# Central Lancashire Local Plan 2023-2041

**THE TOWN AND COUNTRY PLANNING (LOCAL PLANNING) (ENGLAND) REGULATIONS 2012**

## Regulation 19 Pre-Submission Plan

## REPRESENTATION FORM

**The easiest way to submit your comments is online at** https://centrallocalplan.citizenspace.com/planning/cllp-regulation-19-representation-period/ . Alternatively, you can scan the QR code on the right, using a smartphone, to be taken to the webpage. **We would encourage you to use the online form wherever possible.** Where online is not possible, you can complete this form and return it to us using the postal address on the final page.

**Submission form**

**This form has two parts-**

**Part A –** Personal Details: need only to be completed once. **We will not be able to accept responses where personal details are not provided.**

**Part B –** Your representation(s): Please fill in a separate sheet for each representation you wish to make relating to each individual policy.

You will be asked to give details of why you consider the policies of the Local Plan to be sound or unsound, please be as precise as possible. You will also be asked to set out the modification(s) you consider necessary to make the Local Plan policies sound in respect of any soundness matters you have identified. You will need to say why each modification will make the policy sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

**Privacy Notice**

If you have any questions about how the Central Lancashire Authorities will handle your personal data, please see our Data Protection Policy Statement or contact us via email at centrallancashireplan@chorley.gov.uk

- Chorley Privacy Statement: https://chorley.gov.uk/privacy
- Preston Privacy Statement: https://www.preston.gov.uk/article/1231/Data-protection-policy-statement
- South Ribble Privacy Statement: https://southribble.gov.uk/privacypolicy

**Part A: Personal Details***

**We will <u>not</u> be able to accept responses where personal details are not provided.**

1.Please provide your contact details.

**If an agent is appointed, please complete only the Title, Name and Organisation (if applicable) in the Person Details boxes below but complete the full contact details of the agent in Agent Details.*

| | Representor Personal Details | Agents Details (if applicable) |
|---|---|---|
| Title | | |
| First Name | G & W | |
| Last Name | Love | |
| Job Title (where relevant) | | |
| Organisation (where relevant) | | |
| Address Line 1 | [redacted] | |
| Address Line 2 | | |
| Town | [redacted] | |
| Postcode | [redacted] | |
| Telephone number | [redacted] | |
| Email address | [redacted] | |
| What authority do you live / work in? *(Chorley, Preston, or South Ribble)* | | |

**Part B: Please use a separate sheet for each representation you wish to make**

| **Name or Organisation:** | **G & W Love** |
|---|---|

3. To which part of the Local Plan does this representation relate?

Please provide the reference of the policy, paragraph, policies map, evidence etc that your comment relates to. Please use a separate Part B form for each element of the plan (i.e. policy, paragraph, site, document) that you wish to comment on.
If comments do not provide a reference, or are submitted on a single form and relate to multiple elements of the Plan, then the Council will assign and/or separate these points out as it considers most appropriate for submission to the Planning Inspectorate.

| Comment being made against: | Reference (please provide) |
|---|---|
| Policy: | Policy HS3:<br>Housing Allocations South Ribble |
| Paragraph: | Appendix 4: Site Ref HS3.2 |
| Development Site: | HS3.2 Apsley House, Farington |
| Policies Map: | HS3.2 Apsley House, Farington |
| Evidence: | SHELAA Site Ref. 19S064 |
| Other (Please state): | |

4. Do you consider the Local Plan is:

| | Please check the relevant box | |
|---|---|---|
| | Yes | No |
| 1) Legally compliant | ☒ | ☐ |
| 2) Sound<br><br>(If you check 'No', please also confirm below which of the 'tests' it fails to meet) | ☒ | ☐ |
| a) Positively prepared | ☒ | ☐ |
| b) Justified | ☒ | ☐ |
| c) Effective | ☒ | ☐ |
| d) Consistent with national policy | ☒ | ☐ |
| 3) Complies with the duty to co-operate | ☒ | ☐ |

| 5. Please give details of why you consider the Local Plan is not legally compliant or is unsound or fails to comply with the duty to co-operate. Please be as precise as possible (e.g., if objecting on the basis of legal compliance, please quote the specific law that the Central Lancashire Local Plan does not comply with).<br><br>If you wish to support the legal compliance or soundness of the Local Plan or its compliance with the duty to co-operate, please also use this box to set out your comments. |
|---|
| Please refer to attached letter and enclosures<br><br>(Continue on a separate sheet /expand box if necessary) |

| 6. Please set out the modification(s) you consider necessary to make the Local Plan legally compliant and sound, in respect of any legal compliance or soundness matters you have identified at 5 above. (Please note that non-compliance with the duty to co-operate is incapable of modification at examination). You will need to say why each modification will make the Local Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible. |
|---|
| Please refer to attached letter and enclosures<br><br>(Continue on a separate sheet /expand box if necessary) |
| ***Please note:*** *In your representation, you should provide succinctly all the evidence and supporting information necessary to support your representation and your suggested modification(s). You should not assume that you will have a further opportunity to make submissions.*<br><br>***After this stage, further submissions may only be made if invited by the Inspector, based on the matters and issues identified during the examination.*** |

| 7. If your representation is seeking a modification to the plan, do you consider it necessary to participate in examination hearing session(s)? |
|---|

| | Please check the relevant box |
|---|---|
| No, I do not wish to participate in hearing sessions | ☐ |
| Yes, I wish to participate in hearing sessions | ☒ |

*Please note that while this will provide an initial indication of your wish to participate in hearing session(s), you may be asked at a later point to confirm your request to participate*.

| 8. If you wish to participate in the hearing session(s), please outline why you consider this to be necessary: |
|---|
| To support proposed Housing Allocation HS3.2 |
| ***Please note*** *the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate in hearing session(s). You may be asked to confirm your wish to participate when the Inspector has identified the matters and issues for examination.* |

Please return your completed representation form(s) by post to: Planning Policy Team, Third Floor, Town Hall, Lancaster Road, Preston, PR1 2RL by filling in this representation form.

**Forms must be received by midnight on Monday 14 April 2025.**

Chorley Council

South Ribble Borough Council

Preston City Council

14th April 2025

Central Lancashire Local Plan Team
Regulation 19 Consultation
3rd Floor Town Hall
Lancaster Road
Preston PR1 2RL

**By email only**

Dear Sir or Madam,

**REPRESENTATION BY G & W LOVE**
**CENTRAL LANCASHIRE LOCAL PLAN 2023 - 2041 REGULATION 19 CONSULTATION**

As the freehold owner of the 3.75 ha site (SHELLA ref. 19S103) 'Land south of Chain House Lane, Whitestake', we are writing to confirm our support for the Publication Version plan and, expressly, Site Allocation HS3.2: Apsley House, Farington which includes our land. A plan showing the location and extent of our land within Site Allocation HS3.2 is enclosed.

The land surrounding our own is owned by Homes England and forms the western part of Site Allocation HS3.2, with the eastern part owned Northern Trust Group. We are fully committed to bringing our land forward for housing development and have been working jointly with Homes England since 2020. Together with Northern Trust Group, the three landowners have signed 'Letters of Understanding' and are collaborating to bring their land forward in accordance with a comprehensive and coordinated joint Concept Framework plan for the proposed HS3.2 allocation.

The Concept Framework is supported by joint, and individually gathered, technical and environmental evidence and individual capacity testing of each landholding. The collective position is that Site Allocation HS3.2 is undoubtedly suitable, available and achievable for housing development, and has capacity to deliver 448 dwellings[1].

Each landholding is designed to be delivered independently of the others, whilst enabling the overall comprehensive and coordinated delivery of proposed Site Allocation HS3.2, whereby our land can come forward in Phase 1 at the beginning of the plan period, and be fully delivered in the first five years when it is needed most. An illustrative layout showing how our land can be developed as Phase 1 is enclosed, and shows a yield of approximately 100 no. dwellings. The outline planning application 07/2020/00505/OUT demonstrated that development of this type and scale is suitable and achievable on our land, and did not give rise to any technical and environmental objections. An up to date ground report has been commissioned to show that there has been no change in ground conditions, and is enclosed with this representation.

[1] Whilst the draft Plan proposes 435 dwellings, our analysis shows that Site Allocation HS3.2 has capacity to deliver 448 dwellings.

[redacted]

Our joint approach and agreed collaboration is explained in the overarching letter which has been submitted on behalf of all the landowners. This sets out the comprehensive case in support of Site Allocation HS3.2 and includes a joint land ownership plan, the joint Concept Framework plan and a joint housing trajectory.

Whilst Site Allocation HS3.2 Apsley House, Farington is considered sound in principle, as it is justified by technical evidence, is available to be brought forward for development now and offers a sustainable location for development, we request that a modification is made to ensure it is positively prepared (reflecting the joint landowners evidenced testing of site capacity) and consistent with national planning policy by ensuring an effective use of land to meet the need for homes (NPPF 124). The landowners therefore request that the site capacity is increased from 435 dwellings to up to 448 dwellings.

**Conclusion**

In summary, we, together with Homes England and Northern Trust, are fully committed to bringing our land forward for housing development at the earliest practical opportunity and fully support its inclusion and allocation as part of Site Allocation HS3.2 in the Publication Version Central Lancashire Local Plan.

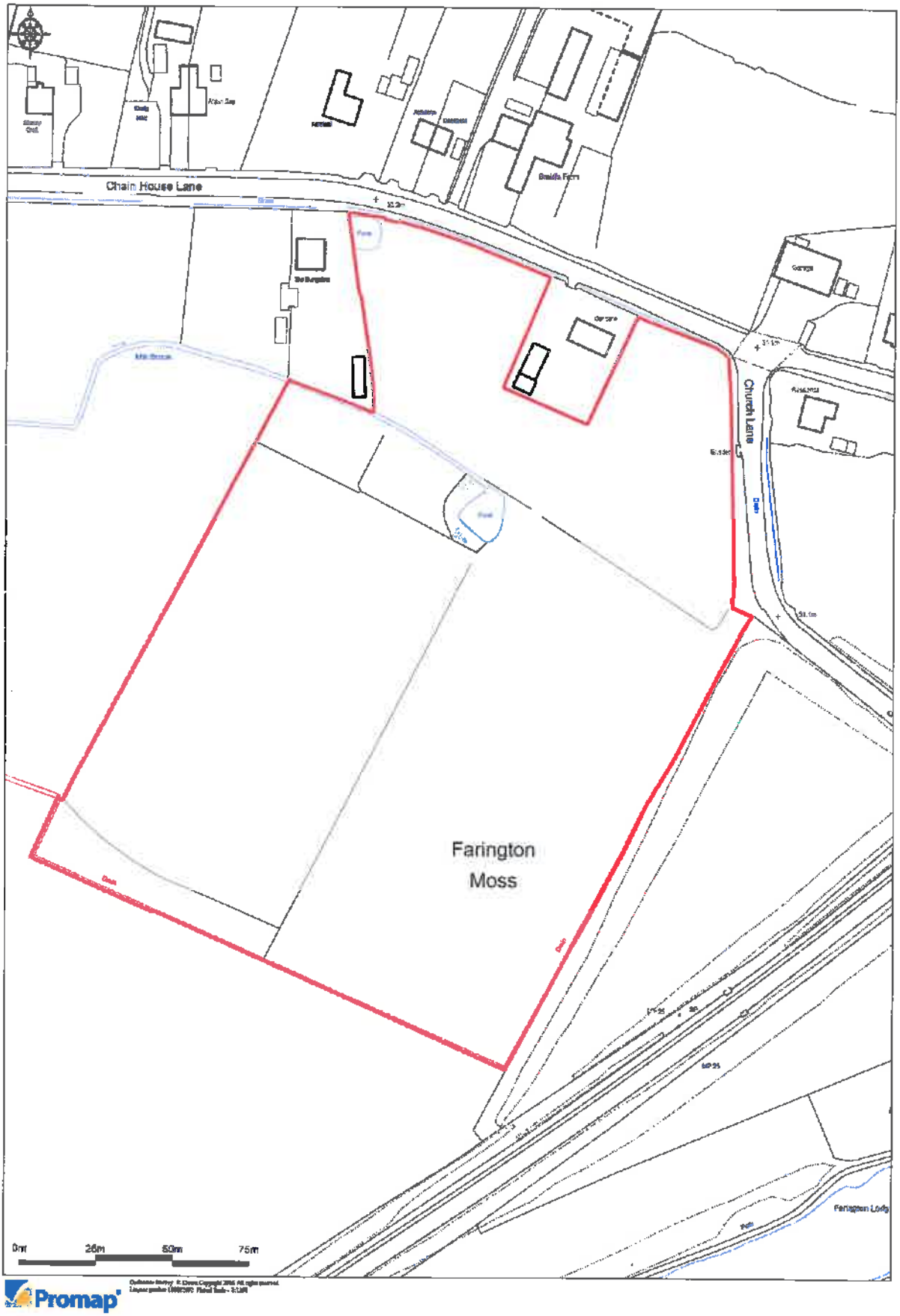
Yours sincerely

**G & W Love**

Encs:

1. Location Plan - Land within Site Allocation HS3.2: Apsley House owned by G & W Love
2. Illustrative Masterplan - Land within Site Allocation HS3.2: Apsley House owned by G & W Love
3. March 2025 Preliminary Risk Assessment report for land owned by G & W Love
4. Joint letter for Regulation 19 in support of Site Allocation HS3.2 submitted on behalf of all the landowners

Land at Chain House Lane, New Longton, Preston



| | Type | Bedrooms | Units |
|---|---|---|---|
| A | Apartment | 2 | 6 |
| B | House | 2 | 13 |
| C | House | 2 | 3 |
| D | House | 3 | 4 |
| E | House | 3 | 14 |
| F | House | 3 | 4 |
| G | House | 3 | 4 |
| H | House | 4 | 7 |
| I | House | 4 | 9 |
| J | House | 4 | 5 |
| K | House | 4 | 4 |
| L | House | 4 | 6 |
| M | House | 4 | 9 |
| N | House | 4 | 5 |
| O | House | 4 | 5 |
| **Total** | | | **98** |


1. Vehicle Access
2. Play Area
3. Pond
4. Sustainable Drainage Features
5. Pedestrian link to Bus Stop
6. Pedestrian links to surrounding development/ Wider Area

| ***PROJECT TITLE*** | ***DRAWING TITLE*** |
|---|---|
| Chain House Lane, Whitestake | Illustrative Master Plan GLCHL-IMP1 |

| *DATE* | *SCALE* | *REVISION* |
|---|---|---|
| 11/22 | NTS@A4 | - |

GEO-ENVIRONMENTAL CONSULTING

# LAND OFF CHAIN HOUSE LANE, WHITESTAKE

## Phase 1 – Preliminary Risk Assessment

Report Ref: BEK-25033-1

Date: March 2025

GEO-ENVIRONMENTAL CONSULTING

# Project Quality Assurance Information Sheet

| | |
|---|---|
| Site | Land off Chain House Lane, Whitestake |
| Report Title | Phase 1 - Preliminary Risk Assessment |
| Report Status | Final |
| Report No | BEK-25033-1 |
| Date | March 2025 |
| Prepared By | **BEK ENVIRO**<br>No 2 Landwick Court<br>Metcalf Drive<br>Altham Business Park<br>Lancashire<br>BB5 5GY |
| Author | **Mitchell Leigh-Monk**<br>BSc (Hons) |
| Checked | **David Emmott**<br>BSc (Hons) MSc MIEnvSc CEnv |
| Authorised | **Michael Buckley**<br>BSc (Hons) MSc MIEnvSc CEnv |
| Contact | [redacted] www.bekenviro.co.uk<br>Office: 01254 377622 Mobile: 07906753583 |

GEO-ENVIRONMENTAL CONSULTING

# LAND OFF CHAIN HOUSE LANE, WHITESTAKE

## Phase 1 - Preliminary Risk Assessment

**PROJECT NO:** 25033

**REPORT REF:** BEK-25033-1

**DATE:** March 2025

## REVISION STATUS / HISTORY

| Rev | Date | Issue / Comment | Prepared | Checked |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

## GENERAL REPORT LIMITATIONS

BEK Enviro Limited (BEK) has prepared this report for the sole use of the client, showing reasonable skill and care, for the intended purposes as stated in the agreement under which this work was completed. The report may not be relied upon by any other party without the express agreement of the client and BEK. No other warranty, expressed or implied, is made as to the professional advice included in this report.

Where any data supplied by the client or from other sources have been used, it has been assumed that the information is correct. No responsibility can be accepted by BEK for inaccuracies in the data supplied by any other party. The conclusions and recommendations in this report are based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.

No part of this report may be copied or duplicated without the express permission of BEK and the party for whom it was prepared. Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

Unless explicitly agreed otherwise, in writing, this report has been prepared under BEK's limited standard Terms and Conditions as included within our proposal to the Client. The report needs to be considered in the light of the BEK proposal and associated limitations of scope. The report needs to be read in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the report.

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| DRAWINGS | |
|---|---|
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# 1. INTRODUCTION

## 1.1 Appointment

1.1.1 BEK Enviro (BEK) has been commissioned to prepare a Phase 1 Preliminary Risk Assessment (PRA) for a parcel of land off Chain House Lane, Whitestake (hereafter referred to as 'the site'). The PRA will assess the potential risks associated with contamination considering a change of use to residential (with homegrown produce).

1.1.2 The site location and layout are presented on BEK Drawing No 25033-1 and BEK Drawing No 25033-2, respectively. Copies of these drawings are presented in Appendix F.

## 1.2 Proposed Development

1.2.1 This report has been prepared to support a planning application for the construction of 98 no. residential dwellings with access, parking and private gardens.

1.2.2 The proposed development layout for the site is presented on 'Illustrative Master Plan' Drawing No: GLCHL-IMP1, a copy of which is presented in Appendix F.

## 1.3 Objective & Scope of Work

1.3.1 The objective of this report is to provide a qualitative assessment of the potential risks from contamination and ground with consideration to the proposed end use residential (with homegrown produce).

1.3.2 To achieve the objective BEK will undertake the following:

- Carry out a site inspection and collect photographs
- Review the available relevant background information for the site, including:
  - Recent Ordnance Survey Maps
  - Site Specific GroundSure Reports
  - Site Specific Historical Maps
  - Coal Authority Website
  - Zetica UXO Information
- Develop a preliminary conceptual site model in accordance with guidance to identify potentially significant pollutant linkages specific to the proposed development
- Establish areas of potential concern based on identified risks and/or potential risks
- Identify any actions required to assess or reduce the risks identified

## 1.4 Limitations

1.4.1 The conclusions and recommendations presented in this report are the result of our professional interpretation of the information currently available. BEK reserves the right to amend the conclusions and recommendations if further information becomes available.

1.4.2 However, it should be noted that much of the information has been derived from reports written by others and BEK takes no responsibility for the accuracy of that information. Notwithstanding the above, the reports reviewed have all been written by professional environmental consultants with a duty of care to provide relevant and accurate information.

1.4.3 This report does not include an invasive plant species assessment.

# 2. SITE DESCRIPTION

## 2.1 Site Location

2.1.1 The site occupies a parcel of land located to the south of Chain House Lane and to the south-west of Church Lane. The site is approximately 1.3 km south-west of Lostock Hall and some 4.6 km south-east of Preston city center.

2.1.2 The National Grid Reference for the centre of the site is 353214, 425305. The site location is shown on BEK Drawing No 25033-1, a copy of which is presented in Appendix F.

## 2.2 Site Layout & Description

2.2.1 The site layout is presented in BEK Drawing No 25033-2, a copy of which is presented in Appendix F. A selection of photographs illustrating the existing site layout is presented in Appendix E.

2.2.2 The site is approximately 3.72 hectare and essentially comprises several grassed agricultural fields separated by hedgerows, drainage ditches and fence lines.

2.2.3 The site is accessed via a metal field gate along the north-western site boundary which leads onto open, well grassed fields. A number of surface water features are noted at the site, the largest of which is a pond located to north of the centre of the site. Several drainage ditches flow into the pond. A field drainage ditch is noted along the southern site boundary on-site.

2.2.4 Several drainage ditches are located off-site beyond the eastern and western site boundary.

## 2.3 Surrounding Land Use

2.3.1 An electrical substation is located some 5 m north-west of the site adjacent to the site entrance. Agricultural farm land is located to the south, east and west of the site. Farington Curve Junction and Ormskirk Line is located some 22 m south of the site. Coote House Garage is located some 30 m north-east.

## 3. SITE HISTORY

3.1 The history of the site has been established using historical OS maps supplied by Groundsure. A selection of historical OS maps reviewed is presented in Appendix A.

1848

3.2 The earliest available maps show two ponds located of site. The largest pond is located north of the center of the site and the smaller is located in the north-west corner. A drainage ditch orientated east/west splits the northern part of the site from the central/southern part of the site. The northern-west of the sits appears to be wooded and remainder of the site appears to be vacant and form part of open fields that dominate the surrounding area. An unmarked road runs along the northern site boundary and along the north-eastern boundary of the site. A large unmarked farm complex is located 25 m north of the site adjacent the road. Preston & Blackburn Lancashire Railway line is located some 50 m south of the site. A large reservoir is located immediately beyond the railway line some 80 m from the site at it's closest point. There are several ponds surrounding the site, the closest of which is located site 150 m south-west (see Figure 1).

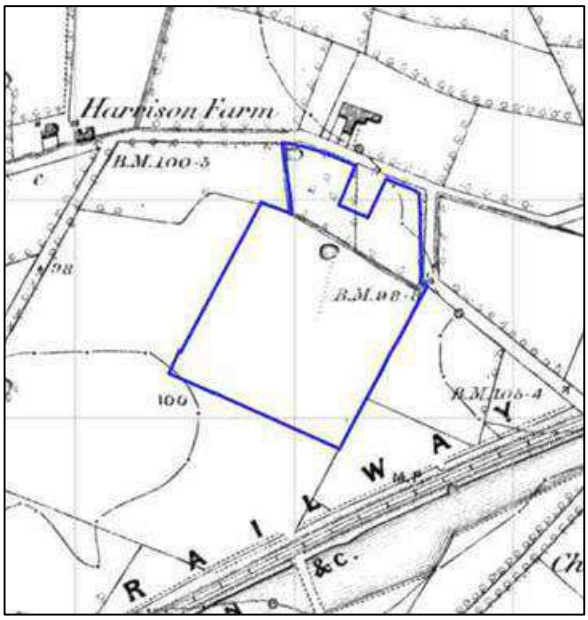



***Figure 1:*** *Extract From 1848 Map.*

1892 - 1911

3.3 These maps show a ditch splitting the southern section of the site, connecting the central pond to a ditch located along the southern site boundary. The trees in the north-west of the site are absent, the remainder of the site remains unchanged. An embankment is located immediately east of the site, possibly associated with a new railway line some 20 m to the south. The farm complex some 25 m north is now marked as Braids Farm. Moss Pumping Station is located some 250 m south-east, this is associated with the railway infrastructure in this location (see Figure 2).

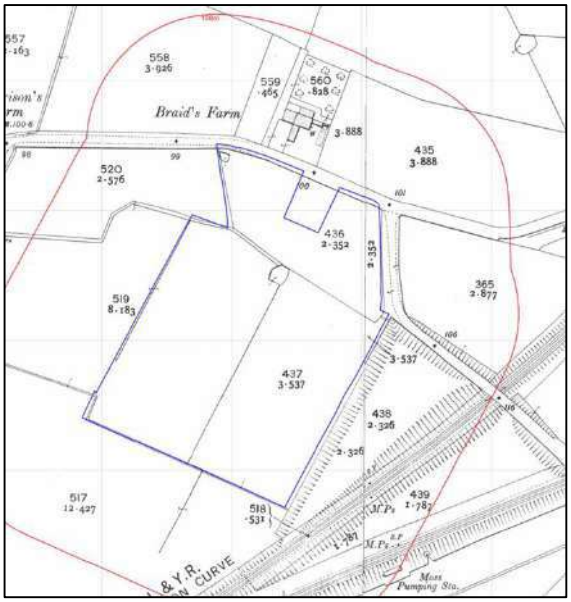



***Figure 2:*** *Extract From 1911 Map.*

1931

3.4 The 1931 maps shows a small building located to the east of the pond near the centre of the site and some additional ditches to the west of the central pond. No further changes have taken place on-site. A residential dwelling and a number of outbuildings are now located off-site to the north. Several residential dwellings are located adjacent the road that runs along the northern boundary of the site (see Figure 3).


***Figure 3:*** *Extract From 1931 Map.*

1936 - 2003

3.5 These maps show the building is no longer present on site with drainage ditches in the south and west of the site. The site is now marked as Farrington Moss. The road immediately north of the site is marked as Chain House Lane and the road to the north-east is marked as Church Lane. A Works is located some 30 m north-east of the site and further residential development has taken place to the north of the site. Circa 1982, the Preston & Blackburn Lancashire Railway line some 50 m south of the site is no longer present on the maps (see Figure 4).

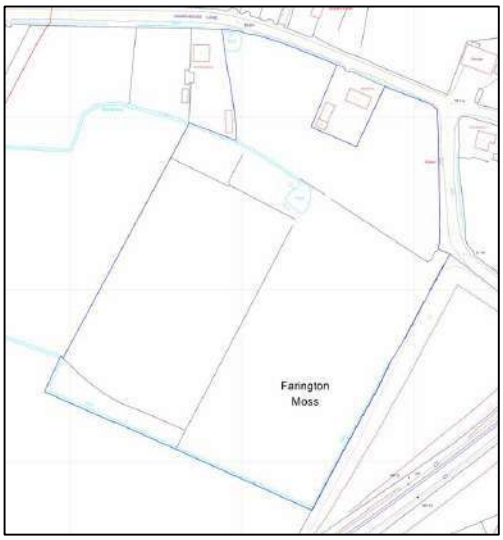



***Figure 4:*** *Extract From 2003 Map*

2010-2023

3.6 The more recent maps shows the pond located in the north-west corner of the site is absent (presumably infilled). The ponds in the wider areas surrounding the site are also absent. An aerial image taken from Google Earth of the site from 2022 shows the site to be split up into a number of fields that are divided by hedge rows. The small drainage ditches to the west of the pond no longer appear of the aerial imagery and have ben presumably infilled (see Figure 5).

***Figure 5****: Aerial Image Taken from Google Images 2022*

# 4. ENVIRONMENTAL SETTING

4.0.1 An Enviro+GeoInsight Report has been obtained from Groundsure and information provided in these reports has been used within this section. A copy of the report is presented in Appendix B.

## 4.1 Geology

4.1.1 The site geology is illustrated in the Enviro+GeoInsight Report which has sourced data from several sources including British Geological Society (BGS), BRITPITS database and the Coal Authority.

4.1.2 In addition, BEK has sought site investigation information from the BGS website and there are 9 boreholes within 250 m of the site, see Figure 6:

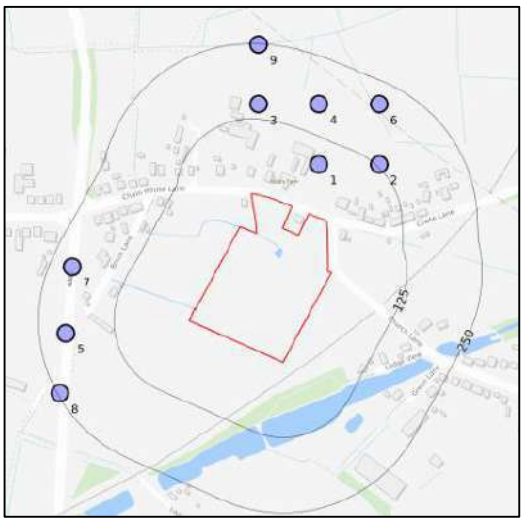



*Figure 6: BGS Borehole Locations*

4.1.3 The strata encountered within the closest three boreholes is summarised in Table 1 below:

| Distance/direction from site | Depth (m) | Strata |
|---|---|---|
| 83 m north-east | 0 – 0.4 | TOPSOIL |
| | 0.4 – 1.1 | Soft to firm brown mottled sandy CLAY |
| | 1.1 – 2.0 | Hard brown grey mottled fissured silty BOULDER CLAY |
| | 2.0 – 6.1 | Stiff becoming firm at depth, fissured at top, brown silty BOULDER CLAY |
| 129 m north-east | 0 – 0.4 | TOPSOIL |
| | 0.4 – 0.6 | TOPSOIL, CLAY roots |
| | 0.6 – 1.2 | Soft to firm brown mottled sandy CLAY with bands of sand |
| | 1.2 – 3.5 | Stiff brown-grey mottled fissured silty BOULDER CLAY |
| | 3.5 – 6.1 | Stiff to firm borwn silty slightly sandy BOULDER CLAY |
| 149 m north-east | 0 – 0.4 | TOPSOIL |
| | 0.4 – 6 | Hard becoming stiff firm with depth brown-grey mottled at top silty slightly sandy BOULDER CLAY |

*Table 1: Summary of Closest Three Boreholes within 250 m Vicinity of the Site.*

4.1.4 Copies of the three BGS boreholes records are provided within Appendix C.

Made Ground

4.1.5 According to the Enviro+GeoInsight Report there is a record of made ground classified as 'Made Ground (Undivided) – Artificial Deposit' located 1 m south of the site. This is highlighted by the purple shaded area; there is a further area of made ground located 19 m east of the site (see Figure 7).

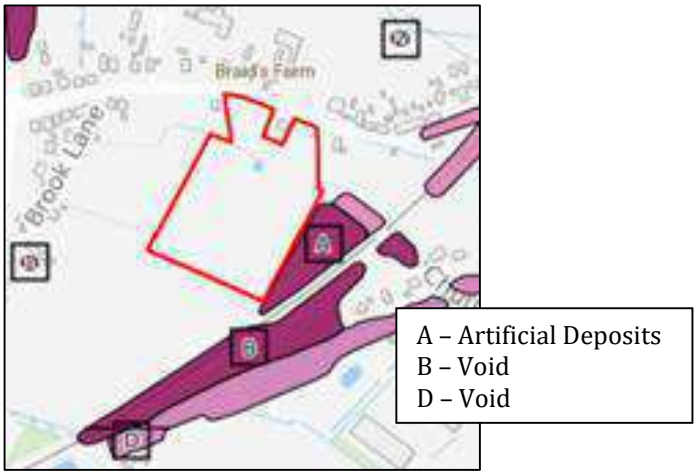



*Figure 7: Made Ground (Artificial Deposits) Within 250 m of the Site.*

Superficial Geology

4.1.5 The Enviro+GeoInsight Insight Report indicates that the underlying superficial geology comprises of Till, Devensian (Boulder Clay) which is dominated by 'Clay, Sandy, Gravelly Cobbly Clay'. This strata has a low to high permeability.

Bedrock

4.1.6 The Enviro+GeoInsight Report indicates that the underlying solid geology comprises of 'Sidmouth Mudstone Formation' which is dominated by mudstone and Halitestone. This strata has a low permeability.

Faults/Linear Features

4.1.7 There are no linear features/faults located within 250 m of the site

## 4.2 Mining & Ground Stability

4.2.1 The information provided by Enviro+GeoInsight Report indicates that the site is located within an area which is unlikely to have been affected by Coal Mining. A review of the Coal Authority interactive map confirms that the site is not located within a coal mining consultation area.

4.2.2 The Enviro+GeoInsight Report indicates there are three surface ground workings located within 250 m of the site. The closest refers to a 'Pond' located some 43 m north-west of the site.

4.2.3 The Enviro+GeoInsight Report indicates there are 50 recorded surface ground workings located within 250 m of the site. The closest refers to a 'Cutting' some 27 m south-east of the site. This feature and the remaining surface ground features are associated with the railway and reservoir to the south-east of the site.

4.2.4 The Enviro+GeoInsight Report provides hazard ratings associated with ground subsidence at the site, as summarised below:

| | |
|---|---|
| Shrink-Swell Clay: | Very Low |
| Landslides: | Very Low |
| Dissolution of Soluble Rocks: | Negligible |
| Compressible Deposits: | Negligible |
| Collapsible Deposits: | Very Low |
| Running Sands: | Very Low |

4.2.5 It can be seen from the above that the site is unlikely to be affected by natural ground instability issues.

## 4.3 Hydrogeology

4.3.1 The underlying superficial deposits underlying the site are classified as a 'Secondary Undifferentiated' aquifer which is 'assigned where it is not possible to attribute either category A or B to a rock type.' These aquifers were formerly referred to as 'unproductive'.

4.3.2 The underlying bedrock is classified as a 'Secondary B' aquifer which is described as predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.

4.3.3 The Enviro+GeoInsight Report indicates the site is not located within a groundwater source protection zone.

4.3.4 There are no groundwater abstractions located within 250 m of the site.

4.3.5 There is a low risk from groundwater flooding at the site.

## 4.4 Hydrology

4.4.1 The Enviro+GeoInsight Report indicates that there are four on-site surface water features. The site walkover confirmed the presence of two drainage ditches and a pond on-site. A drainage ditch was located across the northern section of the site, according to the Enviro+GeoInsight Report this is part of Mill Brook.

4.4.2 Another drainage ditch is located along the southern boundary of the site. The site walkover also confirmed the presence of a pond located north of the center if the site. Two addition drainage ditches were observed along the eastern and western site boundaries.

4.4.3 There are no registered licensed discharge consents within 250 m of the site.

4.4.4 The site is located within flood zone 1.

## 4.5 Contaminated Land & Landfill Activities

4.5.1 Information provided in the Enviro+GeoInsight Report indicates that there are no historic/current landfill or waste management facilities located on or within 250 m of the site. There a number of potentially contaminative infilled features located on site. These are associated with the historical infilled pond located in the north-west corner of the site and the infilled drainage ditches to the west of the pond on site. The nature of the material used to infill the pond and drainage ditches is currently unknown could poses a risk from contamination.

4.5.2 There are 11 recorded waste exceptions located within 250 m of the site. The closest 3 to the site are located some 38 m north and all refers to activity's involving the disposing and use of agricultural waste via:

- Deposit of waste from dredging of inland waters
- Burning waste in the open
- Use of waste to manufacture finished goods

4.5.3 There has been one EA recorded pollution incident located some 199 m south east of the site. This refers to a pollution incident involving oil and fuels via a diesel release, dated 28/06/2003. The water and air impact were both characterised as category 3 Minor impact. The impact to land was characterised as category 4 no impact.

4.5.4 There are no NIHHS or COMAH sites, recorded Part A(1), Part A(2) or IPPC Authorised Activities within 250 m of the site.

4.5.5 There are three registered Part B processes situated within 250 m of the site as summarized in Table 2.

| Location | Address | Process | Status | Enforcement Date |
|---|---|---|---|---|
| 59 m North | W Welch, Arden Lee, 22 Chain House Lane, Whitestake Preston, Lancashire, PR4 4LE | Other Mineral Processes | Current Permit | No |
| 60 m North-west | W Welch Arden Lee, Chainhouse Lane, Whitestake, PR4 4LE | Use of Bulk Cement | Historical Permit | No |

| | | | | |
|---|---|---|---|---|
| 241 m South-east | Whitfires Sawdust and Shavings Ltd, Heathfield Works, Church Lane, Farington, PR5 3RD | Timber Manufacture | Current Permit | No |

*Table 2: Registered Part B Processes Within 250 m of the Site*

4.5.6 The Enviro+GeoInsight Report states that there are 40 potentially contaminative historical industrial sites located within 250 m of the site. BEK has chosen it prudent to review those closest, within 50 m of the site (See Table 3 below).

| Location | Company | Date |
|---|---|---|
| 12 North-east | Unspecified Works | 1968, 1974, 1982, 1990 |
| 27 m North-east | Cuttings | 1955 |
| 31 m South-east | Cuttings | 1938 |
| 34 m South-east | Cuttings | 1892 |
| 35 m South-east | Cuttings | 1909 - 1929 – 1938 |
| 50 m South-east | Cuttings | 1968 - 1974 – 1982 - 1990 |

*Table 3: Potentially Recent Contaminative Industries Within 250 m.*

4.5.7 The information presented in the Enviro+GeoInsight Report indicates that there are 7 historical tanks within 250 m of the site. The closest is located some 112 m north of the site dated 1963.

4.5.8 There are four historical railway features located within 250 m of the site. The closest refers to the 'Farington Curve Junction and Ormskirk Line' (rail) located some 22 m south of the site.

4.5.9 According to the Enviro+GeoInsight Report there are nine potentially contaminative industrial sites located within 250 m of the site, the closest of which is an 'Gas Governor', located some 6 m east of the site.

## 4.6 Sensitive Land Uses

4.6.1 The site is not affected by any of the ecological systems identified as a statutory receptor in the DETR Circular 01/2006.

4.6.2 The site is not located within a designated nitrate vulnerable zone.

## 4.7 Radon

4.7.1 The Enviro+GeoInsight Report states that 'the property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level'. Therefore, 'no radon protective measures are necessary'.

## 4.8 Unexploded Ordnance

4.8.1 The regional unexploded bomb risk map from Zetica indicates that the site is in an area of LOW risk from Unexploded Ordnance (UXO) resulting from the Second World War.

4.8.2 BEK do not consider any further assessment to be required with respect to UXO.

# 5. POTENTIAL POLLUTANT LINKAGES

## 5.1 General

5.1.1 This section identifies the potential sources of contamination along with specific contaminants of concern, pathways and receptors that may be associated with the site based on its known history and the current condition and with respect to the re-development of the site for residential use (with homegrown produce).

5.1.2 This information is used to develop a preliminary conceptual model which is a qualitative description of potential sources of environmental pollutants, the pathways by which they are transported and the receptors:

i) Potential sources of contamination: these include any actual or potentially contaminating materials and activities, located either on or in the vicinity of the site

ii) Potential pathways for contamination migration: these comprise the routes or mechanisms by which contaminants may migrate from the source to the receptor including environmental migration pathways and human health exposure pathways

iii) Potential receptors of contamination: these include future land users, ecological systems, water resources and property.

## 5.2 Potential Sources of Contamination

5.2.1 Based on the earliest available maps dating from 1848, show the site to be vacant and part of open farmland/woodland with two ponds and a drainage ditch. Subsequent maps show additional drainage ditches on site and by 1931, a small building is located adjacent to the centrally located pond. Circa 1936 the building is no longer present and by 2010 the pond located in the north-west corner of the site is no longer present on the maps as are some of the drainage ditched on site (presumably infilled).

5.2.2 The site walkover indicates that the majority of the site is vacant fields. There was no visual evidence for the presence of contamination or potentially contaminative features noted on site.

5.2.3 The potential for significant contamination to be present on site is considered to be low. However, made ground (and contaminants of concern) could be present associated with the infilled pond and drainage ditches. The nature and extent of any made ground at the site is currently unknown and it may contain contaminants of concern.

5.2.4 In addition to the above, consideration has been given to off-site features that could represent a potential risk. The only potentially significant feature is artificial land (made ground) located adjacent to the eastern site boundary. The nature of this material is unknown.

5.2.5 The potential contaminants of concern that may be present at the site are summarised below:

| Contaminants Associated with Made Ground | |
|---|---|
| Arsenic | Zinc |
| Cadmium | Sulphate |
| Chromium | Cyanide |
| Copper | Phenols |
| Lead | Polycyclic Aromatic Hydrocarbons (PAHs) |
| Mercury | Asbestos |
| Nickel | pH |
| Selenium | Total Petroleum Hydrocarbons (TPHCWG) |

*Table 4: Potential Contaminants of Concern*

5.2.5 It should be noted that the above list represents a broad range of potential contaminants of concern. Additional contaminants of concern may be present if ground conditions differ from those anticipated.

5.2.6 Based on the available background information the potential risks from ground gas are considered to be very low. However, it is recommended the this is further assessed during site investigation to (a) investigate areas of made ground on site (infilled pond/drainage ditches), and (b) confirm nature of the natural strata (ie no peat/organic strata).

## 5.3 Potential Pathways

5.3.1 The pathways through which contaminants may reach receptors are in part dependent by the nature and behaviour of the contaminant and the intended end use of the site (residential with homegrown produce).

5.3.2 The following potential pathways have been identified with respect to the existing site condition, historical use of the site, the environmental setting and the re-development of the site to residential (with homegrown produce) which are assessed in the conceptual model:

- Dermal contact of contaminated soil
- Ingestion of contaminated soil/home grown vegetables
- Inhalation of contamination dust

- Dissolution or suspension (leaching) of contaminants into pore waters affecting plant growth

- Indoor inhalation of ground gas/organic vapours

- Dissolution or suspension (leaching) of contaminants from site soils leading to contamination of groundwater

- Dissolution or suspension (leaching) of contaminants from site soils leading to lateral migration within perched waters to on-site and off-site receptors. Potential significant pathways include more permeable layers within the made ground/natural strata, underground services and piles/foundations.

