic (As), cadmium (Cd), chromium (Cr), nickel (Ni) and lead (Pb) in soil, as presented within the Envirocheck® Report. Elevated concentrations of these PHEs can exist because of natural geological conditions or possible anthropogenic contamination. The following BGS estimated soil chemistry levels are attributed to the DCO Site based on the geometric mean concentrations of available data (presented in Table 3-2).

Table 3-2 Estimated Soil Chemistry

Potentially Harmful Element	*Estimated geometric mean concentration (mg/kg)*
Arsenic	<15; 15 - 25
Cadmium	<1.8
Chromium	40 – 60; 60 - 90
Lead	<100
Nickel	<15; 15 - 30

Source: Envirocheck® Report

Ground Stability Records

3.2.6 Table 3-3 shows the variable risk of ground stability hazards across the DCO Site, taken from the Envirocheck® Report.

Table 3-3 Ground Stability Records

Hazard Type	Hazard Potential
Collapsible Ground Stability	No hazard to moderate
Compressible Ground Stability	No hazard to moderate
Ground Dissolution Stability	No hazard
Landslide Ground Stability	Very low to low
Running Sand Ground Stability	No hazard to low
Shrinking or Swelling Clay Ground Stability	No hazard to moderate

Source: Envirocheck® Report

Mining and Mineral Extraction

Aggregate/Mineral Quarrying and Mining

3.2.7 Several ceased BGS recorded mineral sites are present within 1km of the DCO Site Boundary, with one site, operated by Hanson Aggregates, (over 250m of the DCO Site Boundary- approximately 340m north-west of the southern part of the DCO Site Boundary) (NGR: 574695 210890), listed as "dormant".

3.2.8 Table 3-4 presents the available information on mining and quarrying operations, past and present that have taken place on-site and within 250m of the DCO Site Boundary.

Table 3-4 Quarrying (<250m of the DCO Site Boundary)

National Grid Reference	Distance and Direction	Name	Operator	Status/ Material Quarried
575005 210705	30m north of the south-western part of the DCO Site	Boreham Gravel Pit	Hall Aggregates Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
574955 210860	190m north of the south-western part of the DCO Site	Boreham Gravel Pit	Hall Aggregates Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
575872 211425	110m north of the southern part of the DCO Site	Boreham Gravel Pit	Hall Aggregates Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
575505 211815	170m north of the southern part of the DCO Site	Boreham Gravel Pit	Hall Aggregates Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
575850 211600	220m north of the southern part of the DCO Site	Boreham Gravel Pit	Hall Aggregates Ltd.	Ceased / Glaciofluvial

National Grid Reference	Distance and Direction	Name	Operator	Status/ Material Quarried
				Deposits (sand and gravel)
575710 211475	250m north of the southern part of the DCO Site	Boreham Gravel Pit	Hall Aggregates Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
575356 212134	90m west of the central part of the DCO Site	Brent Hall Farm Gravel Pit	Mid Essex Gravel Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
575297 212221	95m west of the central part of the DCO Site	Brent Hall Farm Gravel Pit	Mid Essex Gravel Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
575175 212405	125m west of the central part of the DCO Site	Brent Hall Farm Gravel Pit	Mid Essex Gravel Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
574610 212615	140m west of the central part of the DCO Site	Brent Hall Farm Gravel Pit	Mid Essex Gravel Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
575230 212202	165m west of the central part of the DCO Site	Brent Hall Farm Gravel Pit	Mid Essex Gravel Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
574950 212500	235m west of the central part of the DCO Site	Brent Hall Farm Gravel Pit	Mid Essex Gravel Ltd.	Ceased / Glaciofluvial Deposits (sand and gravel)
576331 212588	On-site - central part of the DCO Site	Porridge Pot Gravel Pit	N/A	Ceased / London Clay Formation (clay)
575989 213288	Adjacent south of the site, central part of the DCO Site	Ringer's Farm Gravel Pit	N/A	Ceased / Lowestoft Formation (sand and gravel)
576774 212340	20m east of the central part of the DCO Site	Lost Wood Sand Pit	N/A	Ceased / Glaciofluvial Deposits (sand)
576055 213973	30m east of the central part of the DCO Site	Roll's Farm Gravel Pit	N/A	Ceased / Glaciofluvial Deposits (sand and gravel)

Source: Envirocheck® Report

Coal Mining

3.2.9 The Coal Authority's online mining checker (Ref 21) and the Envirocheck® Report identify the DCO Site as not being located on a coal field or an area that has been affected by coal mining. This is supported by the Coal Authority's Interactive Map Viewer, which also states that no evidence of historical or current mining is present.

Radon

3.2.10 The Public Health England (PHE) interactive map for radon (UKRadon.org) (Ref 23) indicates that the DCO Site is within a low probability radon area (less than 1% of homes are estimated to be at or above the Action Level).

Aquifer Classification

3.3.1 The Environment Agency's Groundwater Protection Policy adopts aquifer designations that are consistent with the Water Framework Directive. Definitions of the various aquifer types can be found on the Environment Agency section of the gov.uk website (Ref 22). According to this system, the superficial deposits underlying the DCO Site are classified as Secondary A Aquifers (Glaciofluvial deposits and Alluvium), Secondary B Aquifers (Brickearth deposits) and Secondary Undifferentiated (Head deposits and Lowestoft Formation). The solid geology of the London Clay Formation is classified as Unproductive Strata.

Groundwater Vulnerability

3.3.2 The Environment Agency's Simplified Groundwater Vulnerability Map in Magic (Ref 17) shows that the DCO Site is located in an area where the groundwater vulnerability to pollution is medium-low. All associated terminology/definitions can be found on the Environment Agency section of the gov.uk website (Ref 22).

Source Protection Zones

3.3.3 The DCO Site is not in a Source Protection Zone (SPZ) (Ref 17).

3.3.4 There is an area of Zone III – Total Catchment approximately 1.6km to the north of the DCO Site Boundary. This zone is defined as the total area needed to support the abstraction or discharge from a protected groundwater source. There is a further Zone III – Total Catchment area over 3.6km south-west of the DCO Site Boundary, to the south-west of Hatfield Peverel. As both of these SPZs are over 1km from the DCO Site Boundary, they are outside the study area and are not considered further.

Licensed Groundwater Abstractions

3.3.5 Seven licensed groundwater abstractions have been identified within 1km of the DCO Site. These are listed in Table 3-5.

Table 3-5: Environment Agency Licensed Groundwater Abstractions (On or Within 1km of the DCO Site)

National Grid Reference	Distance (m) and Direction	Operator	Use / Status
575900 214000	Adjacent to the eastern site boundary at the central part of the DCO Site	Lord Rayleigh's Farms Inc	Agriculture (general) / revoked
575500 211700	280m west of the southern part of the DCO Site	Rmc Aggregates (Eastern Counties) Ltd	Mineral products: mineral washing / active
575600 211500	340m west of the southern part of the DCO Site	Rmc Aggregates (Eastern Counties) Ltd	Other industrial/commercial/public services: general use (medium loss) / active
577100 213400	450m east of the central part of the DCO Site	Lord Rayleigh's Farms Inc	Agriculture (general) / revoked
577300 211000	975m east of the central part of the DCO Site	John Wray	Agriculture (general) / revoked
577305 211000	975m east of the central part of the DCO Site	John Wray	Unspecified / revoked
577305 210995	980m east of the central part of the DCO Site	John Wray	Spray irrigation / revoked

Source: Envirocheck® Report

3.3.6 Following consultation with the Local Authority regarding records of private abstractions, there are no groundwater abstractions within 1km of the DCO Site, within the Chelmsford City Council area. Consultation on private abstractions within in Braintree District Council area is ongoing and an update will be provided in the ES.

Risk of Flooding from Groundwater

3.3.7 There is a low risk of groundwater flooding occurring at the DCO Site, both at the surface and of property situated below ground level. Refer to ***PEI Report Volume 1: Chapter 9 Flood Risk, Drainage and Surface Water*** for further details.

Surface Water Courses and Drainage

3.4.1 There are two Water Framework Directive-relevant (WFD) watercourses on-site and within 1km of the DCO Site, the River Ter and the Boreham Tributary.

3.4.2 The River Ter (WFD ID: GB105037033940) crosses the DCO Site at the northern extent (Ref 24). The latest available water quality classification

(2019) shows the River Ter to be classified as having a Moderate Ecological Status and Fail Chemical Status. The Environment Agency indicates that River Ter is not achieving a 'Good' Chemical Status, due to sewage discharge, poor nutrient management, poor livestock management and transport drainage.

3.4.3 The western extent of the DCO Site falls within the catchment of the WFD designated Boreham Tributary catchment (WFD ID: GB105037033910). This watercourse rises from in the quarried area at Boreham, approximately 580m west of the DCO Site, and flows south-west, eventually crossing the A12 at which point it becomes designated. It then flows south-east to meet the River Chelmer adjacent to Church Road (2.2km south of the DCO Site). The Catchment Data Explorer website (Ref 24) indicates that the WFD Boreham Tributary watercourse is at 'Moderate' Ecological Status and 'Fail' for Chemical Status (in 2019) (for the previous four listings in 2013, 2014, 2015 and 2016 it had been classified as 'Good' for Chemical Status).

3.4.4 In addition to the WFD designated River Ter and Boreham Tributary, there are several undesignated tributaries of these waterbodies present within the DCO Site. These are predominantly unnamed agricultural ditches and springs on the basis of mapping, some of which provide connectivity between the DCO Site, the River Ter and Boreham Tributary.

3.4.5 There are also numerous ponds and still waters located across the DCO Site along with a collection of former gravel pits to the west of the DCO Site Boundary associated with quarrying activity.

3.4.6 The entire DCO Site is within a Drinking Water Safeguard Zone for surface water (designation SWSGZ1029) (Ref 17). Drinking Water Safeguard Zones are established around public water supplies where additional pollution control measures are needed. The Drinking Water Safeguard Zone within the DCO Site has been designated as water supplies are at risk from nitrate and pesticides (carbetamide, clopyralid, metaldehyde and propyzamide) (Ref 17).

3.4.7 There is a surface water Drinking Water Protected Area approximately 800m east of the DCO Site (south of the A12), which extends south from Hogwells towards Little Baddow (Ref 17). Drinking Water Protected Areas (surface water) are where raw water is abstracted from rivers and reservoirs and additional measures are required to protect the raw water supply to reduce the need for additional purification treatment.

Licensed Surface Water Abstractions

3.4.8 Fourteen surface water abstractions have been identified within 1km of the DCO Site. These are listed in Table 3-6. All are assumed to be active unless otherwise stated.

Table 3-6 Environment Agency Licensed Surface Abstractions (On or Within 1km of DCO Site)

National Grid Reference	*Distance (m) and Direction*	*Operator*	*Use*
574600 215400	On-site, northern extent of the DCO Site	Lord Rayleigh's Farms Ltd	General agriculture: spray irrigation - direct

National Grid Reference	Distance (m) and Direction	Operator	Use
	(Located by supplier to within 10m)		
574500 215395	On-site, northern extent of the DCO Site (Located by supplier to within 10m)	Lowleys Farms	Spray irrigation
575300 215400	340m east of the northern part of the DCO Site (Located by supplier to within 10m)	Lord Rayleigh's Farms Ltd	Spray irrigation
575600 215200 **(multiple records)**	525m north of the DCO Site (Located by supplier to within 10m)	Lord Rayleigh's Farms Ltd	General Agriculture: Spray Irrigation - Storage
575605 215195	530m north of the DCO Site (Located by supplier to within 10m)	Lord Rayleigh's Farms Ltd	Impounding
575000 210300 **(multiple records)**	110m south of the south-western part of the DCO Site (Located by supplier to within 10m)	Hanson Quarry Products Europe Ltd	General agriculture: spray irrigation - direct
575400 212000 **(multiple records)**	115m west of the central part of the DCO Site (Located by supplier to within 10m)	Lord Rayleigh's Farms Ltd	General agriculture: spray irrigation - direct
574800 210600 **(multiple records)**	155m west of the south-western part of the DCO Site (Located by supplier to within 10m)	Hanson Quarry Products Europe Ltd	General agriculture: spray irrigation - direct
574700 210200 **(multiple records)**	400m south-west of the DCO Site (Located by supplier to within 10m)	Hanson Quarry Products Europe Ltd	General agriculture: spray irrigation - direct

National Grid Reference	Distance (m) and Direction	Operator	Use
574600 210000 (multiple records)	600m south-west of the DCO Site (Located by supplier to within 100m)	Hanson Quarry Products Europe Ltd	General agriculture: spray irrigation - direct
574600 210000 (multiple records)	600m south-west of the DCO Site (Located by supplier to within 100m)	Hanson Quarry Products Europe Ltd	General agriculture: spray irrigation - storage
574600 211300 (multiple records)	720m west of the southern extent of the DCO Site (Located by supplier to within 100m)	Hanson Quarry Products Europe Ltd	General agriculture: spray irrigation - direct
574200 210200 (multiple records)	860m west of the southern extent of the DCO Site (Located by supplier to within 100m)	Hanson Quarry Products Europe Ltd	General agriculture: spray irrigation - direct
574000 210800 (multiple records)	950m west of the southern extent of the DCO Site (Located by supplier to within 100m)	Hanson Quarry Products Europe Ltd	General agriculture: spray irrigation - direct

Source: Envirocheck® Report

3.4.9 Following consultation with the Local Authority regarding records of private abstractions, there are no surface abstractions within 1km of the DCO Site, within the Chelmsford City Council area. Consultation on private abstractions on Braintree District Council is ongoing and an update will be provided in the ES.

Risk of Flooding from Surface Water

3.4.10 The indicative floodplain map (Ref 25) for the area, published by the Environment Agency, shows that the risk of surface water flooding at the DCO Site is generally very low (annual chance of flooding of less than 0.1%) with isolated patches of low (chance of flooding of between 0.1% and 1%), medium (chance of flooding of between 1% and 3%) and high risk (chance of flooding of greater than 3.3%) generally associated with the River Ter and its tributaries, as well as isolated patches across the DCO Site.

4. Historical and Planned Development

4.1 Historical Ordnance Survey Mapping & Aerial Photographs

4.1.1 Historical Ordnance Survey (OS) maps of the DCO Site and the wider environs were provided in the Envirocheck® Report (scales 1:2,500, 1:10,560 and 1:10,000) and from Google Earth Pro and these are reviewed in this section. Copies of these maps are presented as Appendix B.

4.1.2 The historical Ordnance Survey (OS) maps obtained with the Envirocheck® Report date between 1881 and 2020.

4.1.3 Table 4-1 presents a summary of the main features present on and within approximately 250m radius of the DCO Site Boundary. It should be noted that only indicative map scales are provided. Where dates are stated, these refer to the dates of maps on which the features are present, have changed use or are no longer annotated, and do not necessarily refer to the exact dates of existence of a particular feature. Development that may have occurred between map editions is recorded as occurring on the later published map, hence there are some limitations to the accuracy to the date of development unless supplementary evidence is available.

Table 4-1 Summary of Historical Mapping

Decades	Key Features on-site	Key Features off-site
Pre-1900	The DCO Site consists of agricultural fields, with limited woodland and farm access tracks. Several drains and ponds are scattered across the DCO Site. The River Ter flows west to east through the northern extent of the DCO Site. A tributary of the River Ter flows north to south to meet the River Ter, south of Fuller Street. Boreham Tributary crosses the south-western part of the DCO Site, north of the A12. A small sand pit/clay pit (<0.05ha) is in the central part of the DCO Site. (60640215_EC_D2_HistSeg2500, 1877 / 1897, 1:2,500). An old gravel pit (<0.05ha) is in the central part of the DCO Site. (60640215_EC_D5_HistSeg2500, 1877, 1:2,500). A small gravel pit (<0.05ha) is shown in the south-western part of the DCO Site. A building (later indicated as Brick House Farm) is partially on-site, along the southern boundary (60640215_EC_A8_HistSeg2500, 1874, 1:2,500).	Great Eastern Railway is 120m south of the south-western part of the DCO Site (at its closest point) (60640215_EC_A8_HistSeg2500, 1874, 1:2,500). Whitehouse Farm and an unnamed farm are adjacent west of the northern part of the DCO Site. (60640215_EC_C14_HistSeg2500, 1875, 1:2,500). Scarlett's Farm and a small unspecified building are on the northern part of the DCO Site, excluded from the DCO Site boundary. (60640215_EC_C15_HistSeg2500, 1874, 1:2,500). Unspecified buildings (later known as Little Russels and Hankings Farm) are adjacent east of the northern part of the DCO Site. (60640215_EC_C16_HistSeg2500, 1874, 1:2,500). Ringer's Farm and Porridgepot Hall are in the central part of the DCO Site, excluded from the DCO Site boundary. (60640215_EC_D6_HistSeg2500, 1877, 1:2,500). Sparrow's Farm and Rolls' farm are adjacent east of the northern part of the DCO Site. (60640215_EC_D13_HistSeg2500, 1874, 1:2,500). Leyland's Farm is 80m east of the northern part of the DCO Site. (60640215_EC_E4_HistSeg2500, 1874, 1:2,500). Noake's Farm is in the central part of the DCO Site (excluded from the DCO Site boundary) (60640215_EC_C11_HistSeg2500 1875, 1:2,500). A small building is adjacent to the western site boundary, in the central part of the DCO Site. (60640215_EC_C12_HistSeg2500 1874, 1:2,500).
1900-1910	No significant change since previous map.	No significant change since previous map.
1910-	No significant change since previous map.	No significant change since previous map.

Decades	Key Features on-site	Key Features off-site
1920		
1920-1930	Boreham Rifle Range is shown in the southern part of the DCO Site, adjacent west of Boreham Tributary. (60640215_EC_B9_HistSeg2500, 1922, 1:2,500). A nursery and orchard occupy the southern part of the DCO Site. (60640215_EC_B14_HistSeg2500, 1922, 1:2,500). The small pit in the central part of the DCO Site is occupied by a pond. (60640215_EC_D2_HistSeg2500, 1922, 1:2,500). A pit is indicated in the central/eastern part of the DCO Site. (60640215_EC_D10_HistSeg2500, 1922, 1:2,500).	A hydraulic ram connected to the River Ter is indicated 20m west of the northern part of the DCO Site. (60640215_EC_E7_HistSeg2500, 1922, 1:2,500).
1930-1940	No significant change since previous map.	No significant change since previous map.
1940-1950	No significant change since previous map.	Boreham Airfield is shown from 250m west of the central part of the DCO Site (and 500m north of the south-western extent of the DCO Site). (60640215_EC_C_HistSlice10000, 1947, Historical Aerial Photography 1:10,560) and 60640215_EC_A_HistSlice10000, 1947, Historical Aerial Photography 1:10,560).

Decades	Key Features on-site	Key Features off-site
1950-1960	Boreham Rifle Range is no longer shown on the southern part of the DCO Site (60640215_EC_B9_HistSeg2500, 1952, 1:2,500). An orchard/nursery occupies the central part of the DCO Site; and includes two loading ramps. (60640215_EC_C8_HistSeg2500, 1952, 1:2,500). An elongated structure, later identified as a ramp, is shown in the central part of the DCO Site, on Boreham Road, south of Cranham Road (60640215_EC_C8_HistSeg2500, 1953, 1:2,500). The small gravel pit (<0.05ha) is no longer shown in the south-western part of the DCO Site. Brick House Farm has been redeveloped and is entirely off-site, along the southern boundary (60640215_EC_A8_HistSeg2500, 1952, 1:2,500). The pit indicated in the central/eastern part of the DCO Site is now a pond. (60640215_EC_D10_HistSeg2500, 1953, 1:2,500).	Some developments are indicated at Noake's Farm in the central part of the DCO Site (excluded from the DCO Site boundary) (60640215_EC_C11_HistSeg2500 1953, 1:2,500). The small building, adjacent to the western site boundary, in the central part of the DCO Site, is no longer shown on the map. (60640215_EC_C12_HistSeg2500 1953, 1:2,500). A large pond and an elongated pit are indicated adjacent north of the southern part of the DCO Site, to the east of Boreham Tributary. (60640215_EC_B9_HistSeg2500, 1952, 1:2,500). Boreham Airfield is indicated as disused. (60640215_EC_A_HistSlice10000, 1955, 1:10,000 and (60640215_EC_A12_HistSeg2500, 1952, 1:2,500). A large old gravel pit/pond is shown 250m north of the south-western extent of the DCO Site (60640215_EC_A12_HistSeg2500, 1952, 1:2,500). Extensive areas of old gravel pits/ponds are shown from adjacent north of the south-western extent of the DCO Site (60640215_EC_B13_HistSeg2500, 1953, 1:2,500). Large pits and ponds are indicated from 50m west of the central part of the DCO Site. (60640215_EC_C4_HistSeg2500, 1953, 1:2,500). Sewage works including tanks and filter beds are shown 250m west of the central part of the DCO Site, adjacent west of the Boreham tributary. (60640215_EC_C4_HistSeg2500, 1953, 1:2,500). A tank is 60m west of the south-western part of the DCO Site (60640215_EC_A8_HistSeg2500, 1952, 1:2,500).

Decades	Key Features on-site	Key Features off-site
1960-1970	No significant change since previous map.	Several small buildings are shown from 100m north of the south-western extent of the DCO Site (60640215_EC_B13_HistSeg2500, 1966, 1:2,500). The tank (60m west of the south-western part of the DCO Site) is no longer shown on the map (60640215_EC_A8_HistSeg2500, 1966, 1:2,500). Joinery works and car repair works are indicated 100m south of the DCO Site (60640215_EC_B5_HistSeg2500, 1966, 1:2,500). A large pond (deriving from quarrying activity) is shown 120m north of the south-western extent of the DCO Site (60640215_EC_A12_HistSeg2500, 1966, 1:2,500). Brick House Farm (south-western extent of the DCO Site) has been further redeveloped (60640215_EC_A8_HistSeg2500, 1966, 1:2,500).
1970 - 1980	The ramp (central part of the DCO Site, on Boreham Road) is no longer indicated on-site (60640215_EC_C8_HistSeg2500, 1978, 1:2,500). The orchard/nursery is no longer indicated on the southern part of the DCO Site (60640215_EC_B14_HistSeg2500, 1973, 1:2,500).	A depot is indicated 100m south of the DCO Site. (60640215_EC_B5_HistSeg2500, 1973, 1:2,500). Car breaker yard and car body works are indicated 100m south of the DCO Site. (60640215_EC_B5_HistSeg2500, 1972, 1:2,500). Depot, tanks and engineering works are indicated 100m south of the DCO Site. (60640215_EC_B5_HistSeg2500, 1978, 1:2,500). Depots, tanks and builder's yard, likely associated with the quarrying activities, are shown from 200m north of the south-western extent of the DCO Site (60640215_EC_B13_HistSeg2500, 1978, 1:2,500). Leyland's Farm (including a tank) is shown expanded and adjoining the DCO Site to the east of the northern extent. (60640215_EC_E4_HistSeg2500, 1972, 1:2,500).
1980-1990	No significant change since previous map.	A depot and works are indicated 120m south of the DCO Site. (60640215_EC_B5_HistSeg2500, 1986, 1:2,500). A large area of quarrying is indicated adjacent west of the central part of the DCO Site, adjacent north of Cranham Road

Decades	Key Features on-site	Key Features off-site
		(60640215_EC_C7_HistSeg2500, 1999, Historical Aerial Photography).
1990-2000	The loading ramp (central part of the DCO Site) is no longer indicated on-site. (60640215_EC_C8_HistSeg2500, 1993, 1:2,500).	Sewage works shown 250m west of the central part of the DCO Site, are shown as disused. (60640215_EC_C4_HistSeg2500, 1993, 1:2,500). Additional tanks are indicated at the Leyland's Farm (adjacent east of the northern extent of the DCO Site). (60640215_EC_E4_HistSeg2500, 1993, 1:2,500).
2000-2010	No significant change since previous map.	Air ambulance and police station are indicated, within the disused Boreham Airfield, 750m west of the central part of the DCO Site (60640215_EC_C_HistSlice10000, 2006, 1:10,000)
2010-2020	Bulls Lodge Substation is located in the south-western part of the DCO Site (Google Earth Pro, aerial photography 2018).	An electricity distribution station is 250m south-west of the DCO Site (60640215_EC_A_HistSlice10000, 2020, 1:10,000). The aerial photograph dated June 2018 shows sand and gravel production operation at Bulls Lodge Quarry, from 660m west of the DCO Site (Google Earth Pro, aerial photography 2018). The aerial photograph dated March 2020 shows the quarry extending from 250m west of the DCO Site (Google Earth Pro, aerial photography 2020).

Source: Envirocheck® Report and Google Earth Pro, aerial photography.

4.2 Planning Authority Records

4.2.1 A search of planning application records for the DCO Site and within 250m of the DCO Site Boundary using the search facility on the website of Chelmsford City Councils (Ref 26) and Braintree District Council has been undertaken (Ref 27). Table 4-2 summarises the most relevant applications (where potential impact to the ground may have been occurred) found during the search (since 2000) for Chelmsford City Council. No applications relevant to the DCO Site were found on the Braintree District Council website.

Table 4-2: Planning Application History

Decision date	*Application Status*	*Location*	*Reference*	*Description*
20 Sep 2016	Permitted	On-site, south-western extent. Substation West of Brick House Farm Generals Lane Boreham, Chelmsford	16/00911/FUL	Construction of a new 400kV Air-Insulated Substation to supply additional power to the Anglia Railway. New car park, fencing and landscaping. Access track to be upgraded with temporary access to be provided during the construction period.
27 Jan 2017	Permitted	Off-site, adjacent west of the central extent. Barn at Noakes Farm Noakes Lane Great Leighs Chelmsford Essex	16/02147/FUL	Insertion of new bunded oil tank within grounds.

Source: Chelmsford District Council Planning Portal

4.3 Unexploded Ordinance Risk

Wartime land Use

4.3.1 Based on a review of historical maps (60640215_EC_A_HistSlice1000 to 60640215_EC_E_HistSlice1000; 1945-1947, Historical Aerial Photography, 1:10,560), the DCO Site was open land during wartime Britain and was undeveloped, meaning it was possible for bomb strikes to go unobserved. The DCO Site was located 250m east of the Royal Air Force Boreham ("Boreham Airfield), which is considered a wartime site of interest. It is also possible that Boreham rifle range, located on the DCO Site during Wartime Britain was military land. Potential practice trenches have been identified on-site as stated in the Historic Environment Records by Essex County Council (Ref 46).

Post War Development

4.3.2 An analysis of the post war historical map (Refer to Table 4-1) does not show visible changes on the land uses of the DCO Site which could indicate potential aerial bombing. However, due to its rural nature the chances of an unexploded Ordnance (UXO) going unnoticed do exist. An area labelled as

'ruin' is indicated 300m west of the DCO Site (60640215_EC_C11_HistSeg2500 1953, 1:2,500).

4.3.3 On-line source (Ref 28 and Ref 29) reports that an "ordnance" was discovered in a garden in Church Road, Boreham, on 23 October 2013. It is understood that about 20 homes were evacuated before the ordnance was detonated. Police stated that the device was "inert" and would not have caused an explosion.

Unexploded Bomb Mapping

4.3.4 The regional unexploded bomb (UXB) mapping published by Zetica (Ref 33 and Appendix D) show the DCO Site lies within a zone that experiences a low risk of UXB. It is estimated that the bombing density of the area is 15 bombs or less within 1000 acres (i.e. 15 bombs or less within 405 ha).

Historical and Planned Development Key Findings:

The maps show that the DCO Site was undeveloped land/agricultural fields since the earliest available historical maps (late 1800's), with contamination sources limited to potential applications of pesticides and fertilisers for agricultural purposes. Part of the DCO Site was an orchard or nursery between the 1920s and 1950s. Potential contaminative sources identified locally on-site may be associated with infilled pits, scattered across the DCO Site or bordering the DCO Site, which may have been filled with a variety of (potentially unlicensed) waste materials. Farmland, including farm buildings and yards where fuel and agricultural materials were/are stored, are shown at various locations adjacent to the DCO Site. Boreham Rifle Range is shown on the southern part of the DCO Site, adjacent west of Boreham Tributary in the 1920s.

The maps show that significant off-site historic development which might affect the Scheme include historical areas of quarrying to the west of the DCO Site. Boreham Airfield, used as bomber and a troop transport airfield during wartime Britain, was located from 250m west of the DCO Site, and is currently partially occupied by sand and gravel production operation. On-line sources (google.co.uk) state that with the facility released from military control, in 1946, the West Essex Car Club developed a 4.76km perimeter motor racing track. In 1955 this area was used as a test facility for trucks, and later, in the 1990s was used by the Essex Police Air Support Unit. During 1990s, the airfield began to be dismantled for aggregates.

Various historical light industrial and commercial activities (depot, car breaker yard, car body works and tanks) are indicated from 100m south of the DCO Site; and historical sewage works are shown 250m west of the DCO Site. Active railway lines are present 120m south of the south-western part of the DCO Site.

There were no planning records indicating potentially contaminative activities on-site/surroundings.

5. Review of Historical Reports

5.1 Argyll Environmental (2020)

5.1.1 Argyll Environmental was commissioned by CMS Cameron McKenna Nabarro Olswang LLP to prepare a due diligence report for the land at Leylands and Porridge Pot Farms, Terling (Ref 12 and Appendix G). The report consists of a desktop assessment of potential soil and groundwater liabilities.

5.1.2 The area considered in the report includes most of the DCO Site (except for the south-western extent) and additional areas to the north-east. The report assumption is that the area will remain in its current use, i.e. agricultural/farming use.

5.1.3 The report identified potentially contaminative sources on-site (related to a number of infilled ponds) and off-site (including current railways, gravel pits, current farm yards, infilled ponds and former licenced waste management facilities).

5.1.4 The environmental sensitivity of the DCO Site was rated as "High", considering the presence of Secondary aquifers on-site, ecological receptors (i.e. River Ter SSS) and water abstractions in the surroundings.

5.1.5 The report concluded that, given the current use of the DCO Site (i.e. agricultural land), "*no significant contaminant linkage has been identified. Accordingly, soil and groundwater liabilities are unlikely to occur. No further action with respect to contaminated land liability is required*". The conclusion of the due diligence report generally aligns with this assessment.

5.1.6 The report highlighted that "*the site is located within an area which may be susceptible to flooding, particularly during an extreme flooding event. However, in most cases, buildings and contents insurance should be available and affordable".* It was recommended that if development is proposed, a detailed Flood Risk Assessment would be required.

5.1.7 The report also identified potential ground instability hazard in the immediate vicinity of the area.

6. Regulated Activities and Statutory Consultation

6.1 Introduction

6.1.1 The key relevant features that characterise the DCO Site and surrounding area are summarised in this section, along with an indication of the risk to the land quality of the DCO Site.

6.1.2 Information on groundwater and surface water abstractions is detailed in Section 3 and is not repeated here.

6.1.3 Generally, any regulated activities within 250m of the DCO Site could, depending upon their nature, represent potential off-site sources of

contamination. Whilst a 1km search area was generally adopted this section places emphasis on those activities present within 250m. The extent of this study area has been developed using professional judgement on the basis that contamination migration beyond this distance is likely to be minimal. This principle has been applied in assessing similar sites.

6.2 Regulated Processes

6.2.1 Table 6-1 summarises information on regulated processes contained in the Envirocheck® Report (Appendix B). The report collates data from a variety of sources including the Environment Agency and the BGS. All data suppliers are referenced in the report.

6.2.2 There were no instances of the following data identified within the information sources reviewed:

- Contaminated Land Register Entries and Notices;
- Prosecutions Relating to Controlled Waters;
- Enforcement and Prohibition Notices;
- Integrated Pollution Controls;
- Integrated Pollution Prevention and Control;
- Local Authority Integrated Pollution Prevention and Control;
- Local Authority Pollution Prevention and Control Enforcements;
- Registered Radioactive Substances;
- Water Industry Act Referrals and Hazardous Substances (Control of Major Accident Hazards Sites (COMAH);
- Explosive Sites;
- Notification of Installations Handling Hazardous Substances (NIHHS);
- Planning Hazardous Substance Consents; or
- Planning Hazardous Substance Enforcements.

Table 6-1 Summary of Regulatory Information

Subject	*Number Present*				*Details*
	On Site	*0-250m*	*250-500m*	*500-1000m*	
Agency and Hydrological					
Discharge Consents	-	1	2	-	South-western area (60640215_EC_A_Datasheet of the Envirocheck® Report) One revoked discharge consent is listed within 250m of the DCO Site, belonging to a domestic property including a farmhouse, located at Boreham. Revocation date is May 1992. The consent related to discharge of surface water to stream. Distance from the DCO Site was

				approximately 45m south of the south-western part of the DCO Site. Two revoked discharge consents are listed within 500m of the DCO Site, belonging to Rmc Aggregates and St Albans Sand and Gravel, at the same location (Waltham Road, Boreham). Revocation dates are June 2005 and August 1993. The consents related to miscellaneous discharge (deriving from mining activities) to freshwater/stream. Distance from the DCO Site was approximately 475m north of the southern part of the DCO Site.
	-	7	6	-	<u>Southern area (60640215 EC B Datasheet of the Envirocheck® Report)</u> Four active and three revoked discharge consents are listed within 250m of the DCO Site, as follows: The two closest active consents belong to the same property, i.e. Old School House, in Waltham Road. The consents relate to sewage discharge via soakaway to groundwater. Distance from the DCO Site is approximately 15m west of the southern part of the DCO Site. One active consent (65m west of the southern part of the DCO Site), belonging to a domestic property, relates to sewage discharge to stream/river. Three revoked consents (between 90m and 130m south of the DCO Site) were located within the Boreham Industrial Estate and related to trade effluent discharge via soakaway to groundwater or to stream/river (Boreham Brook). Revocation dates are between April 1998 and March 2004. Two active and four revoked discharge consents are listed within 500m of the DCO Site, all located downstream of the DCO Site, between 270m and 340m south. Revocation dates are between September 2010 and March 2019.
	1	5	9	-	<u>Central-western area (60640215 EC C Datasheet of the Envirocheck® Report)</u> One revoked discharge consent is listed in the central part of the DCO Site and related to wastewater treatment works. The consent, issued in May 1970 and revoked in June 2009, was for sewage discharge in stream/river. Four active discharge consents are listed within 250m of the DCO Site, belonging to domestic properties or to waste water treatment works. The consents relate to sewage discharge or discharge of other matter (surface water) to freshwater (stream/river). Distance from the DCO Site is approximately from between 50m and 170m west of the central part of the DCO Site. One revoked discharge consent is listed 130m south of the DCO Site (revocation date was March 1993).

					Four active and five revoked discharge consents are listed within 500m of the DCO Site, belonging to domestic properties, wastewater treatment works and quarrying. The consents relate to sewage discharge or miscellaneous discharge to freshwater (stream/river). Revocation dates for the inactive consents were between June 1991 and November 1997.
	-	1	-	-	Central area (60640215_EC_D_Datasheet of the Envirocheck® Report) One active discharge consent is listed within 250m of the DCO Site, belonging to a domestic property including a farmhouse, located at Waltham Road. The consent relates to sewage discharge into a tributary of the River Chelmer. Distance from the DCO Site is approximately 15m west of the central part of the DCO Site.
	-	4	6	-	Northern area (60640215 EC E Datasheet of the Envirocheck® Report) One active and three revoked discharge consents are listed within 250m of the DCO Site. The consents relate to wastewater treatment works. The consents relate (when supplied) to sewage discharge to freshwater (tributary of the River Ter). Revocation dates for the inactive consents were between February 1992 and March 1995. Four active and two revoked discharge consents are listed within 500m of the DCO Site. The consents relate to wastewater treatment works and domestic properties. The consents relate (when supplied) to sewage discharge to freshwater (tributary of the River Ter). Revocation date for the inactive consents was June 1991.
Local Authority Pollution Prevention and Controls (LAPPC)	-	1	1	-	South-western area (60640215 EC A Datasheet of the Envirocheck® Report) One LAPPC (permitted) is listed within 250m of the DCO Site, belonging to Hanson Aggregates, at Bulls Lodge Quarry, General Lanes, Boreham. The LAPPC relates to mineral drying and roadstone coating processes. Distance from the DCO Site is approximately 150m north-west of the southern extent of the DCO Site. One LAPPC (permitted) is listed within 500m of the DCO Site, belonging to Hanson Quarry Products Europe Ltd, at Bulls Lodge Quarry, General Lanes, Boreham. The LAPPC relates to blending, packing, loading and use of bulk cement. Distance from the DCO Site is approximately 320m north-west of the southern extent of the DCO Site.
	-	3	-	-	Southern area (60640215 EC B Datasheet of the Envirocheck® Report) Three LAPPC (permitted) are listed within 250m of the DCO Site, within the Boreham Industrial

					Estate, in Waltham Road, Chelmsford. The LAPPC relates to blending, packing, loading and use of bulk cement (approximately 150m north of the southern part of the DCO Site and 250m south of the DCO Site) and respraying of road vehicle (approximately 250m south of the DCO Site).
Pollution Incidents to Controlled Waters	-	3	2	-	Southern area (60640215 EC B Datasheet of the Envirocheck® Report) Three pollution incidents to controlled waters are listed within 250m of the DCO Site, all were recorded downstream. The incidents occurred between April 1994 and September 1998 and relate to release of rubble/litter in unspecified watercourse, crude oil into Boreham Brook and miscellaneous into Boreham Brook tributary. Two pollution incidents to controlled waters are listed within 500m of the DCO Site. The incidents occurred in April 1995 and September 1998 and relate to the release of miscellaneous in unspecified watercourse (upstream of the DCO Site) and crude oil into Boreham Brook (downstream of the DCO Site). All the incidents were Category 3 (Minor Incident).
	-	1	-	-	Central area (60640215 EC D Datasheet of the Envirocheck® Report) One pollution incident to controlled waters is listed within 250m of the DCO Site. The incident occurred in February 1995 and related to the release of organic waste (cattle manure - solid) into a tributary of the River Ter, approximately 50m east of the central part of the DCO Site. The incident was Category 2 (Significant Incident).
Prosecutions Relating to Authorised Processes	-	-	1	-	Southern area (60640215_EC_B_Datasheet of the Envirocheck® Report) One Prosecution Relating to Authorised Processes is listed 385m south of the DCO Site for a site located at land adjacent to Cock Inn, Main Road, Boreham. The prosecution relates to operating a waste site without correct licence and the verdict was guilty (hearing date: August 2009).

Source: Envirocheck/Landmark Report

6.3 Licensed Waste Management Facilities

6.3.1 There are no recorded landfill sites located on-site and within 250 of the DCO Site.

6.3.2 The closest historical landfill (Great Holts Farm landfill) is located 275m west of the southern part of the DCO Site, on Wallace's Lane, Boreham. The landfill was licensed to receive non-biodegradable waste since 13 April 1984. The closure date in not available. A further historical landfill (Wallace Lane landfill) is located 315m west of the southern part of the DCO Site, in Boreham. The

landfill was licensed to receive inert and industrial waste between 24 July 1978 and 31 December 1985.

6.3.3 Six licenced waste management facilities, including metal recycling sites, household, commercial and industrial transfer stations, are located between 90m and 250m of the DCO Site Boundary. All of these are located downstream of the DCO Site.

6.3.4 A summary of the licenced waste management facilities within 250m of the DCO Site is given in Table 6-2.

Table 6-2 Licensed Waste Management Facilities (<250km of DCO Site)

National Grid Reference	Distance and Direction	Category	Name	Operator / Licence Holder	Dates	Permitted Wastes
575882 210686	90m south of the DCO Site	Metal recycling site (mixed)	Not supplied	European Metal Recycling Limited	Transferred – issued 03 June 1994. Last modified: 01 December 2010	N/A
575878 210639	130m south of the DCO Site	Metal recycling sites (vehicle dismantler)	Not supplied	Sita M R Ltd	Expired – issued 01 July 1994. Last modified: 01 December 2010	N/A
575904 210636	140m south of the DCO Site	Household, commercial and industrial transfer station	The Recycling Centre	Pharaoh & Co Ltd	Issued 09 February 1994	N/A
575904 210636	140m south of the DCO Site	Household, commercial and industrial transfer station	Not supplied	Sita M R Ltd	Expired – issued 09 February 1994. Last modified: 01 December 2010	N/A
575951 210632	175m south of the DCO Site	Household, commercial and industrial transfer stations	Not supplied	Biffa Waste Services Limited	Modified – issued 20 August 2003. Last modified: 15 December 2017	N/A
576000 210700	180m south of the DCO Site	Household, commercial and industrial	Not supplied	R M C Environmental Services Ltd	Issued 20 August 2003	N/A

National Grid Reference	Distance and Direction	Category	Name	Operator / Licence Holder	Dates	Permitted Wastes
		transfer stations				

Source: Envirocheck® Report

6.4 Industrial Land Use

6.4.1 There are various active and inactive contemporary trade directory entries and underground electrical cables within 250m of the DCO Site Boundary. Table 6-3 summarises those that may have the potential to have caused contamination on-site and within a search radius of 250m of the DCO Site Boundary. Any significant inactive listings thought not to be covered by the historical development review in Section 4 are also noted if present and/or identified. With regards to contemporary trade directory entries, unless otherwise stated, the entry relates to an active listing. No fuel station entries and Gas Pipelines have been identified on-site and within 250m of the DCO Site Boundary.

Table 6-3 Potentially Contaminative Industrial Land Use (on and within 250m of the DCO Site)

Subject	Location	Details
Contemporary Trade Directory Entries	On-site	N/A
	Off-site	Chelmer Truck Bodies Ltd - Commercial Vehicle Bodybuilders and Repairers (inactive): approximately 20m west of the southern part of the DCO Site. Tanks: approximately 20m west of the central part of the DCO Site. Tanks – adjacent east and 60m east of the northern part of the DCO Site, at Leylands FarmRmc . Readymix (East Anglia) - Concrete and Mortar Ready Mixed (inactive): approximately 100m west of the southern part of the DCO Site. Rmc Readymix (East Anglia) - Concrete and Mortar Ready Mixed (inactive): approximately 130m west of the southern part of the DCO Site. The Reclaim Centre - Reclamation Centres: approximately 130m west of the southern part of the DCO Site. S L P Autos - Garage Services: approximately 140m south of the DCO Site. Superbia Automotive Ltd - Car Dealers – Used: approximately 180m west of the southern part of the DCO Site. Anglia Building Suppliers Ltd - Reclamation Centres (inactive): approximately 180m west of the southern part of the DCO Site. Premier Recycling Ltd - Recycling Centres (inactive): approximately 170m south of the DCO Site.

Subject	Location	Details
		Cortina Plastics Ltd - Glass Fibre Manufacturers: approximately 170m south of the DCO Site.
		M D Yates - Livestock Farming: approximately 170m west of the central part of the DCO Site
		European Metal Recycling - Scrap Metal Merchants: approximately 180m south of the DCO Site.
		Biffa Waste Services Ltd - Waste Disposal Services: approximately 190m south of the DCO Site.
		Euro Vehicle Engineers Ltd - Garage Services: approximately 180m south of the DCO Site.
		Dc Motors - Garage Services (inactive): approximately 180m south of the DCO Site.
		Kira Uk Ltd - Commercial Vehicle Bodybuilders & Repairers: approximately 180m south of the DCO Site.
		Recycled Motor Parts Ltd - Car Breakers & Dismantlers (inactive) approximately 200m south of the DCO Site.
		Q M Asphalt - Asphalt & Coated Macadam Laying Contractors (inactive): approximately 200m south of the DCO Site.
		Tokyo Auto Spares - Car Breakers and Dismantlers (inactive): approximately 200m south of the DCO Site.
		Stephenson's - Bus and Coach Operators and Stations: approximately 200m south of the DCO Site.
		Service On Site Ltd - Car Breakdown and Recovery Services: approximately 185m west of the southern part of the DCO Site.
		L Burnham - Commercial Vehicle Bodybuilders and Repairers (inactive): approximately 210m west of the southern part of the DCO Site.
		R M C Aggregates Ltd - Sand, Gravel and Other Aggregates (inactive) approximately 210m west of the southern part of the DCO Site.
		T K Wiggins & Son - Car Body Repairs (inactive): approximately 210m south of the DCO Site.
		Cheshams Transport Services - Road Haulage Services (inactive): approximately 240m west of the central part of the DCO Site.
		Boreham Vehicle Services - Commercial Vehicle Servicing, Repairs, Parts and Accessories: approximately 240m west of the central part of the DCO Site.
		A Reclaimed - Builders' Merchants (inactive): approximately 240m west of the central part of the DCO Site.
		Bulls Lodge Quarry – extractive industries: approximately 250m west of the southern part of the DCO Site.
	On Site	Commissioned and planned cables of alternating current: south-western part of the DCO Site,

Subject	Location	Details
Underground Electrical Cables		connected Bulls Lodge Substation and running along the south-western DCO Site boundary (off-site) in a western direction.
	Off-Site	N/A

Source: Envirocheck® Report

6.5 Sensitive Land Uses

6.5.1 The Envirocheck® Report identifies adjacent sensitive land use based upon factors such as Sites of Special Scientific Interest (SSSI), Environmentally Sensitive Areas, Areas of Outstanding Natural Beauty, World Heritage sites, Nature Reserves, National Parks, Nitrate Sensitivity Areas/Vulnerability Zones, and Special Protection Areas.

6.5.2 The Sensitive Land Use Map (Ref 17) indicates that the DCO Site is entirely within the River Chelmer Nitrate Vulnerable Zone (NVZ) (Surface Water designation 428). NVZs are areas designated as being at risk from agricultural nitrate pollution and includes about 55% of land in England (Ref 17).

6.5.3 There are several areas of ancient woodland adjacent to the DCO Site.

6.5.4 The River Ter Site of Special Scientific Interest (SSSI) is immediately west of the northern extent of the DCO Site, adjacent north of Lyons Hall, and consists of approximately 1.2km of the River Ter upstream of the DCO Site. This SSSI is cited by Natural England (Ref 34) as a geological SSSI, which is "*representative of a lowland stream with a distinctive floor regime. It is flashy, draining a low-lying catchment on glacial till, and has a very low base flow discharge but high flood peaks; daily, monthly and annual flow variability are also high. In addition, the SSSI demonstrates characteristic features of a lowland stream including pool-riffle sequences, bank erosion, bedload transport and dimensional adjustments to flooding frequency*". As the SSSI is upstream of the DCO Site, it is unlikely to be affected by the Scheme and therefore is not considered further in this assessment.

6.5.5 The Essex Field Club website (Ref 30) indicates that the Russell Green Gravel Pit (100m west of the southern extent of the DCO Site; at grid reference TL 746 125) is a Potential Geological Site. It is described as a "*former gravel quarry providing exposures of Kesgrave Sands and Gravels (laid down by a former route of the Thames) dating from the early Ice Age. There is currently a fine vertical cliff of gravel on the west side of the lake, visible from the road. The site is privately owned with no public access*".

6.5.6 The Bulls Lodge Gravel Quarry in Boreham (from 250m west of the DCO Site; at grid reference TL 746 108) is also indicated as a General Geological Site (Ref 30). It is described as "*a working gravel quarry with exposures of Kesgrave (Thames) Sands and Gravels overlain by a thickness of boulder clay (till)*".

6.5.7 Tufa features have been identified 520m north-east of the DCO Site (at grid reference TL7547144), adjacent west of Ridley Hall, on the River Ter, during a site reconnaissance undertaken in December 2020. The UK's Freshwater Reefs paper (Ref 31) states that "*tufa (or travertine) is a form of calcium carbonate that deposits within springs and streams often where the local*

geology is over limestone or chalk. Tufa forms under certain conditions relating to water flow and temperature when water is super saturated with Calcium Carbonate. Restoration and protection of tufa features is important. Many sites are small, remain unprotected and can be at risk from development, land drainage, water abstraction, nutrient enrichment and climate change".

6.5.8 Given the distance from the DCO Site, the above geological sites and the tufa feature are unlikely to be affected by the Scheme, therefore these sites will not be considered any further in this assessment.

Figure 6-1 Tufa feature

6.6 Regulatory Consultation

6.6.1 Following the Braintree District Council response to the Scoping Report (PINS REF NO: EN010118-LSF (Longfield Solar Farm), dated 03 December 2020) indicating that areas of contaminated land were identified on the Council's records on-site, contact was made with the Environmental Health Department at Braintree District Council in February 2021. Braintree District Council's records on potentially contaminated land indicates small areas of potentially infilled land on-site and in the vicinity. These areas of unknown infill are indicated in the Local Authority (LA) map included as Appendix F. The areas of the unknown infill identified in the LA map generally align with the historical maps of the Envirocheck report. A total of five areas are shown on-site in the LA map, generally smaller than 0.05ha, and corresponding to areas identified as historical pits/potentially infilled land in the Envirocheck report.

7. Site

7.1.1 An inspection of the DCO Site was completed by a suitably qualified and experienced engineer on 10 March 2021. The aim of the site visit was to identify the range of activities undertaken on the DCO Site and surrounding area and any obvious potential sources of ground contamination at the time of writing.

7.1.2 A summary of the principal observations made during the site visit are provided below. A photographic record of the site visit is included as Appendix E and a photo location plan is included as Figure 2 in Appendix A.

7.1.3 The DCO Site is mostly grassland and agricultural fields, with mature hedges and trees along the boundaries. The vegetation was noted to be healthy with no obvious areas of distress. No invasive plant species were noted on site during the site reconnaissance visit. Several areas of woodland were observed adjacent to the DCO Site.

7.1.4 There is an extensive network of public rights of way (PRoW) both within the DCO Site and across the surrounding area.

7.1.5 Open drainage ditches were observed along the DCO Site Boundary and across the DCO Site. No evidence of contamination was observed in the standing water within the ditches. A limited amount of fly tipped waste was observed during the site visit, along the roads. No obvious asbestos construction waste materials were observed at the DCO Site.

7.1.6 No infrastructure was identified across the DCO Site, except for overhead powerlines carried by tall pylons. These extend from the west of Boreham, across the DCO Site to the west of Sandy Wood, where the alignment of the pylons diverts to the west and east of Fuller Street.

7.1.7 The topography was observed gently rising from north to south and from east to west. The land to the south-eastern part of the DCO Site falls in elevation toward the River Ter valley. To the west of the DCO Site, the landscape is varied, reflecting past sand and gravel extraction. The Boreham Tributary flows across the southern part of the study area and it is surrounded by several large-scale reservoirs and lakes.

8. Preliminary Ground Model

8.1 Geology and Groundwater

8.1.1 Based on the review of published geological and hydro-geological information, and a selection of historical borehole records, the ground conditions within the DCO Site are considered to comprise the following sequence presented in Table 8-1.

Table 8-1 Preliminary Ground Model

Stratum	*Typical Description*	*Anticipated Thickness (m)*	*Groundwater*
Alluvium	Alluvium is a general term for clay, silt, sand and gravel. It is the unconsolidated detrital material deposited by a river, stream or other body of running water as a sorted or semi-sorted sediment in the bed of the stream or on its floodplain. Normally soft to firm consolidated, compressible silty clay, but can contain layers of silt, sand, peat and basal gravel (BGS Lexicon, 2021).	Variable – No borehole on-site indicating the thickness of the Alluvium	N/A
Head	Head is poorly sorted and poorly stratified, angular rock debris and/or clayey hillwash and soil creep, mantling a hillslope (BGS Lexicon, 2021).	0.60m to 4.50m	No record of groundwater
Brickearth (Glaciofluvial Deposits)	Varies from silt to clay, usually yellow-brown (BGS Lexicon, 2021).	Variable – No borehole on-site indicating the thickness of the Brickearth	N/A
Boulder Clay (Lowestoft Formation – Glaciofluvial Deposits)	The Lowestoft Formation forms an extensive sheet of chalky till, together with outwash sands and gravels, silts and clays. The till is characterised by its chalk and flint content (BGS Lexicon, 2021).	1.14m to 17.00m	No record of groundwater
Glacial Sand and Gravel (Glaciofluvial Deposits)	Sand and gravel.	0.90m to 11.00m	Water struck at 7.60m bgl (TL71SE32); 14.00m bgl (TL71SE18); 17.50m bgl (TL71SE128)
London Clay Formation	The London Clay mainly comprises bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, clayey silt and sometimes silt, with some layers of sandy clay. It commonly contains thin courses of carbonate concretions ('cementstone	Up to 150m in eastern part of the London Basin (Essex).	No record of groundwater

Stratum	Typical Description	Anticipated Thickness (m)	Groundwater
	nodules') and disseminated pyrite. It also includes a few thin beds of shells and fine sand partings or pockets of sand, which commonly increase towards the base and towards the top of the formation. At the base, and at some other levels, thin beds of black rounded flint gravel occur in places. Glauconite is present in some of the sands and in some clay beds, and white mica occurs at some levels (BGS Lexicon, 2021).		

8.2 Preliminary gas risk Assessment (Based on RB17)

8.2.1 The historical review identified the presence of few small (<0.05ha) historical pits across the DCO Site. These could be a source of ground-gas, if infilled with unlicensed material, depending on their organic matter content.

8.2.2 Extensive areas of quarrying, mostly occupied by ponds/lakes, are located adjacent west of the DCO Site. Two small areas of potentially infilled land (related to historical pits) have been identified along the eastern DCO Site boundary, south of Roll's Farm and west of Lost Wood (Envirocheck® Report: 60640215_EC_D_SiteSenSlice10000). No historical landfills are located on-site or within 250m of the DCO Site, with the closest (Great Holts Farm landfill and Wallace Lane landfill) located over 270m west of the southern part of the DCO Site and licensed to receive non-biodegradable waste or inert and industrial waste. Closure date for Wallace Lane landfill was December 1985. Closure date for Great Holts Farm landfill was not available.

8.2.3 Given the small size of the historical pits on-site, the presence of degrading contaminant hotspots that have the potential to generate hazardous gases (i.e. methane and carbon dioxide) is considered unlikely. Ground gas may be associated with off-site sources such as former quarries (adjacent west of the DCO Site), however, these are mostly occupied by water and there is no evidence of potentially infilled land at these locations.

8.2.4 Due to the limited ground gases sources identified, no investigation will be undertaken for ground gas. This is in consideration of current use of the DCO Site as agricultural land and the proposed land use as a solar farm, with no permanently occupied buildings/structures. Further details are included in Table 10-5.

9. Initial Conceptual Model (iCM)

9.1 Introduction

9.1.1 This section is aimed at identifying possible risks, if any, arising from substances used or deposited on-site, or from other sources of land contamination. Both past and current potentially contaminative land uses have been considered. It is based on the proposed site development which will comprise the Scheme as identified in Section 1.2 and the masterplan (Figure 3). The aim of the iCM is to inform future decision making and the design of any future ground investigation (if needed).

9.2 Assessment Framework

9.2.1 The DCO Site, in terms of potential land contamination, will be regulated by the Local Planning Authorities (Chelmsford City Council, Braintree District Council and Essex County Council) (Ref 1), taking account of the NPPF 2019 (Ref 2), with the Environment Agency, Natural England and Historic England acting as potential statutory consultees.

9.2.2 Environmental liabilities can arise through provisions contained within statutory legislation including Part 2A of the Environmental Protection Act 1990 (Ref 3), the Environmental Damage (Prevention and Remediation) (England) Regulations 2015 (Ref 38), the Water Resources Act 1991 (Ref 39), the Environmental Permitting (England and Wales) Regulations 2016 and the Water Act 2003 (Ref 41).

9.2.3 Current industry good practice recommends that the determination of health hazards due to contaminated land is based on the principle of risk assessment, as outlined in the Statutory Guidance to Part 2A (2012) and Land Contamination: Risk Management (LCRM) (Ref 8).

9.2.4 The "*suitable for use*" approach is adopted for the assessment of contaminated land where remedial measures are undertaken where unacceptable risks to human health or the environment are realised taking into account the use (or proposed use) of the land in question and the environmental setting. The proposed end-use for the DCO Site is the installation of PV Panels and on-site energy storage facilities, together with grid connection infrastructure.

9.2.5 The risk assessment process for environmental contaminants is based on a source-pathway-receptor analysis. These terms can be defined as follows:

- **Source:** hazardous substance that has the potential to cause adverse impacts;
- **Pathway:** route whereby a hazardous substance may come into contact with the receptor: examples include ingestion of contaminated soil and leaching of contaminants from soil into watercourses; and
- **Receptor:** target that may be affected by contamination: examples include human occupants/users of site, water resources (surface waters or groundwater), or structures.

9.2.6 For a risk to be present, there must be a relevant/viable contaminant linkage; i.e. a mechanism whereby a source impacts on a sensitive receptor via a pathway.

9.2.7 The following sections details the iCM which has been developed for the DCO Site with a view to assessing the potential risks/liabilities and constraints associated with the DCO Site in its current condition prior to any proposed development. Risks associated with the proposed development have also been assessed based on a future land use scenario as a solar farm, including any potential sources of contamination, potential receptors and potential contaminant pathways identified during this desk based assessment.

9.3 Sources of Potential Contamination

On-Site

9.3.1 Potential sources of contamination have been identified locally on-site and consist of historical pits, scattered across the DCO Site, which may have been filled with a variety of (potentially unlicensed) waste materials. Potential contaminants include metals, semi-metals, asbestos, organic and inorganic compounds. In addition, infilled pits could give rise to landfill gases such as methane or carbon dioxide and leachate, although given the size and the age of the pits, this is unlikely.

9.3.2 Boreham Rifle Range which was located on the southern part of the DCO Site, adjacent west of Boreham Tributary, in the 1920's, may represent a potential source of contamination, for metals (lead).

9.3.3 The DCO Site is occupied by agricultural land comprising arable fields. It is considered that although chemicals such as pesticides, herbicides and insecticides may have been used on-site and in its proximity, these chemicals typically have a low residency time in soils and they degrade rapidly in compliance with the requirements for crops and grazing prior to products being used for human consumption. Therefore, agricultural uses are not considered a potential significant source of contamination.

Off-Site

9.3.4 The following potential sources of off-site contamination have been identified as requiring consideration (refer to Table 4-1, Table 6-2 and Table 6-3 for more detail) :

- Farm buildings and yards where fuel and agricultural materials were/are stored, at various locations adjacent to the DCO Site;
- Historical areas of quarrying (adjacent west of the DCO Site)
- Commercial vehicle bodybuilders and repairers (inactive) (20m west of the southern part of the DCO Site);
- Metal recycling site (90m and 130m south of the DCO Site);
- Active railway line (120m south of the south-western part of the DCO Site);
- Industrial estate (120m south of the DCO Site);
- Metal recycling sites (vehicle dismantler) (130m south of the DCO Site);

- Household, commercial and industrial transfer station (140m and 180m south of the DCO Site)
- Garage services (140m south of the DCO Site);
- Recycling centres (inactive) (170m south of the DCO Site);
- Glass fibre manufacturers (170m south of the DCO Site);
- Scrap metal merchants (180m south of the DCO Site);
- Waste disposal services (190m south of the DCO Site);
- Garage services (180m south of the DCO Site);
- Vehicle bodybuilders and repairers (180m south of the DCO Site); and
- Former Boreham Airfield (250m west of the DCO Site).

9.3.5 Migration of contaminants from off-site sources is dependent on the presence, extent and flow direction of shallow groundwater beneath the DCO Site as well as permeable pathways for the migration of ground gases and organic vapours. Shallow groundwater is expected to flow in a southern direction towards the River Chelmer (except for the northern edge of the DCO Site, where groundwater flow direction would be towards the River Ter). Taking this into consideration, the most pertinent off-site sources are considered to be the farm buildings, adjacent to the DCO Site at various locations (along Terling Hall Road, Waltham Road and Boreham Road).

9.3.6 The extensive areas of historical quarrying (adjacent west of the DCO Site) (refer to Table 3-4) include several water features, surrounded by woodland. Given the proximity to the DCO Site, these areas may represent potential sources of ground contamination, mostly related to migration of ground-gas to the DCO Site from potentially unlicensed infilling. Bull Lodge Quarry, located from 250m west of the DCO Site, on the former Boreham Airfield is not considered to be a pertinent off-site source, given the distance from the DCO Site. Former vehicle bodybuilder and repairer (20m west of the southern part of the DCO Site) is small scale, hence is not considered to be a pertinent off-site source.

Summary of Potential Sources

9.3.7 Table 9-1 indicates the potential contaminants that may be associated with the current land use.

Table 9-1 Potential Sources of Contamination

Source Reference	*Location*	*Potential Sources*	*Associated Contaminants of Potential Concern (CoPC)*
S1	On Site	Made Ground (infilled pits) Boreham Rifle Range	Heavy metals and inorganics including sulphate, pH, total petroleum hydrocarbon (TPH), polyaromatic hydrocarbons (PAH), semi-volatile organic compound (SVOCs), Volatile Organic Compound (VOCs), asbestos and asbestos containing materials (ACMs). Gases such as methane or carbon dioxide and leachate

Source Reference	Location	Potential Sources	Associated Contaminants of Potential Concern (CoPC)
S2	Off Site	Farm buildings and yards where fuel and agricultural materials were/are stored.	Heavy metals and inorganics including sulphate, pH, TPH, SVOCs, VOCs, asbestos, ACMs, pesticides and fertilisers. .
S3	Off Site	Historical areas of quarrying. Made Ground (infilled pits)	Heavy metals and inorganics including sulphate, pH, TPH, PAH, SVOCs, VOCs, asbestos and ACMs. Gases such as methane or carbon dioxide and leachate.

9.4 Potential Receptors

On-Site Receptors

9.4.1 The principal human receptors on-site are considered to be: current site users, including farmers, site visitors and general public on the DCO Site using the PRoW; construction and maintenance workers; and future site users, including maintenance workers and general public on the DCO Site using the PRoW, as these will remain following development.

9.4.2 The controlled water receptors include groundwater (Secondary Aquifers), and surface water (River Ter, Boreham Tributary, tributaries of these watercourses, drains and ponds).

9.4.3 Ecological receptors include flora (plants, trees, landscaping, crops) and fauna (livestock and small grazing animals).

9.4.4 Property receptors include PV Mounting Structure and cables.

Off-Site Receptors

9.4.5 The principal human receptors off-site are considered to be neighbours in residential/commercial properties adjacent to the DCO Site and the general public in the areas adjacent the DCO Site.

9.4.6 Property receptors include farm buildings and potable water supply pipes and other services, associated with these buildings.

Summary of Potential Receptors

9.4.7 Potential receptors associated with the potential development are shown on Table 9-2:

Table 9-2 Potential Receptors

Receptor Reference	Receptor	Description
R1	Human Health: Acute[1]	Construction and maintenance workers

[1] Refer to a considerable exposure to contaminated land in a short period of time (for example during construction activities).

Receptor Reference	Receptor	Description
R2	Human Health: Acute	Current Site Users: farmers/site visitors/general public on the DCO Site using the PRoW
R3	Human Health	Future Site Users: site visitors/trespassers/general public on the DCO Site using the PRoW
R4	Human Health: Acute	Adjacent site users during earthworks, (neighbours in residential/commercial properties adjacent to the Site and general public in the areas adjacent the DCO Site)
R5	Water Environment: Superficial Aquifers	Secondary A Aquifers (Glaciofluvial deposits and Alluvium) Secondary B Aquifer (Brickearth deposits) Secondary Undifferentiated (Head deposits and Lowestoft Formation)
R6	Water Environment: Surface waters	River Ter Boreham Tributary Tributaries of the River Ter and Boreham Tributary, drains and ponds
R7	Ecosystems: Flora	Plants, trees, landscaping, crops
R8	Ecosystems: Fauna	Livestock/small grazing animals
R9	Buildings & Infrastructure: Concrete	Future proposed infrastructures (PV Mounting Structure and cables)
R10	Buildings & Infrastructure: Structures	Proposed structures
R11	Buildings & Infrastructure: Services	Potable water supply pipes and other services (off-site).

9.6 Potential Pathways

On-Site Pathways

9.5.1 The human health exposure pathways that are considered viable based on UK guidance (Environment Agency, Contaminated Land Exposure Model "CLEA UK") (Ref 32) are listed below:

- Direct contact, dermal absorption or ingestion of soil;
- Ingestion of fruit and vegetables and/or waters;
- Inhalation of soil particulates derived from soils; and
- Migration of hazardous gases/vapours via permeable strata into confined spaces (asphyxiation/ explosion).

9.5.2 The evaluation of exposure pathways for controlled waters receptors requires an understanding of geological and hydrogeological pathways beneath the

DCO Site. The controlled waters pathways considered viable with respect to the DCO Site are as follows:

- Spillage/loss/run off from surface direct to receiving water; and
- Leaching of chemicals and vertical migration via permeable unsaturated strata to shallow groundwater.

9.5.3 The ecosystem pathways (flora and fauna) considered viable with respect to the DCO Site are as follows:

- Fauna: direct contact, dermal absorption or ingestion of soil / ingestion of fruit and vegetables and/ or waters/inhalation of soil particulates derived from soils; and
- Flora: direct contact with contaminated soils/uptake via root system.

9.5.4 The buildings and infrastructure pathways considered viable with respect to the DCO Site are as follows:

- Direct contact of buried concrete (proposed PV Mounting Structure and cables) with contaminated soils (i.e. hydrocarbons) and aggressive ground conditions (pH and sulphate); and
- Migration of hazardous gases/vapours via permeable strata into enclosed spaces and service/utility trenches.

Summary of Potential Pathways

9.5.5 Potential pathways associated with the proposed development are shown in Table 9-3.

Table 9-3 Potential Pathways

Pathway Reference	*Receptor*	*Description*
P1	Human Health / Fauna: People (Human Health) and animals (Fauna)	Direct Pathway: direct contact, dermal absorption or ingestion of soil.
P2	Human Health / Fauna: People (Human Health) and animals (Fauna)	Indirect Pathway: ingestion of fruit and vegetables and/or waters.
P3	Human Health / Fauna: People (Human Health) and animals (Fauna)	Indirect Pathway: inhalation of soil particulates or vapour derived from soils.
P4	Human Health: People (Human Health)	Indirect Pathway: migration of hazardous gases/vapours via permeable strata into confined spaces (asphyxiation/explosion)
P5	Water Environment: Surface water	Direct Pathway: spillage/loss/run off from surface direct to receiving water
P6	Water Environment: Groundwater	Indirect Pathway: leaching of chemicals and vertical migration via permeable unsaturated strata to shallow groundwater

Pathway Reference	Receptor	Description
P7	Ecosystems: Flora	Direct Pathway: direct contact with contaminated soils
P8	Ecosystems: Flora	Indirect Pathway: uptake via root system
P9	Buildings and Infrastructure: Concrete	Direct Pathway: direct contact of buried concrete with contaminated soils (i.e. hydrocarbons) and aggressive ground conditions (pH and sulphate).
P10	Buildings and Infrastructure: Supply pipes	Direct Pathway: direct contact of services and supply pipes with contaminated soils.
P11	Buildings & Infrastructure: Structures	Indirect Pathway: Migration of hazardous gases/vapours via permeable strata into enclosed spaces and service/utility trenches

9.6 *Environmental Design and Management*

9.6.1 A number of environmental mitigation measures are expected to be employed as standard to minimise impacts to both human health and controlled waters from the Scheme. The mitigation measures are anticipated to be implemented in order to avoid, prevent, reduce or offset the following potential impacts:

- Human exposure through direct contact / inhalation / dermal uptake of contaminants;
- Creation of preferential pathways and mobilisation of contamination;
- Contamination of natural soils, driving of contamination into an aquifer during piling, contamination of groundwater with concrete, paste or grout;
- Pollution and degradation of water quality of any underlying aquifer;
- Infiltration and / or run off into the local drainage / sewerage network – pollution of drainage and sewerage network and any adjacent surface water features;
- Run-off and infiltration of contaminants from material stockpiles;
- Contamination of drainage and sewerage network and / or groundwater; and
- Spread of nuisance dusts and soils to the wider environment and local roads.

9.6.2 A Framework Construction Environmental Management Plan (CEMP) has been developed as part of the Preliminary Environmental Information ('PEI') Report for the Scheme (see ***PEI Report Volume 2: Appendix 2A)***. A detailed CEMP will be produced for the Scheme following the appointment of the contractor in accordance with a Requirement of the DCO, prior to commencing construction.

9.6.3 Table 9-4 lists the standard or tertiary mitigation measures included in the framework CEMP (see ***PEI Report Volume 2: Appendix 2A***). These mitigation measures, defined by IEMA (Ref 47) are considered to be standard

measures that form part of the general environmental management of the Scheme.

9.6.4 The assessment of potential effects set out in the following sections takes into account that these measures will be implemented.

Table 9-4 Construction Standard or Tertiary Environmental Mitigation Measures

Potential Impact	*Mitigation / Enhancement Measure*
Potential for risks to human health associated with waste generation, land contamination, airborne contamination and groundwater contamination. The discovery of ground contamination during groundworks. Levelling of the DCO Site including the possible introduction of new fill materials.	Ground investigation works (if any) will be undertaken prior to commencing construction. Results would be reviewed by the appointed contractor, including any additional investigation or mitigation measures beyond the impact avoidance measures stated here. Best practice avoidance and mitigation measures proposed include: • All workers would be required to wear Personal Protective Equipment (PPE) such as dust masks as applicable; • Containment measures would be implemented, including drip trays, bunding or double-skinned tanks of fuels and oils; all chemicals would be stored in accordance with their COSHH guidelines, whilst spill kits would be provided in areas of fuel/oil storage; • All plant and machinery would be kept away from surface water bodies wherever possible, checked regularly and, where necessary, the use of drip trays would be employed. Refuelling and delivery areas would be located away from surface water drains; • An emergency spillage action plan will be produced, which staff would have read and understood, and provisions made to contain any leak/spill; • Should any potentially contaminated ground, including isolated 'hotspots' of contamination and/or potential deposits of asbestos containing materials (ACM), be encountered, the contractor would be required to investigate the areas and assess the need for containment or disposal of the material. The contractor would also be required to assess whether any additional health and safety measures are required; • To further minimise the risks of contaminants being transferred and contaminating other soils or water, construction workers would be briefed as to the possibility of the presence of such materials; • In the event that contamination is identified, appropriate remediation measures would be taken to protect construction workers, future site users, water resources, structures and services; • The contractor would be required to place arisings and temporary stockpiles away from watercourses and drainage systems, whilst surface water would be directed away from stockpiles to prevent erosion; • The risk to surface water and groundwater from run-off from any contaminated stockpiles during construction works would be reduced by implementing suitable measures to minimise rainwater infiltration and/or capture runoff and leachates, through use of bunding and/or temporary drainage systems. These mitigation measures would be

Potential Impact	Mitigation / Enhancement Measure
	designed in line with current good practice, follow appropriate guidelines and all relevant licences/permits; • The contractor would ensure that all material is suitable for its proposed use and would not result in an increase in contamination-related risks on identified receptors, including any landscaped areas and underlying groundwater; • Any waters removed from excavations by dewatering would be discharged appropriately, subject to the relevant permits being obtained from the Environment Agency; • The contractor will implement a dust suppression/management system in order to control the potential risk from airborne contamination migrating off-site to adjacent sites; and • Piling design and construction works will be completed following the preparation of a piling risk assessment.

10. Preliminary Risk

10.1 Risk Assessment Principles

10.1.1 Current industry good practice recommends that the determination of hazards due to contaminated land is based on the principle of risk assessment, as outlined in the Environment Agency guidance on Land Contamination: Risk Management (LCRM) (Ref 8).

10.1.2 For a risk to be present, there must be a viable contaminant linkage (at the current site condition and/or during construction and/or when the proposed development is complete and operational); i.e. a mechanism whereby a source impacts on a sensitive receptor via a pathway.

10.1.3 Assessments of risks associated with each of these contaminant linkages are discussed in the following sections. The methodology adopted within this Preliminary Risk Assessment does not intend to reflect the EIA Methodology, as described in ***Volume I Chapter 5***: ***Methodology*** of the PEI Report. .

10.1.4 Using criteria broadly based on those presented in in Section 6.3 of the CIRIA Report "Contaminated Land Risk Assessment: A Guide to Good Practice" (CIRIA Report C552) (Ref 35), the magnitude of the risk associated with potential contamination at the DCO Site has been assessed. To do this an estimate is made of:

- The magnitude of the potential consequence (i.e. severity); and
- The magnitude of probability (i.e. likelihood).

