Intermodal Logistics Park North Ltd

INTERMODAL LOGISTICS PARK NORTH (ILPN)

Intermodal Logistics Park North (ILPN) Strategic Rail Freight Interchange (SRFI)

Project reference TR510001

Preliminary Environmental Information Report (PEIR)

Appendix 15.4: Minerals Assessment (Part 01 of 02)

October 2025

Planning Act 2008

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

This document forms a part of a Preliminary Environmental Information Report (PEIR) for the Intermodal Logistics Park North (ILPN) project.

A PEIR presents environmental information to assist consultees to form an informed view of the likely significant environmental effects of a proposed development and provide feedback.

This PEIR has been prepared by the project promoter, Intermodal Logistics Park North Ltd. The Proposed Development is described in Chapter 3 of the PEIR and is the subject of a public consultation.

Details of how to respond to the public consultation are provided at the end of Chapter 1 of the PEIR and on the project website:

https://www.tritaxbigbox.co.uk/our-spaces/intermodal-logistics-park-north/

This feedback will be taken into account by Intermodal Logistics Park North Ltd in the preparation of its application for a Development Consent Order for the project.



ENVIRONMENT

Intermodal Logistics Park North Ltd
Intermodal Logistics Park North
Minerals Assessment

Intermodal Logistics Park North Minerals Assessment October 2025 ILP-BWB-SGT-XX-RP-CE-0001_MA



ENVIRONMENT

Intermodal Logistics Park North Ltd Intermodal Logistics Park North Minerals Assessment

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1. INTRODUCTION

Instruction

- 1.1 BWB Consulting (BWB) was instructed by Intermodal Logistics Park North Ltd (the Client) to carry out a Minerals Assessment for the site at Intermodal Logistics Park North.
- 1.2 The proposed development is anticipated to comprise a new Strategic Rail Freight Interchange (SRFI) project, with an intermodal rail terminal and logistics accommodation / warehousing in Newton-le-Willows. The proposed illustrative masterplan is presented as **Appendix 1**.
- 1.3 The site comprises the main SRFI development site area (the 'Main Site'), the western shunt head ('Western Rail Chord'), and numerous areas of highways improvements and ecology compensation areas (predominantly north of Chat Moss railway line and south east of Winwick Lane) which collective are within the red line boundary ('Order Limits').
- 1.4 While most of the site is within the jurisdiction of St Helens Borough Council, the north east area of the Main Site falls under the jurisdiction of Wigan Council, and the south east edge of the Main Site falls under the jurisdiction of Warrington Council. Wigan Council have designated parts of the north east area of the site as a Minerals Safeguarded Area (MSA) for sand and gravel, and as a Coal Resource Area. There is no such designation in the parts of the site in St Helens or Warrington. This report therefore focusses on the area of the Main Site which falls within the jurisdiction of Wigan Council and the possibility for sand and gravel and coal mineral resources being sterilised as a result of the proposed development. The designated MSAs for Sand and Gravel and Coal are indicated on plans included as **Appendix 2** and **Appendix 3** respectively. Parts of he wider site within the Order Limits are also an MSA. However, these areas not within areas that are proposed to be developed, and so no minerals sterilisation could occur. There areas are therefore excluded from this assessment.

Available Information

- 1.5 The following sources of information have been utilised in this report's production:
 - British Geological Survey (BGS) Geoindex Onshore (online). Accessed July 2025;
 - British Geological Survey (BGS) Exploratory Hole Records (via Geoindex). Accessed July 2025;
 - British Geological Survey (BGS) 1:50,000 Scale, 'Wigan', sheet 84, Bedrock (dated 1971) and Superficial (dated 1977) editions;
 - British Geological Survey (BGS) 1:50,000 Scale, 'Runcorn', sheet 97, Bedrock (dated 1980) and Superficial (dated 1977) editions;
 - British Geological Survey (BGS) Mineral Resource Information in Support of National, Regional and Local Planning: North Yorkshire (comprising North Yorkshire, Yorkshire Dales and North York Moors National Parks and City of York)
 - The Evidence bade for Minerals Planning in Merseyside Report 2008;
 - Warrington Borough Council Minerals Resource Study and Policy Review 2017;



- Greater Manchester Joint Minerals Development Plan Authority Monitoring Report 2019-20;
- Groundsure Report Reference GS-GOZ-A16-EA9-VHN (Appendix 4);
- Historical Ordnance Survey Mapping (Appendix 5); and
- Consultants Coal Mining Report fer: GS-WLV-FK2-86F-HC7-8391 (Appendix 6).