- Contamination affecting the integrity of service pipelines by direct contact

- Buildings affected by direct contact with elevated concentrations of sulphate and/or extreme pH

## 5.4 Receptors

5.4.1 Potential site-specific receptors that may be affected by contamination at the site are listed below:

Future Site Users

5.4.2 Future residents of the site could be at risk from contamination present at the site.

5.4.3 Potential risks are associated with ingestion of soils and home grown vegetables as well as inhalation of contaminated dust/vapours (including asbestos fibres) and dermal contact with contaminants of concern. These risks are all associated with the garden areas, or any open spaces of the proposed development.

5.4.4 In addition, risks associated with indoor inhalation of ground gas/organic vapours need to be assessed.

Construction Workers

5.4.5 The primary risks to construction workers are associated with shallow excavations as asbestos could be present. Asbestos fibers (if present) can be released into the atmosphere during earthworks.

5.4.6 Standard personal protective equipment and site specific risk assessments and method statements should reduce risks associated with other contaminants of concern due to short exposure duration.

Off Site Receptors

5.4.7 Off site receptors include residents to the east and west of the site. Human health could be at risk if asbestos fibres are released during the development.

Flora

5.4.8 Heavy metals can be phytotoxic and if present can represent a potential risk to flora in the landscaped areas.

Buildings & Services

5.4.9 The integrity of service pipes can be affected by concentrations of organic contamination.

Controlled Waters

5.4.10 The site walkover identified a pond in the centre of the site. A number of drainage ditches are also located on-site. A further two drainage ditches are located along the western and eastern site boundaries off site. All represent potential receptors.

5.4.11 The bedrock is classified as a Secondary B Aquifer and is considered a receptor, however the presence of laterally continuous superficial impermeable boulder clay will likely inhibit migration waters to the bedrock aquifer. The bedrock aquifer represents a potential receptor.

## 5.5 Preliminary Conceptual Model

5.5.1 The identified potential sources of contaminants, pathways and receptors have been assessed to establish plausible pollutant linkages. All potentially significant pollutant linkages are detailed in Table B, in Appendix D.

## 5.6 Potentially Significant Pollutant Linkages

5.6.1 A number of possible 'significant pollutant linkages' have been identified associated with the site.

5.6.2 Potential risks relating to the potential harm to the health of humans and/or domestic pets both on and off site due to the potential for direct contact with contaminants in the made ground and the ingestion of contaminated soil/dust **(Link 1).**

5.6.3 There is also the possibility of windblown particulates being inhaled by people/animals both on site and off site **(Link 2).**

5.6.4 Home grown produce could be affected by ground contamination **(Link 3)** and human health could be at risk by the ingestion of home grown produce affected by contamination **(Link 4).**

5.6.5 Human health could be at risk by the inhalation of ground gases (Link 5) and/or volatile contamination migrating into properties on site (Link 6).

5.6.6 Property (including services, flora and fauna) could be affected by direct contact to high concentrations of contaminants (Link 7).

5.6.7 Dissolution or suspension (leaching) of contaminants from site soils leading to lateral migration within perched waters to on and off-site receptors (surface waters). Potential significant pathways include more permeable layers within the made ground/natural strata, underground services and piles/foundations (Link 8).

5.6.8 Dissolution or suspension (leaching) of contaminants from site soils leading to impact on the underlying Secondary A within the bedrock. Potential pathways include areas where Boulder Clay is absent, locations of deep piles/foundations (Link 9).

5.6.9 Site investigation is required to identify site specific conditions and assess the risks associated with each identified plausible pollutant linkage.

# 6. RECOMMENDATIONS

6.1 Based on the findings of the Preliminary Risk Assessment herein, the potential risks associated with contamination have been identified to human health, controlled waters, flora and property (including services). The risks are associated with the presence of made ground (historic building and infilled ponds) and any contamination associated with other former activities.

6.2 BEK recommends that the following site investigation works are carried out to characterise the shallow ground conditions and quantify the potential risks identified. The site investigation will also provide sufficient information to support a geotechnical assessment to inform foundation design options.

Site Investigation

6.3 The investigation should comprise the drilling of a series of WS boreholes and excavation of trial pits to confirm ground conditions across the site, targeting specific locations and providing site wide in information.

6.4 In-situ strength testing (SPTs & shear vane) will be carried out and samples recovered for chemical and geotechnical testing. All samples for chemical testing will be collected in appropriate sampling vessels, stored in a precooled cool box and dispatched to the laboratory within 24 hours.

6.5 The site investigation should be supervised by an experienced engineer who will be responsible for recording ground conditions encountered.

6.6 If potential sources of ground gas are encountered, then gas monitoring probes will be installed within selected boreholes to support a ground gas risk assessment.

Laboratory Testing

6.7 Following a review of ground conditions encountered, a selection of samples will be tested for the contaminants of concern listed in Table 4 of this report. If visual or olfactory evidence of contamination is encountered (including any made ground) during the site investigation then it may be necessary to undertake additional testing.

6.8 Depending on ground conditions encountered, samples will be submitted for geotechnical testing to inform foundation design options.

6.9 All testing will be carried out by a UKAS accredited laboratory to MCERTS standard (where applicable).

Data Assessment

6.10 The investigation findings will be assessed as part of a quantitative risk assessment to amend the conceptual site model and identify any potential significant pollutant linkages.

6.11 The site investigation data and geotechnical test results will also be assessed as part of a geotechnical assessment to inform foundation design.

6.12 The assessments will be undertaken in accordance with current UK guidance and policy.

Reporting

6.13 The works undertaken will be detailed in a Site Investigation & Ground Assessment report along with full justifications for the assessment and the conclusions and any recommendations.

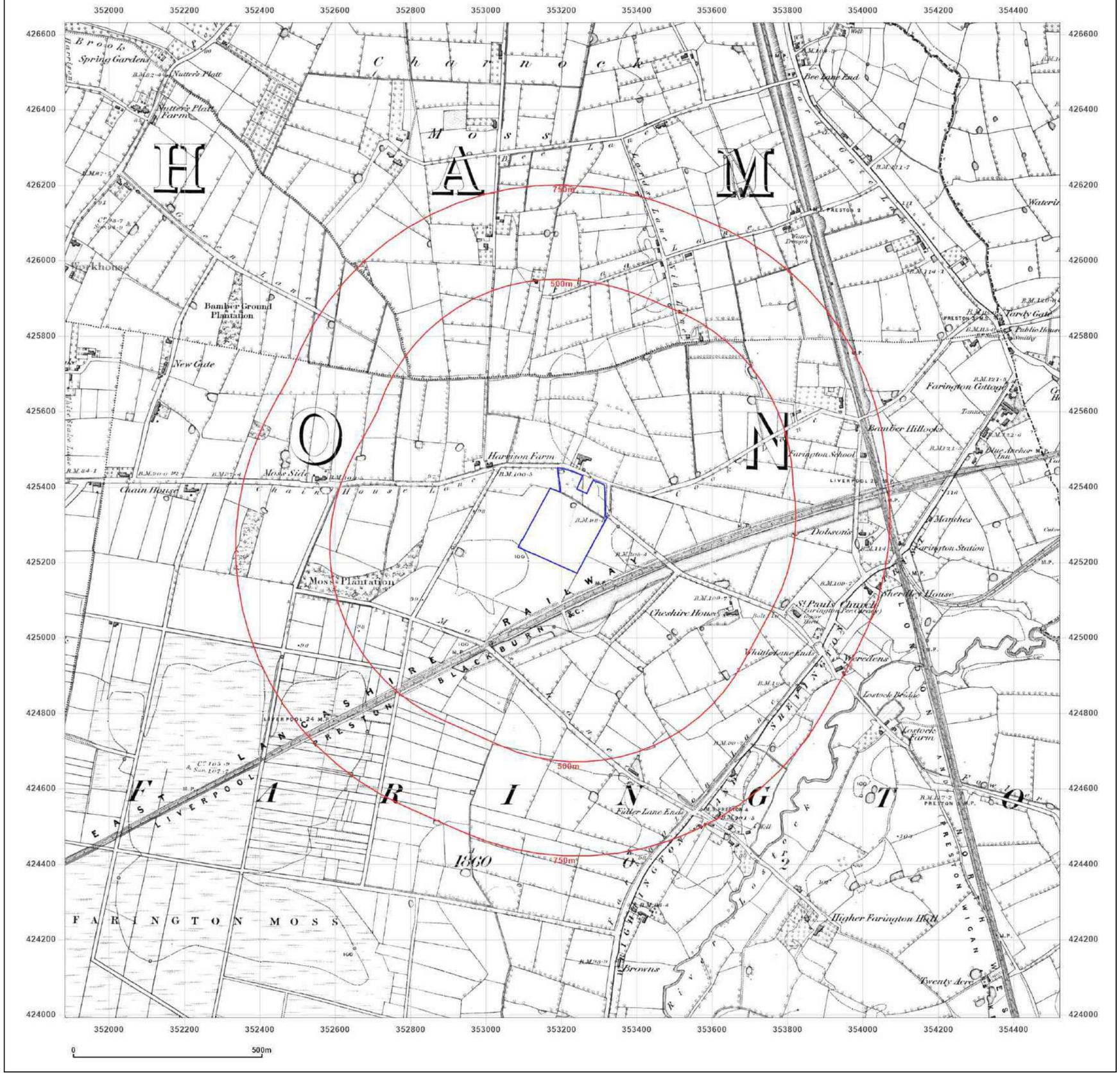
Other Considerations

6.14 It may be necessary to carry out soakaway testing to BRE365 to inform surface water drainage options.

6.15 We would also recommend that consideration is given to the requirements of the water supply service provider and the completion of the UKWIR risk assessment for water pipe selection.

# APPENDIX A

Historical OS Maps




Groundsure INSIGHTS

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OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

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**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** County Series

**Map date:** **1848**

**Scale:** 1:10,560

**Printed at:** 1:10,560

N
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Surveyed 1846
Revised N/A
Edition 1848
Copyright N/A
Levelled N/A


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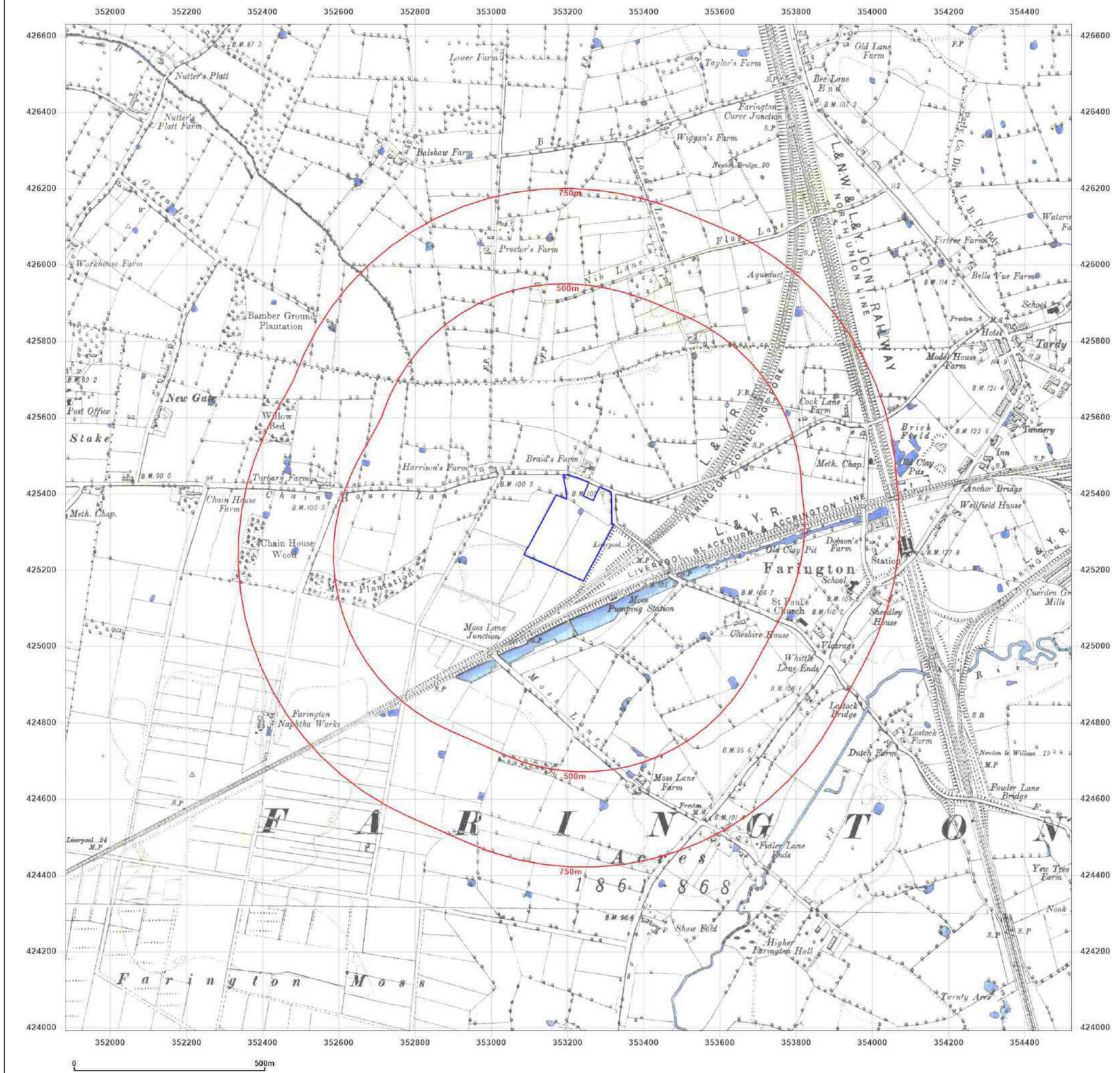


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**Grid Ref:** 353202, 425311

**Map Name:** County Series

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**Printed at:** 1:10,560

N
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Surveyed 1892
Revised 1892
Edition N/A
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Surveyed 1893
Revised 1893
Edition N/A
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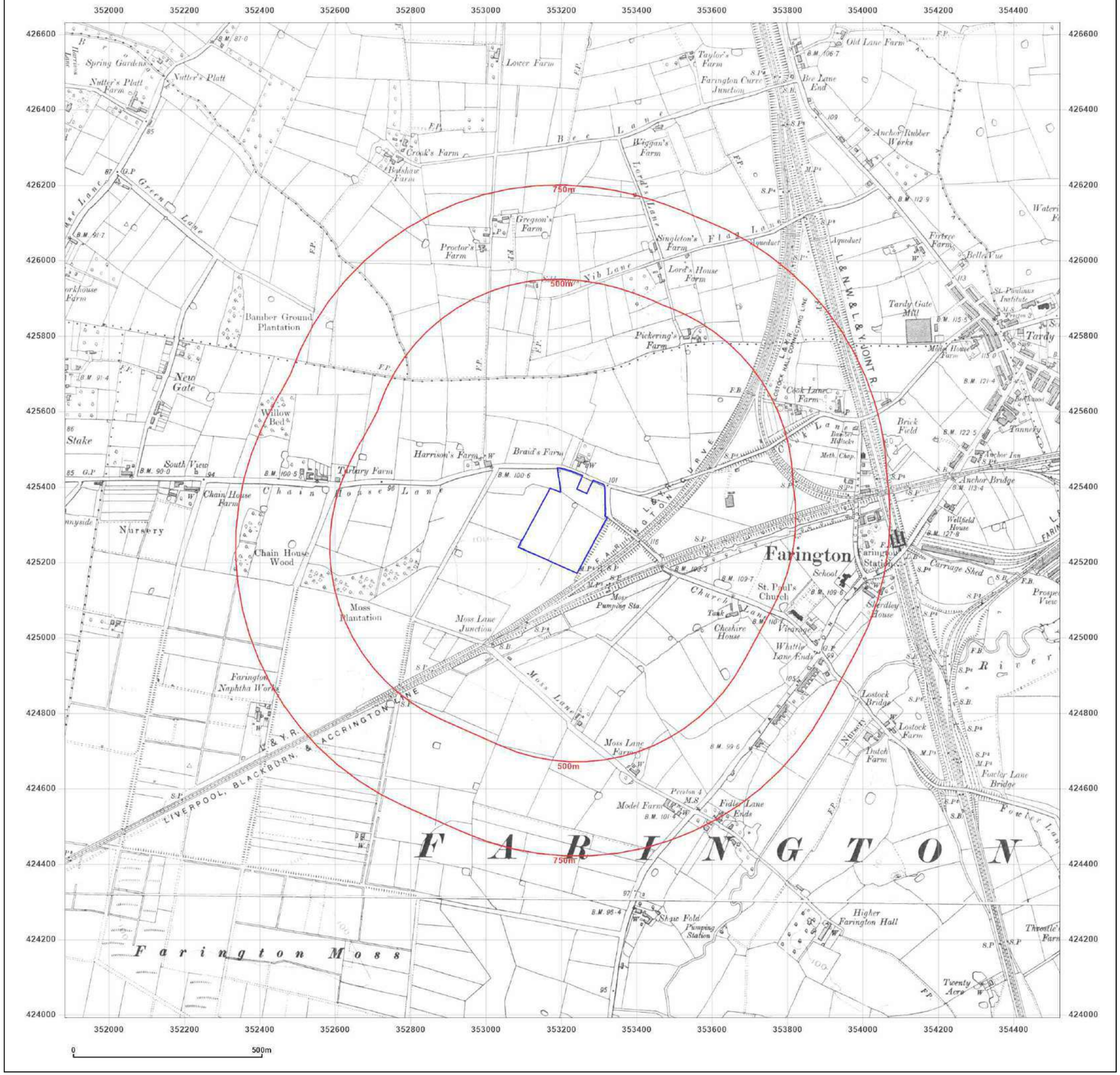


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**Printed at:** 1:10,560

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Surveyed 1847
Revised 1909
Edition N/A
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Surveyed 1844
Revised 1909
Edition N/A
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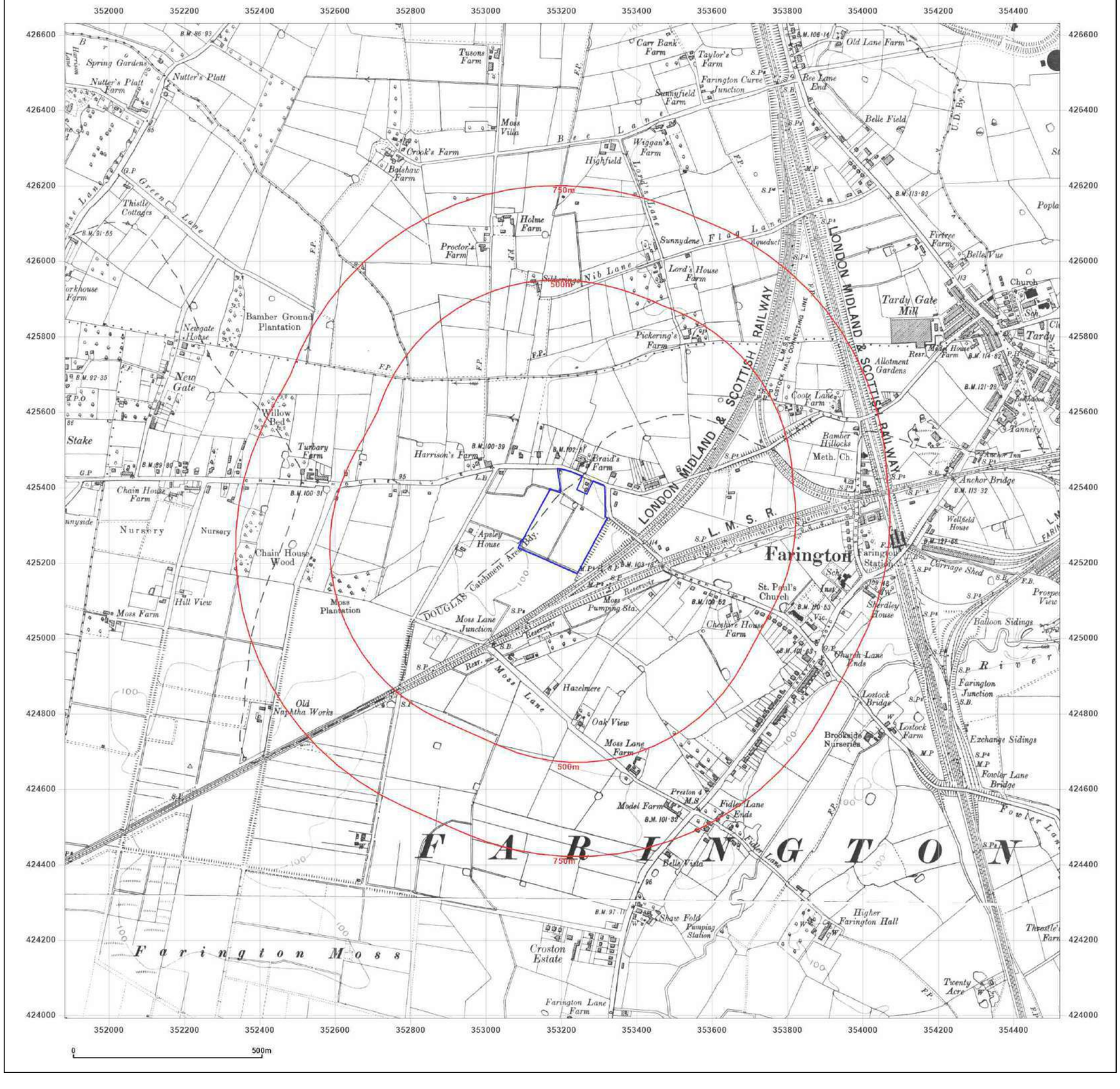


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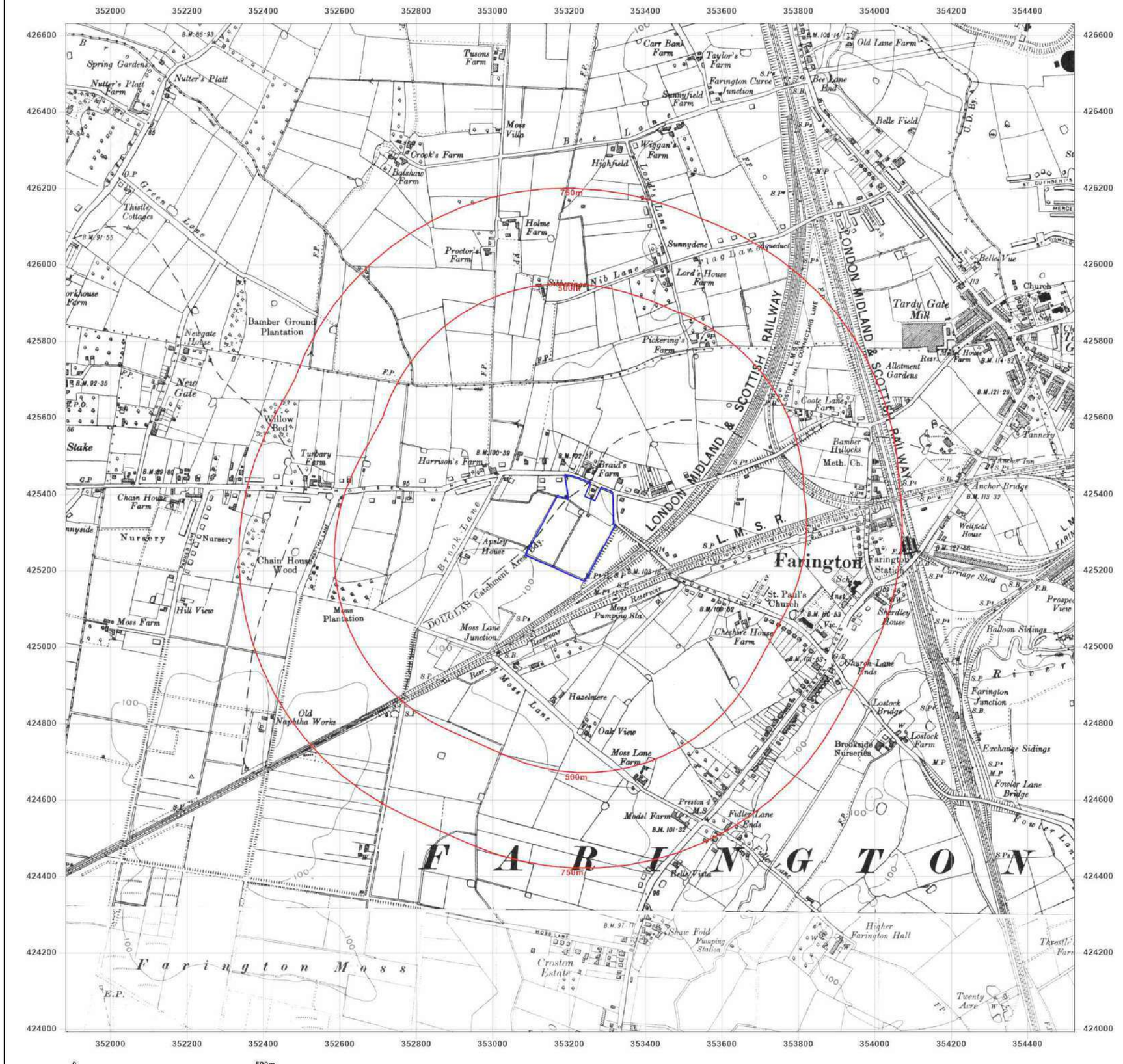


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Surveyed 1847
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Edition N/A
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Surveyed 1844
Revised 1938
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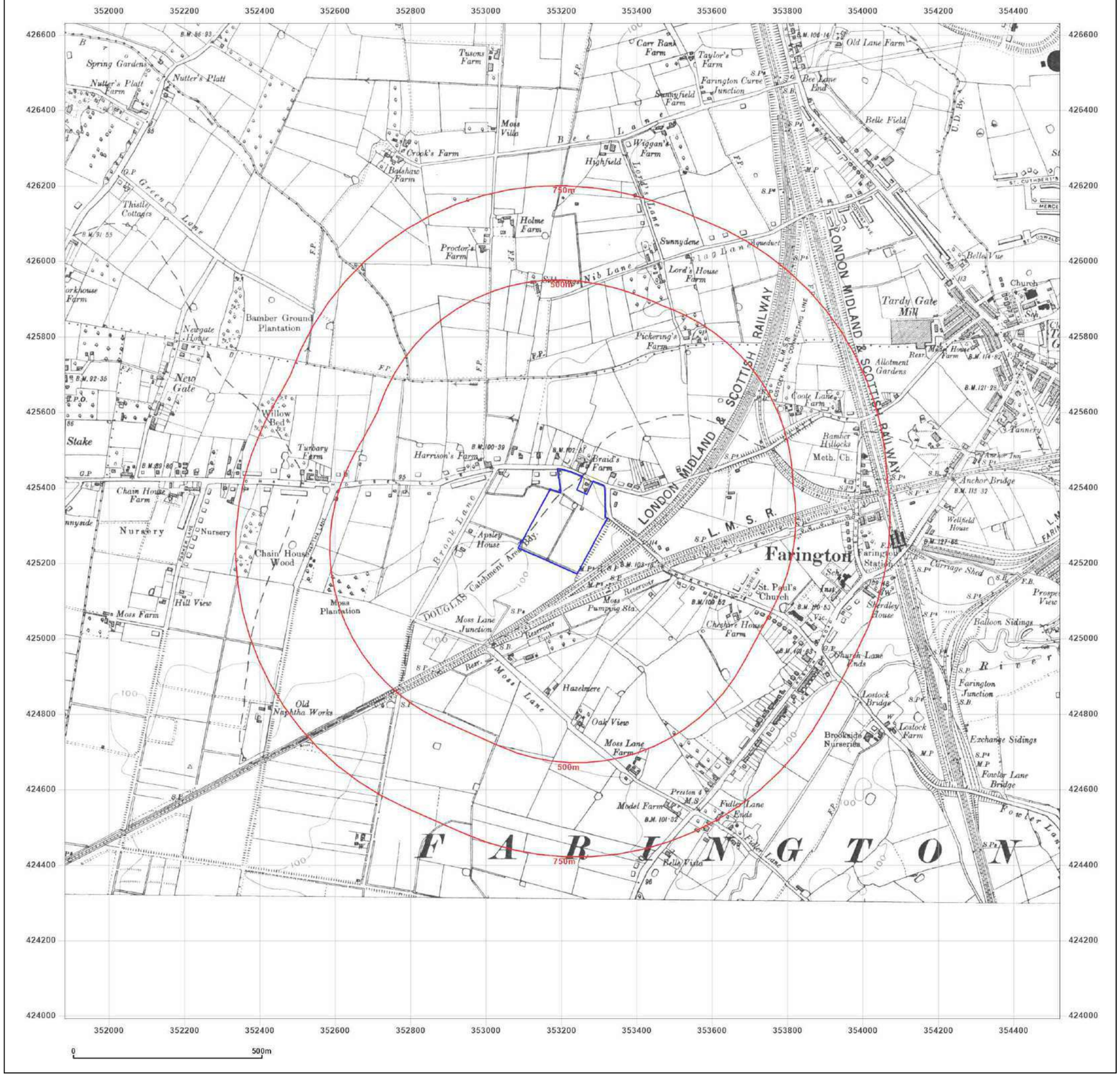


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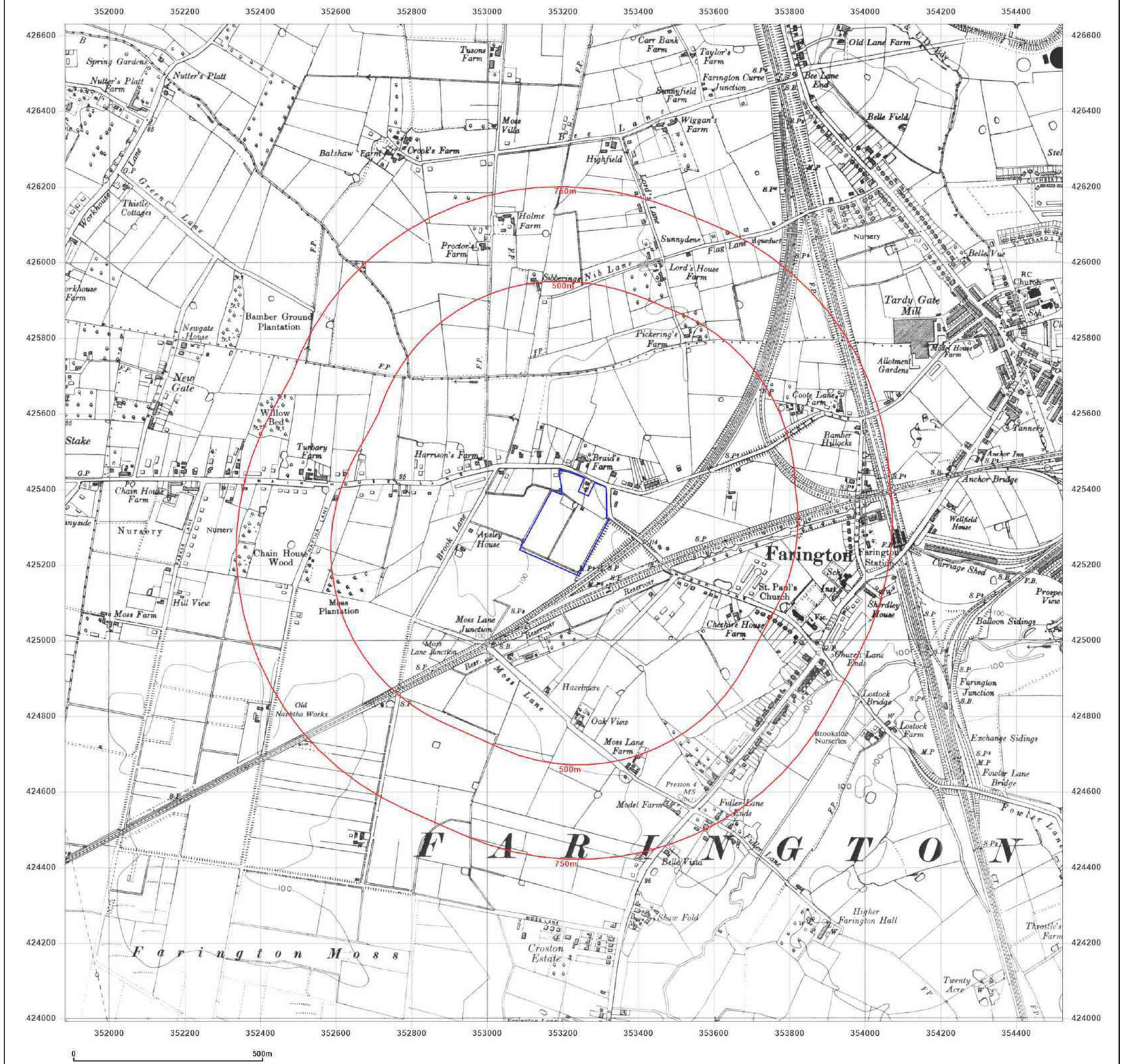


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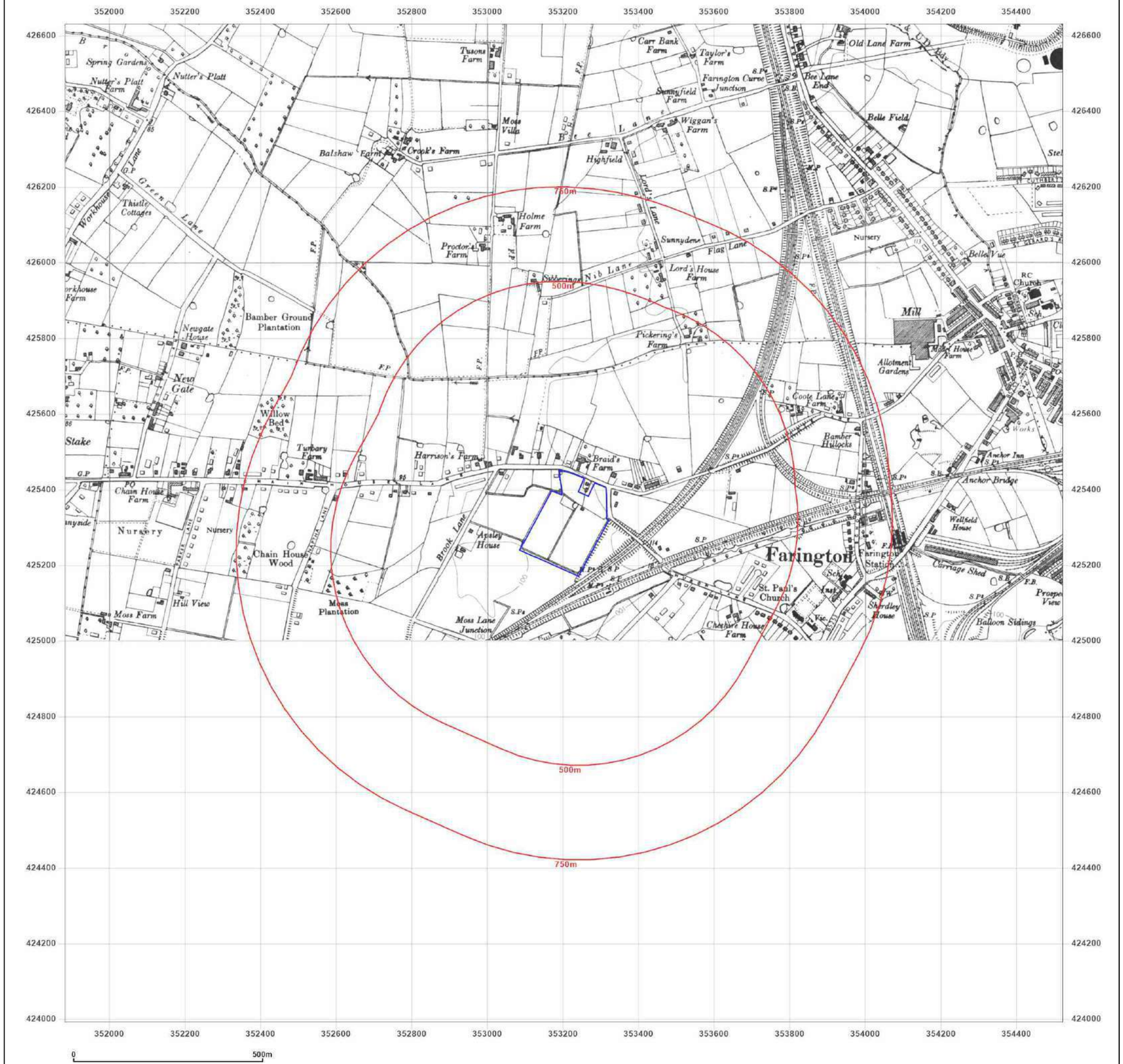


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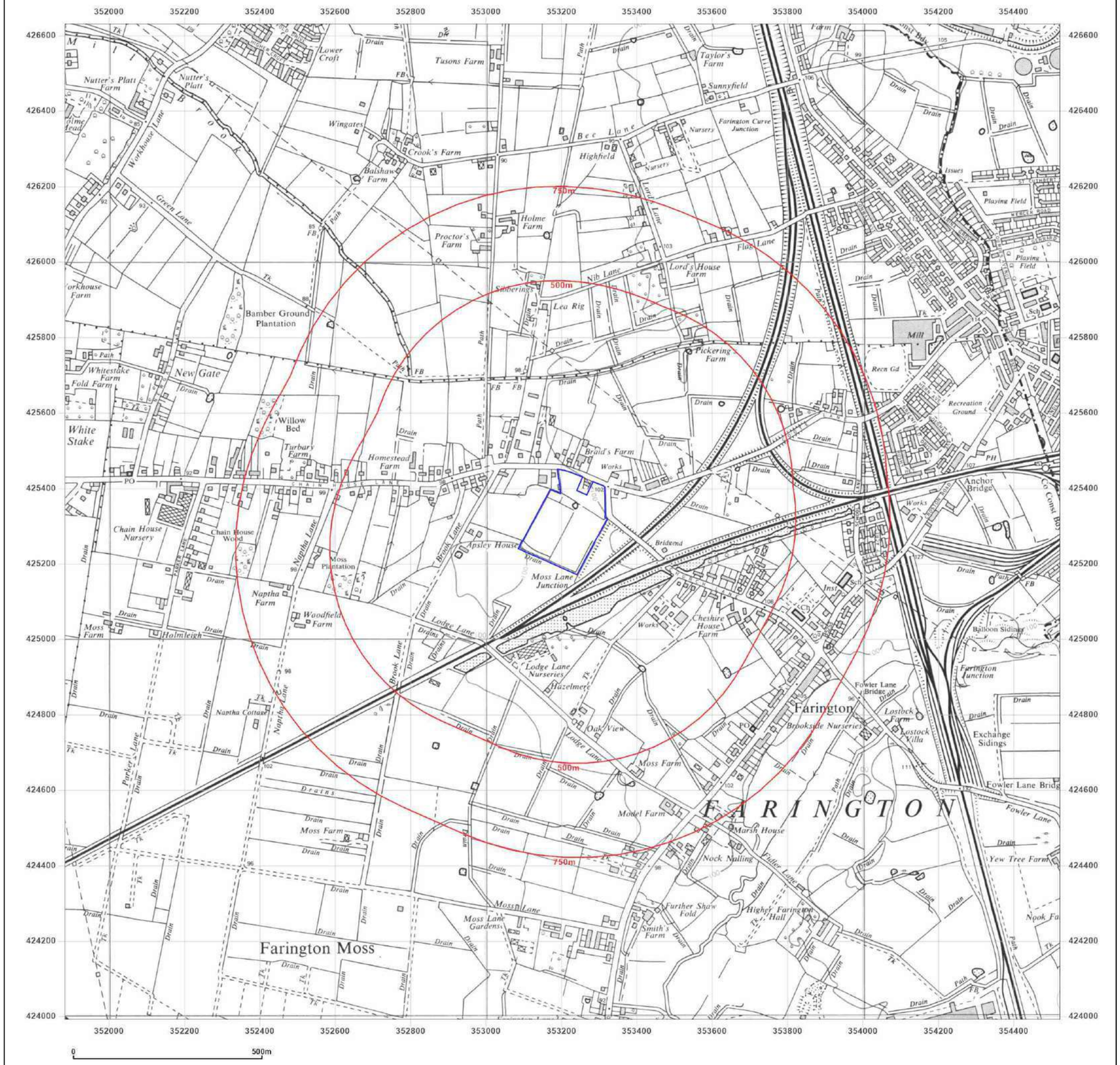