10.1.5 The severity of the risk is classified according to the criteria in Table 10.1.

10.2 Risk Assessment Framework

Table 10-1 Description of Severity of Risk

Term	*Description*
Severe	– Highly elevated concentrations likely to result in significant harm to human health. – Catastrophic damage to crops, buildings or property (e.g. by explosion). – Equivalent to EA Category 1 pollution incident including persistent and/or extensive effects of water quality. – Major damage to aquatic or other ecosystems.
Medium	– Elevated concentrations which could result in significant harm to human health. – Significant damage to crops, buildings or property (e.g. damage to building rendering it unsafe). – Equivalent to EA Category 2 pollution incident including significant effect on water quality. – Significant damage to aquatic or other ecosystems.
Mild	– Exposure to human health unlikely to lead to significant harm. – Minor damage to crops, buildings or property (e.g. surface spalling to concrete). – Equivalent to EA Category 3 pollution incident including minimal or short-lived effect on water quality. – Minor or short-lived damage to aquatic or other ecosystems.
Minor	– No measurable effect on humans. – Repairable effects of damage to buildings, structures and services.

Term	Description
	– Equivalent to insubstantial pollution incident with no observed effect on water quality of ecosystems.

10.2.1 The probability of the risk occurring is classified according to the criteria in Table 10.2 which is determined by professional judgement by the author.

Table 10-2 Likelihood of Risk Occurrence

Likelihood	Explanation
High	Contaminant linkage may be present that appears very likely in the short-term and risk is almost certain to occur in the long term, or there is evidence of harm to the receptor.
Likely	Contaminant linkage may be present, and it is probable that the risk will occur over the long term.
Low	Contaminant linkage may be present and there is a possibility of the risk occurring, although there is no certainty that it will do so.
Unlikely	Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.

10.2.2 An overall evaluation of the level of risk is gained from a comparison of the severity and probability, as shown in Table 10.3.

Table 10-3 Evaluation of Risk Level

Likelihood \ Severity	SEVERE	MEDIUM	MILD	MINOR
HIGH	Very High	High	Moderate	Low
LIKELY	High	Moderate	Moderate/Low	Low
LOW	Moderate	Moderate/Low	Low	Very Low
UNLIKELY	Moderate/Low	Low	Very Low	Very Low

10.3 LCRM Assessment of Risk

10.3.1 In 2019, the UK government issued new guidance on the evaluation and management of contaminated land, LCRM. Current contaminated land guidance in LCRM (Environment Agency, 2020) categorises risk at Stage 1 Tier 1 (i.e. PRA) as follows:

- Acceptable; and
- Unacceptable.

10.3.2 However, no framework for assessing the risk has been published to accompany the guidance, therefore the CIRIA Report C552 (Ref 35) assessment framework constitutes industry good practice in this regard. To align the risk rankings in Section 10.2 with the LCRM rankings and with the Part 2A definitions, the following matrix has been utilised. This conversion is demonstrated in Table 10-4.

Table 10-4 Conversion to LCRM Risk Categories

	Acceptable	*Unacceptable*
Very Low		
Low		
Moderate/Low		
Moderate*		
High		
Very High		

** This risk category spans both acceptable and unacceptable. This is intentional as it is this risk band that tends to have the greatest level of uncertainty associated with it. Acceptability will dependent on site-specific circumstances and level of confidence in the available evidence*
For a risk to be unacceptable, the contaminant linkage should be associated with at least a "medium" severity as defined in Table A4.3 in Annex 4 of R&D66 and the probability should (in the majority of cases) be at least "likely" as defined in Table A4.4 of R&D66.

10.3.3 These risk categories represent the level of risk as it is currently understood from the information available at the time of writing this report

10.4 Preliminary Risk Assessment

10.4.1 An iCM illustrating plausible contaminant linkages has been formulated for the DCO Site. The qualitative preliminary risk assessment of the possible linkages of the above sources (S1 to S3), transport pathways (P1 to P11) and receptors (R1 to R11) is provided in the Table 10-5.

10.4.2 The level of risk is determined based on the current condition of the DCO Site (i.e. the effects of mitigation measures are not included).

10.4.3 The preliminary risk assessment undertaken with in this section does not consider acute[2] linkages for construction and maintenance workers. It is anticipated that these acute linkages will be managed by appropriate health and safety measures. As construction workers are protected under existing health and safety legislation, any potential effects are considered to be temporary and will be avoided, prevented and reduced through the implementation of standard mitigation measures to be incorporated into a CEMP. Work will be undertaken in accordance with relevant Construction Design Management (CDM) Regulations 2015 (Ref 44).

[2] Refers to a considerable exposure to contaminated land in a short period of time (for example during construction activities).

Table 10-5 Potential Sources, Pathways and Receptors

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk (LCRM)	Linkage Reference	Justification
S1: Made Ground and Historical Boreham Rifle Range (metals, semi-metals, asbestos, organic and inorganic compounds. Gases such as methane or carbon dioxide and leachate)	P1: Direct contact, dermal absorption or ingestion of soil.	R2: Current Site Users	Mild	Unlikely	Very Low	LC: S1-P1-R2	Made ground of unknown quality may be associated with any infilling of the small historical pits on site. The volume of the infill is relatively small and unlikely to represent a significant widespread issue. Current users are farmers and general public who might be exposed to soils. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable, given the current use of the site as agricultural field.
	P1: Direct contact, dermal absorption or ingestion of soil.	R3: Future Site Users	Mild	Unlikely	Very Low	LC: S1-P1-R3	Made ground of unknown quality may be associated with any infilling of the small historical pits on site. Future users include site visitors/trespassers/general public on the DCO Site using the PRoW who might be exposed to soils. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable, given the proposed use of the site.
	P1: Direct contact, dermal absorption or ingestion of soil.	R8: Fauna (livestock/ small grazing animals)	Minor	Unlikely	Very Low	LC: S1-P1-R8	Livestock may be currently present on-site; and small grazing animals such as sheep may be present on-site after construction. The risk of harm to livestock and small grazing animals is considered to be very low, since limited potential for ground contamination has been identified at the DCO Site. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk (LCRM)	Linkage Reference	Justification
	P2: Ingestion of fruit and vegetables and/ or waters.	R2: Current Site Users	Mild	Unlikely	Very Low	LC: S1-P2-R2	Limited potential for ground contamination has been identified at the DCO Site. Therefore, risk of harm to human health from ingestion of fruit/vegetables/water is considered to be very low. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
	P2: Ingestion of fruit and vegetables and/ or waters.	R8: Fauna (livestock/ small grazing animals)	Minor	Unlikely	Very Low	LC: S1-P2-R8	Limited potential for ground contamination has been identified at the DCO Site. The risk of harm to livestock/small grazing animals is considered to be very low. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
	P3: Inhalation of soil particulates and vapour derived from soils.	R2: Current Site Users	Mild	Unlikely	Very Low	LC: S1-P3-R2	Limited potential for ground contamination has been identified at the DCO Site. Limited potential for soil vapour exists at the DCO Site, given the age of the potentially infilled historical pits. Therefore, risk of inhalation of soil particulates is considered to be very low. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
	P3: Inhalation of soil particulates and vapour derived from soils.	R3: Future Site Users	Mild	Unlikely	Very Low	LC: S1-P3-R3	Limited potential for ground contamination has been identified at the DCO Site. Limited potential for soil vapour exists at the DCO Site, given the age of the potentially infilled historical pits. Therefore, risk of inhalation of soil particulates is considered to be very low. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk (LCRM)	Linkage Reference	Justification
	P3: Inhalation of soil particulates and vapour derived from soils.	R8: Fauna (livestock/ small grazing animals)	Minor	Unlikely	Very Low	LC: S1-P3-R8	Limited potential for ground contamination has been identified at the DCO Site. Limited potential for soil vapour exists at the DCO Site, given the age of the potentially infilled historical pits. The risk of harm to livestock/small grazing animals is considered to be very low. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
	P4: Migration of hazardous gases/vapours via permeable strata into confined spaces (asphyxiation/ explosion)	R3: Future Site Users	Medium	Unlikely	Low	LC: S1-P4-R3	Ground gas accumulation and potential explosion risk is generally unlikely at the DCO Site, given that limited potential sources of hazardous gases/vapours have been identified on-site. The proposed development will include switch housing/control room in terms of structures, and are unlikely to be located in areas where substantial infilled pits have been identified (in the south western corner of the DCO Site the only infilled pit identified is a gravel pit approximately 3m across shown on the 1874 map). Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
	P6: Leaching of chemicals and vertical migration via permeable unsaturated strata to shallow groundwater	R5: Superficial Aquifers	Minor to Medium	Unlikely	Very Low to Low	LC: S1-P6-R5	Complete pathways may be present but current information suggests a gross source is unlikely. The risk of harm to groundwater from leaching of contaminants is considered between low (for Secondary A Aquifers - Glaciofluvial deposits and Alluvium) and very low (for Secondary B Aquifer - Brickearth deposits; and Secondary Undifferentiated Aquifers - Head deposits and Lowestoft Formation).

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk (LCRM)	Linkage Reference	Justification
	P7: Direct contact with contaminated soils	R7: Flora (plants, trees, landscaping, crops)	Minor	Unlikely	Very Low	LC: S1-P7-R7	Complete pathways may be present but current information suggests a gross source is unlikely. Potential risk from direct contact with contaminated soils for plants, trees, landscaping and crops is considered very low. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. As indicated in the Framework CEMP (see ***Volume 2 Appendix 2A*** of the PEI Report), "*the Scheme would avoid, as far as reasonably practicable, areas of high-quality habitat, such as mature trees and woodland/wetland habitats*" and "*throughout the Scheme, undeveloped buffers will be included to protect all hedgerows, veteran/ancient trees, ponds and ancient woodland during construction and operation*".
	P8: Uptake via root system	R7: Flora (plants, trees, landscaping, crops)	Minor	Unlikely	Very Low	LC: S1-P8-R7	Complete pathways may be present but current information suggests a gross source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. Potential risk from direct contact with contaminated soils for plants, trees, landscaping and crops is considered very low.
	P9: Direct contact of buried concrete with contaminated soils (i.e. hydrocarbons) and aggressive ground conditions (pH and sulphate).	R9: Buildings and Infrastructure: Concrete (PV Mounting Structure and cables)	Minor	Unlikely	Very Low	LC: S1-P9-R9	Complete pathways may be present but current information suggests a gross source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. Potential risk from direct contact with contaminated soils for buried concrete and

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk (LCRM)	Linkage Reference	Justification
							infrastructure (PV Mounting Structure and cables) is considered very low.
	P10: Direct contact of services and supply pipes with contaminated soils.	R11: Buildings and Infrastructure: Supply pipes	Minor	Unlikely	Very Low	LC: S1-P10-R11	Complete pathways may be present for water supply pipes at properties located off-site from on-site sources, but current information suggests a gross source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
	P11: Migration of hazardous gases/vapours via permeable strata into enclosed spaces and service/utility trenches	R10: Buildings and Infrastructure: Structures	Mild	Low	Low	LC: S1-P11-R10	Ground gas accumulation and potential explosion risk is generally unlikely at the DCO Site, given that limited potential sources of hazardous gases/vapours have been identified. Contaminant linkage may be present and there is a possibility of the risk occurring, although there is no certainty that it will do so.
S2: Off-site farm buildings and yards where fuel and agricultural materials were/are stored. (metals, semi-metals, asbestos, organic and inorganic compounds,	P3: Inhalation of particulates derived from soils	R2: Current Site Users	Mild	Unlikely	Very Low	LC: S2-P3-R2	Potential localised contaminant hotspots may be associated with the farm buildings located adjacent to the DCO Site at various locations. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
	P3: Inhalation of particulates derived from soils	R3: Future Site Users	Mild	Unlikely	Very Low	LC: S2-P3-R3	Potential localised contaminant hotspots may be associated with the farm buildings located adjacent to the DCO Site at various locations. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk (LCRM)	Linkage Reference	Justification
pesticides and fertilizers).	P3: Inhalation of particulates derived from soils	R8: Fauna (livestock/ small grazing animals)	Minor	Unlikely	Very Low	LC: S2-P3-R8	Complete pathways may be present but current information suggests a gross source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. The risk of harm to livestock/small grazing animals is considered to be very low.
	P5: Spillage/loss/run off from surface direct to receiving water	R6: Surface waters	Minor to Medium	Unlikely	Very Low to Low	LC: S2-P5-R6	Complete pathways may be present but current information suggests a gross source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. The risk of harm to surface waters from run off from off-site contaminated soil is considered between very low (for drains and ponds located on-site) to low (River Ter, and Boreham Tributary and tributaries).
	P6: Leaching of chemicals and vertical migration via permeable unsaturated strata to shallow groundwater	R5: Superficial Aquifers	Minor to Medium	Unlikely	Very Low to Low	LC: S2-P6-R5	Complete pathways may be present but current information suggests a gross source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. The risk of harm to groundwater from leaching of contaminants and lateral migration to the Site is considered between low (for Secondary A Aquifers - Glaciofluvial deposits and Alluvium) and very low (for Secondary B Aquifer - Brickearth deposits; and Secondary Undifferentiated Aquifers - Head deposits and Lowestoft Formation)
S3: Off-site historical quarries.	P3: Inhalation of soil particulates or vapour derived from soils	R2: Current Site Users	Mild	Unlikely	Very Low	LC: S3-P3-R2	Infilled unlicensed materials may be associated with the former quarries located adjacent west of the DCO Site (although unlikely). Current users

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk (LCRM)	Linkage Reference	Justification
(metals, semi-metals, asbestos, organic and inorganic compounds. Gases such as methane or carbon dioxide and leachate)							are farmers and general public who might be exposed to soil vapour deriving from these areas. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
	P3: Inhalation of soil particulates or vapour derived from soils	R3: Future Site Users	Mild	Unlikely	Very Low	LC: S3-P3-R3	Complete pathways may be present but current information suggests a gross source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. Future site users (trespassers/site visitors/general public on the DCO Site using the PRoW (if retained)) might be exposed to soil vapour deriving from these areas.
	P3: Inhalation of soil particulates or vapour derived from soils	R8: Fauna (livestock / small grazing animals)	Minor	Unlikely	Very Low	LC: S3-P3R8	Complete pathways may be present but current information suggests a gross source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. The risk of harm to livestock / small grazing animals is considered to be very low.
	P4: Migration of hazardous gases/vapours via permeable strata into confined spaces (asphyxiation/ explosion)	R3: Future Site Users	Mild	Low	Low	LC: S3-P4-R3	Complete pathways may be present but current information suggests a gross source is unlikely. Contaminant linkage may be present and there is a possibility of the risk occurring, although there is no certainty that it will do so. Ground gas accumulation and potential explosion risk (deriving from off-site sources, associated with infilled land in the historical quarries) is considered unlikely at the DCO Site.

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk (LCRM)	Linkage Reference	Justification
	P6: Leaching of chemicals and vertical migration via permeable unsaturated strata to shallow groundwater	R5: Superficial Aquifers	Minor to Medium	Unlikely	Very Low to Low	LC: S3-P6-R5	Complete pathways are unlikely, given that most of the DCO Site extends east of the former quarries (except for the area of the Bulls Lodge Substation), and assuming a groundwater flow direction towards the south. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. The risk of harm to groundwater from leaching of contaminants and lateral migration to the DCO Site is considered between low (for Secondary A Aquifers - Glaciofluvial deposits and Alluvium) and very low (for Secondary B Aquifer - Brickearth deposits; and Secondary Undifferentiated Aquifers - Head deposits and Lowestoft Formation).
	P11: Migration of hazardous gases/vapours via permeable strata into enclosed spaces and service/utility trenches	R10: Buildings and Infrastructure: Structures	Mild	Low	Low	LC: S3-P11-R10	Complete pathways may be present but current information suggests a gross source is unlikely. Contaminant linkage may be present and there is a possibility of the risk occurring, although there is no certainty that it will do so. Ground gas accumulation and potential explosion risk (deriving from off-site sources, associated with historical quarries) is unlikely at the DCO Site.

10.5 Discussion of Acute Risk to Future Construction Workers & Off-Site Receptors

10.5.1 The proposed works will be undertaken in compliance with Construction Design and Management (CDM) 2015 Regulations (Ref 44).

10.5.2 Prior to work commencing, a health and safety risk assessment should be undertaken by the appointed principal contractor and developed in accordance with current health and safety regulations. This assessment should cover potential risks to construction staff, permanent site staff and the local population. Based on the findings of this risk assessment, appropriate mitigation measures should be implemented during the construction period. These mitigation measures, defined by IEMA (Ref 47) are considered to be standard measures that form part of the general environmental management of the Scheme, and are integrated within the CEMP (refer to Table 9-4).

10.5.3 The greatest potential for generation of dust will be during the construction phase. Dust generation should be kept to a minimum in accordance with general industry good practice, as outlined in, for example, 'Environmental Good Practice on Site Guide', CIRIA Publication C741 (Ref 45) (refer to Table 9-4).

10.5.4 The risk to construction workers during the site preparation and construction phases in terms of potential exposure to high concentrations of contaminants is considered to be low given the historic and current land uses identified at the DCO Site. Should gross contamination be identified during the construction phase, then this may pose a potential acute risk to construction works. It is likely the risks to construction workers can be effectively managed through good health and safety practices and protocols. Adoption of appropriate dust suppression techniques would also mitigate the degree of potential particulate migration off-site, these will be included within the CEMP for the Scheme.

10.5 Decommissioning (2066 to 2067)

10.5.5 Potential impacts from the decommissioning of the DCO Site are similar in nature to those during construction, as some ground work would be required to remove infrastructure installed. A detailed Decommissioning Environmental Management Plan will be prepared to identify required measures to prevent pollution during this phase of the development, based on the detailed decommissioning plan.

10.5.6 As a result, it is considered the decommissioning impacts and effects would mirror those of the construction phase. Standard mitigation measures (refer to Table 9-4) are expected to be applied during decommissioning.

11. Conclusion

11.1.1 The potential risks that have been identified from contaminated land have been assessed by the preliminary risk assessment as being very low to low.

11.1.2 A number of environmental design and management measures will be employed as standard best practice to minimise impacts to both human health and controlled waters during the construction and decommissioning phases of the Scheme. These have been incorporated into the Framework CEMP which is provided alongside the ES as part of the DCO application.

11.1.3 The information collected as part of this PRA suggests that there are no significant constraints with regards to contamination of soil and groundwater that would limit the development of the DCO Site for a solar PV project.

12. Recommendations

12.1.1 The requirement for a detailed unexploded ordnance (UXO) assessment may need to be considered prior to the commencement of any intrusive works. While it is acknowledged that, the regional unexploded bomb (UXB) mapping published by Zetica shows that the DCO Site lies within a zone that experiences a low risk of UXB. The DCO Site is in close proximity (250m) to a former airfield, which is considered a wartime site of interest, Boreham Rifle Range was also potentially a military site and ordnance was reported to have been identified to the south of the DCO Site.

13. References

Ref 1 Central Government (2008) Planning Act 2008.

Ref 2 Ministry of Housing, Communities and Local Government (MCHLG), (2019); National Planning Policy Framework (NPPF). Conserving and enhancing the historic environment. Ministry of Housing, Communities & Local Government. Available online at: www.gov.uk/government/publications/national-planning-policy-framework--2

Ref 3 DEFRA: Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance, (April 2012).

Ref 4 HMSO, (2012); The Contaminated Land (England) (Amendment) Regulations 2012 .

Ref 5 National Planning Statement (NPS) for Overarching Energy EN-1 (2011).

Ref 6 National Planning Statement (NPS) for Renewable Energy EN-3 (2011).

Ref 7 National Planning Statement (NPS) for Electricity Networks EN-5 (2011).

Ref 8 Environment Agency (2020). Land Contamination Risk Management (LCRM). Available at https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm.

Ref 9 Environment Agency, (2004); Model Procedures for the Management of Contaminated Land: Contaminated Land Report 11.

Ref 10 British Standards 5930:2015+A1:2020 'Code of Practice for Ground Investigations'.

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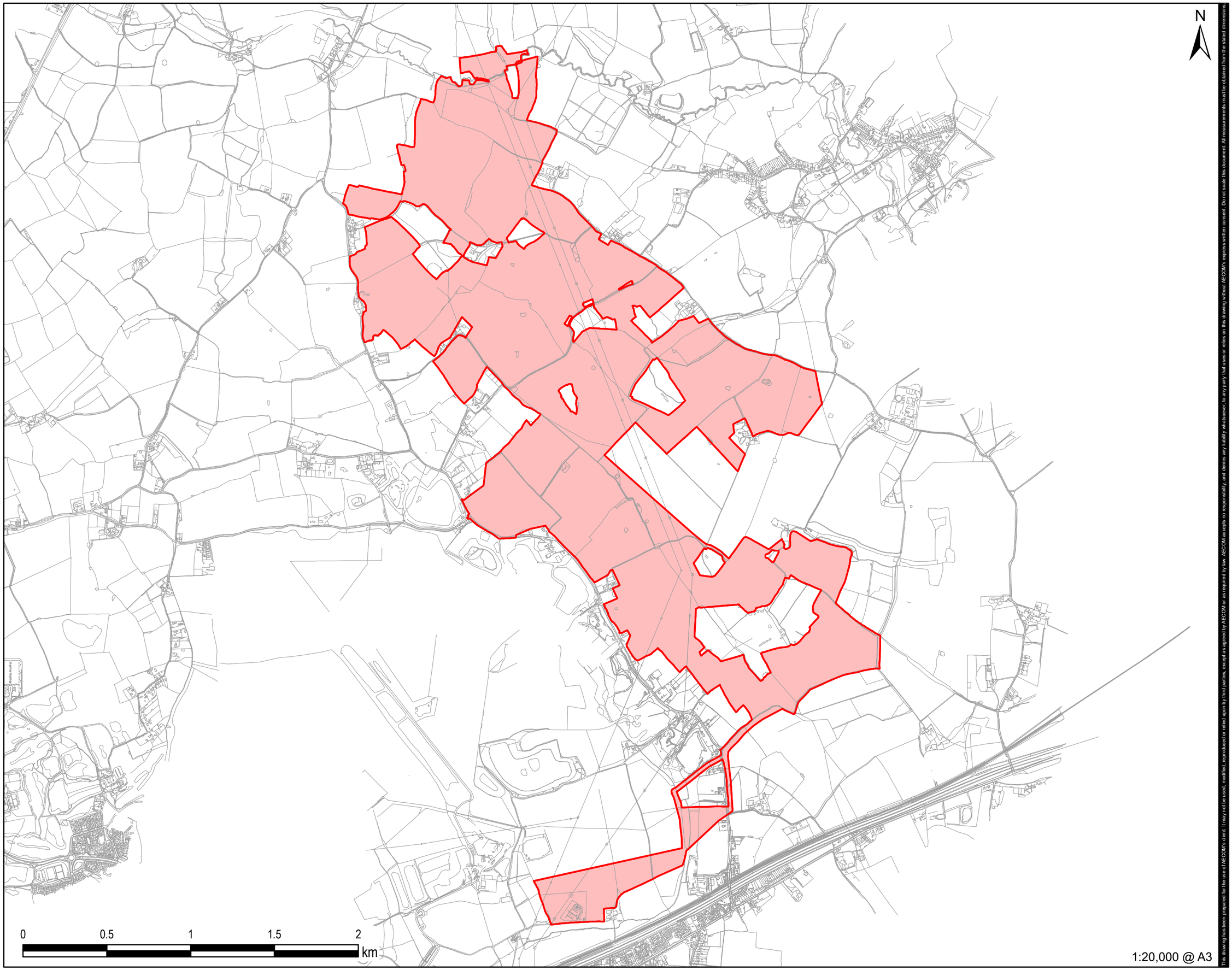
Appendix A Figures



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AECOM

PROJECT

Longfield
Solar Farm,
Essex

CLIENT

Longfield
Solar Energy
Farm Limited

CONSULTANT

AECOM Limited
3rd Floor Portwall Place
Portwall Lane
Bristol, BS1 6NA
T: +44 1173150548
www.aecom.com

LEGEND

Site Boundary

NOTES

ISSUE PURPOSE

FINAL

PROJECT NUMBER

60624362

SHEET TITLE

Redline Boundary

SHEET NUMBER

Figure 1

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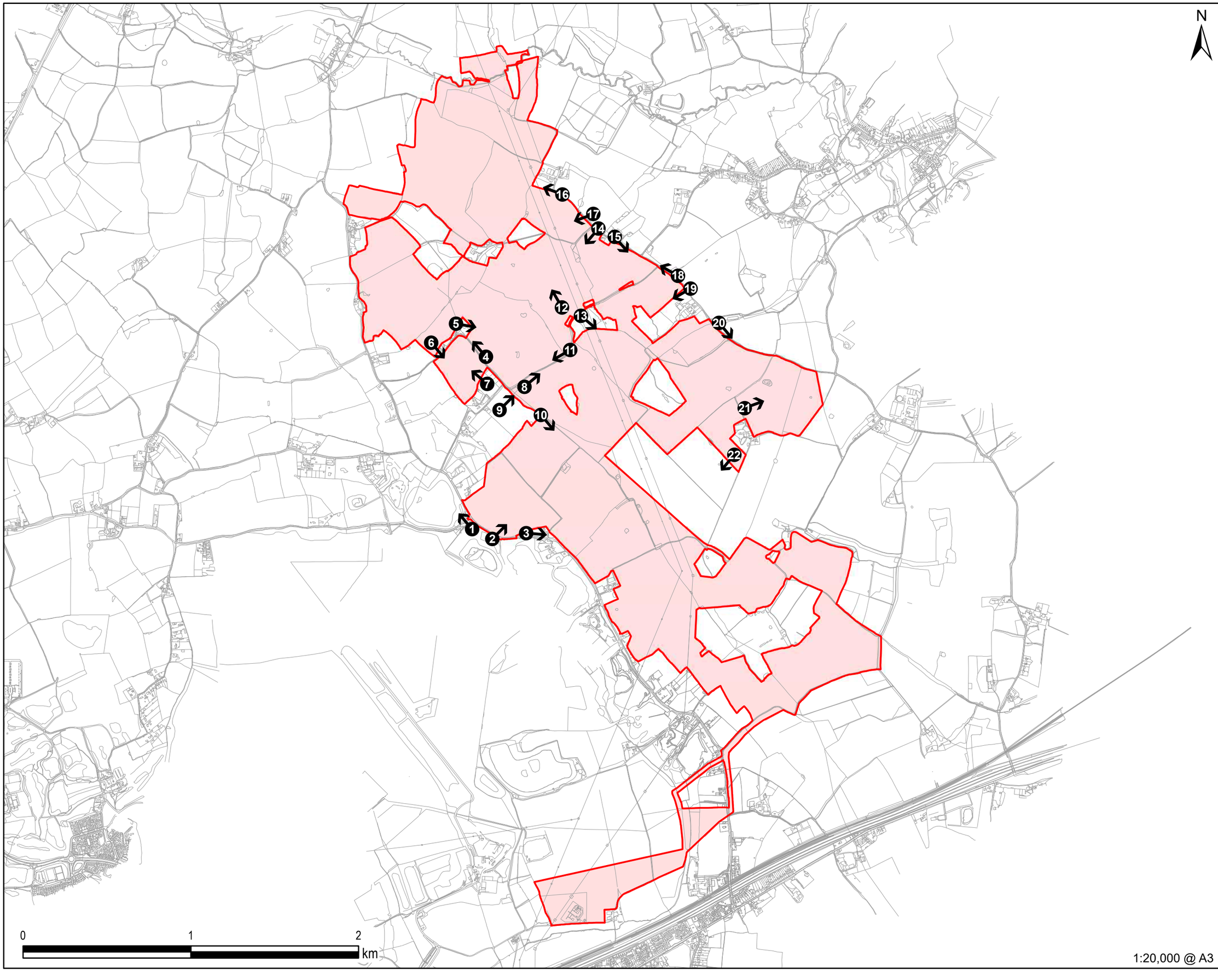

AECOM

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Solar Energy
Farm Limited

CONSULTANT

AECOM Limited
3rd Floor Portwall Place
Portwall Lane
Bristol, BS1 6NA
T: +44 1173150548
www.aecom.com

LEGEND

Site Boundary

Photo Location

NOTES

ISSUE PURPOSE

FINAL

PROJECT NUMBER

60624362

SHEET TITLE

Photo Location
Plan

SHEET NUMBER

Figure 2

N

PDA 1
PDA 2
PDA 3
PDA 4
PDA 5
PDA 6
PDA 7
PDA 8
PDA 9
PDA 10
PDA 11
PDA 12
PDA 13
PDA 14
PDA 15
PDA 16
PDA 17
PDA 18
PDA 19
PDA 20
PDA 21
PDA 22
PDA 23
PDA 24
PDA 25
PDA 26
PDA 27
PDA 28
PDA 29
PDA 30
PDA 31
PDA 32
PDA 33

A A

0 100 200 300 400 500 600 700 800 900 1km
SCALE 1:10,000

TYPICAL SECTION THROUGH VARIOUS MODULE OPTIONS

SCALE 1:100

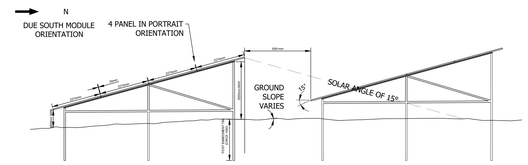

TABLE POST TYPE

KEY

- Site Boundary
- Potential Developable Area
- Proposed Perimeter Fencing
- 4h24 Panel Table
- 4h12 Panel Table
- Inverter/Transformer Station
- PV Substation (including Control Room)
- Permanent Plant Building (max footprint 540m²)
- Proposed Battery Storage
- Proposed Spine Access Route
- Additional Proposed Access Route
- Existing Onsite Access Route
- Existing Offsite Road
- Site Entrance
- Overhead Tower Line (132kV)
- Overhead Tower Line (400 kV)
- PRoW Crossing with Spine Access Route
- Cable Run
- 5m Contour
- Area of Wetland
- Individual Tree
- Hedgerow
- Area of Woodland
- Ancient Woodland
- Site of Special Scientific Interest
- Listed Building
- Residential Dwelling
- Area of Heritage Interest
- Bridleway
- Public Footpath
- Security Kiosk
- Site Access Layby

NOTES:

1. MINIMUM 5M ECOLOGY BUFFER ALLOWED TO ALL BOUNDARIES.
2. MINIMUM 5M BUFFER ALLOWED TO ALL WETLANDS.
3. MINIMUM 5M BUFFER ALLOWED TO ALL PUBLIC RIGHTS OF WAY.
4. MINIMUM 15M BUFFER ALLOWED TO ALL HEDGEROWS.
5. MINIMUM 15M BUFFER ALLOWED TO INDIVIDUAL TREES.
6. MINIMUM 20M BUFFER ALLOWED TO ALL WOODLAND, AND MINIMUM 20 BUFFER ALLOWED TO ALL ANCIENT WOODLAND. A MINIMUM 50M BUFFER IS APPLIED TO THE NORTH SIDE OF ANCIENT WOODLANDS.
7. MINIMUM 50M BUFFER ALLOWED TO ALL RESIDENTIAL PROPERTIES WITH LIMITED PRE-EXISTING SCREENING.
8. MINIMUM 50M BUFFER ALLOWED TO ALL ECOLOGICALLY DESIGNATED SITES.
9. MINIMUM BUFFER OF 9 M APPLIED TO 132 kV PYLON TOWERS, AND 14 M MINIMUM BUFFER APPLIED TO 400 kV PYLON TOWERS, SUBJECT TO FINAL DESIGN.
10. CLEARANCE REQUIRED DUE TO OVERHEAD LINE SAG NOT CONSIDERED AT THIS STAGE OF DESIGN.
11. UTILITIES SEARCHES HAVE NOT BEEN UNDERTAKEN TO INFORM THIS LAYOUT DESIGN. THERE MAY BE OVERHEAD OR UNDERGROUND UTILITIES WHICH HAVE NOT BEEN TAKEN INTO ACCOUNT.
12. PROPOSED ACCESS ROUTES INDICATIVE ONLY, FINAL EXTENT AND DESIGN TO BE CONFIRMED. ANTICIPATED ONLY PERMEABLE MATERIAL USED.
13. ALL HEDGEROW CROSSINGS SUBJECT TO FINAL DESIGN.
14. NUMBER AND LOCATION OF INVERTER/TRANSFORMER SUBSTATIONS SUBJECT TO FINAL DESIGN.
15. LOCATION OF PERIMETER FENCE SUBJECT TO FINAL DESIGN.
16. CONTOURS OBTAINED FROM OS TERRAIN 50 MAPPING.
17. INDICATIVE INITIAL DESIGN FOR FEASIBILITY. NO ELECTRICAL DESIGN UNDERTAKEN. ALL ELECTRICAL COMPONENTS SHOWN ARE ILLUSTRATIVE AND SUBJECT TO FINAL DESIGN.

REVISION SCHEDULE

Individual PDA Area (ha)

PDA	Area (ha)	Capacity (Wp)
1	10.4	14127360.0
2	20.2	28878720.0
3	12.5	16823040.0
4	3.4	4492800.0
5	6.4	8785920.0
6	15.0	20142720.0
7	8.3	8037120.0
8	9.2	11955840.0
9	18.9	24785280.0
10	7.4	10008960.0
11	4.9	6764160.0
12	11.7	15500160.0
13	1.1	1173120.0
14	6.2	8037120.0
15	11.1	15250560.0
16	7.3	9634720.0
17	0.9	923520.0
18	2.7	3419520.0
19	8.3	11506560.0
20	9.8	13703040.0
21	10.3	13952640.0
22	4.2	5541120.0
23	14.3	19543680.0
24	16.3	22414080.0
25	2.6	3306960.0
26	1.9	2396160.0
27	9.3	12504960.0
28	3.4	4118400.0
29	28.3	37340160.0
30	2.5	3219840.0
31	9.1	12654720.0
32	7.4	10133760.0
33	24.7	23712000.0

GEOGRAPHICAL SITE	
COORDINATES	575500,214000
MAMSL	55m
BOUNDARY AREA	570 ha
DEVELOPABLE AREA	316 ha
SITE SYSTEM	
PANEL ANGLE	15°
ARRANGEMENT	4V24 4V11
ORIENTATION	PORTRAIT
PANEL TOTAL	799,968
ROW SPACING	3.081m
BESS AREA	5.2 ha
DC SITE POWER	
520 Wp RATING	415,983,360Wp

INDICATIVE SECTION A-AA

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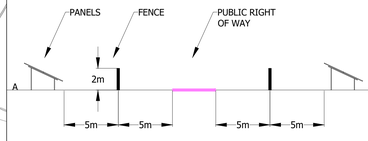


SECTION A-AA - SECTION THROUGH PROPOSED ACCESS AND PANEL DESIGN
(NOTE THAT THERE WOULD ALWAYS BE A 5M OFFSET FROM HEDGE AND PANELS)

STATUS: **DRAFT**

BASE: Reproduced from Ordnance Survey digital map data © Crown copyright 2020. All rights reserved. Licence number 100048606

GRID REFERENCE: SP 966403

PROJECT: LONGFIELD SOLAR

TITLE: OPERATIONAL LAYOUT

CLIENT: EDF RENEWABLES

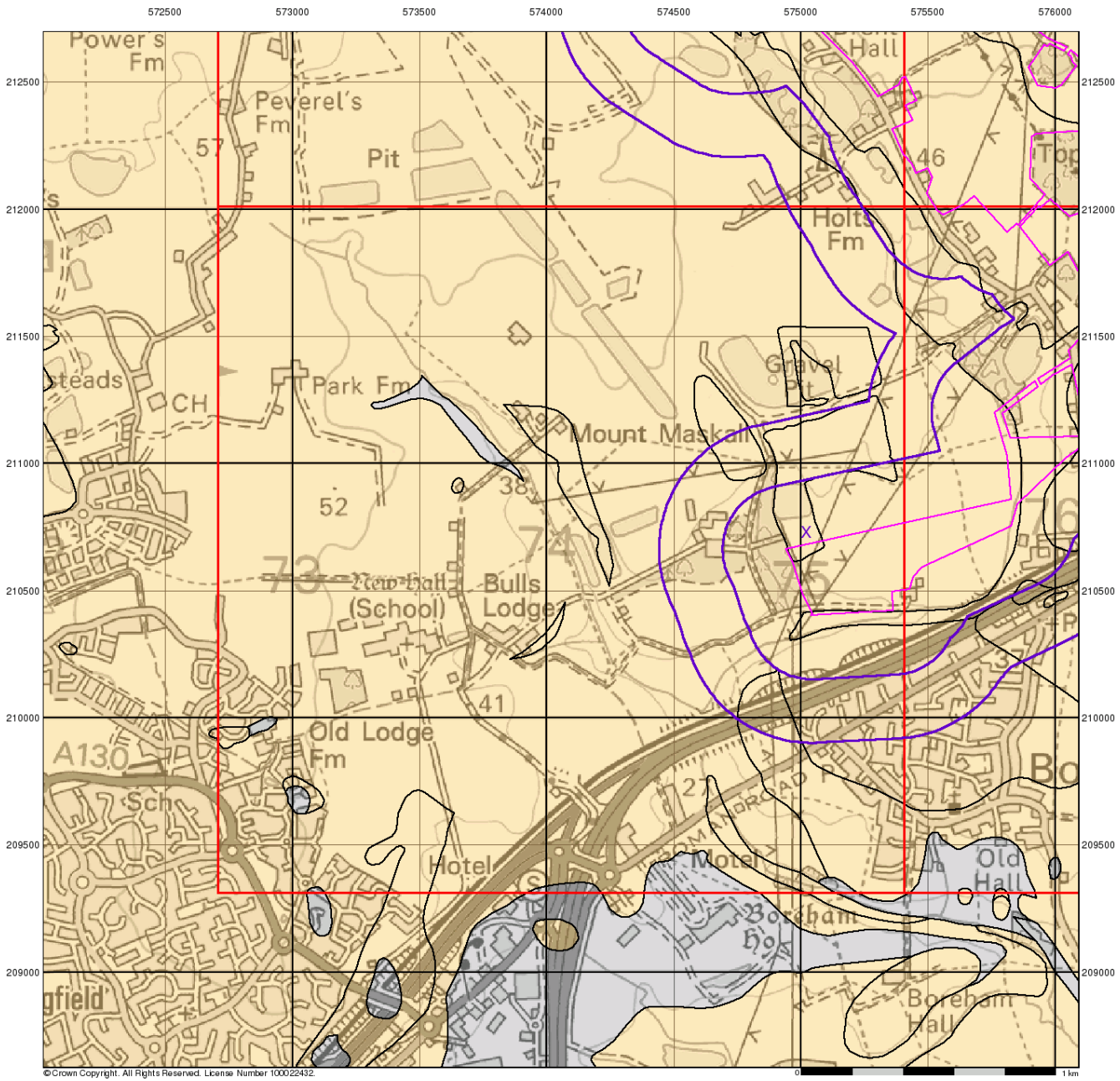
DATE: 04.03.21 SCALE: 1:10,000@A0

DRAWN: EL DRAWING NO.: 4077_LGF_DR_PRE_0001D

CHECKED: REVISION: D

ARCUS
Arcus Consultancy Services
1C Swinegate Court East
3 Swinegate
York, YO1 8AJ
tel: +44 (0)1904 715 470
www.arcusconsulting.co.uk

Appendix B Envirocheck Report



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Groundwater Vulnerability

General

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

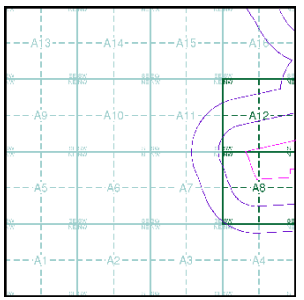
Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



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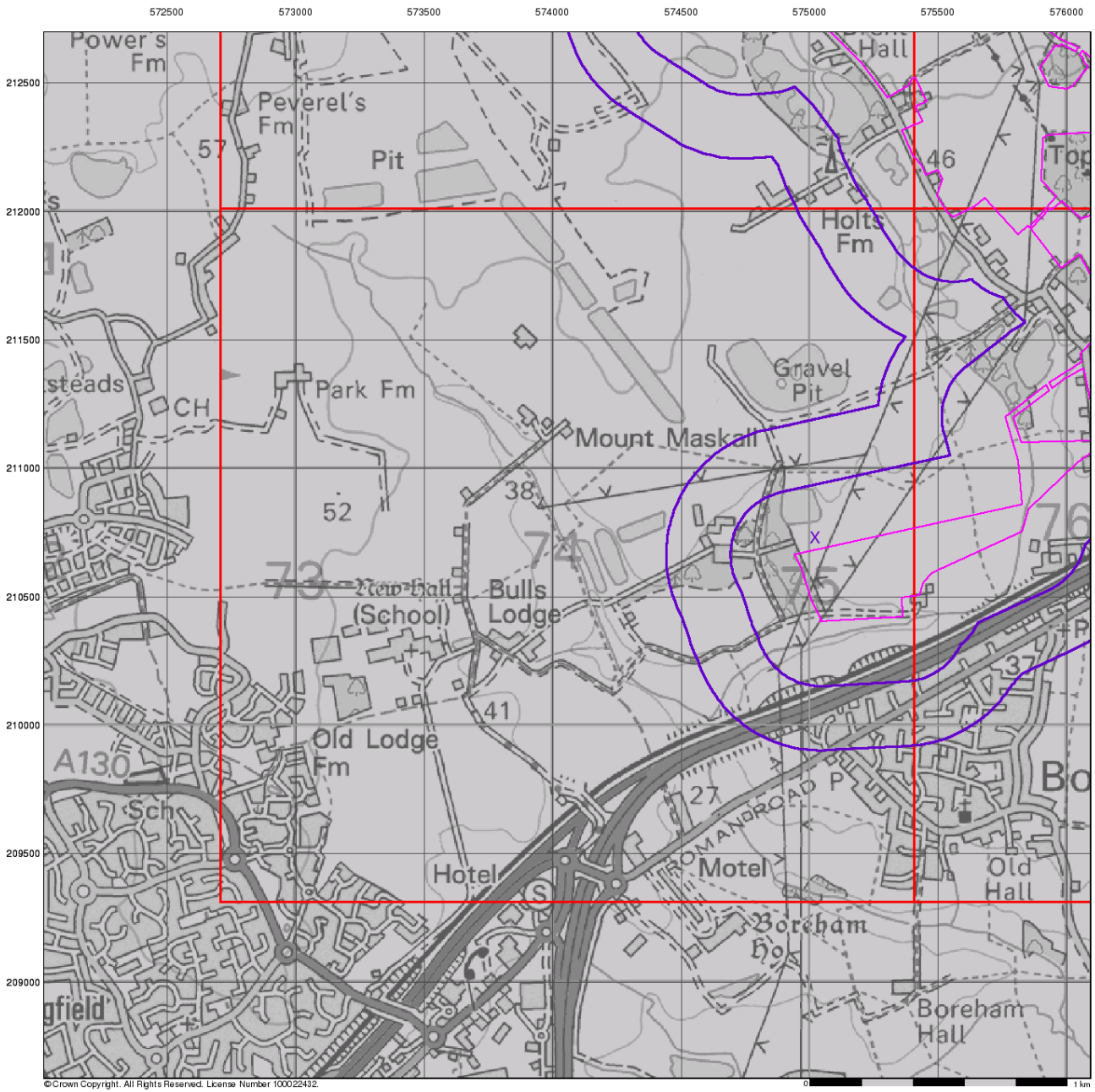
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

Landmark INFORMATION GROUP

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



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Bedrock Aquifer Designation

General

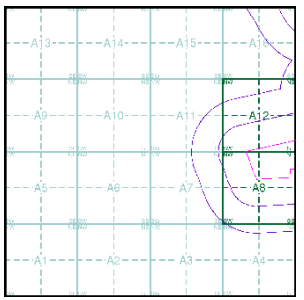
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice A



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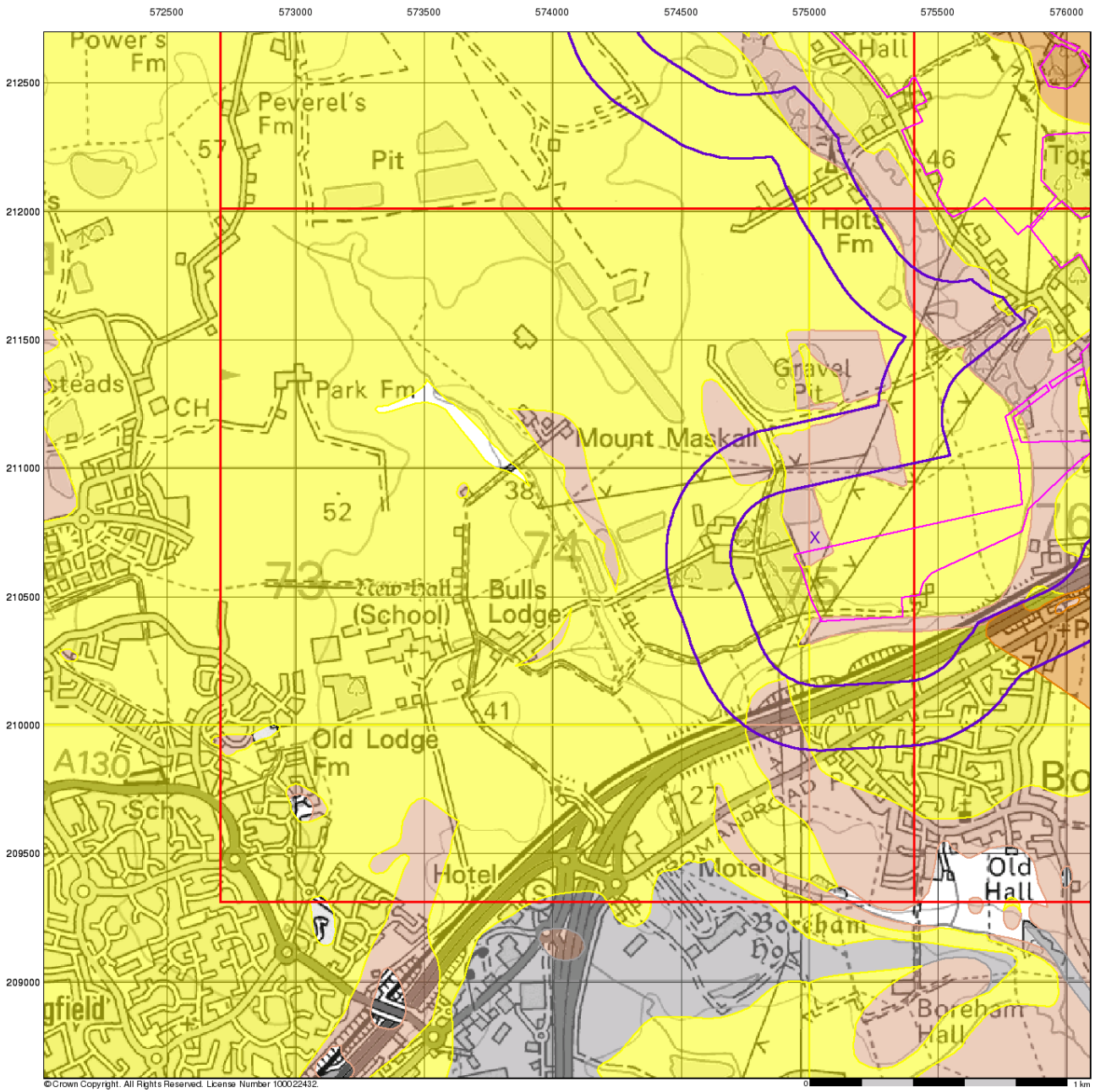

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Superficial Aquifer Designation

General

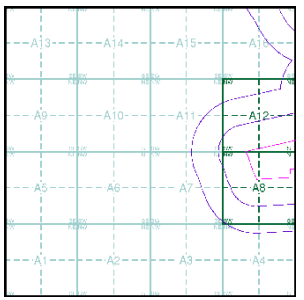
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice A



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Slice:	A
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Search Buffer (m):	500

Site Details

Longfield

Landmark® INFORMATION GROUP

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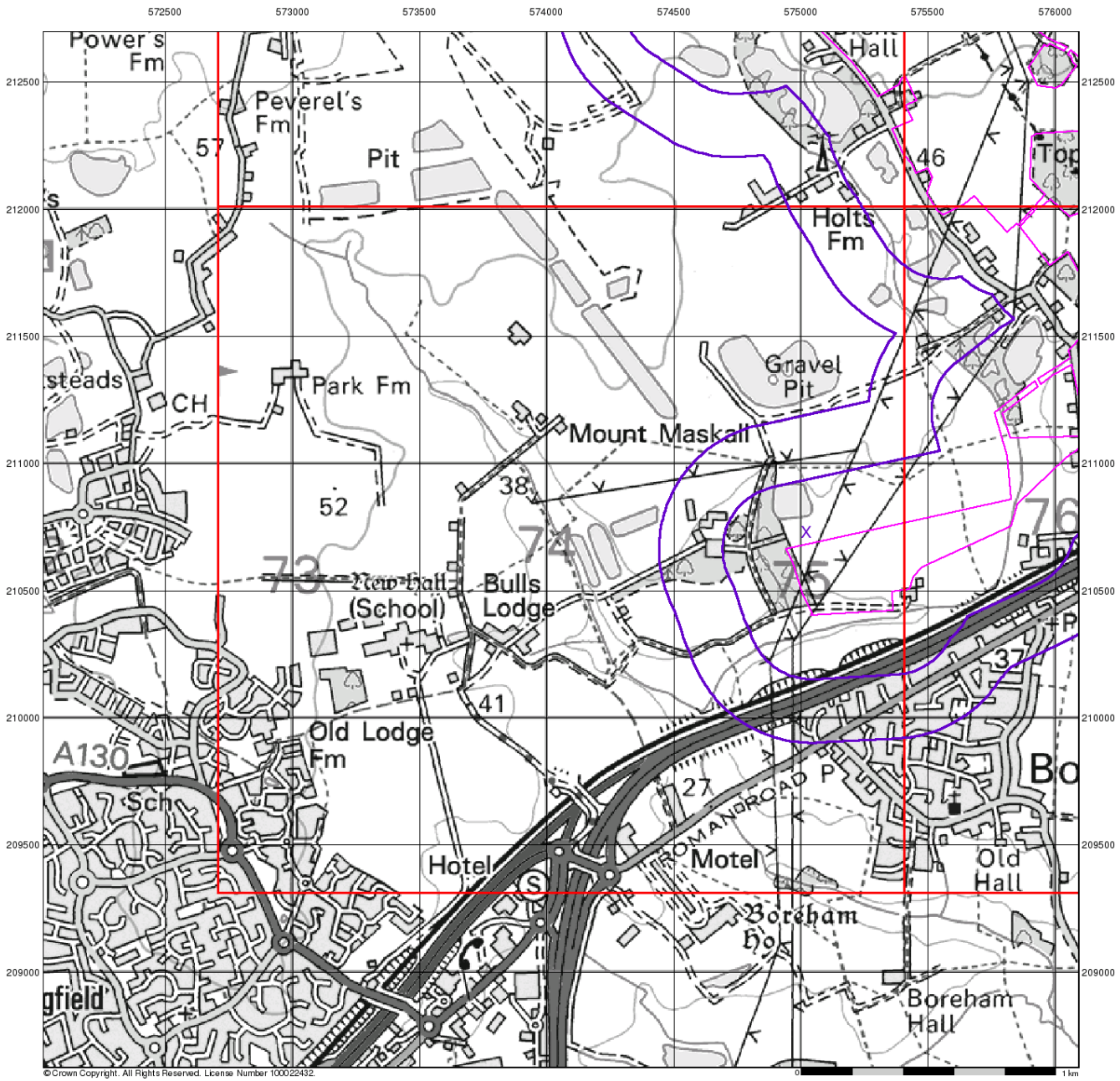

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Source Protection Zones

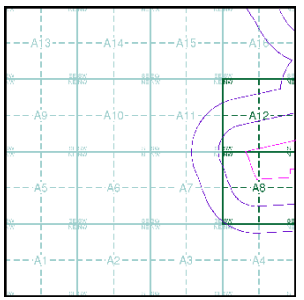
General

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

Agency and Hydrological

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

Site Sensitivity Context Map - Slice A



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Site Details

Longfield

Landmark INFORMATION GROUP

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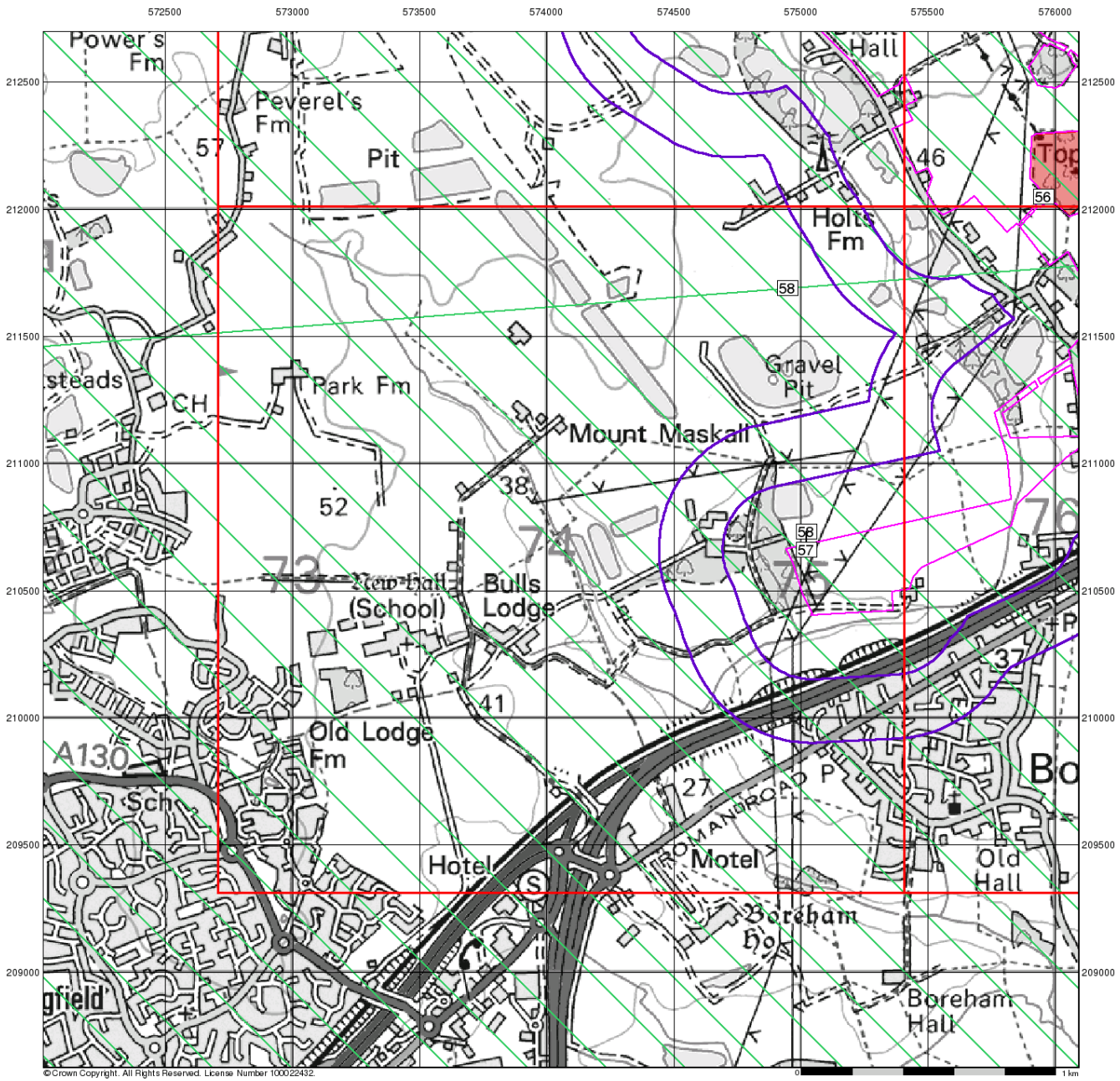

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Sensitive Land Uses

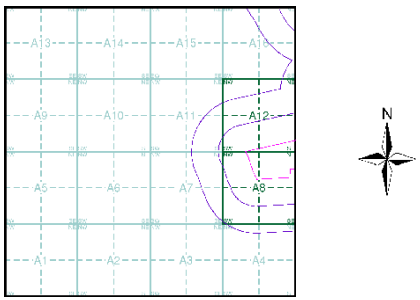
General

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

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



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Site Details

Longfield

Landmark INFORMATION GROUP

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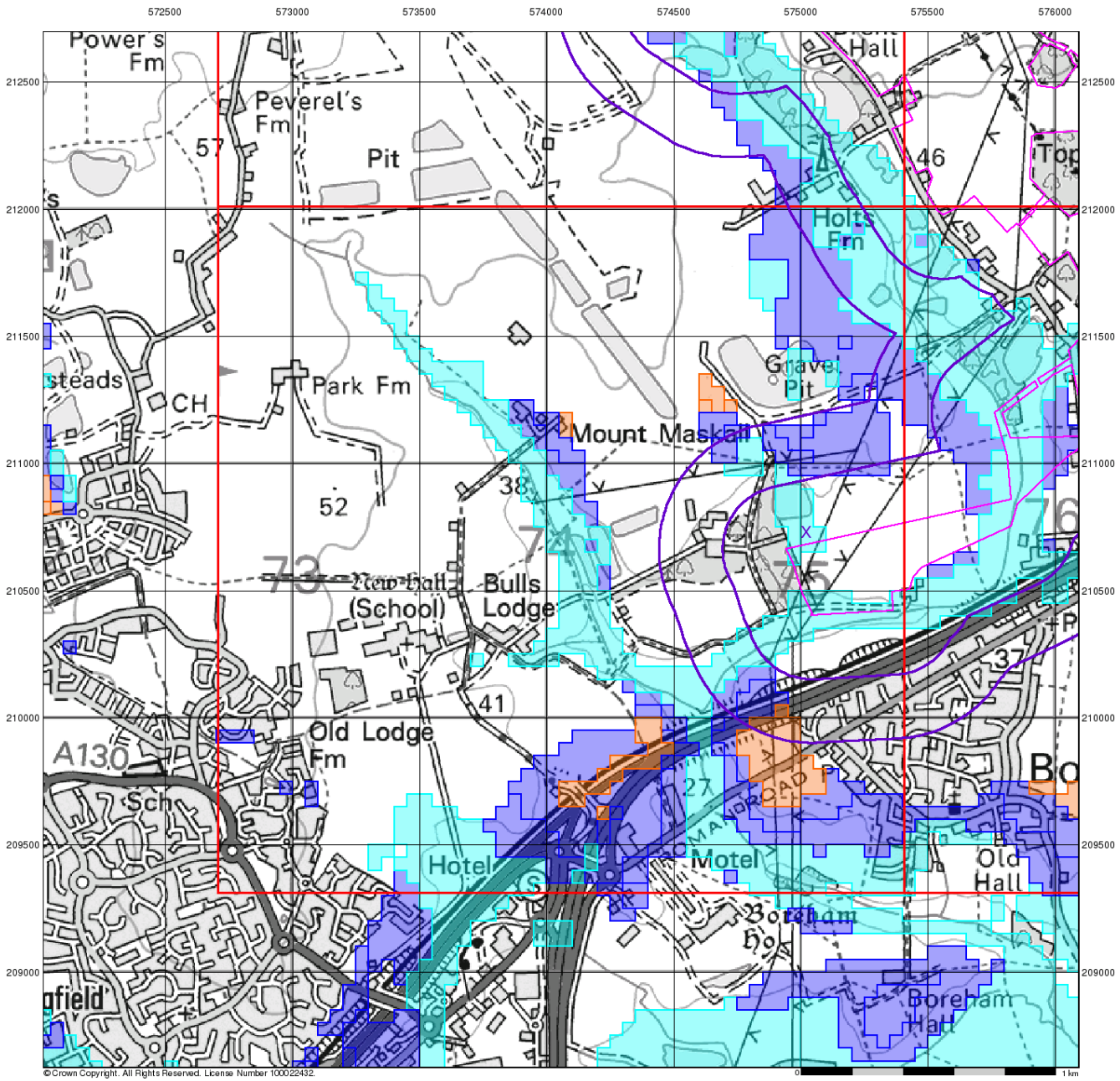

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BGS Flood GFS Data

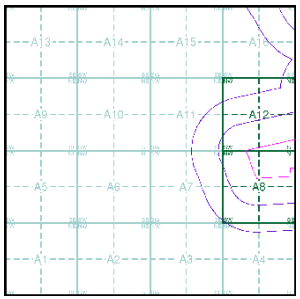
General

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

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



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Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

Landmark INFORMATION GROUP

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

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
274546457_1_1

Customer Reference:
60640215

National Grid Reference:
575020, 210730

Slice:
A

Site Area (Ha):
473.19

Search Buffer (m):
500

Site Details:
Longfield

Client Details:
MRS K Bruce
Aecom Infrastructure & Environment UK Ltd
2nd Floor, St Georges House
5 St Georges Road
London
SW19 4DR

Envirocheck®
LANDMARK INFORMATION GROUP

Contents

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.
In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Report Version v53.0

Envirocheck®
LANDMARK INFORMATION GROUP*

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m (*up to 1000m)
Agency & Hydrological				
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes
Contaminated Land Register Entries and Notices				
Discharge Consents	pg 2		1	2
Prosecutions Relating to Controlled Waters			n/a	n/a
Enforcement and Prohibition Notices				
Integrated Pollution Controls				
Integrated Pollution Prevention And Control				
Local Authority Integrated Pollution Prevention And Control				
Local Authority Pollution Prevention and Controls	pg 3		1	1
Local Authority Pollution Prevention and Control Enforcements				
Nearest Surface Water Feature	pg 3		Yes	
Pollution Incidents to Controlled Waters				
Prosecutions Relating to Authorised Processes				
Registered Radioactive Substances				
River Quality				
River Quality Biology Sampling Points				
River Quality Chemistry Sampling Points				
Substantiated Pollution Incident Register				
Water Abstractions	pg 3		7	3 (*15)
Water Industry Act Referrals				
Groundwater Vulnerability Map	pg 9	Yes	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a
Bedrock Aquifer Designations	pg 13	Yes	n/a	n/a
Superficial Aquifer Designations	pg 13	Yes	n/a	n/a
Source Protection Zones				
Extreme Flooding from Rivers or Sea without Defences	pg 14	Yes		n/a
Flooding from Rivers or Sea without Defences	pg 14	Yes		n/a
Areas Benefiting from Flood Defences				n/a
Flood Water Storage Areas				n/a
Flood Defences				n/a
OS Water Network Lines	pg 14		16	4

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m (*up to 1000m)
Waste				
BGS Recorded Landfill Sites				
Historical Landfill Sites				
Integrated Pollution Control Registered Waste Sites				
Licensed Waste Management Facilities (Landfill Boundaries)	pg 17			1
Licensed Waste Management Facilities (Locations)	pg 17			1
Local Authority Landfill Coverage	pg 17	2	n/a	n/a
Local Authority Recorded Landfill Sites				
Potentially Infilled Land (Non-Water)				
Potentially Infilled Land (Water)				
Registered Landfill Sites				
Registered Waste Transfer Sites				
Registered Waste Treatment or Disposal Sites				
Hazardous Substances				
Control of Major Accident Hazards Sites (COMAH)				
Explosive Sites				
Notification of Installations Handling Hazardous Substances (NIHHS)				
Planning Hazardous Substance Consents				
Planning Hazardous Substance Enforcements				

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m (*up to 1000m)
Geological				
BGS 1:625,000 Solid Geology	pg 18	Yes	n/a	n/a
BGS Estimated Soil Chemistry	pg 18	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 19		2	5
BGS Urban Soil Chemistry				
BGS Urban Soil Chemistry Averages				
CBSCB Compensation District			n/a	n/a
Coal Mining Affected Areas			n/a	n/a
Mining Instability			n/a	n/a
Man-Made Mining Cavities				
Natural Cavities				
Non Coal Mining Areas of Great Britain				n/a
Potential for Collapsible Ground Stability Hazards	pg 21	Yes	Yes	n/a
Potential for Compressible Ground Stability Hazards	pg 21	Yes	Yes	n/a
Potential for Ground Dissolution Stability Hazards				n/a
Potential for Landslide Ground Stability Hazards	pg 21	Yes		n/a
Potential for Running Sand Ground Stability Hazards	pg 21	Yes	Yes	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 22	Yes	Yes	n/a
Radon Potential - Radon Affected Areas			n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a
Industrial Land Use				
Contemporary Trade Directory Entries	pg 24			15
Fuel Station Entries				
Points of Interest - Commercial Services				
Points of Interest - Education and Health				
Points of Interest - Manufacturing and Production	pg 25		1	5
Points of Interest - Public Infrastructure				
Points of Interest - Recreational and Environmental	pg 25			1
Gas Pipelines				
Underground Electrical Cables	pg 25	4		

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m (*up to 1000m)
Sensitive Land Use				
Ancient Woodland	pg 27	1		
Areas of Adopted Green Belt				
Areas of Unadopted Green Belt				
Areas of Outstanding Natural Beauty				
Environmentally Sensitive Areas				
Forest Parks				
Local Nature Reserves				
Marine Nature Reserves				
National Nature Reserves				
National Parks				
Nitrate Sensitive Areas				
Nitrate Vulnerable Zones	pg 27	2		
Ramsar Sites				
Sites of Special Scientific Interest				
Special Areas of Conservation				
Special Protection Areas				
World Heritage Sites				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12SW (W)	0	1	575000 210733
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(E)	0	1	575600 210650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (NE)	0	1	575400 211150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(E)	0	1	575950 210900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(N)	0	1	575000 212200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NW (S)	0	1	575022 210500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12SW (S)	0	1	575022 210733
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(E)	3	1	575500 210600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NW (S)	3	1	575000 210500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	6	1	574750 212600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	98	1	575450 211850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	102	1	574550 212650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(E)	136	1	575950 210700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(NE)	156	1	575650 211750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	176	1	574650 212500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SW (N)	193	1	575022 210950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	206	1	574750 212350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SW (S)	247	1	574900 210200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SW (N)	269	1	575000 210950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A16NE (N)	271	1	575200 211900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SW (S)	290	1	574900 210150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12SW (NW)	302	1	574850 210950

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NW (N)	307	1	575022 211000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	329	1	575022 212100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A16NE (N)	338	1	575150 211850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A16SW (N)	356	1	575000 211500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8SW (S)	364	1	574950 210050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NW (N)	366	1	575000 211050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NW (NW)	388	1	574750 211000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NW (N)	404	1	575022 211100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8SW (S)	405	1	575000 210000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NW (N)	442	1	575050 211150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SW (S)	470	1	574800 210000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (N)	474	1	575150 211250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11NE (NW)	500	1	574700 211100
1	**Discharge Consents** Operator: Co-Partnership Farms Ltd. Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Brickhouse Farm, Boreham, Essex, Cm4 0pe Authority: Environment Agency, Anglian Region Catchment Area: Not Supplied Reference: Pr2nfe04159 Permit Version: 1 Effective Date: 10th September 1959 Issued Date: 10th September 1959 Revocation Date: 5th May 1992 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Boreham Brook **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A8NE (SE)	44	2	575400 210400
2	**Discharge Consents** Operator: Rmc Aggregates (Greater London) Property Type: MINERAL/GRAVEL EXTRACTION/QUARRYING Location: Rmc Aggregates Waltham Road, Boreham, Chelmsford, Essex Authority: Environment Agency, Anglian Region Catchment Area: Lower River Chelmer (Boreham) Reference: Pr2nfe21166 Permit Version: 2 Effective Date: 2nd August 1993 Issued Date: 2nd August 1993 Revocation Date: 9th June 2005 Discharge Type: Miscellaneous Discharges - Mine / Groundwater As Raised Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Boreham Brook **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A12NE (NE)	474	2	575300 211300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	**Discharge Consents** Operator: St Albans Sand & Gravel Property Type: MINERAL/GRAVEL EXTRACTION/QUARRYING Location: Rmc Aggregates Waltham Road, Boreham, Chelmsford, Essex Authority: Environment Agency, Anglian Region Catchment Area: Not Supplied Reference: Pr2nfe21166 Permit Version: 1 Effective Date: 14th July 1966 Issued Date: 14th July 1966 Revocation Date: 1st August 1993 Discharge Type: Miscellaneous Discharges - Mine / Groundwater As Raised Discharge Environment: Freshwater Stream/River Receiving Water: Trib Boreham Brook **Status:** **Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A12NE (NE)	474	2	575300 211300
3	**Local Authority Pollution Prevention and Controls** Name: Hanson Aggregates Location: Bulls Lodge Quarry, Generals Lane, Boreham, Chelmsford, Cm3 3hr Authority: Chelmsford Borough Council, Environmental Health Department Permit Reference: EPR/026 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG3/15 Mineral drying and roadstone coating processes **Status:** **Permitted** Positional Accuracy: Manually positioned to the address or location	A12SW (W)	149	3	574867 210791
4	**Local Authority Pollution Prevention and Controls** Name: Hanson Quarry Products Europe Ltd Location: Bulls Lodge Quarry, Generals Lane, Boreham, CHELMSFORD, Essex, CM3 3HR Authority: Chelmsford Borough Council, Environmental Health Department Permit Reference: Ppc20 Dated: 10th February 2000 Process Type: Local Authority Pollution Prevention and Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status:** **Permitted** Positional Accuracy: Located by supplier to within 10m	A11SE (NW)	322	3	574706 210882
	Nearest Surface Water Feature	A8NW (S)	20	-	575017 210420
5	**Water Abstractions** Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 103 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 13th August 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8SW (S)	111	2	575000 210300
5	**Water Abstractions** Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 102 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 2nd July 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SW (S)	111	2	575000 210300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Water Abstractions** Operator: T M C Pioneer Aggregates Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 100 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 1st January 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SW (S)	111	2	575000 210300
6	**Water Abstractions** Operator: Lord Rayleigh'S Farms Ltd Licence Number: 8/37/36/*G/0036 Permit Version: 100 Location: Gravel Pit,Stocks Farm,Boreham Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A16NE (N)	115	2	575400 212000
7	**Water Abstractions** Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 103 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 13th August 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	155	2	574800 210600
7	**Water Abstractions** Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 102 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 2nd July 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	155	2	574800 210600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Water Abstractions** Operator: T M C Pioneer Aggregates Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 100 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 1st January 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	155	2	574800 210600
8	**Water Abstractions** Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 103 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 13th August 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	397	2	574700 210200
8	**Water Abstractions** Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 102 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 2nd July 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	397	2	574700 210200
8	**Water Abstractions** Operator: T M C Pioneer Aggregates Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 100 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 1st January 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	397	2	574700 210200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 103 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 13th August 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	598	2	574600 210000
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0054 Permit Version: 102 Location: Boreham Brook At Boreham Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 13th August 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	598	2	574600 210000
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 102 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 2nd July 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	598	2	574600 210000
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0054 Permit Version: 101 Location: Boreham Brook At Boreham Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st July 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	598	2	574600 210000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: T M C Pioneer Aggregates Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 100 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 1st January 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	598	2	574600 210000
	Water Abstractions Operator: T M C Pioneer Aggregates Ltd Licence Number: 8/37/36/*S/0054 Permit Version: 100 Location: Boreham Brook At Boreham Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st January 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	598	2	574600 210000
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 103 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 13th August 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A11NE (NW)	724	2	574600 211300
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 102 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 2nd July 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A11NE (NW)	724	2	574600 211300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: T M C Pioneer Aggregates Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 100 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 1st January 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A11NE (NW)	724	2	574600 211300
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 103 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 13th August 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7SW (SW)	857	2	574200 210200
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 102 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 2nd July 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SW (SW)	857	2	574200 210200
	Water Abstractions Operator: T M C Pioneer Aggregates Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 100 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 1st January 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SW (SW)	857	2	574200 210200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 103 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 13th August 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A10SE (W)	952	2	574000 210800
	Water Abstractions Operator: Hanson Quarry Products Europe Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 102 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 2nd July 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10SE (W)	952	2	574000 210800
	Water Abstractions Operator: T M C Pioneer Aggregates Ltd Licence Number: 8/37/36/*S/0013 Permit Version: 100 Location: Tributary Of River Chelmer Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 March Authorised End: 31 October Permit Start Date: 1st January 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10SE (W)	952	2	574000 210800
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	A12SW (SW)	0	4	574938 210698

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	A12SW (W)	0	4	575000 210733
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	A12SW (NE)	0	4	575064 210752
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	A12SW (S)	0	4	575022 210733
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	A8NW (S)	0	4	575051 210416