Scope of Work

1.6 The objective of this report is to review and assess the existing ground conditions at the site with respect to the Merseyside and Warrington Minerals plans and determine whether the proposed development is likely to have an adverse impact on the availability of minerals in the area.



THE SITE 2.

Site Location

2.1 The site is located at East of Newton-Le-Willows, Merseyside centred at National Grid Reference 361107, 394899. The Order Limits (red line boundary) for the DCO, along with the main development areas of the project are shown below on Figure 2:1.

Figure 2:1: Site Location Plan Wigan Council Land Western Rail Chord The Main Site

Site Description

- 2.2 The Main DCO site is irregular in shape and occupies approximately 208.3ha of land with the full Order Limits of the DCO site covering circa 480.5ha.
- 2.3 The site comprises agricultural fields surrounded by hedges and wooded areas. The M6 motorway passes between the western and eastern areas of site, and railway lines border the site to the west and north.

The Main Site

2.4 The Main Site predominantly comprises open fields used agriculturally. A railway within a cutting, and the Highfield Moss Site of Special Scientific Interest (SSSI) borders the site to the north, the M6 borders the site to the west and the south, and the A579 borders



the site to the east and the south. Overhead pylons run throughout, running east/west in the north of the Main Site.

2.5 Highfield Moss is located in the far north, separated by a woodland area and a ditch, which was largely dry at the time of the site visit. Highfield Farm is located within the northern portion. An airfield strip, comprising a grass landing strip, and the Moss Pits are located in a field adjacent to the Highfield Moss. Moss Pits are indicated to be pods/lagoons within small parcels of woodland. Parkside Farm is located centrally.

Western Rail Chord

2.6 The western Rail Chord is accessible via Newton Park Drive to the west. Much of this area is heavily vegetated and inaccessible. Several buildings off the access road are derelict and supported by scaffolding. Newton Park Farm was still in use at the time of the walkover.

Site History

2.7 Historical Ordnance Survey (OS) mapping for the site area has been reviewed. These maps and plans date from 1849 to 2024. The historical plans reviewed are provided in Appendix 5. The key points of the historical development of the site and surrounding area are summarised in Table 2:1. All distances quoted are approximate.

Table 2:1 Summary of Site History

Tuble 2.1	summary of site History	
Dates	On Site	Off-Site
1849- 1956	All sections of the site formed part of open agricultural fields with sporadic farms/residences/ponds. A RAIL LINE within a cutting ran east/west through the very north of the site, with associated infrastructure. MAINS PITS and MOSS PITS were located in the east of the central site. From 1938, the MAINS PITS were no longer present, being possibly INFILLED.	The surrounding area was similarly used as open agricultural land, with sporadic villages, farms, and residences. A RAILWAY LINE was located on the western and northern site boundary. Several small collections of ponds were located between Western and Central Areas of the site. A sandstone QUARRY was located immediately south of the site until 1891. The MAINS PITS was located immediately off the southeastern section. A SAND PIT was located immediately east of the eastern boundary until 1906. The Island Plantation was located immediately west of the southeast section. The BLACK PITS were located immediately northeast of the central site until 1929. Highfield Moss was located immediately off the northern site boundary.
1964 - 2024	An access road as well as a small portion of the neighbouring COLLIERY was located on site. By 1965, a	The M6 MOTORWAY was located immediately west of the central site. A neighbouring COLLIERY was located adjacent to the western area, in replacement of ponds that were located here.



Dates	On Site	Off-Site
	pond that was previously in this area, was likely INFILLED . By 2024, a pond in the far northwest of the Central Site, was no longer present. This was likely INFILLED .	From 2010, several ponds were located between the MAINS PITS and the Island Plantation immediately beyond the southeast section. By 2024, the number of ponds had reduced, being possibly INFILLED .