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**Printed at:** 1:10,560

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Edition N/A
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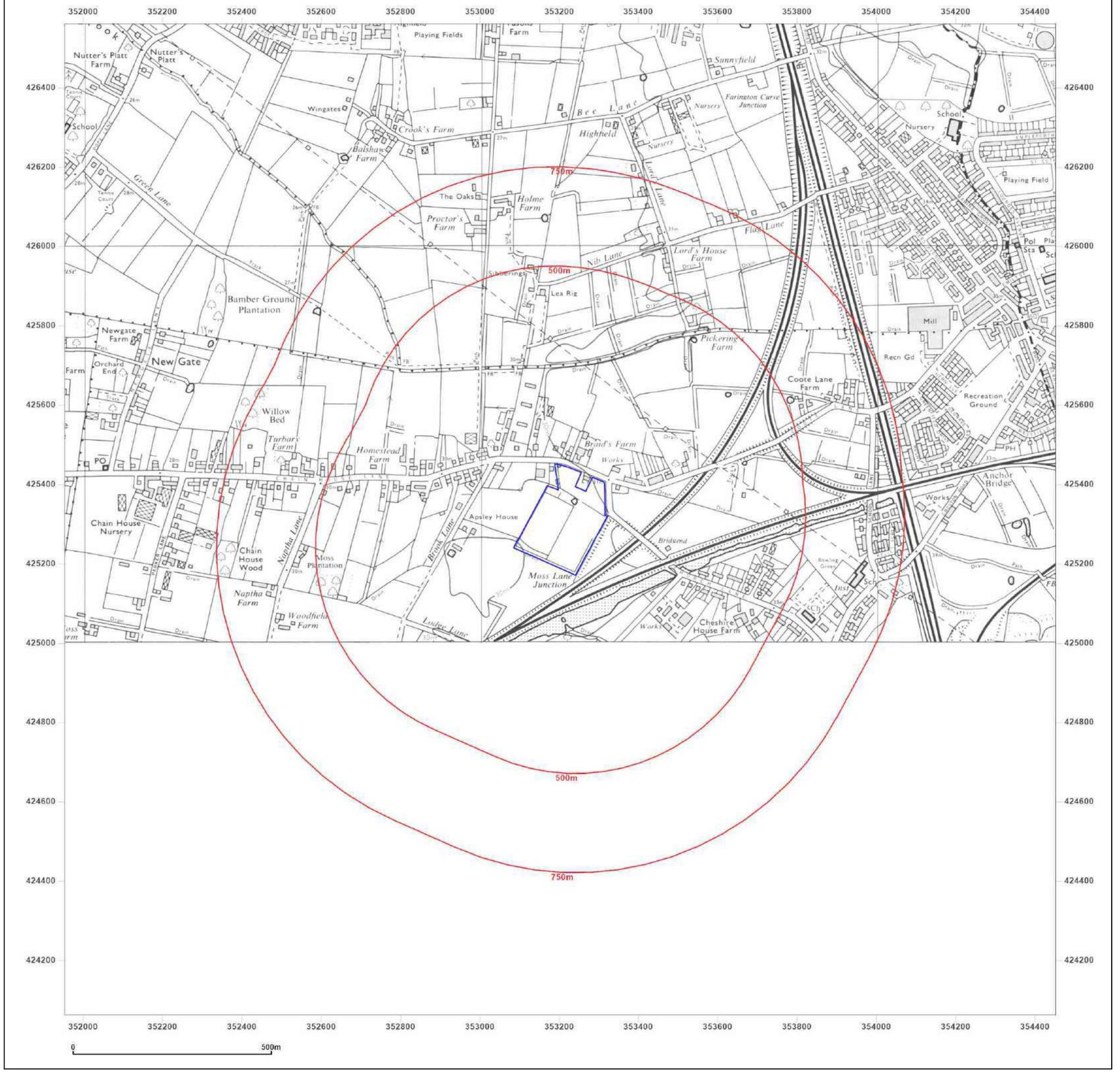


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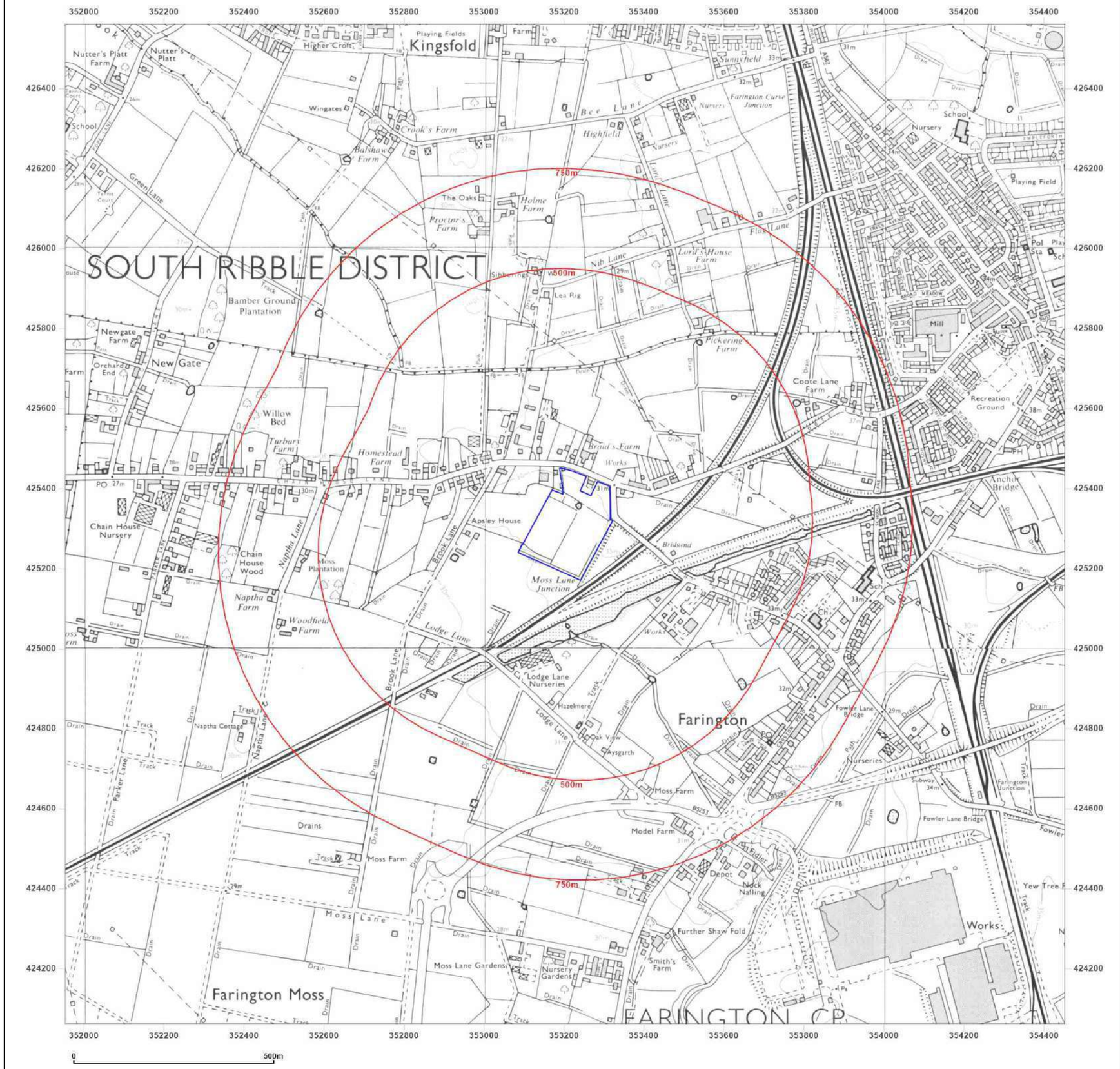


Groundsure INSIGHTS

**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** National Grid

**Map date:** **1982**

**Scale:** 1:10,000

**Printed at:** 1:10,000

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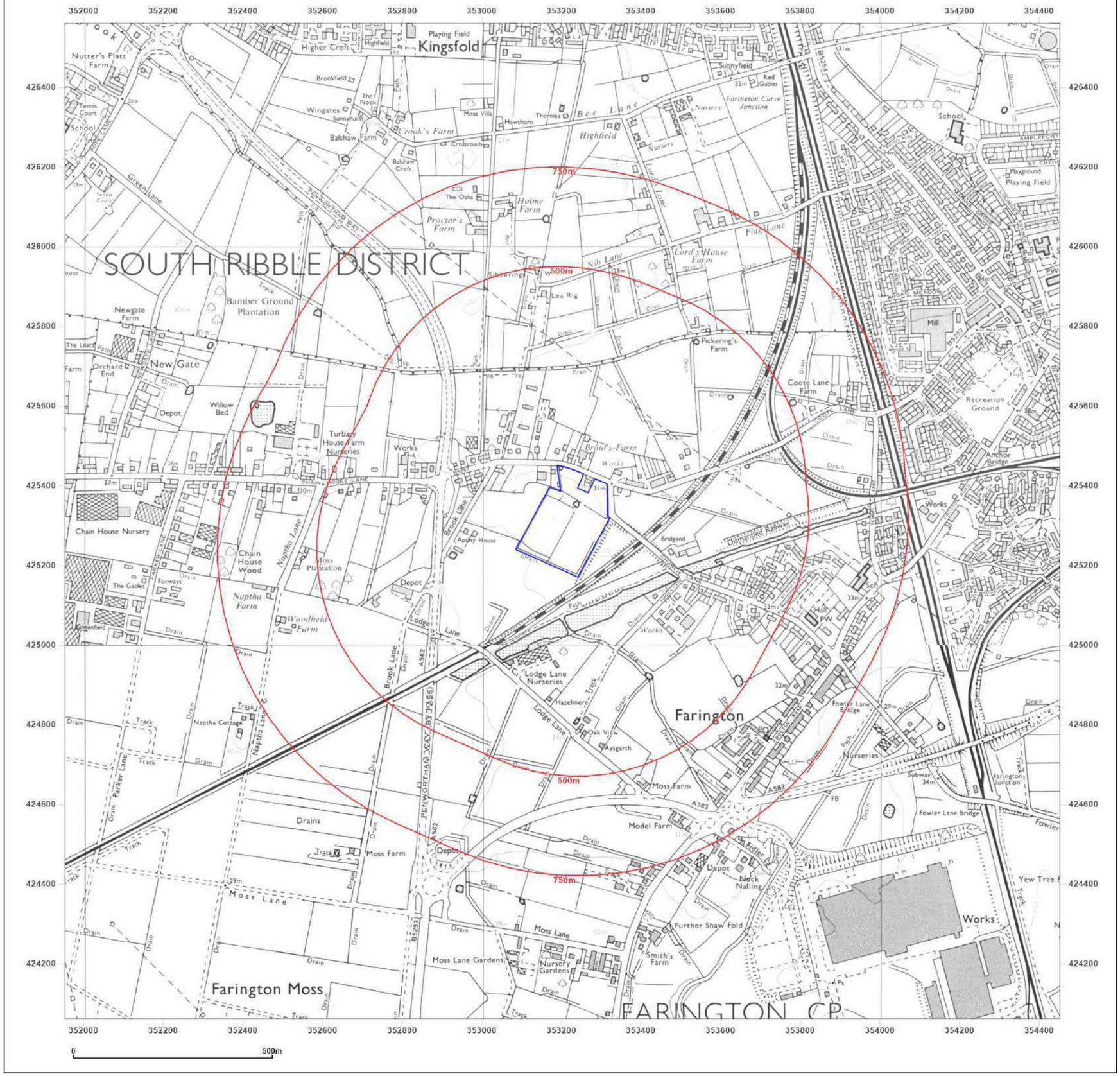




**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** National Grid

**Map date:** **1988-1990**

**Scale:** 1:10,000

**Printed at:** 1:10,000

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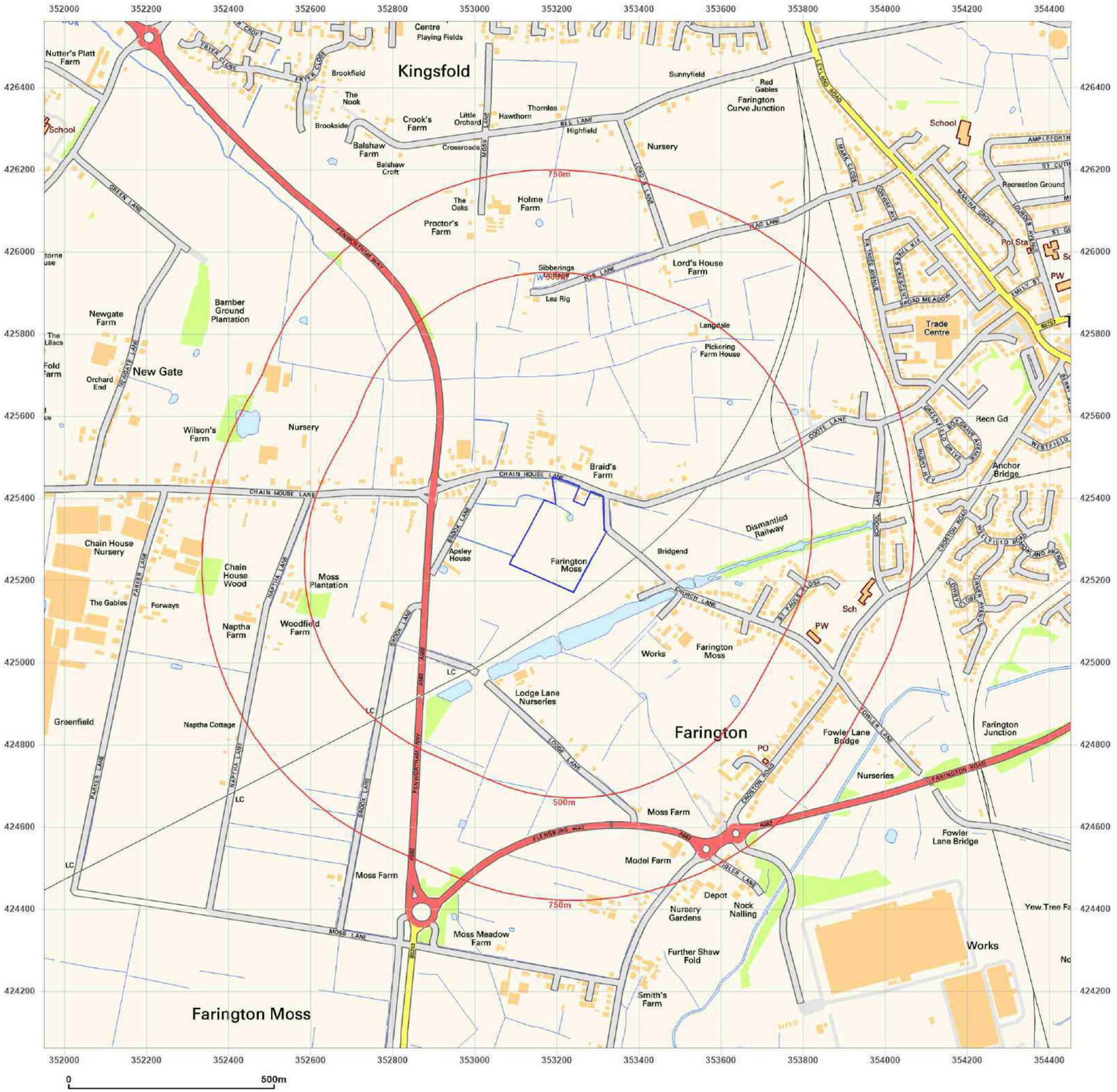


Groundsure INSIGHTS

**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** National Grid
**Map date:** **2001**
**Scale:** 1:10,000
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2001

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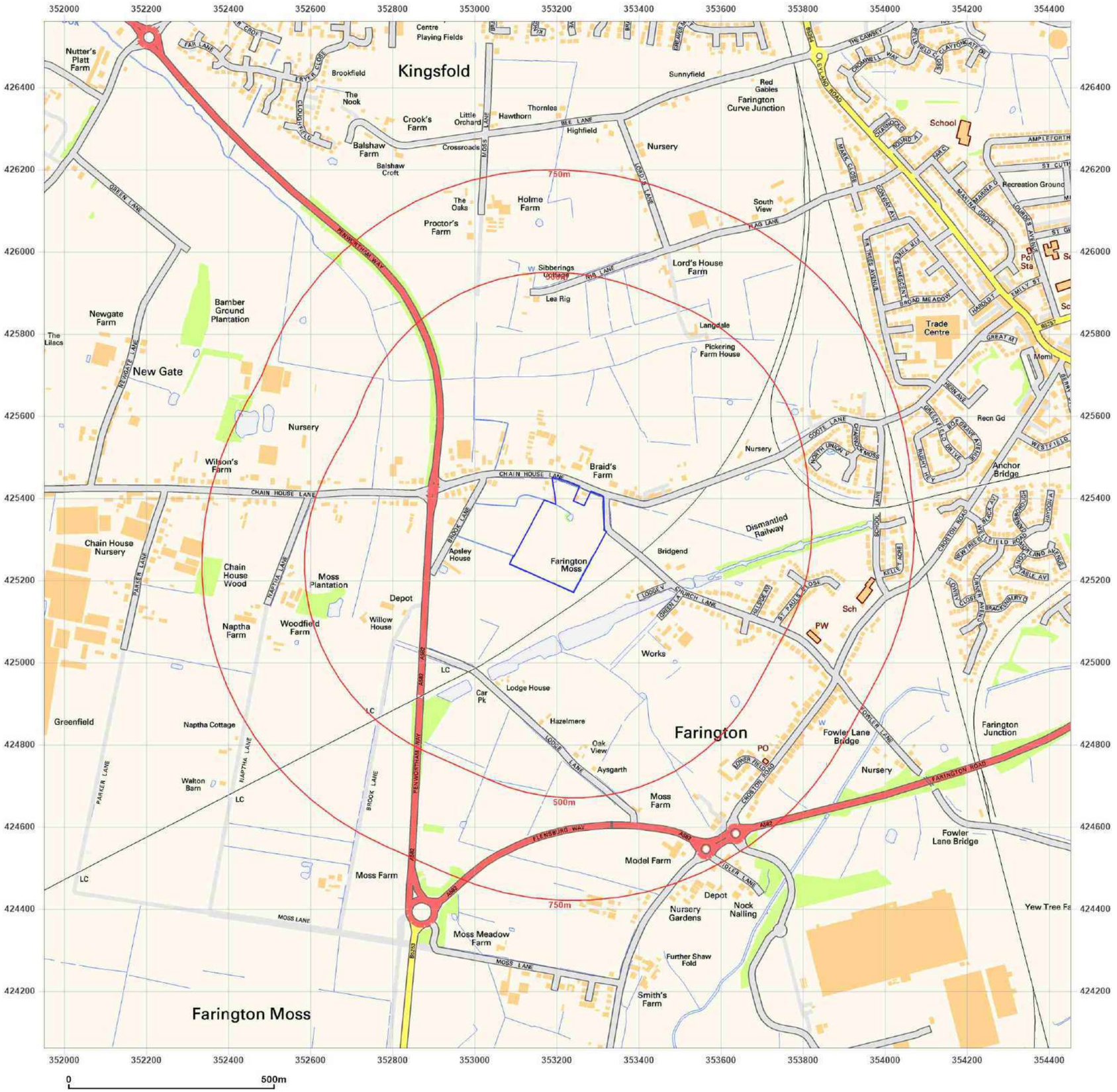


Groundsure INSIGHTS

**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** National Grid
**Map date:** **2010**
**Scale:** 1:10,000
**Printed at:** 1:10,000

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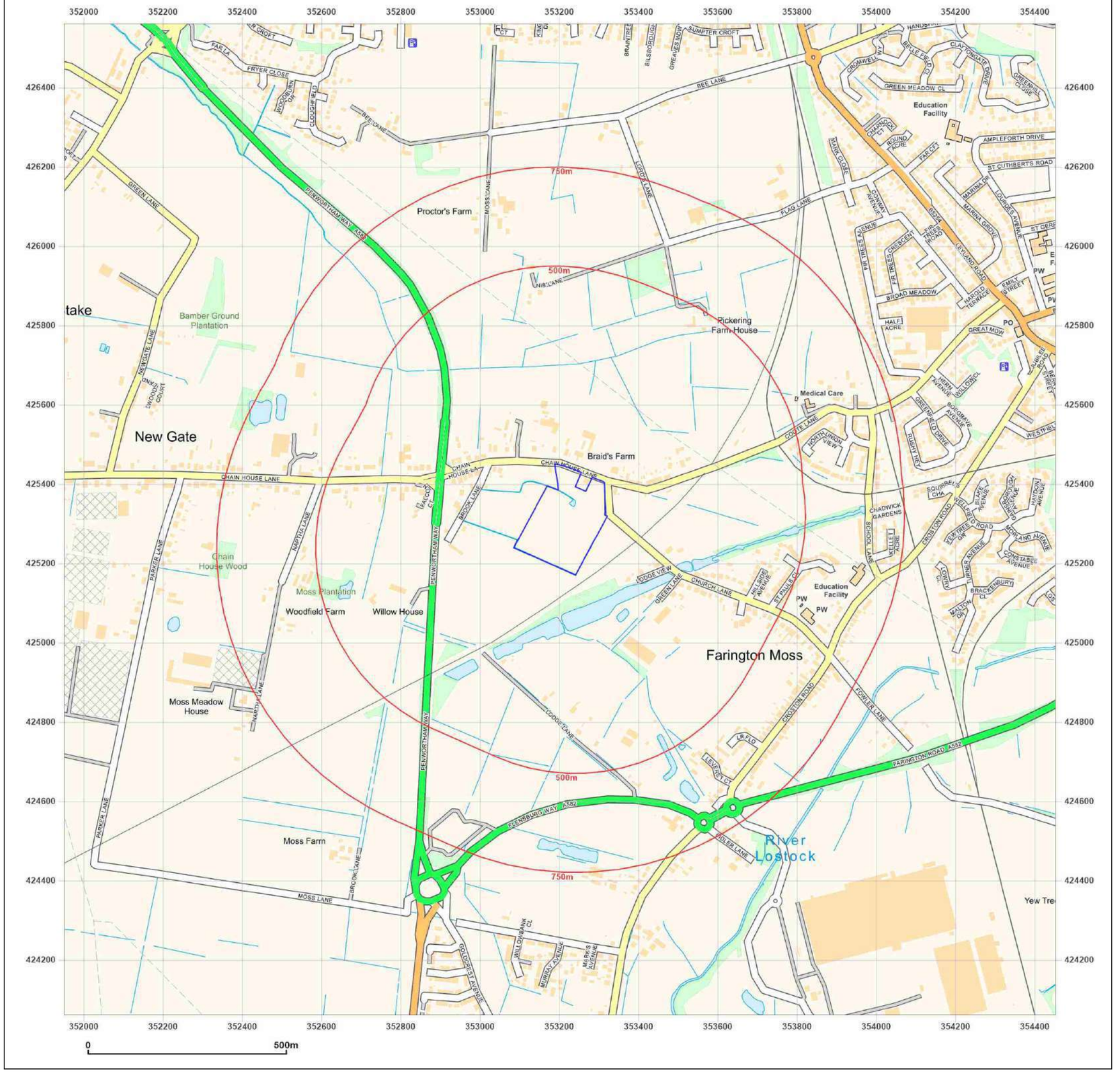


Groundsure INSIGHTS

**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** National Grid
**Map date:** **2025**
**Scale:** 1:10,000
**Printed at:** 1:10,000

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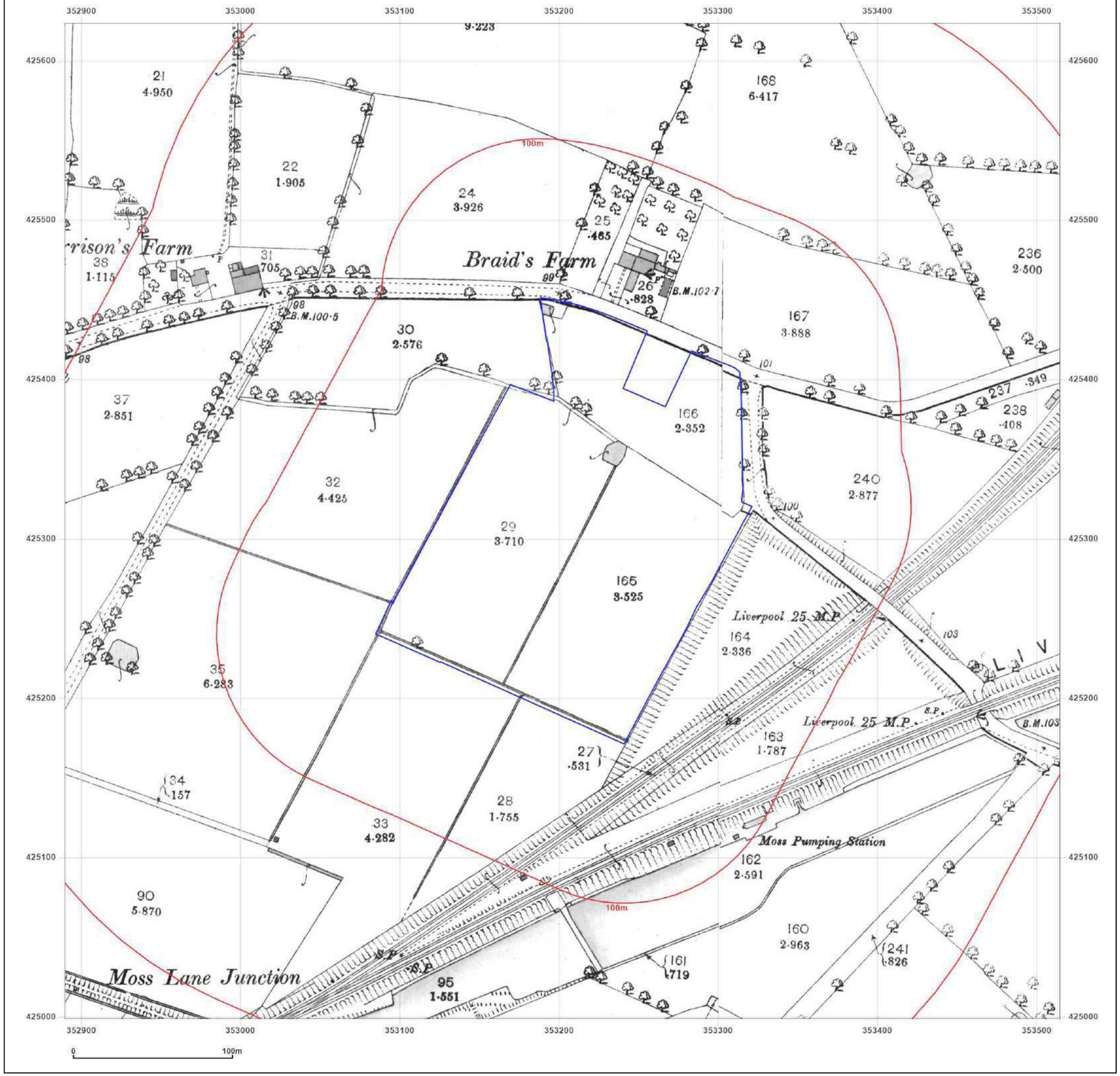


Groundsure INSIGHTS

**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** County Series

**Map date:** **1892**

**Scale:** 1:2,500

**Printed at:** 1:2,500

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Surveyed 1892
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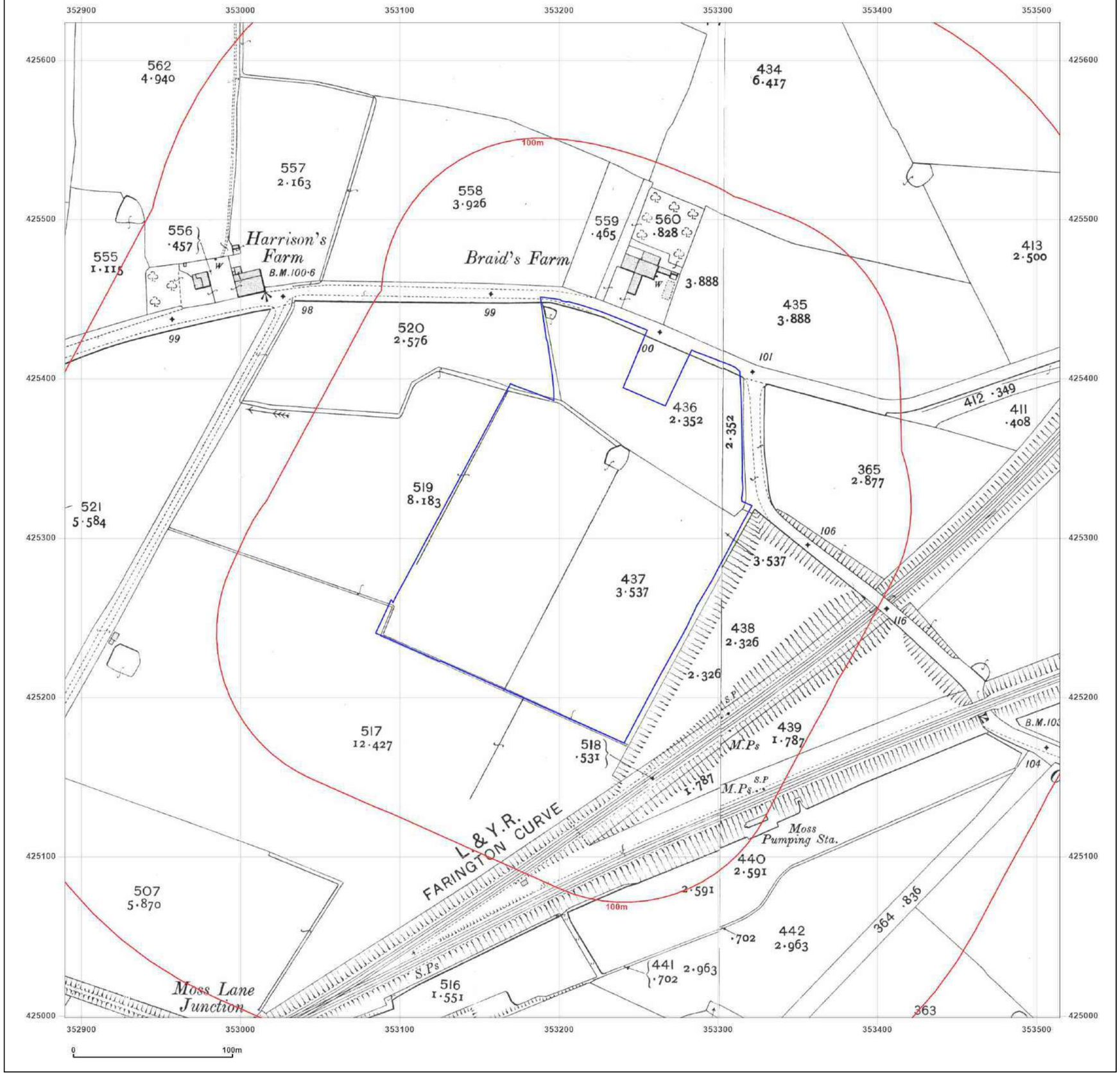


# Groundsure INSIGHTS

**Site Details:**

OAKDENE, CHAIN HOUSE
LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** County Series

**Map date:** **1911**

**Scale:** 1:2,500

**Printed at:** 1:2,500

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Revised 1911
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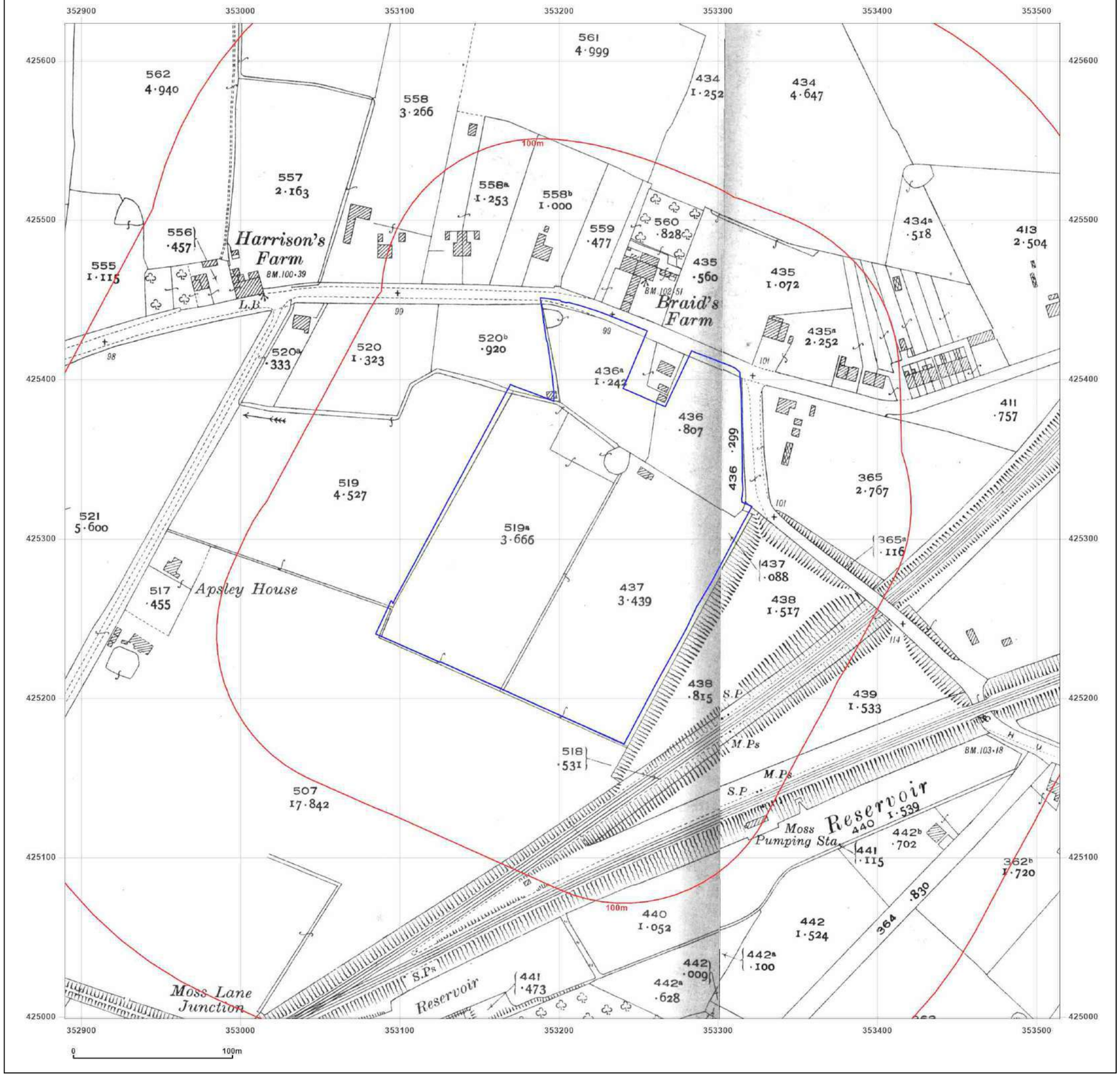


Groundsure INSIGHTS

**Site Details:**

OAKDENE, CHAIN HOUSE
LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** County Series

**Map date:** **1931**

**Scale:** 1:2,500

**Printed at:** 1:2,500

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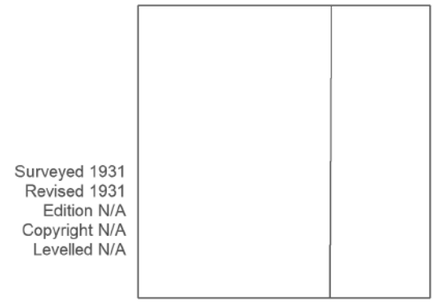


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**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** National Grid

**Map date:** **1963**

**Scale:** 1:1,250

**Printed at:** 1:2,000

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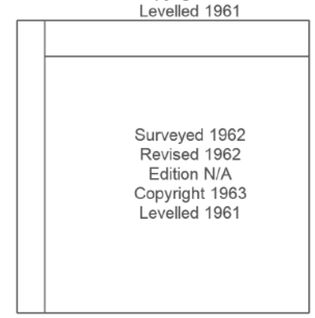
Surveyed 1962
Revised 1962
Edition N/A
Copyright 1963
Levelled 1961



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Revised 1962
Edition N/A
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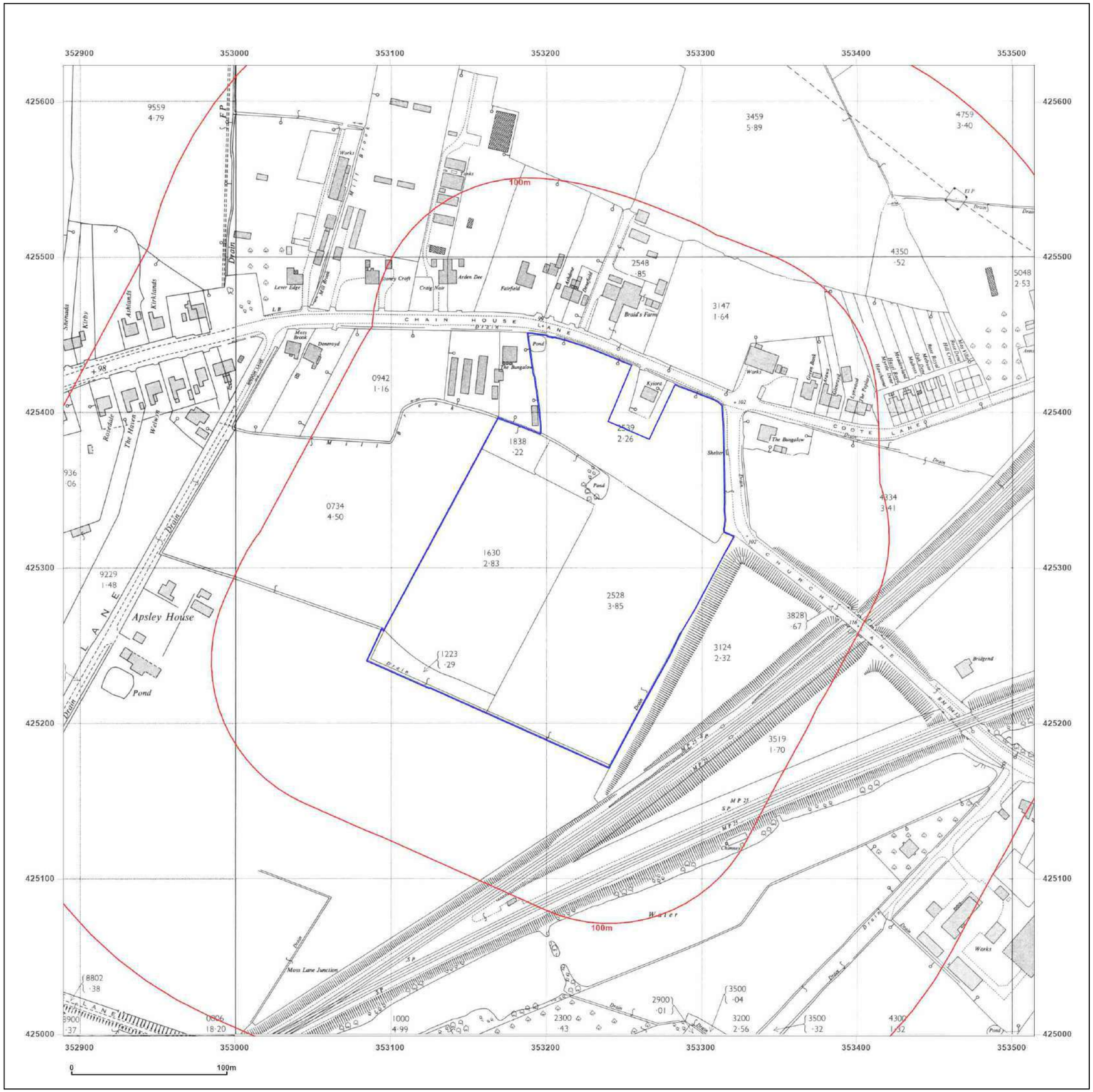


Groundsure INSIGHTS

**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** National Grid

**Map date:** **1961-1963**

**Scale:** 1:2,500

**Printed at:** 1:2,500

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Edition 1963
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**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** National Grid

**Map date:** **1977**

**Scale:** 1:1,250

**Printed at:** 1:2,000

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Edition N/A
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Surveyed 1962
Revised 1976
Edition 1977
Copyright 1963
Levelled N/A