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: High	(E)	0	4	576000 210945
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	(NE)	0	4	575748 211615
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	A12NW (N)	0	4	575000 211157
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	(E)	0	4	575867 211000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: Low	A16NW (N)	0	4	575000 212000
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: Low	(N)	0	4	575000 212239
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: High	(N)	0	4	575470 212000
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: High	(NE)	0	4	576000 212000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	(E)	0	4	576055 211000
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	(E)	0	4	576000 211000
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: High	(NE)	0	4	575964 212376
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: High	(NE)	0	4	576000 212357
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	A12SW (W)	0	4	575000 210733
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	A12SW (S)	0	4	575022 210733
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A12SW (SW)	0	4	574938 210698

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	(E)	0	4	575953 210781
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A12SW (NE)	0	4	575064 210752
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A12SW (W)	0	4	575000 210733
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A12SW (S)	0	4	575022 210733
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	(N)	0	4	575000 212239
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A8NW (S)	0	4	575051 210416
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - B	(SE)	0	4	575696 210400
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - B	(NE)	0	4	575964 212376
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A8NE (S)	0	2	575080 210435
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A8NE (S)	0	2	575075 210430
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
9	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 74.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8NW (S)	17	5	575018 210419
10	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 336.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8NW (SW)	20	5	574865 210626
11	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 455.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8NW (S)	36	5	575067 210356
12	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 188.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8NW (S)	53	5	575045 210350

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 158.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (W)	101	5	574843 210738
14	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 13.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (NW)	129	5	574915 210788
15	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 7.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (NW)	134	5	574904 210795
16	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 66.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (NW)	139	5	574904 210795
17	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 83.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (NW)	182	5	574846 210817
18	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 305.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A16NE (N)	188	5	575327 211948
19	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 52.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (NW)	194	5	574928 210857
20	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 98.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (NW)	194	5	574928 210857
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 560.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	(NE)	202	5	575533 211485

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A16NE (N)	203	5	575332 211942
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 165.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8SW (S)	206	5	574879 210278
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 16.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (N)	243	5	575001 210924
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 157.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (N)	259	5	574999 210940
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 317.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A12SW (NW)	336	5	574847 210985
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8SW (SW)	369	5	574735 210198
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 160.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	A8SW (SW)	373	5	574732 210196

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
29	**Licensed Waste Management Facilities (Landfill Boundaries)** Name: Great Holts Farm Licence Number: 70269 Location: Great Holts Farm, Waltham Road, Boreham, Chelmsford, Essex, CM3 3AZ Licence Holder: Cemex U K Materials Limited Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Landfills Taking Non-biodegradeable Wastes (Not Construction) Max Input Rate: Not Supplied **Licence Status: Closure** Issued: 13th April 1984 Positional Accuracy: Positioned by the supplier Boundary Accuracy: As Supplied	A16SW (N)	275	2	574917 211554
30	**Licensed Waste Management Facilities (Locations)** Licence Number: 402740 Location: Generals Lane, Boreham, Chelmsford, Essex, CM3 3HR Operator Name: Eurovia Infrastructure Limited Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Treatment of waste to produce soil <75,000 tpy **Licence Status: Issued** Issued: 30th October 2015 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A11SE (W)	443	2	574499 210668
	Local Authority Landfill Coverage Name: Chelmsford Borough Council - Has no landfill data to supply		0	3	575022 210733
	Local Authority Landfill Coverage Name: Essex County Council - Has supplied landfill data		0	6	575022 210733

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Thames Group	A12SW (S)	0	1	575022 210733
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A12SW (S)	0	1	575022 210733
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A8NW (S)	0	1	575000 210523
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12SW (NE)	0	1	575064 210752
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A8NW (S)	0	1	575016 210523
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	(E)	0	1	575906 210686
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A8NE (S)	48	1	575089 210346

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A8SW (S)	248	1	574911 210192
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A12SW (NW)	305	1	574844 210952
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A16SW (N)	458	1	575000 211536
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A12NW (N)	462	1	575003 211225
31	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224160 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12SW (SW)	28	1	575005 210705
32	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224159 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12SW (NW)	190	1	574955 210860

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	**BGS Recorded Mineral Sites** Site Name: Bull'S Lodge Quarry Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224171 Type: Opencast **Status: Dormant** Operator: Hanson Aggregates Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A11SE (NW)	336	1	574695 210890
34	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224157 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12NE (N)	370	1	575095 211075
35	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224156 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12NW (N)	392	1	574925 211060
36	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224158 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12NE (NE)	394	1	575255 211135
37	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224155 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A11NE (NW)	466	1	574725 211075
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575051 210416
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	44	1	575000 210390
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A8NE (S)	48	1	575089 210346
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	(NE)	174	1	575456 211544
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575051 210416
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (NE)	0	1	575064 210752
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (SW)	0	1	574938 210698
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	44	1	575000 210390
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	(NE)	136	1	575535 211471
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575051 210416
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	44	1	575000 210390

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(NE)	174	1	575456 211544
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A12SW (SW)	0	1	574938 210698
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A12SW (NE)	0	1	575064 210752
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575055 210471
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A16SE (N)	0	1	575239 211600
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575000 210523
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575016 210523
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	27	1	575000 210438
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8NE (S)	48	1	575149 210356
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8SW (S)	129	1	575000 210281
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12SW (N)	151	1	575000 210830
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12SW (N)	151	1	575000 210830
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A16SW (N)	189	1	575000 211536
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A8SW (S)	193	1	574937 210241
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A8NW (SW)	206	1	574836 210367
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A8SW (S)	248	1	574911 210192
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575002 210733
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575002 210733
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	**Contemporary Trade Directory Entries** Name: Mid Essex Gravel Location: Bulls Lodge Quarry, Generals Lane, Chelmsford, CM3 3HR Classification: Sand, Gravel & Other Aggregates **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SE (W)	326	-	574679 210855
38	**Contemporary Trade Directory Entries** Name: Essex Aggregate Ltd Location: Bulls Lodge Quarry, Generals Lane, Chelmsford, CM3 3HR Classification: Sand, Gravel & Other Aggregates **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SE (W)	326	-	574679 210855
39	**Contemporary Trade Directory Entries** Name: The Concrete Plant Location: Bulls Lodge Quarry, Generals Lane, Boreham, Chelmsford, CM3 3HR Classification: Concrete & Mortar Ready Mixed **Status: Active** Positional Accuracy: Automatically positioned to the address	A11SE (W)	342	-	574600 210691
39	**Contemporary Trade Directory Entries** Name: Hanson Aggregates Location: Bulls Lodge Quarry, Generals Lane, Boreham, Chelmsford, CM3 3HR Classification: Sand, Gravel & Other Aggregates **Status: Active** Positional Accuracy: Automatically positioned to the address	A11SE (W)	342	-	574600 210691
39	**Contemporary Trade Directory Entries** Name: Hanson Location: Bulls Lodge Quarry, Generals Lane, Boreham, Chelmsford, CM3 3HR Classification: Concrete Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A11SE (W)	342	-	574600 210691
40	**Contemporary Trade Directory Entries** Name: Extra Clean Location: 43, Villiers Place, Boreham, Chelmsford, CM3 3JW Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	350	-	575065 210054
40	**Contemporary Trade Directory Entries** Name: Wicks Refrigeration Location: 68, Villiers Place, Boreham, Chelmsford, CM3 3JN Classification: Refrigeration Equipment - Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SE (S)	373	-	575110 210033
41	**Contemporary Trade Directory Entries** Name: Chelmsford Cleaning Services Location: 15, Villiers Place, Boreham, Chelmsford, CM3 3JW Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	408	-	575044 209995
42	**Contemporary Trade Directory Entries** Name: Topps Cleaning Location: 23, Cromwell Close, Boreham, Chelmsford, CM3 3JU Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	418	-	574977 209990
43	**Contemporary Trade Directory Entries** Name: Nicks Tyres Location: New Build, Main Road, Boreham, Chelmsford, CM3 3JB Classification: Tyre Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SE (SE)	419	-	575334 209999
44	**Contemporary Trade Directory Entries** Name: Andmore Location: 2, Oak Cottages, Boreham, Chelmsford, CM3 3HZ Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A4NE (S)	461	-	575152 209947
44	**Contemporary Trade Directory Entries** Name: Creases Location: Main Road, Boreham, Chelmsford, CM3 3HE Classification: Ironing & Home Laundry Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A4NE (S)	481	-	575124 209926

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
44	**Contemporary Trade Directory Entries** Name: Creases Location: Main Road, Boreham, Chelmsford, CM3 3HE Classification: Ironing & Home Laundry Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A4NE (S)	482	-	575125 209925
45	**Contemporary Trade Directory Entries** Name: Nick'S Tyre Services Ltd Location: Main Road, Boreham, Chelmsford, CM3 3JB Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A4NE (S)	492	-	575177 209918
45	**Contemporary Trade Directory Entries** Name: Wipeout Location: Salishan, Main Road, Boreham, Chelmsford, CM3 3JB Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A4NE (S)	498	-	575199 209913
46	**Points of Interest - Manufacturing and Production** Name: Bulls Lodge Quarry Location: CM3 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A8NW (W)	210	7	574737 210616
47	**Points of Interest - Manufacturing and Production** Name: Hanson Aggregates Location: Bulls Lodge Quarry, Generals Lane, Chelmsford, CM3 3HR Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A11SE (W)	326	7	574679 210855
47	**Points of Interest - Manufacturing and Production** Name: Sand and Gravel Pit Location: CM3 Category: Extractive Industries Class Code: Sand, Gravel and Clay Extraction and Merchants Positional Accuracy: Positioned to an adjacent address or location	A11SE (W)	354	7	574631 210832
48	**Points of Interest - Manufacturing and Production** Name: Tank Location: CM3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A11SE (NW)	418	7	574620 210929
49	**Points of Interest - Manufacturing and Production** Name: Sand and Gravel Pit Location: CM3 Category: Extractive Industries Class Code: Sand, Gravel and Clay Extraction and Merchants Positional Accuracy: Positioned to an adjacent address or location	A16NW (N)	466	7	574988 212006
50	**Points of Interest - Manufacturing and Production** Name: Workings (Dis) Location: CM3 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A16SE (N)	474	7	575234 211633
51	**Points of Interest - Recreational and Environmental** Name: Playground Location: Holmans, CM3 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A4NE (S)	488	7	575270 209927
52	**Underground Electrical Cables** Unique Feature Identifier: 10054720 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 11th March 2019	A8NE (SE)	0	8	575210 210471

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
53	**Underground Electrical Cables** Unique Feature Identifier: 10054721 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 11th March 2019	A8NE (SE)	0	8	575213 210471
54	**Underground Electrical Cables** Unique Feature Identifier: 10054718 Cable Status: Planned Cable Type: Alternating Current Record Last Updated: 11th March 2019	A8NE (SE)	0	8	575185 210432
55	**Underground Electrical Cables** Unique Feature Identifier: 10054719 Cable Status: Commissioned Cable Type: Alternating Current Record Last Updated: 11th March 2019	A8NE (SE)	0	8	575184 210432

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
56	**Ancient Woodland** Name: Toppinghoehall Wood Reference: 1116683 Area(m²): 142065.33 Type: Ancient and Semi-Natural Woodland	(NE)	0	9	576054 211978
57	**Nitrate Vulnerable Zones** Name: Sandlings And Chelmsford Description: Groundwater Source: Environment Agency, Head Office	A12SW (S)	0	4	575022 210733
58	**Nitrate Vulnerable Zones** Name: River Chelmer Nvz Description: Surface Water Source: Environment Agency, Head Office	A12SW (S)	0	4	575022 210733

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Environment Agency - Head Office	June 2020	Annually
Chelmsford Borough Council - Environmental Health Department	March 2015	Annual Rolling Update
Discharge Consents		
Environment Agency - Anglian Region	January 2021	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Anglian Region	March 2013	Annual Rolling Update
Integrated Pollution Controls		
Environment Agency - Anglian Region	October 2008	Variable
Integrated Pollution Prevention And Control		
Environment Agency - Anglian Region	January 2021	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Chelmsford Borough Council - Environmental Health Department	October 2014	Variable
Local Authority Pollution Prevention and Controls		
Chelmsford Borough Council - Environmental Health Department	October 2014	Not Applicable
Local Authority Pollution Prevention and Control Enforcements		
Chelmsford Borough Council - Environmental Health Department	October 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	October 2020	
Pollution Incidents to Controlled Waters		
Environment Agency - Anglian Region	September 1999	Not Applicable
Prosecutions Relating to Authorised Processes		
Environment Agency - Anglian Region	March 2013	Annual Rolling Update
Prosecutions Relating to Controlled Waters		
Environment Agency - Anglian Region	March 2013	Annual Rolling Update
Registered Radioactive Substances		
Environment Agency - Anglian Region	June 2016	
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register		
Environment Agency - Anglian Region - Eastern Area	January 2021	Quarterly
Water Abstractions		
Environment Agency - Anglian Region	January 2021	Quarterly
Water Industry Act Referrals		
Environment Agency - Anglian Region	October 2017	Quarterly
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Source Protection Zones		
Environment Agency - Head Office	October 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	September 2020	Quarterly
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	September 2020	Quarterly

Data Currency

Agency & Hydrological	Version	Update Cycle
Areas Benefiting from Flood Defences Environment Agency - Head Office	September 2020	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	September 2020	Quarterly
Flood Defences Environment Agency - Head Office	September 2020	Quarterly
OS Water Network Lines Ordnance Survey	September 2020	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water Suitability Environment Agency - Head Office	October 2013	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually
Waste	**Version**	**Update Cycle**
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Environment Agency - Head Office	October 2019	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Anglian Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - Anglian Region - Eastern Area	January 2021	Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - Anglian Region - Eastern Area	January 2021	Quarterly
Local Authority Landfill Coverage Chelmsford Borough Council - Environmental Health Department Essex County Council	May 2000 May 2000	Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Chelmsford Borough Council - Environmental Health Department Essex County Council	May 2000 November 2004	Not Applicable Not Applicable
Potentially Infilled Land (Non-Water) Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water) Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites Environment Agency - Anglian Region - Eastern Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency - Anglian Region - Eastern Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - Anglian Region - Eastern Area	March 2003	Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements Chelmsford Borough Council Essex County Council	February 2016 February 2016	Variable Variable
Planning Hazardous Substance Consents Chelmsford Borough Council Essex County Council	February 2016 February 2016	Variable Variable
Geological	**Version**	**Update Cycle**
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2020	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually

Data Currency

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	January 2021	Quarterly
Fuel Station Entries Catalist Ltd - Experian	February 2021	Quarterly
Gas Pipelines National Grid	January 2021	
Points of Interest - Commercial Services PointX	March 2021	Quarterly
Points of Interest - Education and Health PointX	March 2021	Quarterly
Points of Interest - Manufacturing and Production PointX	March 2021	Quarterly
Points of Interest - Public Infrastructure PointX	March 2021	Quarterly
Points of Interest - Recreational and Environmental PointX	March 2021	Quarterly
Underground Electrical Cables National Grid	December 2020	

Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural England	February 2021	Bi-Annually
Areas of Adopted Green Belt Chelmsford Borough Council	June 2020	As notified
Areas of Unadopted Green Belt Chelmsford Borough Council	June 2020	As notified
Areas of Outstanding Natural Beauty Natural England	January 2021	Bi-Annually
Environmentally Sensitive Areas Natural England	January 2017	
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	February 2021	Bi-Annually
Marine Nature Reserves Natural England	July 2019	Bi-Annually
National Nature Reserves Natural England	January 2021	Bi-Annually
National Parks Natural England	April 2017	Bi-Annually
Nitrate Sensitive Areas Natural England	April 2016	Not Applicable
Nitrate Vulnerable Zones Environment Agency - Head Office Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	December 2017 October 2015	Bi-Annually
Ramsar Sites Natural England	August 2020	Bi-Annually
Sites of Special Scientific Interest Natural England	February 2021	Bi-Annually
Special Areas of Conservation Natural England	July 2020	Bi-Annually
Special Protection Areas Natural England	February 2021	Bi-Annually

Data Suppliers

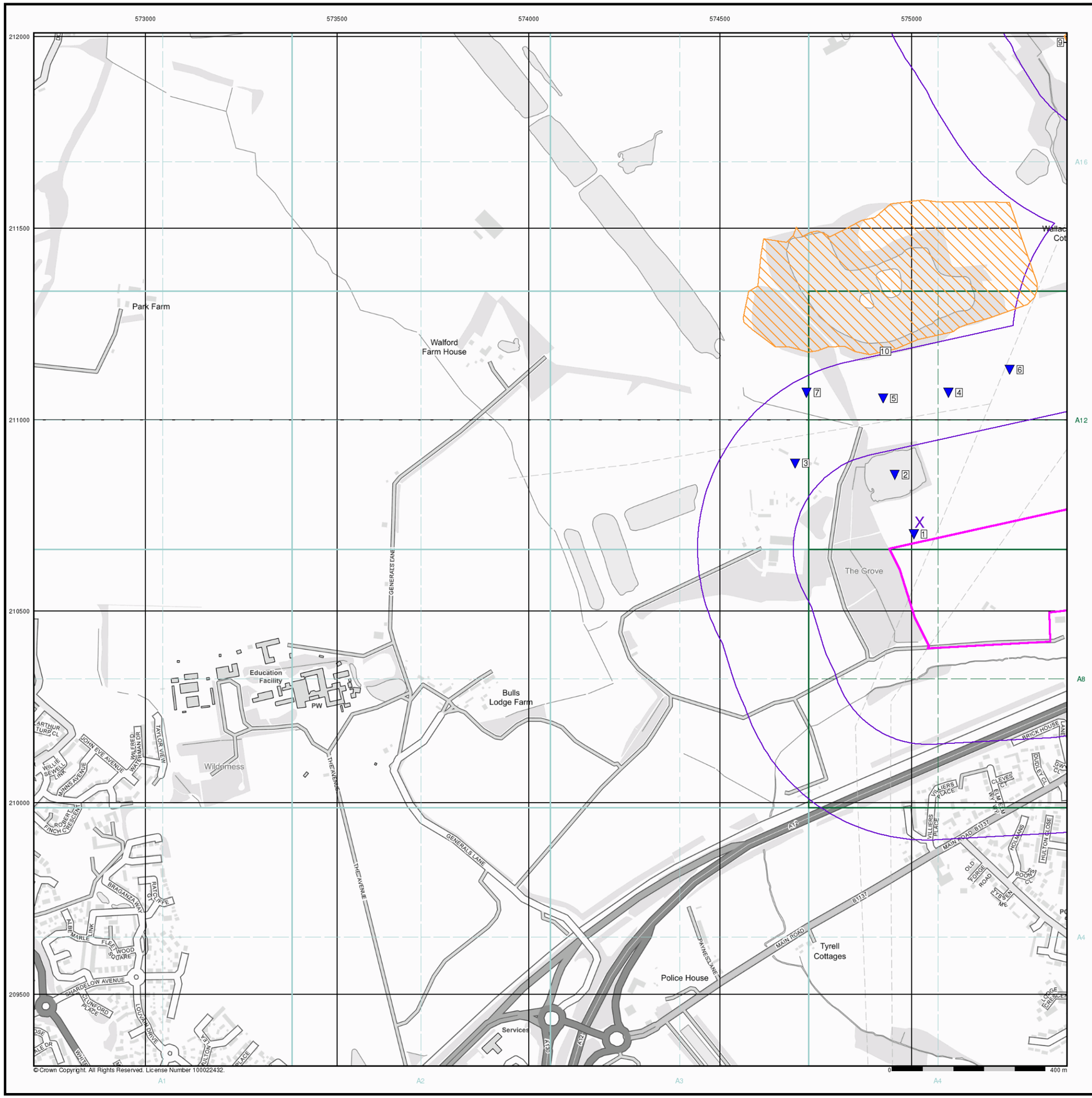
A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Chelmsford Borough Council - Environmental Health Department** Coval Lane, Chelmsford, Essex, CM1 1TJ	Telephone: 01245 606606 Fax: 01245 606606 Email: Environmental.services@chelmsfordbc.gov.uk Website: www.chelmsfordbc.gov.uk
4	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	**Essex County Council** County Hall, Chelmsford, Essex, CM1 1YS	Telephone: 01245 492211 Website: www.essexcc.gov.uk
7	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
8	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9966 Fax: 0844 844 9951 Email: helpdesk@landmark.co.uk Website: www.landmark.co.uk
9	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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



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Historical Land Use Information (1:10,000)

General

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

Several of Type at Location

Potentially Contaminative Industrial Uses (Past Land Uses - Mining)

	Point	Line	Polygon
Air Shafts	◆	—	▨
Disturbed Ground	◆	—	▨
General Quarrying	◆	—	▨
Heap, unknown constituents	◆	—	▨
Mineral Railway	◆	—	▨
Mining and Quarrying General	◆	—	▨
Mining of Coal & Lignite	◆	—	▨
Quarrying of Sand and Clay, Operation of Sand and Gravel Pits	◆	—	▨

Historical Land Use

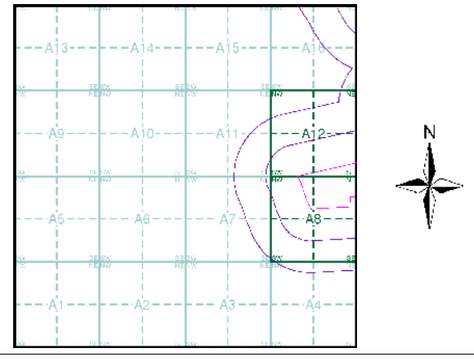
	Point	Line	Polygon
Potentially Infilled Land (Non-Water)	●	- - -	▭
Potentially Infilled Land (Water)	●	- - -	▭
Former Marsh	✠		

Mining Data

Potential Mining Area

BGS Recorded Mineral Site

Mining and Ground Stability - Slice A



Order Details

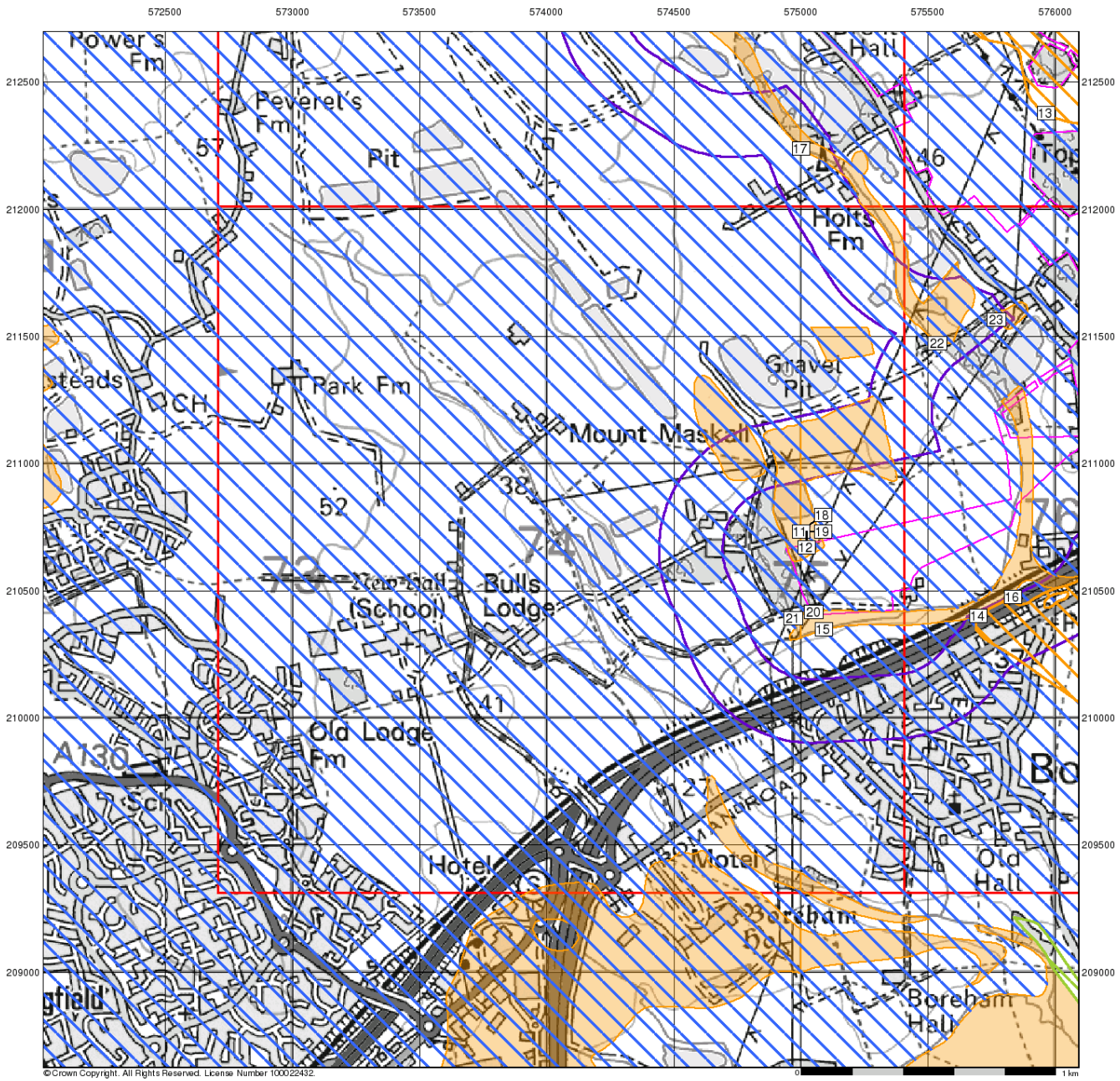
Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

Landmark INFORMATION GROUP

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



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Ground Stability Data (1:50,000)

General

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

Potential for Compressible Ground Stability Hazards

High | Low | Moderate | Very Low

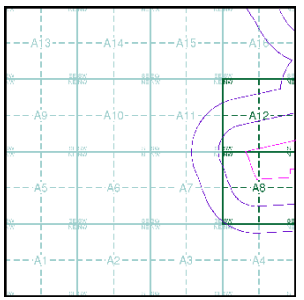
Potential for Collapsible Ground Stability Hazards

High | Low | Moderate | Very Low

Brine Pumping and Salt Mining

	Point	Polygon
Brine Pumping Related Feature	▲	▨
Salt Mining Related Feature	▲	▨

Mining and Ground Stability - Slice A



Order Details

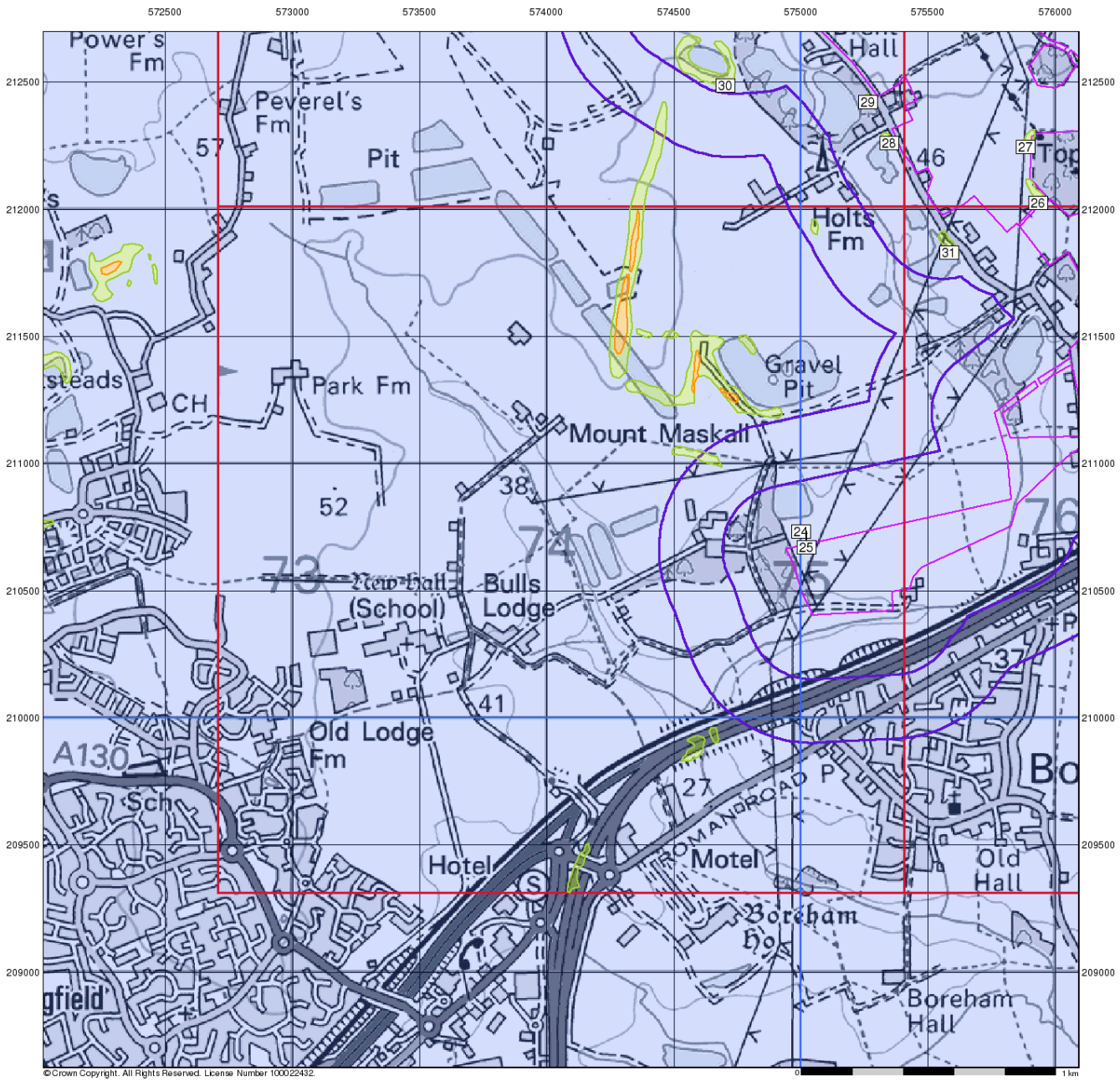
Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

Landmark INFORMATION GROUP

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



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Ground Stability Data (1:50,000)

General

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

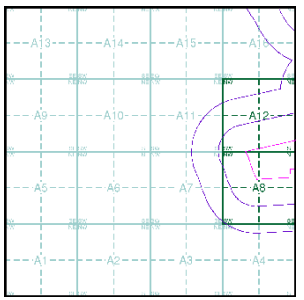
Potential for Landslide Ground Stability Hazards

High | Low | Moderate | Very Low

Potential for Ground Dissolution Stability Hazards

High | Low | Moderate | Very Low

Mining and Ground Stability - Slice A



Order Details

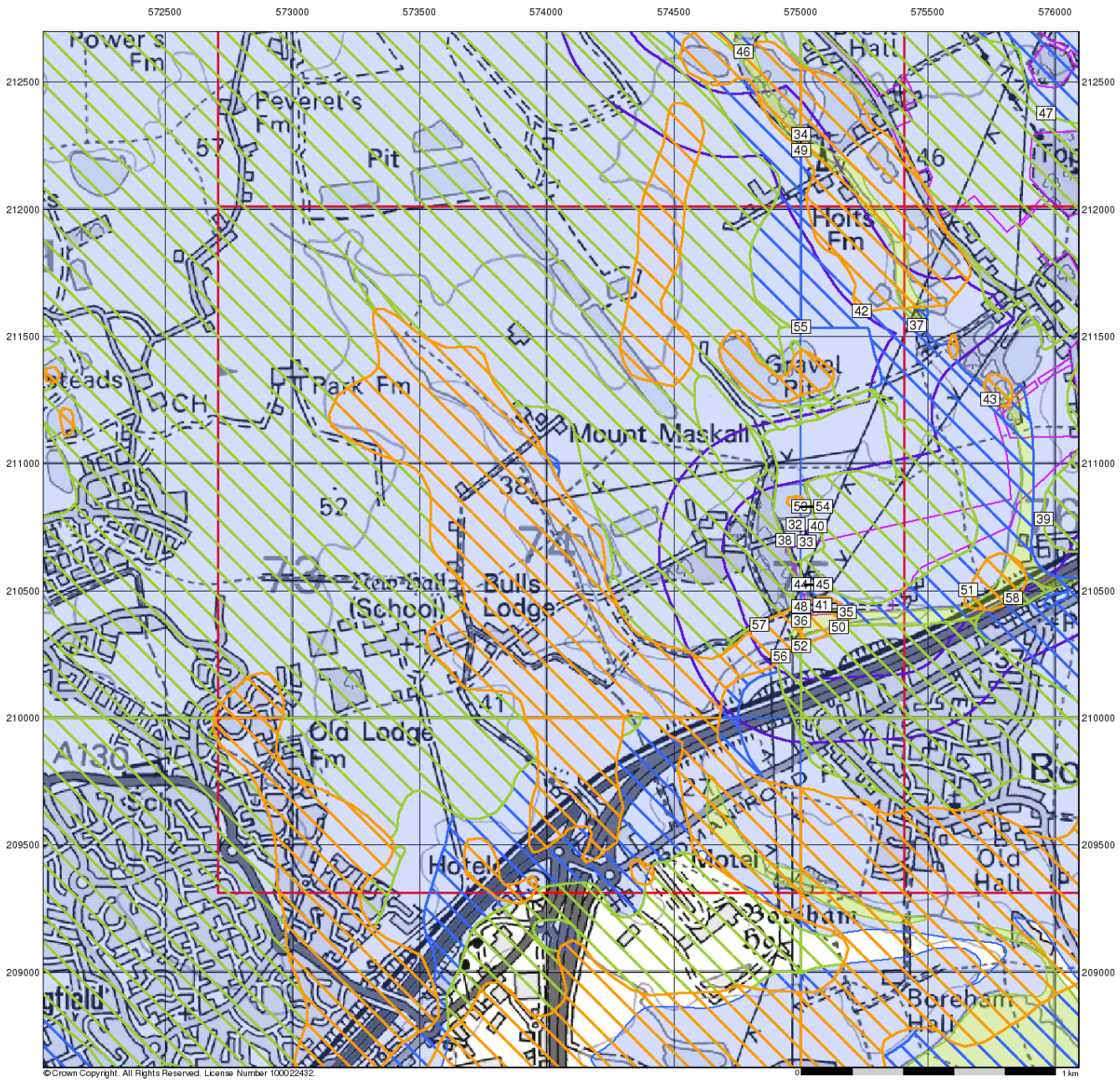
Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

Landmark INFORMATION GROUP

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



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Ground Stability Data (1:50,000)

General

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

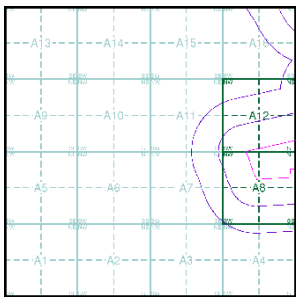
Potential for Running Sand Ground Stability Hazards

High | Low | Moderate | Very Low

Potential for Shrinking or Swelling Clay Ground Stability Hazards

High | Low | Moderate | Very Low

Mining and Ground Stability - Slice A



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

Landmark INFORMATION GROUP

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

Envirocheck® Report:

Mining and Ground Stability Datasheet

Order Details:

Order Number:
274546457_1_1

Customer Reference:
60640215

National Grid Reference:
575020, 210730

Slice:
A

Site Area (Ha):
473.19

Search Buffer (m):
500

Site Details:

Longfield

Client Details:

MRS K Bruce
Aecom Infrastructure & Environment UK Ltd
2nd Floor, St Georges House
5 St Georges Road
London
SW19 4DR

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Contents

Report Version v53.0

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Man Made Mining Cavities				
Mining Instability			n/a	n/a
Natural Cavities				
Non Coal Mining Areas of Great Britain				n/a
Potential Mining Areas				
Historical Land Use Information (1:2,500)				
Extractive Industries or Potential Excavations from 1855-1909 (100m)				n/a
Extractive Industries or Potential Excavations from 1893-1915 (100m)				n/a
Extractive Industries or Potential Excavations from 1906-1937 (100m)				n/a
Extractive Industries or Potential Excavations from 1924-1949 (100m)				n/a
Extractive Industries or Potential Excavations from 1950-1980 (100m)	pg 3	1		n/a
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Potentially Infilled Land (Water)				
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Brine Pumping Related Features				
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Potential for Ground Dissolution Stability Hazards	pg 6	Yes		n/a
Potential for Landslide Ground Stability Hazards	pg 6	Yes	Yes	n/a
Potential for Running Sand Ground Stability Hazards	pg 6	Yes	Yes	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 6	Yes	Yes	n/a
Salt Mining Related Features				

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Summary

Report Version v53.0

Mining and Natural Cavities Data

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224160 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12SW (SW)	28	1	575005 210705
2	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224159 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12SW (NW)	190	1	574955 210860
3	**BGS Recorded Mineral Sites** Site Name: Bull'S Lodge Quarry Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224171 Type: Opencast **Status: Dormant** Operator: Hanson Aggregates Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A11SE (NW)	336	1	574695 210890
4	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224157 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12NE (N)	370	1	575095 211075
5	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224156 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12NW (N)	392	1	574925 211060
6	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224158 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12NE (NE)	394	1	575255 211135

Mining and Natural Cavities Data

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224155 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A11NE (NW)	466	1	574725 211075
	Coal Mining Affected Areas In an area which may not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				

Historical Land Use Information (1:2,500)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	**Extractive Industries or Potential Excavations from 1950-1980** Use: Pond First Map Published Date: 1952 Last Map Published Date: N/A	A8NE (S)	0	-	575098 210424

Historical Land Use Information (1:10,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	**Quarrying of sand & clay, operation of sand & gravel pits** Use: Not Supplied Date of Mapping: 1978	(NE)	35	-	575474 211652
10	**Quarrying of sand & clay, operation of sand & gravel pits** Use: Not Supplied Date of Mapping: 1978	A12NW (N)	458	-	574931 211179

Ground Stability Data (1:50,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	CBSCB Compensation District The site does not fall within the brine compensation area.				
	Brine Subsidence Solution Area The site does not fall within the brine subsidence solution area.				
11	**Potential for Collapsible Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
12	**Potential for Collapsible Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
13	**Potential for Collapsible Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	(NE)	0	1	575964 212376
14	**Potential for Collapsible Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	(SE)	0	1	575696 210400
15	**Potential for Collapsible Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A8NE (S)	48	1	575089 210346
16	**Potential for Collapsible Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	(E)	221	1	575833 210475
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	(N)	0	1	575000 212239
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575051 210416
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	44	1	575000 210390
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	(NE)	174	1	575456 211544
17	**Potential for Compressible Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	(N)	0	1	575000 212239
18	**Potential for Compressible Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
19	**Potential for Compressible Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
20	**Potential for Compressible Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575051 210416
21	**Potential for Compressible Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	44	1	575000 210390
22	**Potential for Compressible Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	(NE)	136	1	575535 211471
23	**Potential for Compressible Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	(NE)	179	1	575769 211565
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (NE)	0	1	575064 210752
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (SW)	0	1	574938 210698

Ground Stability Data (1:50,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
24	**Potential for Landslide Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
25	**Potential for Landslide Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
26	**Potential for Landslide Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(NE)	0	1	575934 212025
27	**Potential for Landslide Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(NE)	0	1	575884 212244
28	**Potential for Landslide Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(N)	17	1	575347 212261
29	**Potential for Landslide Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(N)	26	1	575264 212421
30	**Potential for Landslide Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(N)	63	1	574703 212484
31	**Potential for Landslide Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(NE)	64	1	575582 211829
32	**Potential for Running Sand Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
33	**Potential for Running Sand Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
34	**Potential for Running Sand Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(N)	0	1	575000 212239
35	**Potential for Running Sand Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575051 210416
36	**Potential for Running Sand Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	44	1	575000 210390
37	**Potential for Running Sand Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(NE)	174	1	575456 211544
38	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A12SW (SW)	0	1	574938 210698
39	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(E)	0	1	575953 210781
40	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A12SW (NE)	0	1	575064 210752
41	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575055 210471
42	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A16SE (N)	0	1	575239 211600

Ground Stability Data (1:50,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
43	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	(NE)	0	1	575743 211251
44	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575000 210523
45	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	0	1	575016 210523
46	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	(N)	0	1	574773 212618
47	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	(NE)	0	1	575964 212376
48	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NW (S)	27	1	575000 210438
49	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	(N)	43	1	575000 212231
50	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8NE (S)	48	1	575149 210356
51	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	(E)	76	1	575657 210501
52	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8SW (S)	129	1	575000 210281
53	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12SW (N)	151	1	575000 210830
54	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12SW (N)	151	1	575000 210830
55	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A16SW (N)	189	1	575000 211536
56	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A8SW (S)	193	1	574937 210241
57	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A8NW (SW)	206	1	574836 210367
58	**Potential for Shrinking or Swelling Clay Ground Stability Hazards** Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(E)	222	1	575834 210470
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	(N)	0	1	574802 212637
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	(E)	0	1	575906 210686
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (W)	0	1	575000 210733
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (S)	0	1	575022 210733
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A8SW (S)	248	1	574911 210192

Historical Map List

The following mapping has been analysed for Historical Land Use Information (1:2,500):

1:2,500	Mapsheet	Published Date
Ordnance Survey Plan	TL7409	1952
Ordnance Survey Plan	TL7410	1952
Ordnance Survey Plan	TL7410	1952
Ordnance Survey Plan	TL7411	1952
Ordnance Survey Plan	TL7510	1952
Ordnance Survey Plan	TL7510	1952
Ordnance Survey Plan	TL7511	1953
Ordnance Survey Plan	TL7509	1967

The following mapping has been analysed for Historical Land Use Information (1:10,000):

1:10,560	Mapsheet	Published Date
Essex	044_00	1881
Essex	044_NW	1897
Essex	044_SW	1897
Essex	054_NE	1924
Essex	055_NW	1924
Essex	054_NE	1938
Ordnance Survey Plan	TL70NW	1955
Ordnance Survey Plan	TL71SE	1955
Ordnance Survey Plan	TL71SW	1955
Ordnance Survey Plan	TL70NE	1960
1:10,000	**Mapsheet**	**Published Date**
Ordnance Survey Plan	TL71SE	1978
Ordnance Survey Plan	TL70NE	1983
Ordnance Survey Plan	TL70NW	1990
Ordnance Survey Plan	TL71SW	1993

Data Currency

Mining and Cavities Data	Version	Update Cycle
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2020	Bi-Annually
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Man Made Mining Cavities Stantec UK Ltd	November 2020	Bi-Annually
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Natural Cavities Stantec UK Ltd	November 2020	Bi-Annually
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Historical Land Use Information (1:2,500)	**Version**	**Update Cycle**
Subterranean Features Landmark Information Group Limited	February 2020	Bi-Annually
Ground Stability Data (1:50,000)	**Version**	**Update Cycle**
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Brine Subsidence Solution Area Johnson Poole & Bloomer	December 2020	Annual Rolling Update

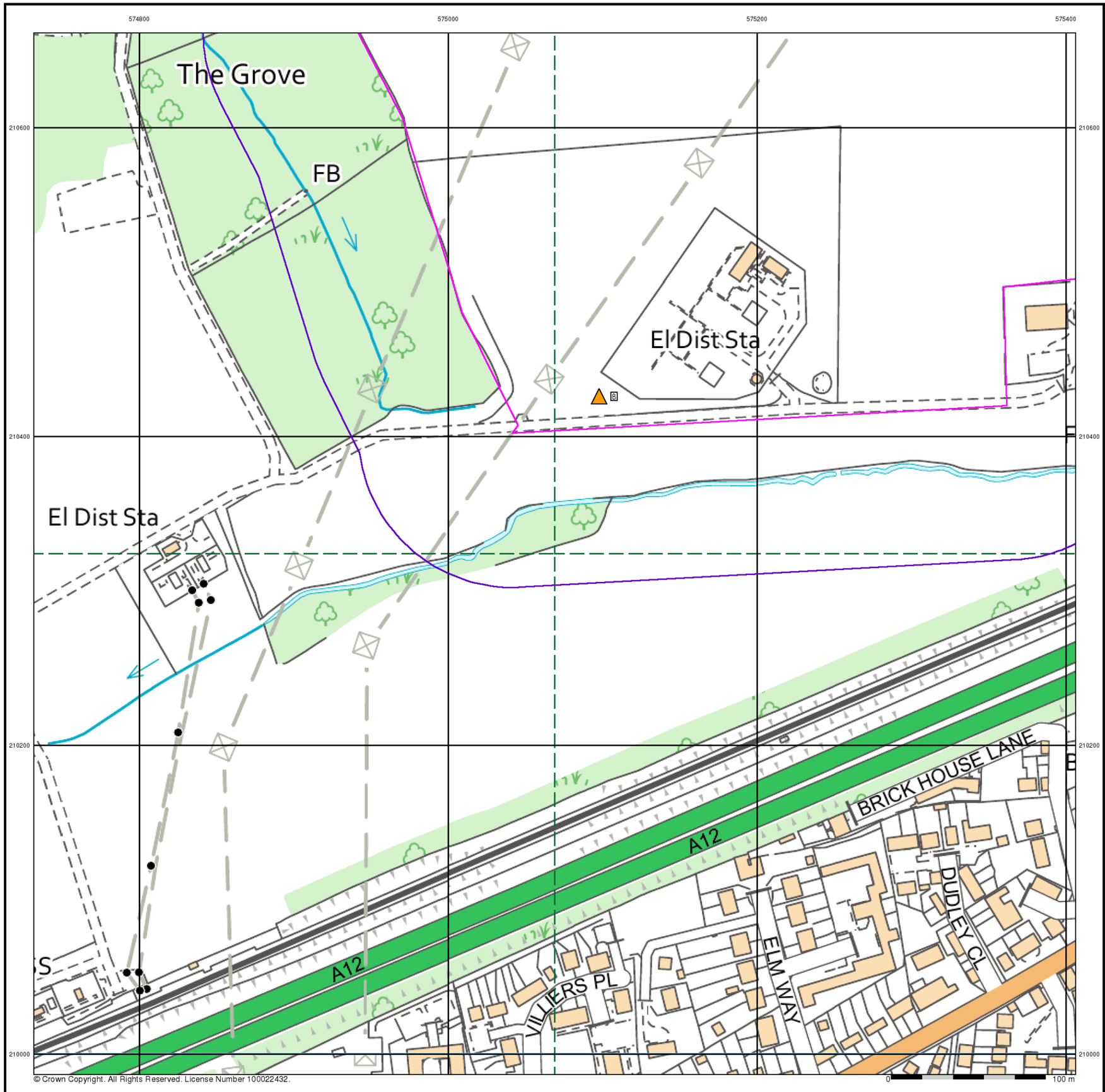
Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
British Geological Survey	British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
The Coal Authority	The Coal Authority
Ove Arup	ARUP
Stantec UK Ltd	Stantec
Wardell Armstrong	wardell armstrong your earth our world
Johnson Poole & Bloomer	JPB

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk



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Historical Land Use Information (1:2,500)

General

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

Several of Type at Location

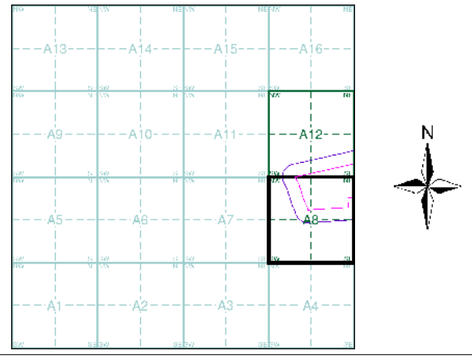
Potentially Contaminative Industrial Uses (Extractive Industries Activity)

	Point	Line	Polygon
Extractive Industries Activity from 1855 - 1909	▲	—	▭
Extractive Industries Activity from 1893 - 1915	▲	—	▨
Extractive Industries Activity from 1906 - 1937	▲	—	▤
Extractive Industries Activity from 1924 - 1949	▲	—	▨
Extractive Industries Activity from 1950 - 1980	▲	—	▥

Subterranean Features

	Point	Line	Polygon
Subterranean Features	▼	- - -	▭

Mining and Ground Stability - Segment A8



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Plot Buffer (m):	100

Site Details

Longfield

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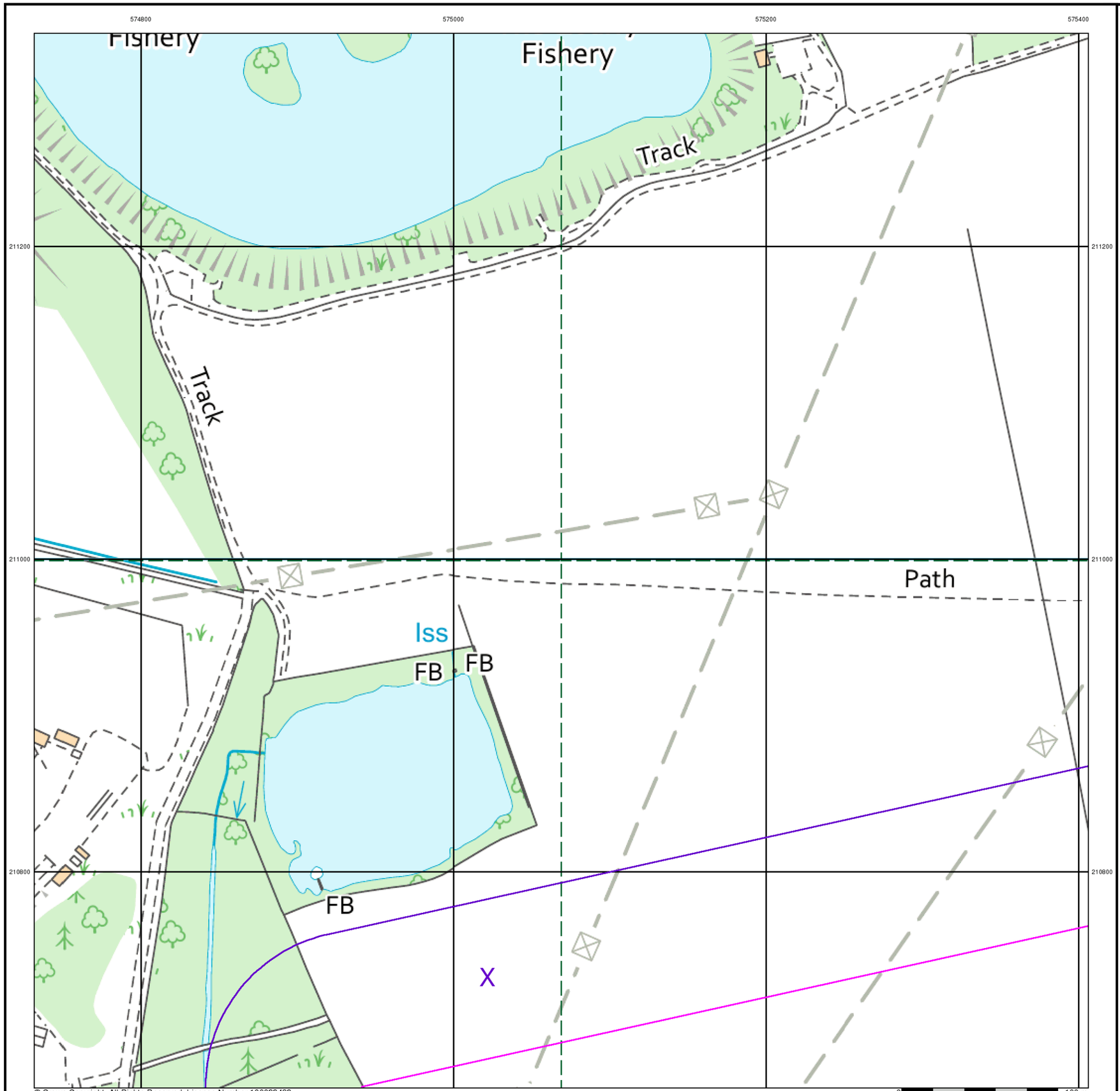
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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Historical Land Use Information (1:2,500)

General

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

Several of Type at Location

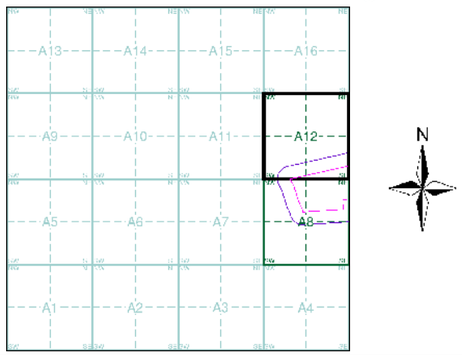
Potentially Contaminative Industrial Uses (Extractive Industries Activity)

	Point	Line	Polygon
Extractive Industries Activity from 1855 - 1909	▲	—	▭
Extractive Industries Activity from 1893 - 1915	▲	—	▨
Extractive Industries Activity from 1906 - 1937	▲	—	▭
Extractive Industries Activity from 1924 - 1949	▲	—	▨
Extractive Industries Activity from 1950 - 1980	▲	—	▥

Subterranean Features

	Point	Line	Polygon
Subterranean Features	▼	- - -	▭

Mining and Ground Stability - Segment A12



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Plot Buffer (m):	100

Site Details

Longfield

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

Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WMGR	Infilled Ground	Artificial Deposit	Not Supplied - Holocene
	WGR	Worked Ground (Undivided)	Void	Not Supplied - Holocene

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	LOFT	Lowestoft Formation	Diamicton	Not Supplied - Anglian
	GFDMP	Glaciofluvial Deposits, Mid Pleistocene	Sand and Gravel	Not Supplied - Cromerian
	GLLMP	Glaciolacustrine Deposits, Mid Pleistocene	Clay and Silt	Not Supplied - Cromerian
	BRK	Brickearth	Clay, Silt and Sand	Not Supplied - Pleistocene
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary
	RTD2	River Terrace Deposits, 2	Sand and Gravel	Not Supplied - Quaternary
	HEAD	Head	Clay and Silt	Not Supplied - Quaternary

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LC	London Clay Formation	Clay, Silt and Sand	Not Supplied - Ypresian

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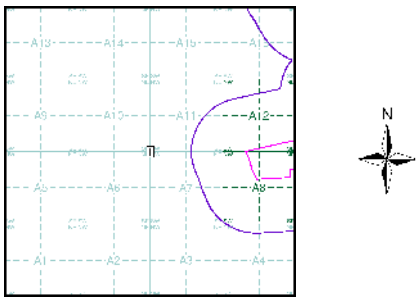
Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	**1**
Map Sheet No:	**241**
Map Name:	**Chelmsford**
Map Date:	**1975**
Bedrock Geology:	**Available**
Superficial Geology:	**Available**
Artificial Geology:	**Available**
Faults:	**Not Supplied**
Landslip:	**Available**
Rock Segments:	**Not Supplied**

Geology 1:50,000 Maps - Slice A



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Site Area (Ha):	473.19
Search Buffer (m):	500

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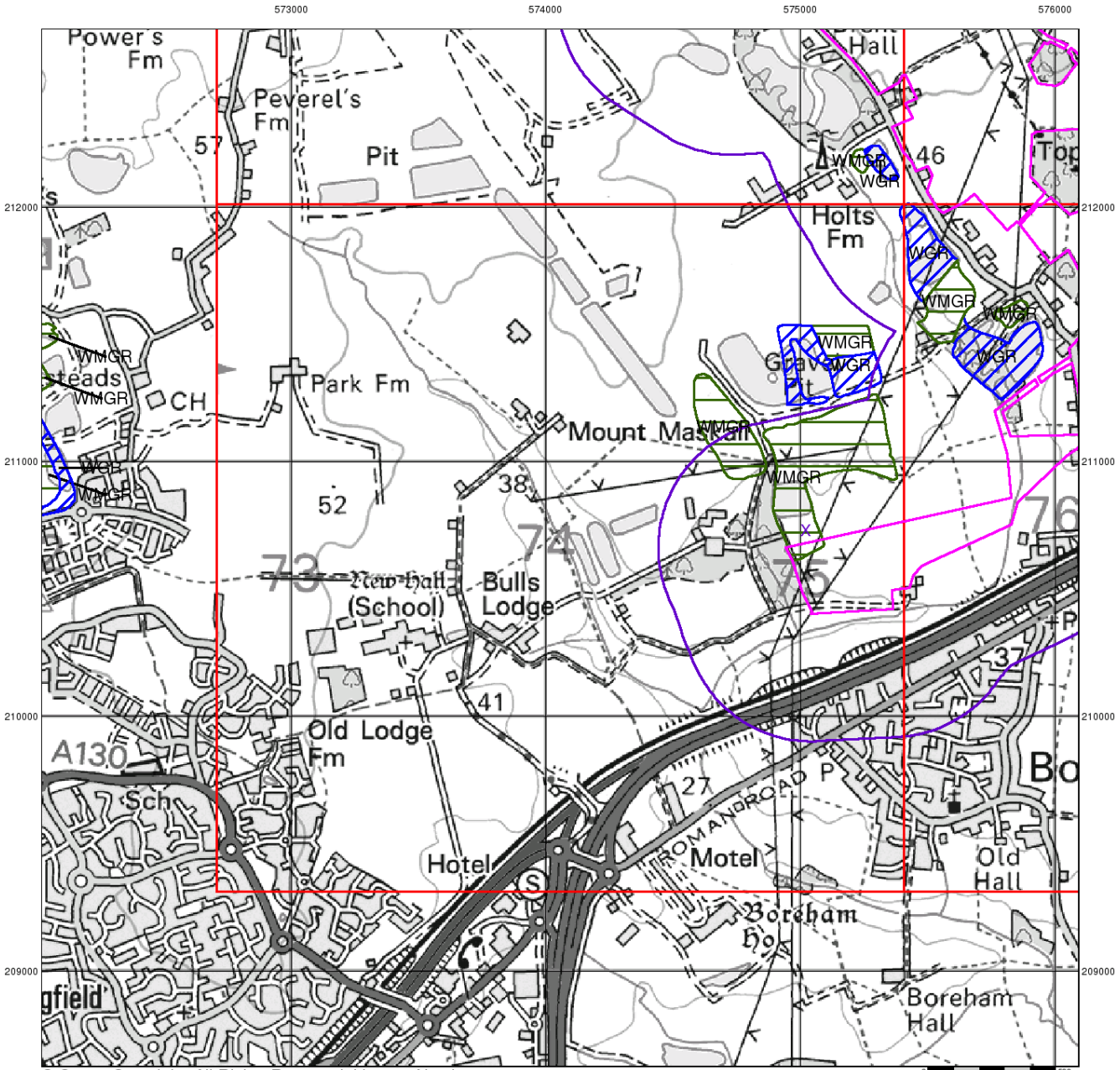

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Artificial Ground and Landslip

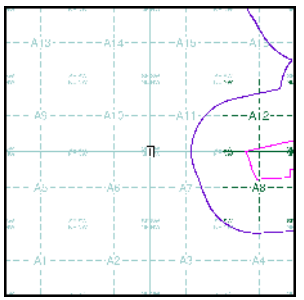
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions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

Artificial ground includes:

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

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

Artificial Ground and Landslip Map - Slice A



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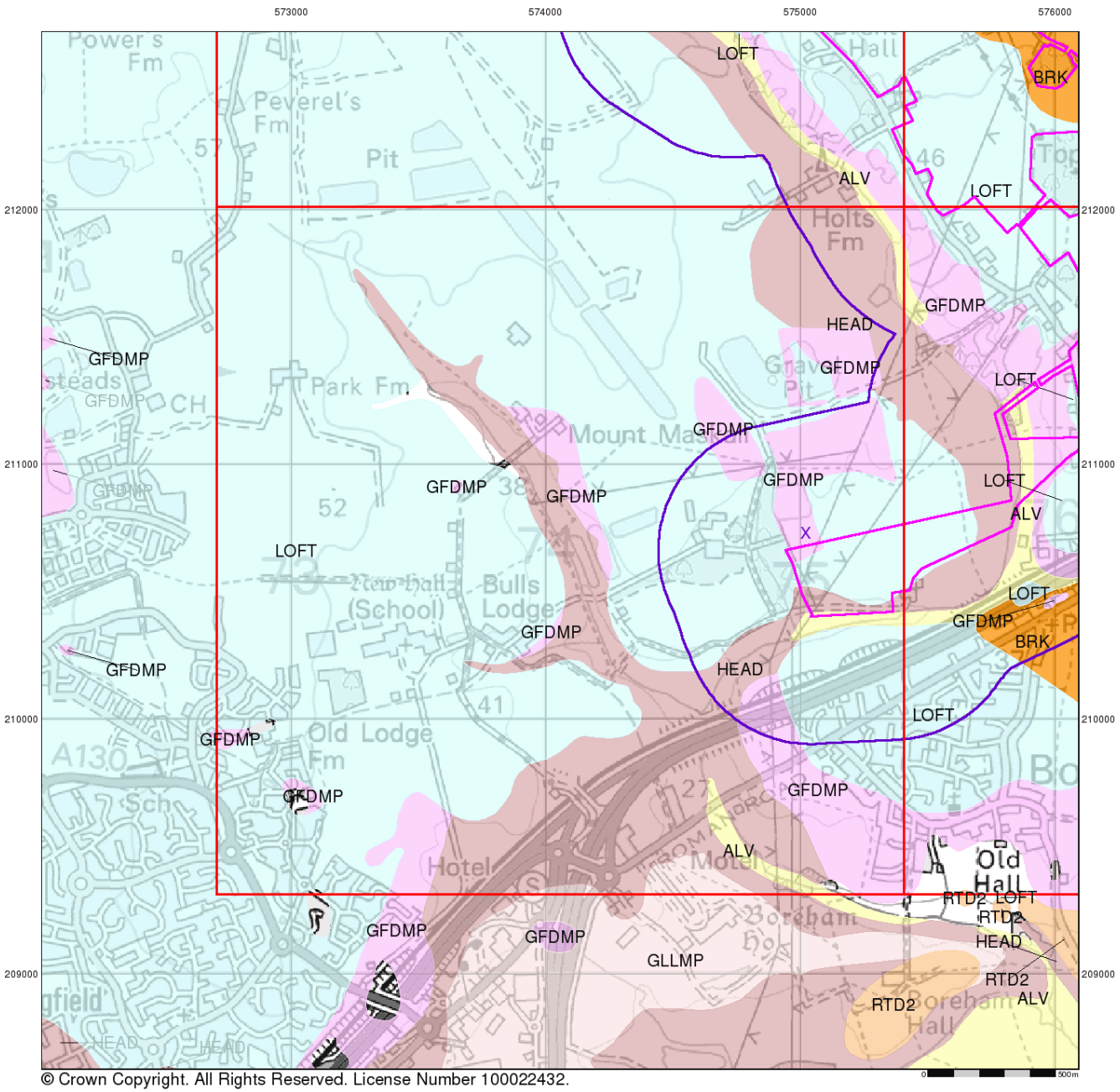

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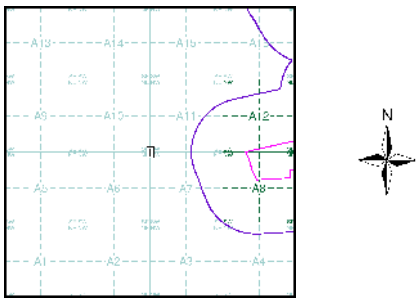
Superficial Geology

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

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

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

Superficial Geology Map - Slice A



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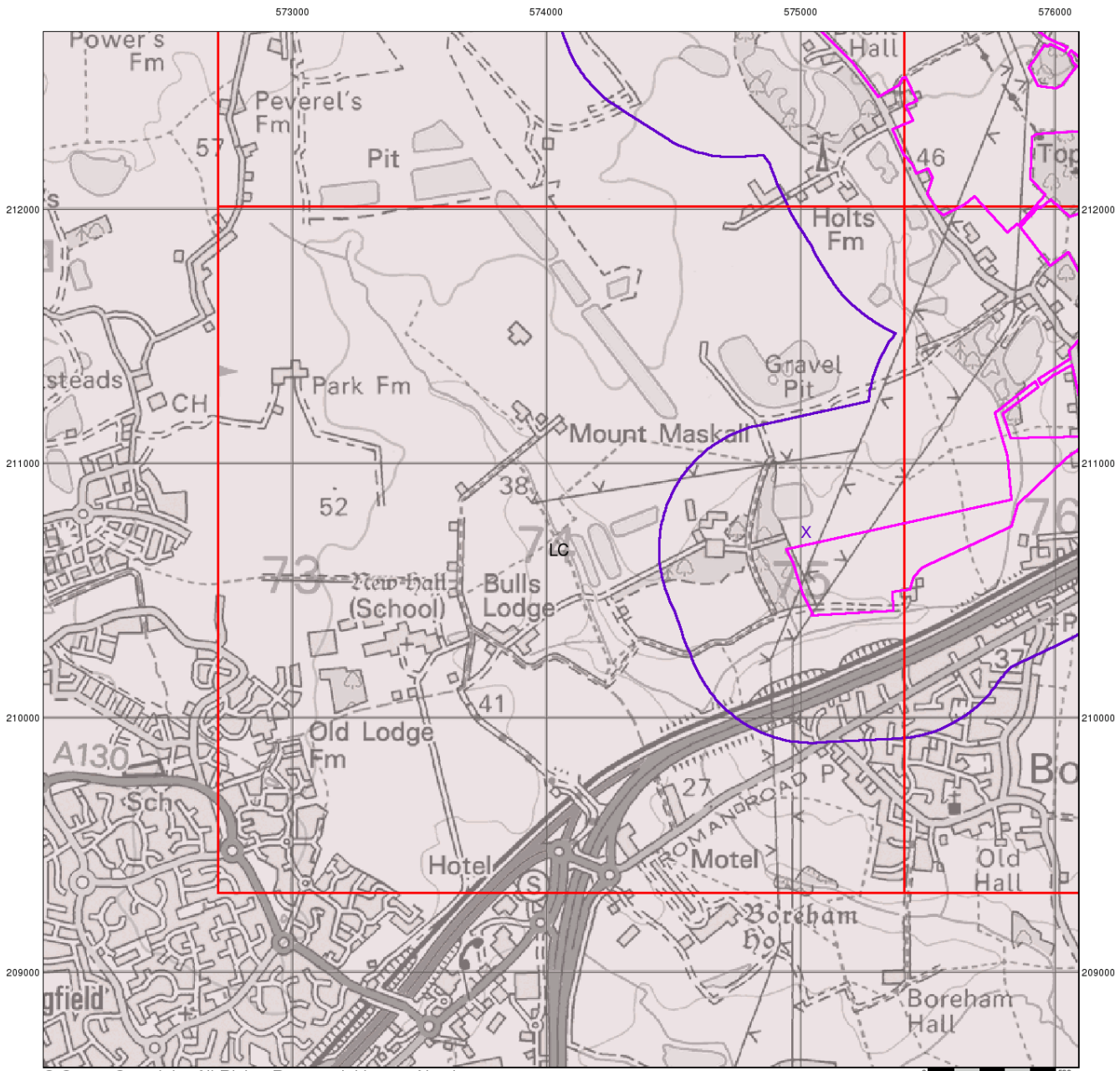

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Bedrock and Faults

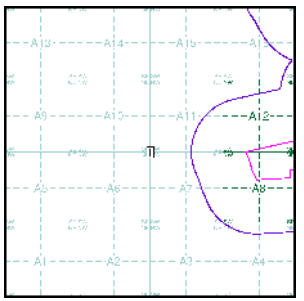
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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

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

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

Bedrock and Faults Map - Slice A



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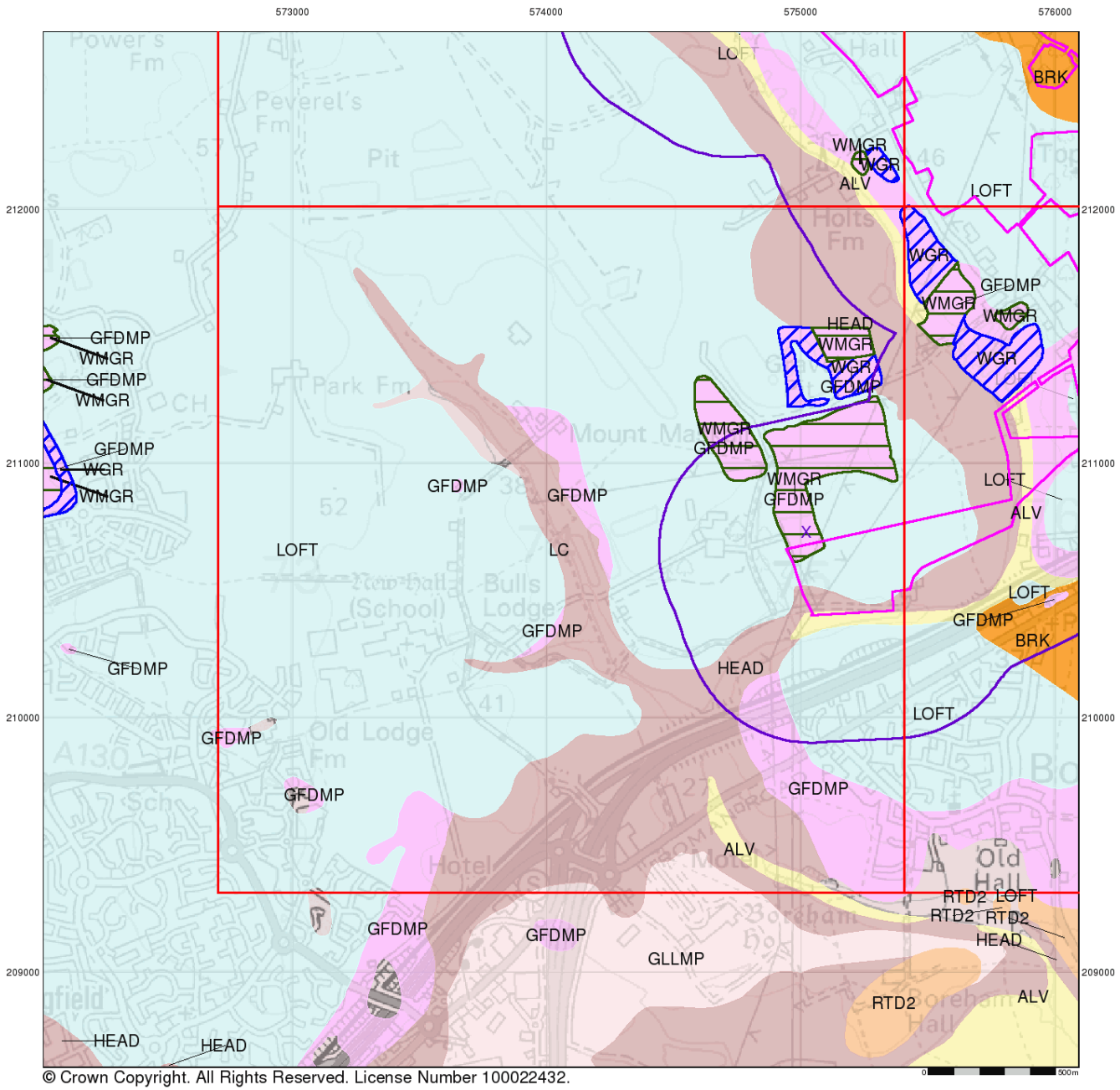

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Combined Surface Geology

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

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

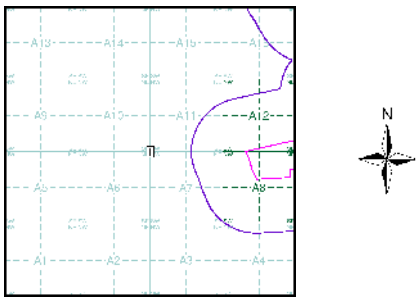
Additional Information

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

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



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Site Details:

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Historical Mapping Legends

Ordnance Survey County Series 1:10,560

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

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Electricity Transmission Line
Pole
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

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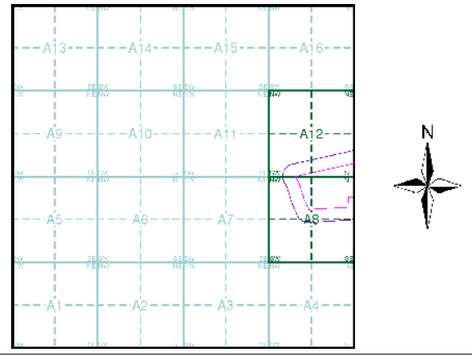
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Essex	1:10,560	1881	2
Essex	1:10,560	1897	3
Essex	1:10,560	1924	4
Essex	1:10,560	1938	5
Historical Aerial Photography	1:10,560	1945 - 1947	6
Historical Aerial Photography	1:10,560	1947	7
Ordnance Survey Plan	1:10,000	1955	8
Ordnance Survey Plan	1:10,000	1960 - 1968	9
Ordnance Survey Plan	1:10,000	1969	10
Ordnance Survey Plan	1:10,000	1970 - 1979	11
Ordnance Survey Plan	1:10,000	1983	12
Ordnance Survey Plan	1:10,000	1990 - 1993	13
10K Raster Mapping	1:10,000	1999	14
10K Raster Mapping	1:10,000	2006	15
VectorMap Local	1:10,000	2020	16