3. GROUND CONDITIONS

Published Geology

- 3.1 Information published by the BGS indicates that the nature of superficial deposits on site vary.
- 3.2 The central area of the site is largely a combination of Devensian Till deposits as well as being devoid of any superficial deposits. The far north of this section is underlain by Glaciofluvial Ice Contact deposits (Devensian sand and gravel). It is worth noting that peat deposits are mapped within Highfield Moss which is situated immediately to the northeast of the section and therefore may well extend onto the site. In the very northeast of the site, small sequences of Glaciofluvial Ice Contact deposits and Lacustrine Deposits are mapped.
- 3.3 The vast majority of superficial deposits overlie the Chester Formation (sandstone) bedrock. The Kinnerton Sandstone Formation, and the Manchester Marls Formation are located beneath superficial deposits in the west of the central site area.
- 3.4 The quarry located to the southeast of the Main Site is underlain by a mixture of Devensian Till, Glaciofluvial Deposits as well as being devoid of superficial deposits. The entirety of the superficial deposits in this area overlies the Chester Formation bedrock.
- 3.5 The area to the west is similarly mapped to be underlain by a combination of Devensian Till as well as being devoid of superficial deposits. The superficial deposits predominantly overlie the Chester Formation bedrock, with the eastern boundary being underlain by the Manchester Marls Formation.
- 3.6 Numerous historical BGS boreholes are located on site. Relevant information from the boreholes is summarised in **Table 3:1**.

Table 3:1: Summary of BGS Exploratory Records

Reference	Date	Easting, Northing (OSGB)	Location relative to site	Relevant Details
SJ69NW108	1985	361991, 395730	East	Sandstone bedrock encountered at 10.60m bgl.
SJ69SW18	1952	360900, 394880	Central	Weak sandstone bedrock encountered at 4.00m bgl.
SJ69SW41	1950	360050, 394990	West	'Marl' bedrock encountered at 7.62m bgl.
\$J59\$E36	Not stated	359990, 394730	West	Parkside Colliery shaft 1, bedrock encountered at 0.61m bgl, first coal encountered at 41.61m bgl.
\$J69\$W46	Not stated	360060, 394760	West	Parkside Colliery shaft 2, Bedrock encountered at 1.00m bgl,



- 3.7 A site-specific Coal Mining Report (included as Appendix 4) indicates one mine shaft within close proximity to the site relating to the former Parkside Colliery (reference 359394-001). This shaft has been filled and capped by British Coal in 1994, with a reinforced concrete 15m square and 1m thick cap. It also incorporates a gas vent that is actively monitored monthly by the Coal Authority. Two historical Mine Gas incidents have been recorded associated with this.
- 3.8 There are nine abandoned mine plan catalogue numbers which intersect with some, or all, of the site boundary.
- 3.9 There are many records of past underground mining within the Coal Mining Report. The shallowest of these is at 361m below ground level (bgl).
- 3.10 There has been a previous subsidence claim relating to Coal Mining which was rejected for a parcel of land east of Moss Pits on the Wigan Land.

Ground Conditions Encountered

- 3.11 Intrusive ground investigation works were undertaken by BWB Consulting across the wider proposed Development Site between 23/04/2025 and 24/06/2025 and comprised excavation of 72 trial pits, advancement of 38 dynamic sampling boreholes and advancement of 8 open hole rotary boreholes. Exploratory hole location plan is included within **Appendix 4**.
- 3.12 The ground conditions encountered during the ground investigation within the Wigan Council Land where the MSA is located on the site is summarised in the following sections and below in **Table 5:1**. The exploratory hole location plan is included within **Appendix 7**. Borehole logs are presented as **Appendix 8**.

Table 3:2: Summary of Ground Conditions (Mineral Safeguarding Area)

Stratum	Top Depth (m)		Base Depth (m)		Thickness (m)	
Silatotti	Min	Max	Min	Max	Min	Max
Topsoil	Ground Level		0.20	0.40	0.20	0.40
Made Ground*	Ground	d Level	1.60		1.60	
Glaciofluvial Ice Contact Deposits*	1.	60	2.70**		1.10**	
Lacustrine Deposits*	0.3	35	0.60		0.25	
Till***	0.20	0.60	1.20	4.00	0.80	4.60
Weathered Chester Formation***	1.20	4.00	3.20	5.00	0.30	2.20

^{*}Recorded in one location.

3.13 In total, eight trial pits (TP01, TP02, TP06, TP08, TP10, TP11, TP12 and TP72 and 5 dynamic sampling boreholes (DS02, DS03, DS04, DS08 and DS10) were located within the MSA in the northeast part of the site.

^{**}Thickness of Glaciofluvial Contact Deposits not proven.

^{***}Thickness and base of Till and Weathered Chester Formation not proven.



Topsoil

3.14 Topsoil was encountered consistently across the majority of the site (MSA) at typical thicknesses of between 0.20m and 0.40m bgl. The composition was dark brown clayey sand or sandy clay with rootlets and rare sandstone and quartzite gravel.

Made Ground

3.15 Made Ground was recorded in one location (TP02) at a thickness of 1.60m and comprised dark brown silty slightly gravelly fine sand with rootlets and quartzite, plastic and brick gravel over grey and brown slightly gravelly sandy and silty clay. Gravel was sandstone, quartzite and shale.