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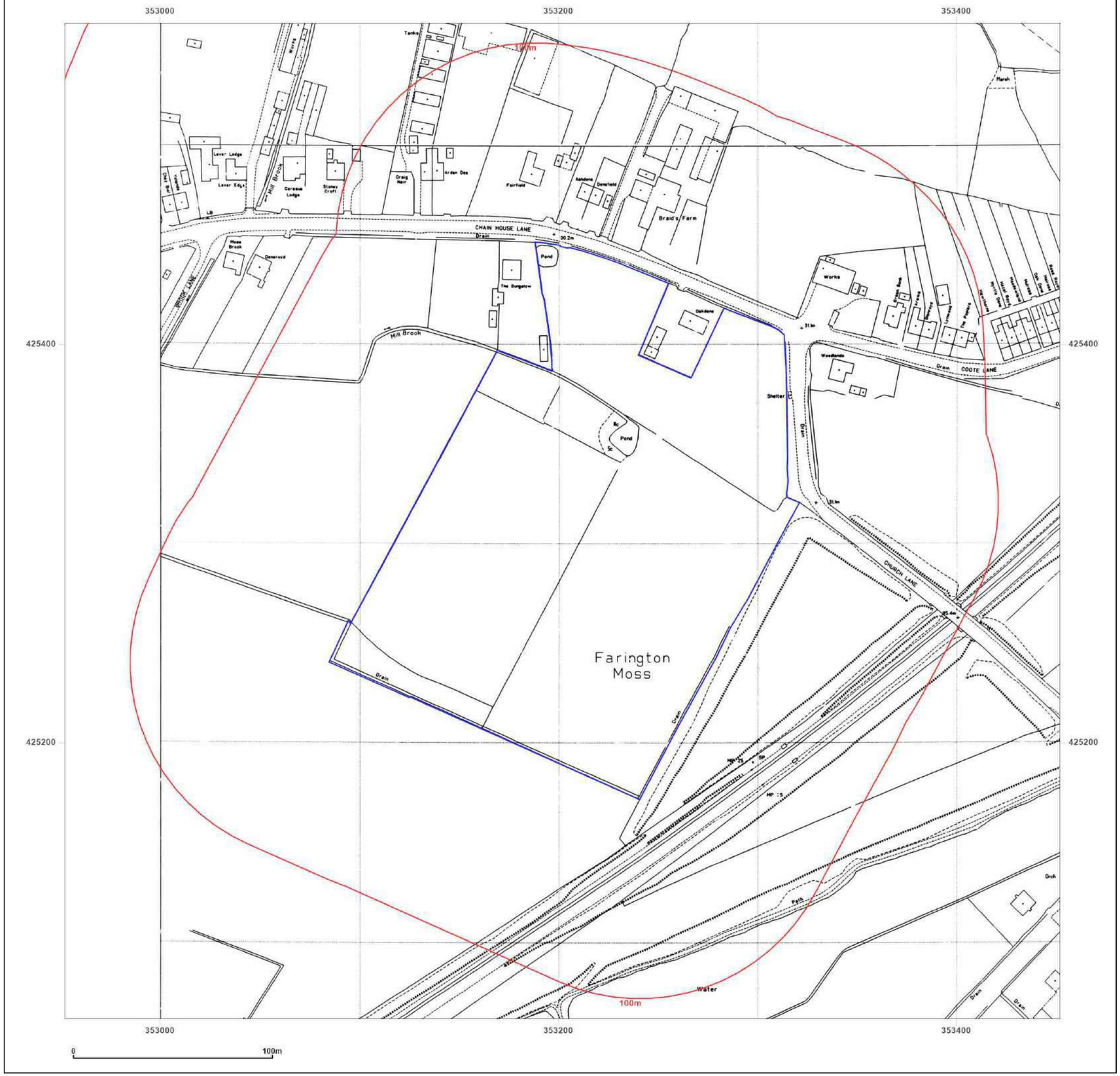


Groundsure INSIGHTS

**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** National Grid

**Map date:** **1993**

**Scale:** 1:1,250

**Printed at:** 1:2,000

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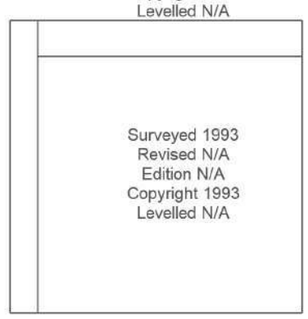
Surveyed 1993
Revised N/A
Edition N/A
Copyright 1993
Levelled N/A



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Groundsure INSIGHTS

**Site Details:**

OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

**Client Ref:** 8578-25033-MLM
**Report Ref:** GS-EYL-4JF-WEJ-94M
**Grid Ref:** 353202, 425311

**Map Name:** LandLine
**Map date:** **2003**
**Scale:** 1:1,250
**Printed at:** 1:1,250

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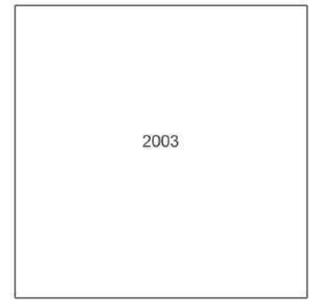


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# APPENDIX B

Enviro+GeoInsight Report

Groundsure
LOCATION INTELLIGENCE

# Enviro+Geo Insight

## OAKDENE, CHAIN HOUSE LANE, WHITESTAKE, PR4 4LH

## Order Details

**Date:** 03/03/2025

**Your ref:** 8578-25033-MLM

**Our Ref:** GS-O5T-HC6-X3P-DHE

## Site Details

**Location:** 353214 425305

**Area:** 3.76 ha

**Authority:** South Ribble Borough Council ↗



**Summary of findings** p. 2 >

**OS MasterMap site plan** p.14 >

**Aerial image** p. 9 >

Insight User Guide ↗



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# Summary of findings

| Page | Section | Past land use > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 15 > | 1.1 > | Historical industrial land uses > | 0 | 5 | 14 | 12 | - |
| 17 > | 1.2 > | Historical tanks > | 0 | 0 | 4 | 1 | - |
| 17 | 1.3 | Historical energy features | 0 | 0 | 0 | 0 | - |
| 18 | 1.4 | Historical petrol stations | 0 | 0 | 0 | 0 | - |
| 18 | 1.5 | Historical garages | 0 | 0 | 0 | 0 | - |
| 18 | 1.6 | Historical military land | 0 | 0 | 0 | 0 | - |
| Page | Section | Past land use - un-grouped > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 19 > | 2.1 > | Historical industrial land uses > | 0 | 10 | 30 | 18 | - |
| 22 > | 2.2 > | Historical tanks > | 0 | 0 | 7 | 1 | - |
| 22 | 2.3 | Historical energy features | 0 | 0 | 0 | 0 | - |
| 22 | 2.4 | Historical petrol stations | 0 | 0 | 0 | 0 | - |
| 23 | 2.5 | Historical garages | 0 | 0 | 0 | 0 | - |
| Page | Section | Waste and landfill > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 24 | 3.1 | Active or recent landfill | 0 | 0 | 0 | 0 | - |
| 24 | 3.2 | Historical landfill (BGS records) | 0 | 0 | 0 | 0 | - |
| 25 | 3.3 | Historical landfill (LA/mapping records) | 0 | 0 | 0 | 0 | - |
| 25 | 3.4 | Historical landfill (EA/NRW records) | 0 | 0 | 0 | 0 | - |
| 25 | 3.5 | Historical waste sites | 0 | 0 | 0 | 0 | - |
| 25 | 3.6 | Licensed waste sites | 0 | 0 | 0 | 0 | - |
| 25 > | 3.7 > | Waste exemptions > | 0 | 5 | 6 | 10 | - |
| Page | Section | Current industrial land use > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 28 > | 4.1 > | Recent industrial land uses > | 0 | 3 | 6 | - | - |
| 29 | 4.2 | Current or recent petrol stations | 0 | 0 | 0 | 0 | - |
| 29 | 4.3 | Electricity cables | 0 | 0 | 0 | 0 | - |
| 29 | 4.4 | Gas pipelines | 0 | 0 | 0 | 0 | - |
| 30 | 4.5 | Sites determined as Contaminated Land | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 30 | 4.6 | Control of Major Accident Hazards (COMAH) | 0 | 0 | 0 | 0 | - |
| 30 | 4.7 | Regulated explosive sites | 0 | 0 | 0 | 0 | - |
| 30 | 4.8 | Hazardous substance storage/usage | 0 | 0 | 0 | 0 | - |
| 30 | 4.9 | Historical licensed industrial activities (IPC) | 0 | 0 | 0 | 0 | - |
| 31 | 4.10 | Licensed industrial activities (Part A(1)) | 0 | 0 | 0 | 0 | - |
| **31 >** | **4.11 >** | **Licensed pollutant release (Part A(2)/B) >** | 0 | 0 | 3 | 3 | - |
| 32 | 4.12 | Radioactive Substance Authorisations | 0 | 0 | 0 | 0 | - |
| 32 | 4.13 | Licensed Discharges to controlled waters | 0 | 0 | 0 | 0 | - |
| 32 | 4.14 | Pollutant release to surface waters (Red List) | 0 | 0 | 0 | 0 | - |
| 32 | 4.15 | Pollutant release to public sewer | 0 | 0 | 0 | 0 | - |
| 32 | 4.16 | List 1 Dangerous Substances | 0 | 0 | 0 | 0 | - |
| 33 | 4.17 | List 2 Dangerous Substances | 0 | 0 | 0 | 0 | - |
| **33 >** | **4.18 >** | **Pollution Incidents (EA/NRW) >** | 0 | 0 | 1 | 4 | - |
| 34 | 4.19 | Pollution inventory substances | 0 | 0 | 0 | 0 | - |
| 34 | 4.20 | Pollution inventory waste transfers | 0 | 0 | 0 | 0 | - |
| 34 | 4.21 | Pollution inventory radioactive waste | 0 | 0 | 0 | 0 | - |

| Page | Section | **Hydrogeology >** | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| **35 >** | **5.1 >** | **Superficial aquifer >** | Identified (within 500m) | | | | |
| **37 >** | **5.2 >** | **Bedrock aquifer >** | Identified (within 500m) | | | | |
| **39 >** | **5.3 >** | **Groundwater vulnerability >** | Identified (within 50m) | | | | |
| 40 | 5.4 | Groundwater vulnerability- soluble rock risk | None (within 0m) | | | | |
| 40 | 5.5 | Groundwater vulnerability- local information | None (within 0m) | | | | |
| **41 >** | **5.6 >** | **Groundwater abstractions >** | 0 | 0 | 0 | 0 | 21 |
| **47 >** | **5.7 >** | **Surface water abstractions >** | 0 | 0 | 0 | 0 | 13 |
| 50 | 5.8 | Potable abstractions | 0 | 0 | 0 | 0 | 0 |
| 51 | 5.9 | Source Protection Zones | 0 | 0 | 0 | 0 | - |
| 51 | 5.10 | Source Protection Zones (confined aquifer) | 0 | 0 | 0 | 0 | - |

| Page | Section | **Hydrology >** | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| **52 >** | **6.1 >** | **Water Network (OS MasterMap) >** | 5 | 11 | 36 | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 57 > | 6.2 > | Surface water features > | 1 | 6 | 22 | - | - |
| 57 > | 6.3 > | WFD Surface water body catchments > | 1 | - | - | - | - |
| 57 | 6.4 | WFD Surface water bodies | 0 | 0 | 0 | - | - |
| 58 > | 6.5 > | WFD Groundwater bodies > | 1 | - | - | - | - |
| Page | Section | River and coastal flooding | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 59 | 7.1 | Risk of flooding from rivers and the sea | None (within 50m) | | | | |
| 59 | 7.2 | Historical Flood Events | 0 | 0 | 0 | - | - |
| 59 | 7.3 | Flood Defences | 0 | 0 | 0 | - | - |
| 60 | 7.4 | Areas Benefiting from Flood Defences | 0 | 0 | 0 | - | - |
| 60 | 7.5 | Flood Storage Areas | 0 | 0 | 0 | - | - |
| 61 | 7.6 | Flood Zone 2 | None (within 50m) | | | | |
| 61 | 7.7 | Flood Zone 3 | None (within 50m) | | | | |
| Page | Section | Surface water flooding > | | | | | |
| 62 > | 8.1 > | Surface water flooding > | 1 in 30 year, 0.3m - 1.0m (within 50m) | | | | |
| Page | Section | Groundwater flooding > | | | | | |
| 64 > | 9.1 > | Groundwater flooding > | Low (within 50m) | | | | |
| Page | Section | Environmental designations > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 65 | 10.1 | Sites of Special Scientific Interest (SSSI) | 0 | 0 | 0 | 0 | 0 |
| 66 | 10.2 | Conserved wetland sites (Ramsar sites) | 0 | 0 | 0 | 0 | 0 |
| 66 | 10.3 | Special Areas of Conservation (SAC) | 0 | 0 | 0 | 0 | 0 |
| 66 | 10.4 | Special Protection Areas (SPA) | 0 | 0 | 0 | 0 | 0 |
| 66 | 10.5 | National Nature Reserves (NNR) | 0 | 0 | 0 | 0 | 0 |
| 67 > | 10.6 > | Local Nature Reserves (LNR) > | 0 | 0 | 0 | 0 | 2 |
| 67 | 10.7 | Designated Ancient Woodland | 0 | 0 | 0 | 0 | 0 |
| 67 | 10.8 | Biosphere Reserves | 0 | 0 | 0 | 0 | 0 |
| 67 | 10.9 | Forest Parks | 0 | 0 | 0 | 0 | 0 |
| 68 | 10.10 | Marine Conservation Zones | 0 | 0 | 0 | 0 | 0 |
| 68 > | 10.11 > | Green Belt > | 0 | 1 | 0 | 0 | 0 |
| 68 | 10.12 | Proposed Ramsar sites | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 68 | 10.13 | Possible Special Areas of Conservation (pSAC) | 0 | 0 | 0 | 0 | 0 |
| 69 | 10.14 | Potential Special Protection Areas (pSPA) | 0 | 0 | 0 | 0 | 0 |
| 69 | 10.15 | Nitrate Sensitive Areas | 0 | 0 | 0 | 0 | 0 |
| 69 > | 10.16 > | Nitrate Vulnerable Zones > | 0 | 0 | 0 | 0 | 2 |
| 70 > | 10.17 > | SSSI Impact Risk Zones > | 1 | - | - | - | - |
| 71 | 10.18 | SSSI Units | 0 | 0 | 0 | 0 | 0 |
| Page | Section | Visual and cultural designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 72 | 11.1 | World Heritage Sites | 0 | 0 | 0 | - | - |
| 72 | 11.2 | Area of Outstanding Natural Beauty | 0 | 0 | 0 | - | - |
| 72 | 11.3 | National Parks | 0 | 0 | 0 | - | - |
| 72 | 11.4 | Listed Buildings | 0 | 0 | 0 | - | - |
| 73 | 11.5 | Conservation Areas | 0 | 0 | 0 | - | - |
| 73 | 11.6 | Scheduled Ancient Monuments | 0 | 0 | 0 | - | - |
| 73 | 11.7 | Registered Parks and Gardens | 0 | 0 | 0 | - | - |
| Page | Section | Agricultural designations > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 74 > | 12.1 > | Agricultural Land Classification > | Grade 2 (within 250m) | | | | |
| 75 | 12.2 | Open Access Land | 0 | 0 | 0 | - | - |
| 75 | 12.3 | Tree Felling Licences | 0 | 0 | 0 | - | - |
| 75 | 12.4 | Environmental Stewardship Schemes | 0 | 0 | 0 | - | - |
| 76 | 12.5 | Countryside Stewardship Schemes | 0 | 0 | 0 | - | - |
| Page | Section | Habitat designations > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 77 > | 13.1 > | Priority Habitat Inventory > | 0 | 0 | 1 | - | - |
| 78 | 13.2 | Habitat Networks | 0 | 0 | 0 | - | - |
| 78 | 13.3 | Open Mosaic Habitat | 0 | 0 | 0 | - | - |
| 78 | 13.4 | Limestone Pavement Orders | 0 | 0 | 0 | - | - |
| Page | Section | Geology 1:10,000 scale > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 79 > | 14.1 > | 10k Availability > | Identified (within 500m) | | | | |
| 80 > | 14.2 > | Artificial and made ground (10k) > | 0 | 3 | 9 | 5 | - |
| 82 > | 14.3 > | Superficial geology (10k) > | 1 | 0 | 1 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 83 | 14.4 | Landslip (10k) | 0 | 0 | 0 | 0 | - |
| 84 > | 14.5 > | Bedrock geology (10k) > | 1 | 0 | 1 | 0 | - |
| 85 | 14.6 | Bedrock faults and other linear features (10k) | 0 | 0 | 0 | 0 | - |
| Page | Section | Geology 1:50,000 scale > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 86 > | 15.1 > | 50k Availability > | Identified (within 500m) | | | | |
| 87 | 15.2 | Artificial and made ground (50k) | 0 | 0 | 0 | 0 | - |
| 87 | 15.3 | Artificial ground permeability (50k) | 0 | 0 | - | - | - |
| 88 > | 15.4 > | Superficial geology (50k) > | 1 | 0 | 0 | 0 | - |
| 89 > | 15.5 > | Superficial permeability (50k) > | Identified (within 50m) | | | | |
| 89 | 15.6 | Landslip (50k) | 0 | 0 | 0 | 0 | - |
| 89 | 15.7 | Landslip permeability (50k) | None (within 50m) | | | | |
| 90 > | 15.8 > | Bedrock geology (50k) > | 1 | 0 | 0 | 0 | - |
| 91 > | 15.9 > | Bedrock permeability (50k) > | Identified (within 50m) | | | | |
| 91 | 15.10 | Bedrock faults and other linear features (50k) | 0 | 0 | 0 | 0 | - |
| Page | Section | Boreholes > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 92 > | 16.1 > | BGS Boreholes > | 0 | 0 | 9 | - | - |
| Page | Section | Natural ground subsidence > | | | | | |
| 94 > | 17.1 > | Shrink swell clays > | Very low (within 50m) | | | | |
| 95 > | 17.2 > | Running sands > | Very low (within 50m) | | | | |
| 96 > | 17.3 > | Compressible deposits > | Negligible (within 50m) | | | | |
| 97 > | 17.4 > | Collapsible deposits > | Very low (within 50m) | | | | |
| 98 > | 17.5 > | Landslides > | Very low (within 50m) | | | | |
| 99 > | 17.6 > | Ground dissolution of soluble rocks > | Negligible (within 50m) | | | | |
| Page | Section | Mining and ground workings > | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 101 > | 18.1 > | BritPits > | 0 | 0 | 0 | 1 | - |
| 102 > | 18.2 > | Surface ground workings > | 0 | 6 | 44 | - | - |
| 104 | 18.3 | Underground workings | 0 | 0 | 0 | 0 | 0 |
| 104 | 18.4 | Underground mining extents | 0 | 0 | 0 | 0 | - |
| 104 | 18.5 | Historical Mineral Planning Areas | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 105 | 18.6 | Non-coal mining | 0 | 0 | 0 | 0 | 0 |
| **105 >** | **18.7 >** | **JPB mining areas >** | Identified (within 0m) | | | | |
| 105 | 18.8 | The Coal Authority non-coal mining | 0 | 0 | 0 | 0 | - |
| 105 | 18.9 | Researched mining | 0 | 0 | 0 | 0 | - |
| 106 | 18.10 | Mining record office plans | 0 | 0 | 0 | 0 | - |
| 106 | 18.11 | BGS mine plans | 0 | 0 | 0 | 0 | - |
| 106 | 18.12 | Coal mining | None (within 0m) | | | | |
| 106 | 18.13 | Brine areas | None (within 0m) | | | | |
| 106 | 18.14 | Gypsum areas | None (within 0m) | | | | |
| 107 | 18.15 | Tin mining | None (within 0m) | | | | |
| 107 | 18.16 | Clay mining | None (within 0m) | | | | |

| Page | Section | Ground cavities and sinkholes | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 108 | 19.1 | Natural cavities | 0 | 0 | 0 | 0 | - |
| 108 | 19.2 | Mining cavities | 0 | 0 | 0 | 0 | 0 |
| 108 | 19.3 | Reported recent incidents | 0 | 0 | 0 | 0 | - |
| 108 | 19.4 | Historical incidents | 0 | 0 | 0 | 0 | - |

| Page | Section | **Radon >** |
|---|---|---|
| **110 >** | **20.1 >** | **Radon >** Less than 1% (within 0m) |

| Page | Section | **Soil chemistry >** | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| **112 >** | **21.1 >** | **BGS Estimated Background Soil Chemistry >** | 1 | 1 | - | - | - |
| 112 | 21.2 | BGS Estimated Urban Soil Chemistry | 0 | 0 | - | - | - |
| 112 | 21.3 | BGS Measured Urban Soil Chemistry | 0 | 0 | - | - | - |

| Page | Section | **Railway infrastructure and projects >** | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 113 | 22.1 | Underground railways (London) | 0 | 0 | 0 | - | - |
| 113 | 22.2 | Underground railways (Non-London) | 0 | 0 | 0 | - | - |
| 114 | 22.3 | Railway tunnels | 0 | 0 | 0 | - | - |
| 114 | 22.4 | Historical railway and tunnel features | 0 | 0 | 0 | - | - |
| 114 | 22.5 | Royal Mail tunnels | 0 | 0 | 0 | - | - |
| **114 >** | **22.6 >** | **Historical railways >** | 0 | 0 | 1 | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **115 >** | **22.7 >** | **Railways >** | 0 | 2 | 2 | - | - |
| 115 | 22.8 | Crossrail 2 | 0 | 0 | 0 | 0 | - |
| 115 | 22.9 | HS2 | 0 | 0 | 0 | 0 | - |

## Recent aerial photograph


Capture Date: 23/06/2022

Site Area: 3.76ha

# Recent site history - 2019 aerial photograph


Capture Date: 22/04/2019

Site Area: 3.76ha

# Recent site history - 2012 aerial photograph


Capture Date: 26/03/2012

Site Area: 3.76ha

# Recent site history - 2007 aerial photograph


Capture Date: 02/06/2007

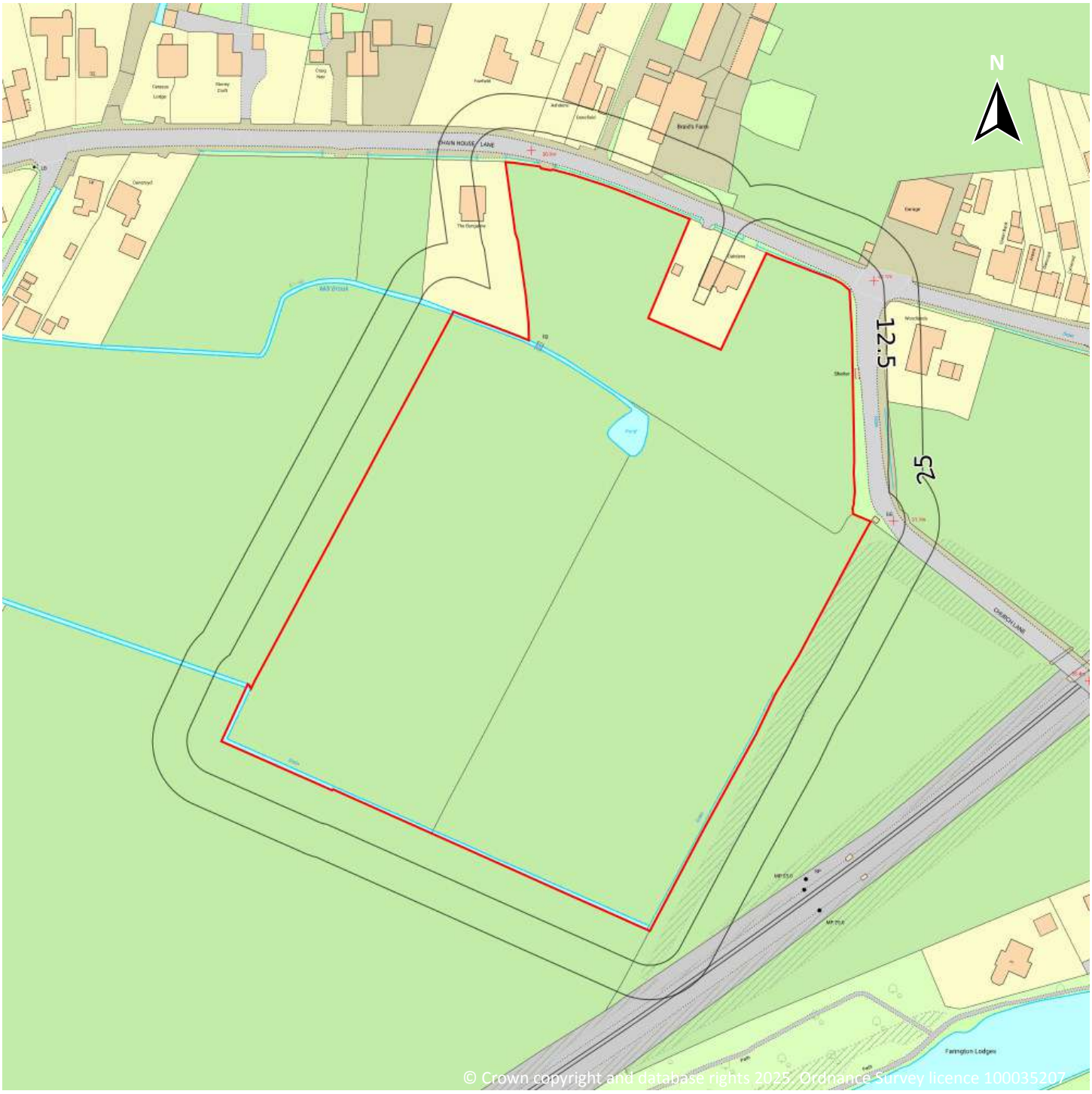
Site Area: 3.76ha

# Recent site history - 2001 aerial photograph


Capture Date: 01/05/2001

Site Area: 3.76ha

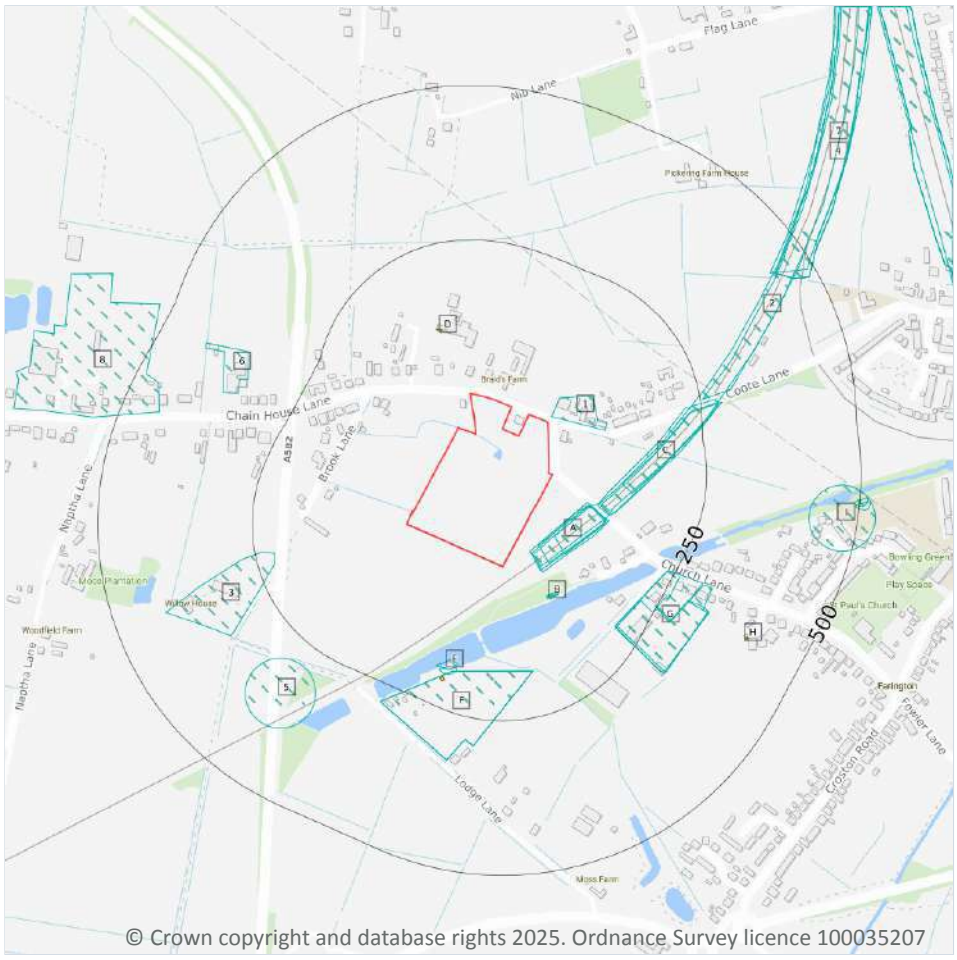
## OS MasterMap site plan






Site Area: 3.76ha

# 1 Past land use






Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

## 1.1 Historical industrial land uses

| Records within 500m | 31 |
|---|---|

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 15 >**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 1 | 12m NE | Unspecified Works | 1968 - 1990 | 773137 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| A | 27m SE | Cuttings | 1955 | 722072 |
| A | 31m SE | Cuttings | 1938 | 795577 |
| 2 | 34m SE | Cuttings | 1892 | 789661 |
| A | 35m SE | Cuttings | 1909 - 1938 | 715080 |
| A | 50m SE | Cuttings | 1968 - 1990 | 786175 |
| B | 85m SE | Pumping Station | 1938 | 800927 |
| C | 88m E | Cuttings | 1938 - 1955 | 771431 |
| B | 89m SE | Pumping Station | 1892 - 1938 | 782002 |
| C | 93m E | Cuttings | 1909 - 1938 | 709408 |
| C | 114m E | Cuttings | 1968 - 1990 | 747483 |
| E | 168m S | Unspecified Pit | 1955 | 674766 |
| F | 169m S | Nurseries | 1982 - 1988 | 764936 |
| F | 169m S | Nurseries | 1967 | 782985 |
| E | 179m S | Unspecified Ground Workings | 1909 - 1938 | 790157 |
| G | 206m SE | Unspecified Works | 1982 - 1990 | 759965 |
| G | 206m SE | Unspecified Works | 1974 | 759845 |
| G | 208m SE | Unspecified Works | 1968 | 742357 |
| 3 | 219m W | Unspecified Depot | 1990 | 669588 |
| 4 | 254m E | Cuttings | 1968 - 1990 | 762020 |
| 5 | 285m SW | Junction Station | 1955 | 687557 |
| 6 | 338m NW | Unspecified Works | 1990 | 683407 |
| H | 400m SE | Unspecified Tank | 1909 | 697122 |
| I | 421m E | Old Clay Pit | 1892 | 654165 |
| 7 | 434m NE | Cuttings | 1938 - 1955 | 782780 |
| 8 | 440m W | Nurseries | 1990 | 704914 |
| J | 442m NE | Cuttings | 1938 | 728480 |
| J | 442m NE | Cuttings | 1909 | 782307 |
| J | 442m NE | Cuttings | 1929 | 788711 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| I | 488m E | Unspecified Pit | 1955 | 782137 |
| I | 494m E | Unspecified Pit | 1909 - 1938 | 777509 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.2 Historical tanks

| **Records within 500m** | **5** |
|---|---|

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 15 >**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| D | 112m N | Tanks | 1963 | 96077 |
| D | 112m N | Tanks | 1963 | 102819 |
| D | 116m N | Tanks | 1963 | 101781 |
| E | 202m S | Unspecified Tank | 1963 - 1988 | 107825 |
| H | 401m SE | Unspecified Tank | 1911 | 87146 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.3 Historical energy features

| **Records within 500m** | **0** |
|---|---|

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.4 Historical petrol stations

| Records within 500m | 0 |
|---|---|

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.5 Historical garages

| Records within 500m | 0 |
|---|---|

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

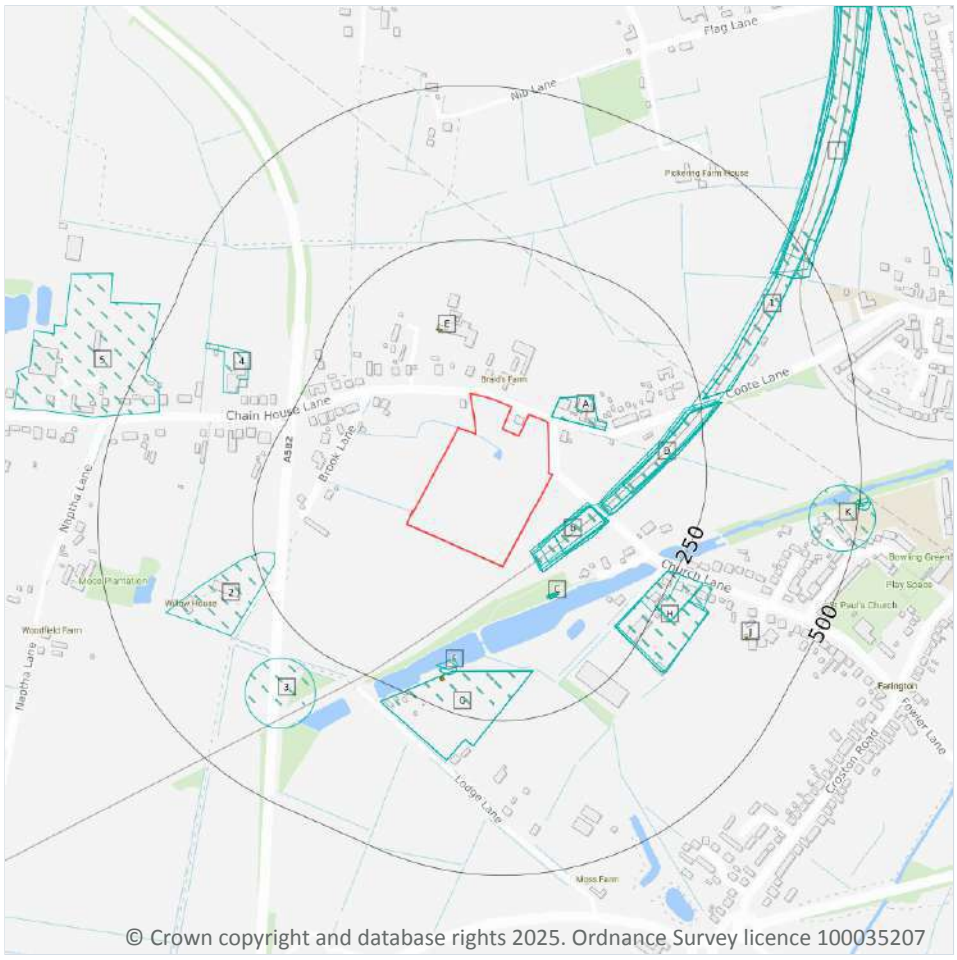
## 1.6 Historical military land

| Records within 500m | 0 |
|---|---|

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

*This data is sourced from Ordnance Survey / Groundsure / other sources.*

# 2 Past land use - un-grouped




Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

## 2.1 Historical industrial land uses

| Records within 500m | 58 |
|---|---|

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 19 >**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| A | 12m NE | Unspecified Works | 1982 | 773137 |
| A | 12m NE | Unspecified Works | 1974 | 773137 |
| A | 12m NE | Unspecified Works | 1968 | 773137 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| A | 12m NE | Unspecified Works | 1990 | 773137 |
| B | 27m SE | Cuttings | 1955 | 722072 |
| B | 31m SE | Cuttings | 1938 | 795577 |
| 1 | 34m SE | Cuttings | 1892 | 789661 |
| B | 35m SE | Cuttings | 1938 | 715080 |
| B | 35m SE | Cuttings | 1929 | 715080 |
| B | 35m SE | Cuttings | 1909 | 715080 |
| B | 50m SE | Cuttings | 1982 | 786175 |
| B | 50m SE | Cuttings | 1974 | 786175 |
| B | 50m SE | Cuttings | 1968 | 786175 |
| B | 50m SE | Cuttings | 1990 | 786175 |
| C | 85m SE | Pumping Station | 1938 | 800927 |
| D | 88m E | Cuttings | 1938 | 771431 |
| D | 89m E | Cuttings | 1955 | 771431 |
| C | 89m SE | Pumping Station | 1892 | 782002 |
| C | 89m SE | Pumping Station | 1938 | 782002 |
| C | 89m SE | Pumping Station | 1929 | 782002 |
| C | 89m SE | Pumping Station | 1909 | 782002 |
| D | 93m E | Cuttings | 1938 | 709408 |
| D | 93m E | Cuttings | 1929 | 709408 |
| D | 93m E | Cuttings | 1909 | 709408 |
| D | 114m E | Cuttings | 1982 | 747483 |
| D | 114m E | Cuttings | 1974 | 747483 |
| D | 114m E | Cuttings | 1968 | 747483 |
| D | 114m E | Cuttings | 1990 | 747483 |
| F | 168m S | Unspecified Pit | 1955 | 674766 |
| G | 169m S | Nurseries | 1967 | 782985 |
| G | 169m S | Nurseries | 1982 | 764936 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| G | 169m S | Nurseries | 1988 | 764936 |
| F | 179m S | Unspecified Ground Workings | 1938 | 790157 |
| F | 179m S | Unspecified Ground Workings | 1929 | 790157 |
| F | 179m S | Unspecified Ground Workings | 1909 | 790157 |
| H | 206m SE | Unspecified Works | 1982 | 759965 |
| H | 206m SE | Unspecified Works | 1990 | 759965 |
| H | 206m SE | Unspecified Works | 1974 | 759845 |
| H | 208m SE | Unspecified Works | 1968 | 742357 |
| 2 | 219m W | Unspecified Depot | 1990 | 669588 |
| I | 254m E | Cuttings | 1982 | 762020 |
| I | 254m E | Cuttings | 1974 | 762020 |
| I | 254m E | Cuttings | 1968 | 762020 |
| I | 254m E | Cuttings | 1990 | 762020 |
| 3 | 285m SW | Junction Station | 1955 | 687557 |
| 4 | 338m NW | Unspecified Works | 1990 | 683407 |
| J | 400m SE | Unspecified Tank | 1909 | 697122 |
| K | 421m E | Old Clay Pit | 1892 | 654165 |
| L | 434m NE | Cuttings | 1955 | 782780 |
| 5 | 440m W | Nurseries | 1990 | 704914 |
| M | 442m NE | Cuttings | 1938 | 728480 |
| M | 442m NE | Cuttings | 1929 | 788711 |
| M | 442m NE | Cuttings | 1909 | 782307 |
| L | 470m NE | Cuttings | 1938 | 782780 |
| K | 488m E | Unspecified Pit | 1955 | 782137 |
| K | 494m E | Unspecified Pit | 1938 | 777509 |
| K | 494m E | Unspecified Pit | 1929 | 777509 |
| K | 494m E | Unspecified Pit | 1909 | 777509 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.2 Historical tanks

| Records within 500m | 8 |
|---|---|

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 19 >**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| E | 112m N | Tanks | 1963 | 96077 |
| E | 112m N | Tanks | 1963 | 102819 |
| E | 116m N | Tanks | 1963 | 101781 |
| F | 202m S | Unspecified Tank | 1964 | 107825 |
| F | 203m S | Unspecified Tank | 1982 | 107825 |
| F | 203m S | Unspecified Tank | 1988 | 107825 |
| F | 203m S | Unspecified Tank | 1963 | 107825 |
| J | 401m SE | Unspecified Tank | 1911 | 87146 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.3 Historical energy features

| Records within 500m | 0 |
|---|---|

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.4 Historical petrol stations

| Records within 500m | 0 |
|---|---|

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

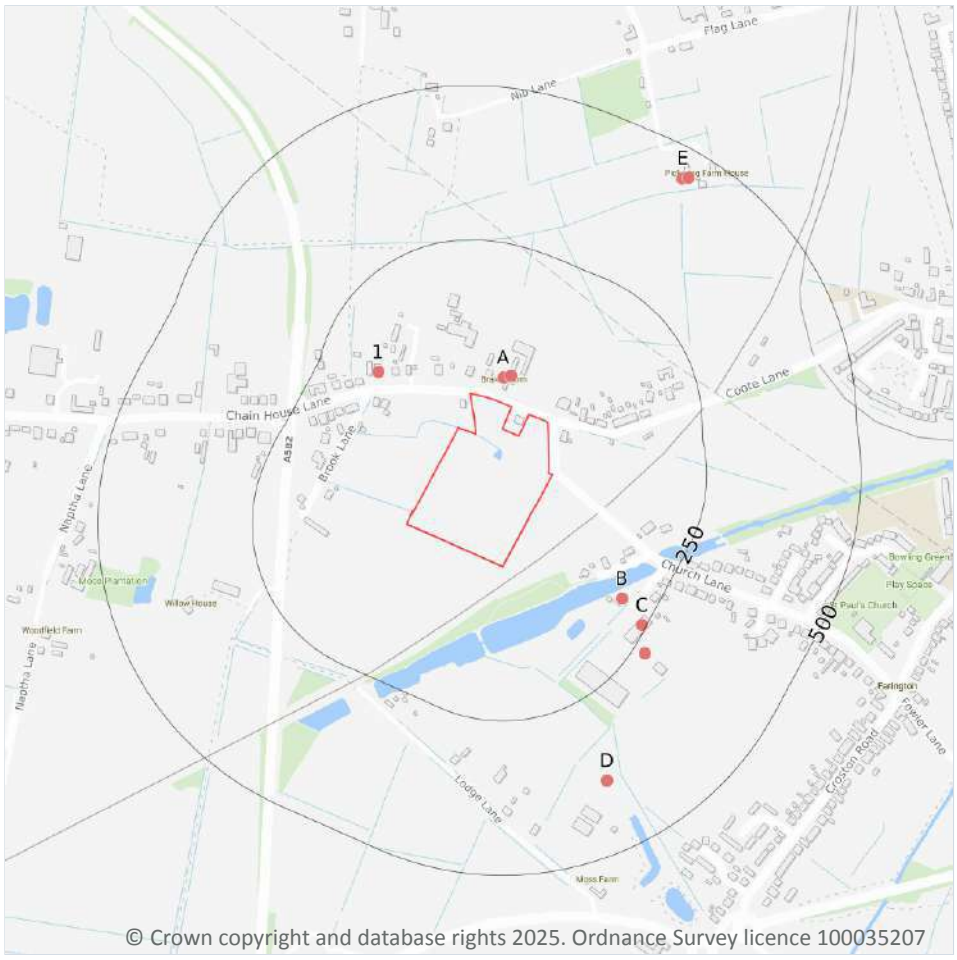
## 2.5 Historical garages

| Records within 500m | 0 |
|---|---|

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

# 3 Waste and landfill






Site Outline

Search buffers in metres (m)

Waste exemptions

## 3.1 Active or recent landfill

| Records within 500m | 0 |
|---|---|

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 3.2 Historical landfill (BGS records)

| Records within 500m | 0 |
|---|---|

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

*This data is sourced from the British Geological Survey.*

## 3.3 Historical landfill (LA/mapping records)

| Records within 500m | 0 |
|---|---|

Landfill sites identified from Local Authority records and high detail historical mapping.