Historical Map - Slice A



Order Details

Order Number: 274546457_1_1
Customer Ref: 60640215
National Grid Reference: 575020, 210730
Slice: A
Site Area (Ha): 473.19
Search Buffer (m): 500

Site Details

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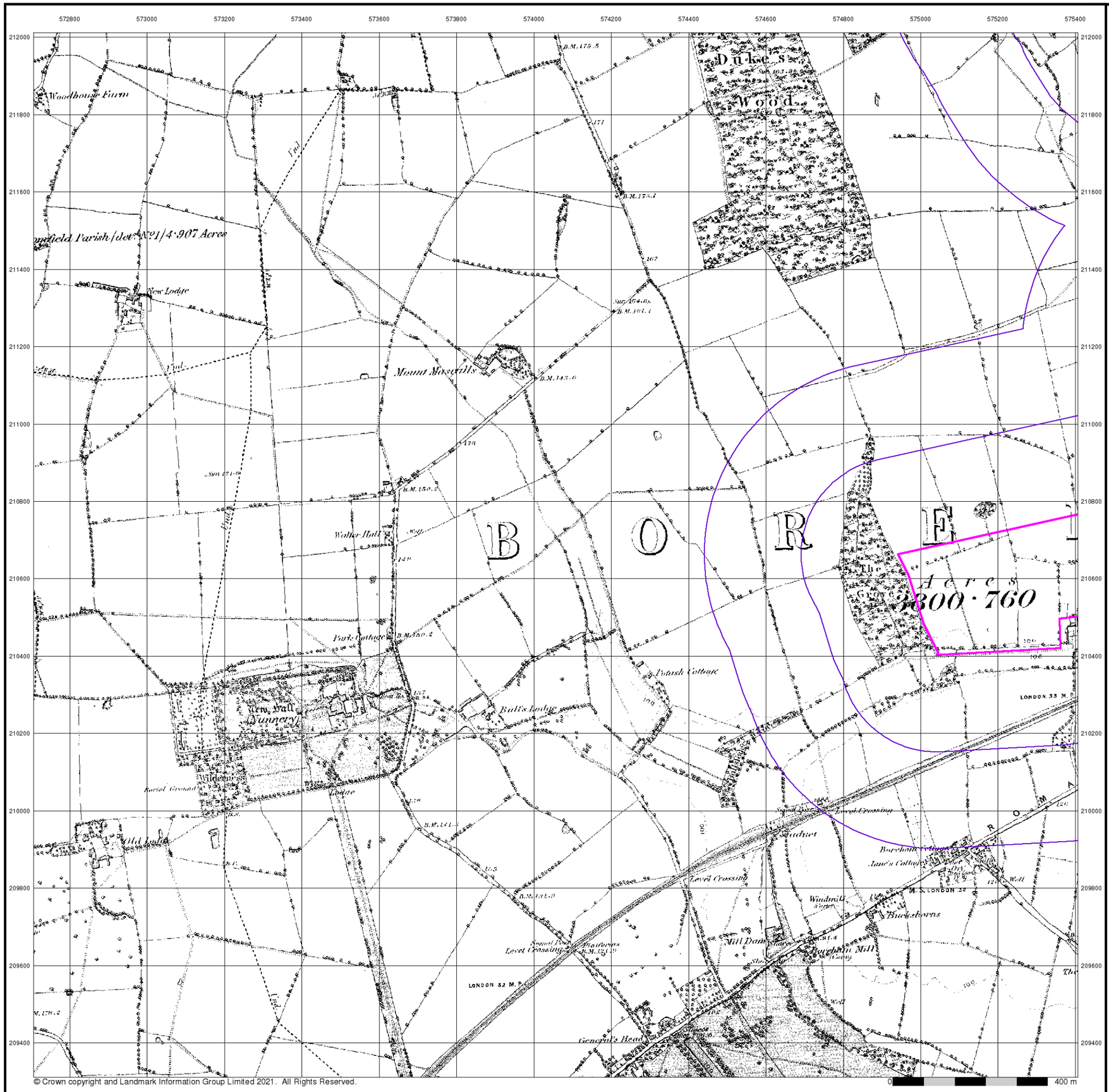

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Essex

Published 1881

Source map scale - 1:10,560

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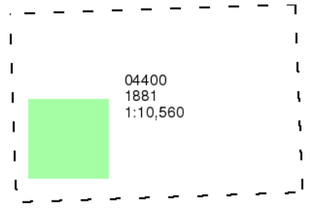
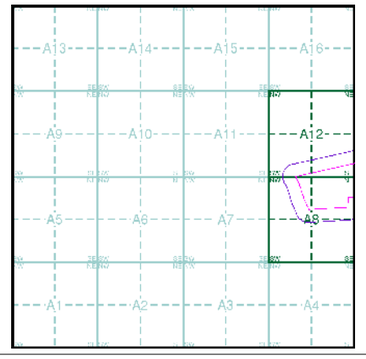
Map Name(s) and Date(s)



Historical Map - Slice A



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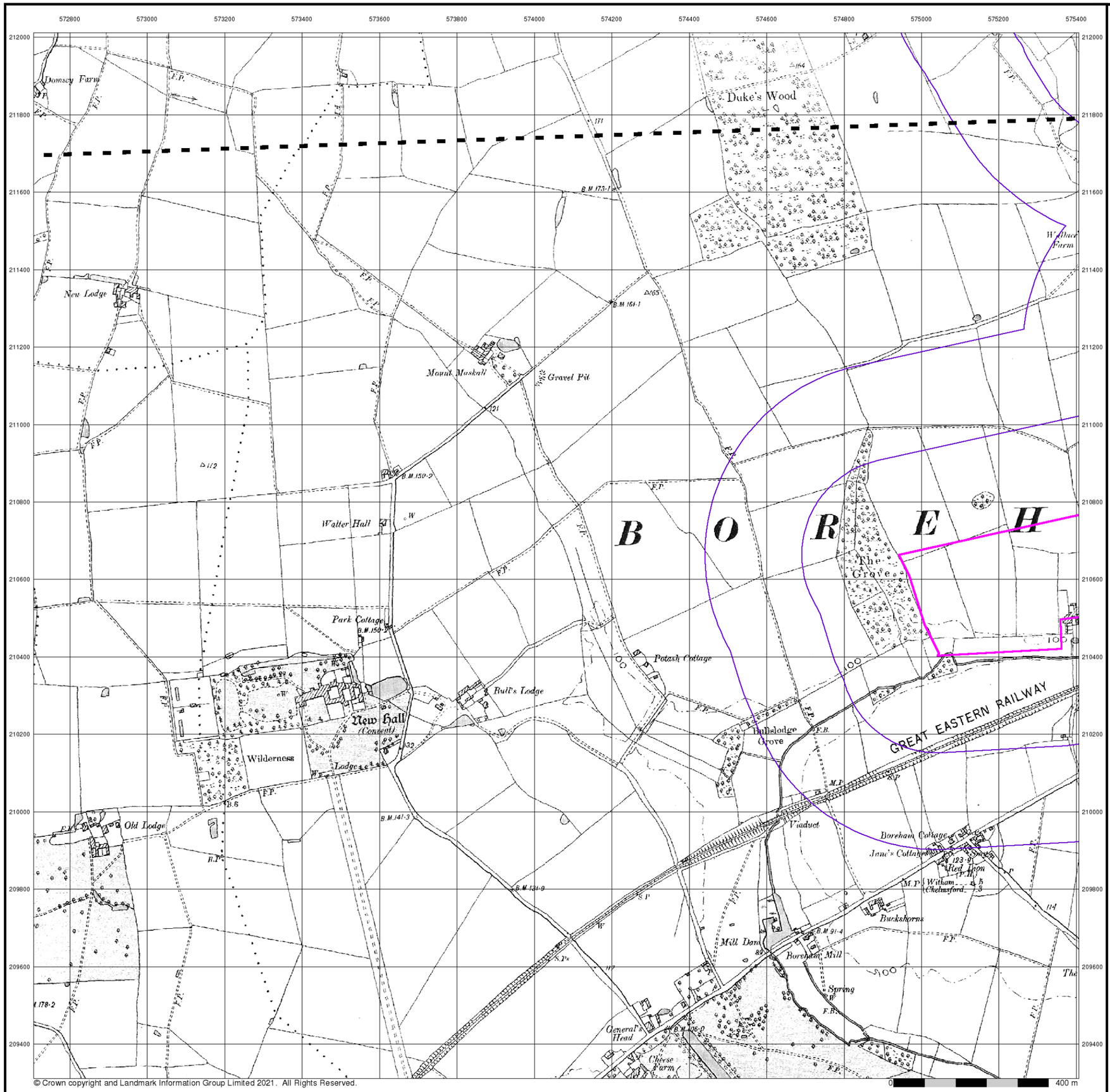

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Published 1897

Source map scale - 1:10,560

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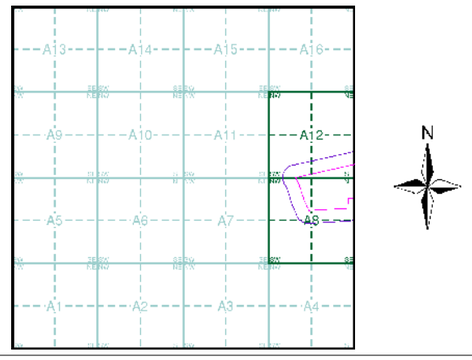
Map Name(s) and Date(s)

044NW
1897
1:10,560

044SW
1897
1:10,560

Historical Map - Slice A



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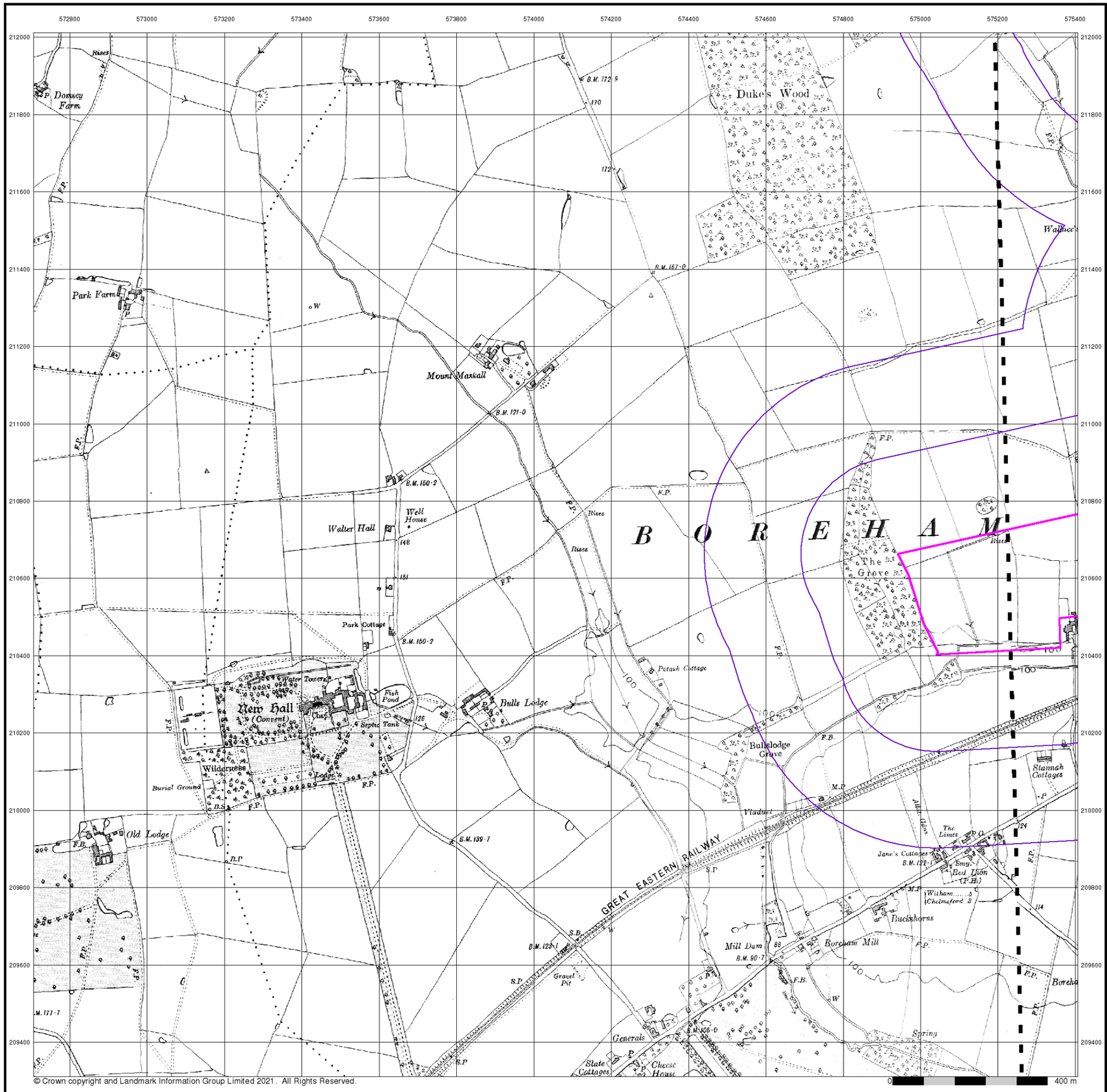

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Published 1924

Source map scale - 1:10,560

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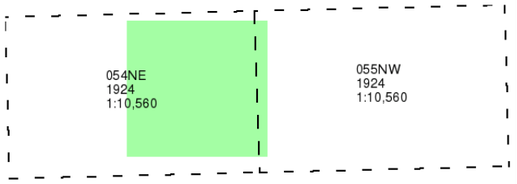
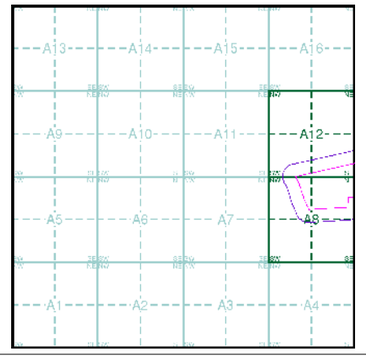


Historical Map - Slice A



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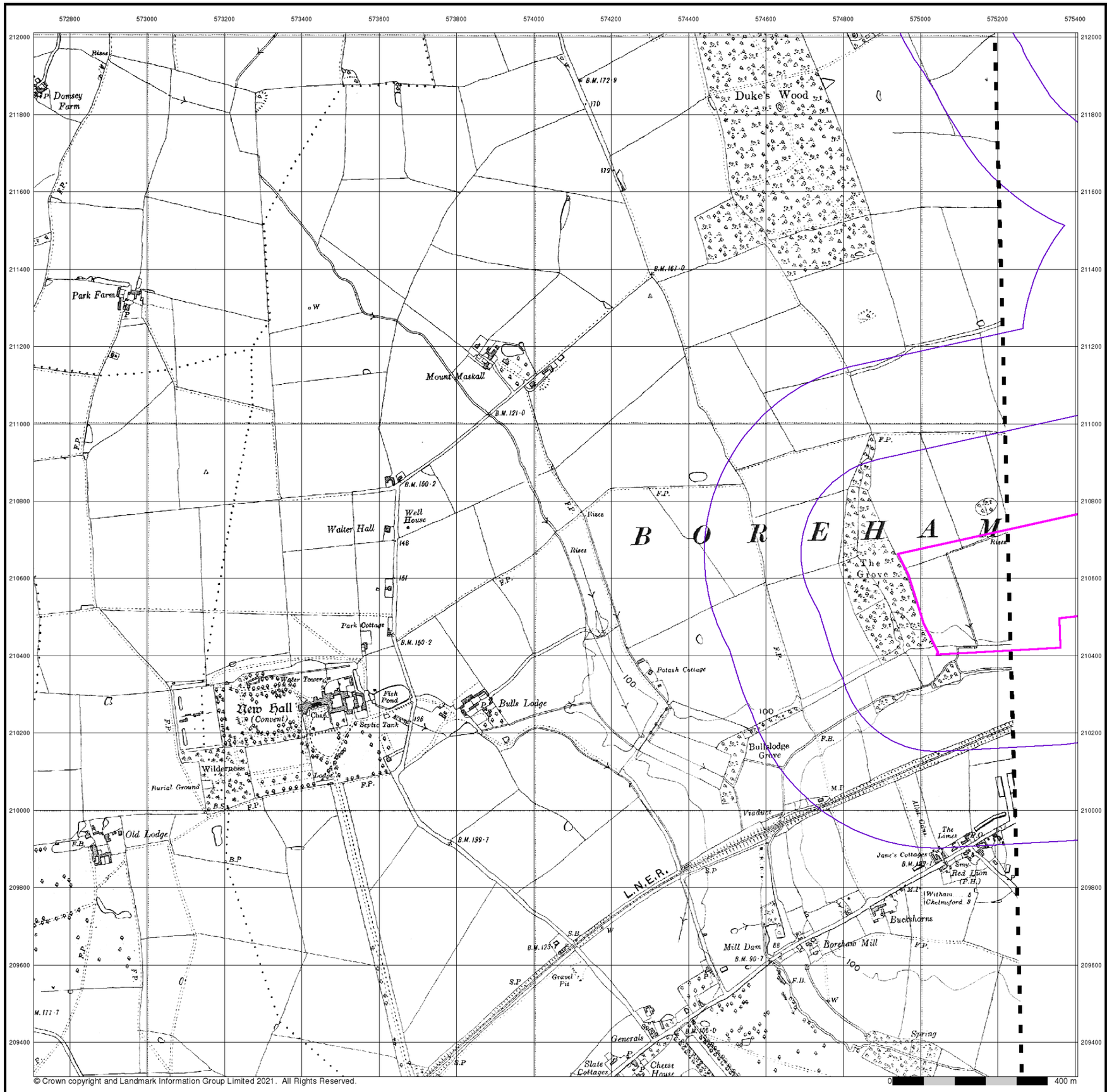

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Essex

Published 1938

Source map scale - 1:10,560

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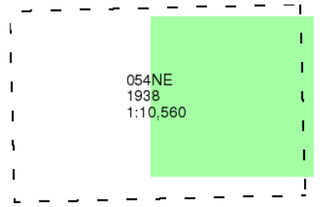
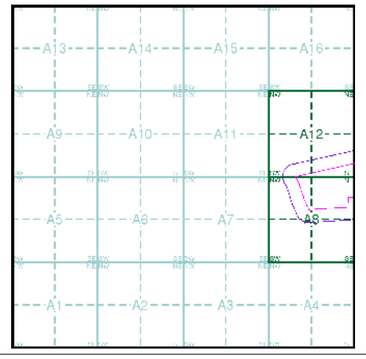


Historical Map - Slice A



Order Details

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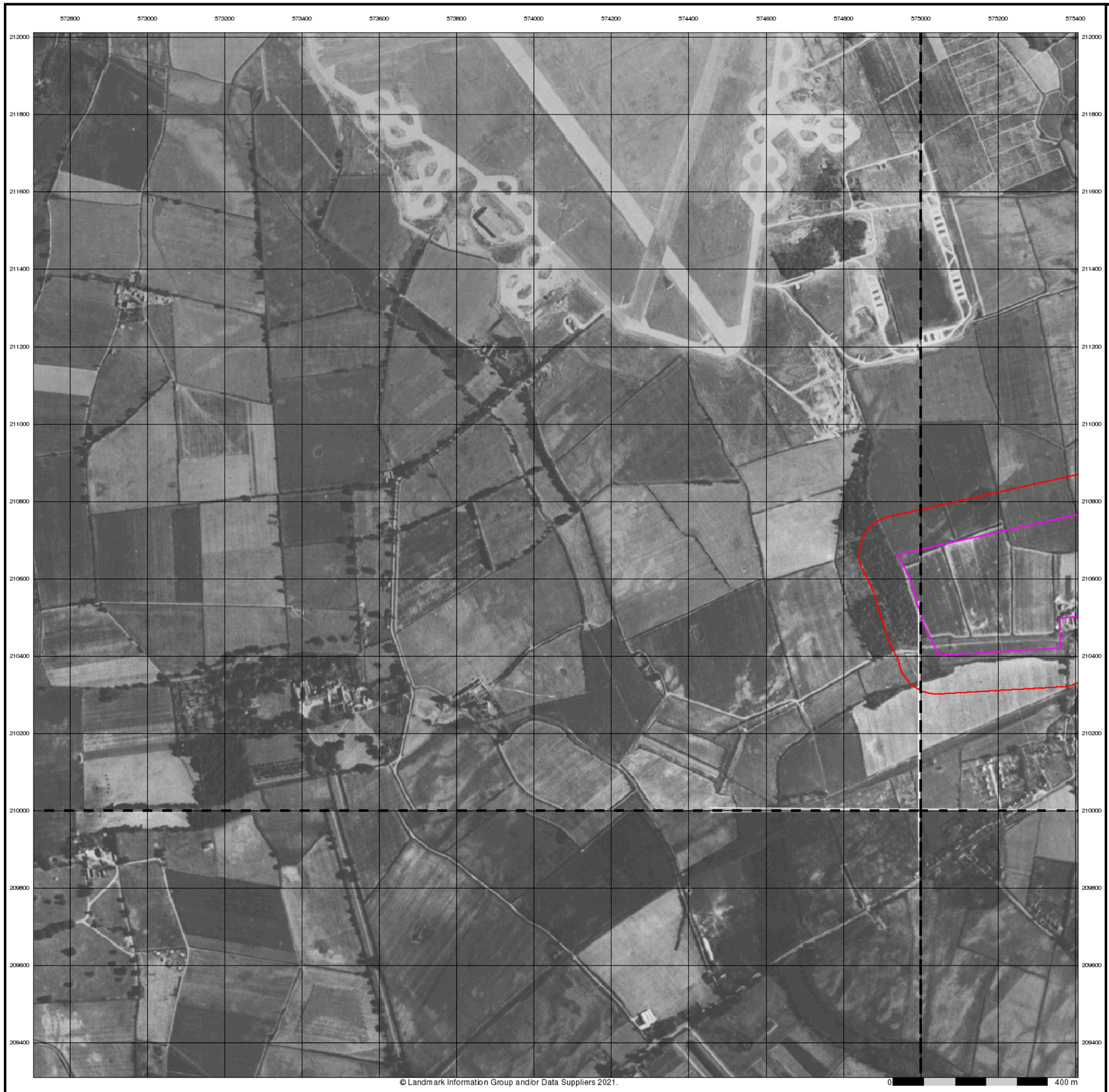
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

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



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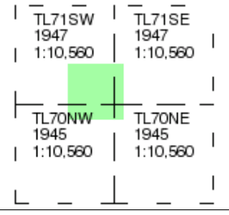
Historical Aerial Photography

Published 1945 - 1947

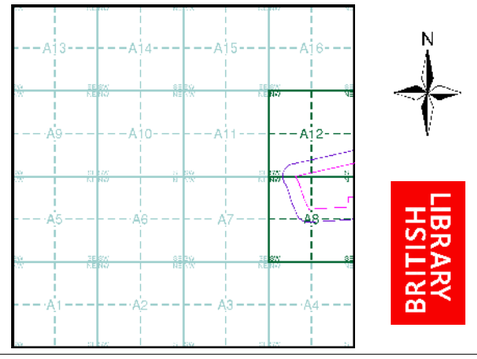
Source map scale - 1:10,560

The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



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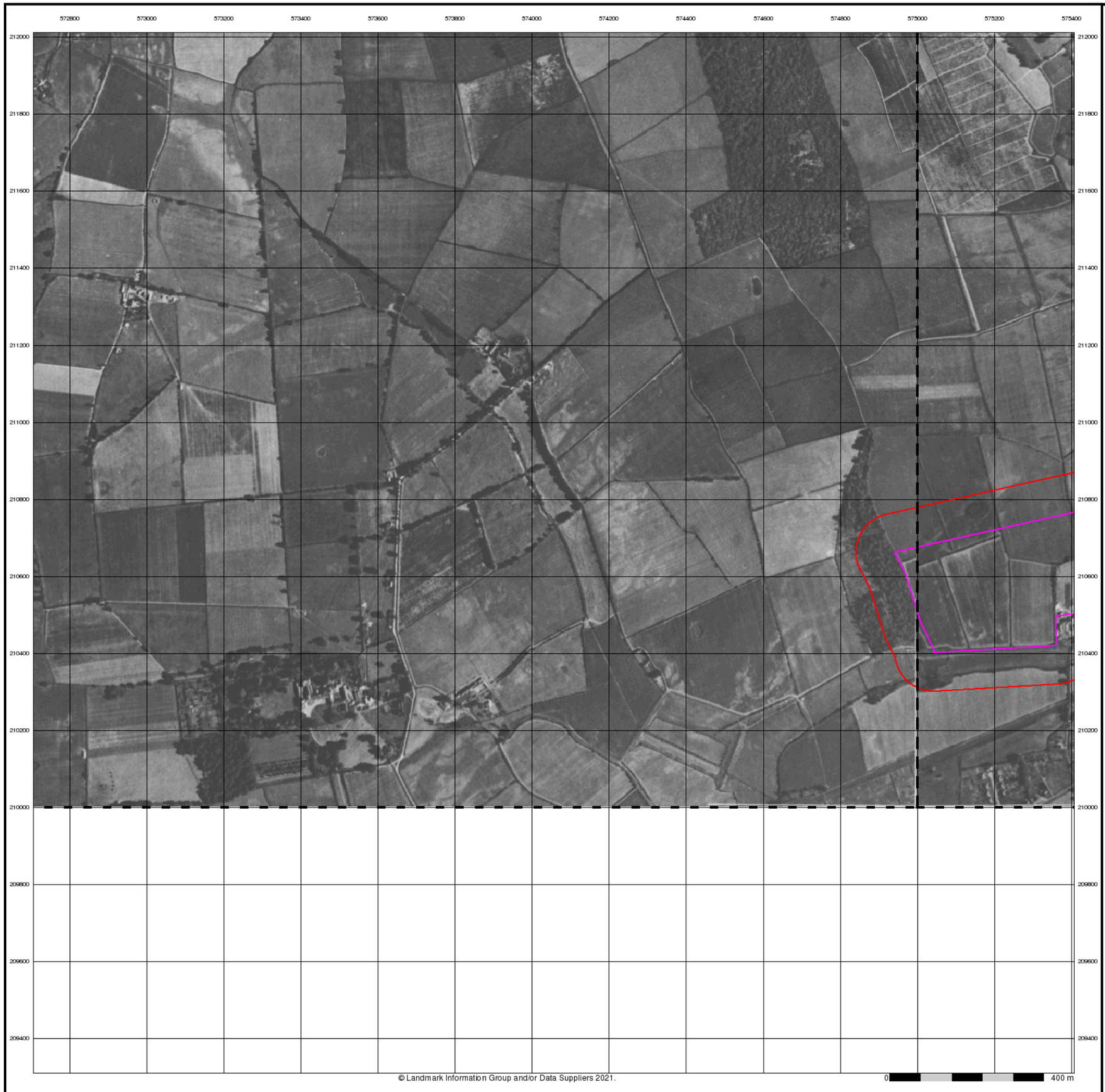

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Historical Aerial Photography

Published 1947

Source map scale - 1:10,560

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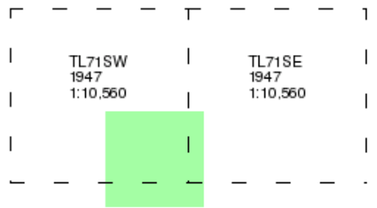
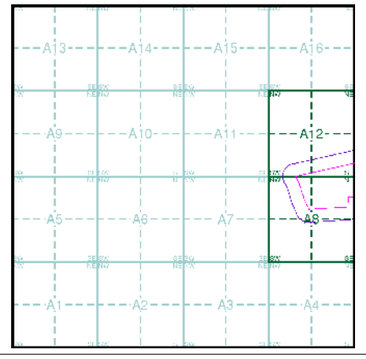


Historical Aerial Photography - Slice A



BRITISH LIBRARY

Order Details

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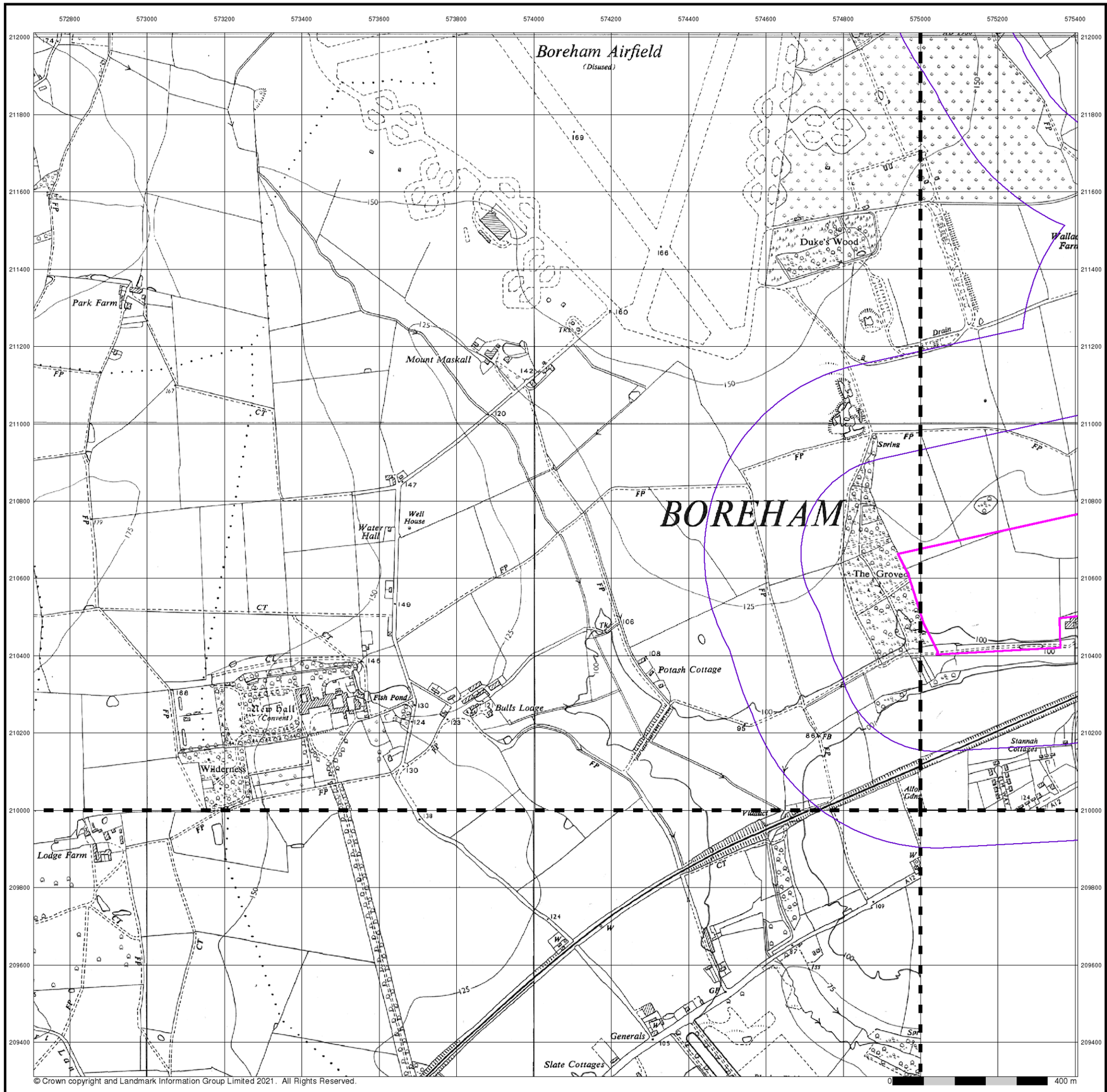

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Ordnance Survey Plan

Published 1955

Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

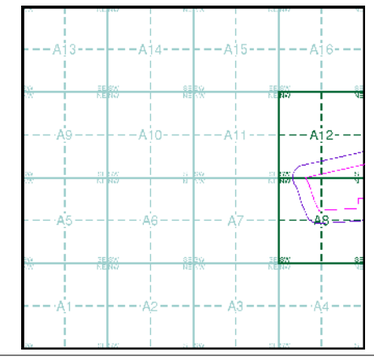
Map Name(s) and Date(s)

TL71SW 1955 1:10,560

TL71SE 1955 1:10,560

TL70NW 1955 1:10,560

Historical Map - Slice A



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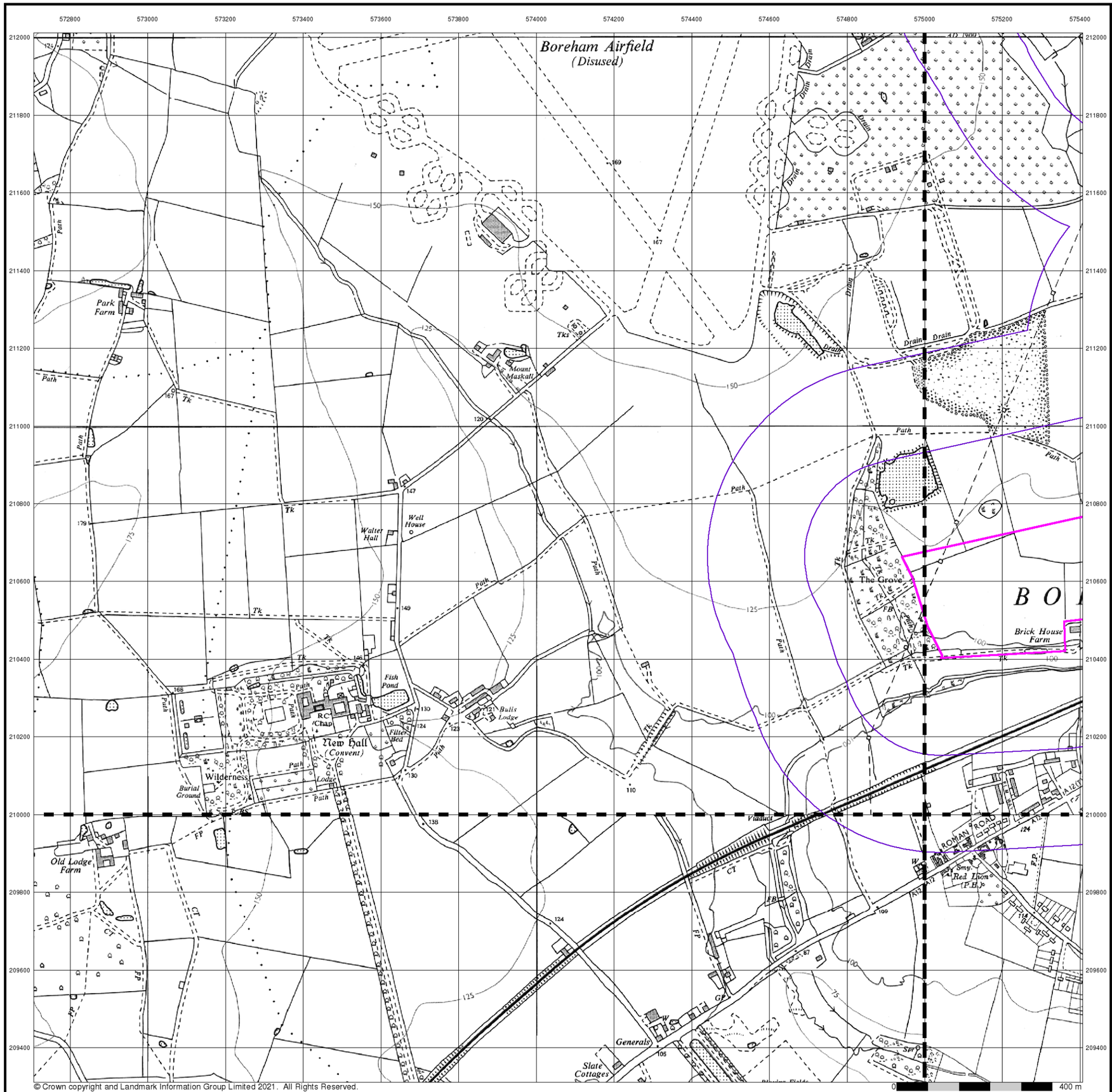

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Ordnance Survey Plan

Published 1960 - 1968

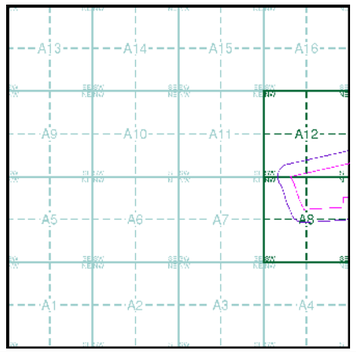
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

TL71SW 1967 1:10,560	TL71SE 1968 1:10,560
TL70NW 1965 1:10,560	TL70NE 1960 1:10,560

Historical Map - Slice A



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Site Details

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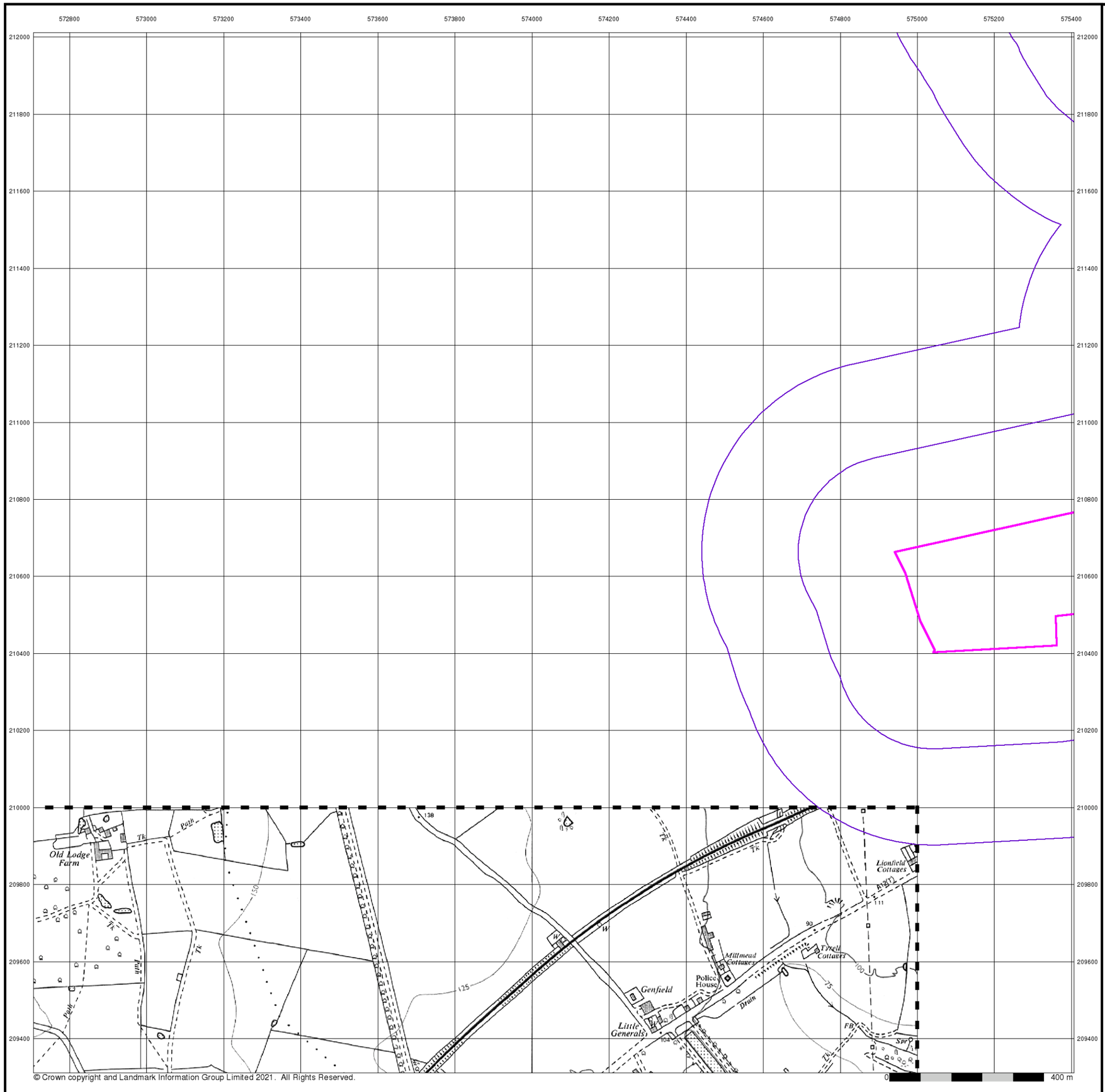

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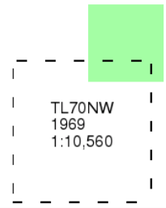
Ordnance Survey Plan

Published 1969

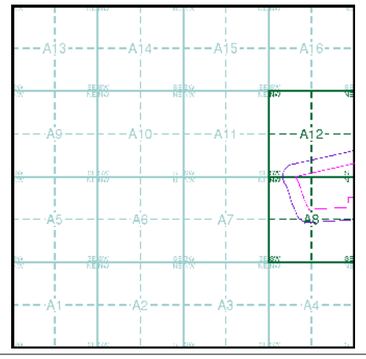
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



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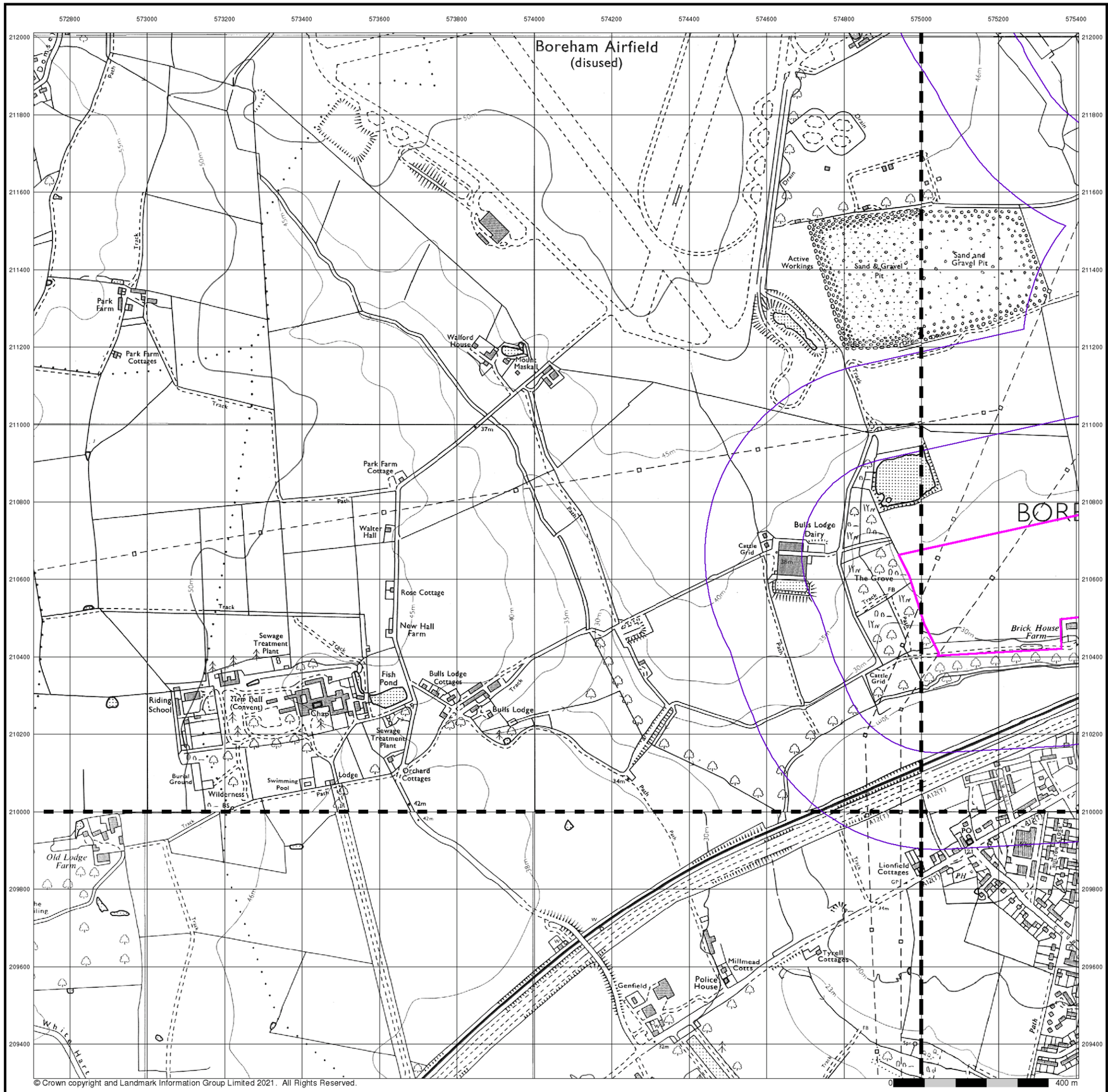

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Ordnance Survey Plan

Published 1970 - 1979

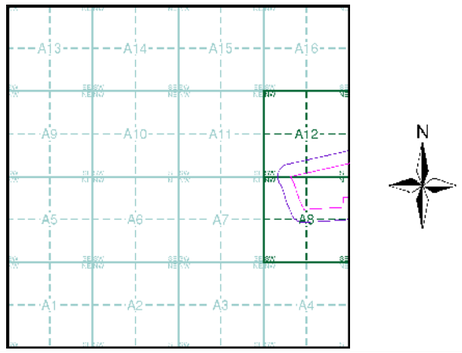
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

TL71SW 1979 1:10,000	TL71SE 1978 1:10,000
TL70NW 1976 1:10,000	TL70NE 1970 1:10,560

Historical Map - Slice A



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
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Slice:	A
Site Area (Ha):	473.19
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Site Details

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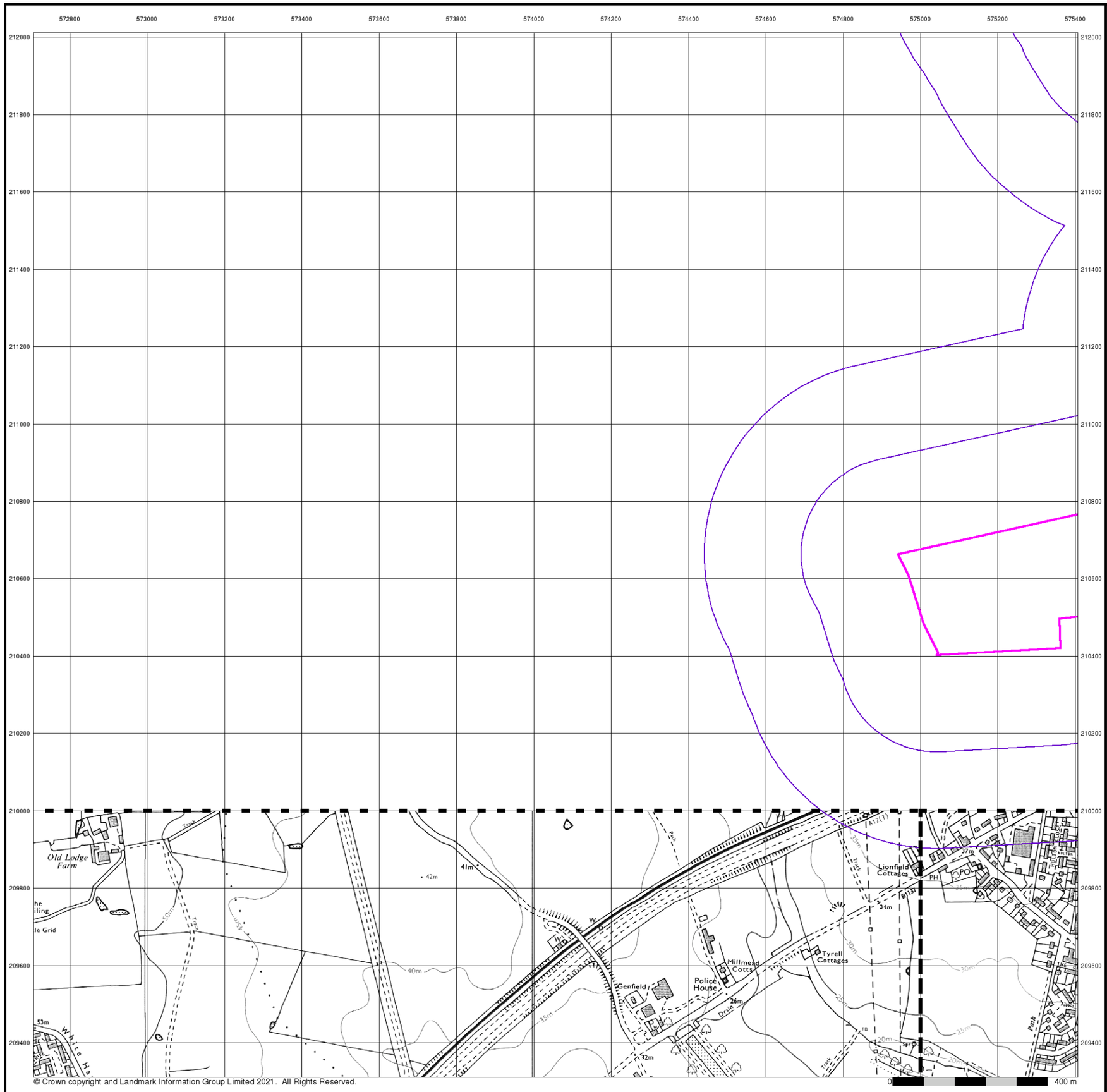

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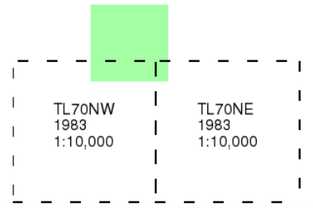
Ordnance Survey Plan

Published 1983

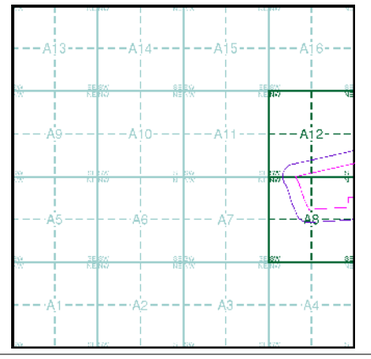
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

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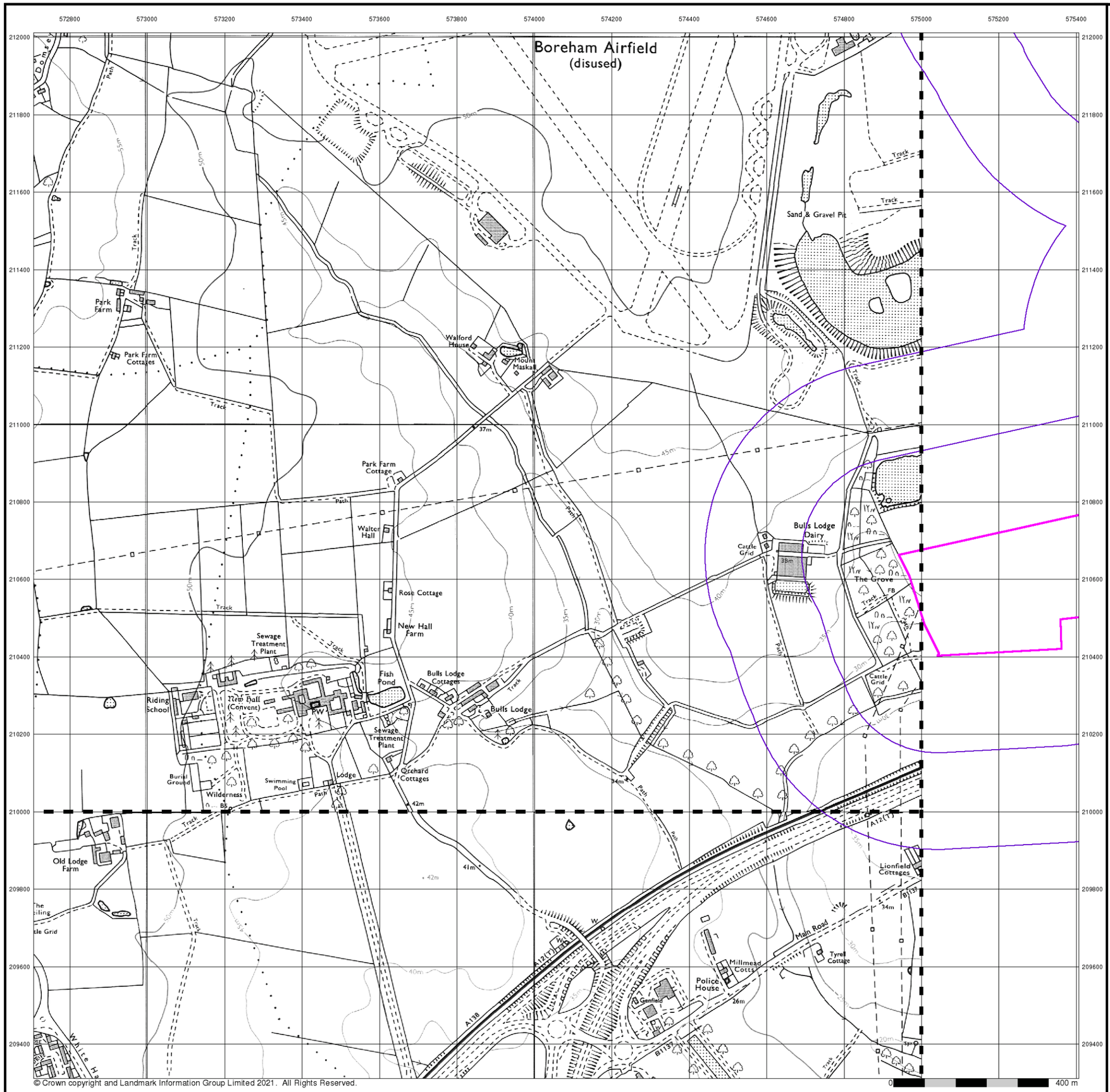

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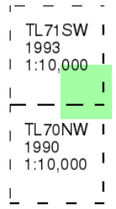
Ordnance Survey Plan

Published 1990 - 1993

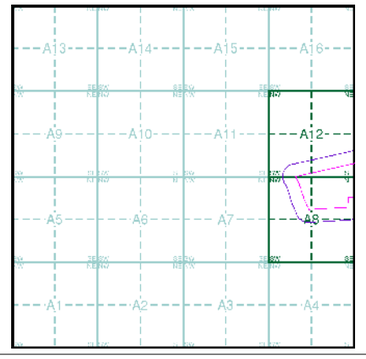
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



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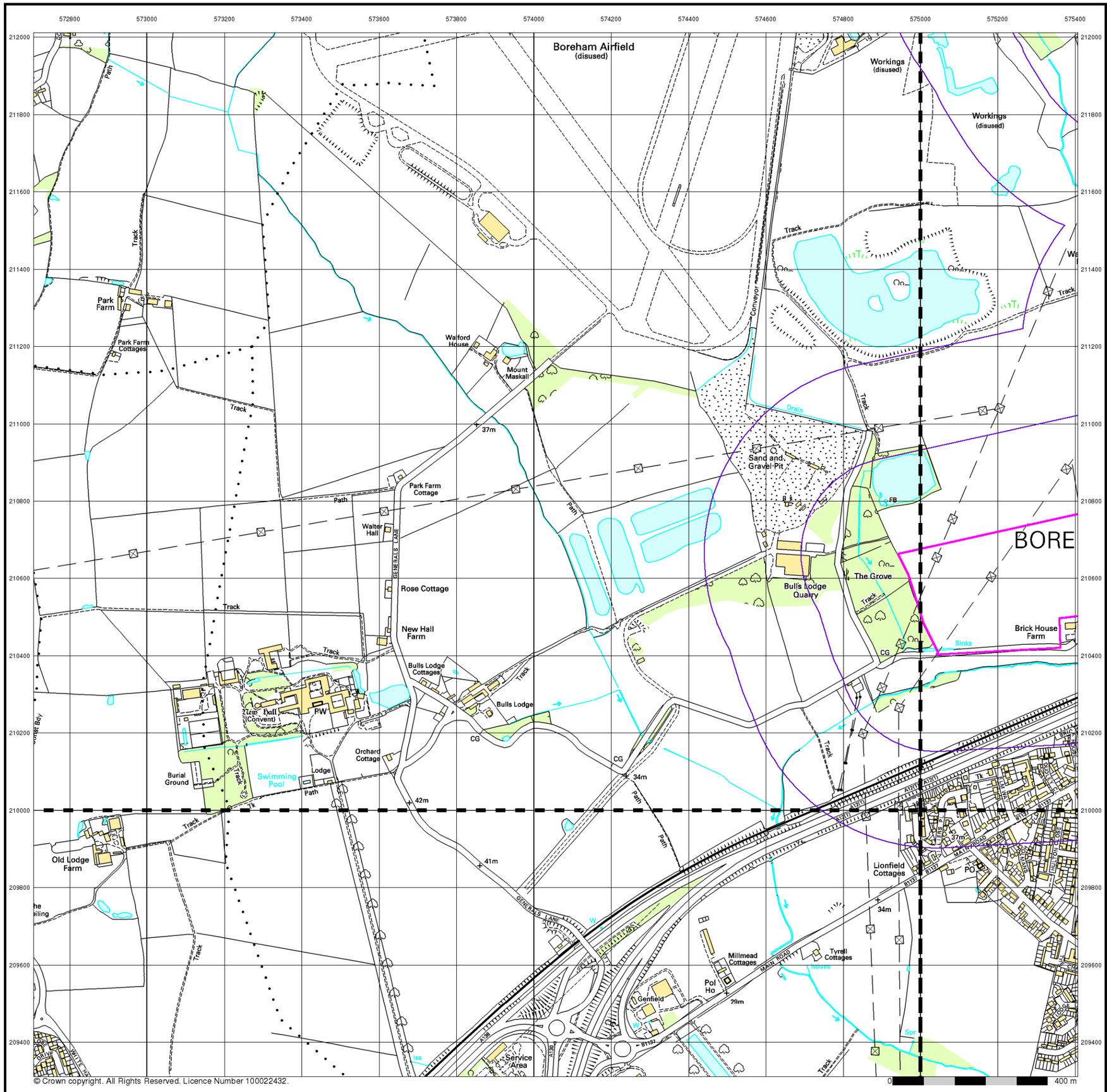

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10k Raster Mapping

Published 1999

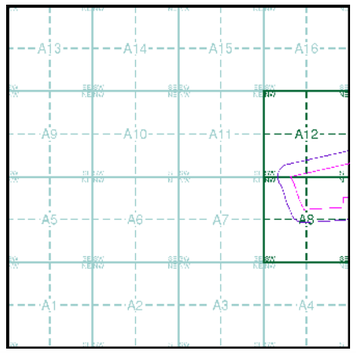
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

TL71SW 1999 1:10,000	TL71SE 1999 1:10,000
TL70NW 1999 1:10,000	TL70NE 1999 1:10,000

Historical Map - Slice A



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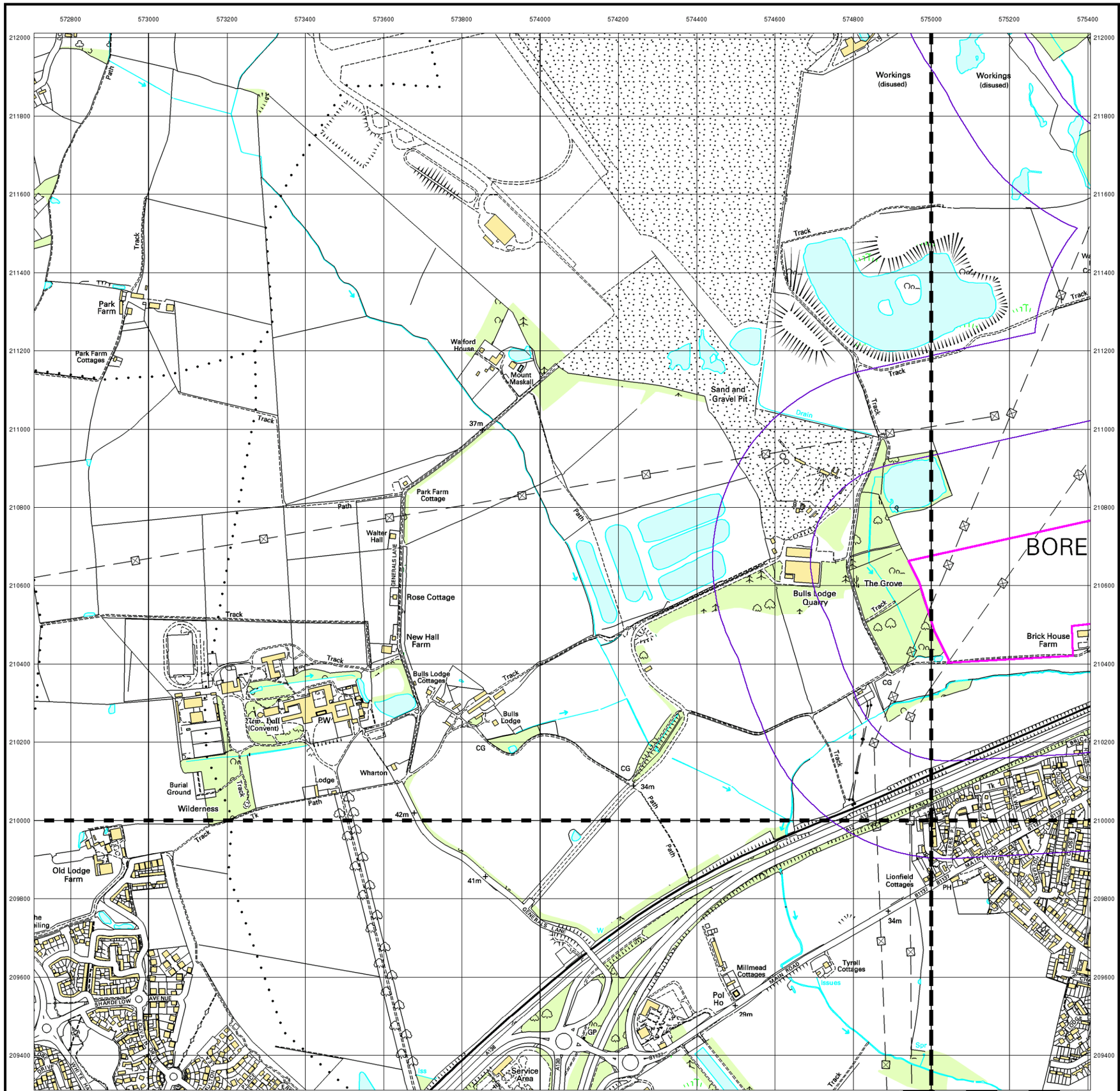

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10k Raster Mapping

Published 2006

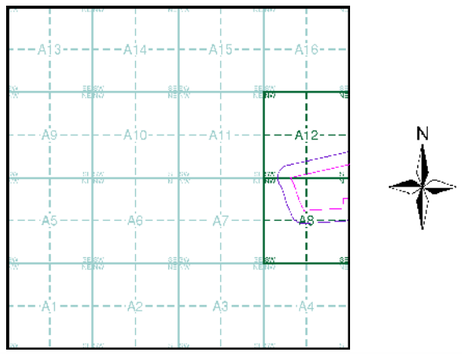
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

TL71SW 2006 1:10,000	TL71SE 2006 1:10,000
TL70NW 2006 1:10,000	TL70NE 2006 1:10,000

Historical Map - Slice A



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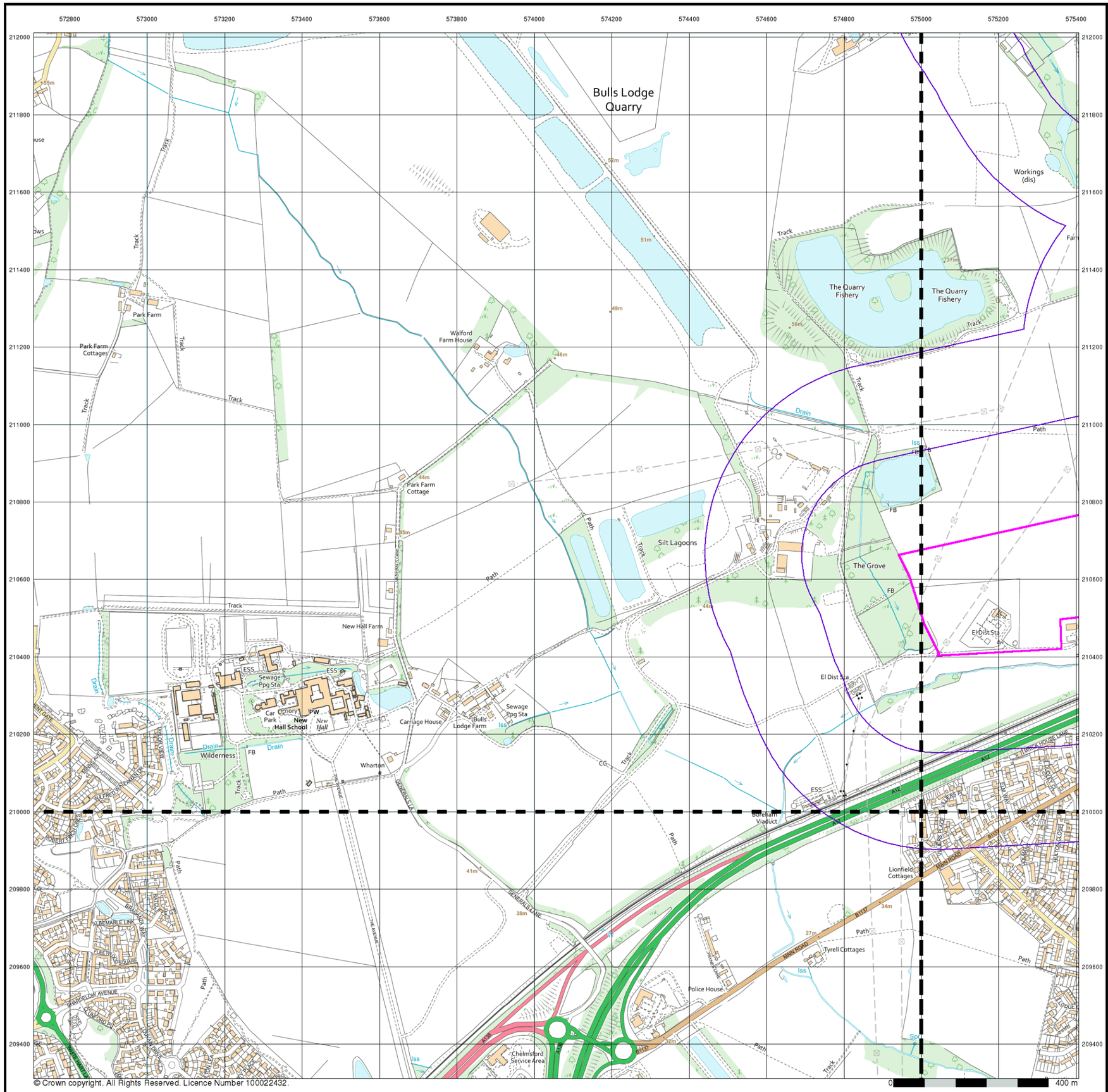

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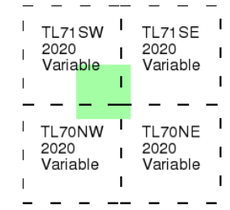
VectorMap Local

Published 2020

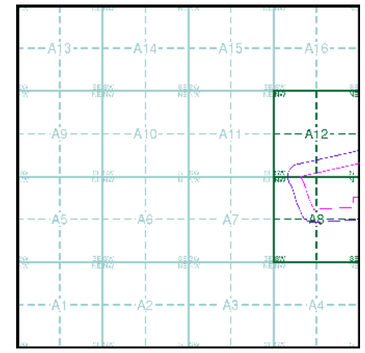
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



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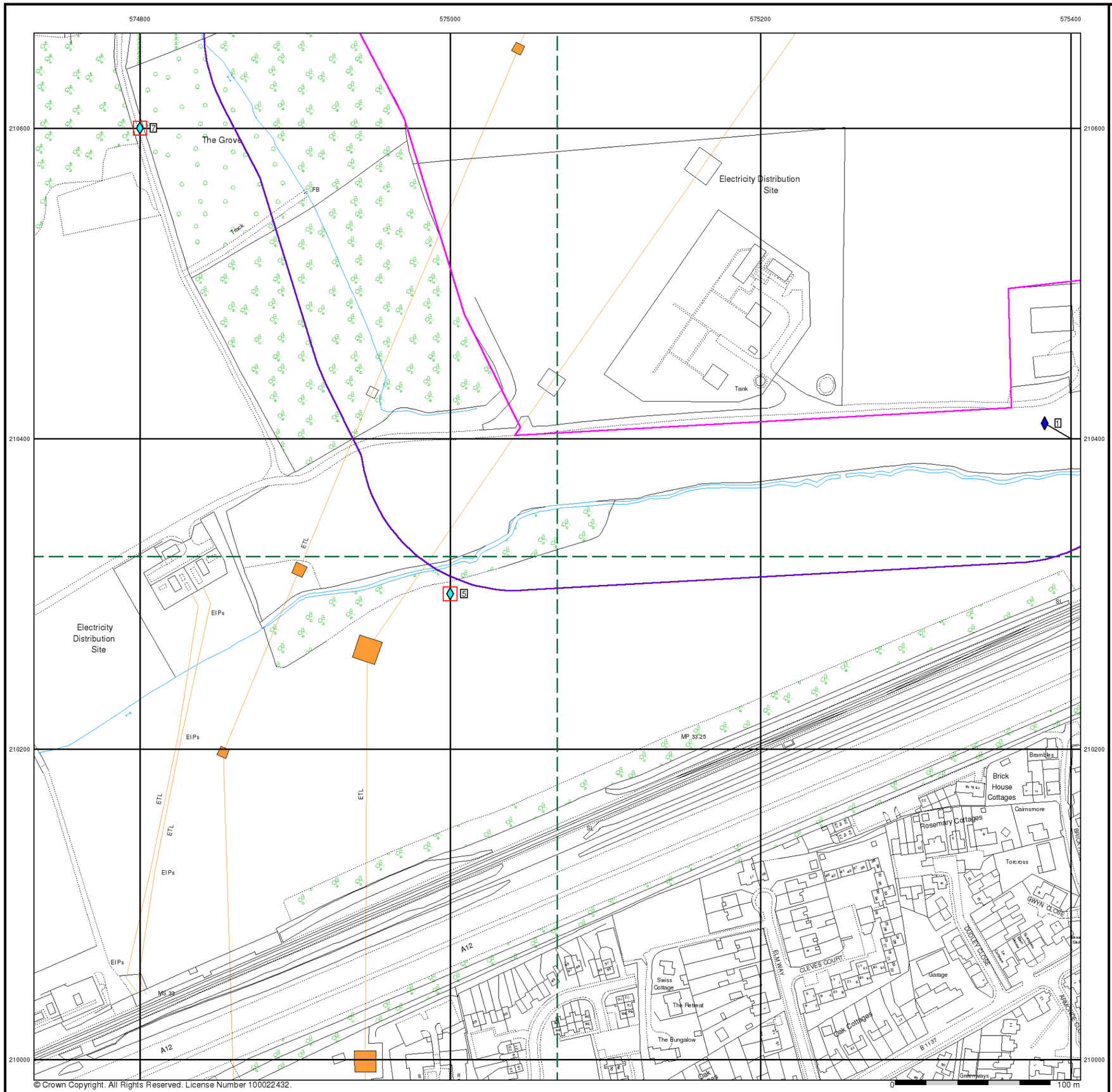