Glaciofluvial Ice Contact Deposits

3.16 Glaciofluvial Ice Contact Deposits were also recorded in one location (TP02) at a thickness of 1.10m and comprised brown medium sand with sandstone gravel.

<u>Lacustrine Deposits</u>

3.17 Lacustrine deposits were recorded in one location (TP72) at a thickness of 0.25m, comprising firm light brown and light grey clay.

Till

- 3.18 Till deposits were recorded across majority of the area with exception of TP02 where trial pit was terminated at Glaciofluvial Ice Contact Deposits. Till deposits ranged in thickness between 0.80m to 4.60m. Thickness of deposits were not proven at TP06, TP10, TP72, and DS03.
- 3.19 Till deposits generally comprised red to brown slightly gravelly sandy silty clay. Gravel was recorded as coal, sandstone, quartzite and shale. Pyrite crystals were noted at DS02 in sand.
- 3.20 At DS08 deposits between 0.20m and 1.40m were recorded as reddish brown clayey fine to coarse sand, at TP12 as gravelly fine and medium sand and at DS10 Till deposits were described as fine to medium sand with thin slightly sandy clay bands.

Weathered Chester Formation

3.21 Weathered Chester Formation deposits were recorded in eight of twelve locations within the MSA. Top depth of the formation ranged between 1.20m bgl and 4.00m bgl thickness of deposits were not proven. Weathered Chester Formation Deposits generally comprised weathered sandstone recovered as red or orange gravelly sand, sandy gravel or brown sand. Rare angular sandstone cobbles were recorded at TP08 and TP12.



Deep Coal (50m bgl-1200m bgl) Resources

3.22 Boreholes constructed on the site during BWB Consulting 2025 ground investigation did not exceed 30m bgl. No coal deposits were recorded on site up to 30.0m bgl.

Material Quality

3.23 The results of the PSD analysis on the Till and Glaciofluvial Ice Contact Deposits located at the MSA indicated that material on site generally comprise of cohesive material. The results are summarised in **Table 5:2** below. PSD testing results are presented in **Appendix 7**.

Table 3:3: PSD Result Summary – Superficial Deposits

Location	Depth	Geology	Cobble Content	Gravel Content	Sand Content	Silt/Clay Content	Series 600 Earthworks Class (Table 6/2)
TP02	0.60	Till	0	15	20	65	2A&2B
TP02	1.90	Glaciofluvial Ice Contact Deposits	0	2	77	21	2A&2B
TP11	0.80	Till	0	4	51	45	2A&2B
TP12	1.90	Till	0	3	60	37	2A&2B
TP72	1.00	Till	0	4	36	60	2A&2B

Hydrogeology

3.24 Shallow groundwater was encountered in six of twelve exploratory holes located within the MSA and are summarised in **Table 5:3**.

Table 3:4: Groundwater Strikes

Location	Depth (m)	Stratum	Comment
DS02	2.50	Till	Water struck at 2.50m bgl.
DS08	3.80	Till	Water struck at 3.80m bgl.
TP01	1.20	Till/Weathered Chester Formation	Wet soils below 1.20m bgl. Slow water inflow.
TP02	1.60	Made Ground/Glaciofluvial Ice Contact Deposits	Wet soils below 1.60m bgl. Moderate water inflow.
TP10	1.60	Till	Wet soils below 1.60m bgl. Slow water inflow.

3.25 Standing water levels recorded during the monitoring period ranged between 1.70m (DS08 on 13/06/2025) and 2.20m bgl (DS02 on 21/05/2025). Borehole DS08 was recorded as dry during first monitoring rounds. A summary of water levels recorded are presented within **Table 5:4** below.



Table 3:5: Standing Water Levels

Location	Depth (m bgl) (21/05/2025)	Depth (m bgl) (13/06/2025)	Depth (m bgl) (03/07/2025)	Stratum
DS02	2.20	NR	NR	Till
DS08	Dry	1.70	1.75	Till

Notes:

NR - Levels not recorded.