*This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.*

## 3.4 Historical landfill (EA/NRW records)

| Records within 500m | 0 |
|---|---|

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 3.5 Historical waste sites

| Records within 500m | 0 |
|---|---|

Waste site records derived from Local Authority planning records and high detail historical mapping.

*This data is sourced from Ordnance Survey/Groundsure and Local Authority records.*

## 3.6 Licensed waste sites

| Records within 500m | 0 |
|---|---|

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 3.7 Waste exemptions

| Records within 500m | 21 |
|---|---|

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

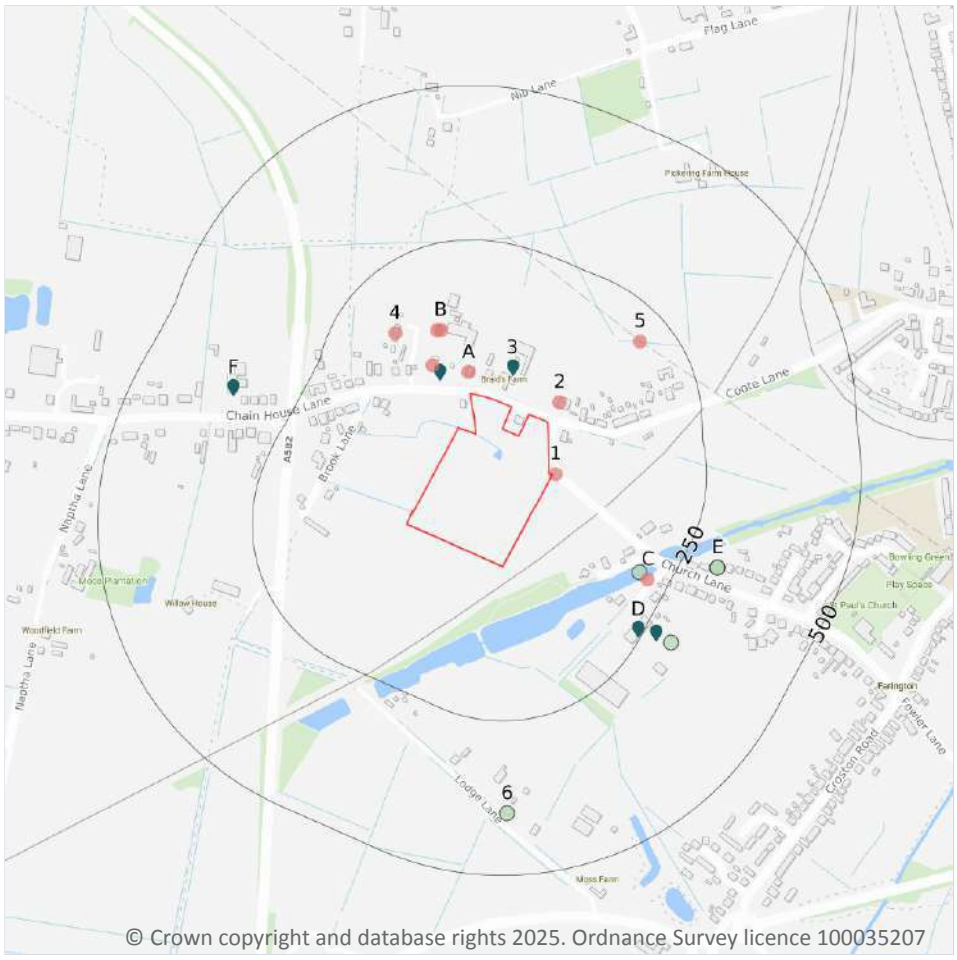
Features are displayed on the Waste and landfill map on **page 24 >**

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| A | 38m N | Braids Farm Chain House Lane Preston Pr4 4le | EPR/TE5283HU/A001 | Disposing of waste exemption | Agricultural waste only | Deposit of waste from dredging of inland waters |
| A | 38m N | Braids Farm Chain House Lane Preston Pr4 4le | EPR/TE5283HU/A001 | Disposing of waste exemption | Agricultural waste only | Burning waste in the open |
| A | 38m N | Braids Farm Chain House Lane Preston Pr4 4le | EPR/TE5283HU/A001 | Using waste exemption | Agricultural waste only | Use of waste to manufacture finished goods |
| A | 45m N | Braids Farm, Chain House Lane, Whitestake, Preston, Pr4 4le | WEX205652 | Disposing of waste exemption | On a farm | Burning waste in the open |
| A | 45m N | Braids Farm, Chain House Lane, Whitestake, Preston, Pr4 4le | WEX046280 | Disposing of waste exemption | On a farm | Burning waste in the open |
| 1 | 154m NW | 32, Chain House Lane, Whitestake, Preston, Pr4 4le | WEX234948 | Using waste exemption | On a farm | Use of waste in construction |
| B | 194m SE | - | WEX401844 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| B | 194m SE | - | WEX401844 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| B | 194m SE | - | WEX271785 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| B | 194m SE | - | WEX271785 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| C | 244m SE | Church Lane, Farington Moss, Leyland, Pr26 6rd | WEX131783 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| C | 269m SE | Bank Farm Strickens Lane Preston Pr3 1ue | EPR/RE5886FR/A001 | Disposing of waste exemption | Agricultural waste only | Deposit of agricultural waste consisting of plant tissue under a Plant Health notice |
| C | 269m SE | Bank Farm Strickens Lane Preston Pr3 1ue | EPR/RE5886FR/A001 | Disposing of waste exemption | Agricultural waste only | Burning waste in the open |
| C | 269m SE | Bank Farm Strickens Lane Preston Pr3 1ue | EPR/RE5886FR/A001 | Using waste exemption | Agricultural waste only | Use of waste for a specified purpose |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| C | 269m SE | Bank Farm Strickens Lane Preston Pr3 1ue | EPR/RE5886FR/A001 | Disposing of waste exemption | Agricultural waste only | Deposit of waste from dredging of inland waters |
| C | 269m SE | Bank Farm Strickens Lane Preston Pr3 1ue | EPR/RE5886FR/A001 | Treating waste exemption | Agricultural waste only | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| D | 386m S | - | WEX287750 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| D | 386m S | - | WEX416922 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| E | 451m NE | Langdale Flag Lane Preston Pr1 9tp | EPR/GF0204UD/A001 | Storing waste exemption | Non-agricultural waste only | Storage of waste in a secure place |
| E | 456m NE | Flag Lane, Penwortham, Preston, Pr1 9tp | WEX121734 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| E | 456m NE | - | WEX261420 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

# 4 Current industrial land use






Site Outline

Search buffers in metres (m)

Recent industrial land uses

Licensed pollutant release (Part A(2)/B)

Pollution Incidents (EA/NRW)

## 4.1 Recent industrial land uses

| Records within 250m | 9 |
|---|---|

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 28 >**

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 1 | 6m E | Gas Governor | Lancashire, PR4 | Gas Features | Infrastructure and Facilities |
| A | 36m N | Sharples Transport Ltd | Fairfield 18, Chain House Lane, Whitestake, Lancashire, PR4 4LE | Distribution and Haulage | Transport, Storage and Delivery |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 2 | 38m NE | Coote Lane Garage | Coote Lane Garage, Coote Lane, Lostock Hall, Lancashire, PR5 5JB | Vehicle Repair, Testing and Servicing | Repair and Servicing |
| A | 77m NW | W Welch Fencing | Chain House Lane, Whitestake, Preston, Lancashire, PR4 4LE | Fences, Gates and Railings | Industrial Products |
| B | 114m N | Tank | Lancashire, PR4 | Tanks (Generic) | Industrial Features |
| B | 117m N | Tank | Lancashire, PR4 | Tanks (Generic) | Industrial Features |
| 4 | 157m NW | Works | Lancashire, PR4 | Unspecified Works Or Factories | Industrial Features |
| 5 | 200m NE | Pylon | Lancashire, PR4 | Electrical Features | Infrastructure and Facilities |
| C | 217m SE | Electricity Sub Station | Lancashire, PR26 | Electrical Features | Infrastructure and Facilities |

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

| Records within 500m | 0 |
|---|---|

Open, closed, under development and obsolete petrol stations.

*This data is sourced from Experian.*

## 4.3 Electricity cables

| Records within 500m | 0 |
|---|---|

High voltage underground electricity transmission cables.

*This data is sourced from National Grid.*

## 4.4 Gas pipelines

| Records within 500m | 0 |
|---|---|

High pressure underground gas transmission pipelines.

*This data is sourced from National Grid.*

## 4.5 Sites determined as Contaminated Land

| Records within 500m | 0 |
|---|---|

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

*This data is sourced from Local Authority records.*

## 4.6 Control of Major Accident Hazards (COMAH)

| Records within 500m | 0 |
|---|---|

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

*This data is sourced from the Health and Safety Executive.*

## 4.7 Regulated explosive sites

| Records within 500m | 0 |
|---|---|

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

*This data is sourced from the Health and Safety Executive.*

## 4.8 Hazardous substance storage/usage

| Records within 500m | 0 |
|---|---|

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

*This data is sourced from Local Authority records.*

## 4.9 Historical licensed industrial activities (IPC)

| Records within 500m | 0 |
|---|---|

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.10 Licensed industrial activities (Part A(1))

| Records within 500m | 0 |
|---|---|

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.11 Licensed pollutant release (Part A(2)/B)

| Records within 500m | 6 |
|---|---|

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 28 >**

| ID | Location | Address | Details | |
|---|---|---|---|---|
| 3 | 59m N | W Welch, Arden Lee, 22 Chain House Lane, Whitestake, Preston, Lancashire, PR4 4LE | Process: Other Mineral Processes<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcements Notified<br>Date of enforcement: No Enforcements Notified<br>Comment: No Enforcements Notified |
| A | 60m NW | W Welch Arden Lee, Chainhouse Lane, Whitestake, PR4 4LE | Process: Use of Bulk Cement<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcements Notified<br>Date of enforcement: No Enforcements Notified<br>Comment: No Enforcements Notified |
| D | 241m SE | Whitfires Sawdust and Shavings Ltd, Heathfield Works, Church Lane, Farington, PR5 3RD | Process: Timber Manufacture<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: Breach of contract<br>Date of enforcement: No Details<br>Comment: These have now largely been resolved |
| D | 270m SE | Farington Wood Machinery, Whitfire Wks, Church Lane, PR5 3RD | Process: Timber Manufacture<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcements Notified<br>Date of enforcement: No Enforcements Notified<br>Comment: No Enforcements Notified |
| F | 353m W | Bambers Frozen Meats, Chainhouse Lane, PR4 4LD | Process: Pet Food Manufacture<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcements Notified<br>Date of enforcement: No Enforcements Notified<br>Comment: No Enforcements Notified |
| F | 353m W | F W Bamber Ltd, 60 Chain House Lane, Whitestake, Preston, Lancashire, PR4 4LD | Process: Animal and Plant/Vegetable Processes<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcements Notified<br>Date of enforcement: No Enforcements Notified<br>Comment: No Enforcements Notified |

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

| Records within 500m | 0 |
|---|---|

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.13 Licensed Discharges to controlled waters

| Records within 500m | 0 |
|---|---|

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.14 Pollutant release to surface waters (Red List)

| Records within 500m | 0 |
|---|---|

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.15 Pollutant release to public sewer

| Records within 500m | 0 |
|---|---|

Discharges of Special Category Effluents to the public sewer.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.16 List 1 Dangerous Substances

| Records within 500m | 0 |
|---|---|

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.17 List 2 Dangerous Substances

| Records within 500m | 0 |
|---|---|

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.18 Pollution Incidents (EA/NRW)

| Records within 500m | 5 |
|---|---|

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 28 >**

| ID | Location | Details | |
|---|---|---|---|
| C | 199m SE | Incident Date: 28/06/2003<br>Incident Identification: 169545<br>Pollutant: Oils and Fuel<br>Pollutant Description: Diesel | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| D | 298m SE | Incident Date: 21/06/2016<br>Incident Identification: 1445644<br>Pollutant: Contaminated Water<br>Pollutant Description: Firefighting Run-Off | Water Impact: Category 1 (Major)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 307m E | Incident Date: 30/03/2011<br>Incident Identification: 871308<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 2 (Significant) |
| E | 307m E | Incident Date: 20/03/2011<br>Incident Identification: 867474<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 2 (Significant) |
| 6 | 400m S | Incident Date: 21/03/2011<br>Incident Identification: 867733<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 2 (Significant) |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.19 Pollution inventory substances

| Records within 500m | 0 |
|---|---|

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*

## 4.20 Pollution inventory waste transfers

| Records within 500m | 0 |
|---|---|

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*

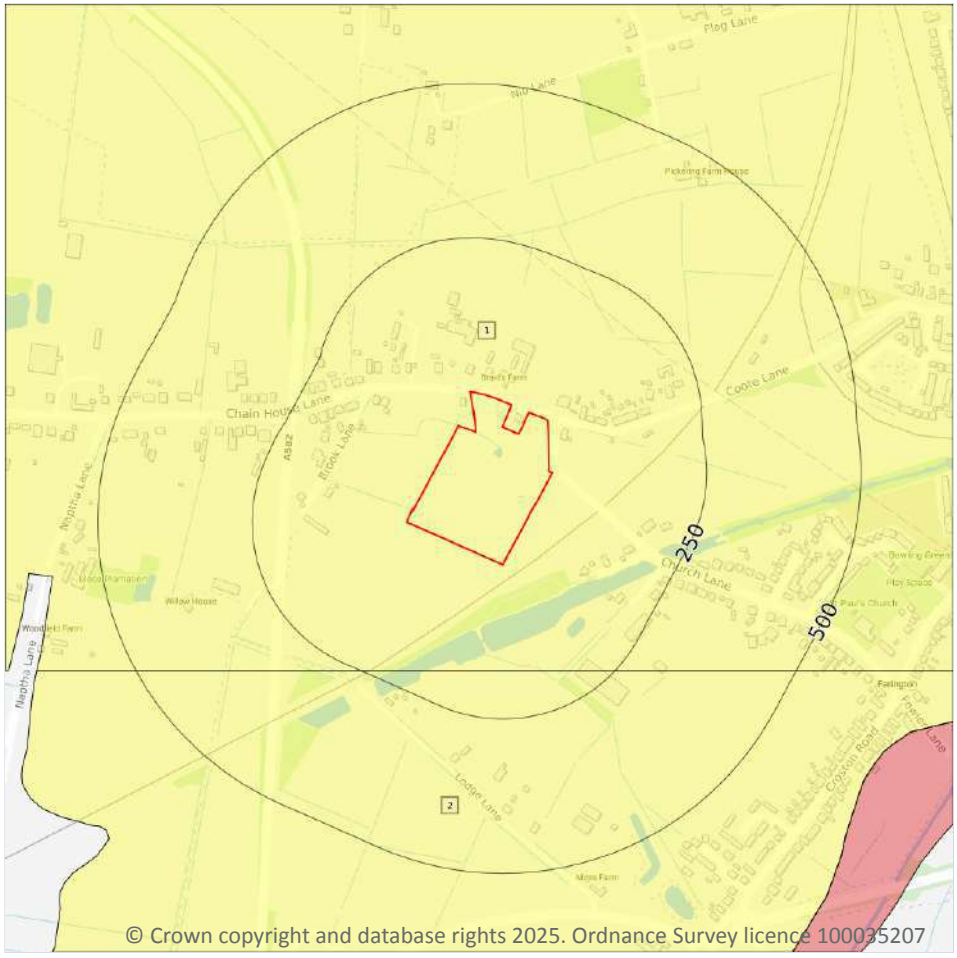
## 4.21 Pollution inventory radioactive waste

| Records within 500m | 0 |
|---|---|

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*

# 5 Hydrogeology - Superficial aquifer




## 5.1 Superficial aquifer

| Records within 500m | 2 |
|---|---|

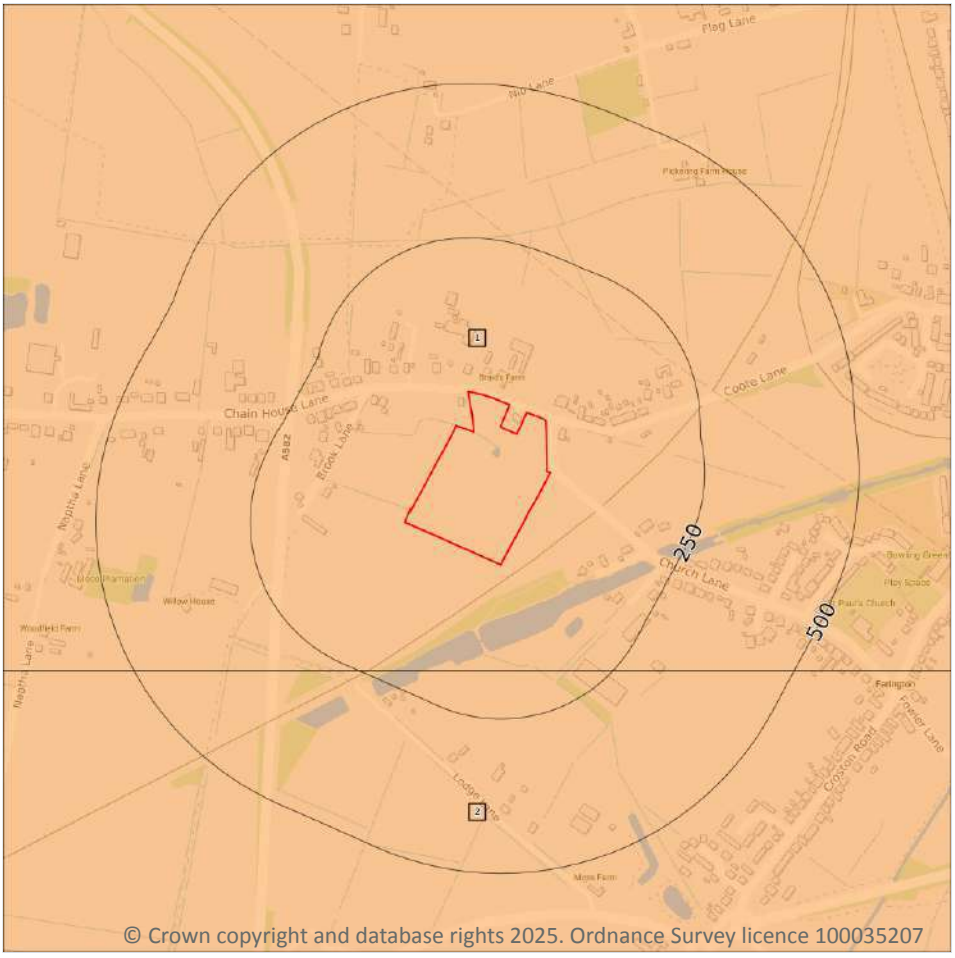
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 35 >**

| ID | Location | Designation | Description |
|---|---|---|---|
| **1** | **On site** | **Secondary Undifferentiated** | **Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type** |
| 2 | 171m S | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*

# Bedrock aquifer




Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

## 5.2 Bedrock aquifer

| Records within 500m | 2 |
|---|---|

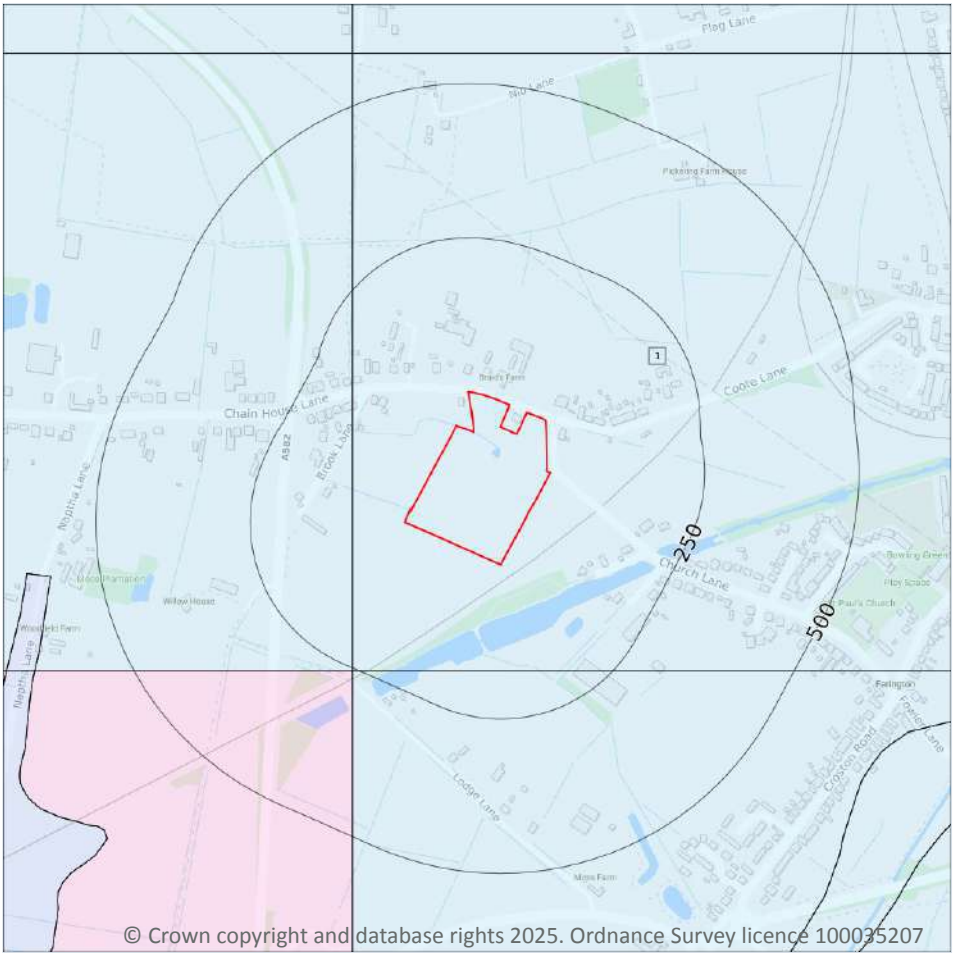
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 37 >**

| ID | Location | Designation | Description |
|---|---|---|---|
| **1** | **On site** | **Secondary B** | **Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers** |
| 2 | 171m S | Secondary B | Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers |

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*

# Groundwater vulnerability




Site Outline

Search buffers in metres (m)

Superficial vulnerability
- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability
- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information
- Unproductive aquifer
- Soluble rock risk
- Local information

## 5.3 Groundwater vulnerability

| Records within 50m | 1 |
|---|---|

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 39 >**

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| 1 | On site | **Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer** | **Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year** | **Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*

## 5.4 Groundwater vulnerability- soluble rock risk

| Records on site | 0 |
|---|---|

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

*This data is sourced from the British Geological Survey and the Environment Agency.*

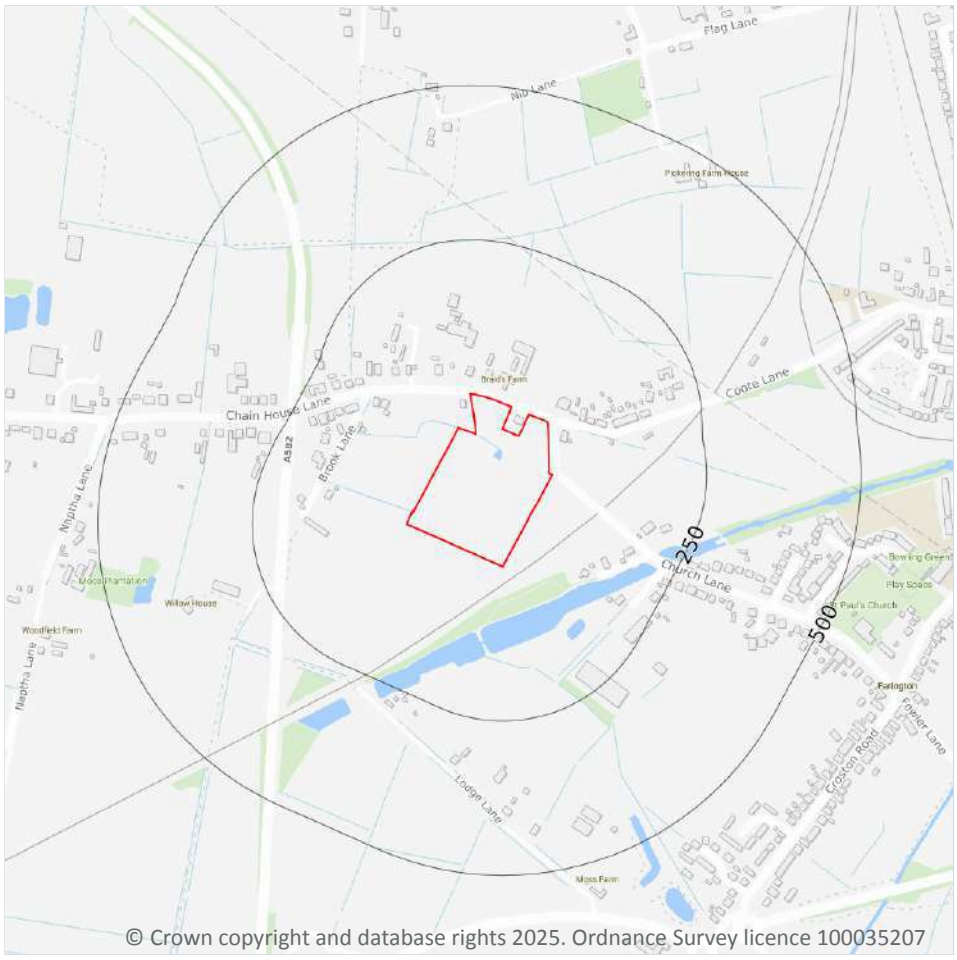
## 5.5 Groundwater vulnerability- local information

| Records on site | 0 |
|---|---|

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

*This data is sourced from the British Geological Survey and the Environment Agency.*

# Abstractions and Source Protection Zones




Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

## 5.6 Groundwater abstractions

| Records within 2000m | 21 |
|---|---|

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 41 >**

| ID | Location | Details | |
|---|---|---|---|
| - | 970m SW | Status: Historical<br>Licence No: 2670214004<br>Details: Spray Irrigation - Direct<br>Direct Source: Ground Water - North West Region<br>Point: TWO BOREHOLES AT FARINGTON<br>Data Type: Point<br>Name: COXHEAD<br>Easting: 352600<br>Northing: 424400 | Annual Volume ($m^3$): 38230<br>Max Daily Volume ($m^3$): 261.85<br>Original Application No: -<br>Original Start Date: 21/07/1978<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 23/08/1994<br>Version End Date: - |
| - | 1015m S | Status: Active<br>Licence No: 2670212001<br>Details: Process Water<br>Direct Source: Ground Water - North West Region<br>Point: WELL IN UNDERGROUND STRATA AT FARINGTON NEAR LOSTOCK HALL<br>Data Type: Point<br>Name: LANCASHIRE COUNTY ENTERPRISES (INDUSTRIAL DEVELOPMENT) LTD<br>Easting: 353620<br>Northing: 424230 | Annual Volume ($m^3$): 309128<br>Max Daily Volume ($m^3$): 1031.94<br>Original Application No: 3132<br>Original Start Date: 21/01/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 05/07/2002<br>Version End Date: - |
| - | 1015m S | Status: Historical<br>Licence No: 2670212001<br>Details: Process water<br>Direct Source: Ground Water - North West Region<br>Point: "WELL IN UNDERGROUND STRATA AT FARINGTON,NR LOSTOCK HAL"<br>Data Type: Point<br>Name: LANCASHIRE COUNTY ENTERPRISES (INDUSTRIAL DEVELOPMENT) LTD<br>Easting: 353620<br>Northing: 424230 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 21/01/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 05/07/2002<br>Version End Date: - |
| - | 1015m S | Status: Historical<br>Licence No: 2670212001<br>Details: Process water<br>Direct Source: Ground Water - North West Region<br>Point: WELL IN UNDERGROUND STRATA AT FARINGTON,NR LOSTOCK HAL<br>Data Type: Point<br>Name: LANCASHIRE COUNTY ENTERPRISES (INDUSTRIAL DEVELOPMENT) LTD<br>Easting: 353620<br>Northing: 424230 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 21/01/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 05/07/2002<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1273m W | Status: Historical<br>Licence No: 2670215012<br>Details: Transfer between sources<br>Direct Source: Ground Water - North West Region<br>Point: UNDERGROUND STRATA IN WHITESTAKE PRESTON<br>Data Type: Point<br>Name: COXHEAD<br>Easting: 351870<br>Northing: 424860 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 11/06/1996<br>Expiry Date: 11/06/2004<br>Issue No: 100<br>Version Start Date: 11/06/1996<br>Version End Date: - |
| - | 1273m W | Status: Historical<br>Licence No: 2670215012/R1<br>Details: Transfer between sources<br>Direct Source: Ground Water - North West Region<br>Point: UNDERGROUND STRATA IN WHITESTAKE PRESTON<br>Data Type: Point<br>Name: P B, P & P J COXHEAD T/A J C'S COUNTRY FRESH PRODUCE<br>Easting: 351870<br>Northing: 424860 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/05/2004<br>Expiry Date: 31/03/2016<br>Issue No: 2<br>Version Start Date: 17/05/2004<br>Version End Date: - |
| - | 1273m W | Status: Historical<br>Licence No: 2670215012/R1<br>Details: Transfer Between Sources (Pre Water Act 2003)<br>Direct Source: Ground Water - North West Region<br>Point: UNDERGROUND STRATA IN WHITESTAKE PRESTON<br>Data Type: Point<br>Name: P B P & P J COXHEAD T/A J C'S COUNTRY FRESH PRODUCE<br>Easting: 351870<br>Northing: 424860 | Annual Volume ($m^3$): 98000<br>Max Daily Volume ($m^3$): 700<br>Original Application No: -<br>Original Start Date: 17/05/2004<br>Expiry Date: 31/03/2016<br>Issue No: 2<br>Version Start Date: 01/04/2006<br>Version End Date: - |
| - | 1281m W | Status: Active<br>Licence No: NW/070/0205/001<br>Details: Transfer Between Sources (Post Water Act 2003)<br>Direct Source: Ground Water - North West Region<br>Point: GREENFIELDS, PARKER LANE, WHITESTAKE, PRESTON<br>Data Type: Point<br>Name: Country Fresh Produce Limited<br>Easting: 351875<br>Northing: 424820 | Annual Volume ($m^3$): 120000<br>Max Daily Volume ($m^3$): 700<br>Original Application No: NPS/WR/025611<br>Original Start Date: 26/09/2017<br>Expiry Date: 31/03/2028<br>Issue No: 1<br>Version Start Date: 26/09/2017<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1281m W | Status: Active<br>Licence No: NW/070/0205/001<br>Details: Spray Irrigation - Direct<br>Direct Source: Ground Water - North West Region<br>Point: GREENFIELDS, PARKER LANE, WHITESTAKE, PRESTON<br>Data Type: Point<br>Name: Country Fresh Produce Limited<br>Easting: 351875<br>Northing: 424820 | Annual Volume ($m^3$): 120000<br>Max Daily Volume ($m^3$): 700<br>Original Application No: NPS/WR/025611<br>Original Start Date: 26/09/2017<br>Expiry Date: 31/03/2028<br>Issue No: 1<br>Version Start Date: 26/09/2017<br>Version End Date: - |
| - | 1281m W | Status: Active<br>Licence No: NW/070/0205/001<br>Details: Spray Irrigation - Storage<br>Direct Source: Ground Water - North West Region<br>Point: GREENFIELDS, PARKER LANE, WHITESTAKE, PRESTON<br>Data Type: Point<br>Name: Country Fresh Produce Limited<br>Easting: 351875<br>Northing: 424820 | Annual Volume ($m^3$): 120000<br>Max Daily Volume ($m^3$): 700<br>Original Application No: NPS/WR/025611<br>Original Start Date: 26/09/2017<br>Expiry Date: 31/03/2028<br>Issue No: 1<br>Version Start Date: 26/09/2017<br>Version End Date: - |
| - | 1599m SE | Status: Historical<br>Licence No: 2670212007<br>Details: Boiler Feed<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT CENTURION WAY,FARINGTON<br>Data Type: Point<br>Name: DUNLOP ENERKA BELTING LTD<br>Easting: 354210<br>Northing: 423900 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 18/03/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 17/07/1998<br>Version End Date: - |
| - | 1599m SE | Status: Historical<br>Licence No: 2670212007<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT CENTURION WAY,FARINGTON<br>Data Type: Point<br>Name: DUNLOP ENERKA BELTING LTD<br>Easting: 354210<br>Northing: 423900 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 18/03/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 17/07/1998<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1797m SE | Status: Historical<br>Licence No: 2670212007<br>Details: Boiler Feed<br>Direct Source: Ground Water - North West Region<br>Point: RESERVOIR AT CENTURION WAY FED BY TWO BOREHOLES INTO U/GRO<br>Data Type: Point<br>Name: DUNLOP ENERKA BELTING LTD<br>Easting: 354510<br>Northing: 423900 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 18/03/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 17/07/1998<br>Version End Date: - |
| - | 1797m SE | Status: Historical<br>Licence No: 2670212007<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: Ground Water - North West Region<br>Point: "BOREHOLE AT CENTURION WAY, FARINGTON"<br>Data Type: Point<br>Name: HIFLEX FLUID HANDLING GROUP LIMITED<br>Easting: 354510<br>Northing: 423900 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 18/03/1966<br>Expiry Date: -<br>Issue No: 102<br>Version Start Date: 11/04/2002<br>Version End Date: - |
| - | 1797m SE | Status: Historical<br>Licence No: 2670212007<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: Ground Water - North West Region<br>Point: RESERVOIR AT CENTURION WAY FED BY TWO BOREHOLES INTO U/GRO<br>Data Type: Point<br>Name: HIFLEX FLUID HANDLING GROUP LIMITED<br>Easting: 354510<br>Northing: 423900 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 18/03/1966<br>Expiry Date: -<br>Issue No: 102<br>Version Start Date: 11/04/2002<br>Version End Date: - |
| - | 1797m SE | Status: Historical<br>Licence No: 2670212007<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT CENTURION WAY, FARINGTON<br>Data Type: Point<br>Name: HIFLEX FLUID HANDLING GROUP LIMITED<br>Easting: 354510<br>Northing: 423900 | Annual Volume ($m^3$): 219026<br>Max Daily Volume ($m^3$): 600.07<br>Original Application No: -<br>Original Start Date: 18/03/1966<br>Expiry Date: -<br>Issue No: 102<br>Version Start Date: 11/04/2002<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1797m SE | Status: Historical<br>Licence No: 2670212007<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: Ground Water - North West Region<br>Point: RESERVOIR AT CENTURION WAY FED BY 2 BOREHOLES<br>Data Type: Point<br>Name: HIFLEX FLUID HANDLING GROUP LIMITED<br>Easting: 354510<br>Northing: 423900 | Annual Volume ($m^3$): 219026<br>Max Daily Volume ($m^3$): 600.07<br>Original Application No: -<br>Original Start Date: 18/03/1966<br>Expiry Date: -<br>Issue No: 102<br>Version Start Date: 11/04/2002<br>Version End Date: - |
| - | 1843m SW | Status: Active<br>Licence No: 2670215011/R02<br>Details: Transfer Between Sources (Post Water Act 2003)<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT WHITESTAKE, PRESTON<br>Data Type: Point<br>Name: E N COXHEAD LIMITED<br>Easting: 351380<br>Northing: 424540 | Annual Volume ($m^3$): 36363<br>Max Daily Volume ($m^3$): 382<br>Original Application No: NPS/WR/019243<br>Original Start Date: 01/04/2016<br>Expiry Date: 31/03/2028<br>Issue No: 1<br>Version Start Date: 01/04/2020<br>Version End Date: - |
| - | 1843m SW | Status: Historical<br>Licence No: 2670215011<br>Details: Spray Irrigation - Direct<br>Direct Source: Ground Water - North West Region<br>Point: "BOREHOLE AT WHITESTAKE, PRESTON"<br>Data Type: Point<br>Name: E N COXHEAD LIMITED<br>Easting: 351380<br>Northing: 424540 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 11/06/1996<br>Expiry Date: 11-Jun-04<br>Issue No: 102<br>Version Start Date: 27/05/2000<br>Version End Date: - |
| - | 1843m SW | Status: Historical<br>Licence No: 2670215011<br>Details: Spray Irrigation - Direct<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT WHITESTAKE, PRESTON<br>Data Type: Point<br>Name: E N COXHEAD LIMITED<br>Easting: 351380<br>Northing: 424540 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 11/06/1996<br>Expiry Date: 11/06/2004<br>Issue No: 102<br>Version Start Date: 27/05/2000<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1843m SW | Status: Historical<br>Licence No: 2670215011/R1<br>Details: Transfer Between Sources (Pre Water Act 2003)<br>Direct Source: Ground Water - North West Region<br>Point: BOREHOLE AT WHITESTAKE, PRESTON<br>Data Type: Point<br>Name: E N COXHEAD LIMITED<br>Easting: 351380<br>Northing: 424540 | Annual Volume ($m^3$): 36363<br>Max Daily Volume ($m^3$): 382<br>Original Application No: -<br>Original Start Date: 12/05/2004<br>Expiry Date: 31/03/2016<br>Issue No: 1<br>Version Start Date: 01/04/2006<br>Version End Date: - |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.7 Surface water abstractions