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General

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

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

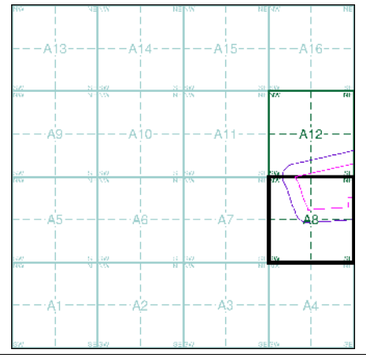
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A8



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Plot Buffer (m):	100

Site Details

Longfield

Landmark INFORMATION GROUP

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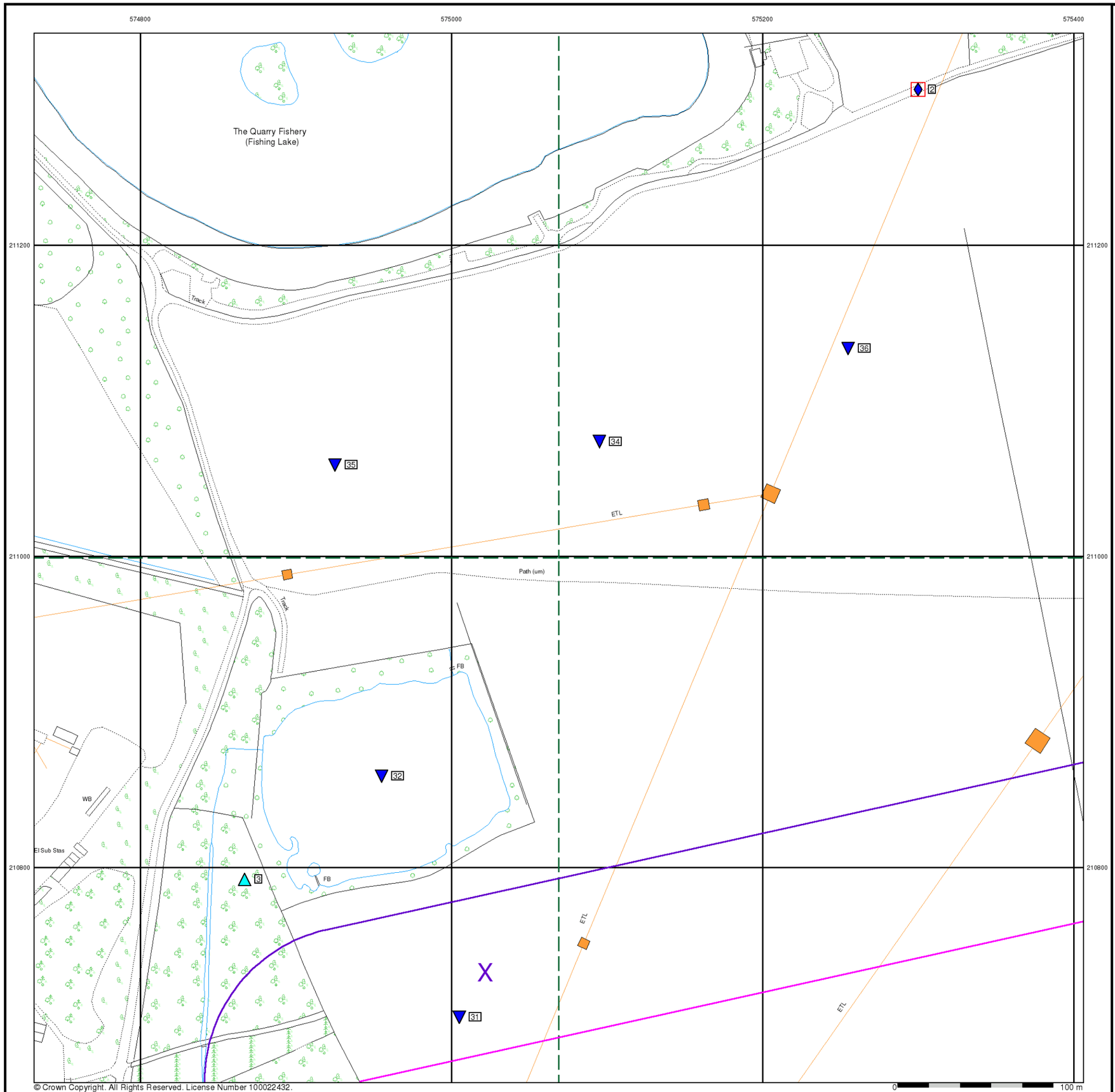
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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LANDMARK INFORMATION GROUP®

General

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

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

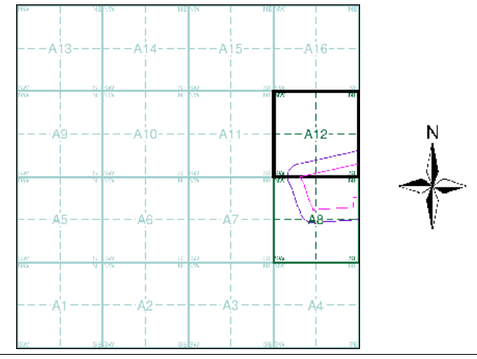
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A12



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Plot Buffer (m):	100

Site Details

Longfield

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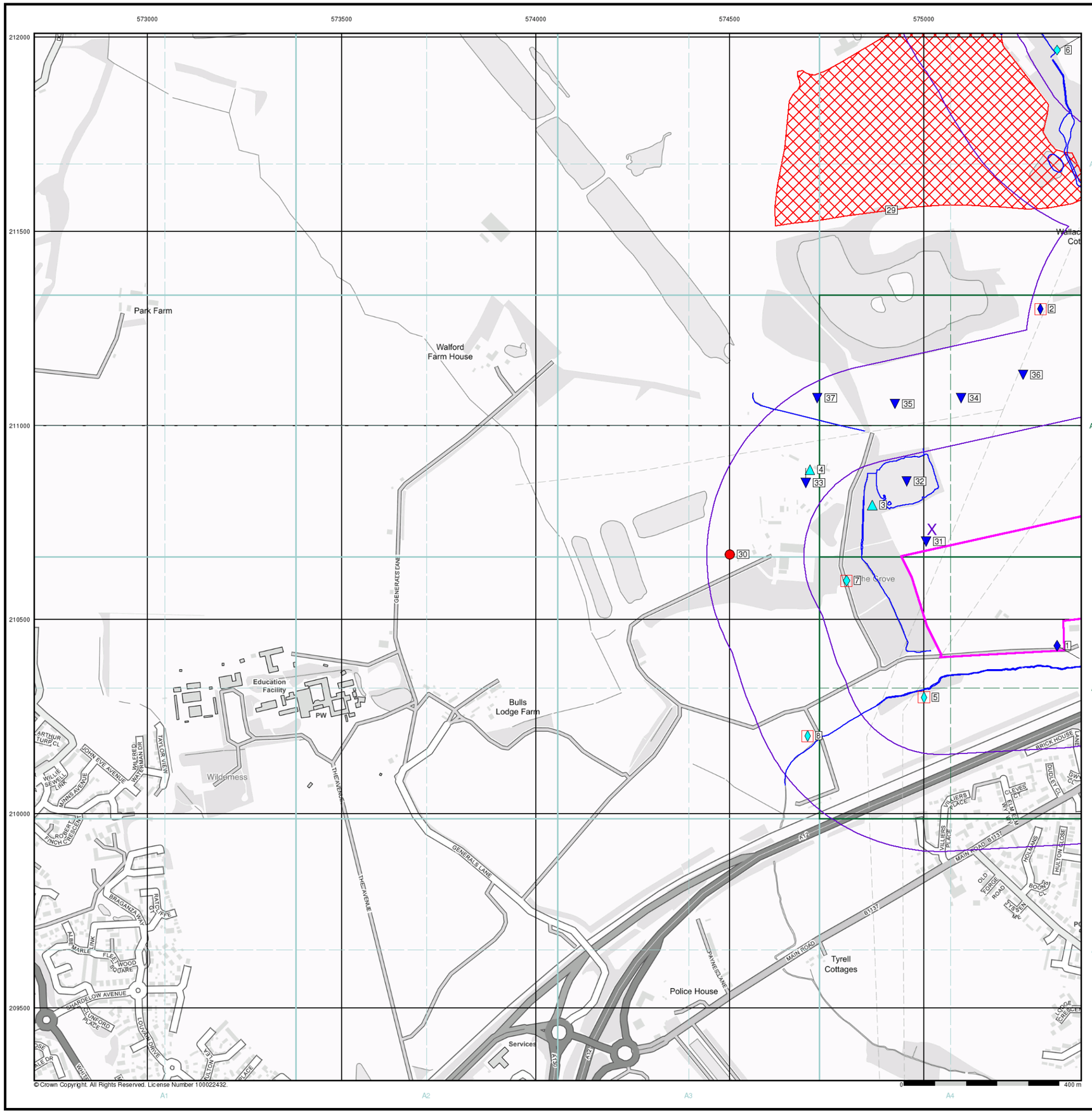
Web: www.envirocheck.co.uk



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LANDMARK INFORMATION GROUP®

General

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

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

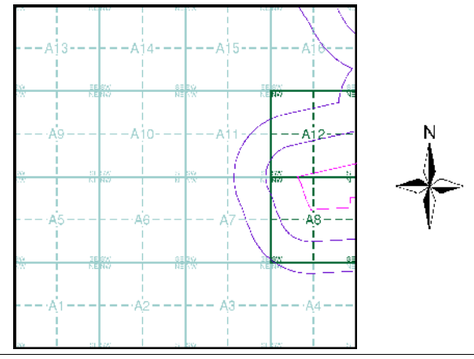
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice A



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

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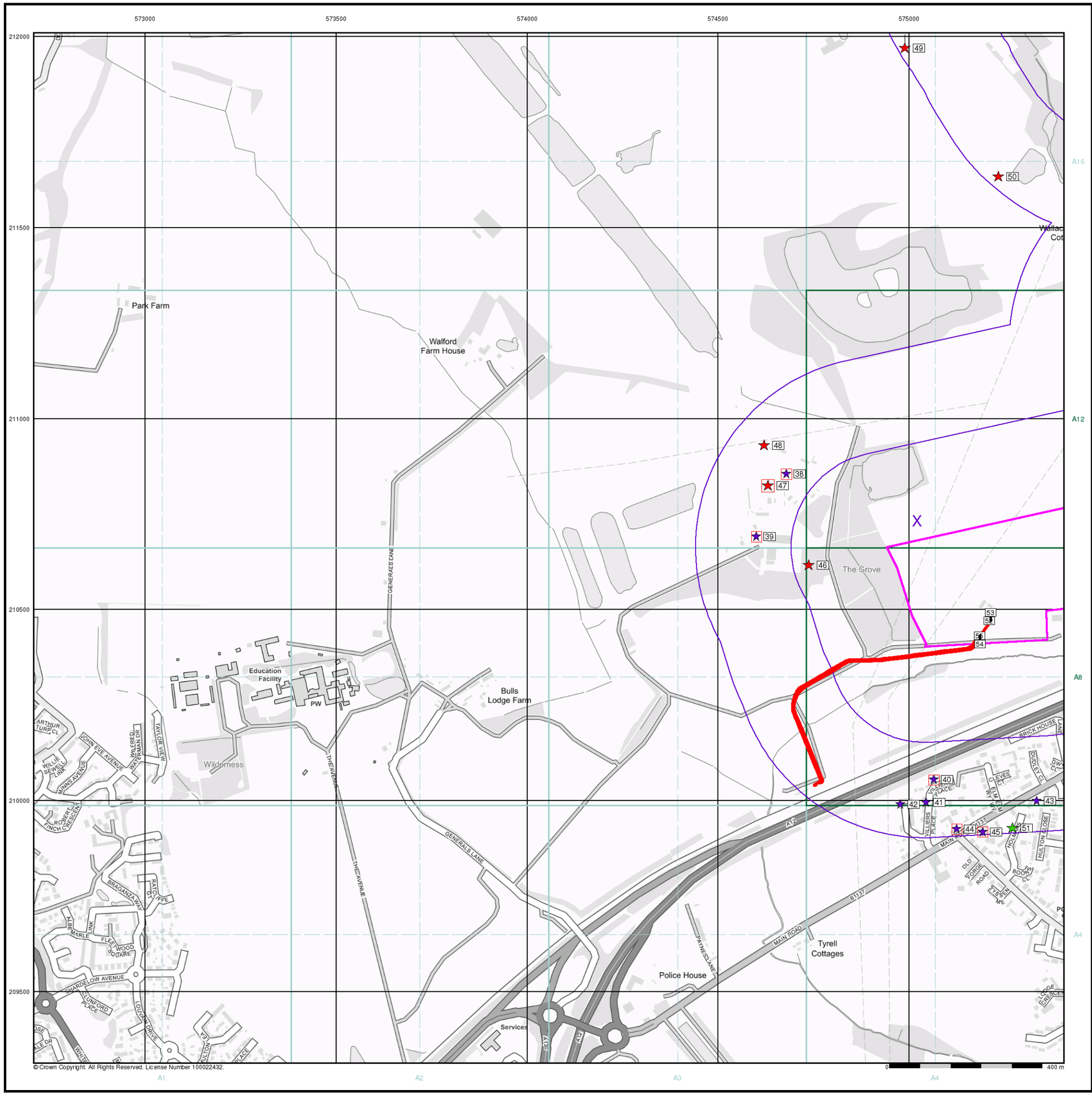

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Industrial Land Use Map

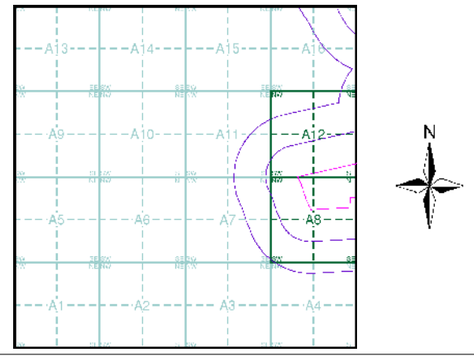
General

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

Industrial Land Use

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

Industrial Land Use Map - Slice A



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

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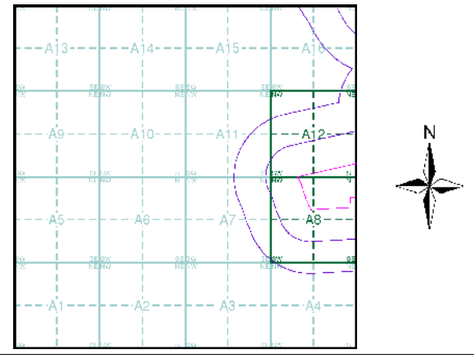
General

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

Agency and Hydrological (Flood)

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

Flood Map - Slice A



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

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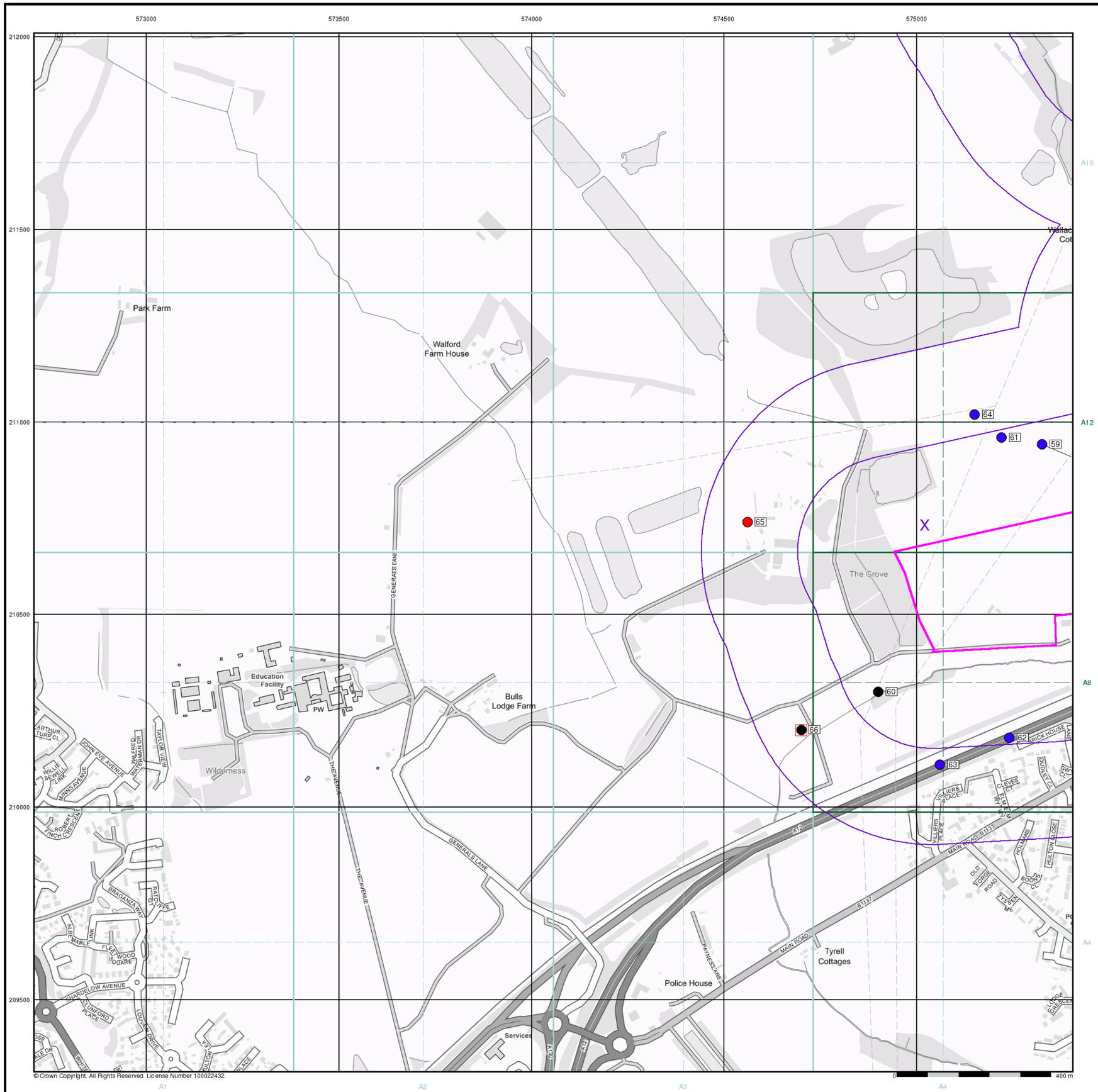

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LANDMARK INFORMATION GROUP®

General

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

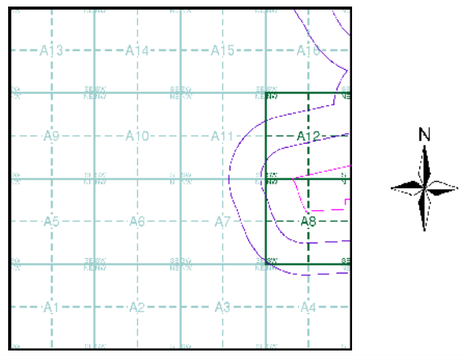
Agency and Hydrological (Boreholes)

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

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

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

Borehole Map - Slice A



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

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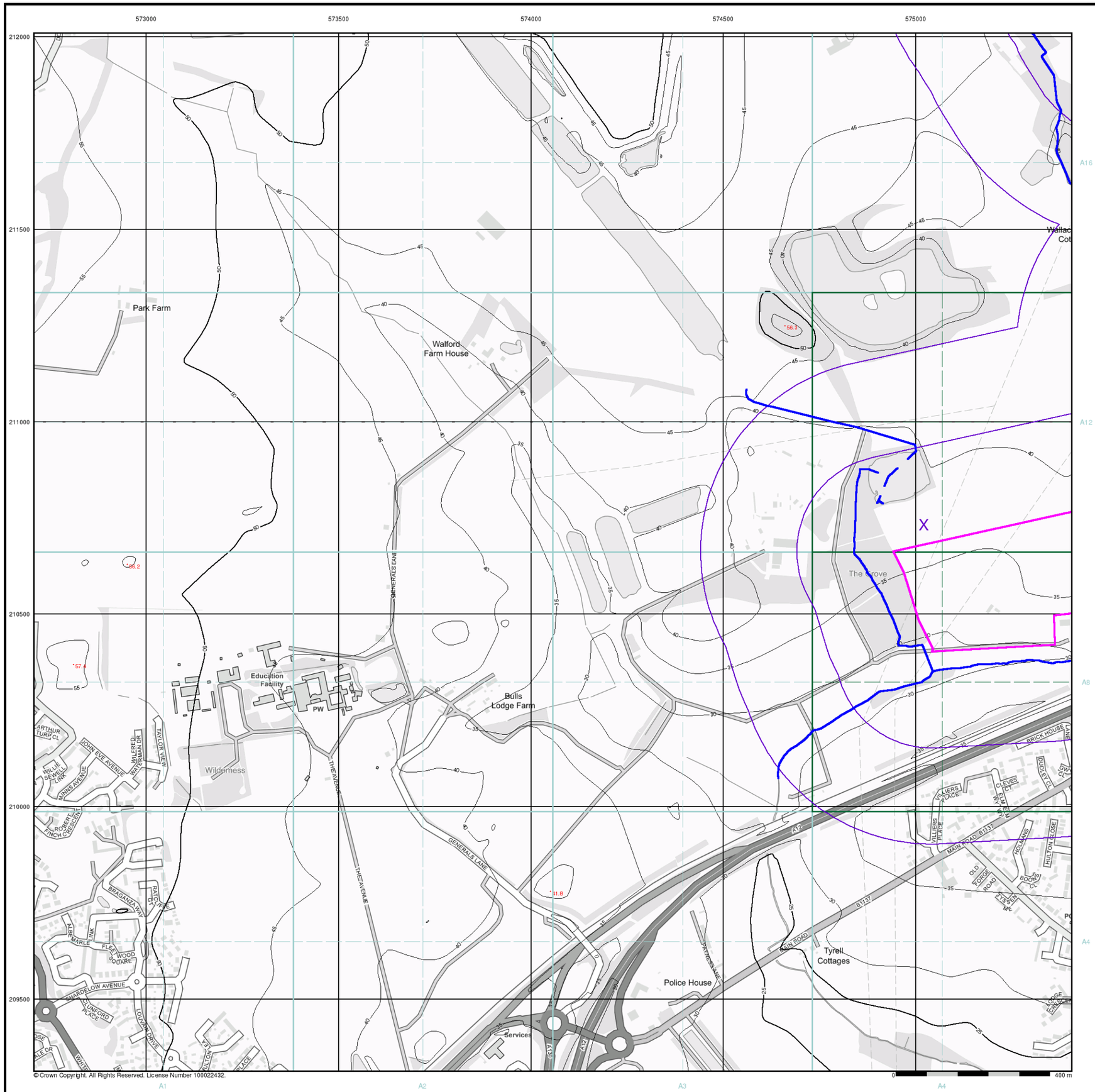

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LANDMARK INFORMATION GROUP®

General

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

OS Water Network Data

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

Contours (height in meters)

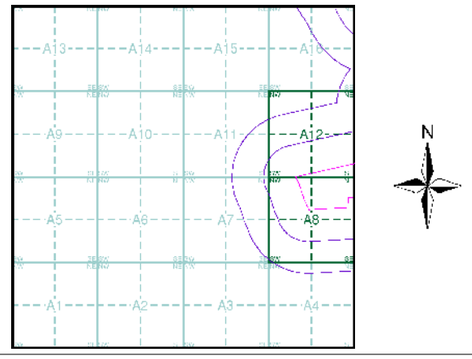
Standard Contour 105 100 95

Master Contour

Spot Height 167.3

- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

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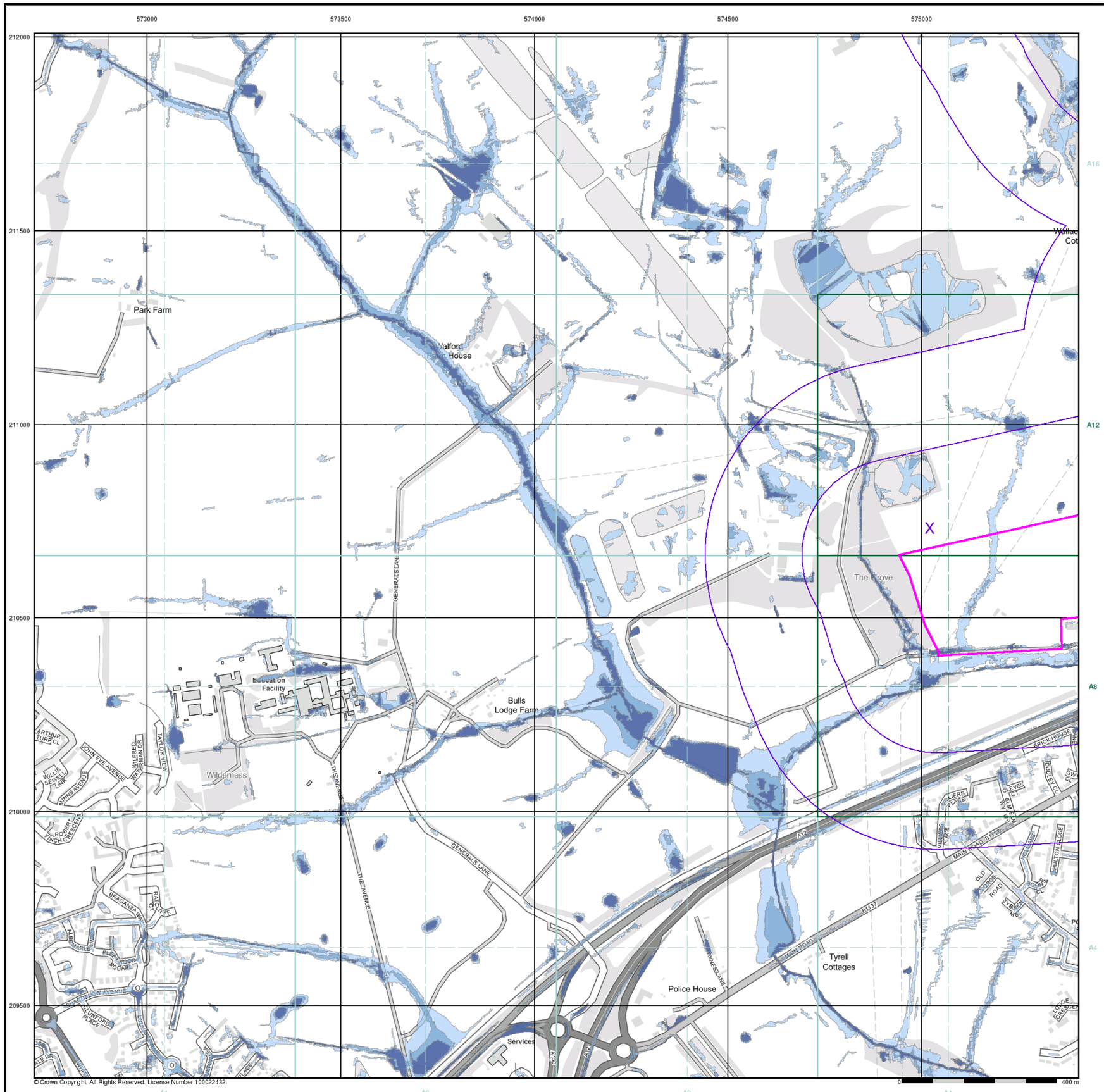
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



A1 A2 A3 A4

Envirocheck®

LANDMARK INFORMATION GROUP®

General

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

Risk of Flooding from Surface Water

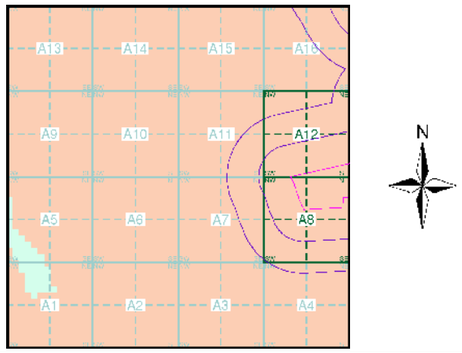
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

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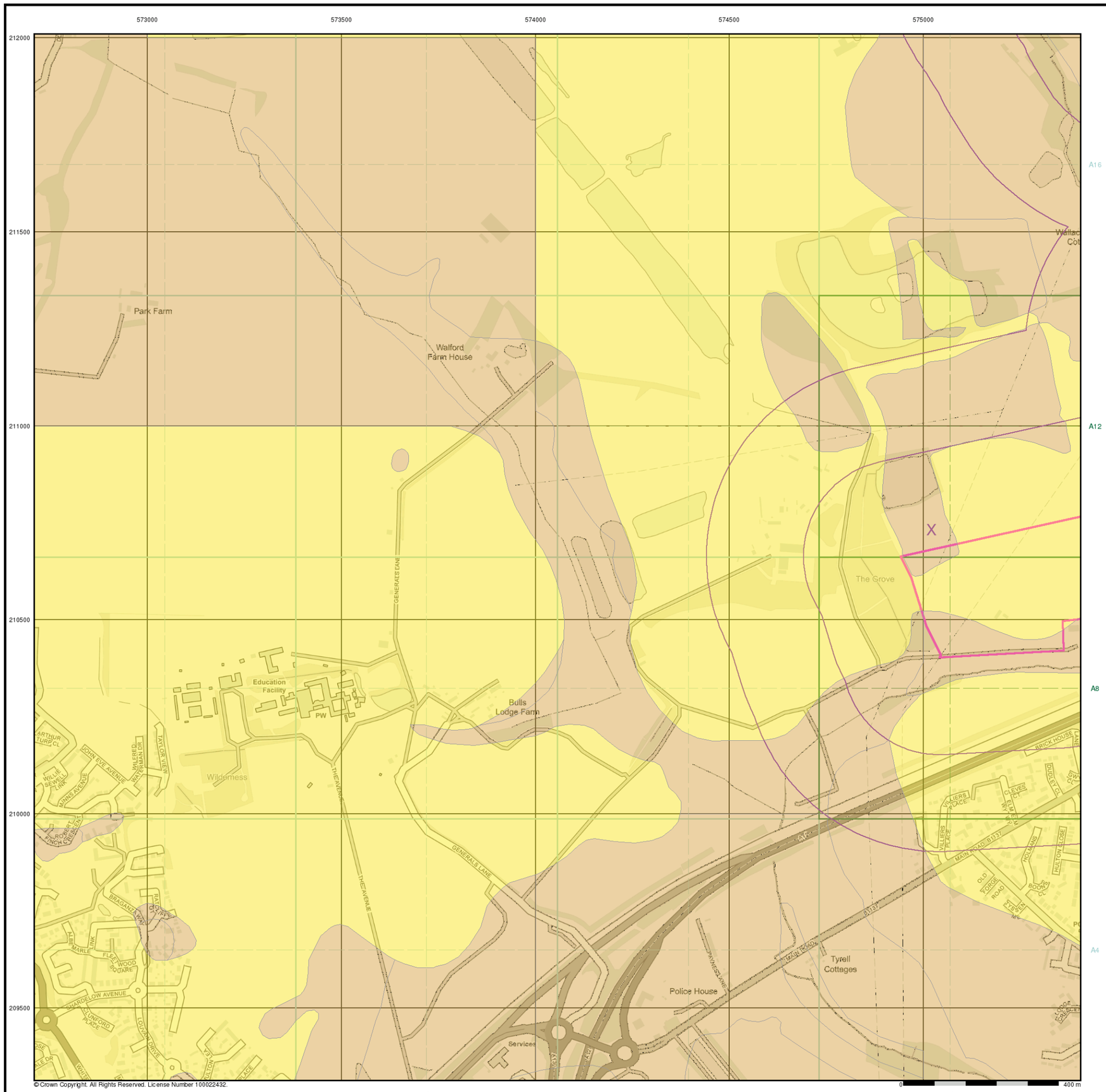
Web: www.envirocheck.co.uk



A1 A2 A3 A4

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LANDMARK INFORMATION GROUP®

General

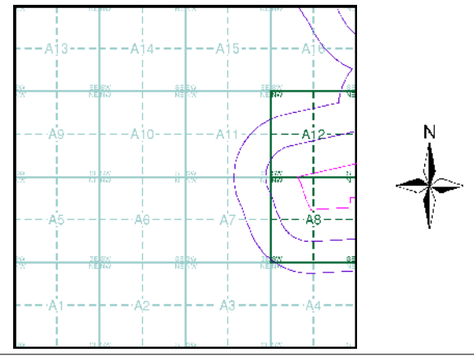
Specified Site Specified Buffer(s) X Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

Estimated Soil Chemistry Arsenic - Slice A



Order Details

Order Details:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

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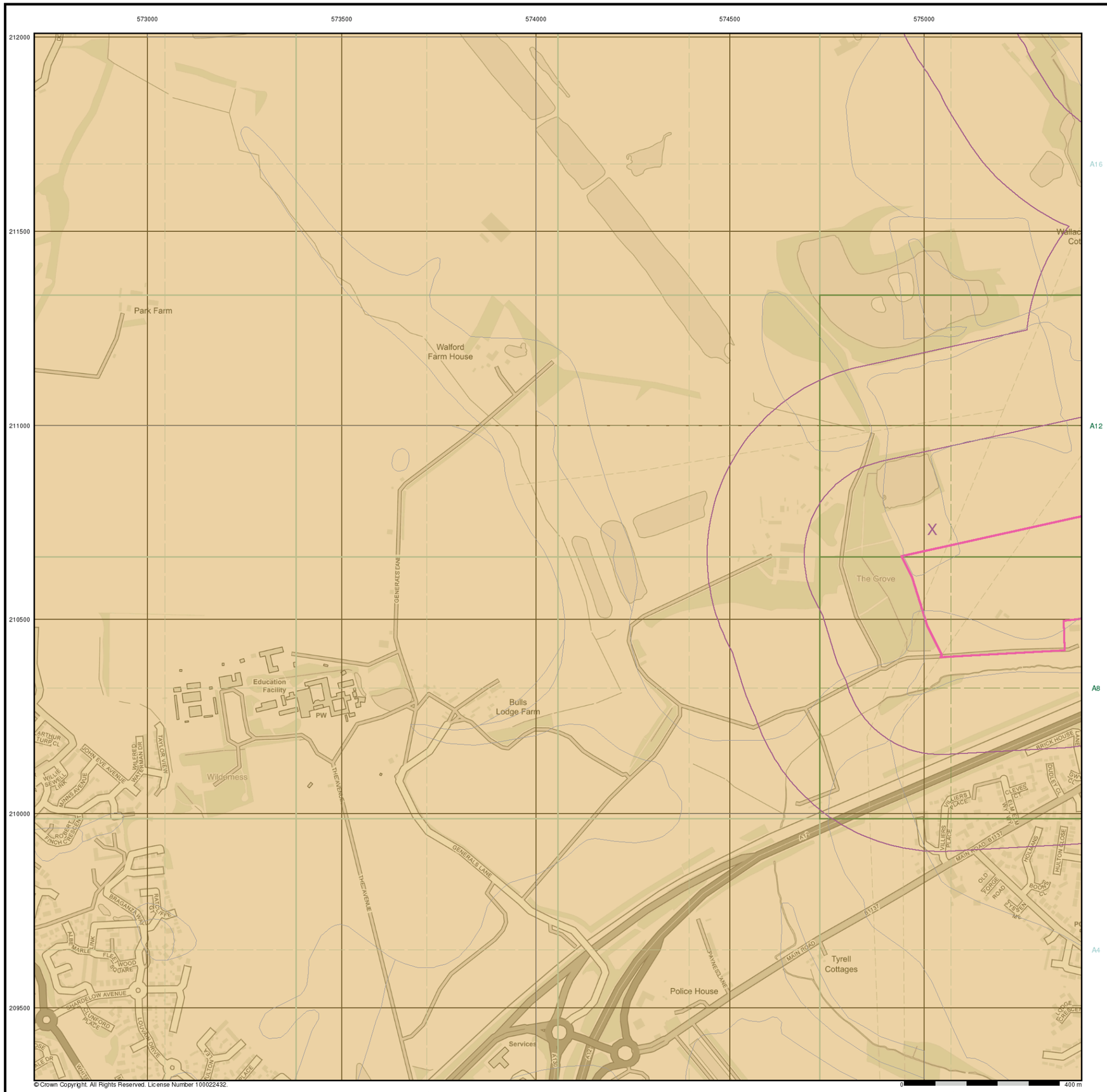

0 400 m

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LANDMARK INFORMATION GROUP®

General

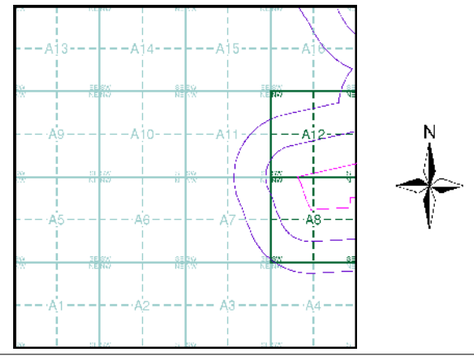
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

- < 1.8
- 1.8 - 2.2
- 2.2 - 3.0
- > 3.0

Estimated Soil Chemistry Cadmium - Slice A



Order Details

Order Details:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

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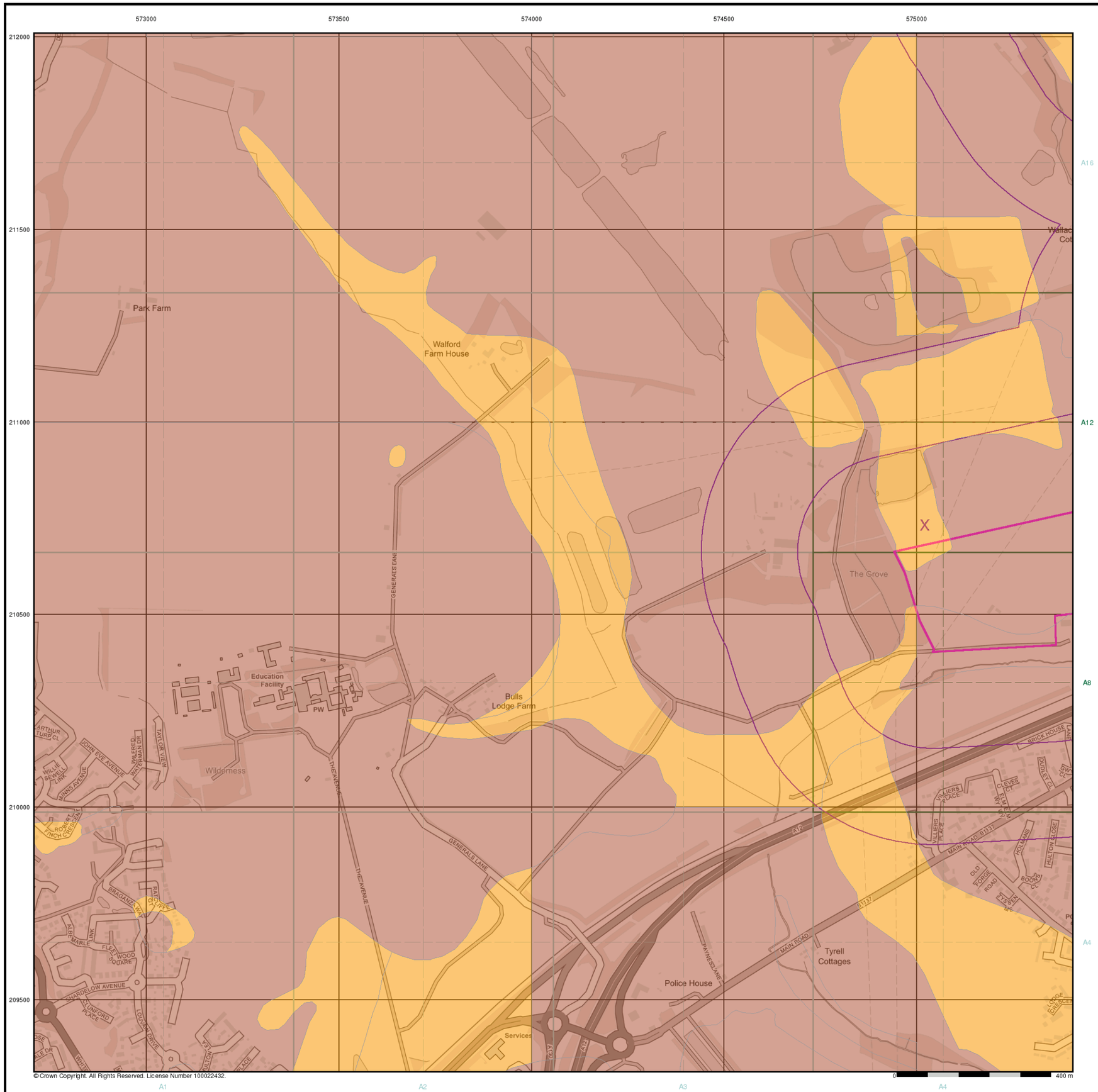
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Envirocheck®

LANDMARK INFORMATION GROUP®

General

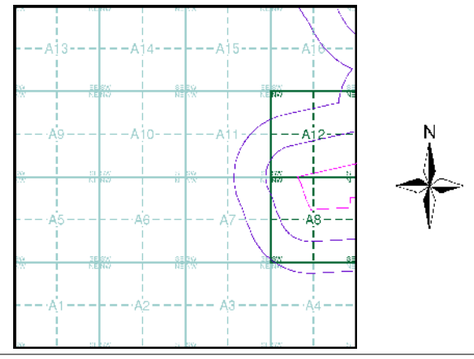
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

Estimated Soil Chemistry Chromium - Slice A

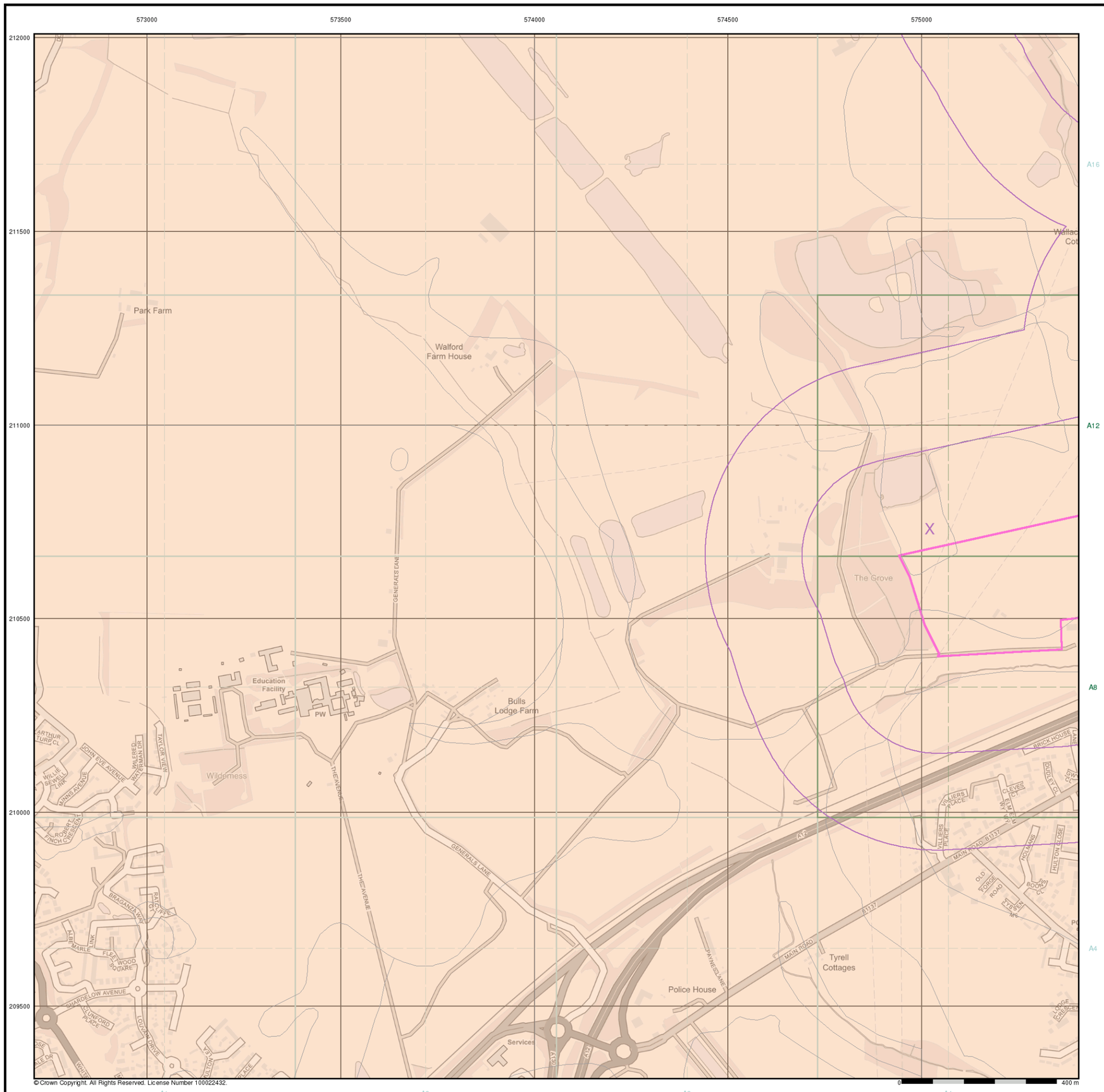


Order Details

Order Details:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield



Envirocheck®

LANDMARK INFORMATION GROUP®

General

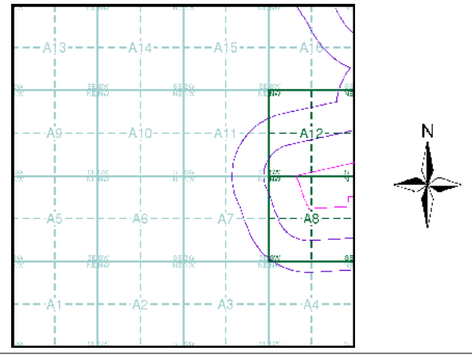
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

- <100 mg/kg
- 100 - 200
- 200 - 300
- 300 - 600
- 600 - 1200
- >1200

Estimated Soil Chemistry Lead - Slice A



Order Details

Order Details:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

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Fax: 0844 844 9951
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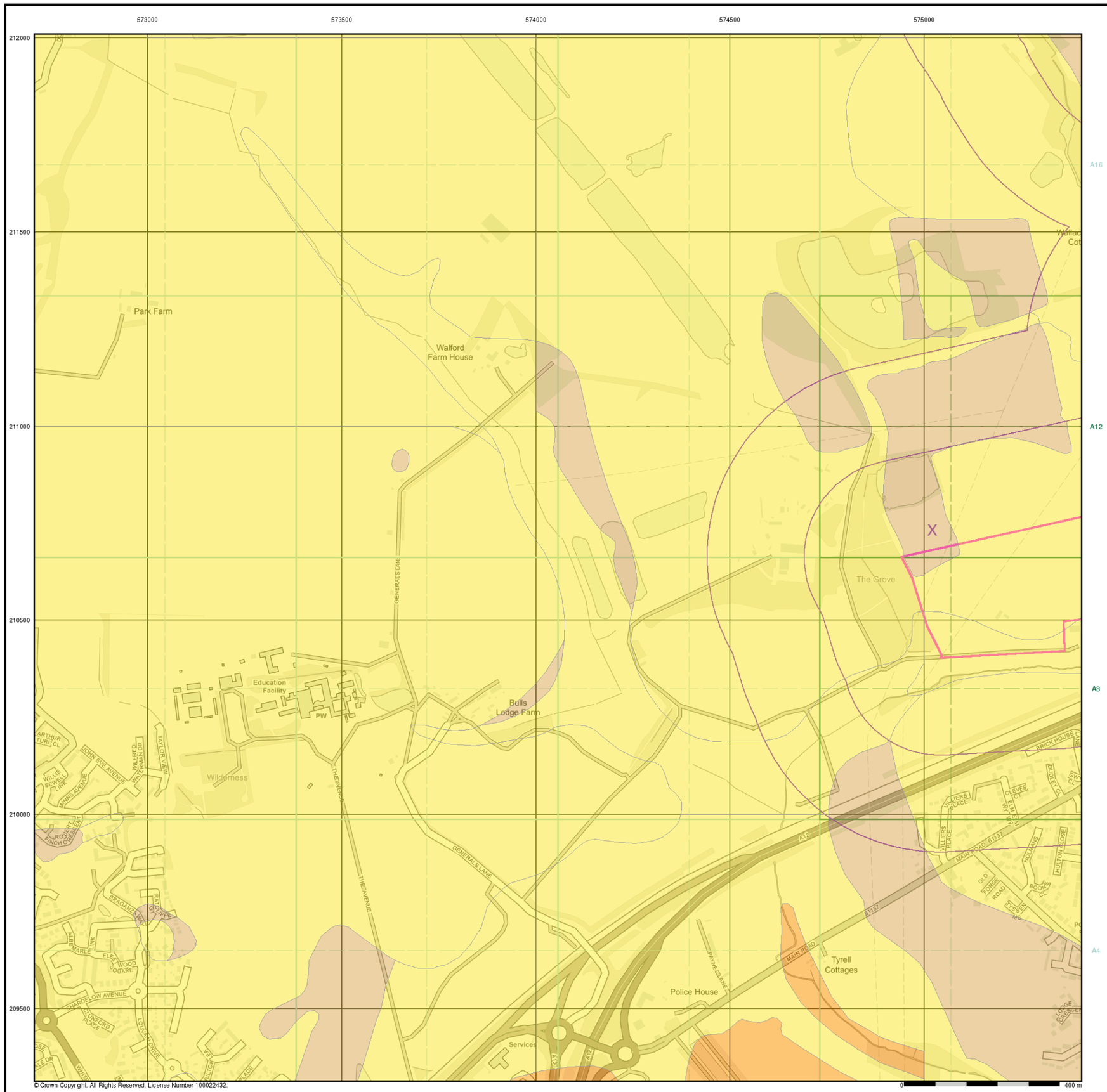


Envirocheck®

LANDMARK INFORMATION GROUP®

General

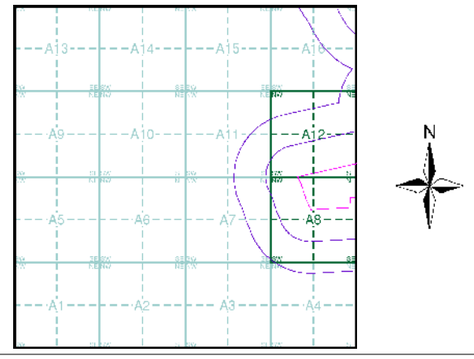
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Estimated Soil Chemistry Nickel - Slice A



Order Details

Order Details:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

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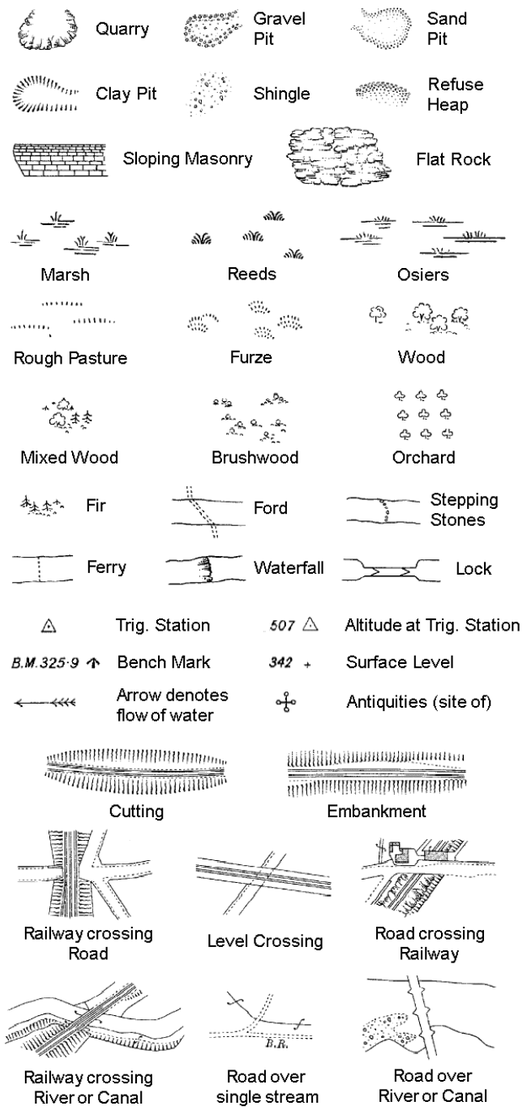
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Historical Mapping Legends

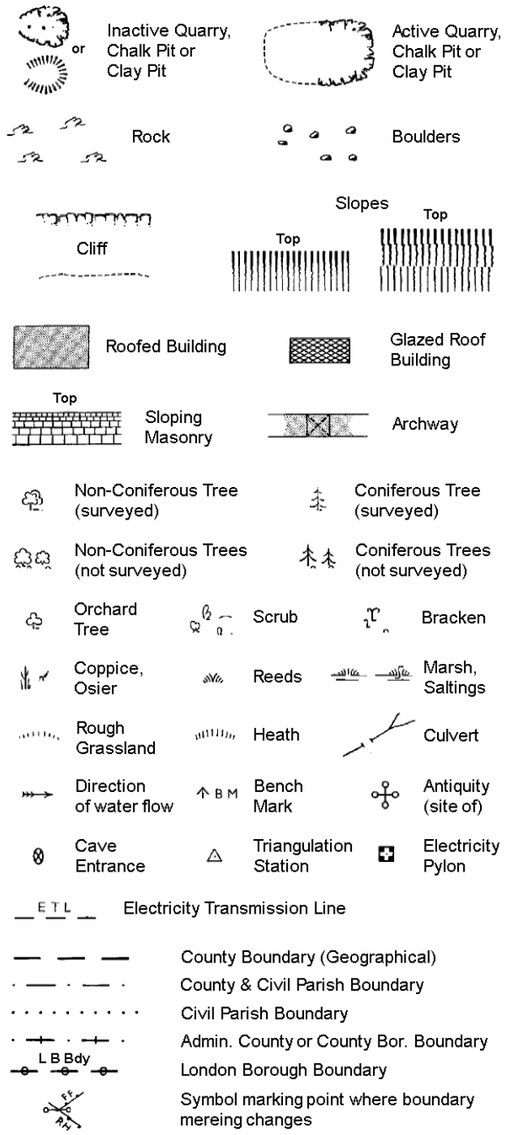
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)

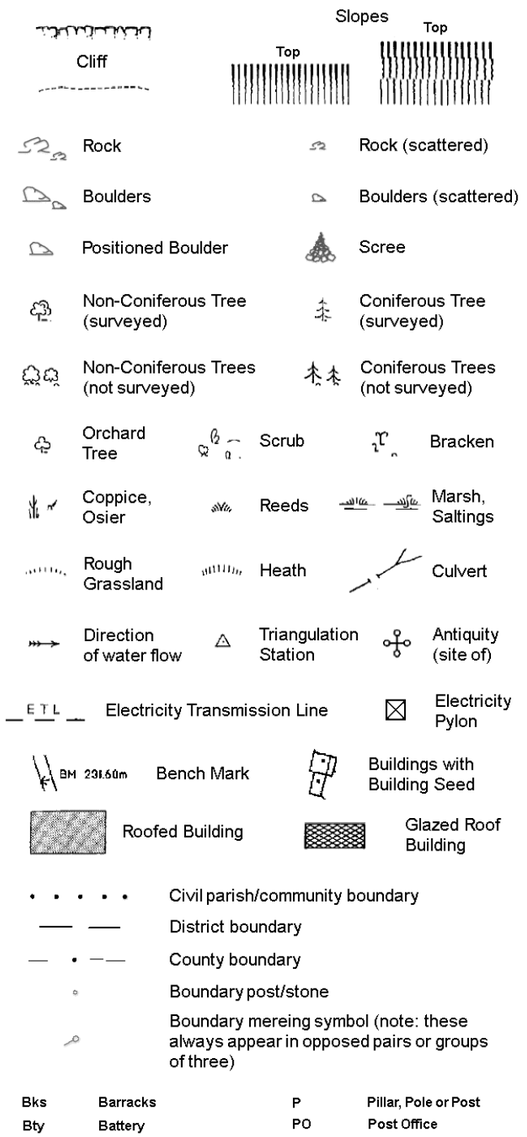
B.P B.S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	Sl.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

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



BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

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



Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

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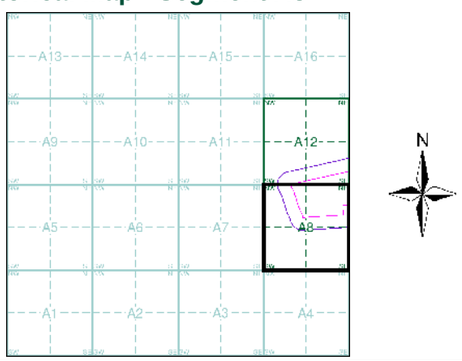
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Essex	1:2,500	1874	2
Essex	1:2,500	1897	3
Essex	1:2,500	1922	4
Ordnance Survey Plan	1:2,500	1952 - 1967	5
Ordnance Survey Plan	1:2,500	1966 - 1967	6
Ordnance Survey Plan	1:2,500	1972	7
Supply of Unpublished Survey Information	1:2,500	1974	8
Additional SIMs	1:2,500	1978 - 1988	9
Additional SIMs	1:2,500	1983 - 1985	10
Additional SIMs	1:2,500	1985	11
Ordnance Survey Plan	1:2,500	1986 - 1991	12
Large-Scale National Grid Data	1:2,500	1993	13
Large-Scale National Grid Data	1:2,500	1993	14
Large-Scale National Grid Data	1:2,500	1994	15
Large-Scale National Grid Data	1:2,500	1995	16
Large-Scale National Grid Data	1:2,500	1996	17
Large-Scale National Grid Data	1:2,500	1996	18
Historical Aerial Photography	1:2,500	1999	19

Historical Map - Segment A8



Order Details

Order Number: 274546457_1_1
Customer Ref: 60640215
National Grid Reference: 575020, 210730
Slice: A
Site Area (Ha): 473.19
Search Buffer (m): 100

Site Details

Longfield

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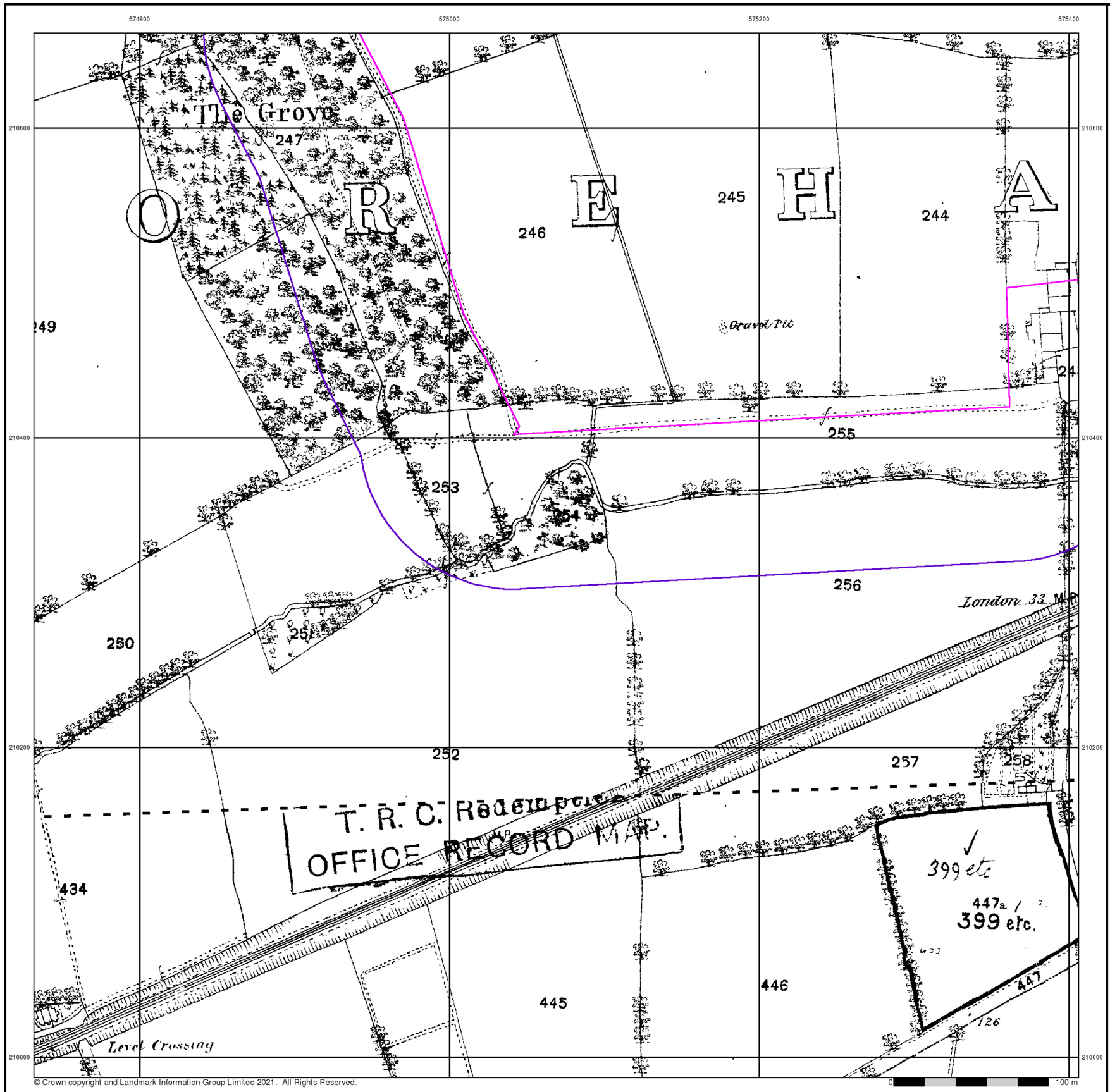
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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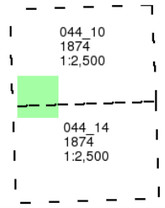
Essex

Published 1874

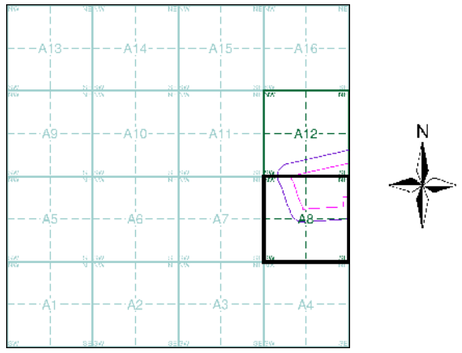
Source map scale - 1:2,500

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 A8



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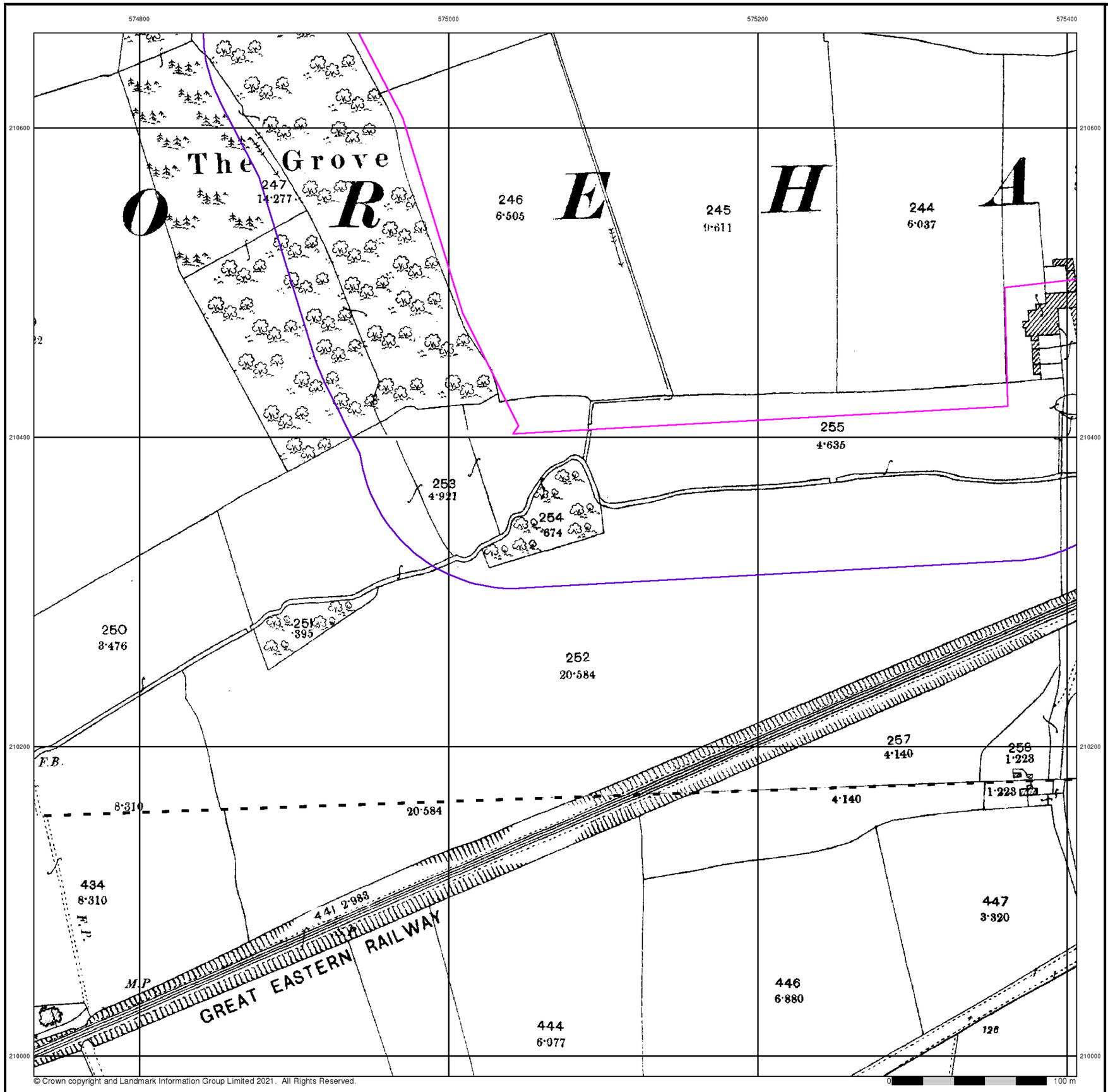

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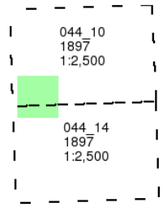
Essex

Published 1897

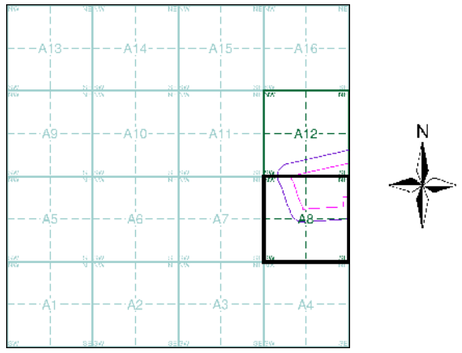
Source map scale - 1:2,500

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 A8



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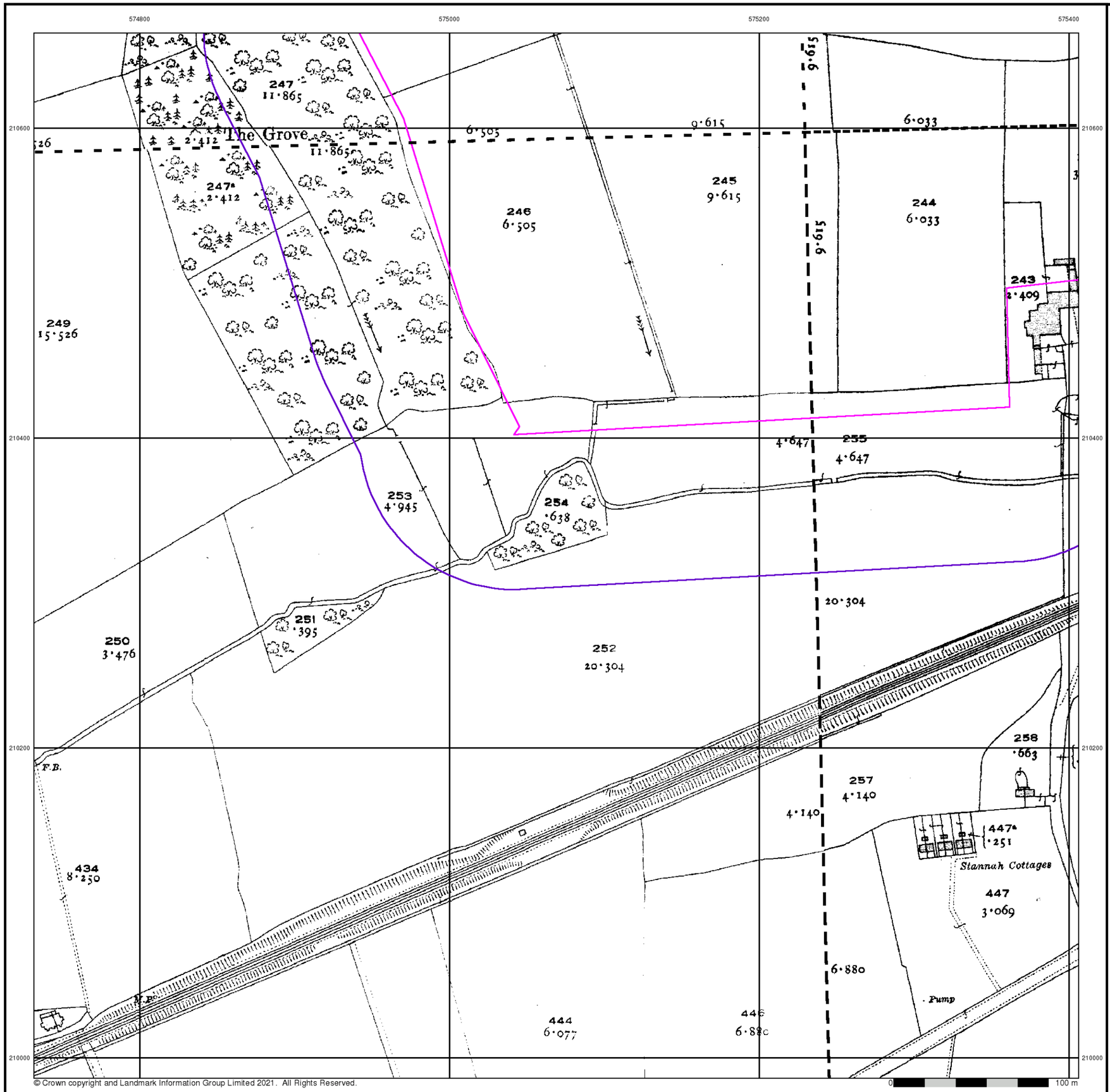

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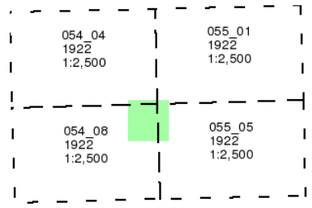
Essex

Published 1922

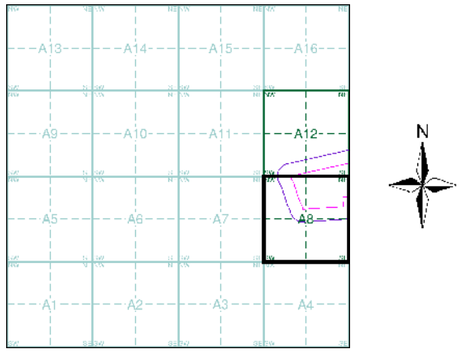
Source map scale - 1:2,500

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 A8



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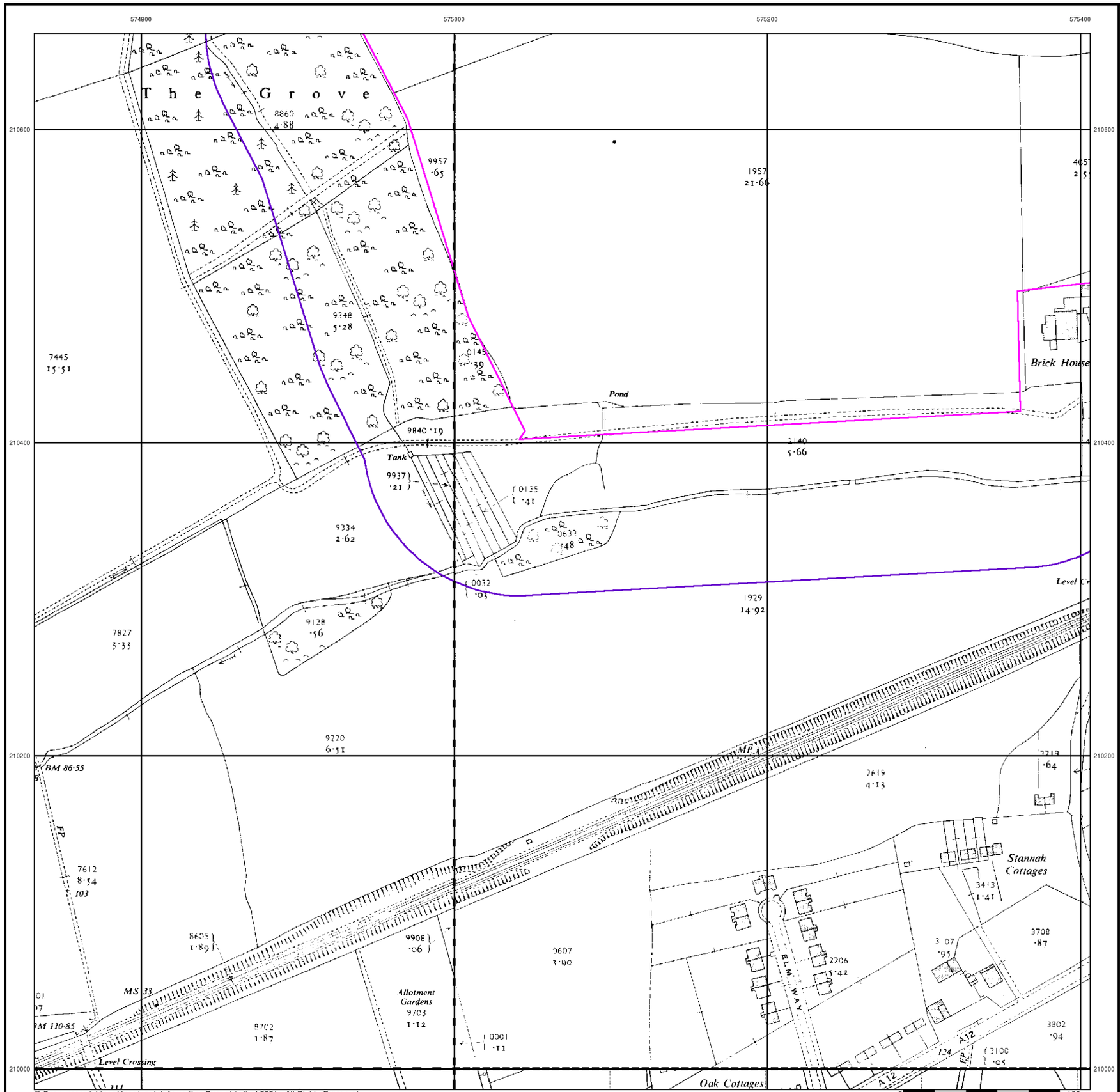

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Ordnance Survey Plan

Published 1952 - 1967

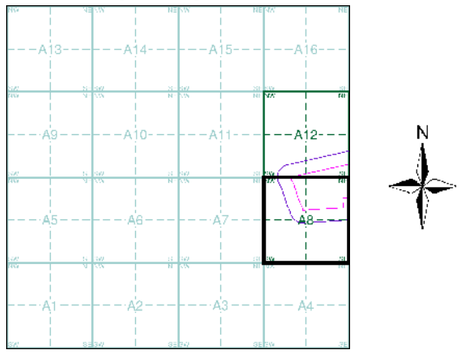
Source map scale - 1:2,500

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)

TL7410 1952 1:2,500	TL7510 1952 1:2,500
TL7409 1952 1:2,500	TL7509 1967 1:2,500

Historical Map - Segment A8



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
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Site Area (Ha):	473.19
Search Buffer (m):	100

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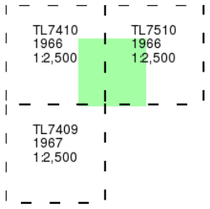
Ordnance Survey Plan

Published 1966 - 1967

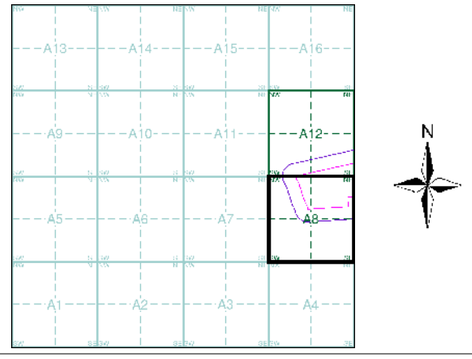
Source map scale - 1:2,500

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 A8



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
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Site Details

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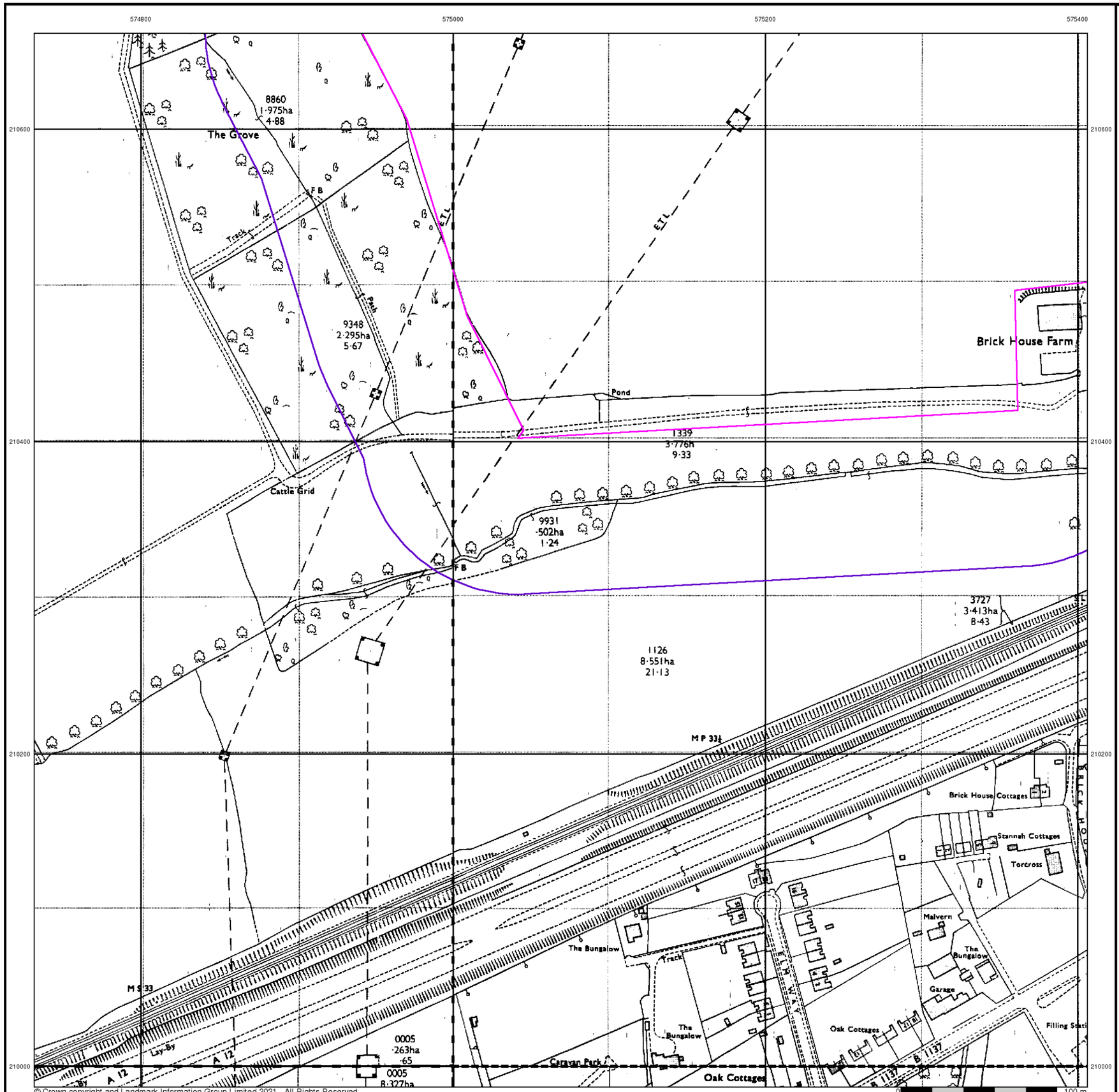

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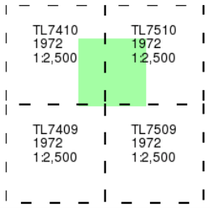
Ordnance Survey Plan

Published 1972

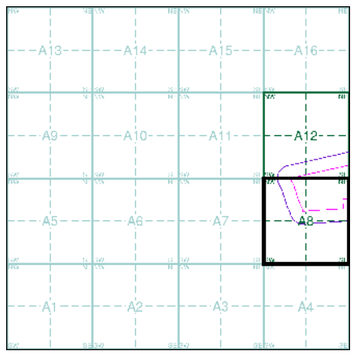
Source map scale - 1:2,500

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 A8



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
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Site Details

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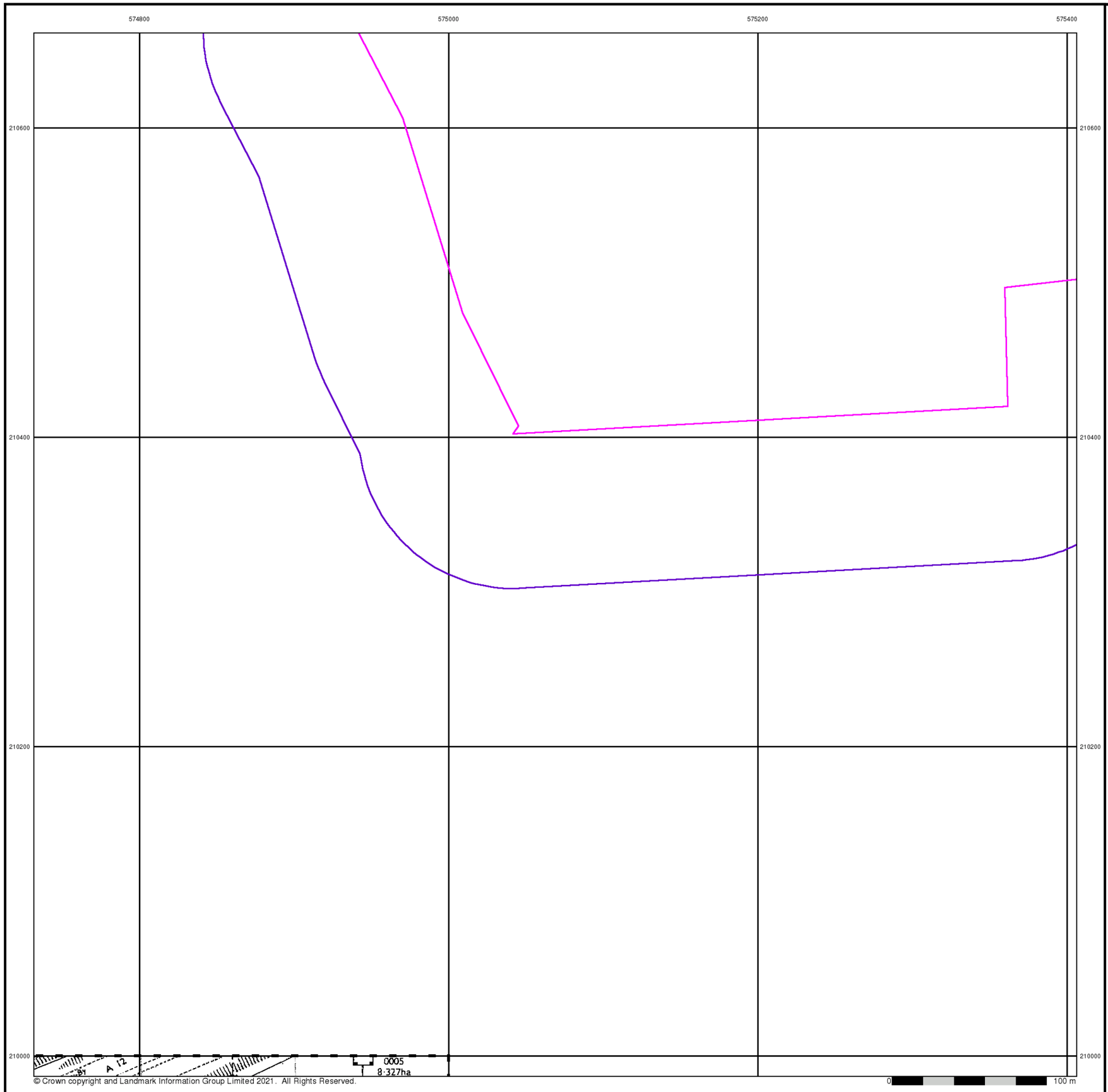

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LANDMARK INFORMATION GROUP®

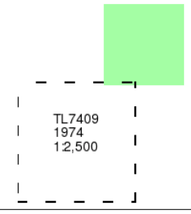
Supply of Unpublished Survey Information

Published 1974

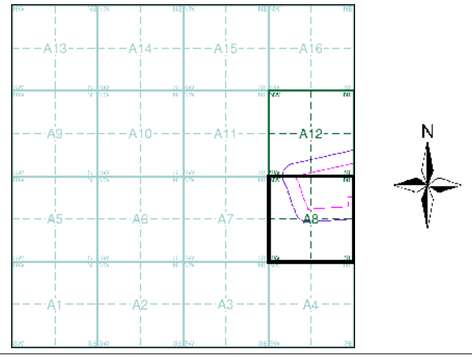
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A8



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	100

Site Details

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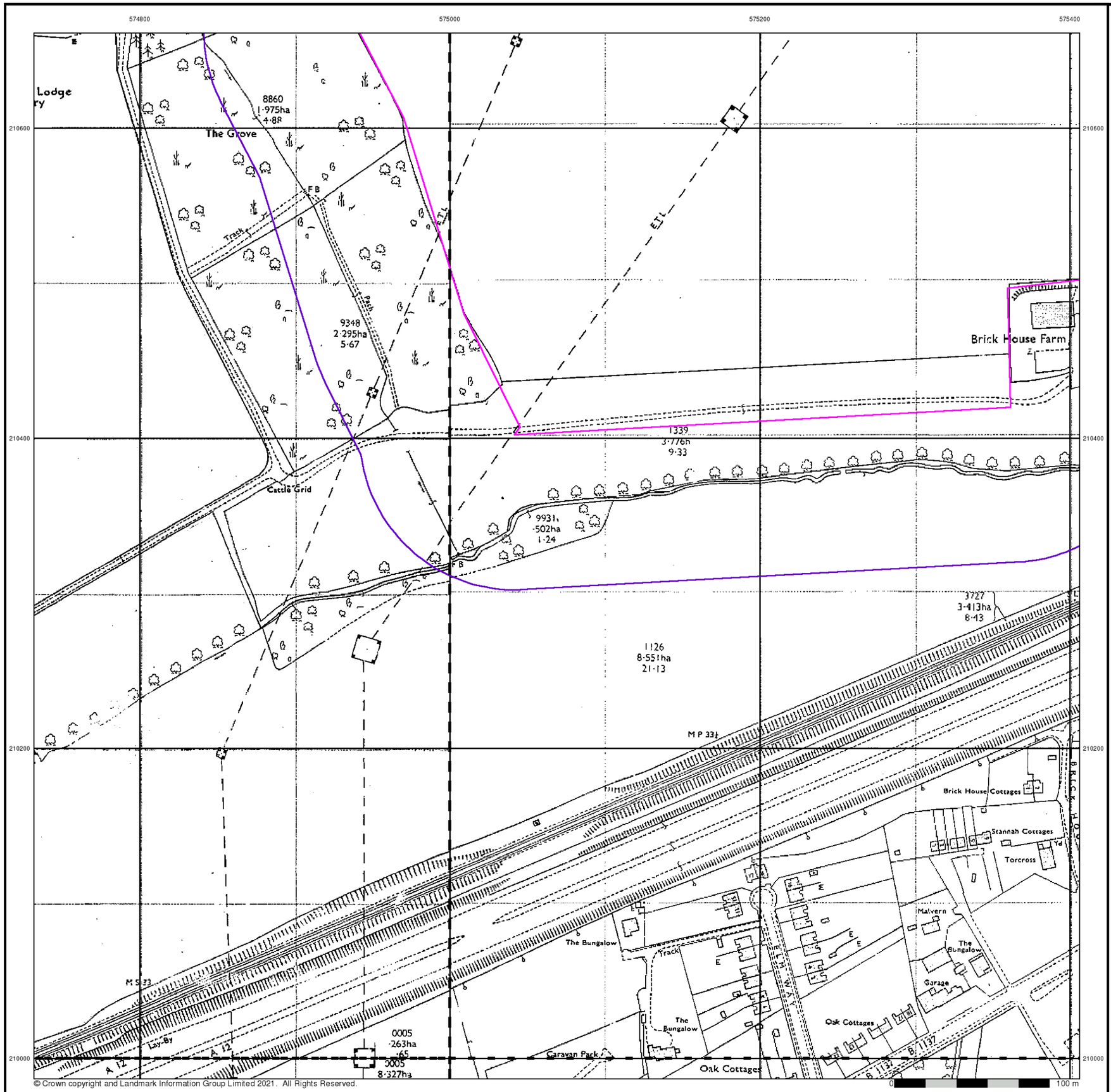

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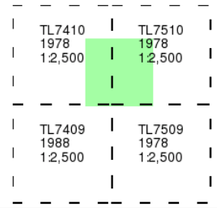
Additional SIMs

Published 1978 - 1988

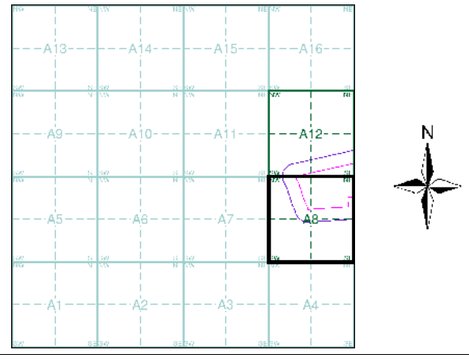
Source map scale - 1:2,500

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 A8



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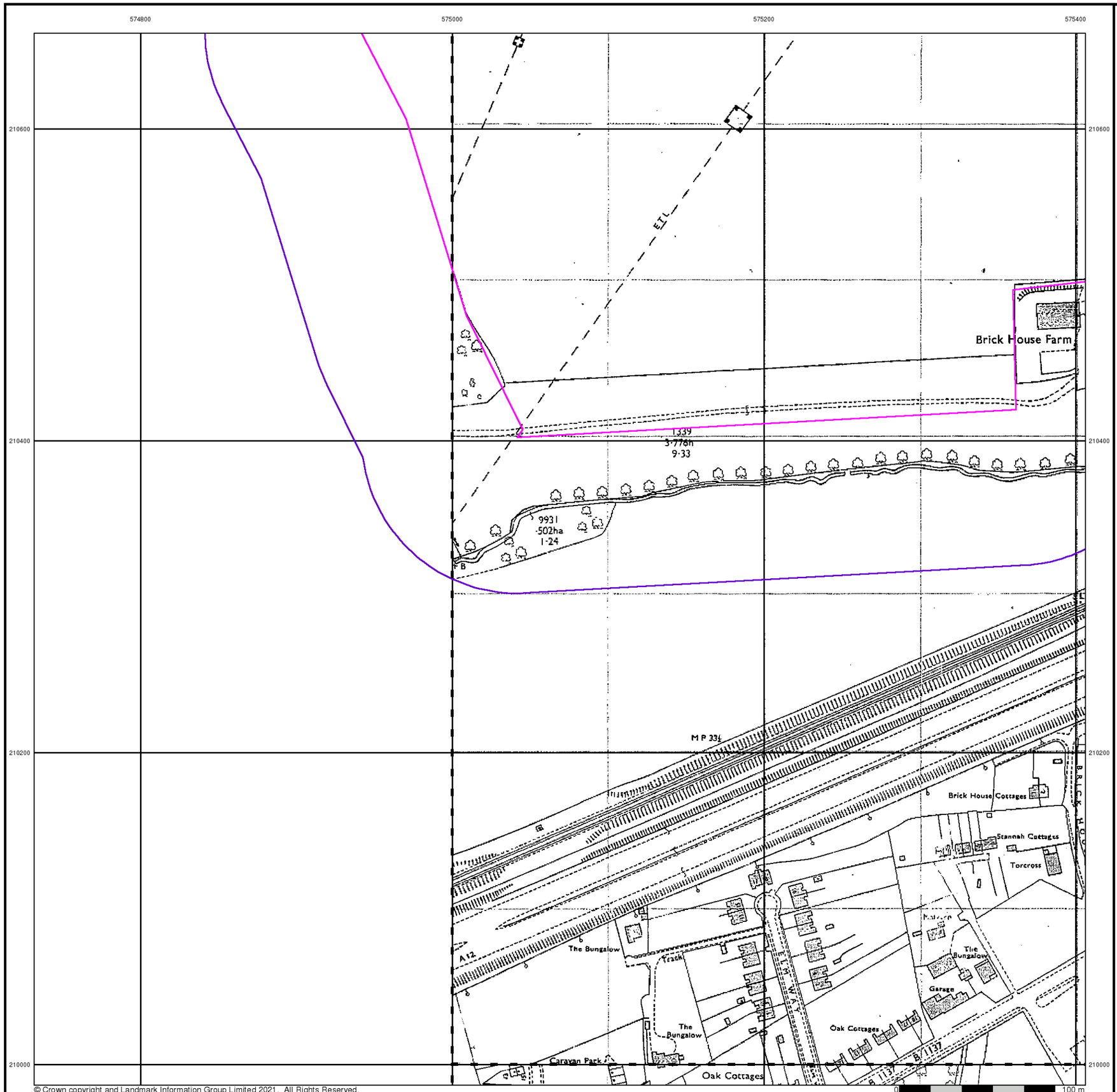

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LANDMARK INFORMATION GROUP®

Additional SIMs

Published 1983 - 1985

Source map scale - 1:2,500

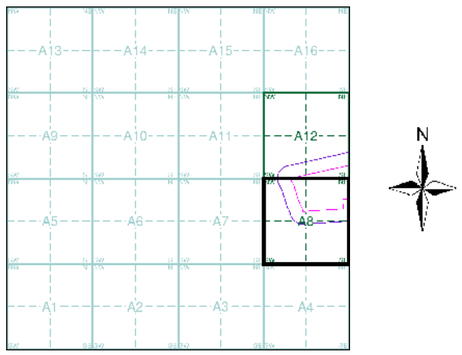
The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps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

Map Name(s) and Date(s)

TL7510
1983
1:2,500

TL7509
1985
1:2,500

Historical Map - Segment A8



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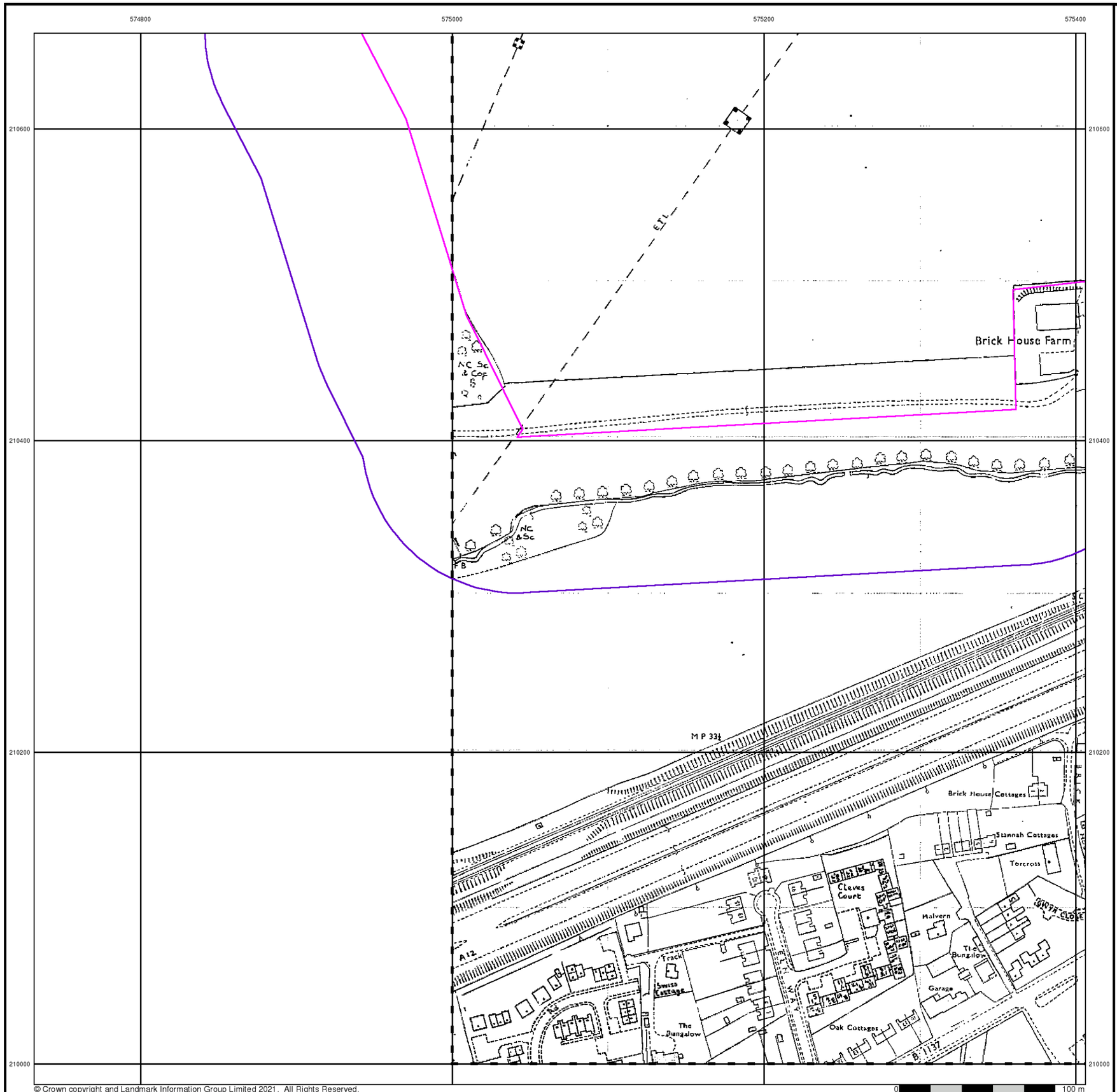

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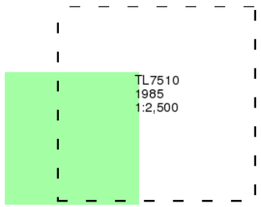
Additional SIMs

Published 1985

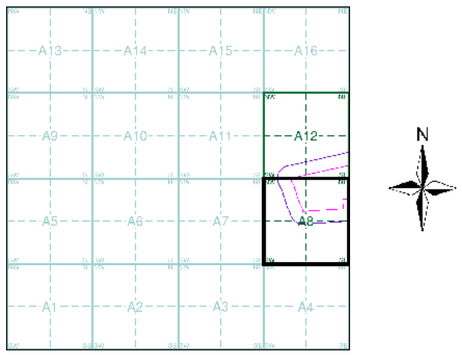
Source map scale - 1:2,500

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 A8



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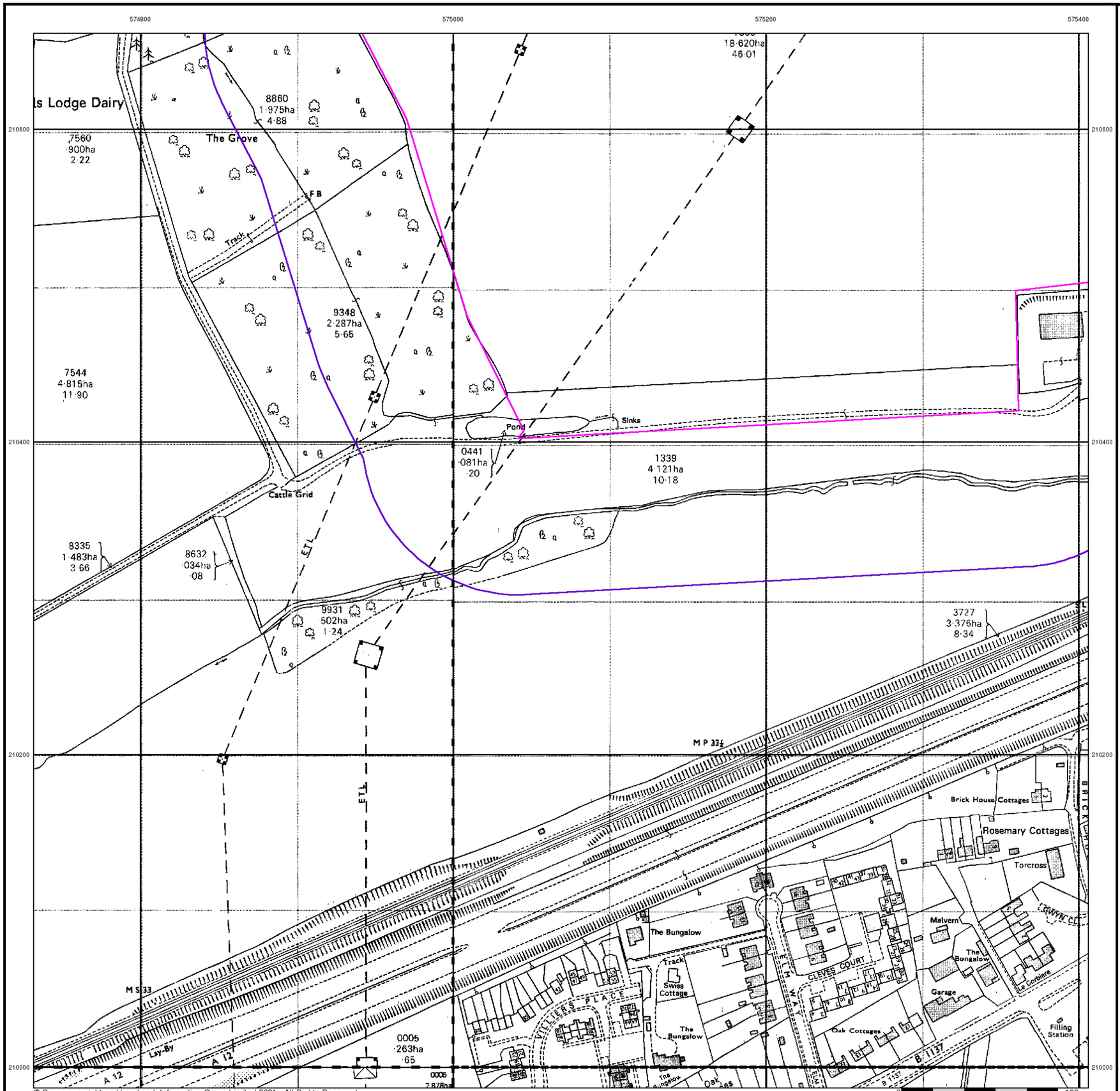

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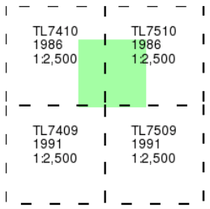
Ordnance Survey Plan

Published 1986 - 1991

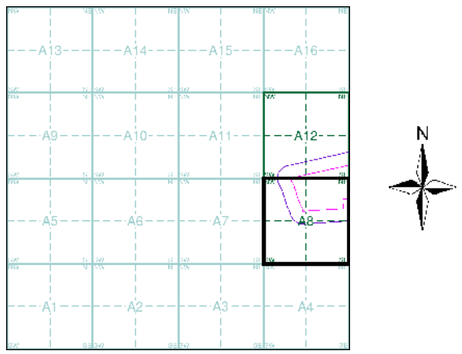
Source map scale - 1:2,500

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 A8



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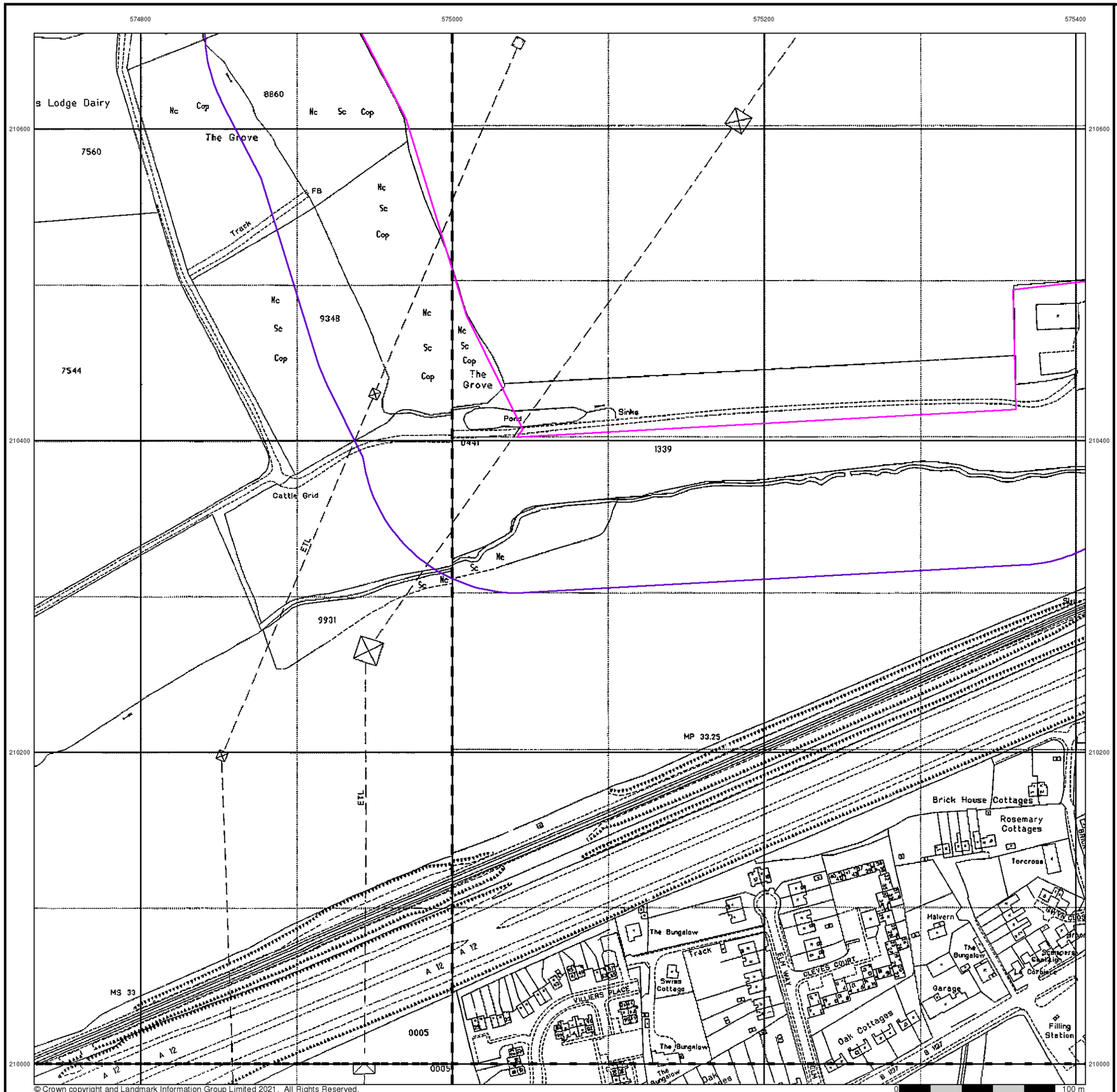

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Large-Scale National Grid Data

Published 1993

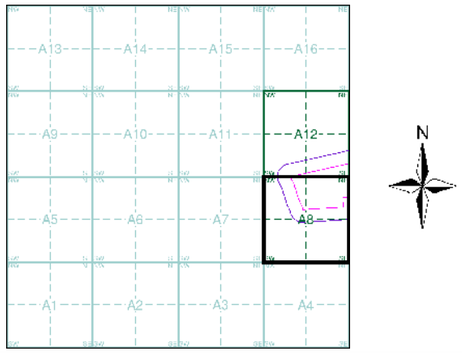
Source map scale - 1:2,500

'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)

TL7410 1993 1:2,500	TL7510 1993 1:2,500
TL7409 1993 1:2,500	TL7509 1993 1:2,500

Historical Map - Segment A8



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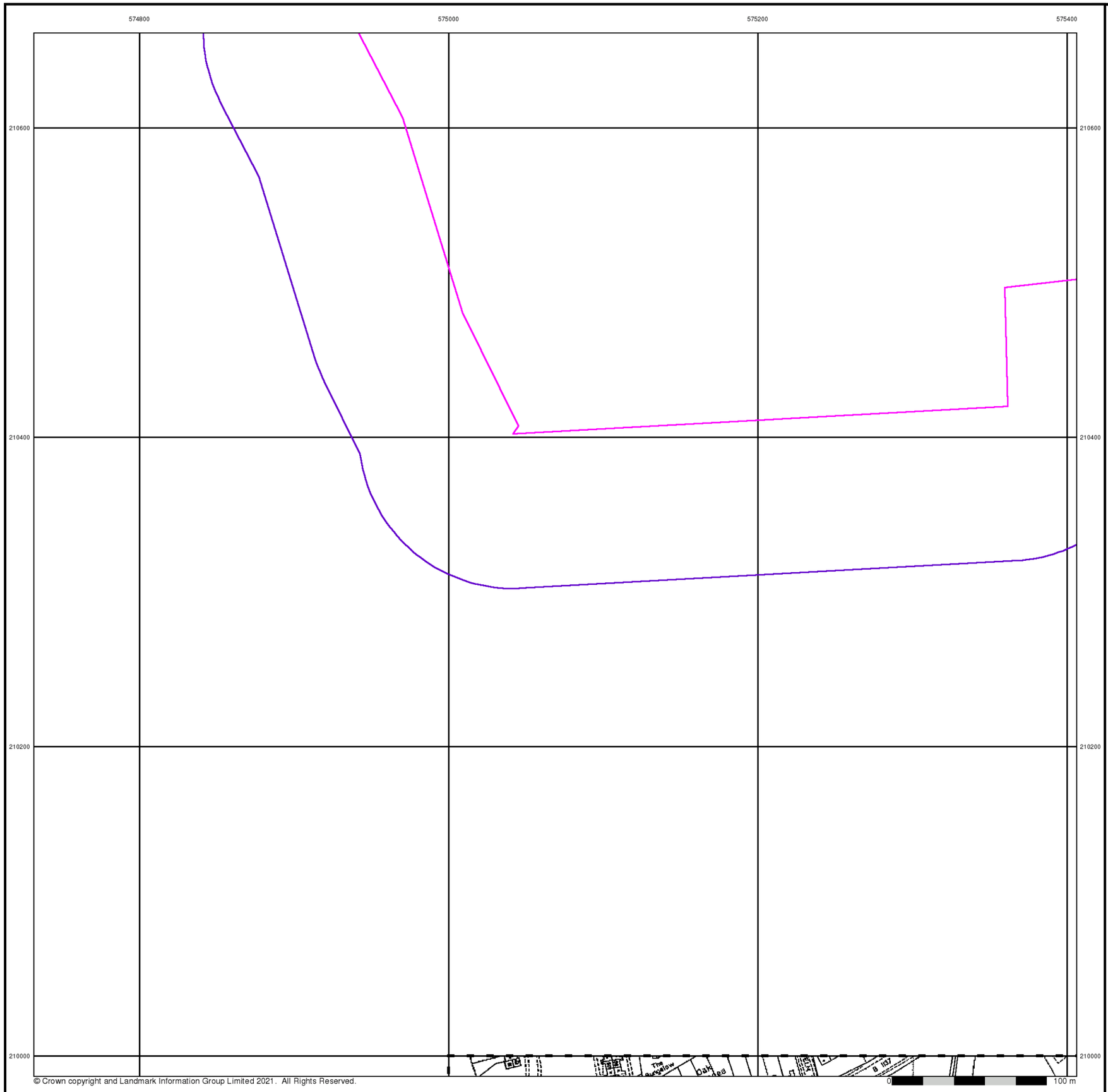
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	100

Site Details

Longfield

Landmark INFORMATION GROUP

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



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LANDMARK INFORMATION GROUP®

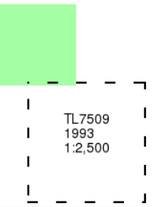
Large-Scale National Grid Data

Published 1993

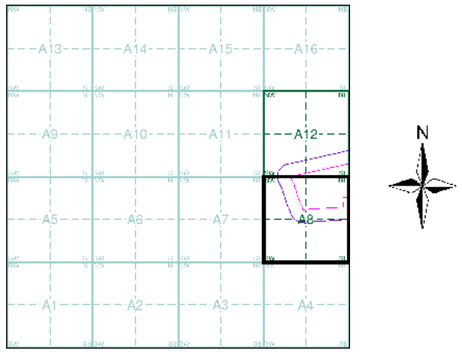
Source map scale - 1:2,500

'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 A8



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	100

Site Details

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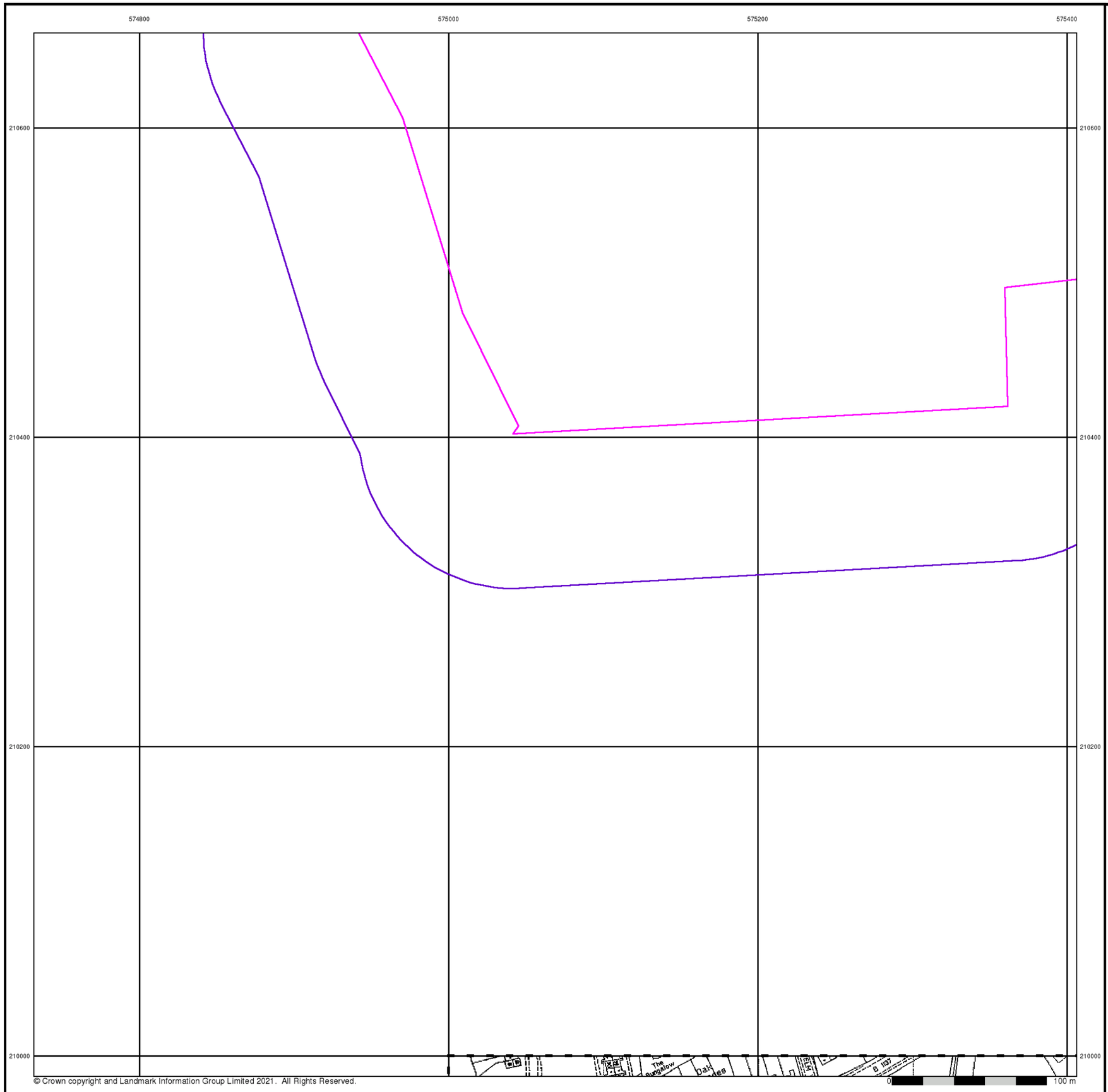

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Large-Scale National Grid Data

Published 1994

Source map scale - 1:2,500

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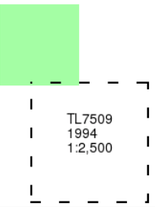

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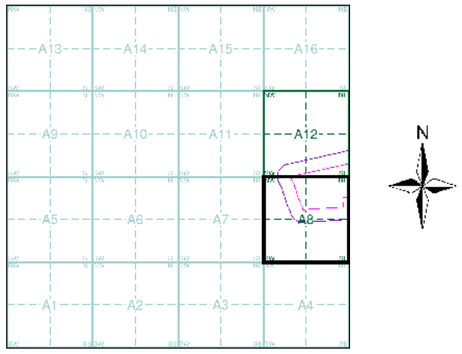

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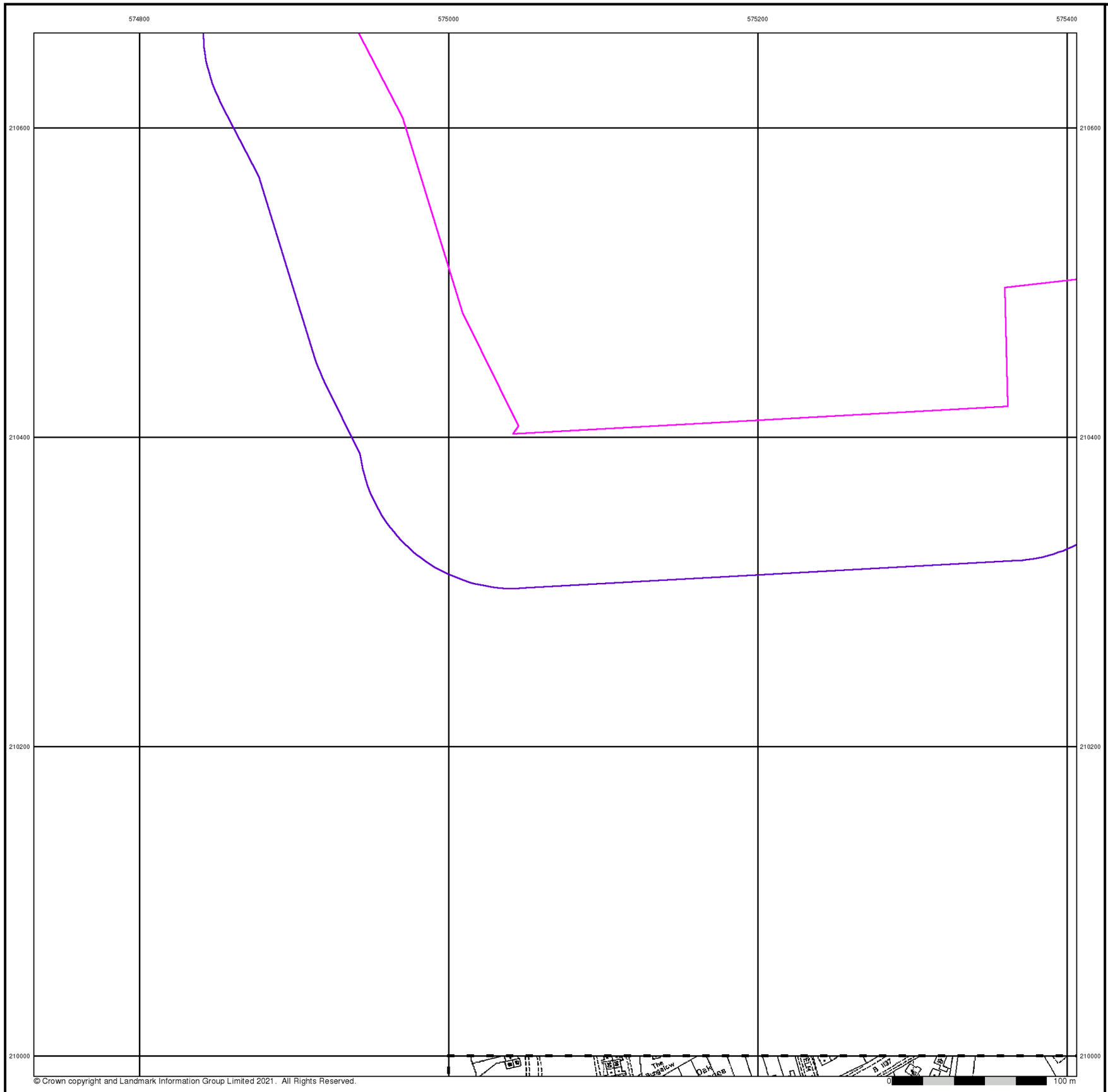

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Large-Scale National Grid Data

Published 1995

Source map scale - 1:2,500

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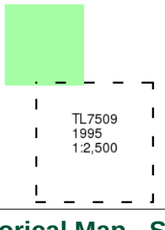
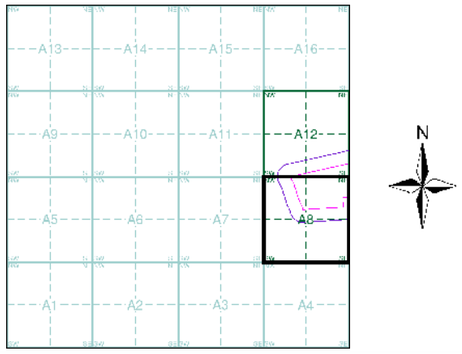


Historical Map - Segment A8



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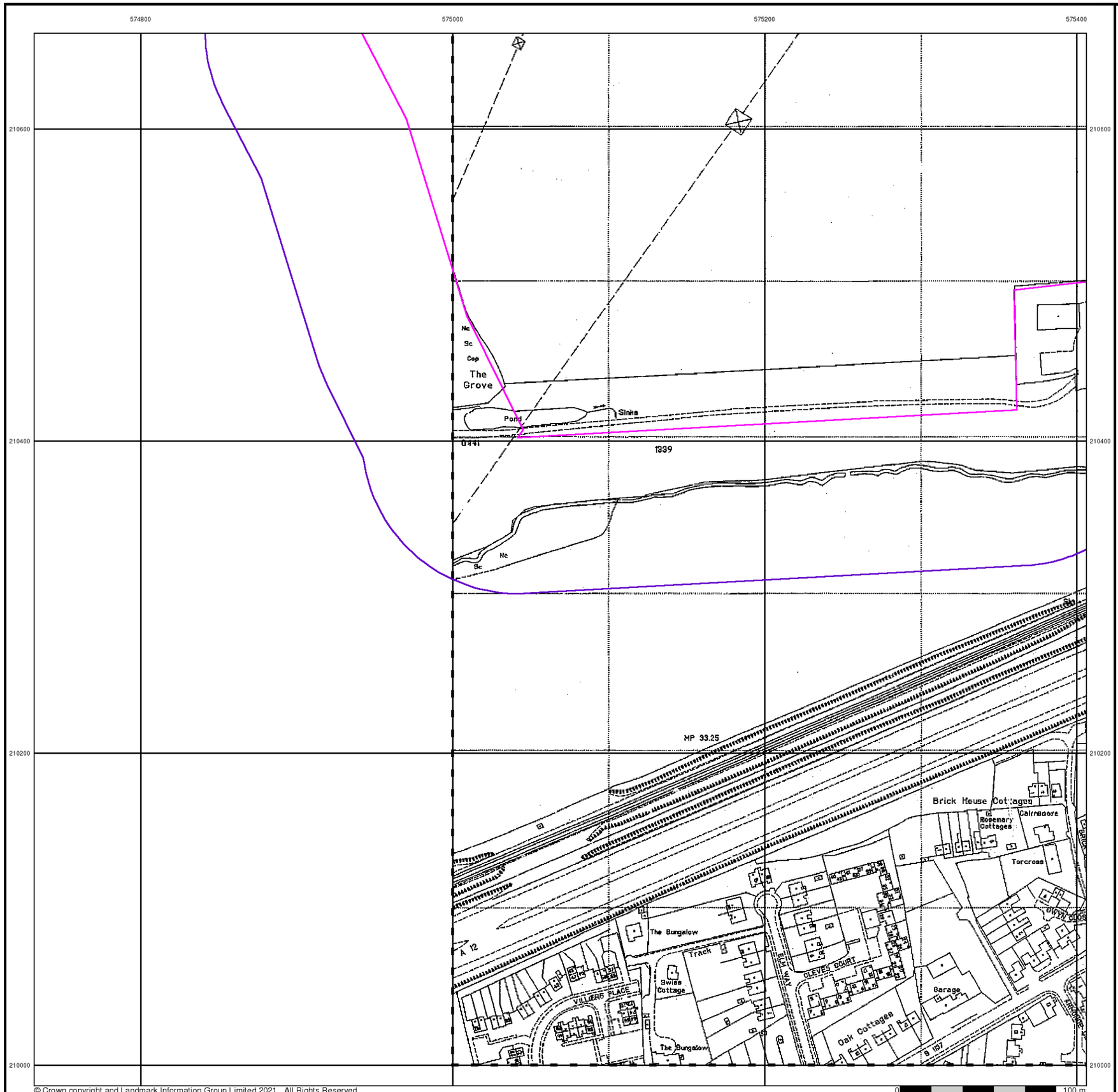

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Large-Scale National Grid Data

Published 1996

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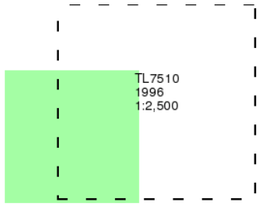

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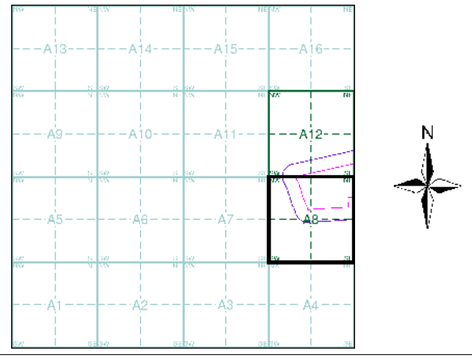

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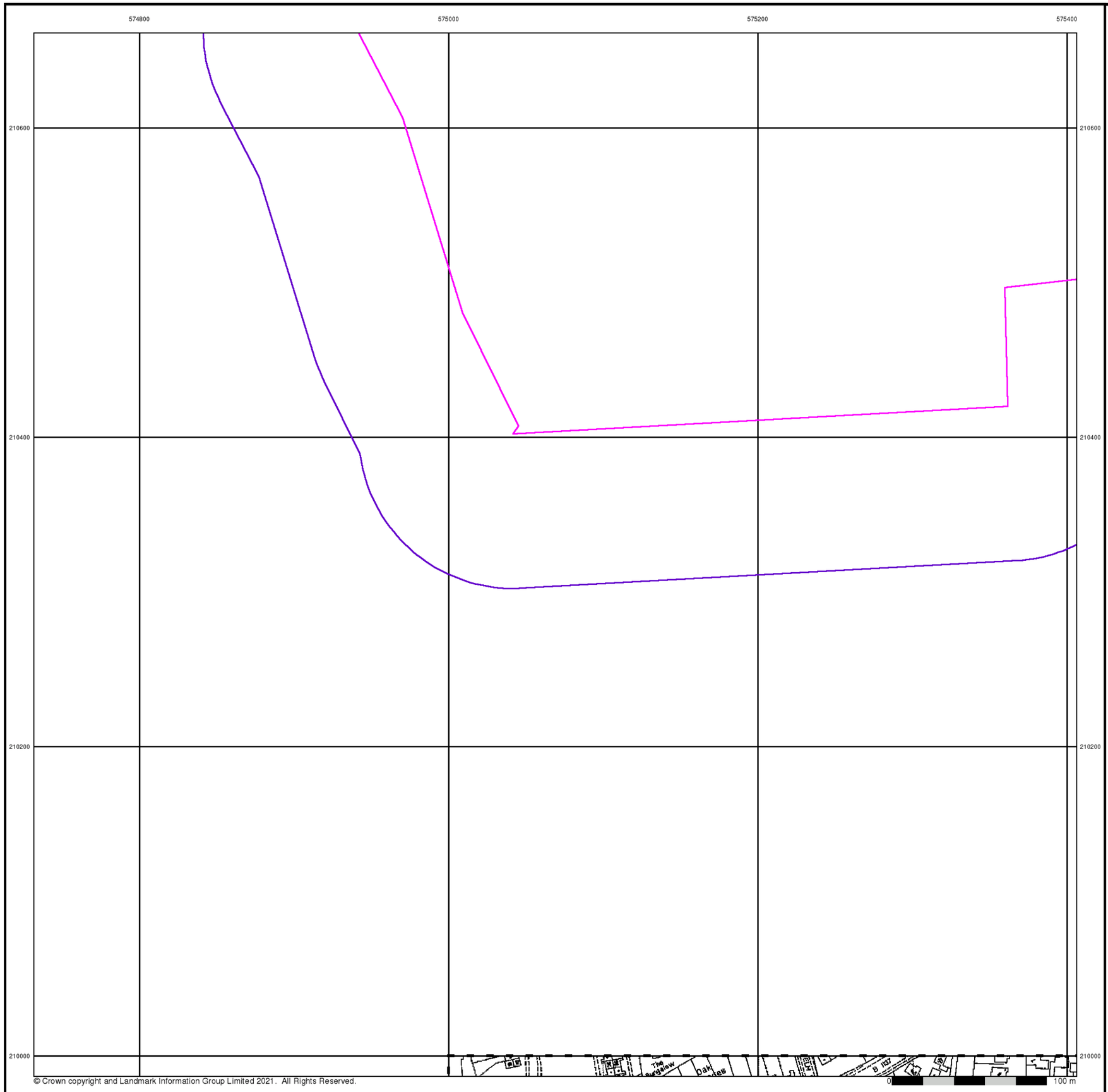

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Large-Scale National Grid Data

Published 1996

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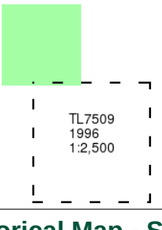
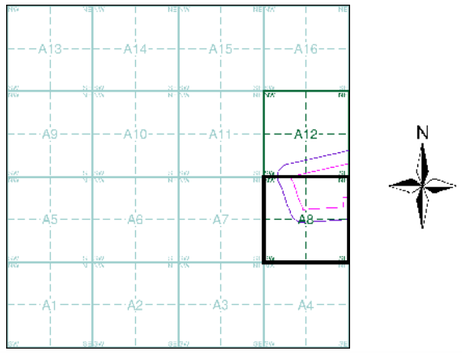


Historical Map - Segment A8



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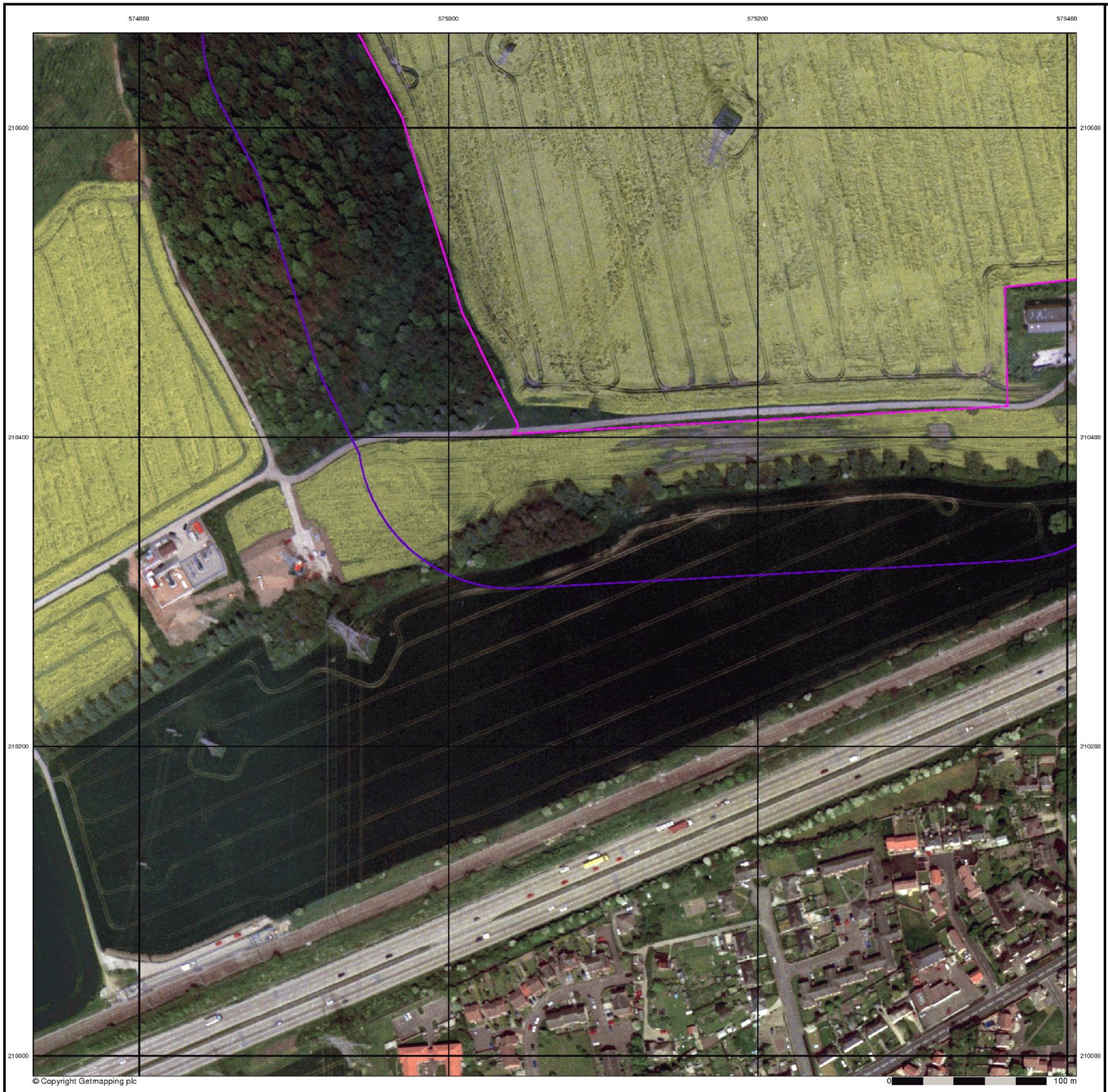

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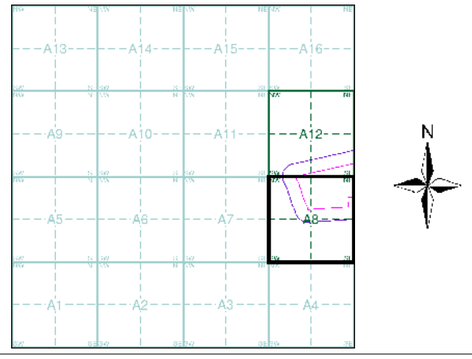
Historical Aerial Photography

Published 1999

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

Historical Aerial Photography - Segment A8



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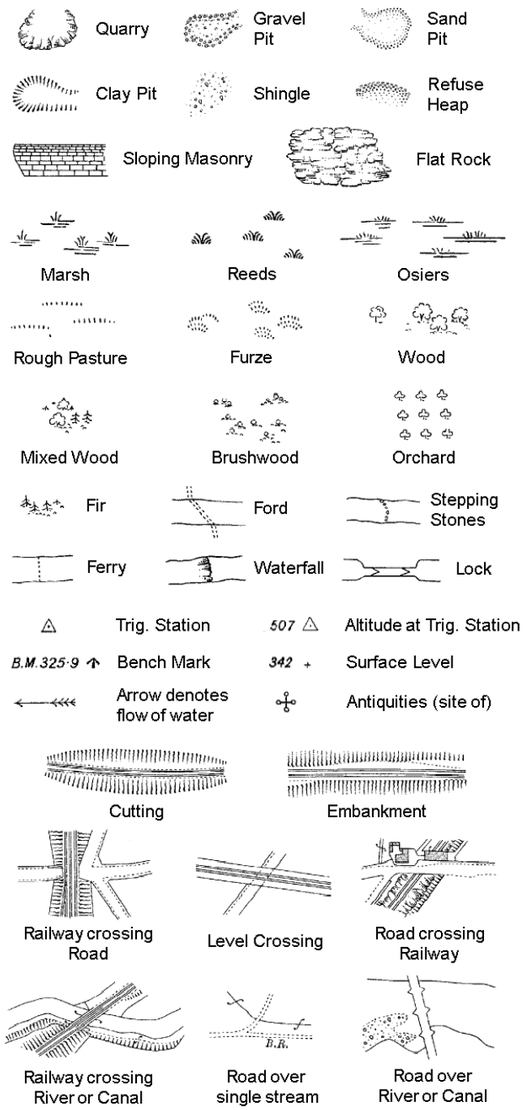
Historical Mapping Legends

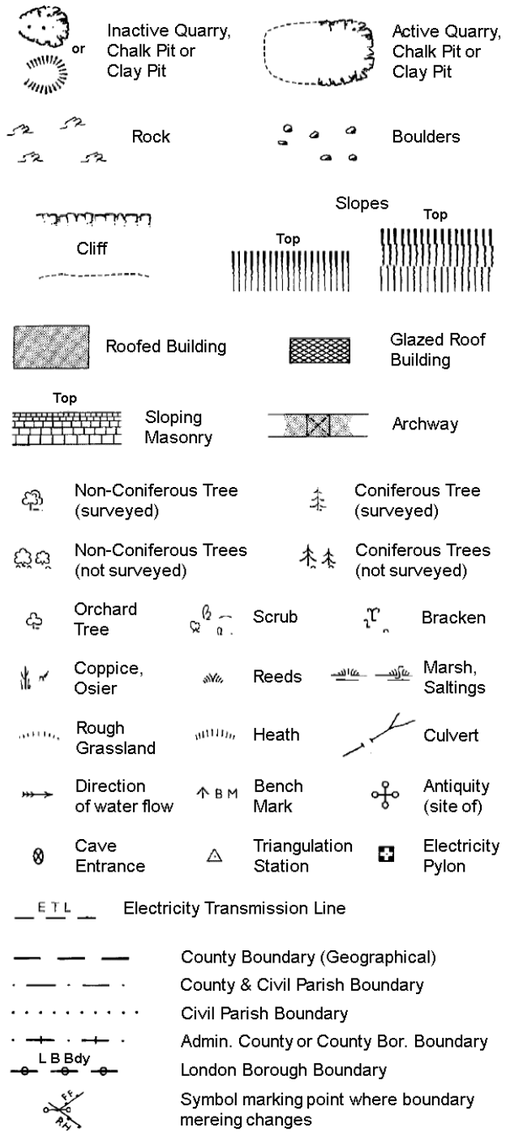
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy.
County Borough Boundary (England)
Co. Burgh Bdy.
County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

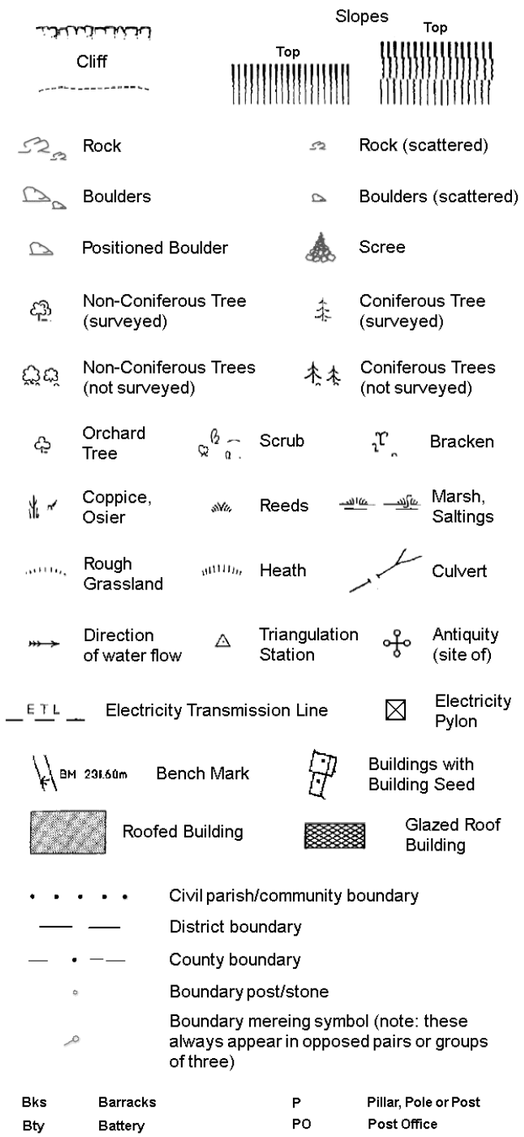
Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)
County & Civil Parish Boundary
Civil Parish Boundary
Admin. County or County Bor. Boundary
L B Bdy
London Borough Boundary
Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

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



Civil parish/community boundary
District boundary
County boundary
Boundary post/stone
Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

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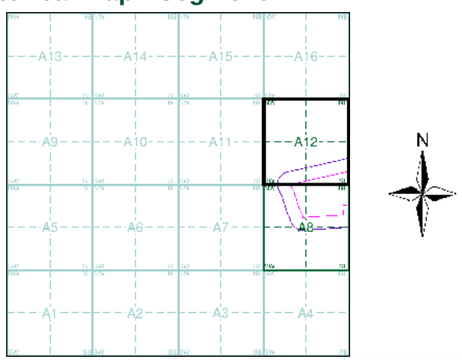
Historical Mapping & Photography included:

Historical Map - Segment A12



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	100

Site Details

Longfield

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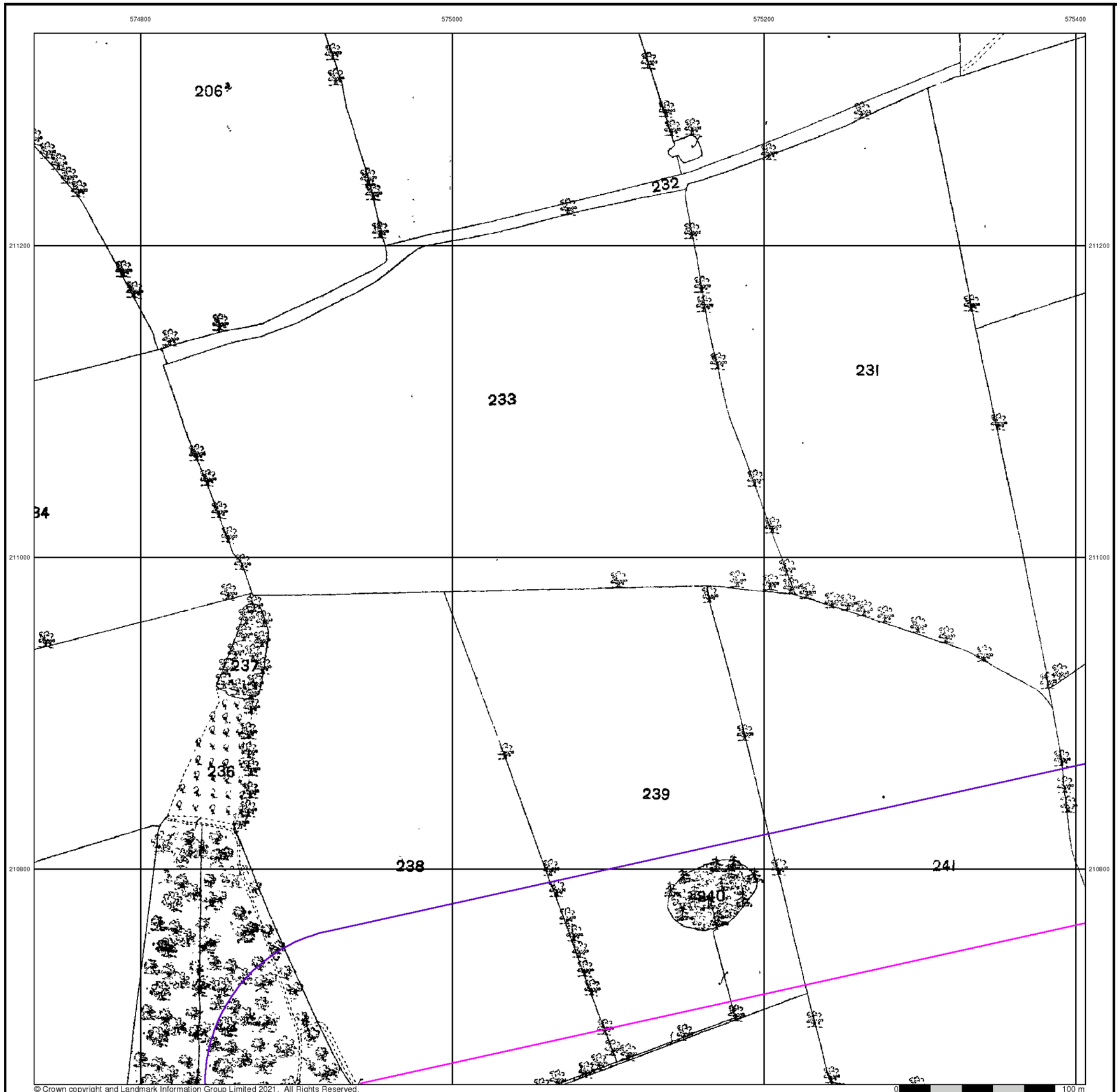

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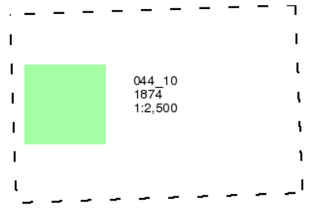
Essex

Published 1874

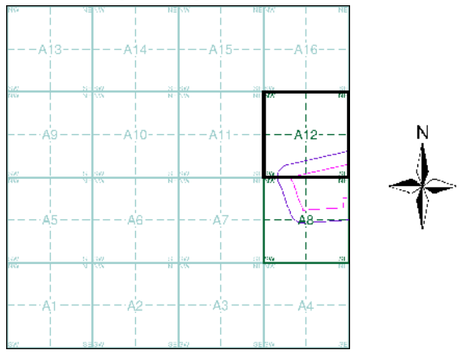
Source map scale - 1:2,500

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 A12



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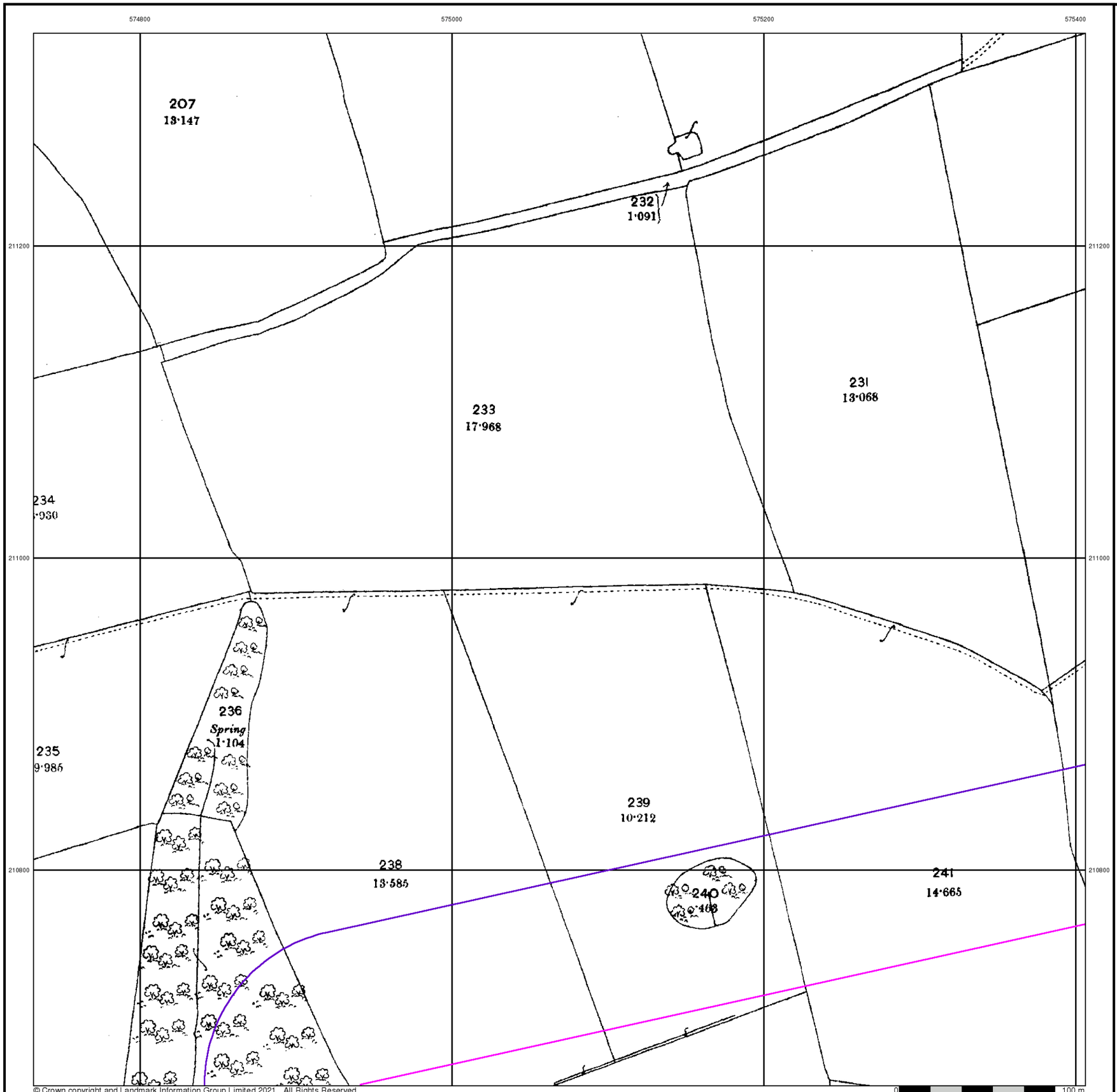

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Essex

Published 1897

Source map scale - 1:2,500

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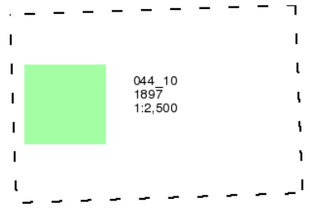
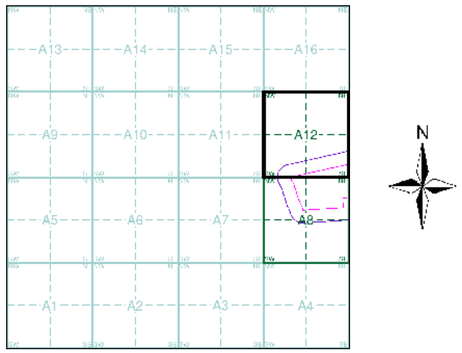


Historical Map - Segment A12



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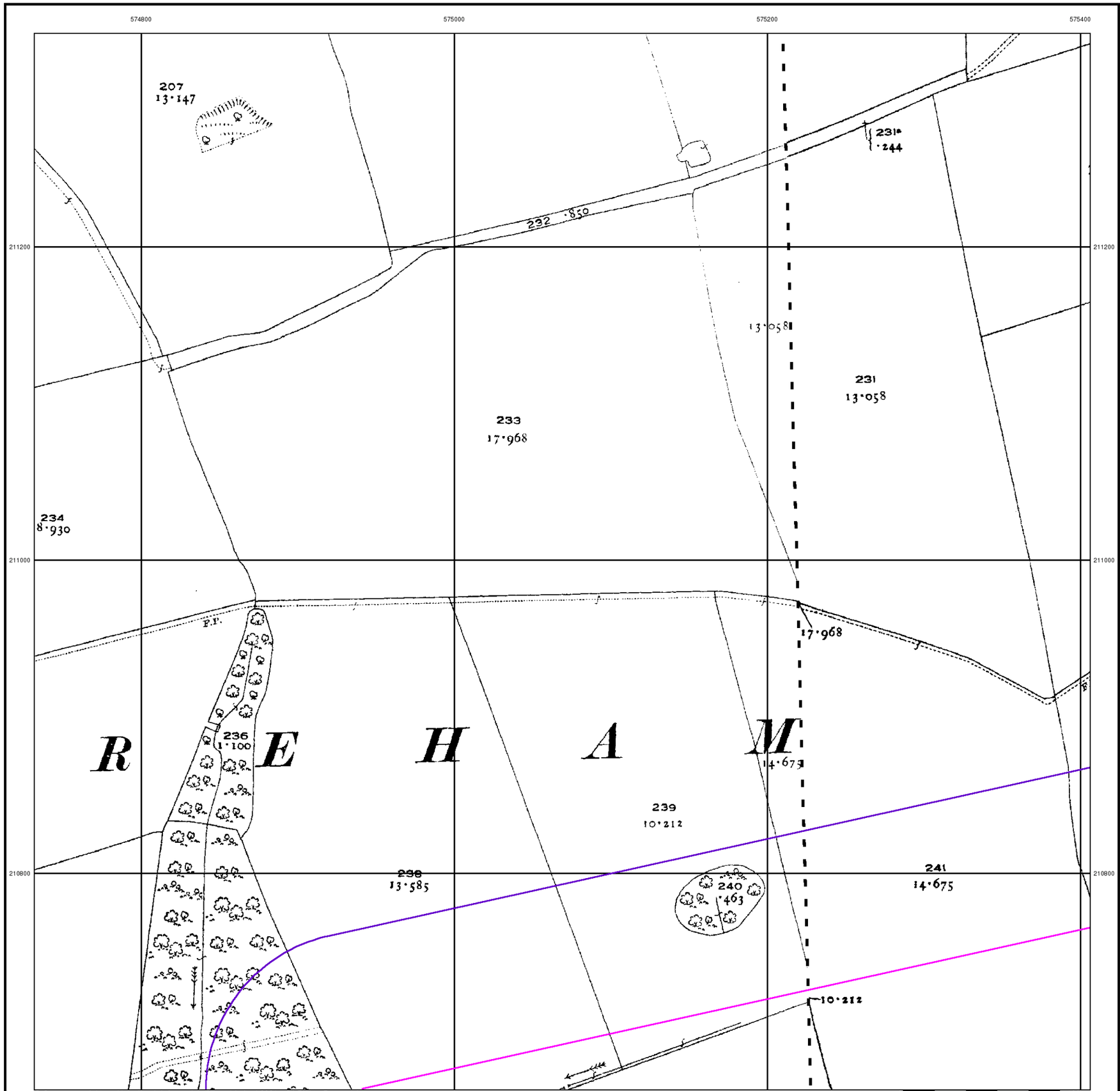

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Essex

Published 1922

Source map scale - 1:2,500

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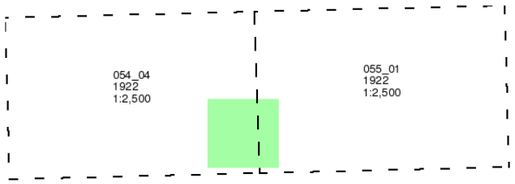
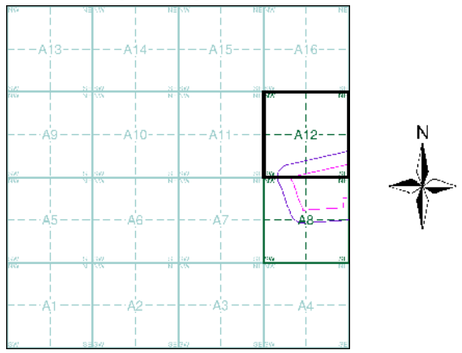


Historical Map - Segment A12



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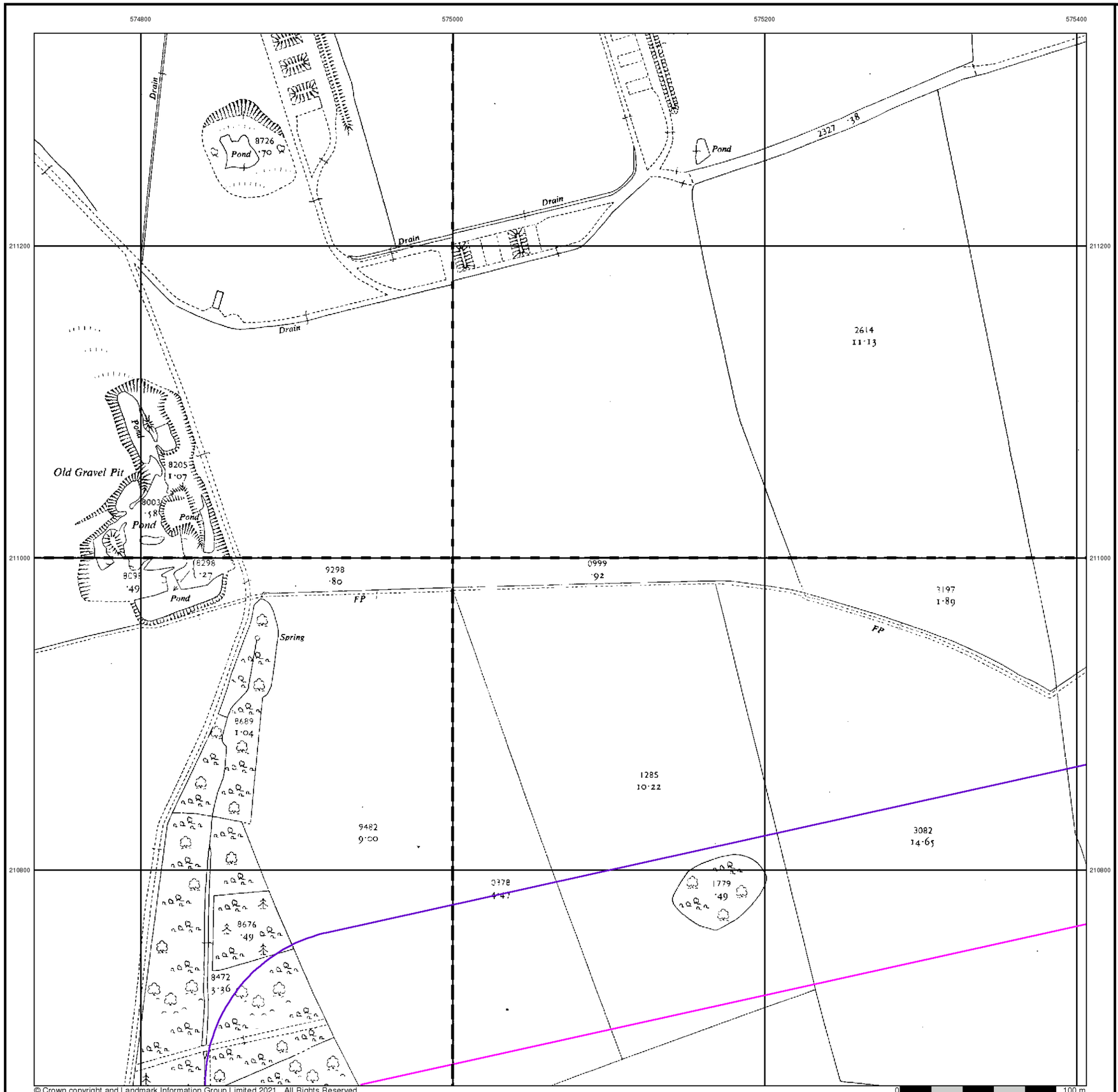

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Ordnance Survey Plan

Published 1952 - 1953

Source map scale - 1:2,500

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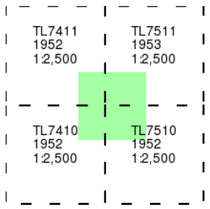

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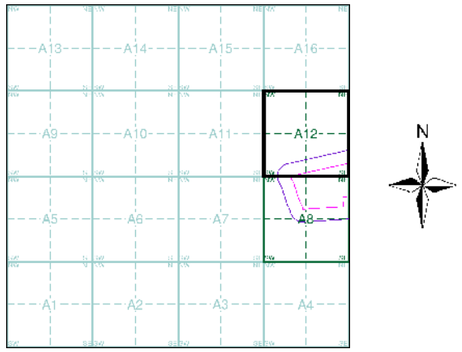

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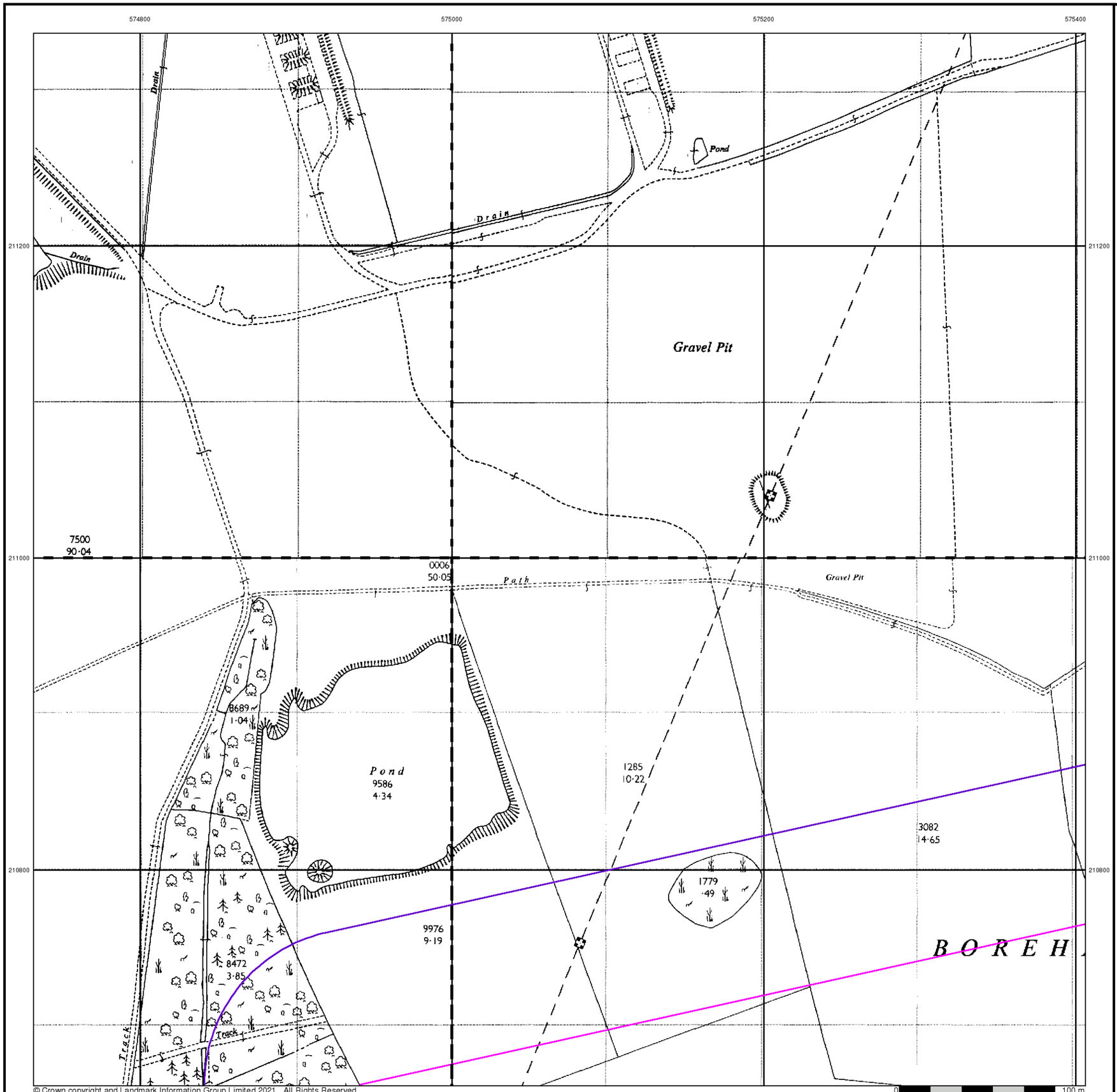

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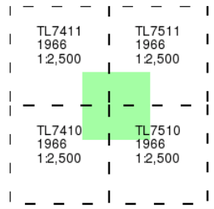
Ordnance Survey Plan

Published 1966

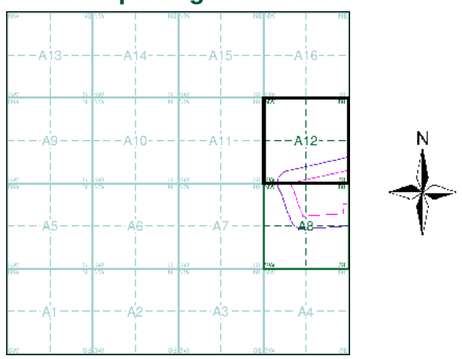
Source map scale - 1:2,500

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 A12

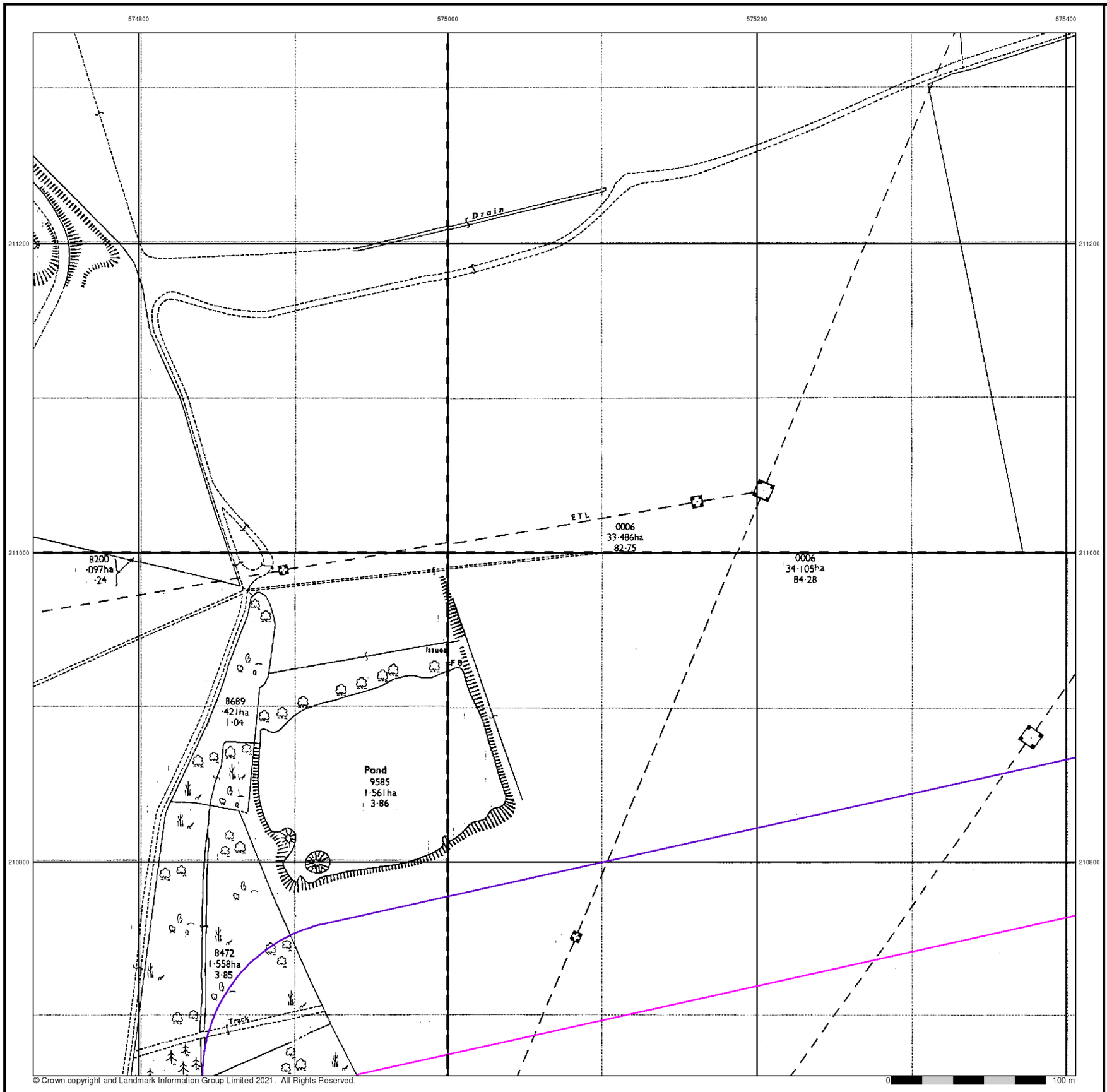


Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	575020, 210730
Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	100

Site Details

Longfield



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Ordnance Survey Plan

Published 1972 - 1978

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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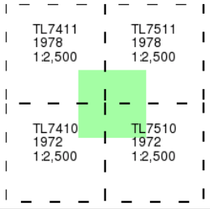
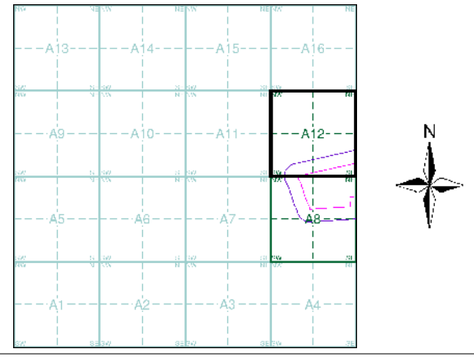


Historical Map - Segment A12



Order Details

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Slice:	A
Site Area (Ha):	473.19
Search Buffer (m):	100

Site Details

Longfield

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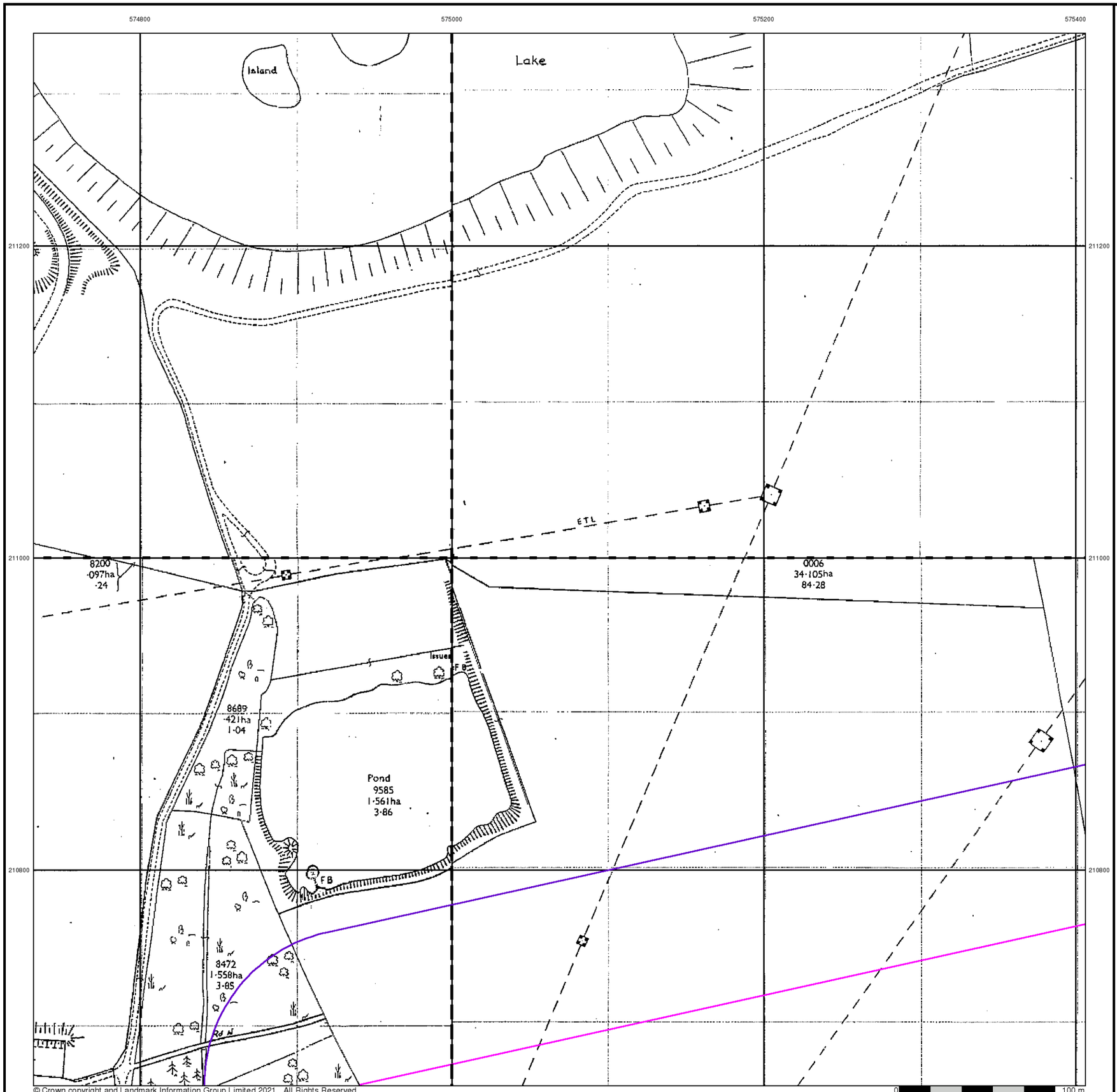
Web: www.envirocheck.co.uk



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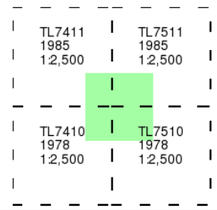
Additional SIMs

Published 1978 - 1985

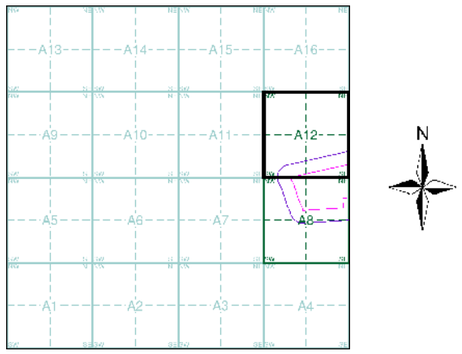
Source map scale - 1:2,500

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 A12



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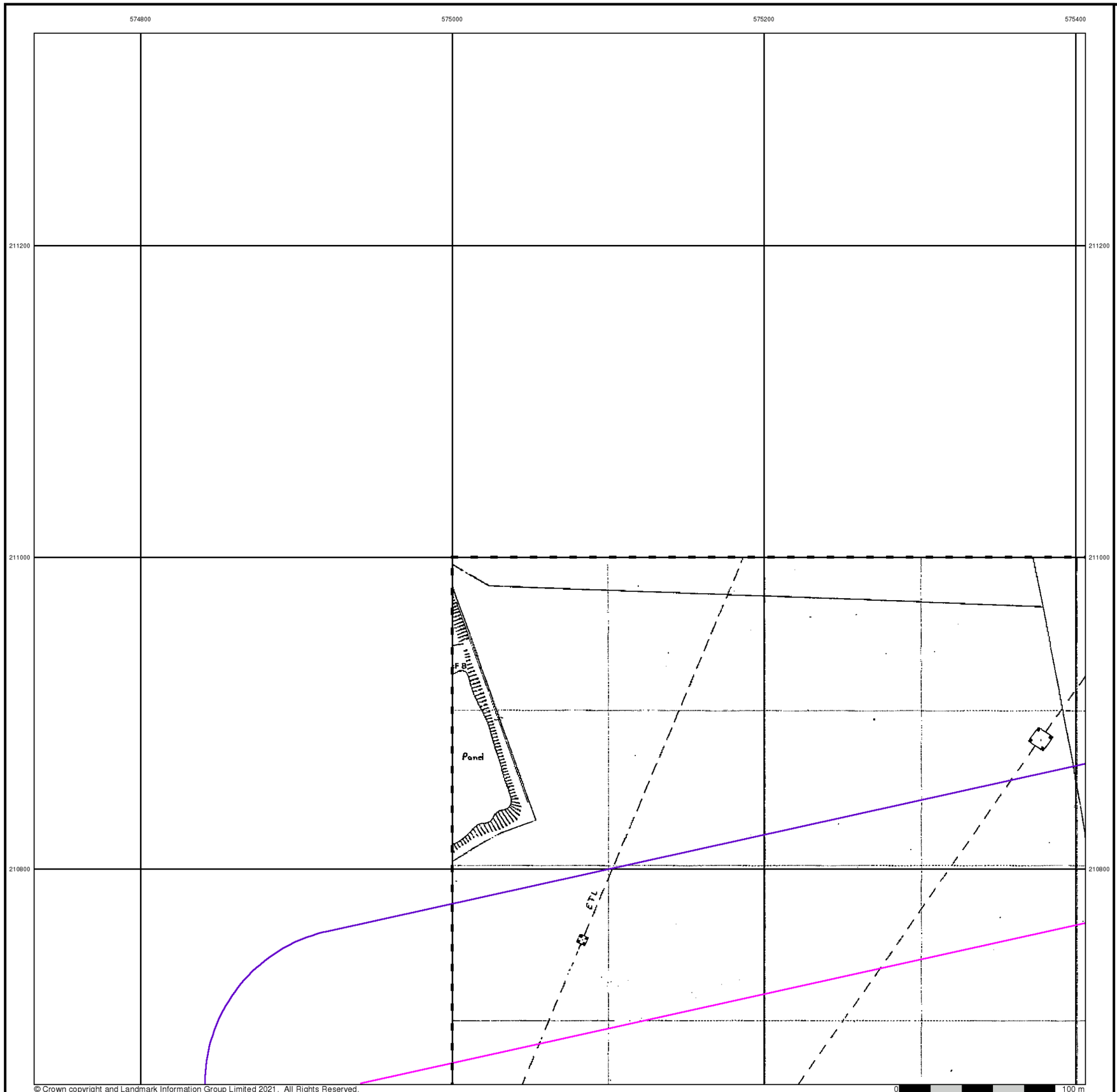

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Additional SIMs

Published 1983

Source map scale - 1:2,500

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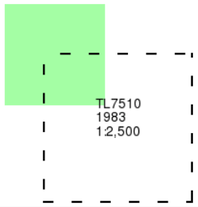
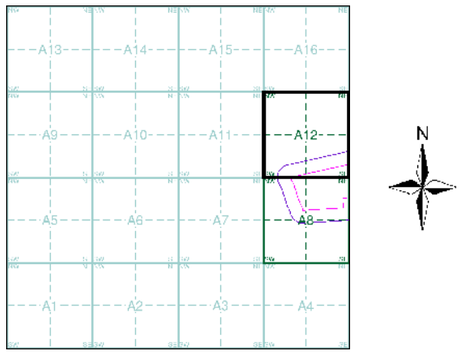


Historical Map - Segment A12



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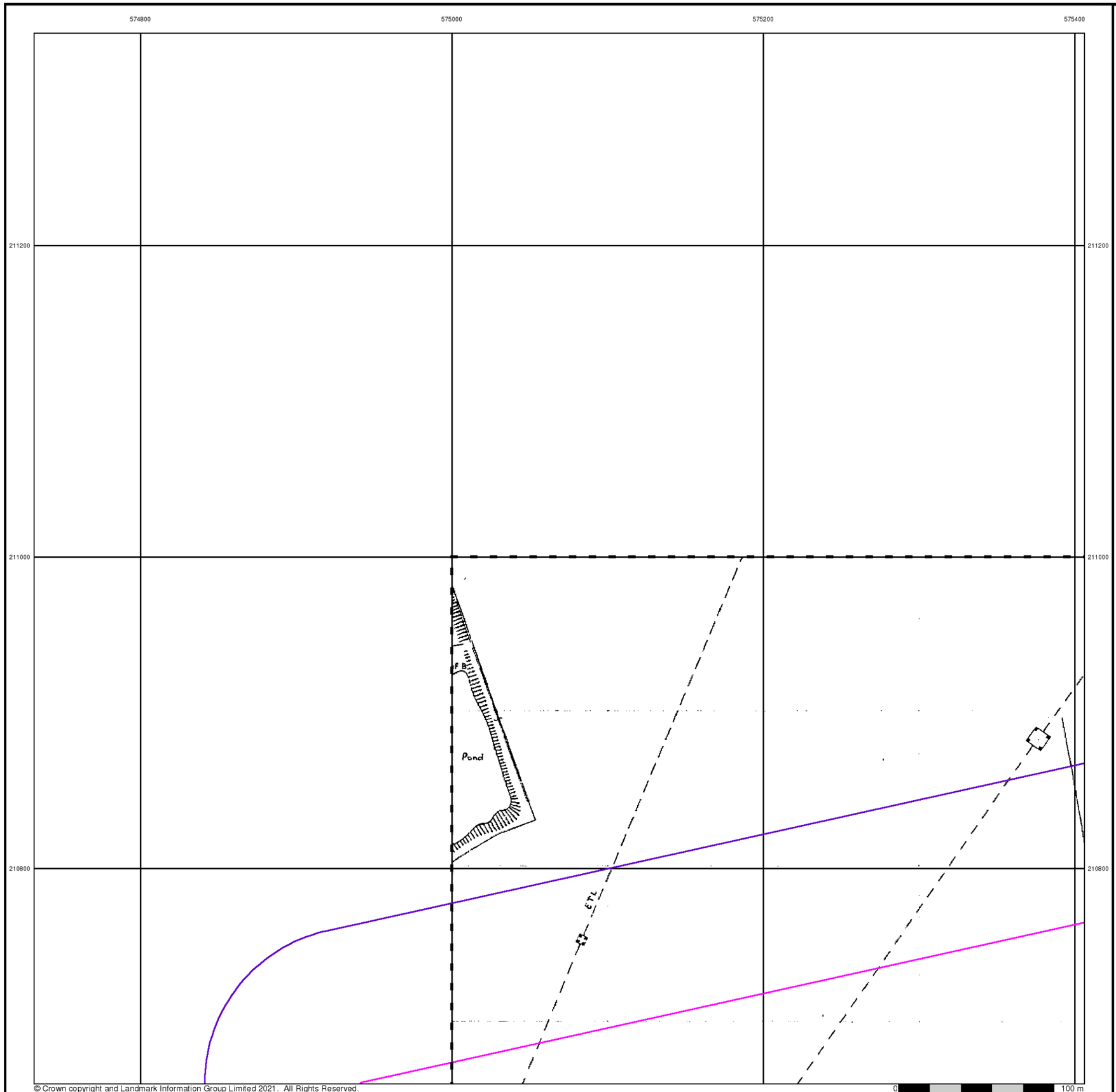

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Additional SIMs

Published 1985

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.

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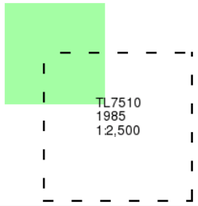
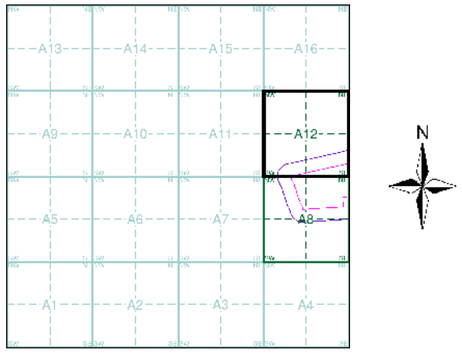


Historical Map - Segment A12



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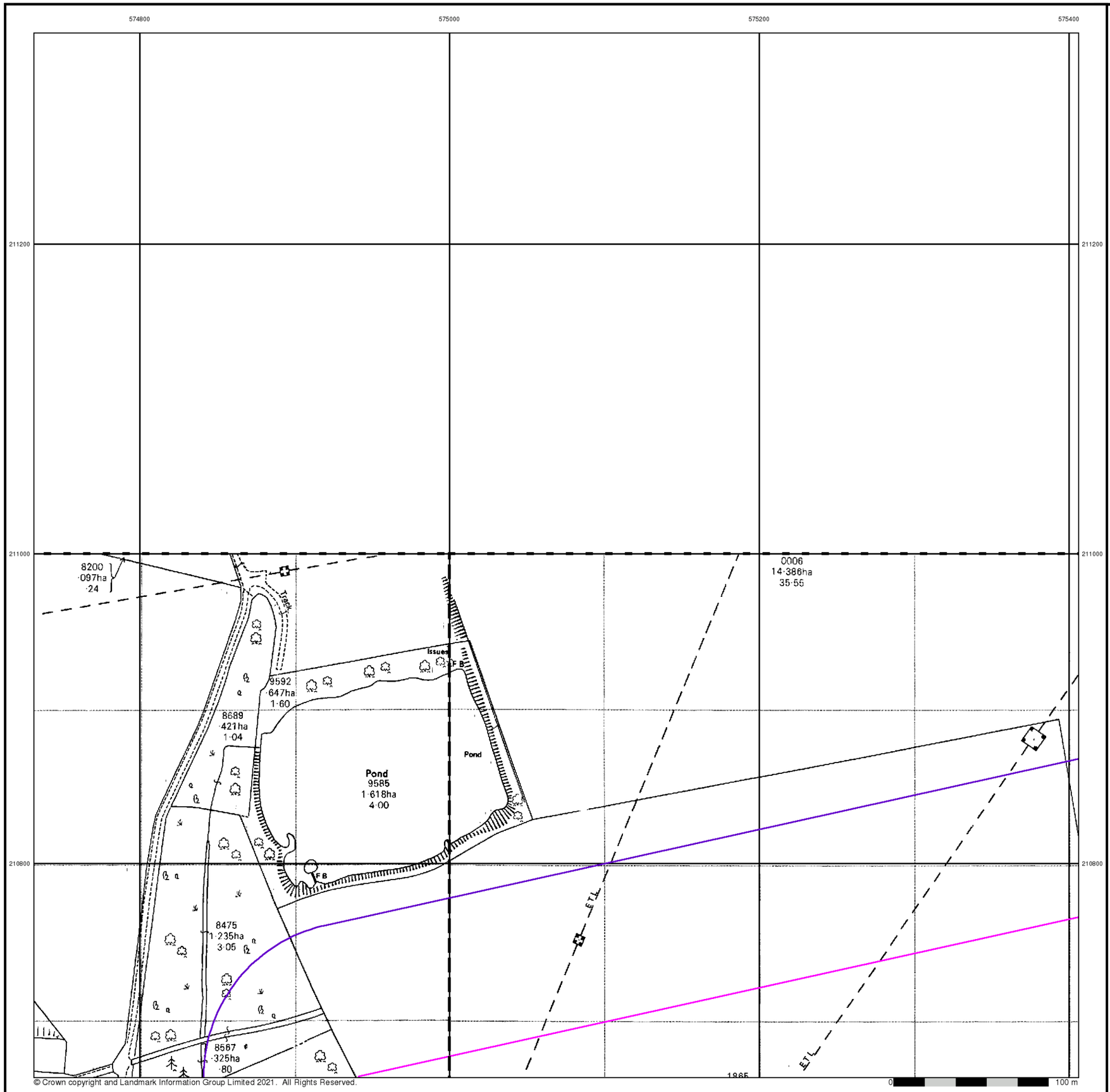

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Ordnance Survey Plan

Published 1986

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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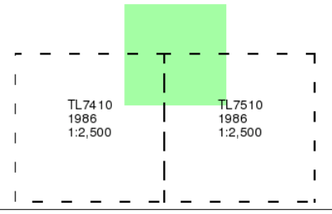
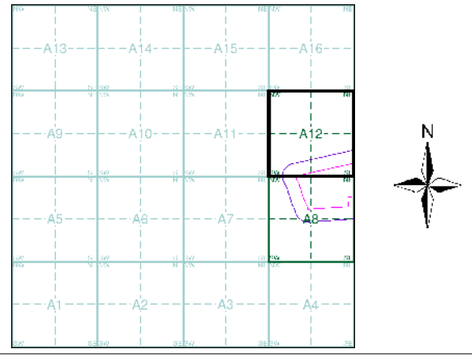


Historical Map - Segment A12



Order Details

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Slice:	A
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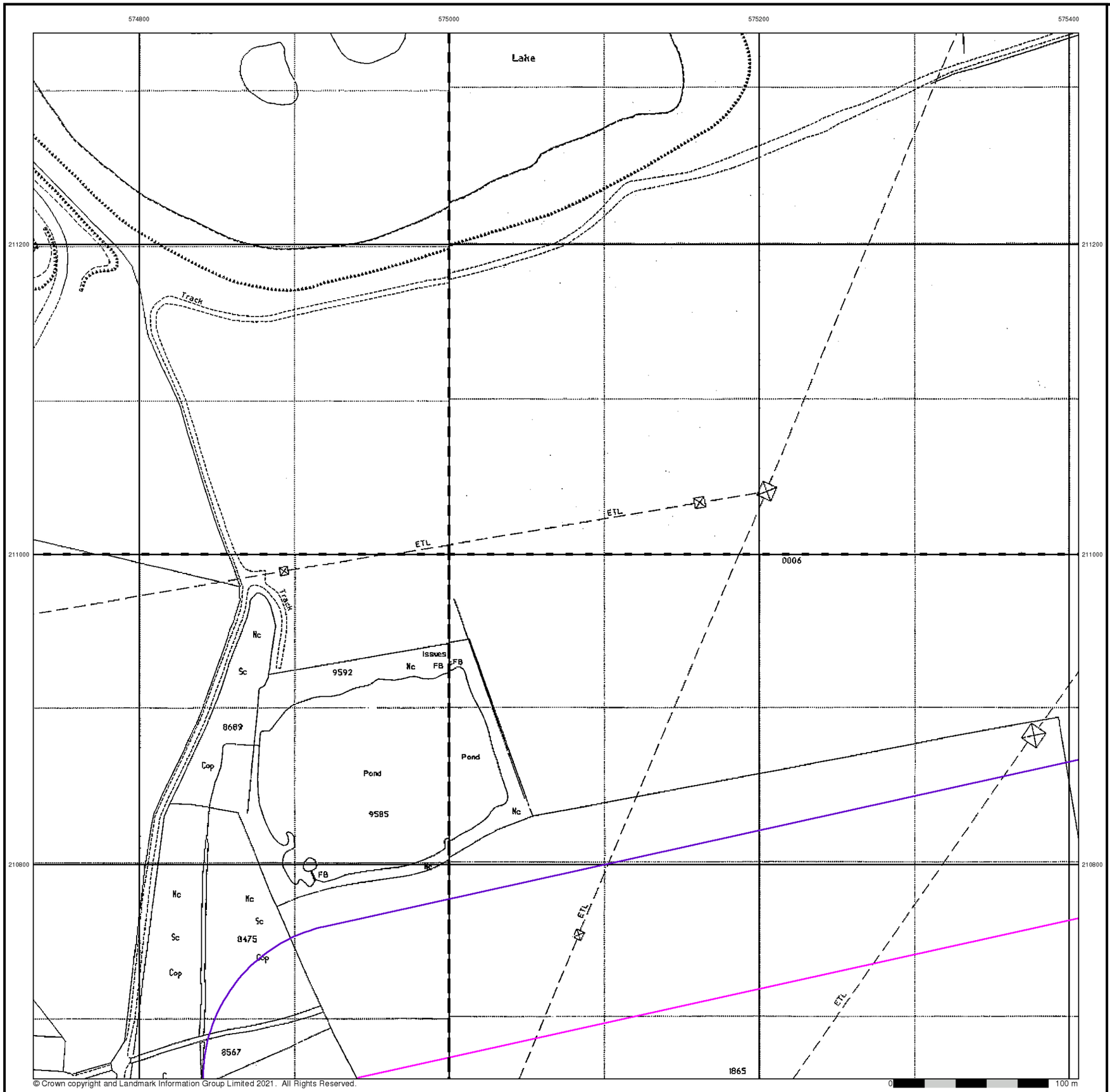

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LANDMARK INFORMATION GROUP®

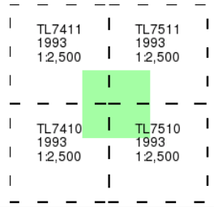
Large-Scale National Grid Data

Published 1993

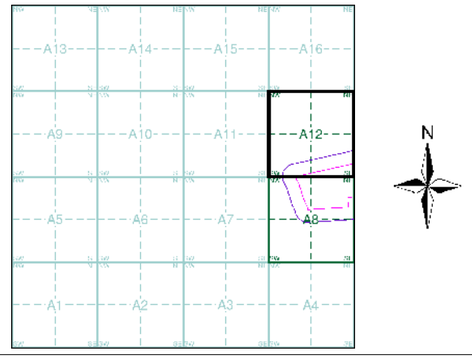
Source map scale - 1:2,500

'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 A12



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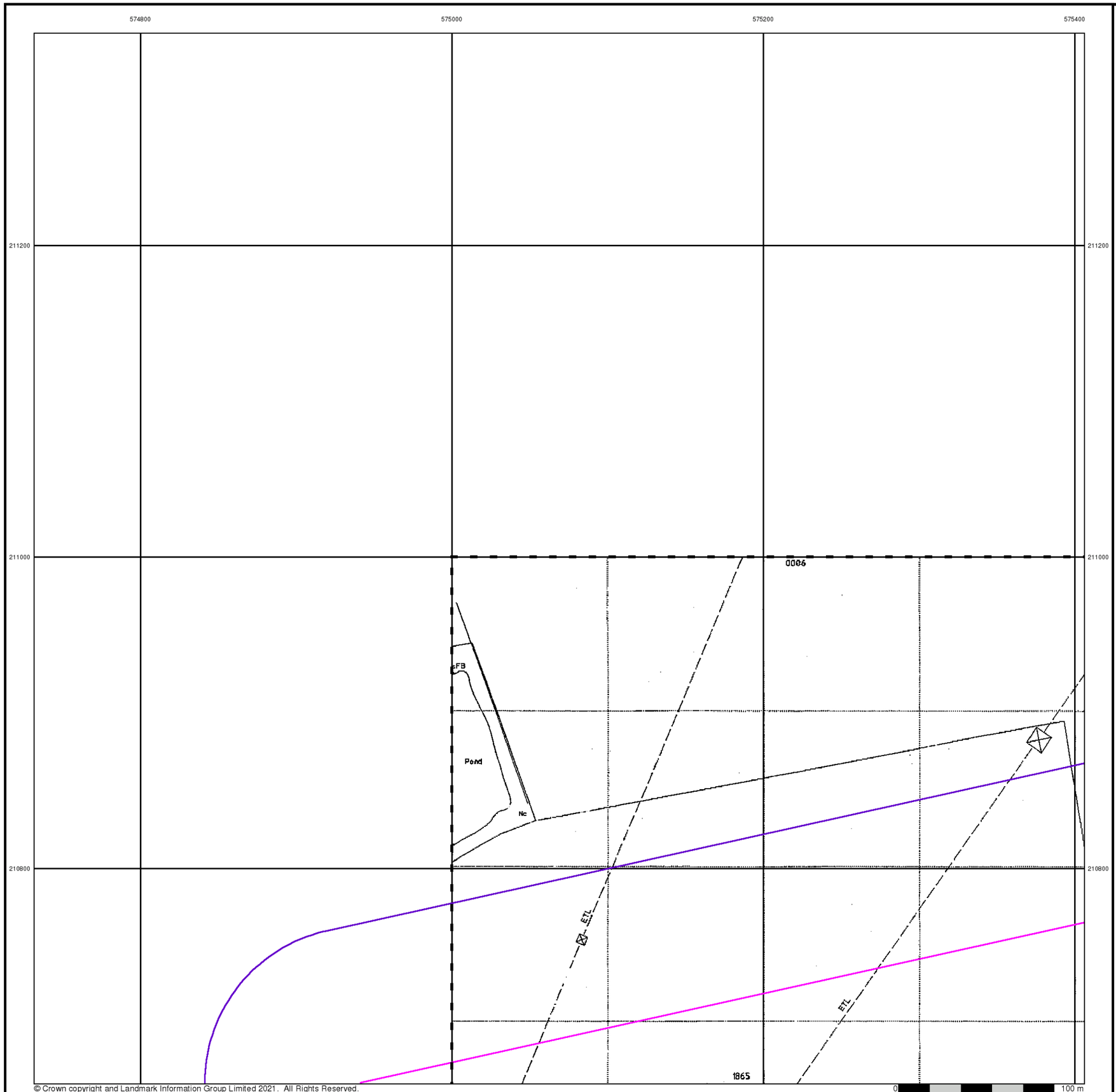

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LANDMARK INFORMATION GROUP®

Large-Scale National Grid Data

Published 1996

Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey 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.

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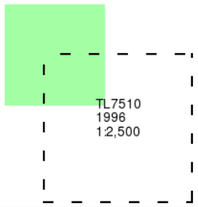
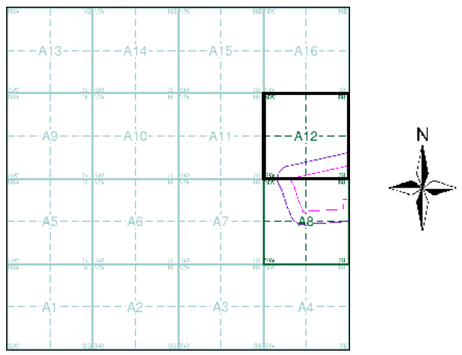


Historical Map - Segment A12



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Site Details

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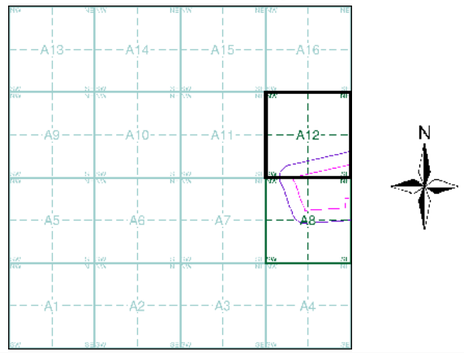
Historical Aerial Photography

Published 1999

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

Historical Aerial Photography - Segment A12



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Site Details

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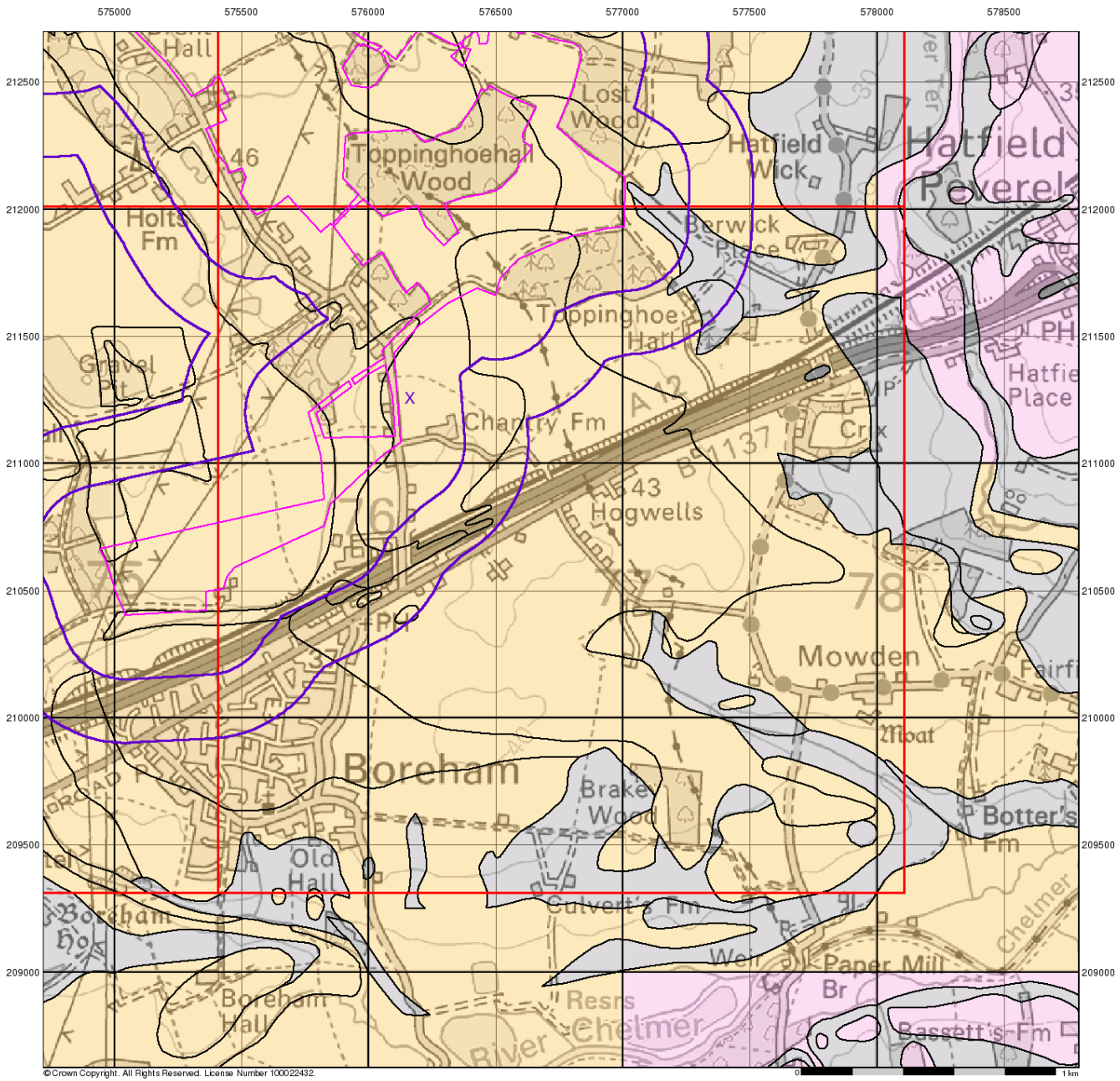

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Groundwater Vulnerability

General

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

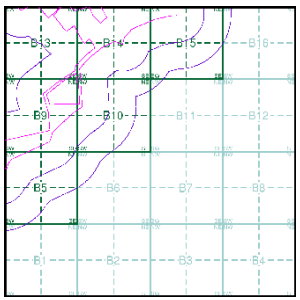
Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice B



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	576160, 211260
Slice:	B
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

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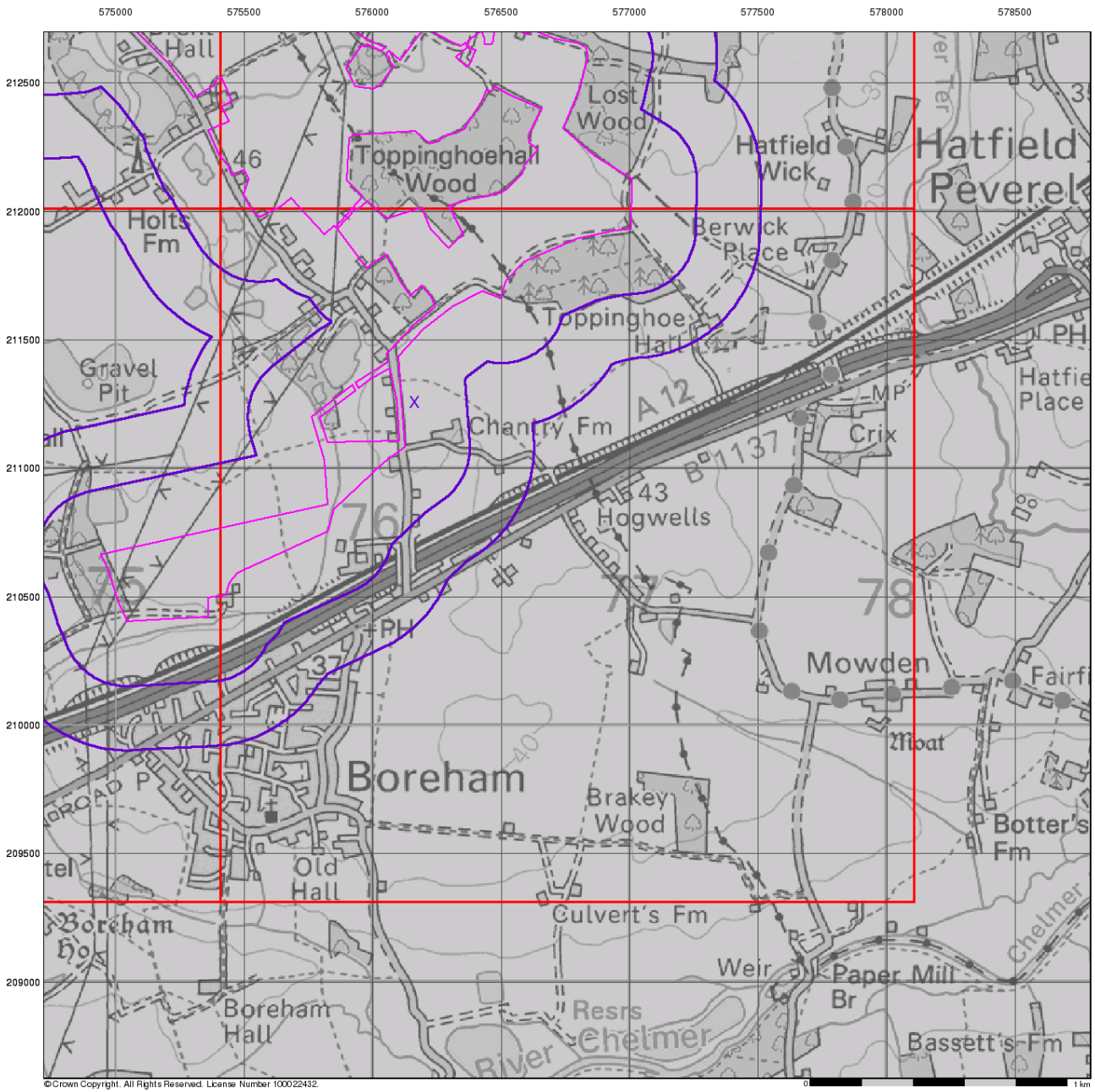

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LANDMARK INFORMATION GROUP®

Bedrock Aquifer Designation

General

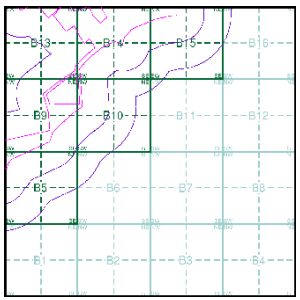
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice B



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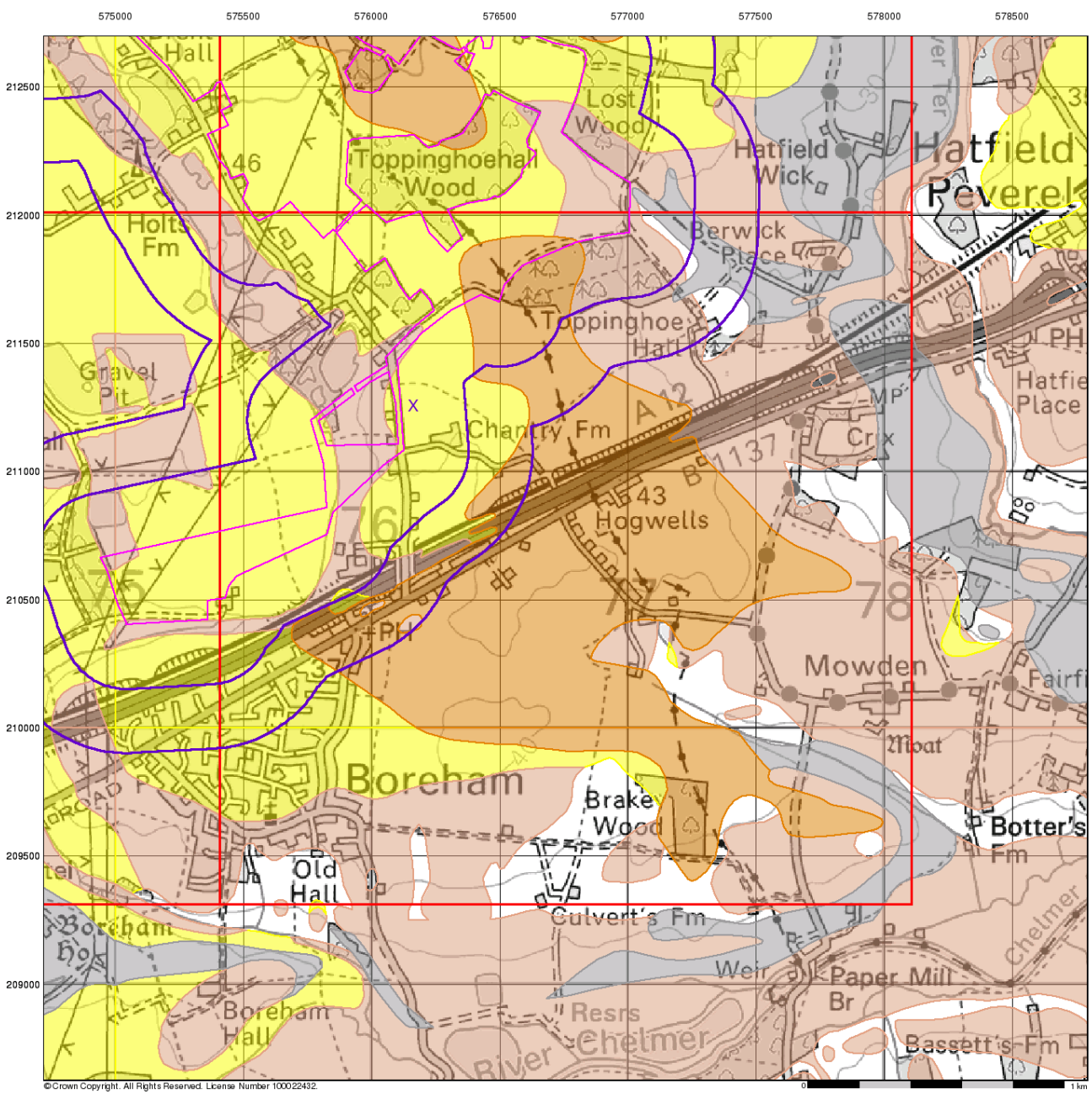

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Superficial Aquifer Designation

General

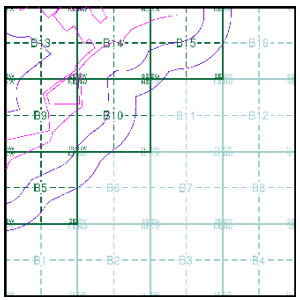
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice B



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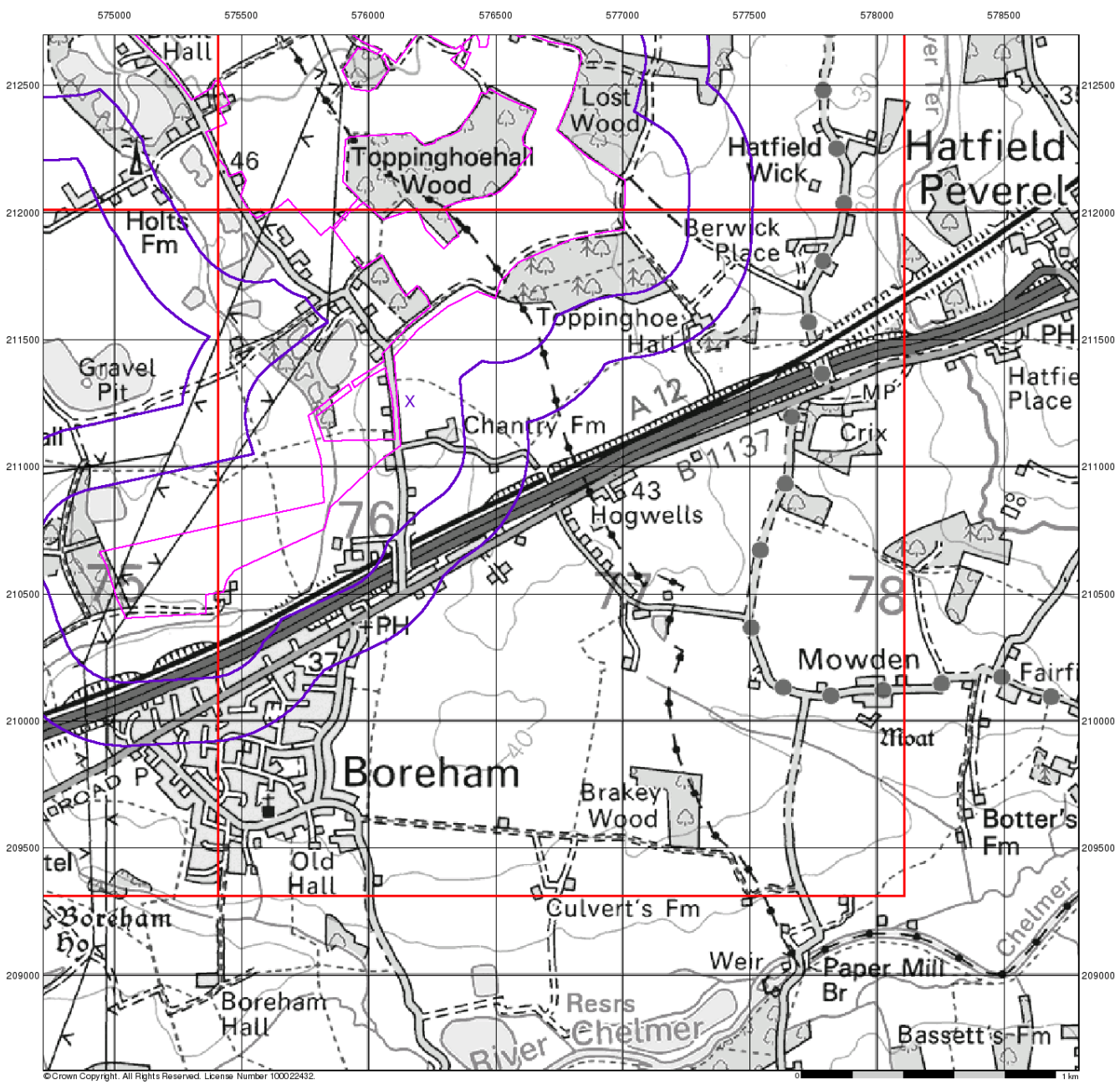