**Records within 2000m** **13**

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 41 >**

| ID | Location | Details | |
|---|---|---|---|
| - | 1193m W | Status: Historical<br>Licence No: 2670215005<br>Details: Spray Irrigation - Direct<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: UNNAMED WATERCOURSE AT FARINGTON<br>Data Type: Point<br>Name: COXHEAD<br>Easting: 351900<br>Northing: 425100 | Annual Volume ($m^3$): 9092<br>Max Daily Volume ($m^3$): 654.624<br>Original Application No: -<br>Original Start Date: 09/03/1979<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 26/11/2018<br>Version End Date: - |
| - | 1200m S | Status: Historical<br>Licence No: 2670212016<br>Details: General use relating to Secondary Category (Medium Loss)<br>Direct Source: "Surface, Non-Tidal - North West Region"<br>Point: "R LOSTOCK AT SPURRIER WORKS,LEYLAND"<br>Data Type: Point<br>Name: LANCASHIRE COUNTY ENTERPRISES (INDUSTRIAL DEVELOPMENT) LTD<br>Easting: 353500<br>Northing: 424000 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 04/07/1969<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 05/07/2002<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1200m S | Status: Historical<br>Licence No: 2670212016<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: "Surface, Non-Tidal - North West Region"<br>Point: "R LOSTOCK AT SPURRIER WORKS,LEYLAND"<br>Data Type: Point<br>Name: LANCASHIRE COUNTY ENTERPRISES (INDUSTRIAL DEVELOPMENT) LTD<br>Easting: 353500<br>Northing: 424000 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 04/07/1969<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 05/07/2002<br>Version End Date: - |
| - | 1200m S | Status: Historical<br>Licence No: 2670212016<br>Details: General Use Relating To Secondary Category (Medium Loss)<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: R LOSTOCK AT SPURRIER WORKS,LEYLAND<br>Data Type: Point<br>Name: LANCASHIRE COUNTY ENTERPRISES (INDUSTRIAL DEVELOPMENT) LTD<br>Easting: 353500<br>Northing: 424000 | Annual Volume ($m^3$): 363680<br>Max Daily Volume ($m^3$): 1136.5<br>Original Application No: -<br>Original Start Date: 04/07/1969<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 05/07/2002<br>Version End Date: - |
| - | 1200m S | Status: Historical<br>Licence No: 2670212016<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: R LOSTOCK AT SPURRIER WORKS,LEYLAND<br>Data Type: Point<br>Name: LANCASHIRE COUNTY ENTERPRISES (INDUSTRIAL DEVELOPMENT) LTD<br>Easting: 353500<br>Northing: 424000 | Annual Volume ($m^3$): 363680<br>Max Daily Volume ($m^3$): 1336.50<br>Original Application No: 4741<br>Original Start Date: 04/07/1969<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 01/04/2019<br>Version End Date: - |
| - | 1200m S | Status: Historical<br>Licence No: 2670212016<br>Details: Process Water<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: R LOSTOCK AT SPURRIER WORKS,LEYLAND<br>Data Type: Point<br>Name: LANCASHIRE COUNTY ENTERPRISES (INDUSTRIAL DEVELOPMENT) LTD<br>Easting: 353500<br>Northing: 424000 | Annual Volume ($m^3$): 363680<br>Max Daily Volume ($m^3$): 1336.50<br>Original Application No: 4741<br>Original Start Date: 04/07/1969<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 01/04/2019<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1706m SW | Status: Historical<br>Licence No: 2670214003<br>Details: Spray Irrigation - Direct<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: UNNAMED WATERCOURSES AT FARINGTON<br>Data Type: Line<br>Name: COXHEAD<br>Easting: 351600<br>Northing: 424400 | Annual Volume ($m^3$): 57675<br>Max Daily Volume ($m^3$): 450<br>Original Application No: -<br>Original Start Date: 28/10/1977<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 28/10/1977<br>Version End Date: - |
| - | 1790m SE | Status: Historical<br>Licence No: 2670212018<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: "Surface, Non-Tidal - North West Region"<br>Point: "HOT WELL ADJ TO STORAGE RES@ CENTURION WAY,FARINGTON,LEYLAND"<br>Data Type: Point<br>Name: HIFLEX FLUID HANDLING GROUP LIMITED<br>Easting: 354500<br>Northing: 423900 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 27/11/1974<br>Expiry Date: -<br>Issue No: 102<br>Version Start Date: 22/11/2001<br>Version End Date: - |
| - | 1790m SE | Status: Historical<br>Licence No: 2670212018<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: HOT WELL ADJ TO STORAGE RES@ CENTURION WAY,FARINGTON,LEYLAND<br>Data Type: Point<br>Name: LANCASHIRE PROPERTY MANAGEMENT LTD<br>Easting: 354500<br>Northing: 423900 | Annual Volume ($m^3$): 5000600<br>Max Daily Volume ($m^3$): 16365.6<br>Original Application No: -<br>Original Start Date: 27/11/1974<br>Expiry Date: -<br>Issue No: 103<br>Version Start Date: 23/12/2003<br>Version End Date: - |
| - | 1794m SW | Status: Historical<br>Licence No: 2670214003<br>Details: Spray Irrigation - Direct<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: UNNAMED WATERCOURSES AT FARINGTON 282<br>Data Type: Point<br>Name: COXHEAD<br>Easting: 351700<br>Northing: 424100 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 28/10/1977<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 28/10/1977<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1794m SW | Status: Historical<br>Licence No: 2670214003<br>Details: Spray Irrigation - Direct<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: UNNAMED WATERCOURSES AT FARINGTON $282<br>Data Type: Point<br>Name: COXHEAD<br>Easting: 351700<br>Northing: 424100 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 28/10/1977<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 28/10/1977<br>Version End Date: - |
| - | 1794m SW | Status: Historical<br>Licence No: 2670214003<br>Details: Spray Irrigation - Direct<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: UNNAMED WATERCOURSES AT FARINGTON<br>Data Type: Point<br>Name: COXHEAD<br>Easting: 351700<br>Northing: 424100 | Annual Volume ($m^3$): 57675<br>Max Daily Volume ($m^3$): 450<br>Original Application No: -<br>Original Start Date: 28/10/1977<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 28/10/1977<br>Version End Date: - |
| - | 1979m SE | Status: Historical<br>Licence No: 2670212017<br>Details: General Cooling (Existing Licences Only) (Low Loss)<br>Direct Source: Surface, Non-Tidal - North West Region<br>Point: HIGH ASH RESERVOIR AT LEYLAND<br>Data Type: Point<br>Name: LANCASHIRE COUNTY ENTERPRISES (INDUSTRIAL DEVELOPMENT) LTD<br>Easting: 354300<br>Northing: 423500 | Annual Volume ($m^3$): 181840<br>Max Daily Volume ($m^3$): 1145.59<br>Original Application No: 4924<br>Original Start Date: 10/04/1974<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 05/07/2002<br>Version End Date: - |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.8 Potable abstractions

| Records within 2000m | 0 |
|---|---|

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.9 Source Protection Zones

| Records within 500m | 0 |
|---|---|

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

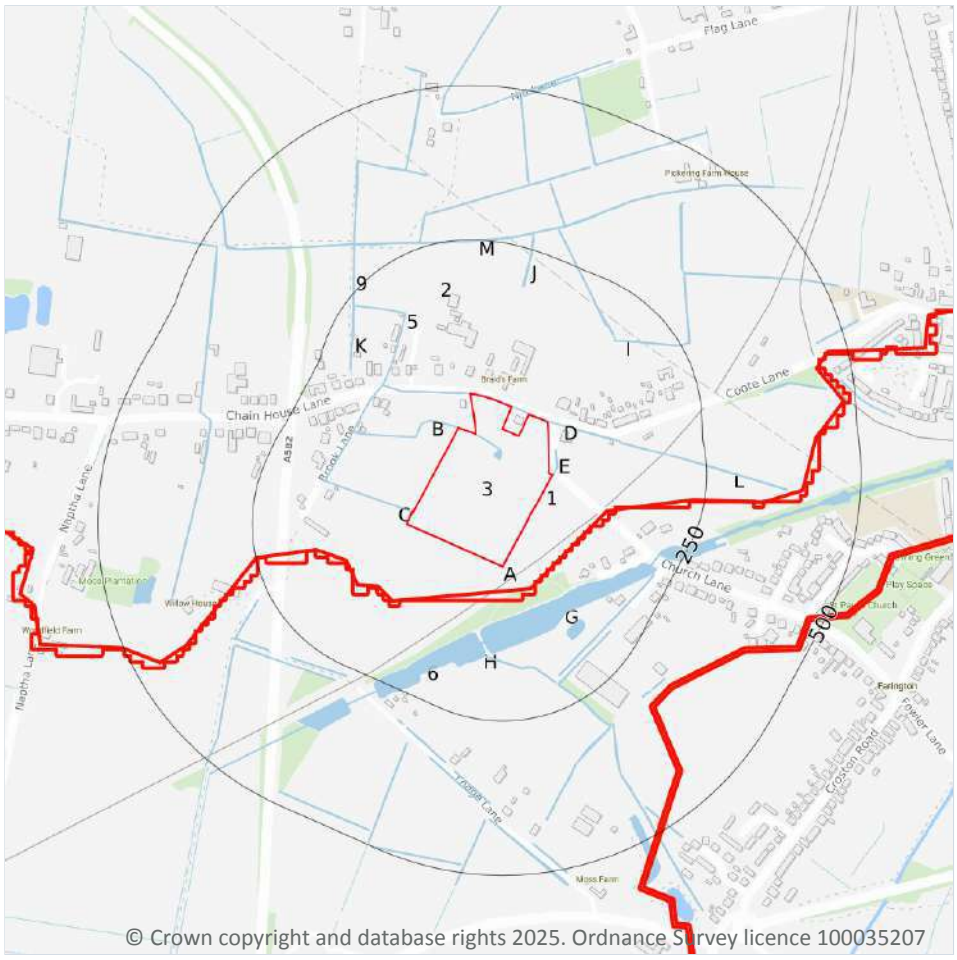
## 5.10 Source Protection Zones (confined aquifer)

| Records within 500m | 0 |
|---|---|

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

# 6 Hydrology






Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

## 6.1 Water Network (OS MasterMap)

| Records within 250m | 52 |
|---|---|

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 52 >**

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| 1 | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | - |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| **A** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **A** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **B** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **Mill Brook** |
| **C** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| D | 1m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | 1m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | 1m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | 1m N | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| D | 1m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | 2m N | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| D | 4m N | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| D | 5m NE | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| D | 10m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| D | 10m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| E | 11m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | 50m NW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| D | 50m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | 67m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | 87m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 101m S | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | 109m NW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| 5 | 136m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Mill Brook |
| D | 136m NW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | Mill Brook |
| D | 141m NW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | Mill Brook |
| 6 | 143m S | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| H | 143m S | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| D | 148m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Mill Brook |
| H | 148m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| H | 148m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | 156m E | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| I | 172m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 187m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| J | 190m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 190m SE | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| G | 194m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 197m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| K | 198m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 199m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 199m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| L | 202m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 208m SE | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| G | 210m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 210m SE | Lake, loch or reservoir. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| G | 214m E | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 215m SE | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 219m SE | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| G | 220m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 9 | 237m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Mill Brook |
| G | 247m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| M | 247m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 248m E | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |

*This data is sourced from the Ordnance Survey.*

## 6.2 Surface water features

| Records within 250m | 29 |
|---|---|

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 52 >**

*This data is sourced from the Ordnance Survey.*

## 6.3 WFD Surface water body catchments

| Records on site | 1 |
|---|---|

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 52 >**

| ID | Location | Type | Water body catchment | Water body ID | Operational catchment | Management catchment |
|---|---|---|---|---|---|---|
| **2** | **On site** | **Coastal Catchment** | **Not part of a river WB catchment** | **175** | **Douglas OC** | **Douglas** |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 6.4 WFD Surface water bodies

| Records identified | 0 |
|---|---|

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 6.5 WFD Groundwater bodies

| Records on site | 1 |
|---|---|

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 52 >**

| ID | Location | Name | Water body ID | Overall rating | Chemical rating | Quantitative | Year |
|---|---|---|---|---|---|---|---|
| **3** | **On site** | **West Lancashire Quaternary Sand and Gravel Aquifers** | **GB41202G912700** ↗ | **Good** | **Good** | **Good** | **2019** |

*This data is sourced from the Environment Agency and Natural Resources Wales.*

# 7 River and coastal flooding

## 7.1 Risk of flooding from rivers and the sea

| Records within 50m | 0 |
|---|---|

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.2 Historical Flood Events

| Records within 250m | 0 |
|---|---|

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.3 Flood Defences

| Records within 250m | 0 |
|---|---|

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.4 Areas Benefiting from Flood Defences

| Records within 250m | 0 |
|---|---|

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.5 Flood Storage Areas

| Records within 250m | 0 |
|---|---|

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

# River and coastal flooding - Flood Zones

## 7.6 Flood Zone 2

| Records within 50m | 0 |
|---|---|

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

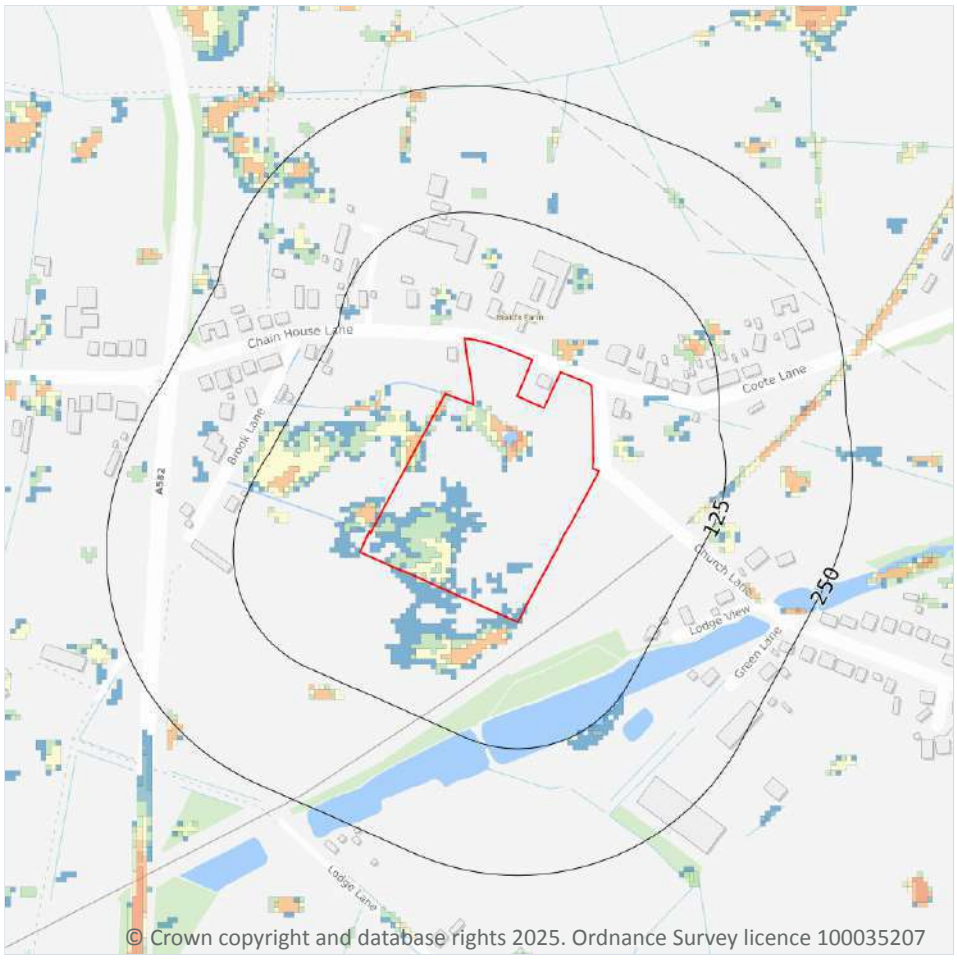
## 7.7 Flood Zone 3

| Records within 50m | 0 |
|---|---|

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

# 8 Surface water flooding




Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

## 8.1 Surface water flooding

| | |
|---|---|
| **Highest risk on site** | **1 in 30 year, 0.3m - 1.0m** |
| **Highest risk within 50m** | **1 in 30 year, 0.3m - 1.0m** |

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 62 >**

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

| Return period | Maximum modelled depth |
|---|---|
| 1 in 1000 year | Between 0.3m and 1.0m |
| 1 in 250 year | Between 0.3m and 1.0m |
| 1 in 100 year | Between 0.3m and 1.0m |
| 1 in 30 year | Between 0.3m and 1.0m |

*This data is sourced from Ambiental Risk Analytics.*

# 9 Groundwater flooding


Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

## 9.1 Groundwater flooding

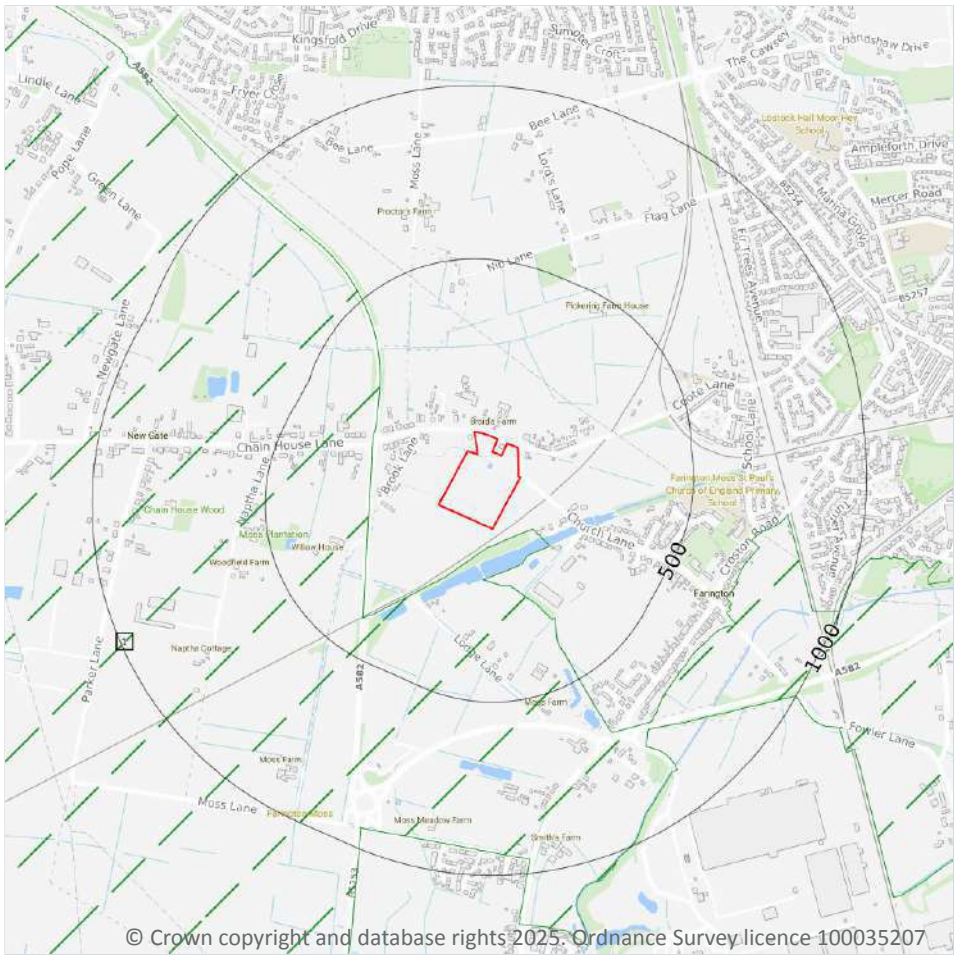
| | |
|---|---|
| **Highest risk on site** | **Low** |
| **Highest risk within 50m** | **Low** |

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 64 >**

*This data is sourced from Ambiental Risk Analytics.*

# 10 Environmental designations






Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

Green Belt

## 10.1 Sites of Special Scientific Interest (SSSI)

| Records within 2000m | 0 |
|---|---|

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.2 Conserved wetland sites (Ramsar sites)

| Records within 2000m | 0 |
|---|---|

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.3 Special Areas of Conservation (SAC)

| Records within 2000m | 0 |
|---|---|

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.4 Special Protection Areas (SPA)

| Records within 2000m | 0 |
|---|---|

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.5 National Nature Reserves (NNR)

| Records within 2000m | 0 |
|---|---|

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.6 Local Nature Reserves (LNR)

| Records within 2000m | 2 |
|---|---|

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

Features are displayed on the Environmental designations map on **page 65 >**

| ID | Location | Name | Data source |
|---|---|---|---|
| - | 1841m NE | Preston Junction | Natural England |
| - | 1953m E | Preston Junction | Natural England |

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.7 Designated Ancient Woodland

| Records within 2000m | 0 |
|---|---|

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.8 Biosphere Reserves

| Records within 2000m | 0 |
|---|---|

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.9 Forest Parks

| Records within 2000m | 0 |
|---|---|

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

*This data is sourced from the Forestry Commission.*

## 10.10 Marine Conservation Zones

| Records within 2000m | 0 |
|---|---|

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.11 Green Belt

| Records within 2000m | 1 |
|---|---|

Areas designated to prevent urban sprawl by keeping land permanently open.

Features are displayed on the Environmental designations map on **page 65 >**

| ID | Location | Name | Local Authority name |
|---|---|---|---|
| 1 | 45m S | Merseyside and Greater Manchester Green Belt | South Ribble |

*This data is sourced from the Ministry of Housing, Communities and Local Government.*

## 10.12 Proposed Ramsar sites

| Records within 2000m | 0 |
|---|---|

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

*This data is sourced from Natural England.*

## 10.13 Possible Special Areas of Conservation (pSAC)

| Records within 2000m | 0 |
|---|---|

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

*This data is sourced from Natural England and Natural Resources Wales.*

## 10.14 Potential Special Protection Areas (pSPA)

| Records within 2000m | 0 |
|---|---|

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

*This data is sourced from Natural England.*

## 10.15 Nitrate Sensitive Areas

| Records within 2000m | 0 |
|---|---|

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

*This data is sourced from Natural England.*

## 10.16 Nitrate Vulnerable Zones

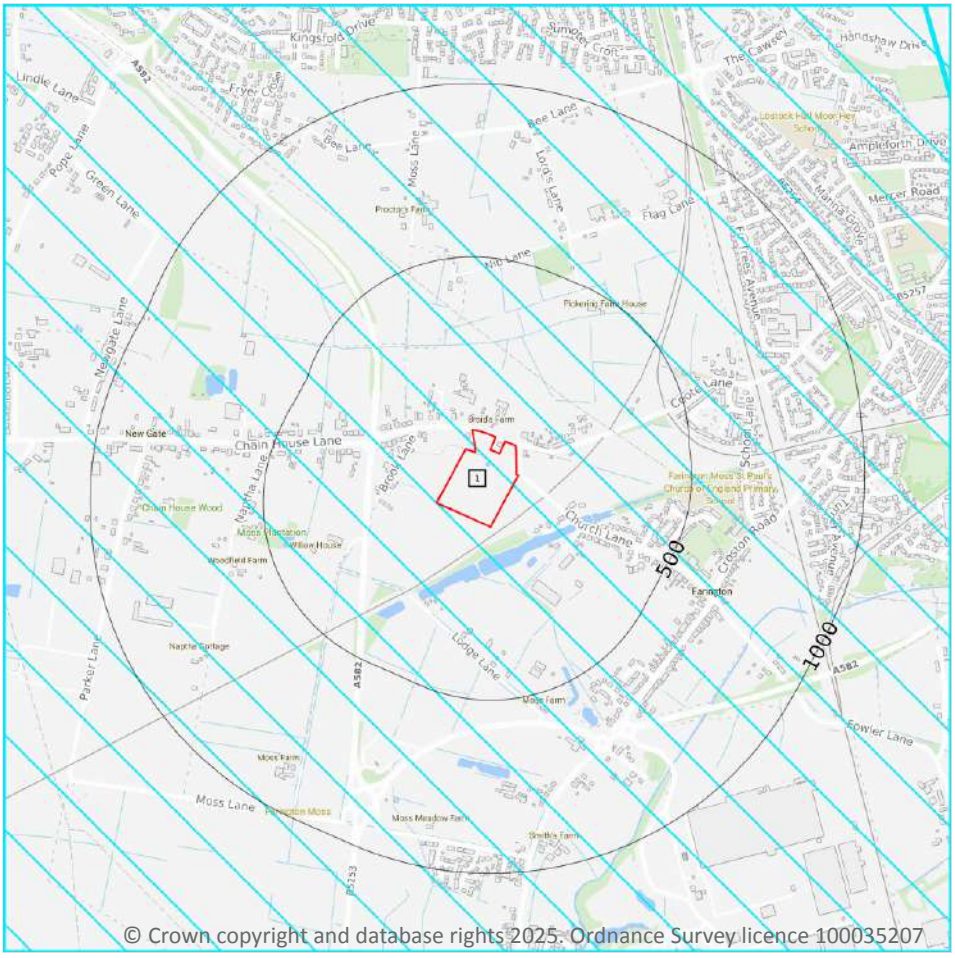
| Records within 2000m | 2 |
|---|---|

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

| Location | Name | Type | NVZ ID | Status |
|---|---|---|---|---|
| 753m W | Tarra Carr Gutter NVZ | Surface Water | 645 | Existing |
| 1979m W | Tarra Carr Gutter NVZ | Surface Water | 645 | Existing |

*This data is sourced from Natural England and Natural Resources Wales.*

# SSSI Impact Zones and Units




Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

## 10.17 SSSI Impact Risk Zones

| Records on site | 1 |
|---|---|

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 70 >**

| ID | Location | Type of developments requiring consultation |
|---|---|---|
| 1 | On site | **Infrastructure - Airports, helipads and other aviation proposals.**<br>**Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines.**<br>**Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 4000m².**<br>**Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.**<br>**Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.**<br>**Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream.** |

*This data is sourced from Natural England.*

## 10.18 SSSI Units

| Records within 2000m | 0 |
|---|---|

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

*This data is sourced from Natural England and Natural Resources Wales.*

# 11 Visual and cultural designations

## 11.1 World Heritage Sites

| Records within 250m | 0 |
|---|---|

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.2 Area of Outstanding Natural Beauty

| Records within 250m | 0 |
|---|---|

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 11.3 National Parks

| Records within 250m | 0 |
|---|---|

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

*This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.*

## 11.4 Listed Buildings

| Records within 250m | 0 |
|---|---|

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.5 Conservation Areas

| Records within 250m | 0 |
|---|---|

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.6 Scheduled Ancient Monuments

| Records within 250m | 0 |
|---|---|

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

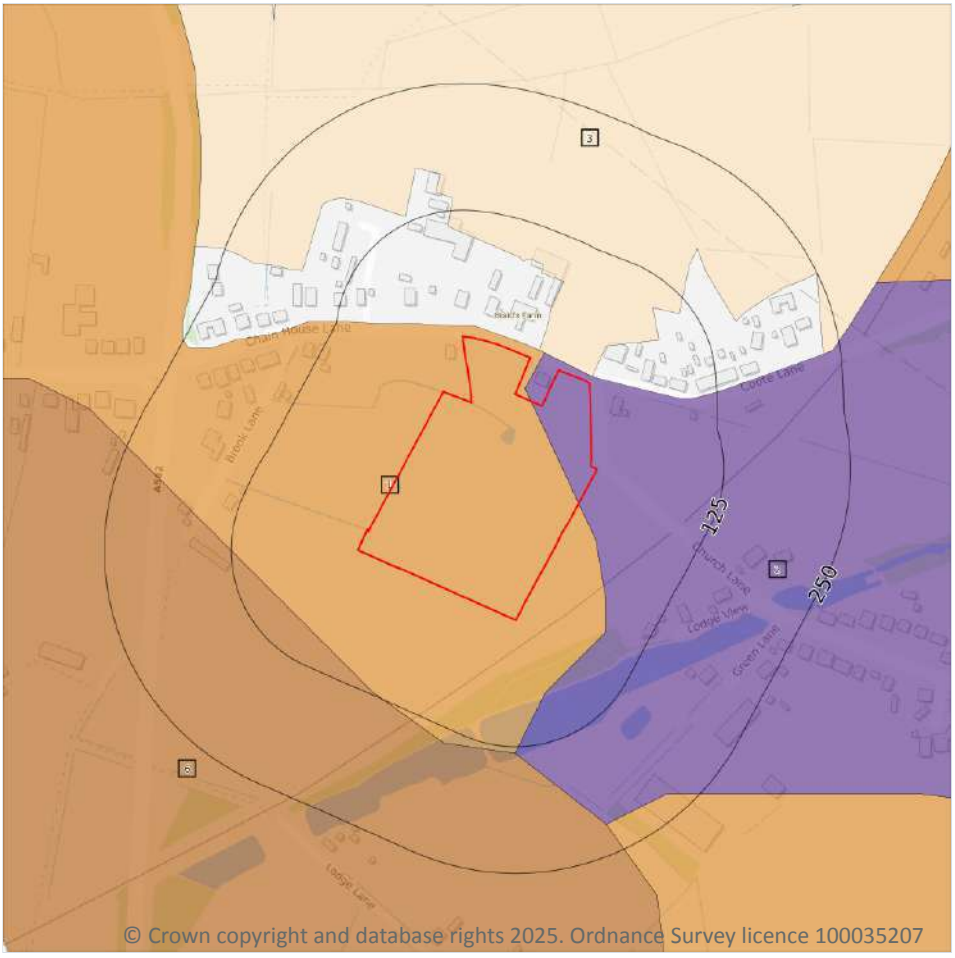
## 11.7 Registered Parks and Gardens

| Records within 250m | 0 |
|---|---|

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

# 12 Agricultural designations




Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

## 12.1 Agricultural Land Classification

| Records within 250m | 4 |
|---|---|

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 74 >**

| ID | Location | Classification | Description |
|---|---|---|---|
| 1 | On site | Grade 3 | Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2. |
| 2 | On site | Urban | Non-agricultural/no quality assigned |

| ID | Location | Classification | Description |
|---|---|---|---|
| 3 | 7m NE | Grade 3b | Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year. |
| 6 | 89m SW | Grade 2 | Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1. |

*This data is sourced from Natural England.*

## 12.2 Open Access Land

| Records within 250m | 0 |
|---|---|

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

*This data is sourced from Natural England and Natural Resources Wales.*

## 12.3 Tree Felling Licences

| Records within 250m | 0 |
|---|---|

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

*This data is sourced from the Forestry Commission.*

## 12.4 Environmental Stewardship Schemes

| Records within 250m | 0 |
|---|---|

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

*This data is sourced from Natural England.*

## 12.5 Countryside Stewardship Schemes

| Records within 250m | 0 |
|---|---|

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

*This data is sourced from Natural England.*

# 13 Habitat designations


Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks
Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

## 13.1 Priority Habitat Inventory

| Records within 250m | 1 |
|---|---|

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 77 >**

| ID | Location | Main Habitat | Other habitats |
|---|---|---|---|
| 1 | 242m E | No main habitat but additional habitats present | Main habitat: DWOOD (INV > 50%) |

*This data is sourced from Natural England.*

## 13.2 Habitat Networks

| Records within 250m | 0 |
|---|---|

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

*This data is sourced from Natural England.*

## 13.3 Open Mosaic Habitat

| Records within 250m | 0 |
|---|---|

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

*This data is sourced from Natural England.*

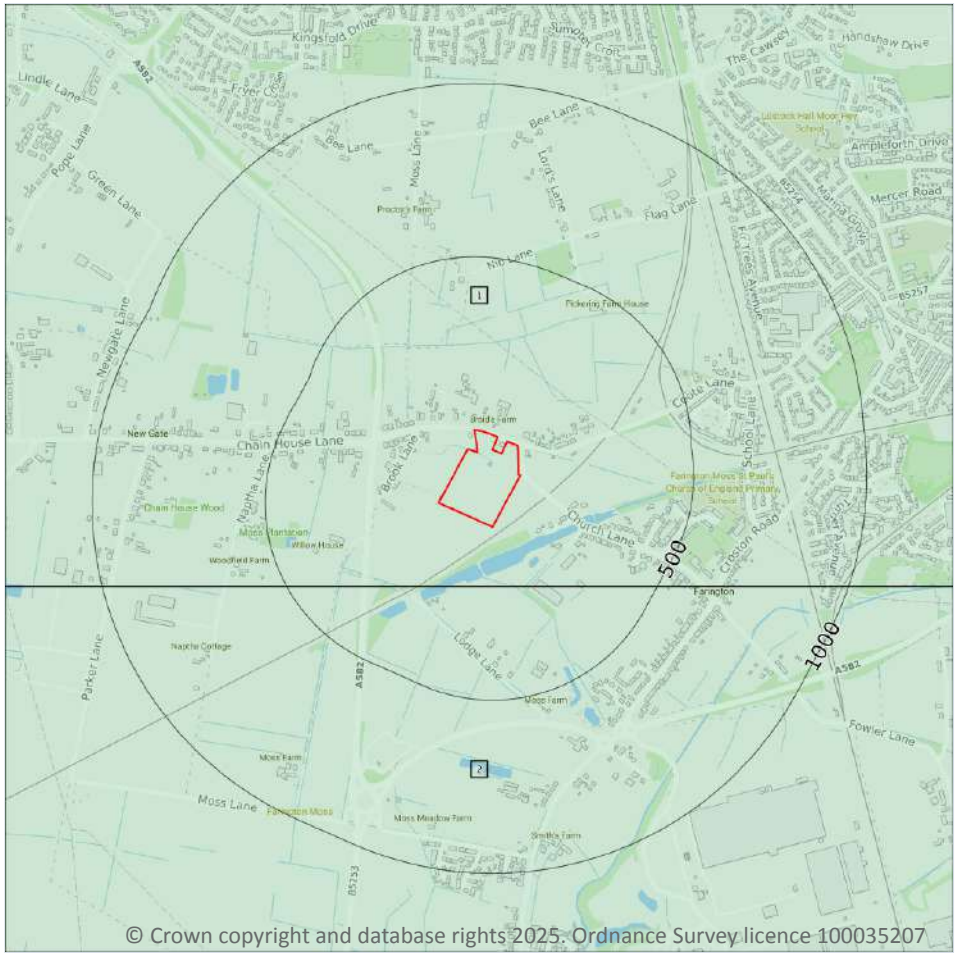
## 13.4 Limestone Pavement Orders

| Records within 250m | 0 |
|---|---|

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

*This data is sourced from Natural England.*

# 14 Geology 1:10,000 scale - Availability




Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

## 14.1 10k Availability

| Records within 500m | 2 |
|---|---|

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 79 >**

| ID | Location | Artificial | Superficial | Bedrock | Mass movement | Sheet No. |
|---|---|---|---|---|---|---|
| **1** | **On site** | **Full** | **Full** | **Full** | **Full** | **SD52NW** |
| 2 | 171m S | Full | Full | Full | No coverage | SD52SW |

*This data is sourced from the British Geological Survey.*

# Geology 1:10,000 scale - Artificial and made ground


Site Outline

Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

## 14.2 Artificial and made ground (10k)

| Records within 500m | 17 |
|---|---|

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

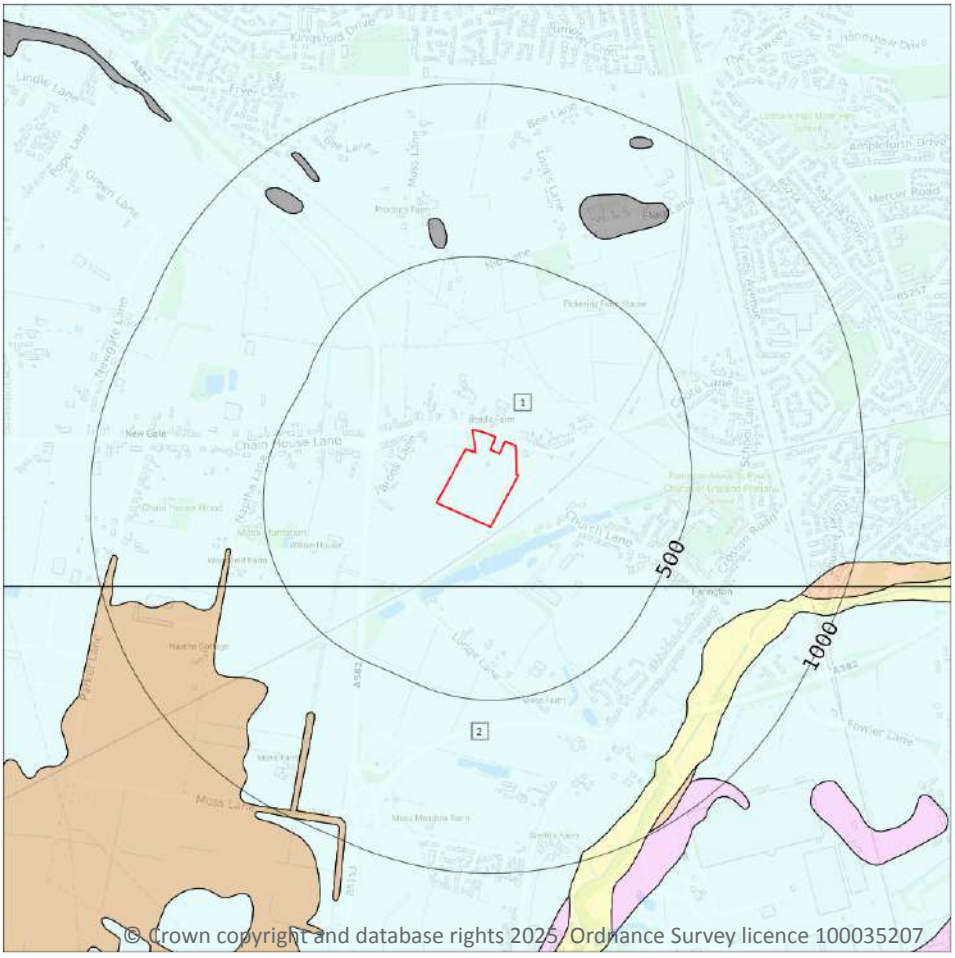
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 80 >**

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| A | 1m S | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| A | 19m E | WGR-VOID | Worked Ground (Undivided) | Void |
| B | 32m S | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| B | 80m S | WGR-VOID | Worked Ground (Undivided) | Void |

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| A | 102m E | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| C | 138m E | WGR-VOID | Worked Ground (Undivided) | Void |
| 1 | 151m W | WGR-VOID | Worked Ground (Undivided) | Void |
| 2 | 154m NE | WGR-VOID | Worked Ground (Undivided) | Void |
| D | 208m S | WGR-VOID | Worked Ground (Undivided) | Void |
| 3 | 212m E | WGR-VOID | Worked Ground (Undivided) | Void |
| D | 230m SW | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| 4 | 249m E | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| 5 | 270m NW | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| 6 | 278m NW | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| 7 | 285m E | MGR-ARTDP | Made Ground (Undivided) | Artificial Deposit |
| 8 | 461m SE | WGR-VOID | Worked Ground (Undivided) | Void |
| 9 | 464m W | WGR-VOID | Worked Ground (Undivided) | Void |

*This data is sourced from the British Geological Survey.*

# Geology 1:10,000 scale - Superficial




Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

## 14.3 Superficial geology (10k)

**Records within 500m** **2**

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 82 >**

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| **1** | **On site** | **TILLD-CSVZ** | **Till, Devensian - Clay, Sandy, Gravelly, Silty (unlithified Deposits Coding Scheme)** | **Clay, Sandy, Gravelly, Silty** |
| 2 | 171m S | TILLD-CSVZ | Till, Devensian - Clay, Sandy, Gravelly, Silty (unlithified Deposits Coding Scheme) | Clay, Sandy, Gravelly, Silty |

*This data is sourced from the British Geological Survey.*

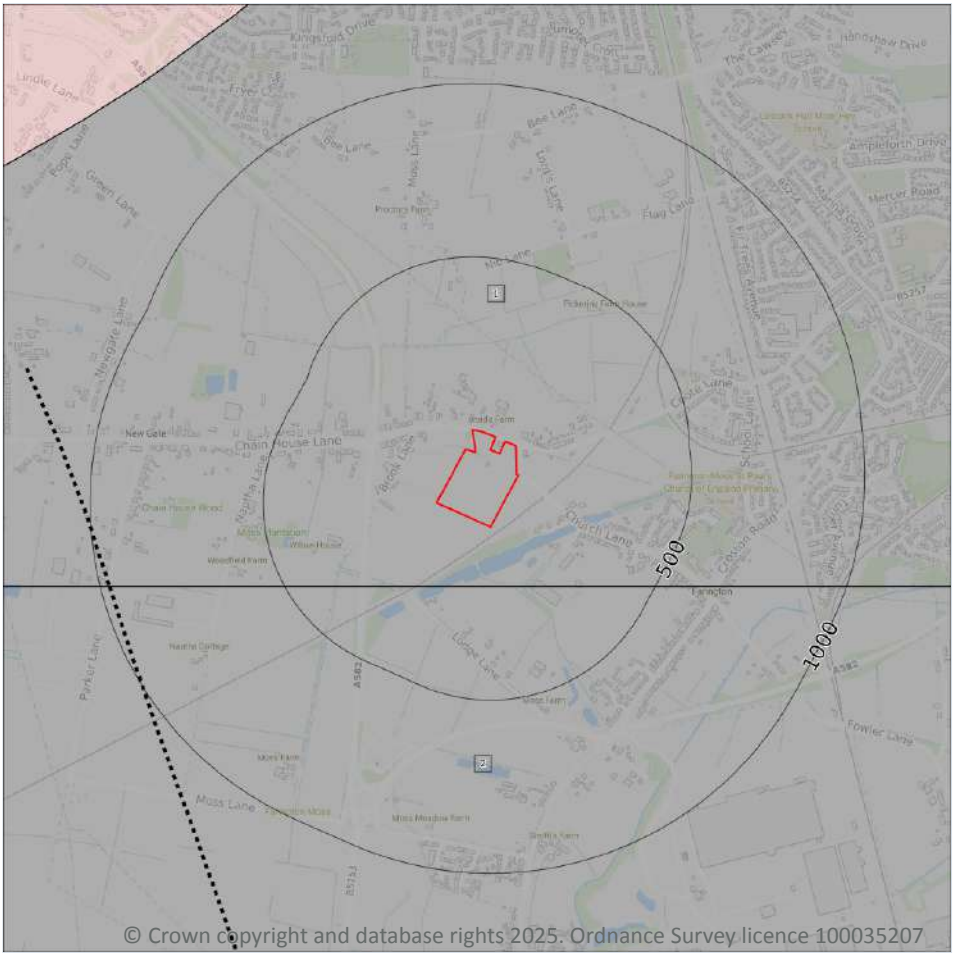
## 14.4 Landslip (10k)

| Records within 500m | 0 |
|---|---|

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

*This data is sourced from the British Geological Survey.*

# Geology 1:10,000 scale - Bedrock






Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

## 14.5 Bedrock geology (10k)

| Records within 500m | 2 |
|---|---|

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 84 >**

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| **1** | **On site** | **SIM-MDHA** | **Sidmouth Mudstone Formation - Mudstone And Halite-stone** | **Carnian Age - Olenekian Age** |
| 2 | 171m S | SIM-MDHA | Sidmouth Mudstone Formation - Mudstone And Halite-stone | Carnian Age - Olenekian Age |