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Source Protection Zones

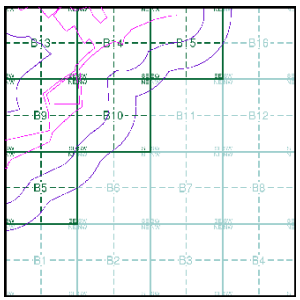
General

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

Agency and Hydrological

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

Site Sensitivity Context Map - Slice B



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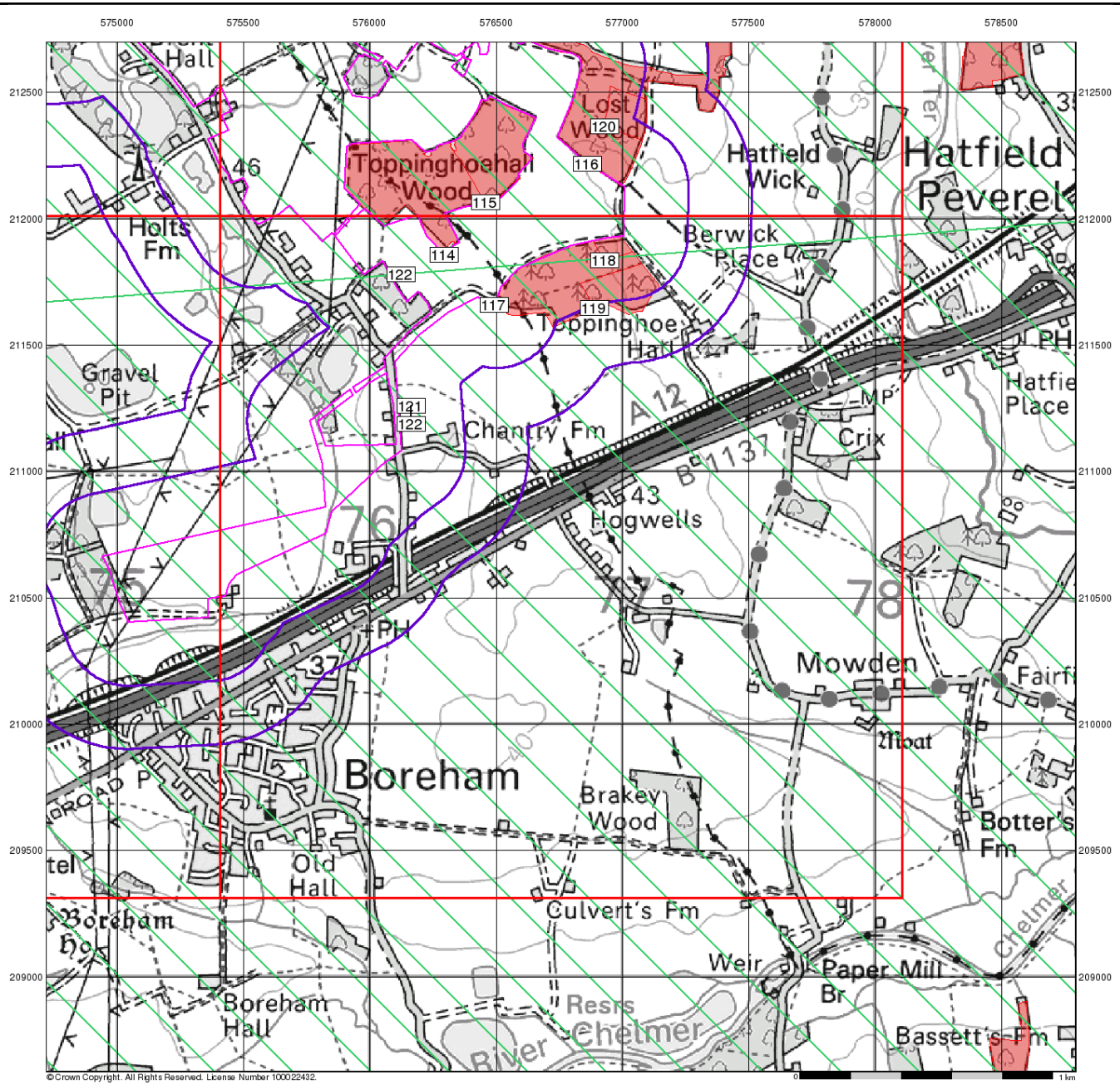

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Sensitive Land Uses

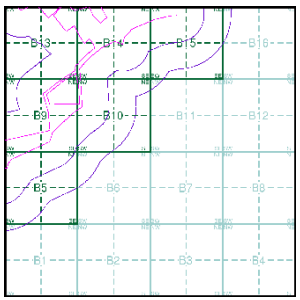
General

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

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice B



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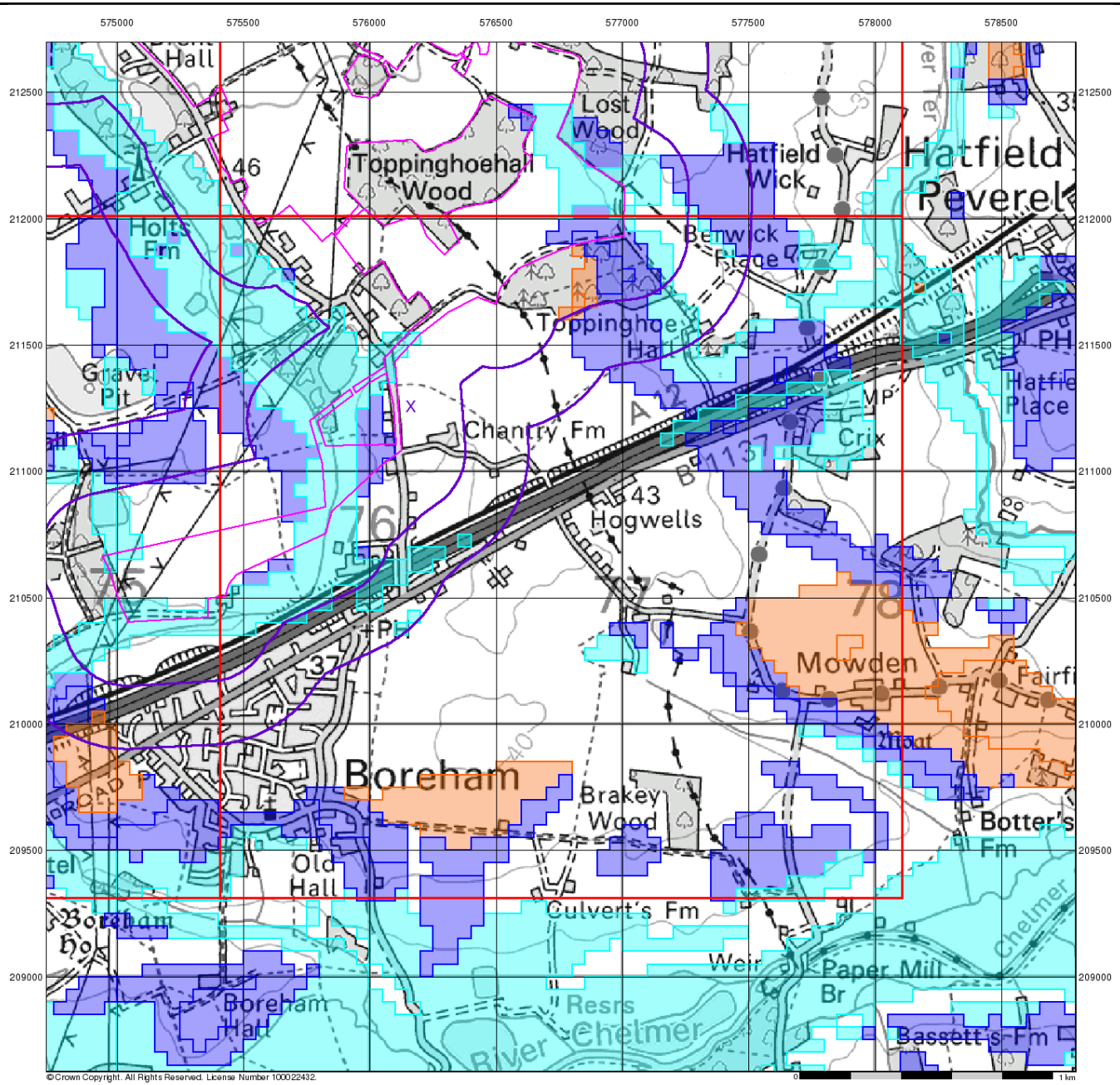

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BGS Flood GFS Data

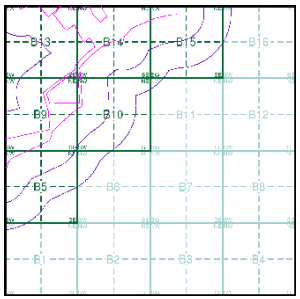
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice B



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	576160, 211260
Slice:	B
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

Landmark INFORMATION GROUP

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

Envirocheck® Report:

Datasheet

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Order Number:
274546457_1_1

Customer Reference:
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576160, 211260

Slice:
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Site Area (Ha):
473.19

Search Buffer (m):
500

Site Details:
Longfield

Client Details:
MRS K Bruce
Aecom Infrastructure & Environment UK Ltd
2nd Floor, St Georges House
5 St Georges Road
London
SW19 4DR

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Contents

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.
In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Report Version v53.0

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m (*up to 1000m)
Agency & Hydrological				
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes
Contaminated Land Register Entries and Notices				
Discharge Consents	pg 3		7	6
Prosecutions Relating to Controlled Waters			n/a	n/a
Enforcement and Prohibition Notices				
Integrated Pollution Controls				
Integrated Pollution Prevention And Control				
Local Authority Integrated Pollution Prevention And Control				
Local Authority Pollution Prevention and Controls	pg 6		3	
Local Authority Pollution Prevention and Control Enforcements				
Nearest Surface Water Feature		Yes		
Pollution Incidents to Controlled Waters	pg 7		3	2
Prosecutions Relating to Authorised Processes	pg 8			1
Registered Radioactive Substances				
River Quality				
River Quality Biology Sampling Points				
River Quality Chemistry Sampling Points				
Substantiated Pollution Incident Register				
Water Abstractions	pg 8			2 (*3)
Water Industry Act Referrals				
Groundwater Vulnerability Map	pg 9	Yes	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a
Bedrock Aquifer Designations	pg 14	Yes	n/a	n/a
Superficial Aquifer Designations	pg 14	Yes	n/a	n/a
Source Protection Zones				
Extreme Flooding from Rivers or Sea without Defences	pg 15	Yes		n/a
Flooding from Rivers or Sea without Defences	pg 15	Yes		n/a
Areas Benefiting from Flood Defences				n/a
Flood Water Storage Areas				n/a
Flood Defences				n/a
OS Water Network Lines	pg 15	7	18	18

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m (*up to 1000m)
Waste				
BGS Recorded Landfill Sites				
Historical Landfill Sites	pg 21			1
Integrated Pollution Control Registered Waste Sites				
Licensed Waste Management Facilities (Landfill Boundaries)	pg 21			1
Licensed Waste Management Facilities (Locations)	pg 21		6	1
Local Authority Landfill Coverage	pg 22	3	n/a	n/a
Local Authority Recorded Landfill Sites	pg 23			1
Potentially Infilled Land (Non-Water)				
Potentially Infilled Land (Water)	pg 23			1
Registered Landfill Sites	pg 23			1
Registered Waste Transfer Sites	pg 23		1	
Registered Waste Treatment or Disposal Sites	pg 24		3	
Hazardous Substances				
Control of Major Accident Hazards Sites (COMAH)				
Explosive Sites				
Notification of Installations Handling Hazardous Substances (NIHHS)				
Planning Hazardous Substance Consents				
Planning Hazardous Substance Enforcements				

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m (*up to 1000m)
Geological				
BGS 1:625,000 Solid Geology	pg 26	Yes	n/a	n/a
BGS Estimated Soil Chemistry	pg 26	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 27		4	1
BGS Urban Soil Chemistry				
BGS Urban Soil Chemistry Averages				
CBSCB Compensation District			n/a	n/a
Coal Mining Affected Areas			n/a	n/a
Mining Instability			n/a	n/a
Man-Made Mining Cavities				
Natural Cavities				
Non Coal Mining Areas of Great Britain				n/a
Potential for Collapsible Ground Stability Hazards	pg 28	Yes	Yes	n/a
Potential for Compressible Ground Stability Hazards	pg 28	Yes	Yes	n/a
Potential for Ground Dissolution Stability Hazards				n/a
Potential for Landslide Ground Stability Hazards	pg 29	Yes	Yes	n/a
Potential for Running Sand Ground Stability Hazards	pg 29	Yes	Yes	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 29	Yes	Yes	n/a
Radon Potential - Radon Affected Areas			n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a
Industrial Land Use				
Contemporary Trade Directory Entries	pg 31		24	12
Fuel Station Entries				
Points of Interest - Commercial Services	pg 34		8	2
Points of Interest - Education and Health				
Points of Interest - Manufacturing and Production	pg 35		10	4
Points of Interest - Public Infrastructure	pg 36		3	2
Points of Interest - Recreational and Environmental	pg 36			2
Gas Pipelines				
Underground Electrical Cables				

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m (*up to 1000m)
Sensitive Land Use				
Ancient Woodland	pg 37	5	2	
Areas of Adopted Green Belt				
Areas of Unadopted Green Belt				
Areas of Outstanding Natural Beauty				
Environmentally Sensitive Areas				
Forest Parks				
Local Nature Reserves				
Marine Nature Reserves				
National Nature Reserves				
National Parks				
Nitrate Sensitive Areas				
Nitrate Vulnerable Zones	pg 37	2		
Ramsar Sites				
Sites of Special Scientific Interest				
Special Areas of Conservation				
Special Protection Areas				
World Heritage Sites				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	0	1	576600 212350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(NE)	0	1	576850 212200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(W)	0	1	575000 210950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B5NW (SW)	0	1	575700 210650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B15SW (E)	0	1	576800 211450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B9NE (SW)	0	1	575800 211100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	0	1	576550 212400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B15NW (NE)	0	1	576800 211850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B15NW (NE)	0	1	576900 211700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B14NE (NE)	0	1	576750 212000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B9NE (W)	0	1	576050 211257
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(NW)	0	1	575000 212200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B14SW (NW)	0	1	576100 211350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(W)	0	1	575050 210900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B5NW (SW)	3	1	575600 210600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(SW)	3	1	575000 210500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(NW)	6	1	574750 212600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(NE)	40	1	577600 212950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B15SE (E)	44	1	577150 211400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B15NW (NE)	54	1	576800 211700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B13NW (NW)	98	1	575500 211850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B9SE (S)	136	1	576000 210700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B13NW (NW)	156	1	575700 211750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(NE)	159	1	577200 212100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B15SW (NE)	179	1	576800 211650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(NE)	191	1	577200 212050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	193	1	575350 211200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B14SE (NE)	205	1	576750 211600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(NW)	206	1	574750 212350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B15SW (NE)	225	1	576800 211600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B15NE (NE)	242	1	577250 212000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	247	1	574900 210200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	269	1	575000 211050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(NW)	271	1	575250 211900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	290	1	574950 210100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B15NE (NE)	293	1	577300 211950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(W)	302	1	574850 211100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	307	1	575050 211050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(NW)	329	1	575050 212100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(NW)	338	1	575200 211850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B15NE (NE)	344	1	577350 211900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	356	1	575000 211500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(SW)	364	1	574950 210050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	366	1	575000 211150

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	388	1	574800 211150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B15NE (NE)	395	1	577400 211850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B10SW (S)	399	1	576350 210750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	404	1	575050 211150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(SW)	405	1	575000 210000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(NE)	408	1	577350 212350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	442	1	575100 211200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B6NW (S)	445	1	576163 210450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B6NW (S)	448	1	576150 210400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	470	1	574800 210000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	474	1	575300 211300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	500	1	574750 211200
1	**Discharge Consents** Operator: Ford Motorsport Property Type: Domestic Property (Single) Location: Old School House Waltham Road, Boreham, Essex, Cm3 3ax Authority: Environment Agency, Anglian Region Catchment Area: Not Supplied Reference: Pr2lfs26771 Permit Version: 1 Effective Date: 21st December 1971 Issued Date: 21st December 1971 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Land **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Manually positioned to the address or location	B9NE (NW)	17	2	576063 211328
1	**Discharge Consents** Operator: Mr H Jordan / Mr J Vince Property Type: Domestic Property (Single) Location: Old School House Waltham Road, Boreham, Essex, Cm3 3ax Authority: Environment Agency, Anglian Region Catchment Area: Lower River Chelmer (Boreham) Reference: Pr2lfs11766 Permit Version: 1 Effective Date: 1st December 1966 Issued Date: 1st December 1966 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Not Supplied **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	B9NE (NW)	17	2	576062 211330

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	**Discharge Consents** Operator: Mr And Mrs Fisher Property Type: Domestic Property (Single) Location: Brick House Farm Generals Lane, Boreham, Chelmsford, Essex, Cm3 3hu Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Prenf08503 Permit Version: 1 Effective Date: 28th June 1993 Issued Date: 28th June 1993 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Boreham Brook **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	B5NW (SW)	65	2	575430 210440
3	**Discharge Consents** Operator: Arc Ltd Property Type: Undefined Or Other Location: Boreham Industrial Est Waltham Road, Boreham, Essex Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Pr2lf735 Permit Version: 1 Effective Date: 25th February 1988 Issued Date: 25th February 1988 Revocation Date: 8th April 1998 Discharge Type: Trade Effluent Discharge Environment: Land/Soakaway Receiving Water: Soakaway Into Land **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	B9SE (SW)	87	2	575850 210670
4	**Discharge Consents** Operator: Rmc Environmental Services Property Type: Undefined Or Other Location: Premier Recycling Ltd Boreham Industrial Estate, Waltham Road, Boreham, Chelmsford, Cm3 3aw Authority: Environment Agency, Anglian Region Catchment Area: Lower River Chelmer (Boreham) Reference: Prenf15533 Permit Version: 1 Effective Date: 10th April 2003 Issued Date: 10th April 2003 Revocation Date: 12th March 2004 Discharge Type: Trade Effluent Discharge-Site Drainage Discharge Environment: Freshwater Stream/River Receiving Water: Boreham Brook **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5NE (SW)	127	2	575860 210630
5	**Discharge Consents** Operator: Mr Neil O'Brien Property Type: Domestic Property (Single) Location: Hunters Moon Waltham Road, Boreham, Chelmsford, Essex, Cm3 3ay Authority: Environment Agency, Anglian Region Catchment Area: Not Supplied Reference: Eprfb3997wy Permit Version: 1 Effective Date: 19th April 2017 Issued Date: 19th April 2017 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of The Boreham Brook **Status: New issued under EPR 2010** Positional Accuracy: Located by supplier to within 10m	B13NW (NW)	128	2	575715 211825

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	**Discharge Consents** Operator: Montrose Furniture Ltd Property Type: Undefined Or Other Location: Boreham Industrial Estate Waltham Road, Boreham, Essex Authority: Environment Agency, Anglian Region Catchment Area: Not Supplied Reference: Pr2lf736 Permit Version: 1 Effective Date: 25th February 1988 Issued Date: 25th February 1988 Revocation Date: 18th June 1998 Discharge Type: Unknown Discharge Environment: Land/Soakaway Receiving Water: Soakaway Into Land **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	B5NE (S)	134	2	575920 210660
7	**Discharge Consents** Operator: Moody Homes Limited Property Type: Domestic Property (Single) Location: Waltham Road, Boreham, Chelmsford, Essex, Cm3 3as Authority: Environment Agency, Anglian Region Catchment Area: Lower River Chelmer (Boreham) Reference: Prenf13938 Permit Version: 1 Effective Date: 16th January 2002 Issued Date: 17th January 2002 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of River Chelmer **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 10m	B10SW (S)	272	2	576140 210740
8	**Discharge Consents** Operator: Boreham Parish Council Property Type: Domestic Property (Multiple) Location: Chantry Field, Waltham Road, Boreham, Essex, Cm3 3as Authority: Environment Agency, Anglian Region Catchment Area: River Ter (Terling) Reference: Prenf13163 Permit Version: 1 Effective Date: 16th June 2000 Issued Date: 3rd July 2000 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of Boreham Brook **Status: New Consent, by Application (Water Resources Act 1991, Section 88)** Positional Accuracy: Located by supplier to within 10m	B10SW (S)	318	2	576240 210770
9	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Boreham - Radcliffe Boleyn Way Sp Radcliffes Boleyn Way, Boreham, -, Essex, Cm3 3jj Authority: Environment Agency, Anglian Region Catchment Area: Lower River Chelmer (Boreham) Reference: Asenf2547 Permit Version: 3 Effective Date: 13th July 2017 Issued Date: 13th July 2017 Revocation Date: 18th March 2019 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of The River Chelmer **Status: Surrendered under EPR 2010** Positional Accuracy: Located by supplier to within 100m	B5SW (SW)	341	2	575700 210300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Boreham - Radcliffe Boleyn Way Sp Radcliffes Boleyn Way, Boreham, -, Essex, Cm3 3jj Authority: Environment Agency, Anglian Region Catchment Area: Lower River Chelmer (Boreham) Reference: Asenf2547 Permit Version: 3 Effective Date: 13th July 2017 Issued Date: 13th July 2017 Revocation Date: 18th March 2019 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of The River Chelmer **Status: Surrendered under EPR 2010** Positional Accuracy: Located by supplier to within 100m	B5SW (SW)	341	2	575700 210300
9	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Boreham - Radcliffe Boleyn Way Sp Radcliffes Boleyn Way, Boreham, -, Essex, Cm3 3jj Authority: Environment Agency, Anglian Region Catchment Area: Lower River Chelmer (Boreham) Reference: Asenf2547 Permit Version: 2 Effective Date: 3rd September 2010 Issued Date: 3rd September 2010 Revocation Date: 12th July 2017 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Trib R Chelmer **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	B5SW (SW)	341	2	575700 210300
9	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Boreham - Radcliffe Boleyn Way Sp Radcliffes Boleyn Way, Boreham, -, Essex, Cm3 3jj Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Asenf2547 Permit Version: 1 Effective Date: 2nd January 1990 Issued Date: 2nd January 1990 Revocation Date: 2nd September 2010 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Trib R Chelmer **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	B5SW (SW)	341	2	575700 210300
10	**Local Authority Pollution Prevention and Controls** Name: Euromix Concrete Ltd Location: Boreham Industrial Estate, Waltham Road, CHELMSFORD, CM3 3AY Authority: Chelmsford Borough Council, Environmental Health Department Permit Reference: Ppc13 Dated: 29th March 1993 Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status: Authorised** Positional Accuracy: Manually positioned to the road within the address or location	B13SE (NW)	153	3	575887 211656
11	**Local Authority Pollution Prevention and Controls** Name: Chelmer Truck Bodies Ltd Location: Boreham Industrial Estate, Waltham Road, CHELMSFORD, Essex, CM3 3AW Authority: Chelmsford Borough Council, Environmental Health Department Permit Reference: Ppc06 Dated: 26th November 1993 Process Type: Local Authority Pollution Prevention and Control Description: PG6/34 Respraying of road vehicles **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	B9SE (S)	247	3	576055 210664

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	**Local Authority Pollution Prevention and Controls** Name: Euromix Ltd Location: Unit 1 Boreham Industrial Estate, Waltham Road, Boreham, Chelmsford, Essex, CM3 3AY Authority: Chelmsford Borough Council, Environmental Health Department Permit Reference: Ppc10 Dated: 25th March 1993 Process Type: Local Authority Pollution Prevention and Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status: Permitted** Positional Accuracy: Located by supplier to within 10m	B9SE (S)	250	3	576063 210677
	Nearest Surface Water Feature	B9NE (SW)	0	-	575865 211104
12	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Chelmsford District Authority: Environment Agency, Anglian Region Pollutant: Rubble/Litter Or Solids Note: Pond Incident Date: 9th February 1998 Incident Reference: 3664 Catchment Area: Not Given Receiving Water: Into And/Or Watercourse Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B9SE (SW)	92	2	575900 210700
13	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Chelmsford District Authority: Environment Agency, Anglian Region Pollutant: Crude Sewage Note: East Arm; Boreham Brook Incident Date: 7th September 1998 Incident Reference: 3874 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Blocked Sewer Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B5NW (SW)	128	2	575500 210400
14	**Pollution Incidents to Controlled Waters** Property Type: Industrial: Other Location: Chelmsford District Authority: Environment Agency, Anglian Region Pollutant: Miscellaneous - Inert Suspended Solids Note: Tributary Boreham Brook Incident Date: 14th April 1994 Incident Reference: 2280 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Land Runoff Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B5NE (S)	233	2	576000 210600
15	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Chelmsford District Authority: Environment Agency, Anglian Region Pollutant: Miscellaneous - Unknown Note: Tributary Of Chelmer Incident Date: 24th April 1995 Incident Reference: 2699 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B13SW (NW)	275	2	575700 211500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Pumping Station Location: Chelmsford District Authority: Environment Agency, Anglian Region Pollutant: Crude Sewage Note: Boreham Brook Incident Date: 28th September 1998 Incident Reference: 3899 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Blocked Sewer Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B6NW (S)	374	2	576100 210500
17	**Prosecutions Relating to Authorised Processes** Location: Land Adj To Cock Inn, Main Road, Boreham Prosecution Text: Operating a waste site without the correct license Prosecution Act: Epr 13 Hearing Date: 1st August 2009 Verdict: Guilty Fine: 6000 Costs: 6252 Positional Accuracy: Manually positioned to the address or location	B6NW (S)	385	2	576103 210488
18	**Water Abstractions** Operator: R M C Aggregates (Eastern Counties) Ltd Licence Number: 8/37/36/*G/0035 Permit Version: 100 Location: Waltham Rd Gravel Pits,Boreham Authority: Environment Agency, Anglian Region Abstraction: Mineral Products: Mineral Washing Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 1999 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	B13NW (NW)	283	2	575500 211700
19	**Water Abstractions** Operator: Rmc Aggregates (Eastern Counties) Ltd Licence Number: 8/37/36/*G/0039 Permit Version: 101 Location: Gravel Pit.Wallaces Fm,Boreham Authority: Environment Agency, Anglian Region Abstraction: Other Industrial/Commercial/Public Services: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Fluvial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th January 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	B13SW (NW)	337	2	575600 211500
	Water Abstractions Operator: John Wray Licence Number: 8/37/38/*g/040 Permit Version: Not Supplied Location: Briars Farm, BOREHAM Authority: Environment Agency, Anglian Region Abstraction: Agriculture (General) Abstraction Type: Not Supplied Source: Groundwater Fed Reservoir Daily Rate (m3): 27 Yearly Rate (m3): 86400 Details: Glacial Sand and Gravel; Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	B11NE (E)	975	2	577300 211000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: John Wray Licence Number: 8/37/38/*g/040 Permit Version: Not Supplied Location: Briars Farm , BOREHAM Authority: Environment Agency, Anglian Region Abstraction: Unspecified Abstraction Type: Not Supplied Source: Groundwater Fed Reservoir Daily Rate (m3): 27 Yearly Rate (m3): 86400 Details: Glacial Sand and Gravel; Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	B11NE (E)	977	2	577305 211000
	Water Abstractions Operator: John Wray Licence Number: 8/37/38/*g/040 Permit Version: Not Supplied Location: Briars Farm, BOREHAM Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Groundwater Fed Reservoir Daily Rate (m3): 27 Yearly Rate (m3): 86400 Details: Glacial Sand and Gravel; Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	B11SE (E)	982	2	577305 210995
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	(W)	0	4	574907 210983
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	(W)	0	4	575000 211000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	B9NE (SW)	0	4	575867 211000
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	(W)	0	4	575368 211000
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	B9NE (SW)	0	4	576000 211000
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: High	B9NE (SW)	0	4	576055 211000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	B13SE (NW)	0	4	576000 211471
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	B9NE (W)	0	4	575843 211160
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	B9NE (W)	0	4	576000 211257
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: Low	(NW)	0	4	575000 212000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: Low	(NW)	0	4	575000 212239
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: High	B13NE (N)	0	4	576000 212000
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: High	B14NW (N)	0	4	576163 212000
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: High	B14NE (NE)	0	4	576731 212000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	B10NW (SE)	0	4	576163 211257
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	B9NE (W)	0	4	576047 211260
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	B15SW (E)	0	4	576791 211517
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: Low	B14SW (NE)	0	4	576398 211369

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: High	B15SW (E)	0	4	577000 211343
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: High	(N)	0	4	576000 212357
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: High	(N)	0	4	576316 212257
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: >10m Superficial Recharge: High	B15NW (NE)	0	4	577000 212000
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	(W)	0	4	575000 211257
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	B10NW (SE)	0	4	576163 211257
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	(W)	0	4	575000 211225

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	B10NW (SE)	0	4	576163 211257
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	B9NE (W)	0	4	575843 211160
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	(W)	0	4	575000 211157
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	(W)	0	4	575367 211008
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	(NW)	0	4	575000 212239
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	B9NE (W)	0	4	576047 211260
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	B15SW (E)	0	4	576791 211517
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - B	B14SW (NE)	0	4	576398 211369
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - B	(N)	0	4	576316 212257
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	B9NE (SW)	0	2	575915 211105
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	B9NE (SW)	0	2	575900 211120
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
20	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 417.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B9NE (W)	0	5	575846 211149
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 518.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B9NE (W)	0	5	575852 211134
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B9NE (W)	0	5	575846 211259

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 217.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SE (NW)	0	5	576007 211400
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 131.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B9NE (W)	0	5	575861 211202
25	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 5.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B10NW (SW)	0	5	576099 211222
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 111.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B10NW (NW)	0	5	576136 211276
27	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 52.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B9NE (W)	5	5	575840 211267
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 91.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B9SE (SW)	14	5	575917 210884
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 213.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B9SE (SW)	29	5	575922 210793
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 455.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NW (SW)	36	5	575473 210420
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 28.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NW (SW)	76	5	575467 210425

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
32	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 51.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13NW (NW)	79	5	575468 211937
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 10.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NW (SW)	90	5	575478 210425
34	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 31.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NE (SW)	93	5	575848 210653
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 460.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NE (SW)	94	5	575818 210647
36	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NW (SW)	95	5	575478 210425
37	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 11.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13NW (NW)	98	5	575459 211937
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NE (SW)	101	5	575856 210653
39	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 146.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NE (SW)	106	5	575856 210652
40	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 33.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13NW (NW)	108	5	575447 211936

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
41	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 9.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (W)	173	5	575735 211399
42	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 24.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SE (W)	174	5	575746 211410
43	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 560.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (W)	202	5	575556 211472
44	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 111.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NE (S)	219	5	575995 210544
45	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 25.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (NW)	267	5	575714 211501
46	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (NW)	287	5	575714 211527
47	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 23.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (NW)	289	5	575722 211538
48	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 10.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (W)	299	5	575580 211436
49	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 78.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B10NE (SE)	302	5	576428 211094

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
50	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 29.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NE (S)	303	5	576035 210535
51	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 20.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (W)	309	5	575574 211445
52	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 64.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (NW)	320	5	575712 211566
53	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 59.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (NW)	323	5	575612 211492
54	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 67.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (NW)	323	5	575661 211538
55	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 19.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B5NE (S)	329	5	576060 210523
56	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (W)	330	5	575564 211462
57	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (W)	337	5	575559 211469
58	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (W)	339	5	575558 211470

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
59	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 26.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B13SW (W)	342	5	575557 211473
60	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B10NE (E)	359	5	576481 211151
61	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B10NE (E)	364	5	576486 211155
62	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 136.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Chelmer Primacy: 1	B16NW (E)	480	5	577462 211780

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
63	**Historical Landfill Sites** Licence Holder: Ready Mixed Concrete United Kingdom Limited Location: Boreham, Chelmsford, Essex Name: Wallace Lane Operator Location: RMC House, High Street, Feltham, Middlesex Boundary Accuracy: As Supplied Provider Reference: EAHLD01185 First Input Date: 24th July 1978 Last Input Date: 31st December 1985 Specified Waste Type: Deposited Waste included Inert and Industrial Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 1500/0580 BGS Ref: Not Supplied Other Ref: 047/78, CHE005	B13SW (NW)	315	2	575665 211524
64	**Licensed Waste Management Facilities (Landfill Boundaries)** Name: Great Holts Farm Licence Number: 70269 Location: Great Holts Farm, Waltham Road, Boreham, Chelmsford, Essex, CM3 3AZ Licence Holder: Cemex U K Materials Limited Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Landfills Taking Non-biodegradeable Wastes (Not Construction) Max Input Rate: Not Supplied **Licence Status: Closure** Issued: 13th April 1984 Positional Accuracy: Positioned by the supplier Boundary Accuracy: As Supplied	B13SW (NW)	275	2	575424 211589
65	**Licensed Waste Management Facilities (Locations)** Licence Number: 70363 Location: Boreham Ind Estate, Waltham Road, Boreham, Chelmsford, Essex, CM3 3AW Operator Name: European Metal Recycling Limited Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Metal Recycling Sites (Mixed) **Licence Status: Transferred** Issued: 3rd June 1994 Last Modified: 1st December 2010 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	B9SE (SW)	89	2	575882 210686
66	**Licensed Waste Management Facilities (Locations)** Licence Number: 70368 Location: Boreham Ind Estate, Waltham Road, Boreham, Essex, CM3 3AW Operator Name: Sita M R Ltd Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Metal Recycling Sites (Vehicle Dismantlers) **Licence Status: Expired** Issued: 1st July 1994 Last Modified: 1st December 2010 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	B5NE (SW)	127	2	575878 210639
66	**Licensed Waste Management Facilities (Locations)** Licence Number: 70349 Location: Boreham Ind Est, Waltham Road, Boreham, Essex, CM3 3AW Operator Name: Pharaoh & Co Ltd Operator Location: The Recycling Centre, Boreham Ind Est, Waltham Road, Boreham, Essex, CM3 3AW Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Household, Commercial And Industrial Transfer Stations **Licence Status: Issued** Issued: 9th February 1994 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	B5NE (SW)	142	2	575904 210636

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
66	**Licensed Waste Management Facilities (Locations)** Licence Number: 70349 Location: Boreham Ind Estate, Waltham Road, Boreham, Essex, CM3 3AW Operator Name: Sita M R Ltd Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Household, Commercial And Industrial Transfer Stations **Licence Status: Expired** Issued: 9th February 1994 Last Modified: 1st December 2010 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	B5NE (SW)	142	2	575904 210636
66	**Licensed Waste Management Facilities (Locations)** Licence Number: 71316 Location: Units 11 & 12 Boreham Ind Est, Waltham Road, Boreham, Chelmsford, Essex, CM3 3AW Operator Name: Biffa Waste Services Limited Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Household, Commercial And Industrial Transfer Stations **Licence Status: Modified** Issued: 20th August 2003 Last Modified: 15th December 2017 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	B5NE (S)	175	2	575951 210632
67	**Licensed Waste Management Facilities (Locations)** Licence Number: 71316 Location: Units 11 & 12 Boreham Ind Est, Waltham Road, Boreham, Chelmsford, Essex, CM3 3AW Operator Name: R M C Environmental Services Ltd Operator Location: Delamare Road, Cheshunt, Waltham Cross, Hertfordshire, EN8 9SJ Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Household, Commercial And Industrial Transfer Stations **Licence Status: Issued** Issued: 20th August 2003 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Manually corrected supplier location	B9SE (S)	183	2	576000 210700
68	**Licensed Waste Management Facilities (Locations)** Licence Number: 400980 Location: Main Road, Boreham, Chelmsford, Essex, CM3 3AA Operator Name: Thurgood John Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Treatment of waste to produce soil <75,000 tpy **Licence Status: Revoked** Issued: 21st November 2013 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: 20th October 2015 Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	B5NE (S)	374	2	576033 210443
	Local Authority Landfill Coverage Name: Chelmsford Borough Council - Has no landfill data to supply		0	3	576163 211257
	Local Authority Landfill Coverage Name: Braintree District Council - Has no landfill data to supply		0	6	576691 211362
	Local Authority Landfill Coverage Name: Essex County Council - Has supplied landfill data		0	7	576163 211257

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
69	**Local Authority Recorded Landfill Sites** Location: Boreham Reference: 23/421/12 Authority: Essex County Council **Last Reported Status: Not Supplied** Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Manually positioned within the geographical locality Boundary Quality: Not Applicable	B13SW (NW)	407	7	575559 211557
70	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1955	B5SW (SW)	272	-	575617 210311
71	**Registered Landfill Sites** Licence Holder: Rmc (Uk) Ltd Licence Reference: 47/78 Site Location: Wallace Lane, Boreham, Chelmsford, Essex Licence Easting: Not Supplied Licence Northing: Not Supplied Operator Location: RMC House, High Street, Feltham, HOUNSLOW, Middlesex, TW13 4HA Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Landfill Max Input Rate: Undefined Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 24th July 1978 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Positioned by the supplier Boundary Accuracy: Moderate Authorised Waste: Concrete/Asphalt Mixed Waste	B13SW (NW)	321	2	575674 211538
72	**Registered Waste Transfer Sites** Licence Holder: Pharaoh & Co Ltd Licence Reference: 279/94 Site Location: Recycling Centre At Boreham Ind.Est, Waltham Road, Boreham, Chelmsford, Essex, Cm3 3aw Operator Location: As Site Address Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Transfer Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 9th February 1994 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Batteries, Cleaned & Drained Transformers, Computer/Electronic Equipment, Electrical Cable & Wire, Electrical Fittings/Domestic Appliance, Ferrous/Non-Ferrous, Fragment'D,Unsorted (Ferrous,Non-Ferr), Heavy/Light Industrial Machinery, Max.Waste Permitted By Licence, Motor Vehicles/Parts, Newspapers,Magazines,Cardboard, Non-Haz. Building/Demolition Waste, Plastic Bottles/Cartons, Shot Blasting Residues, Soil/Excavated Natural Materials, Swarfs,Turnings,Dust,Powders,Granules, Textiles, Transformers,Capacitors,Photocopiers Prohibited Waste: Spec.Waste (Epa'90:S62/1996 Regs)N.O.S, Waste N.O.S.	B5NE (SW)	128	2	575900 210650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
73	**Registered Waste Treatment or Disposal Sites** Licence Holder: S B Wheeler & Sons Ltd Licence Reference: 296/94 Site Location: Boreham Industrial Estate, Waltham Road, Boreham, CHELMSFORD, Essex, CM3 3AW Operator Location: King Edward Quay, The Hythe, COLCHESTER, Essex, CO2 8JB Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Scrapyard - with Transfer Station Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 26th March 1999 Preceded By Licence: 296/94 Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the road within the address or location Boundary Quality: Not Supplied Authorised Waste: Degradable Commercial Waste Degradable Household Waste Degradable Industrial Waste Inert Waste Scrap Metal Spec.Waste (Epa'90:S62/1996 Regs) Prohibited Waste: Liquid Wastes Sludge Wastes Waste N.O.S.	B9SE (SW)	92	2	575900 210700
73	**Registered Waste Treatment or Disposal Sites** Licence Holder: Boreham Reclamation Ltd Licence Reference: 296/94 Site Location: Boreham Industrial Estate, Waltham Road, Boreham, CHELMSFORD, Essex, CM3 3AW Operator Location: 39 Moulsham Street, CHELMSFORD, Essex, SM2 0HY Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Scrapyard - with Transfer Station Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Record supersededSuperseded Dated: 3rd June 1994 Preceded By Licence: Not Given Superseded By Licence: 296/94 Positional Accuracy: Manually positioned to the road within the address or location Boundary Quality: Not Supplied Authorised Waste: Aircraft, Railway Carriages Batteries Electric. Fittings/Domestic Appliances Electrical Cable & Wire Ferrous Metal Scrap Fragment'D/Unsorted Ferrous/Non-Ferr. Heavy/Light Industrial Machinery Max.Waste Permitted By Licence Motor Vehicles/Parts Non-Ferrous Metal Scrap Non-Haz. Building/Demol. Waste Rubber & Latex Ships,Locos,Armoured Fighting Vehs. Shot Blasting Residues Soil/Excavated Natural Materials Prohibited Waste: Clinical - As In Hsc '92 Special Wastes Waste N.O.S.	B9SE (SW)	92	2	575900 210700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
73	**Registered Waste Treatment or Disposal Sites** Licence Holder: Recycled Motorparts Ltd Licence Reference: 302/94 Site Location: Unit 15 Boreham Industrial Estate, Waltham Road, Boreham, CHELMSFORD, Essex, CM3 3AW Operator Location: As Site Address Authority: Environment Agency - Anglian Region, Eastern Area Site Category: Scrapyard Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 1st July 1994 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned within the geographical locality Boundary Quality: Not Supplied Authorised Waste: Electric.Fittings/Domestic Appliances Ferrous Metal Scrap Light Industrial Machinery Max.Waste Permitted By Licence Motor Vehicles/Parts Non-Ferrous Metal Scrap	B9SE (SW)	113	2	575910 210680

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Thames Group	B10NW (SE)	0	1	576163 211257
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	B15SW (E)	0	1	576791 211517
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	B10NW (SE)	0	1	576163 211257
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	B14SW (NE)	0	1	576398 211369
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	B9NE (W)	0	1	576047 211260
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	B5NW (SW)	48	1	575696 210400
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	B5NE (S)	221	1	575911 210539

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	B2NE (S)	248	1	576501 209824
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	B5NE (S)	316	1	576045 210495
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 40 - 60 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	B6NW (S)	450	1	576163 210441
74	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224153 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	B13SE (NW)	111	1	575872 211425
75	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224150 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	B13NW (NW)	171	1	575505 211815
76	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224152 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	B13SE (NW)	220	1	575850 211600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 224151 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Cromerian - Ipswichian Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	B13SW (NW)	249	1	575710 211475
78	**BGS Recorded Mineral Sites** Site Name: Boreham Gravel Pit Location: Boreham, Chelmsford, Essex Source: British Geological Survey, National Geoscience Information Service Reference: 180784 Type: Opencast **Status: Ceased** Operator: Hall Aggregates Ltd. Operator Location: Not Supplied Periodic Type: Quaternary Geology: Glaciofluvial Deposits, Mid Pleistocene Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	B13SW (NW)	314	1	575620 211660
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B10NW (SE)	0	1	576163 211257
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B14SW (NE)	0	1	576398 211369
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B9NE (W)	0	1	575894 211204
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B15SE (E)	9	1	577176 211667
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	48	1	575696 210400
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B13SW (NW)	174	1	575497 211573
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B5NE (S)	221	1	575911 210539
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B9NE (W)	0	1	575894 211204
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B10NW (SE)	0	1	576163 211257
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B13SW (NW)	136	1	575676 211615
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B13SE (NW)	179	1	575881 211576

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B10NW (SE)	0	1	576163 211257
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B10NW (SE)	0	1	576163 211257
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B14SE (NE)	0	1	576530 211620
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B14NE (NE)	0	1	576529 211773
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B14NE (NE)	0	1	576601 211829
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B14NW (N)	0	1	576278 211862
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B13NW (NW)	64	1	575621 211815
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B10NW (SE)	0	1	576163 211257
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B9NE (W)	0	1	575894 211204
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B15SE (E)	9	1	577176 211667
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B13SW (NW)	174	1	575497 211573
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B10NW (SE)	0	1	576163 211257
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B9SW (SW)	0	1	575631 210991
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B15SW (E)	0	1	577052 211591
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B13NW (NW)	0	1	575627 211683
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B9NE (W)	0	1	575831 211260
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B14SW (NE)	0	1	576398 211369
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B15SW (E)	0	1	576791 211517
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B9NE (W)	0	1	576047 211260
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	48	1	575696 210400
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B5NE (SW)	76	1	575817 210641

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(NE)	133	1	577141 212075
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B5NE (S)	222	1	575911 210539
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	B10NW (SE)	0	1	576163 211257
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	B10NW (SE)	0	1	576163 211257

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
79	**Contemporary Trade Directory Entries** Name: Chelmer Truck Bodies Ltd Location: Barracks Field, Industrial Estate, Waltham Road, Boreham, Chelmsford, Essex, CM3 3AW Classification: Commercial Vehicle Bodybuilders & Repairers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B13SE (NW)	21	-	576036 211431
80	**Contemporary Trade Directory Entries** Name: Rmc Readymix (East Anglia) Location: Waltham Rd, Boreham, Chelmsford, Essex, CM3 3AY Classification: Concrete & Mortar Ready Mixed **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	B13NW (NW)	103	-	575583 211876
81	**Contemporary Trade Directory Entries** Name: Lovely Low Rider Location: Waltham Rd, Boreham, Chelmsford, Essex, CM3 3AY Classification: Cycle Accessories, Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	B10SW (S)	106	-	576114 210942
82	**Contemporary Trade Directory Entries** Name: Rmc Readymix (East Anglia) Location: Waltham Rd, Boreham, Chelmsford, Essex, CM3 3AY Classification: Concrete & Mortar Ready Mixed **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	B13NW (NW)	132	-	575632 211865
82	**Contemporary Trade Directory Entries** Name: The Reclaim Centre Location: Waltham Road, Boreham, Chelmsford, Essex, CM3 3AY Classification: Reclamation Centres **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	B13NW (NW)	132	-	575633 211865
83	**Contemporary Trade Directory Entries** Name: S L P Autos Location: Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	B9SE (S)	140	-	575938 210671
84	**Contemporary Trade Directory Entries** Name: D W Parsons & Son Location: Waltham Rd, Boreham, Chelmsford, Essex, CM3 3AY Classification: Fireplaces & Mantelpieces **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	B13SE (NW)	162	-	575862 211666
84	**Contemporary Trade Directory Entries** Name: Superbia Automotive Ltd Location: Waltham Road, Boreham, Chelmsford, CM3 3AY Classification: Car Dealers - Used **Status: Active** Positional Accuracy: Automatically positioned to the address	B13SE (NW)	183	-	575857 211641
84	**Contemporary Trade Directory Entries** Name: Anglia Building Suppliers Ltd Location: Waltham Road, Boreham, Chelmsford, Essex, CM3 3AY Classification: Reclamation Centres **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B13SE (NW)	184	-	575857 211640
85	**Contemporary Trade Directory Entries** Name: Premier Recycling Ltd Location: Ind Est,Waltham Rd, Boreham, Chelmsford, Essex, CM3 3AW Classification: Recycling Centres **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B5NE (SW)	167	-	575882 210597
85	**Contemporary Trade Directory Entries** Name: Cortina Plastics Ltd Location: Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Classification: Glass Fibre Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	B5NE (S)	170	-	575899 210601

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
85	**Contemporary Trade Directory Entries** Name: European Metal Recycling Location: Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Classification: Scrap Metal Merchants **Status: Active** Positional Accuracy: Automatically positioned to the address	B5NE (S)	176	-	575909 210599
85	**Contemporary Trade Directory Entries** Name: Biffa Waste Services Ltd Location: Units 11-12 Waltham Industrial Estate, Waltham Road, Boreham, Chelmsford, Essex, CM3 3AW Classification: Waste Disposal Services **Status: Active** Positional Accuracy: Manually positioned to the address or location	B5NE (S)	189	-	575947 210610
86	**Contemporary Trade Directory Entries** Name: Euro Vehicle Engineers Ltd Location: Unit 10 Waltham Road Industrial Estate,Waltham Road, Boreham, Chelmsford, Essex, CM3 3AW Classification: Garage Services **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	B9SE (S)	177	-	575979 210666
86	**Contemporary Trade Directory Entries** Name: Dc Motors Location: 6, Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B9SE (S)	177	-	575979 210666
86	**Contemporary Trade Directory Entries** Name: Kira Uk Ltd Location: Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Classification: Commercial Vehicle Bodybuilders & Repairers **Status: Active** Positional Accuracy: Automatically positioned to the address	B9SE (S)	182	-	575989 210674
86	**Contemporary Trade Directory Entries** Name: Recycled Motor Parts Ltd Location: Unit 15,Industrial Est,Waltham Rd, Boreham, Chelmsford, Essex, CM3 3AW Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	B9SE (S)	199	-	576006 210670
86	**Contemporary Trade Directory Entries** Name: Q M Asphalt Location: Q M Asphalt, Waltham Road, Chelmsford, CM3 3AY Classification: Asphalt & Coated Macadam Laying Contractors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B9SE (S)	200	-	576006 210668
86	**Contemporary Trade Directory Entries** Name: Tokyo Auto Spares Location: 2, Industrial Estate, Waltham Road, Boreham, Chelmsford, Essex, CM3 3AW Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B9SE (S)	200	-	576007 210671
86	**Contemporary Trade Directory Entries** Name: Stephenson'S Location: Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Classification: Bus & Coach Operators & Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	B9SE (S)	200	-	576007 210671
87	**Contemporary Trade Directory Entries** Name: Service On Site Ltd Location: Recovery House, Waltham Road, Boreham, Chelmsford, CM3 3AY Classification: Car Breakdown & Recovery Services **Status: Active** Positional Accuracy: Automatically positioned to the address	B13SE (NW)	185	-	575899 211612
88	**Contemporary Trade Directory Entries** Name: L Burnham Location: Waltham Rd, Boreham, Chelmsford, Essex, CM3 3AZ Classification: Commercial Vehicle Bodybuilders & Repairers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	B13NW (NW)	208	-	575685 211744

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
88	**Contemporary Trade Directory Entries** Name: R M C Aggregates Ltd Location: Waltham Rd, Boreham, Chelmsford, Essex, CM3 3AY Classification: Sand, Gravel & Other Aggregates **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	B13NW (NW)	209	-	575692 211738
89	**Contemporary Trade Directory Entries** Name: T K Wiggins & Son Location: Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B5NE (S)	210	-	575981 210613
90	**Contemporary Trade Directory Entries** Name: Euromix Concrete Pumping Ltd Location: 1, Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Classification: Concrete & Mortar Ready Mixed **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B9SE (S)	255	-	576068 210677
90	**Contemporary Trade Directory Entries** Name: Euromix Concrete Location: 1, Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Classification: Concrete Contractors **Status: Active** Positional Accuracy: Automatically positioned to the address	B9SE (S)	255	-	576068 210677
90	**Contemporary Trade Directory Entries** Name: Uk Concrete Pumping Ltd Location: 1, Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Classification: Concrete Pumping Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B9SE (S)	255	-	576068 210677
91	**Contemporary Trade Directory Entries** Name: Njw Vechicle Services Location: Unit 6 Industrial Est,Waltham Rd, Boreham, Chelmsford, Essex, CM3 3AW Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	B10SW (S)	256	-	576106 210730
91	**Contemporary Trade Directory Entries** Name: K P T Supplies Ltd Location: Industrial Est,Waltham Rd, Boreham, Chelmsford, Essex, CM3 3AW Classification: Commercial Vehicle Component Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	B10SW (S)	261	-	576105 210722
92	**Contemporary Trade Directory Entries** Name: Mainstay Electrical Ltd Location: 27, St. Andrews Road, Boreham, Chelmsford, CM3 3DL Classification: Electrical Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B5SW (SW)	389	-	575540 210075
93	**Contemporary Trade Directory Entries** Name: Hamilton Motors Location: Main Rd, Boreham, Chelmsford, Essex, CM3 3JD Classification: Car Breakdown & Recovery Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	B5NE (S)	397	-	575866 210335
94	**Contemporary Trade Directory Entries** Name: A J Motors Location: Roselea, Main Road, Boreham, Chelmsford, Essex, CM3 3JZ Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	B6NW (S)	471	-	576242 210535
95	**Contemporary Trade Directory Entries** Name: Rowan Engineering Location: Hillview, Main Road, Boreham, Chelmsford, CM3 3AD Classification: Boilers - Servicing, Replacements & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B6NW (S)	471	-	576301 210617
96	**Contemporary Trade Directory Entries** Name: Blue Roan Graphics Ltd Location: 17, Allens Close, Boreham, Chelmsford, CM3 3DR Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B5SW (S)	475	-	575701 210089

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
97	**Contemporary Trade Directory Entries** Name: Scrap Cars Chelmsford Location: 5 Orchard Cottages, Main Road, Boreham, Chelmsford, CM3 3AD Classification: Scrap Metal Merchants **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B6NW (S)	478	-	576346 210650
97	**Contemporary Trade Directory Entries** Name: Blackwell Transport Services Location: 7 Orchard Cottages, Main Road, Boreham, Chelmsford, CM3 3AD Classification: Car Breakdown & Recovery Services **Status: Active** Positional Accuracy: Automatically positioned to the address	B6NW (S)	479	-	576363 210661
98	**Points of Interest - Commercial Services** Name: Scrap Yard Location: CM3 Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	B9SE (SW)	76	8	575882 210704
98	**Points of Interest - Commercial Services** Name: Scrap Yard Location: Not Supplied Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to an adjacent address or location	B5NE (SW)	126	8	575871 210637
99	**Points of Interest - Commercial Services** Name: Euro Vehicle Engineers Ltd Location: Unit 10 Boreham Industrial Estate, Waltham Road, Chelmsford, CM3 3AW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	B9SE (S)	140	8	575938 210671
99	**Points of Interest - Commercial Services** Name: Sita UK Ltd Location: Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	B5NE (SW)	142	8	575904 210636
99	**Points of Interest - Commercial Services** Name: S L P Autos Location: Unit 10 Boreham Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	B9SE (S)	149	8	575951 210674
99	**Points of Interest - Commercial Services** Name: European Metal Recycling Location: Unit 12-14 Waltham Road Industrial Estate, Boreham, Chelmsford, CM3 3AW Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	B5NE (S)	176	8	575909 210600
99	**Points of Interest - Commercial Services** Name: T K Wiggins & Son Location: Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	B5NE (S)	209	8	575980 210613
99	**Points of Interest - Commercial Services** Name: T K Wiggins & Son Location: Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	B5NE (S)	210	8	575981 210613
100	**Points of Interest - Commercial Services** Name: A J Motors Location: Roselea, Main Road, Boreham, Chelmsford, CM3 3JZ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	B6NW (S)	471	8	576242 210535
101	**Points of Interest - Commercial Services** Name: Scrap Cars Chelmsford Location: 5 Orchard Cottages, Main Road, Boreham, Chelmsford, CM3 3AD Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	B6NW (S)	478	8	576346 210650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
102	**Points of Interest - Manufacturing and Production** Name: Industrial Estate Location: CM3 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	B9SE (SW)	116	8	575929 210703
102	**Points of Interest - Manufacturing and Production** Name: Industrial Estate Location: CM3 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	B9SE (S)	128	8	575944 210705
102	**Points of Interest - Manufacturing and Production** Name: Works Location: CM3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B9SE (S)	134	8	575932 210673
102	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B9SE (S)	137	8	575935 210672
102	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B5NE (S)	192	8	575990 210655
102	**Points of Interest - Manufacturing and Production** Name: Works Location: CM3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B5NE (S)	194	8	575991 210653
103	**Points of Interest - Manufacturing and Production** Name: Works Location: CM3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B10NW (SE)	139	8	576264 211099
103	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B10NW (SE)	142	8	576267 211098
104	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B5NE (S)	215	8	575989 210614
104	**Points of Interest - Manufacturing and Production** Name: Works Location: CM3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B5NE (S)	219	8	575991 210611
105	**Points of Interest - Manufacturing and Production** Name: Works Location: CM3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B9SE (S)	257	8	576069 210673
105	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B9SE (S)	259	8	576070 210670

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
106	**Points of Interest - Manufacturing and Production** Name: Tank Location: CM3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	B10SW (S)	297	8	576253 210807
107	**Points of Interest - Manufacturing and Production** Name: Sand and Gravel Pit Location: CM3 Category: Extractive Industries Class Code: Sand, Gravel and Clay Extraction and Merchants Positional Accuracy: Positioned to an adjacent address or location	B13SW (NW)	320	8	575650 211633
108	**Points of Interest - Public Infrastructure** Name: Sita UK Location: Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Category: Infrastructure and Facilities Class Code: Recycling Centres Positional Accuracy: Positioned to address or location	B5NE (SW)	142	8	575904 210636
108	**Points of Interest - Public Infrastructure** Name: Biffa Waste Services Ltd Location: Units 11-12 Waltham Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	B5NE (S)	189	8	575947 210610
109	**Points of Interest - Public Infrastructure** Name: Stephenson's Location: Unit 2 Boreham Industrial Estate, Waltham Road, Boreham, Chelmsford, CM3 3AW Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to address or location	B9SE (S)	228	8	576040 210676
110	**Points of Interest - Public Infrastructure** Name: Sewage Pumping Station Location: CM3 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	B5NW (SW)	304	8	575684 210343
111	**Points of Interest - Public Infrastructure** Name: Sewage Ppg Location: CM3 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	B5NE (S)	340	8	576067 210515
112	**Points of Interest - Recreational and Environmental** Name: Play Area Location: CM3 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	B5NE (S)	366	8	576063 210476
113	**Points of Interest - Recreational and Environmental** Name: Play Area Location: CM3 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	B5SW (S)	467	8	575741 210149

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
114	**Ancient Woodland** Name: Toppinghoehall Wood Reference: 1116683 Area(m²): 142065.33 Type: Ancient and Semi-Natural Woodland	B14NW (N)	0	9	576294 211856
115	**Ancient Woodland** Name: Toppinghoehall Wood Reference: 1116683 Area(m²): 82011.45 Type: Plantation on Ancient Woodland	(N)	0	9	576458 212063
116	**Ancient Woodland** Name: Lost Wood Reference: 1116684 Area(m²): 164568.33 Type: Ancient and Semi-Natural Woodland	(NE)	0	9	576861 212216
117	**Ancient Woodland** Name: Not Supplied Reference: 1420068 Area(m²): 96214 Type: Plantation on Ancient Woodland	B14SE (NE)	0	9	576491 211658
118	**Ancient Woodland** Name: Not Supplied Reference: 1420069 Area(m²): 9152.03 Type: Plantation on Ancient Woodland	B15NW (NE)	0	9	576929 211833
119	**Ancient Woodland** Name: Not Supplied Reference: 1420067 Area(m²): 38296.95 Type: Plantation on Ancient Woodland	B15SW (NE)	123	9	576887 211647
120	**Ancient Woodland** Name: Lost Wood Reference: 1116684 Area(m²): 25245.28 Type: Plantation on Ancient Woodland	(NE)	129	9	576929 212364
121	**Nitrate Vulnerable Zones** Name: Sandlings And Chelmsford Description: Groundwater Source: Environment Agency, Head Office	B10NW (SE)	0	4	576163 211257
122	**Nitrate Vulnerable Zones** Name: River Chelmer Nvz Description: Surface Water Source: Environment Agency, Head Office	B10NW (SE)	0	4	576163 211257

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Braintree District Council - Environmental Health Department	January 2020	Annual Rolling Update
Environment Agency - Head Office	June 2020	Annually
Chelmsford Borough Council - Environmental Health Department	March 2015	Annual Rolling Update
Discharge Consents		
Environment Agency - Anglian Region	January 2021	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Anglian Region	March 2013	Annual Rolling Update
Integrated Pollution Controls		
Environment Agency - Anglian Region	October 2008	Variable
Integrated Pollution Prevention And Control		
Environment Agency - Anglian Region	January 2021	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Braintree District Council - Environmental Health Department	August 2014	Variable
Chelmsford Borough Council - Environmental Health Department	October 2014	Variable
Local Authority Pollution Prevention and Controls		
Braintree District Council - Environmental Health Department	August 2014	Not Applicable
Chelmsford Borough Council - Environmental Health Department	October 2014	Not Applicable
Local Authority Pollution Prevention and Control Enforcements		
Braintree District Council - Environmental Health Department	August 2014	Variable
Chelmsford Borough Council - Environmental Health Department	October 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	October 2020	
Pollution Incidents to Controlled Waters		
Environment Agency - Anglian Region	September 1999	Not Applicable
Prosecutions Relating to Authorised Processes		
Environment Agency - Anglian Region	March 2013	Annual Rolling Update
Prosecutions Relating to Controlled Waters		
Environment Agency - Anglian Region	March 2013	Annual Rolling Update
Registered Radioactive Substances		
Environment Agency - Anglian Region	June 2016	
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register		
Environment Agency - Anglian Region - Eastern Area	January 2021	Quarterly
Water Abstractions		
Environment Agency - Anglian Region	January 2021	Quarterly
Water Industry Act Referrals		
Environment Agency - Anglian Region	October 2017	Quarterly
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Source Protection Zones		
Environment Agency - Head Office	October 2019	Quarterly

Agency & Hydrological	Version	Update Cycle
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	September 2020	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	September 2020	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	September 2020	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	September 2020	Quarterly
Flood Defences Environment Agency - Head Office	September 2020	Quarterly
OS Water Network Lines Ordnance Survey	September 2020	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water Suitability Environment Agency - Head Office	October 2013	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites		
Environment Agency - Head Office	October 2019	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - Anglian Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - Anglian Region - Eastern Area	January 2021	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - Anglian Region - Eastern Area	January 2021	Quarterly
Local Authority Landfill Coverage		
Braintree District Council	May 2000	Not Applicable
Chelmsford Borough Council - Environmental Health Department	May 2000	Not Applicable
Essex County Council	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
Braintree District Council	May 2000	Not Applicable
Chelmsford Borough Council - Environmental Health Department	May 2000	Not Applicable
Essex County Council	November 2004	Not Applicable
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites		
Environment Agency - Anglian Region - Eastern Area	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - Anglian Region - Eastern Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites		
Environment Agency - Anglian Region - Eastern Area	March 2003	Not Applicable
Hazardous Substances	**Version**	**Update Cycle**
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
Braintree District Council	February 2016	Variable
Chelmsford Borough Council	February 2016	Variable
Essex County Council	February 2016	Variable
Planning Hazardous Substance Consents		
Braintree District Council	February 2016	Variable
Chelmsford Borough Council	February 2016	Variable
Essex County Council	February 2016	Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2020	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually
Industrial Land Use	**Version**	**Update Cycle**
Contemporary Trade Directory Entries Thomson Directories	January 2021	Quarterly
Fuel Station Entries Catalist Ltd - Experian	February 2021	Quarterly
Gas Pipelines National Grid	January 2021	
Points of Interest - Commercial Services PointX	March 2021	Quarterly
Points of Interest - Education and Health PointX	March 2021	Quarterly
Points of Interest - Manufacturing and Production PointX	March 2021	Quarterly
Points of Interest - Public Infrastructure PointX	March 2021	Quarterly
Points of Interest - Recreational and Environmental PointX	March 2021	Quarterly
Underground Electrical Cables National Grid	December 2020	

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	February 2021	Bi-Annually
Areas of Adopted Green Belt		
Braintree District Council	June 2020	As notified
Chelmsford Borough Council	June 2020	As notified
Areas of Unadopted Green Belt		
Braintree District Council	June 2020	As notified
Chelmsford Borough Council	June 2020	As notified
Areas of Outstanding Natural Beauty		
Natural England	January 2021	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	February 2021	Bi-Annually
Marine Nature Reserves		
Natural England	July 2019	Bi-Annually
National Nature Reserves		
Natural England	January 2021	Bi-Annually
National Parks		
Natural England	April 2017	Bi-Annually
Nitrate Sensitive Areas		
Natural England	April 2016	Not Applicable
Nitrate Vulnerable Zones		
Environment Agency - Head Office	December 2017	Bi-Annually
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	
Ramsar Sites		
Natural England	August 2020	Bi-Annually
Sites of Special Scientific Interest		
Natural England	February 2021	Bi-Annually
Special Areas of Conservation		
Natural England	July 2020	Bi-Annually
Special Protection Areas		
Natural England	February 2021	Bi-Annually

Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Chelmsford Borough Council - Environmental Health Department** Coval Lane, Chelmsford, Essex, CM1 1TJ	Telephone: 01245 606606 Fax: 01245 606606 Email: Environmental.services@chelmsfordbc.gov.uk Website: www.chelmsfordbc.gov.uk
4	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	**Braintree District Council** Causway House, Braintree, Essex, CM7 9HB	Telephone: 01376 552525 Fax: 01376 552626 Website: www.braintree.gov.uk
7	**Essex County Council** County Hall, Chelmsford, Essex, CM1 1YS	Telephone: 01245 492211 Website: www.essexcc.gov.uk
8	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
9	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

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Historical Land Use Information (1:10,000)

General

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

Several of Type at Location

Potentially Contaminative Industrial Uses (Past Land Uses - Mining)

	Point	Line	Polygon
Air Shafts	◆		
Disturbed Ground	◆		
General Quarrying	◆		
Heap, unknown constituents	◆		
Mineral Railway	◆		
Mining and Quarrying General	◆		
Mining of Coal & Lignite	◆		
Quarrying of Sand and Clay, Operation of Sand and Gravel Pits	◆		

Historical Land Use

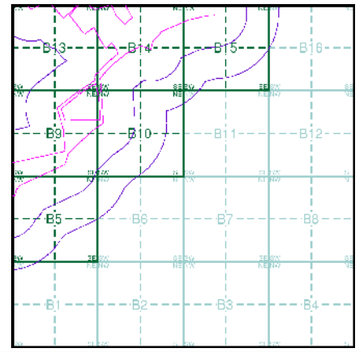
	Point	Line	Polygon
Potentially Infilled Land (Non-Water)	●		
Potentially Infilled Land (Water)	●		
Former Marsh	✠		

Mining Data

Potential Mining Area

BGS Recorded Mineral Site

Mining and Ground Stability - Slice B



Order Details

Order Number:	274546457_1_1
Customer Ref:	60640215
National Grid Reference:	576160, 211260
Slice:	B
Site Area (Ha):	473.19
Search Buffer (m):	500

Site Details

Longfield

Landmark INFORMATION GROUP

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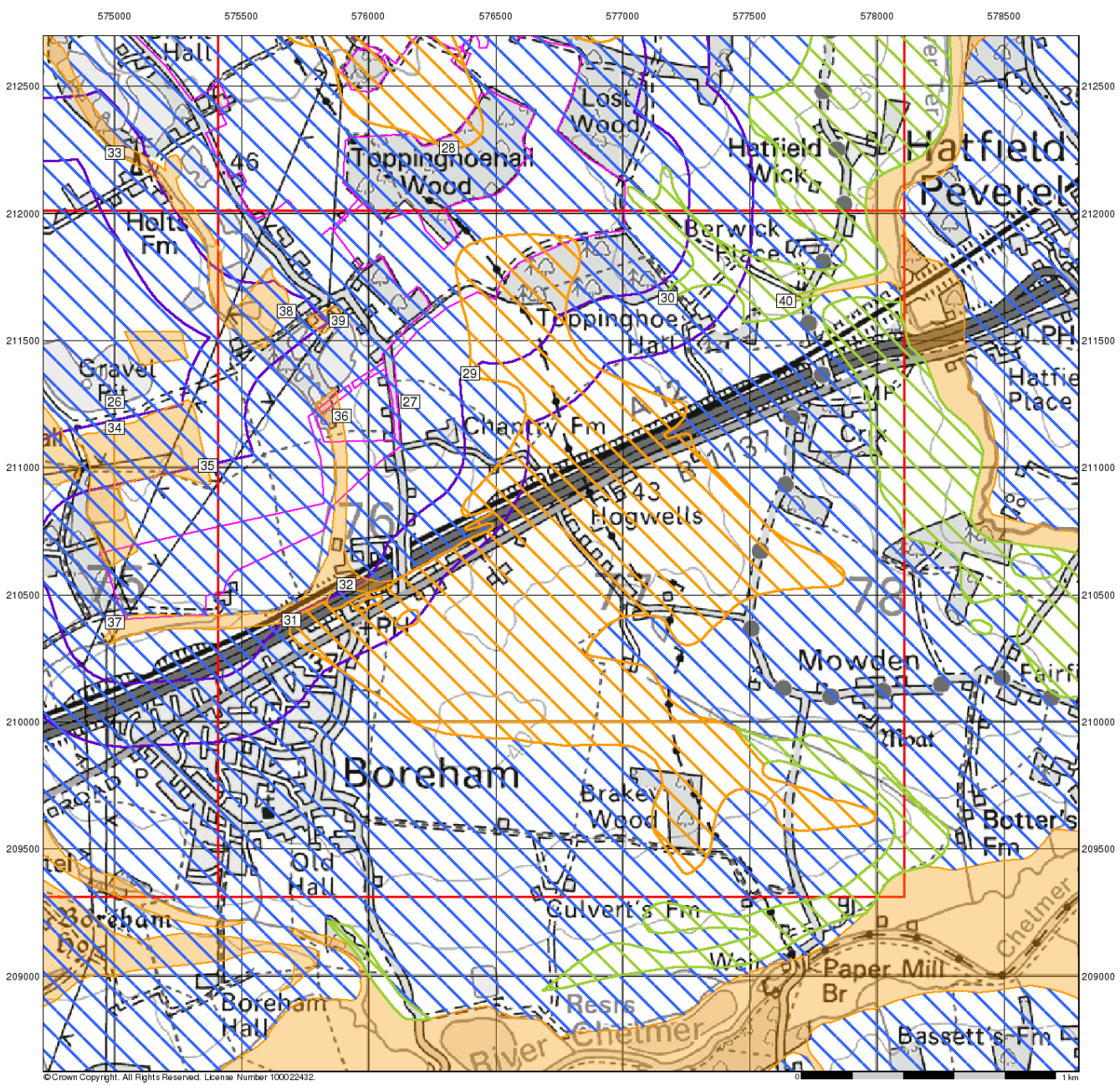
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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Ground Stability Data (1:50,000)

General

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

Potential for Compressible Ground Stability Hazards

High | Low | Moderate | Very Low

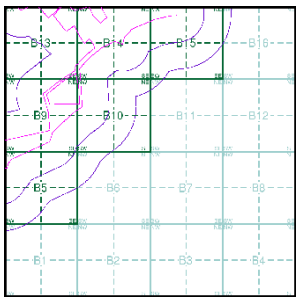
Potential for Collapsible Ground Stability Hazards

High | Low | Moderate | Very Low

Brine Pumping and Salt Mining

	Point	Polygon
Brine Pumping Related Feature	▲	▨
Salt Mining Related Feature	▲	▨

Mining and Ground Stability - Slice B



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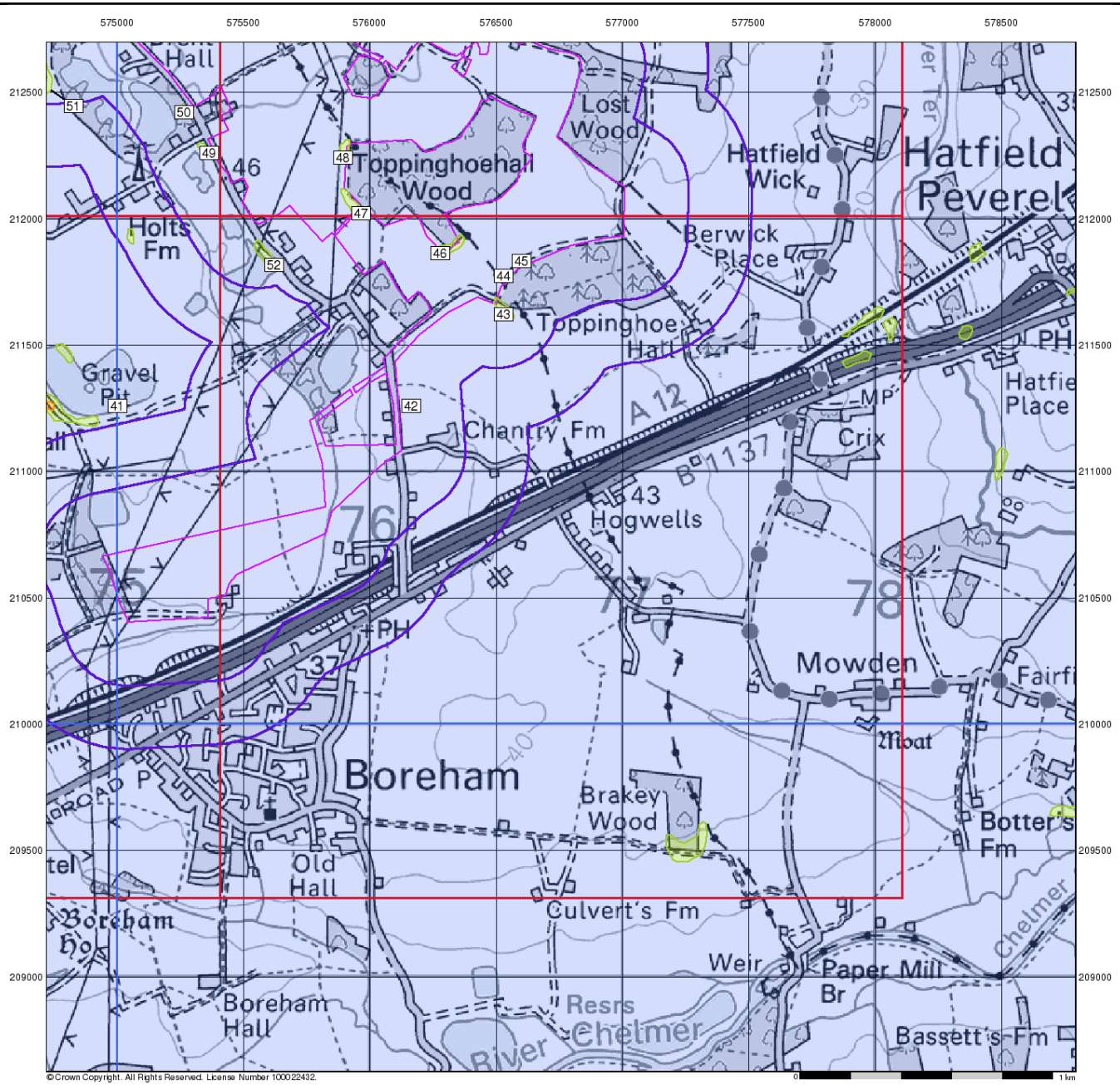

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Ground Stability Data (1:50,000)

General

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

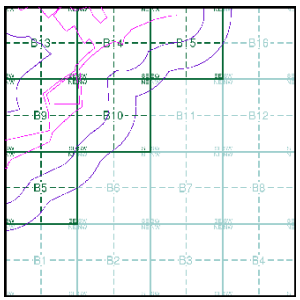
Potential for Landslide Ground Stability Hazards

High | Low | Moderate | Very Low

Potential for Ground Dissolution Stability Hazards

High | Low | Moderate | Very Low

Mining and Ground Stability - Slice B



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