*This data is sourced from the British Geological Survey.*

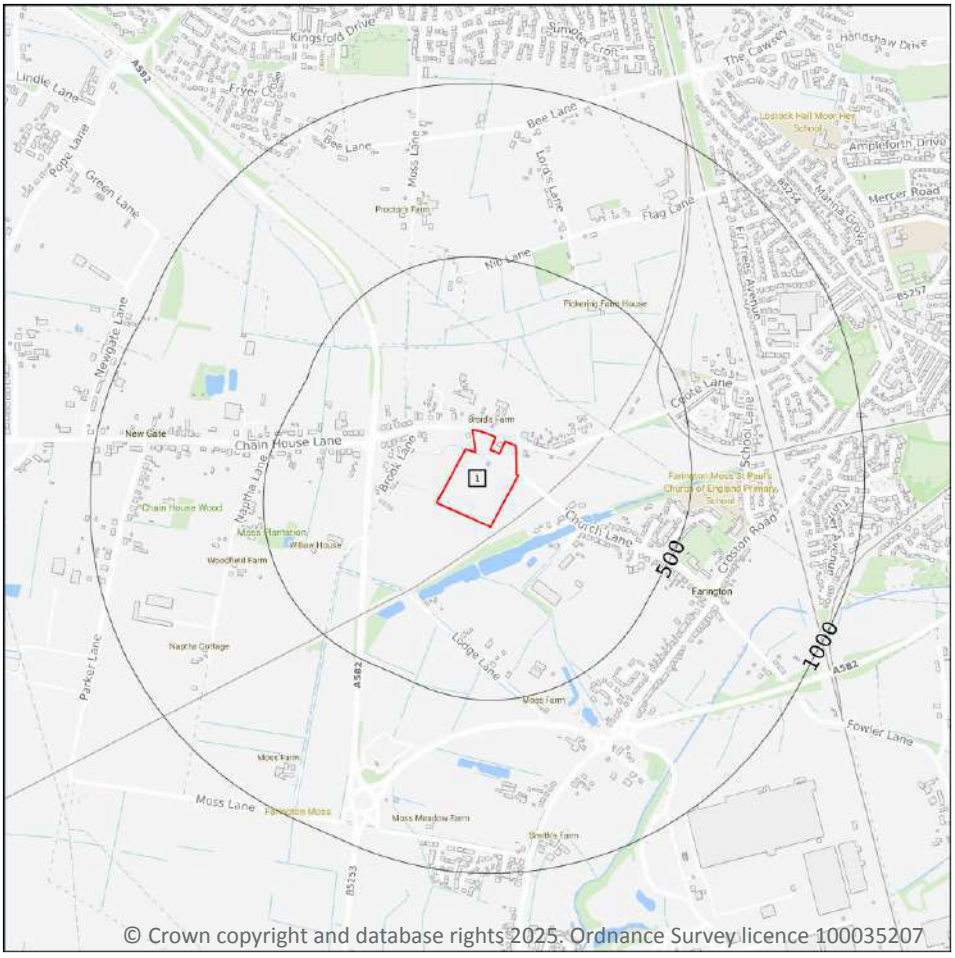
## 14.6 Bedrock faults and other linear features (10k)

| Records within 500m | 0 |
|---|---|

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

*This data is sourced from the British Geological Survey.*

# 15 Geology 1:50,000 scale - Availability




Site Outline

Search buffers in metres (m)

Geological map tile

## 15.1 50k Availability

| Records within 500m | 1 |
|---|---|

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 86 >**

| ID | Location | Artificial | Superficial | Bedrock | Mass movement | Sheet No. |
|---|---|---|---|---|---|---|
| **1** | **On site** | **No coverage** | **Full** | **Full** | **Full** | **EW075_preston_v4** |

*This data is sourced from the British Geological Survey.*

# Geology 1:50,000 scale - Artificial and made ground

## 15.2 Artificial and made ground (50k)

| Records within 500m | 0 |
|---|---|

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

*This data is sourced from the British Geological Survey.*

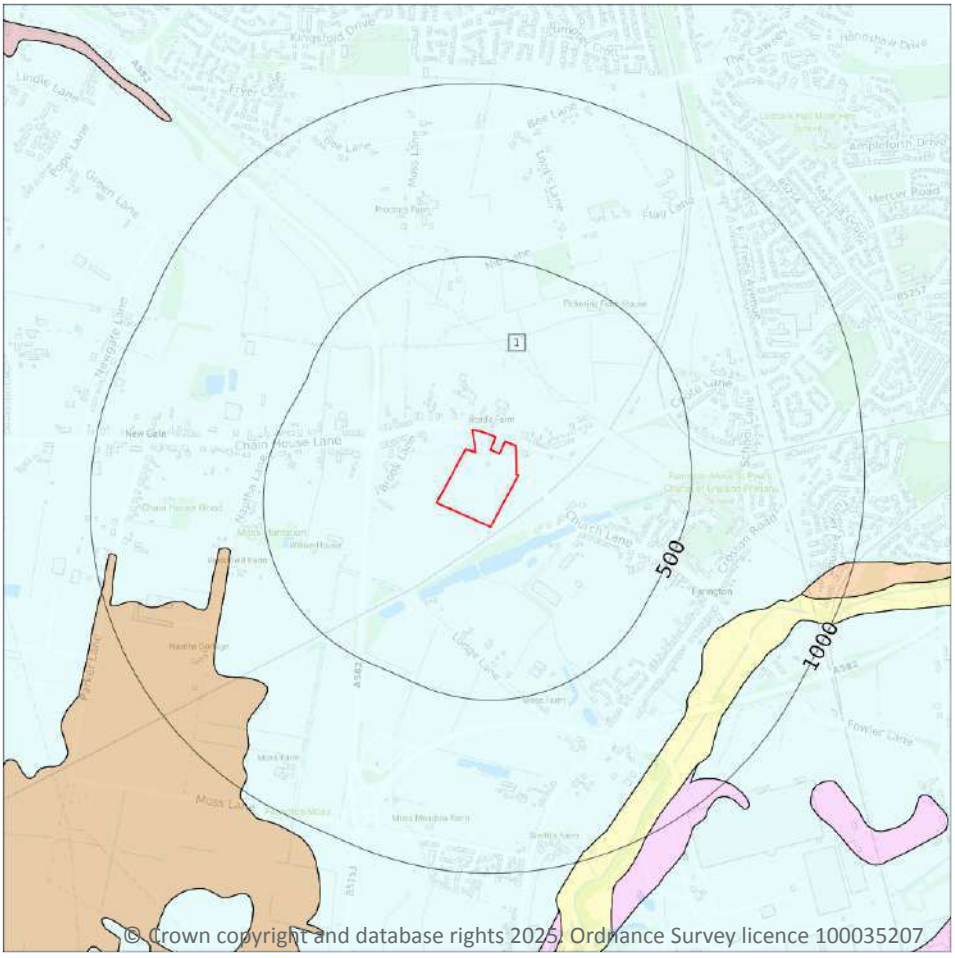
## 15.3 Artificial ground permeability (50k)

| Records within 50m | 0 |
|---|---|

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

*This data is sourced from the British Geological Survey.*

# Geology 1:50,000 scale - Superficial




Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

## 15.4 Superficial geology (50k)

| Records within 500m | 1 |
|---|---|

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 88 >**

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| **1** | **On site** | **TILLD-DMTN** | **TILL, DEVENSIAN** | **DIAMICTON** |

*This data is sourced from the British Geological Survey.*

## 15.5 Superficial permeability (50k)

| Records within 50m | 1 |
|---|---|

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

| Location | Flow type | Maximum permeability | Minimum permeability |
|---|---|---|---|
| **On site** | **Mixed** | **High** | **Low** |

*This data is sourced from the British Geological Survey.*

## 15.6 Landslip (50k)

| Records within 500m | 0 |
|---|---|

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

*This data is sourced from the British Geological Survey.*

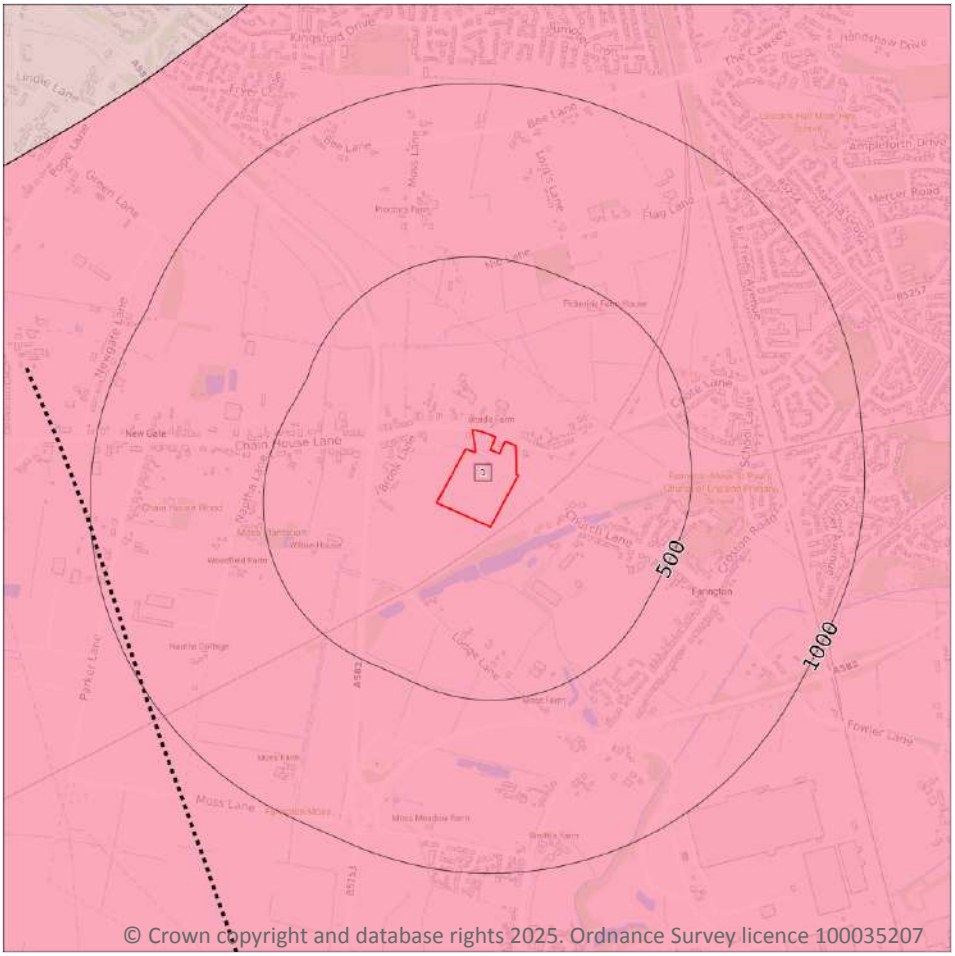
## 15.7 Landslip permeability (50k)

| Records within 50m | 0 |
|---|---|

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

*This data is sourced from the British Geological Survey.*

# Geology 1:50,000 scale - Bedrock




Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

## 15.8 Bedrock geology (50k)

| Records within 500m | 1 |
|---|---|

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 90 >**

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| **1** | **On site** | **SNM-MDST** | **SINGLETON MUDSTONE MEMBER - MUDSTONE** | **-** |

*This data is sourced from the British Geological Survey.*

## 15.9 Bedrock permeability (50k)

| Records within 50m | 1 |
|---|---|

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

| Location | Flow type | Maximum permeability | Minimum permeability |
|---|---|---|---|
| **On site** | **Fracture** | **Low** | **Low** |

*This data is sourced from the British Geological Survey.*

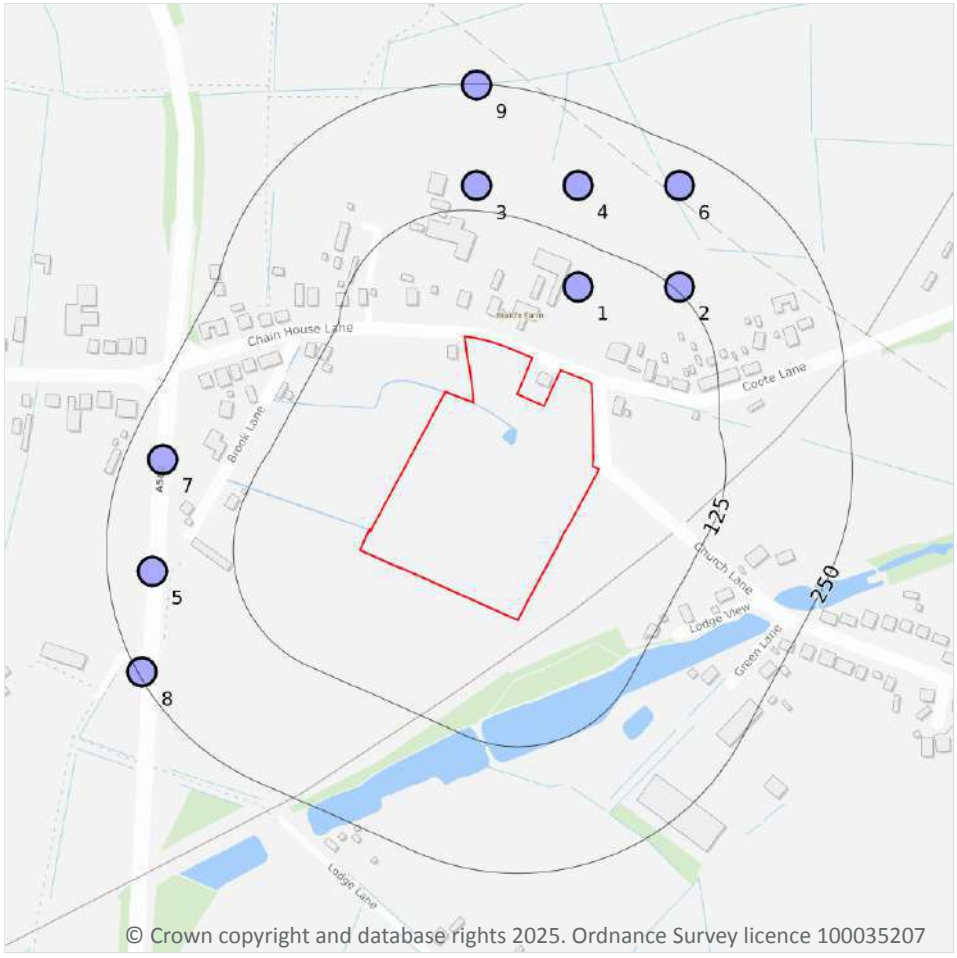
## 15.10 Bedrock faults and other linear features (50k)

| Records within 500m | 0 |
|---|---|

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

*This data is sourced from the British Geological Survey.*

# 16 Boreholes




Site Outline

Search buffers in metres (m)

Confidential

0 - 10m

10 - 30m

30m+

Unknown

## 16.1 BGS Boreholes

| Records within 250m | 9 |
|---|---|

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

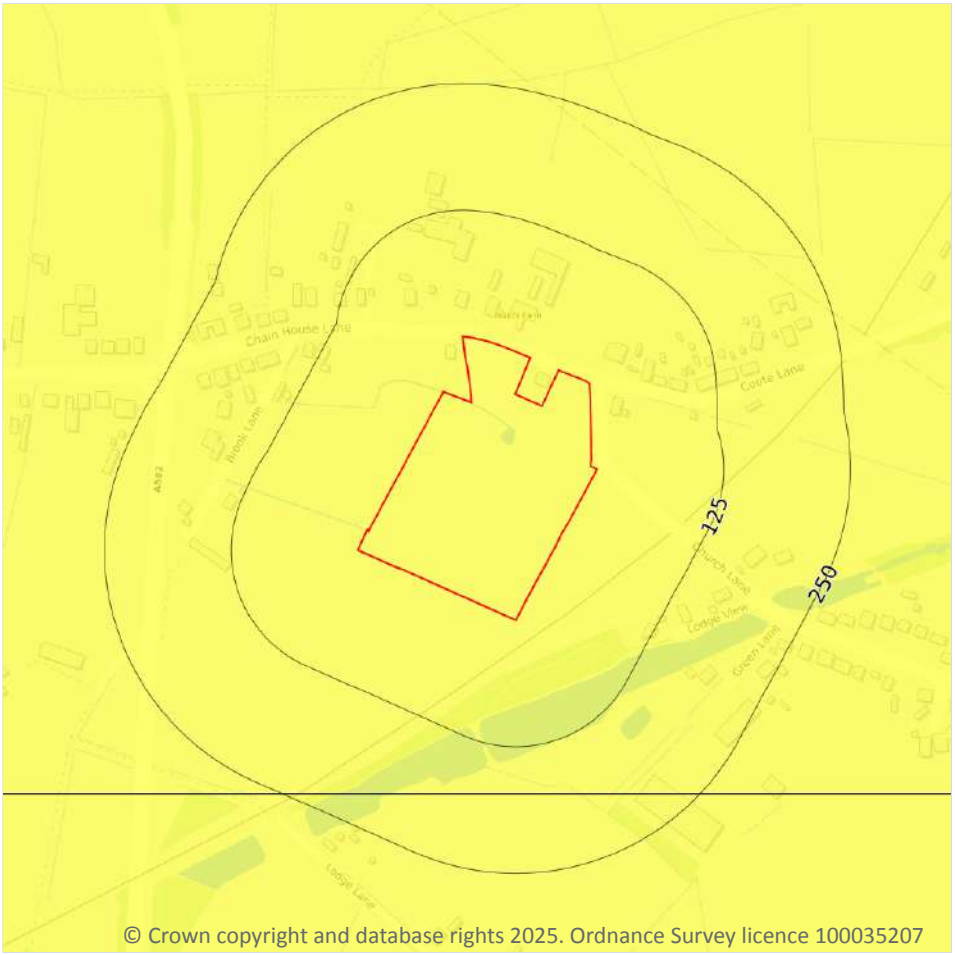
Features are displayed on the Boreholes map on **page 92 >**

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 1 | 83m NE | 353300 425500 | PICKERINGS FARM 6 (1) AREA 87 | 6.1 | N | 17155708 ↗ |
| 2 | 129m NE | 353400 425500 | PICKERINGS FARM 6 (1) AREA 86 | 6.1 | N | 17155706 ↗ |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 3 | 149m N | 353200 425600 | PICKERINGS FARM 6 (1) AREA 79 | 6.0 | N | 17155696 ↗ |
| 4 | 174m N | 353300 425600 | PICKERINGS FARM 6 (1) AREA 80 | 6.1 | N | 17155697 ↗ |
| 5 | 206m W | 352880 425220 | WESTERN PRIMARY ROAD BH10 | 3.0 | N | 10664 ↗ |
| 6 | 213m NE | 353400 425600 | PICKERINGS FARM 6 (1) AREA 81 | 6.1 | N | 17155699 ↗ |
| 7 | 214m W | 352890 425330 | WESTERN PRIMARY ROAD BH9 | 2.0 | N | 10663 ↗ |
| 8 | 246m SW | 352870 425120 | WESTERN PRIMARY ROAD BH11 | 4.0 | N | 10665 ↗ |
| 9 | 249m N | 353200 425700 | PICKERINGS FARM 6 (1) AREA 70 | 6.1 | N | 17155683 ↗ |

*This data is sourced from the British Geological Survey.*

# 17 Natural ground subsidence - Shrink swell clays




Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.1 Shrink swell clays

| Records within 50m | 1 |
|---|---|

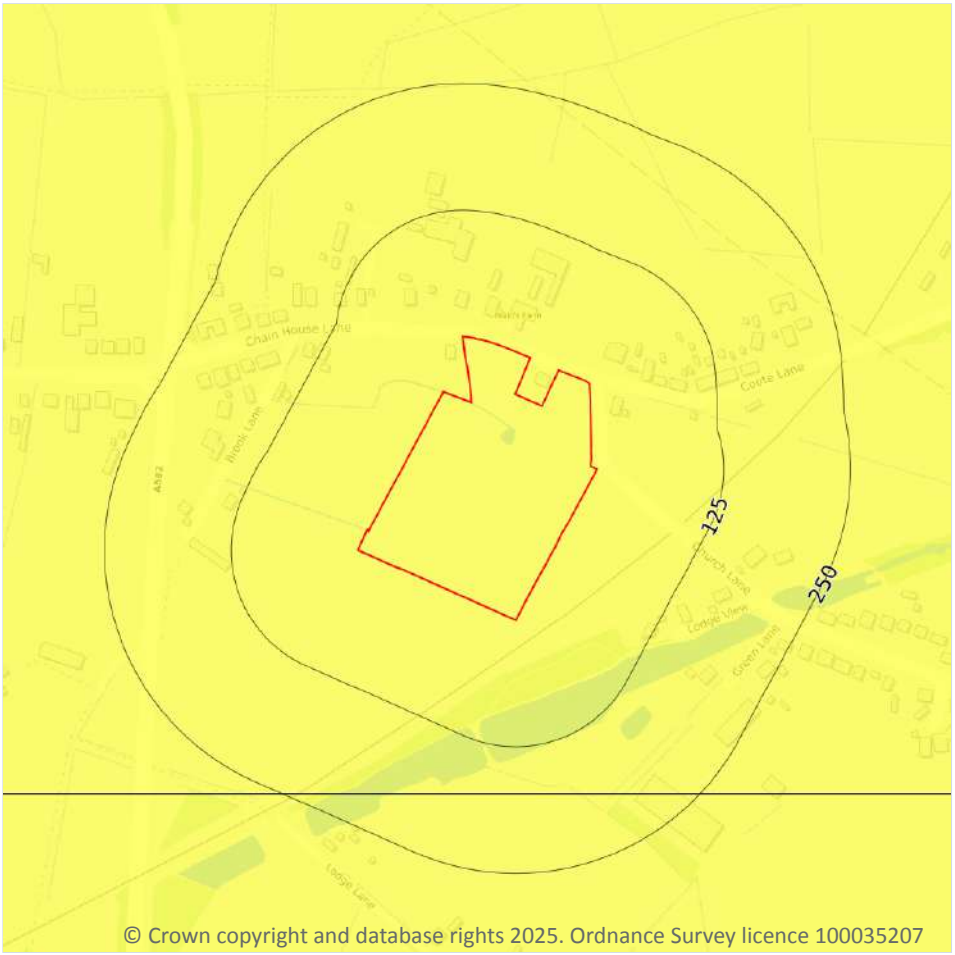
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 94 >**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Very low** | **Ground conditions predominantly low plasticity.** |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Running sands




Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.2 Running sands

| Records within 50m | 1 |
|---|---|

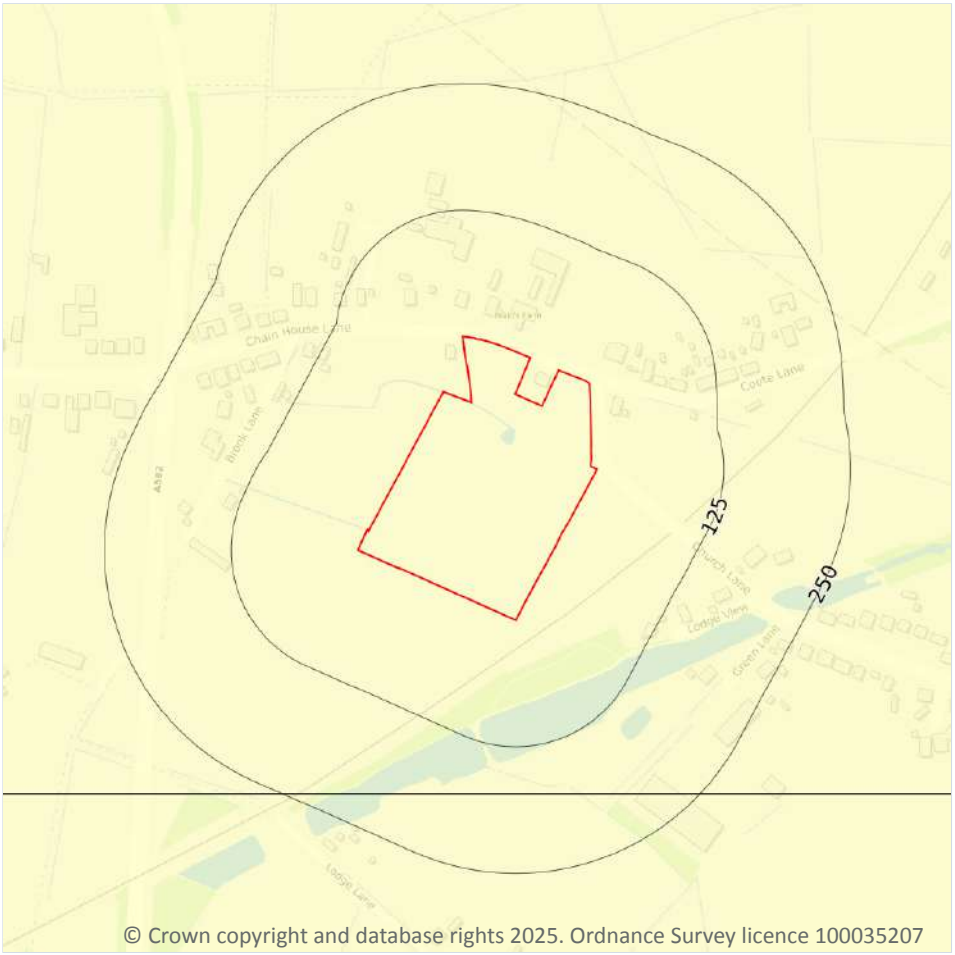
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 95 >**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Very low** | **Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.** |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Compressible deposits




Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.3 Compressible deposits

| Records within 50m | 1 |
|---|---|

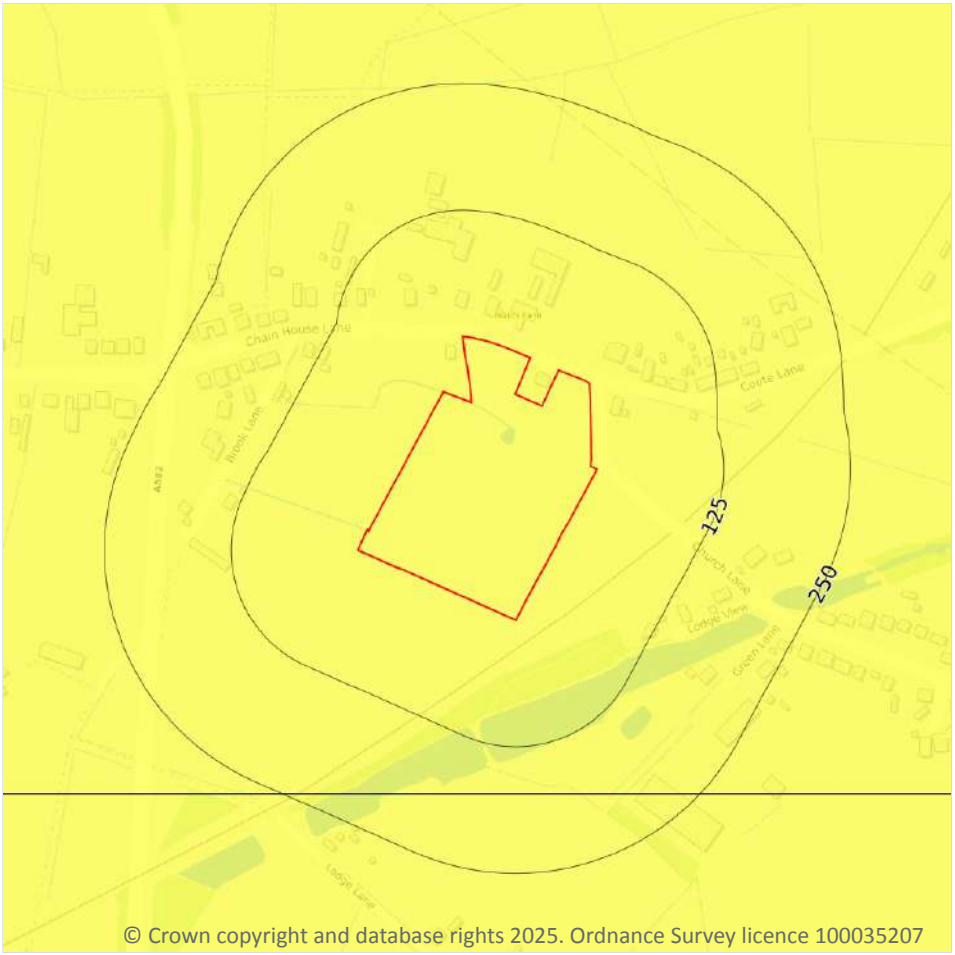
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 96 >**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Negligible** | **Compressible strata are not thought to occur.** |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Collapsible deposits






Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.4 Collapsible deposits

| Records within 50m | 1 |
|---|---|

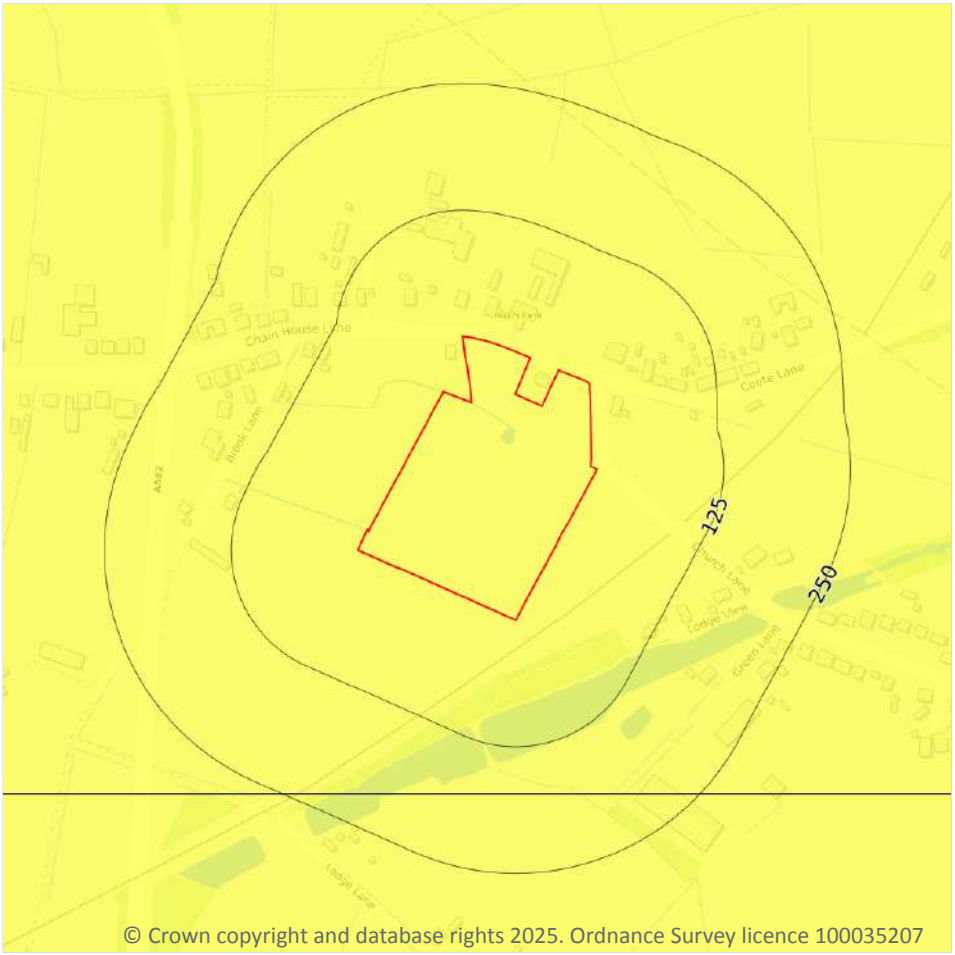
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 97 >**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Very low** | **Deposits with potential to collapse when loaded and saturated are unlikely to be present.** |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Landslides




Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.5 Landslides

| Records within 50m | 1 |
|---|---|

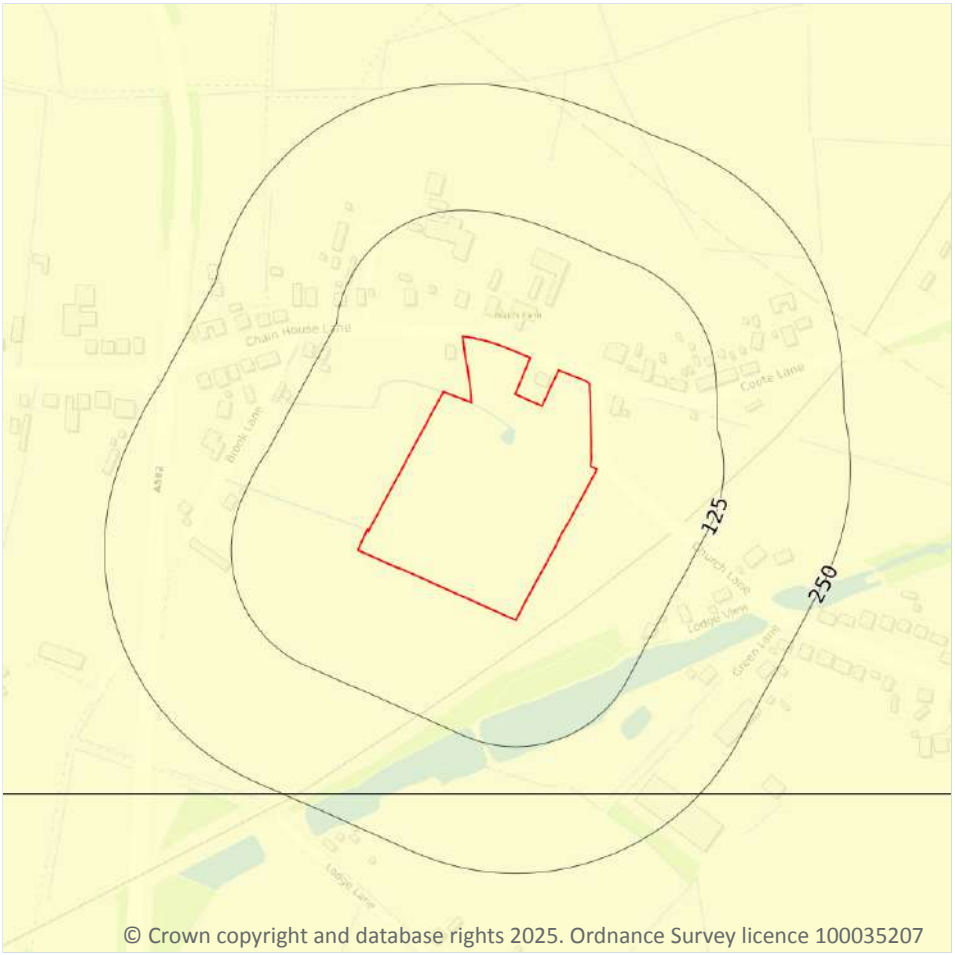
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 98 >**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Very low** | **Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.** |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Ground dissolution of soluble rocks






Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.6 Ground dissolution of soluble rocks

| Records within 50m | 1 |
|---|---|

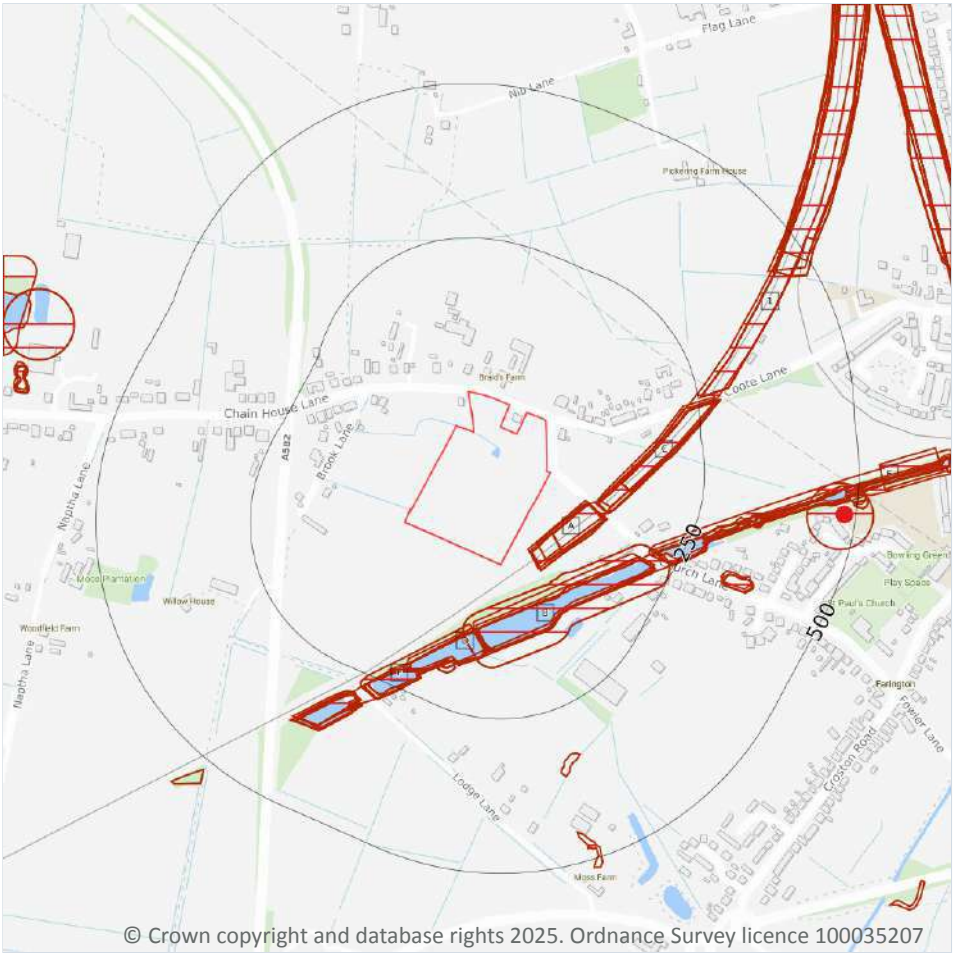
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 99 >**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Negligible** | **Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.** |

*This data is sourced from the British Geological Survey.*

# 18 Mining and ground workings






Site Outline

Search buffers in metres (m)

- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

## 18.1 BritPits

| Records within 500m | 1 |
|---|---|

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on **page 101 >**

| ID | Location | Details | Description |
|---|---|---|---|
| J | 481m E | Name: Farington<br>Address: Lostock Hall, BAMBER BRIDGE, Lancashire<br>Commodity: Clay & Shale<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

*This data is sourced from the British Geological Survey.*

## 18.2 Surface ground workings

**Records within 250m** **50**

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on **page 101 >**

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| A | 27m SE | Cuttings | 1955 | 1:10560 |
| A | 31m SE | Cuttings | 1938 | 1:10560 |
| 1 | 34m SE | Cuttings | 1892 | 1:10560 |
| A | 35m SE | Cuttings | 1938 | 1:10560 |
| A | 35m SE | Cuttings | 1929 | 1:10560 |
| A | 35m SE | Cuttings | 1909 | 1:10560 |
| A | 50m SE | Cuttings | 1982 | 1:10000 |
| A | 50m SE | Cuttings | 1974 | 1:10000 |
| A | 50m SE | Cuttings | 1968 | 1:10560 |
| A | 50m SE | Cuttings | 1990 | 1:10000 |
| B | 57m S | Reservoir | 1938 | 1:10560 |
| B | 57m S | Reservoir | 1929 | 1:10560 |
| B | 67m S | Reservoir | 1938 | 1:10560 |
| B | 76m S | Reservoir | 1955 | 1:10560 |
| B | 81m S | Water Body | 1892 | 1:10560 |
| B | 81m S | Water Body | 1982 | 1:10000 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| B | 81m S | Water Body | 1974 | 1:10000 |
| B | 81m S | Water Body | 1968 | 1:10560 |
| B | 81m S | Water Body | 1990 | 1:10000 |
| B | 82m S | Water Body | 1909 | 1:10560 |
| C | 88m E | Cuttings | 1938 | 1:10560 |
| C | 89m E | Cuttings | 1955 | 1:10560 |
| C | 93m E | Cuttings | 1938 | 1:10560 |
| C | 93m E | Cuttings | 1929 | 1:10560 |
| C | 93m E | Cuttings | 1909 | 1:10560 |
| D | 109m S | Reservoir | 1938 | 1:10560 |
| D | 111m S | Reservoir | 1955 | 1:10560 |
| C | 114m E | Cuttings | 1982 | 1:10000 |
| C | 114m E | Cuttings | 1974 | 1:10000 |
| C | 114m E | Cuttings | 1968 | 1:10560 |
| C | 114m E | Cuttings | 1990 | 1:10000 |
| D | 115m S | Reservoir | 1938 | 1:10560 |
| D | 115m S | Reservoir | 1929 | 1:10560 |
| D | 115m S | Water Body | 1909 | 1:10560 |
| D | 168m S | Unspecified Pit | 1955 | 1:10560 |
| D | 179m S | Unspecified Ground Workings | 1938 | 1:10560 |
| D | 179m S | Unspecified Ground Workings | 1929 | 1:10560 |
| D | 179m S | Unspecified Ground Workings | 1909 | 1:10560 |
| E | 201m E | Water Body | 1938 | 1:10560 |
| E | 202m SE | Pond | 1955 | 1:10560 |
| F | 206m S | Pond | 1967 | 1:10560 |
| F | 206m S | Pond | 1982 | 1:10000 |
| F | 206m S | Pond | 1988 | 1:10000 |
| E | 211m SE | Water Body | 1938 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| E | 211m SE | Water Body | 1929 | 1:10560 |
| E | 211m SE | Water Body | 1909 | 1:10560 |
| E | 211m E | Water Body | 1982 | 1:10000 |
| E | 211m E | Water Body | 1974 | 1:10000 |
| E | 211m E | Water Body | 1968 | 1:10560 |
| E | 211m E | Water Body | 1990 | 1:10000 |

*This is data is sourced from Ordnance Survey/Groundsure.*

## 18.3 Underground workings

| Records within 1000m | 0 |
|---|---|

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

*This is data is sourced from Ordnance Survey/Groundsure.*

## 18.4 Underground mining extents

| Records within 500m | 0 |
|---|---|

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

*This data is sourced from Groundsure.*

## 18.5 Historical Mineral Planning Areas

| Records within 500m | 0 |
|---|---|

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

*This data is sourced from the British Geological Survey.*

## 18.6 Non-coal mining

| Records within 1000m | 0 |
|---|---|

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

*This data is sourced from the British Geological Survey.*

## 18.7 JPB mining areas

| Records on site | 1 |
|---|---|

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

| Location | Details |
|---|---|
| **On site** | **Whilst outside of an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) may have information such as mining plans and maps held within their archive that have occurred within 1km of this property. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk ↗.** |

*This data is sourced from Johnson Poole and Bloomer.*

## 18.8 The Coal Authority non-coal mining

| Records within 500m | 0 |
|---|---|

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

*This data is sourced from The Coal Authority.*

## 18.9 Researched mining

| Records within 500m | 0 |
|---|---|

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of

risk have been captured.

*This data is sourced from Groundsure.*

## 18.10 Mining record office plans

| Records within 500m | 0 |
|---|---|

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

*This data is sourced from Groundsure.*

## 18.11 BGS mine plans

| Records within 500m | 0 |
|---|---|

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

*This data is sourced from Groundsure.*

## 18.12 Coal mining

| Records on site | 0 |
|---|---|

Areas which could be affected by past, current or future coal mining.

*This data is sourced from the Coal Authority.*

## 18.13 Brine areas

| Records on site | 0 |
|---|---|

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

*This data is sourced from the Cheshire Brine Subsidence Compensation Board.*

## 18.14 Gypsum areas

| Records on site | 0 |
|---|---|

Generalised areas that may be affected by gypsum extraction.

*This data is sourced from British Gypsum.*

## 18.15 Tin mining

| Records on site | 0 |
|---|---|

Generalised areas that may be affected by historical tin mining.

*This data is sourced from Groundsure.*

## 18.16 Clay mining

| Records on site | 0 |
|---|---|

Generalised areas that may be affected by kaolin and ball clay extraction.

*This data is sourced from the Kaolin and Ball Clay Association (UK).*

# 19 Ground cavities and sinkholes

## 19.1 Natural cavities

| Records within 500m | 0 |
|---|---|

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

*This data is sourced from Stantec UK Ltd.*

## 19.2 Mining cavities

| Records within 1000m | 0 |
|---|---|

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

*This data is sourced from Stantec UK Ltd.*

## 19.3 Reported recent incidents

| Records within 500m | 0 |
|---|---|

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

*This data is sourced from Groundsure.*

## 19.4 Historical incidents

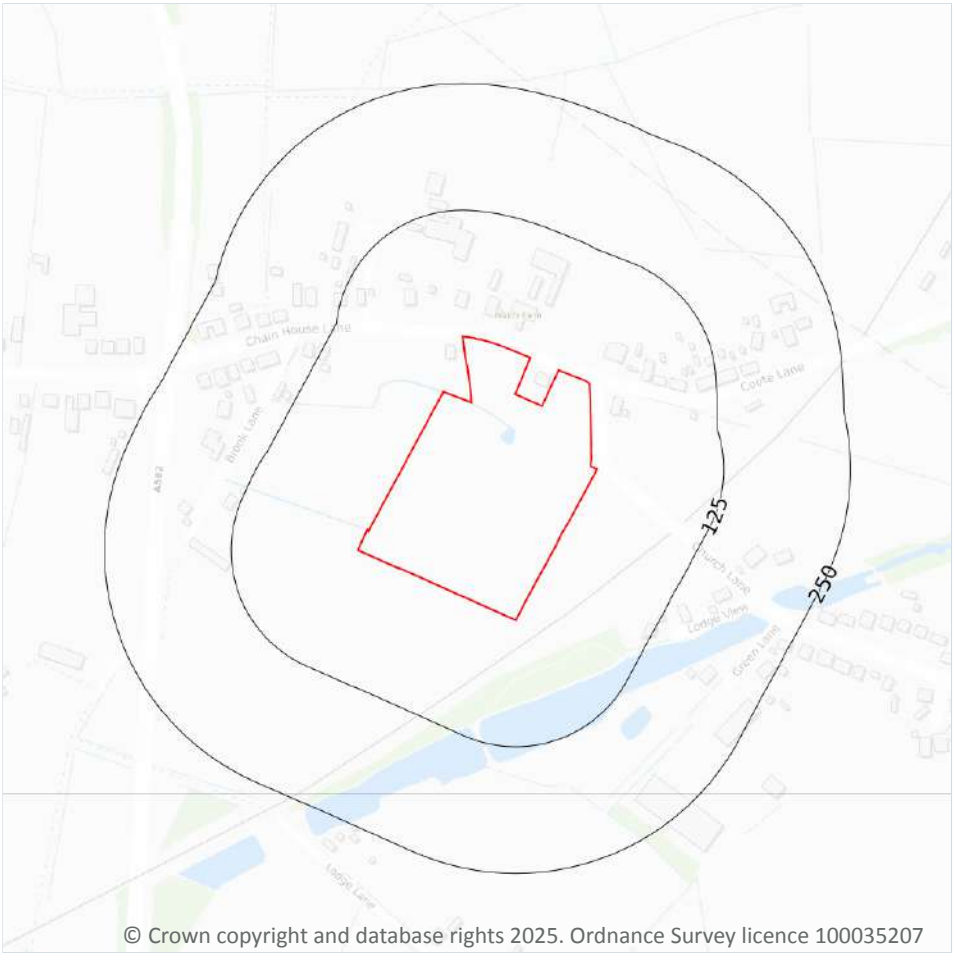
| Records within 500m | 0 |
|---|---|

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

*This data is sourced from Groundsure.*

# 20 Radon






Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

## 20.1 Radon

| Records on site | 1 |
|---|---|

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 110 >**

| Location | Estimated properties affected | Radon Protection Measures required |
|---|---|---|
| **On site** | **Less than 1%** | **None** |

*This data is sourced from the British Geological Survey and UK Health Security Agency.*

# 21 Soil chemistry

## 21.1 BGS Estimated Background Soil Chemistry

| Records within 50m | 2 |
|---|---|

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 $km^2$. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 $km^2$; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

| Location | Arsenic | Bioaccessible Arsenic | Lead | Bioaccessible Lead | Cadmium | Chromium | Nickel |
|---|---|---|---|---|---|---|---|
| **On site** | **15 mg/kg** | **No data** | **100 mg/kg** | **60 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| 49m N | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |

*This data is sourced from the British Geological Survey.*

## 21.2 BGS Estimated Urban Soil Chemistry

| Records within 50m | 0 |
|---|---|

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per $km^2$).

*This data is sourced from the British Geological Survey.*

## 21.3 BGS Measured Urban Soil Chemistry

| Records within 50m | 0 |
|---|---|

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per $km^2$.

*This data is sourced from the British Geological Survey.*

# 22 Railway infrastructure and projects


Site Outline

Search buffers in metres (m)

- Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

## 22.1 Underground railways (London)

| Records within 250m | 0 |
|---|---|

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

*This data is sourced from publicly available information by Groundsure.*

## 22.2 Underground railways (Non-London)

| Records within 250m | 0 |
|---|---|

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

*This data is sourced from publicly available information by Groundsure.*

## 22.3 Railway tunnels

| Records within 250m | 0 |
|---|---|

Railway tunnels taken from contemporary Ordnance Survey mapping.

*This data is sourced from the Ordnance Survey.*

## 22.4 Historical railway and tunnel features

| Records within 250m | 0 |
|---|---|

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

*This data is sourced from Ordnance Survey/Groundsure.*

## 22.5 Royal Mail tunnels

| Records within 250m | 0 |
|---|---|

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

*This data is sourced from Groundsure/the Postal Museum.*

## 22.6 Historical railways

| Records within 250m | 1 |
|---|---|

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

Features are displayed on the Railway infrastructure and projects map on **page 113 >**

| Location | Description |
|---|---|
| 60m S | Abandoned |

*This data is sourced from OpenStreetMap.*

## 22.7 Railways

| Records within 250m | 4 |
|---|---|

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

Features are displayed on the Railway infrastructure and projects map on **page 113 >**

| Location | Name | Type |
|---|---|---|
| 22m S | Farington Curve Junction and Ormskirk Line | rail |
| 24m S | Not given | Single Track |
| 99m S | Not given | Single Track |
| 100m E | Not given | Single Track |

*This data is sourced from Ordnance Survey and OpenStreetMap.*

## 22.8 Crossrail 2

| Records within 500m | 0 |
|---|---|

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

*This data is sourced from publicly available information by Groundsure.*

## 22.9 HS2

| Records within 500m | 0 |
|---|---|

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

*This data is sourced from HS2 ltd.*

## Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

## Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗.

# APPENDIX C

BGS Borehole Recvords

HIGHWAY & FOUNDATION SURVEYS LTD.,
BROOK LANE, PEMBERTON, WIGAN, LANCS.

# BOREHOLE RECORD SHEET

| Date | Scale | Job No. | Location | Borehole |
|---|---|---|---|---|
| MAY 1981 | 1:50 | 2137 | PICKERINGS FARM 6(1) AREA | 87 |

Method: SHELL AND AUGER

Client: CENTRAL LANCS. DEV. CORPORATION

| Drilling & Casing Progress | Water Notes & Levels | Sample Types & Depths | S.P.T. 'N' value or Cohesion* | Description | O.D. Level | Legend | Depth |
|---|---|---|---|---|---|---|---|
| | | | | | 31.1 | | 0.0 |
| 21st | | | | TOPSOIL | 30.7 | | 0.4 |
| | | | | Soft to firm, brown mottled sandy CLAY | 30.0 | | 1.1 |
| | | U 1.0 - 1.5 | 215.2 | Hard, brown, grey mottled, fissured, silty, BOULDER CLAY | 29.1 | | 2.0 |
| | | U 2.5 - 3.0 | 92.8 | Stiff, becoming firm at depth, fissured at top brown, silty, BOULDER CLAY | | | |
| | | U 4.0 - 4.5 | 98.4 | | | | |
| 21st | Dry | U 5.5 - 6.1 | 48.4 | | 25. | | 6.1 |
| | | | | END OF BORE | | | |

**HIGHWAY & FOUNDATION SURVEYS LTD.,**
**BROOK LANE, PEMBERTON, WIGAN, LANCS.**

**BOREHOLE RECORD SHEET**

| Date | Scale | Job No. | Location | Borehole |
|---|---|---|---|---|
| MAY 1981 | 1:50 | 2137 | PICKERINGS FARM 6(1) AREA | 86 |

| Method | Client |
|---|---|
| SHELL AND AUGER | CENTRAL LANCS. DEV. CORPORATION |

| Drilling & Casing Progress | Water Notes & Levels | Sample Type & Depths | S.P.T. 'N' value or Cohesion* | Description | O.D. Level | Legend | Depth |
|---|---|---|---|---|---|---|---|
| 21st | | | | | 31.2 | | 0.0 |
| | | | | TOPSOIL | 30.8 | | 0.4 |
| | | | | TOPSOIL, CLAY, roots | 30.6 | | 0.6 |
| | slight 1.0 | | | Soft to firm, brown, mottled, sandy CLAY, with bands of sand | 30.0 | | 1.2 |
| | slight 1.5 | U 1.0 slipped | | | | | |
| | | U 1.5 - 2.0 | 104.3 | Stiff, brown-grey mottled, fissured, silty BOULDER CLAY | | | |
| | | U 2.5 - 3.0 | 113.7 | | | | |
| | | | | | 27.7 | | 3.5 |
| | | U 4.0 - 4.5 | 97.3 | Stiff to firm, brown, silty, slightly sandy, BOULDER CLAY | | | |
| | | W 5.0 | | | | | |
| | | U 5.5 - 6.0 | 48.7 | | | | |
| 21st | 5.0 | | | | 25.1 | | 6.1 |
| | | | | END OF BORE | | | |

**HIGHWAY & FOUNDATION SURVEYS LTD.,**
**BROOK LANE, PEMBERTON, WIGAN, LANCS.**

**BOREHOLE RECORD SHEET**

| Date | Scale | Job No. | Location | Borehole |
|---|---|---|---|---|
| JUNE 1981 | 1:50 | 2137 | PICKERINGS FARM 6(1) AREA | 79 |

| Method | Client |
|---|---|
| SHELL AND AUGER | CENTRAL LANCS. DEV. CORPORATION |

| Drilling & Casing Progress | Water Notes & Levels | Sample Type & Depths | S.P.T. 'N' value or Cohesion* | Description | O.D. Level | Legend | Depth |
|---|---|---|---|---|---|---|---|
| 10th | | | | | 30.7 | | 0.0 |
| | | | | TOPSOIL | 30.3 | | 0.4 |
| | | U 1.0 - 1.5 | 183.9 | Hard becoming stiff, firm with depth, brown grey mottled at top, silty, slightly sandy, BOULDER CLAY | | | |
| | | U 2.5 - 3.0 | 376.0 | | | | |
| | | U 4.1 - 4.5 | 117.2 | | | | |
| | | U 5.5 - 6.0 | 68.1 | | | | |
| 10th | Dry | | | | 24.7 | | 6.0 |
| | | | | END OF BORE | | | |

# APPENDIX D

Preliminary Conceptual Model

| POTENTIAL RECEPTOR | COMMENTS | Include in PCM |
|---|---|---|
| PROPERTY: Other | | |
| On Site | | |
| Crops | None intended on site | × |
| Domestic Produce | May be grown in residential gardens | ✓ |
| Livestock | None anticipated on site | × |
| Domestic Animals | May be owned by residents | ✓ |
| Game | None on site | × |
| Off Site | | |
| Crops | possibly in the fields surrounding the site | ✓ |
| Domestic Produce | Possibly in houses in vicinity of the site | ✓ |
| Livestock | possibly in the fields surrounding the site | ✓ |
| Domestic Animals | May belong to adjacent residents | ✓ |
| Game | Unlikely | × |
| PROPERTY: Buildings | | |
| On Site | | |
| | Residential Properties, services, flora | ✓ |
| Off Site | | |
| | Residential Properties, services, flora | ✓ |
| HUMANS | | |
| On Site | | |
| Residents | Future Residents | ✓ |
| Construction workers | During ground excavations | ✓ |
| Employees | Landscape Gardeners | ✓ |
| Surface water users | No current surface water abstractions located on site | × |
| Off Site | | |
| Residents | Residents adjacent to the site | ✓ |
| Recreational users | Recreational walkers | ✓ |
| Groundwater users | No groundwater abstractions within 250 m. | × |
| Controlled Waters | | |
| On Site | | |
| Surface Waters | There is a pond located in the center of the site. Three field drainage ditches are located on site. | ✓ |
| Groundwater | The underlying bedrock Aquifer are classified as a Secondary B Aquifer. This represent a significant potential receptor. | ✓ |
| Off Site | | |
| Controlled Waters | There is a pond and three field drainage ditched on site. there are two further drainage ditched off site along the eastern and western site boundary, theses represent a potential receptor. | ✓ |
| Ecological Systems | | |
| On/Off Site | | |
| SSSIs, national nature reserves, SACs etc | None on site or located within 250 m of the site | × |

***Table A:*** *Potential Receptors to be Considered in the Preliminary Conceptual Model*

| Link | Source | Hazard | Transport Mechanism | Pathway | Medium of Exposure | Receptor | Risk Summary* |
|---|---|---|---|---|---|---|---|
| 1 | Contaminated soils | Direct contact /ingestion of soil or dust | Direct contact with contaminated soil | Dermal contact/ingestion of soil at surface | Soil | Humans (on-site/off-site), domestic pets | Low |
| 2 | Contaminated soils | Particulate inhalation | Wind blown particulates | Inhalation of particulates | Air | Humans (on-site/off-site), domestic pets | Low |
| 3 | Contaminated Soils | Impaired produce growth | Uptake of contaminants by homegrown produce resulting in loss | Uptake during growth | Vegetable produce | Property (domestic produce) | Low |
| 4 | Contaminated Soils | Ingestion of Contaminants | Uptake of contaminants by homegrown produce | Consumption of homegrown produce | Vegetable produce | Humans | Low |
| 5 | Contaminated Soils | Inhalation of Ground Gas | Degradation of contaminants generating ground gas through unsaturated zone to soil leading to inhalation | Inhalation of Gases | Air | Humans (on-site/ off-site, domestic pets) | Low |
| 6 | Contaminated Soils | Vapour Inhalation | Volatalisation of organic compounds through unsaturated zone of soil leading to inhalation | Inhalation of Vapours | Air | Humans (on-site/ off-site, domestic pets) | Low |
| 7 | Contaminated Soils | Damage to structure/services | Direct contact of contaminants with building structures/services | Direct contact | Soil/Water | Flora, services | Low |
| 8 | Contaminated Soils | Degradation of perched water quality | Dissolution or suspension of contaminants into perched waters and migration to on-site and off-site receptors | Dissolution or Suspension | Water | Perched Waters, surface waters | Low |
| 9 | Contaminated Soils | Pollution of underlying groundwater | Dissolution or suspension of contaminants into groundwaters | Dissolution or Suspension | Water | Groundwaters | Low |

***Table B:*** *Preliminary Conceptual Model*

***Relative Risk Screening and Prioritisation for further Investigation & or Assessment**

| | |
|---|---|
| **High** | Higher probability of occurrence and identification of primary sources of contamination with respect to most sensitive receptors. |
| **Medium** | Pollutant linkage generally dependent on the presence of other primary pollutant linkages and/or where pollutant linkage generally associated with less sensitive receptors. |
| **Low** | Lower probability of occurrence such as based on requirement for significant migration pathway or where pollutant linkage requires the presence of source contaminants at concentration likely to be much higher than other identified pollutant linkages. |

# APPENDIX E

Site Photographs


**P1:** Site entracnce along the north-western site boundary

**P2:** Hedge row traversing across the northern section of the site

**P3:** View across the northern section of the site

**P4:** Drainage ditch off site along the eastern site boundary

**P5:** A culvert east off site

**P6:** A pond located to the north of the centre of the site.

**Comments:**

GEO-ENVIRONMENTAL CONSULTING

**Photographs 1 to 6**

| | | | | |
|---|---|---|---|---|
| **This appendix is for illustrative purposes only and is for use only in conjunction with associated reports relating to the project** | **Site:** Land off Chain House Lane, Whitestake | **Project No:** 25033 | **Created By:** M Leigh-Monk | **Date:** March 2025 |
| | **Title:** Appendix E - Site Photographs | **Client:** | | |

**P7:** A drainage ditch and hedge row located along the southern boundary of the site.

**P8:** A drainage ditch along the southern boundary of the site with adjacent fields off site

**P9:** Drainage ditch off-site along the western site boundary, with access to the adjacent field off-site

**Comments:**

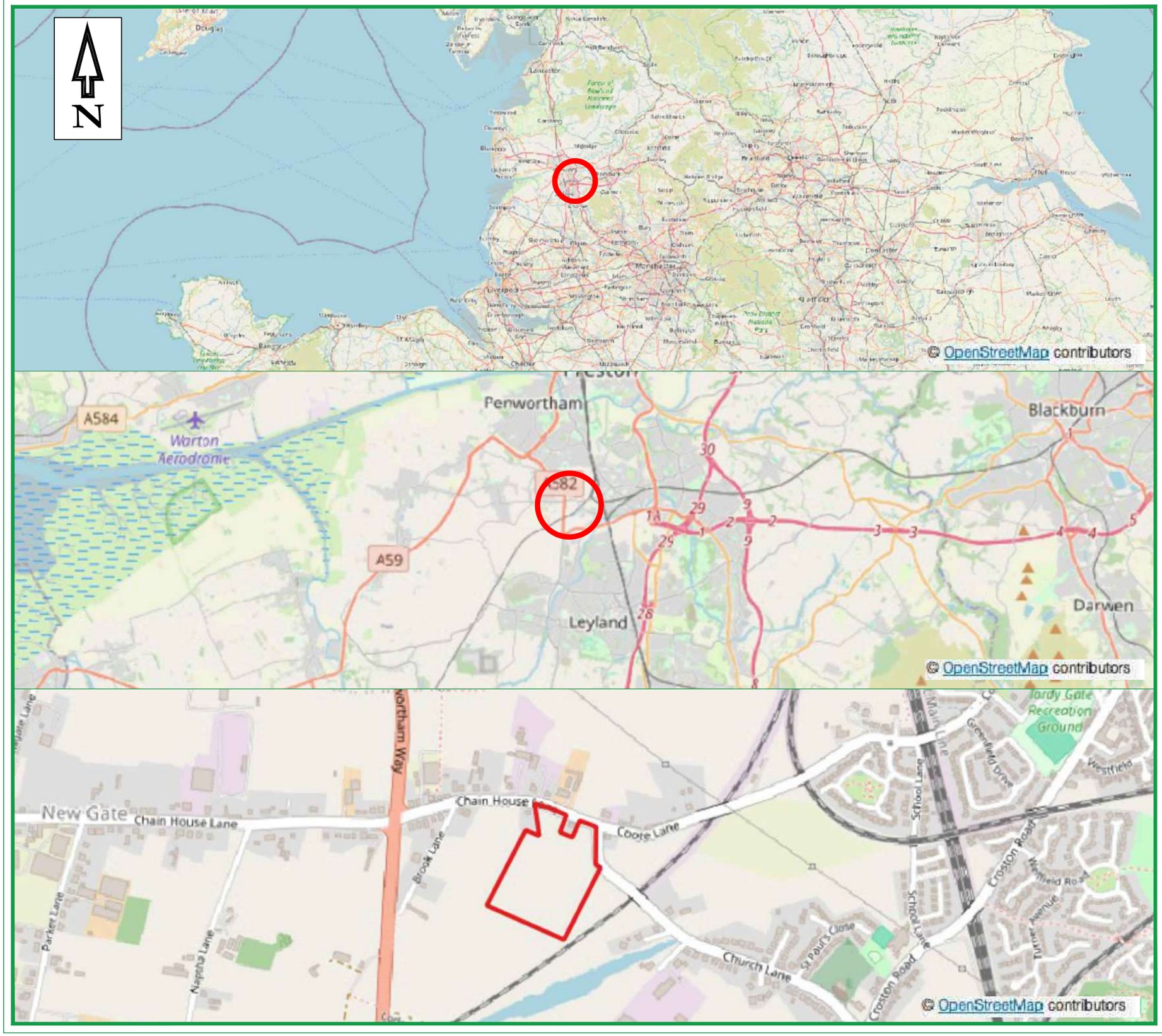
GEO-ENVIRONMENTAL CONSULTING

**Photographs 7 to 9**

| | | | | |
|---|---|---|---|---|
| **This appendix is for illustrative purposes only and is for use only in conjunction with associated reports relating to the project** | **Site:** Land off Chain House Lane, Whitestake | **Project No:** 25033 | **Created By:** M Leigh-Monk | **Date:** March 2025 |
| | **Title:** Appendix E - Site Photographs | **Client:** | | |

# APPENDIX F

Drawings



## LEGEND

🟥 SITE LOCATION

| REV | DESCRIPTION | DATE | BY |
|---|---|---|---|
| | | | |
| | | | |

GEO-ENVIRONMENTAL CONSULTING
No 2 Landwick Court, Metcalf Drive, Altham Business Park, Lancashire
Tel: 01254 377622 Mob: 07906753583
Email: mbuckley@bekenviro.co.uk
Web: www.bekenviro.co.uk

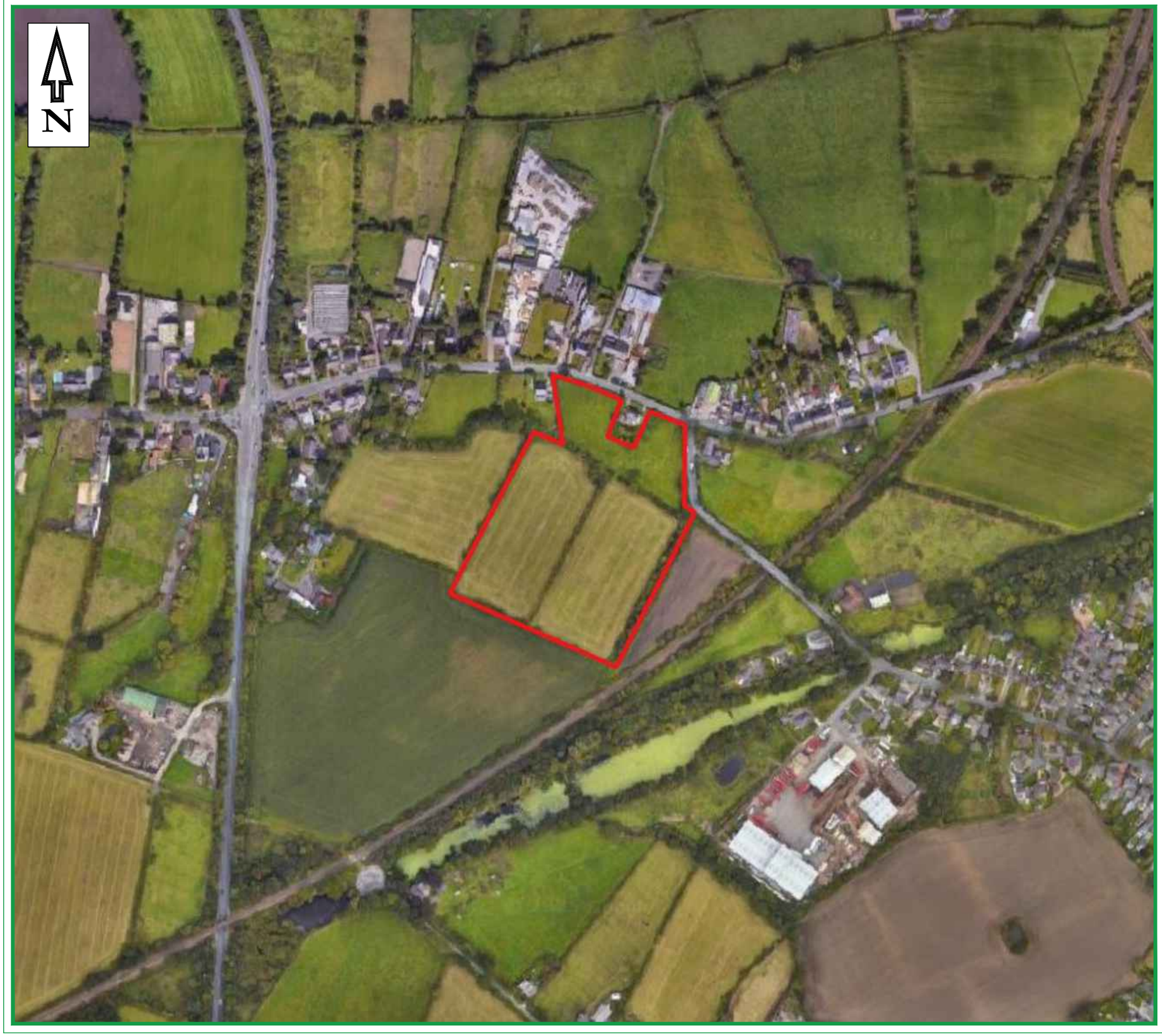
CLIENT.
SMITH LOVE PLANNING

JOB TITLE.
LAND TO THE REAR OF OAKDENE,
CHAIN HOUSE LANE, WHITESTAKE

DRAWING TITLE.
SITE LOCATION PLAN

| SCALE @ A3. | DRAWN BY. | APPROVED BY. | DATE. |
|---|---|---|---|
| NTS | D.E. | M.B. | 07/03/25 |

| DRAWING No. | REV. |
|---|---|
| 25033-1 | - |




# LEGEND

SITE FOOTPRINT

| REV | DESCRIPTION | DATE | BY |
|---|---|---|---|
| | | | |
| | | | |

GEO-ENVIRONMENTAL CONSULTING
No 2 Landwick Court, Metcalf Drive, Altham Business Park, Lancashire, BB5 5GY
Tel: 01254 377622 Mob: 07906753583
Email: mbuckley@bekenviro.co.uk
Web: www.bekenviro.co.uk

CLIENT.

SMITH LOVE PLANNING

JOB TITLE.

LAND TO THE REAR OF OAKDENE,
CHAIN HOUSE LANE, WHITESTAKE

DRAWING TITLE.

SITE LAYOUT PLAN

| SCALE @ A3. | DRAWN BY. | APPROVED BY. | DATE. |
|---|---|---|---|
| NTS | D.E. | M.B. | 07/03/25 |

| DRAWING No. | REV. |
|---|---|
| 25033-2 | - |

| | Type | Bedrooms | Units |
|---|---|---|---|
| A | Apartment | 2 | 6 |
| B | House | 2 | 13 |
| C | House | 2 | 3 |
| D | House | 3 | 4 |
| E | House | 3 | 14 |
| F | House | 3 | 4 |
| G | House | 3 | 4 |
| H | House | 4 | 7 |
| I | House | 4 | 9 |
| J | House | 4 | 5 |
| K | House | 4 | 4 |
| L | House | 4 | 6 |
| M | House | 4 | 9 |
| N | House | 4 | 5 |
| O | House | 4 | 5 |
| **Total** | | | **98** |


1. Vehicle Access
2. Play Area
3. Pond
4. Sustainable Drainage Features
5. Pedestrian link to Bus Stop
6. Pedestrian links to surrounding development/ Wider Area

| ***PROJECT TITLE*** | ***DRAWING TITLE*** |
|---|---|
| Chain House Lane, Whitestake | Illustrative Master Plan GLCHL-IMP1 |

| *DATE* | *SCALE* | *REVISION* |
|---|---|---|
| 11/22 | NTS@A4 | - |

GEO-ENVIRONMENTAL CONSULTING

**BEK Geo-Environmental Consulting**
No.2 Landwick Court, Metcalf Drive,
Altham Business Park,
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mbuckley@bekenviro.co.uk
01254 377622

BEK Enviro Limited Company No: 08868761 | VAT No. 179 9310 65

Homes England

Central Lancashire Local Plan Team
Regulation 19 Consultation
Third Floor
Town Hall
Lancaster Road
Preston
PR1 2RL

By Email: centrallancashireplan@chorley.gov.uk

11th April 2025

Dear Sir / Madam

**Central Lancashire Local Plan: Regulation 19 Submission Local Plan Consultation**

This representation is submitted on behalf of the landowners contained within the proposed allocation HS3.2: Apsley House, Farington (hereafter referred to as the "Site") of the Central Lancashire Local Plan ("CLLP").

The proposed allocation includes land owned by:

- Homes England – 11.1 ha :
- G & W Love (individual landowner): 3.7 ha and
- Northern Trust Group (with Lanley Homes): 8.5 ha

A land ownership plan is provided at Appendix 1.

This representation focuses on Policy HS3.2: Apsley House, Farington only and sets out the landowners' joint support for the proposed allocation. Other representations have been submitted by each landowner individually to the Regulation 19 consultation and in response to the previous consultation stages for the CLLP.

Included within this representation are the following:

- Appendix 1 – Land Ownership Plan
- Appendix 2 – Concept Framework
- Appendix 3 – Housing Trajectory

All of the landowners support the efforts of the Central Lancashire Authorities (Preston, South Ribble and Chorley) [the CLAs] in preparing a joint Local Plan to address the future needs of the area. They also support the preparation of Plans to ensure long term housing needs and economic growth ambitions are met in full.

The landowners of HS3.2: Apsley House, Farington are fully committed to the delivery of residential development at the earliest opportunity and consider that the allocation has capacity for 448 dwellings.

The allocation is suitable, available and achievable and the majority (330 dwellings) can be delivered in the first five years of the Plan period following adoption.

**Policy HS3.2: Apsley House, Farington**

The allocation is located approximately 2.5km from Leyland and Penwortham town centres and 1km from Lostock Hall (Tardy Gate) district centre. It comprises land bound by the Preston to Ormskirk railway line to the south, Penwortham Way to the west and Chain House Lane / Coote Lane to the north.

Within the CLLP, the Site is proposed for allocation under Policy HS3.2: Apsley House, Farington for 435 homes.

All the landowners are supportive of Policy HS3.2 and the allocation of Apsley House, Farington for new dwellings. The Site is:

- **Suitable:** The Site is considered suitable for residential development as a robust understanding of constraints and opportunities has informed the Concept Framework for the proposed allocation (provided at Appendix 2) and the understanding of housing capacity on the Site. It demonstrates that there are no technical, environmental and legal constraints to the Site's delivery.

- **Available:** The proposed allocation is in multiple ownerships, and is being promoted jointly by Homes England, G & W Love and Northern Trust Group (with Lanley Homes). The land jointly promoted by the landowners is available for development now.

- **Achievable:** The Housing Trajectory provided at Appendix 3 demonstrates that the Site can be delivered early and in full within the Plan period. Each landowners' site can be phased and delivered independently of each other, to accelerate housing delivery at the earliest opportunity.

As noted above, the Site is allocated for c.435 dwellings in the CLLP (under Policy HS3.2) however this is a lower capacity than our analysis has indicated. Following a review of technical constraints, we consider the Site has capacity for c.448 dwellings (an increase of 13 dwellings) and we request this modification to the allocation.

**Collaborative Approach to Placemaking**

As noted above, the allocation consists of three landowners: Homes England, G & W Love and Northern Trust Group (with Lanley Homes). All landowners have been working collaboratively throughout the preparation of the Local Plan to promote and coordinate the proposed allocation.

Recognising the need within Policy EN1 (referenced in the allocation's Key Development Considerations) for a collaborative approach to ensure the allocation is brought forward in a well-planned and timely manner, Homes England, G & W Love and Northern Trust Group (with Lanley Homes) have agreed and signed "Letters of Understanding".

The "Letters of Understanding" set out agreed aims and objectives needed in order to bring forward comprehensive housing development across the proposed allocation.

The aims and objectives agreed between all landowners are to:

- Work together to positively promote the allocation through the emerging Local Plan.
- Ensure that any planning and related technical due diligence work for each parties' land ownerships ensures a coherent solution to deliver the allocation as a whole.
- Collaborate on technical matters around masterplanning, access, drainage and any other relevant technical matters to achieve a mutually beneficial delivery solution to all parties.

Further to the agreed Letters of Understanding, and to ensure there is good placemaking across the allocation, the landowners have also produced and agreed a joint Concept Framework for the allocation – provided at Appendix 2.

This Concept Framework demonstrates a housing capacity of c.448 dwellings. It shows how each respective ownership within the allocation can be individually delivered, whilst avoiding uncoordinated piecemeal development and ensuring the proper planning of the area. The three sites can be delivered individually and phased to deliver concurrently (as included in housing trajectory in Appendix 3) and/or in any order.

The design principles that underpin the Concept Framework are:

- **Sustainable Travel Link:** To create a place that is well integrated into the existing built surroundings, the Concept Framework identifies where sustainable travel links could be provided from the western portion of the proposed allocation, towards the land to the north, (the Strategic Site Allocation – Pickering's Farm, Penwortham, SS6 and Local Centre) and wider consented scheme (LPA Reference: 07/2021/00886/ORM). This link would secure better cycle and pedestrian links to the north, improving permeability. Scope to improve public transport and upgrade bus stops on Chain House Lane / Coote Lane can also be explored if this is deemed desirable by South Ribble and Lancashire County Council.

- **Vehicular Access:** High-level access appraisals have been carried out to inform the location of the proposed vehicular access points. This creates two loop roads and provides primary access points on to Chain House Lane and Coote Lane. An access is also proposed on to Church Lane which is anticipated will only serve a small number of homes.

- **Wider connections:** The Concept Framework identifies opportunities to draw points of connection into and through the allocation creating well-connected street and path networks. To improve permeability in numerous directions, opportunities are identified to provide connections towards Bamber Bridge and Lostock Hall Railway Station. Opportunities to improve active travel routes along Chain House Lane, Coote Lane and Church Lane will also be explored.

- **Open Space and Play Space:** The Concept Framework demonstrates how a range of open spaces, including play space and natural walking routes across both the western and eastern portions of the allocation, could be provided. These walking routes can support well-being and access to nature.

- **Biodiversity Net Gain:** The Concept Framework will weave opportunities for habitat creation and enhancement throughout the landscaping strategy. In accordance with national planning policy, 10% Biodiversity Net Gain will be provided for the proposed allocation.

- **Surface Water Drainage:** The allocation is in Flood Zone 1 and is not at risk of flooding. The Concept Framework demonstrates how natural surface water swales within the green spaces on-site could manage surface water flooding.

By adopting an integrated and collaborative approach, the landowners can fully explore and understand both the barriers and opportunities on the allocation, thereby ensuring that the collective development contributes positively to placemaking.

A holistic and collaborative approach to deliverability and connectivity is being pursued and the landowners have worked together to ensure that the three parcels remain independently deliverable and can therefore accelerate housing delivery across the allocation.

**Proposed Modifications**

Based on the work undertaken to date, all landowners consider Policy HS3.2: Apsley House, Farington, is sound as it is justified by technical evidence, it is available to be brought forward for development now and is a suitable and sustainable location for new housing development.

For completeness, a modification is requested to the draft policy to clarify that the capacity of the Site is 448 dwellings and not 435 dwellings. This is to ensure it is justified (reflecting our proportionate evidence of the allocation's capacity) and consistent with national planning policy by ensuring an effective use of land to meet the need for homes (Paragraph 124 of the NPPF).

The landowners consider the Key Development Considerations can be met in full within individual planning applications and are confident that no modifications are necessary to this policy wording.

**Summary**

The landowners are working in collaboration to ensure that the allocation is brought forward in a well-planned and timely manner, immediately from adoption, and for completion early in the Plan period. The landowners are fully committed to the delivery of residential development on the proposed allocation at the earliest opportunity.

The landowners welcome further discussions with the CLAs to bring this allocation forward. We will continue to engage as appropriate a look forward to continuing to work with the CLAs on supporting the preparation of the CLLP.

Yours faithfully,

**Signed on behalf of Homes England**

[redacted].....

Lucinda Taylor
Head of Planning and Enabling - North West

Homes England

**Signed in acknowledgement on behalf of G & W Love**

[redacted].....

G & W Love

**Signed in acknowledgement on behalf of Northern Trust and Lanley Homes**

[redacted]

Neil McManus
Senior Development Manager

Homes England

The Housing and Regeneration Agency

# Appendix 1 – Land Ownership Plan of Policy HS3.2: Apsley House, Faringtон

**Land Ownership Plan**

- Land Owned by Homes England
- Land Owned by Mr. G Love
- Land in control of Northern Trust Group and Lanley Homes

Homes England

# Appendix 2 – Concept Framework

Connection to proposed residential allocation in Homes England Ownership

Connection to Bamber Bridge and Lostock Hall Railway Station

Potential pedestrian connection to School Lane

Proposed residential allocation in Homes England Ownership

**Coote Lane - Concept Framework**

Potential residential capacity on sites edged in red: 448 homes

- Residential development
- Amenity landscape / green infrastructure
- Natural landscape / green infrastructure / BNG
- Play facilities or LEAP
- SUDs features (indicative)
- Retained hedgerows / planting
- New sustainable travel link
- Potential footpath and cycle network
- Potential vehicle connection to sites
- Primary / secondary streets
- Access to adjacent development sites

Homes England

# Appendix 3 – Housing Trajectory of Policy HS3.2: Apsley House, Farington

**Appendix 3 – Housing Trajectory of Policy HS3.2: Apsley House, Farington**

| Landowners | Sept 2028 | March 2029 | March 2030 | March 2031 | March 2032 | March 2033 | March 2034 | March 2035 | Total |
|---|---|---|---|---|---|---|---|---|---|
| Mr Love | 16 | 32 | 32 | 20 | | | | | **100** |
| Homes England | | | | 24 | 49 | 49 | 49 | 49 | **220** |
| Northern Trust Group (with Lanley Homes) | 16 | 32 | 32 | 32 | 16 | | | | **128** |
| **Total** | **32** | **64** | **64** | **76** | **65** | **49** | **49** | **49** | **448** |