4. MINERAL RESOURCE ASSESSMENT

Background

- 4.1 The Greater Manchester Joint Minerals Development Plan and Warrington Borough Council Minerals Resource Study report indicates minerals with significant importance in the wider area. Six categories of potential mineral resources within Greater Manchester area including Wigan and Warrington are:
 - Superficial sand and gravel (partially located within site boundary)
 - Carboniferous Millstone Grit (sandstone) (not located within site boundary)
 - Brickclay with Surface Mined Coal (Shallow Coal) (not located within site boundary)
 - Peat (located adjacent to site boundary)
 - Salt (not within site boundary)
 - Coal (deep coal deposits located below site boundary)
- 4.2 The MSA map for sand and gravel is presented as **Appendix 2**. This map indicates that the site is in an Mineral Safeguarding Area (MSA) for sand and gravel.
- 4.3 The deep coal (depths between 50m bgl 1,200m bgl) have potential for coal bed methane extraction below site boundary. The deep coal resource map is presented as **Appendix 3**.

Strategic Policy Objectives

4.4 The Strategic Objectives of the Greater Manchester Joint Minerals Plan Policy are as follows:

Policy 1 – The Presumption in Favour of Sustainable Minerals Development

4.5 Positive consideration will be given to minerals development which accords with the policies set out in this document and with all other relevant local plan (Local Development Framework) policies.

Policy 8 – Prior extraction of Mineral Resources

- 4.6 All non-mineral development proposals within the MSA should extract any viable mineral resources present in advance of construction.
- 4.7 Non-mineral developments within these areas will be permitted if:
 - i. The need for the development outweighs the need to extract the mineral.
 - ii. It can be clearly demonstrated that it is not environmentally acceptable or economically viable to extract the mineral prior to non-mineral development taking place.
 - iii. It can be clearly demonstrated that the mineral is either not present or of no economic value or too deep to extract in relation to the proposed development;



iv. The development is limited or temporary and would not prevent minerals extraction taking place in the future.

Policy 11 – Protection of Existing Mineral Site/Infrastructure

4.8 Development on or adjoining an existing mineral working or site containing minerals infrastructure will be permitted provided it would not have an unacceptable impact on the continuation of mineral working or the continued operation of the mineral infrastructure.

Landbank

4.9 The Greater Manchester Joint Minerals Development Plan Authority Monitoring Report April 2020 – March 2025, dated July 2025 states there no sand and gravel reserves remain within the area covered by the Greater Manchester Joint Minerals Development Plan, and it relies heavily on imports.

Mineral Extraction Viability

4.10 A review of the Mineral Resource Maps for Greater Manchester indicates that Glacial Sand and Gravel Deposits and deep coal (between 50m bgl and 1,200m bgl) are present on site. The site is not indicated to fall within an area with valid or expired planning permission for workings.

Sand and Gravel

- 4.11 Glacial sand and gravel deposits indicated on site on minerals maps are included within the MSA. The outline of the indicated Glacial Sand and Gravel appears to fall within the BGS mapping of Lacustrine Deposits, Glaciofluvial Ice Contact Deposits and Till. It is therefore considered that deposits are shown as a potential resource in the northeast of the site.
- 4.12 The BGS defines typical criteria for economically workable sand and gravel deposits:
 - Criteria for Category A deposits:
 - o The deposit should average at least 2m thickness;
 - o Ratio of overburden to mineral should not exceed 1:1;
 - The proportion of fines (particles passing 0.063mm B.S. sieve) should not exceed 20 per cent; and
 - o The deposit should lie within 5 metres of the surface.
 - Criteria for Category B deposits:
 - o The deposit should average at least 2m thickness;
 - o Ratio of overburden to mineral should not exceed 2:1;
 - The proportion of fines (particles passing 0.063mm B.S. sieve) should not exceed 40 per cent; and
 - o The deposit should lie within 10 metres of the surface.



4.13 Based on the ground conditions encountered, the deposits in the MSA parts of the site are typically not sand and gravel and have fine proportions of greater than 40% for most samples analysed. Considering Policy 8, the information clearly demonstrates that sand and gravel is not present and the deposits at the site are of no economic value.

<u>Groundwater</u>

4.14 Shallow groundwater is present within the area of the MSA and would necessitate groundwater control measures/dewatering reducing economic viability for extraction.

Coal

- 4.15 The area of deep coal (depths between 50m bgl 1,200m bgl) have potential for Coal Bed Methane Extraction beneath site boundary.
- 4.16 Parkside Colliery, located beneath the western area of site, closed in 1993. No deep or opencast coal mining is currently taking place in England.
- 4.17 The site is not within a Coal Authority development high risk area, and no records of shallow or surface coal workings have been mapped nearby. The BGS Mineral Resources Maps show the site is not covered by a Coal Licence.

Ecology

4.18 The Minerals and Waste Policies Map shows an area (Highfield Moss) adjacent to the site to the north, which is designated as a National Nature Reserve and a SSSI site. It is expected that a mineral extraction operation at the subject site could be too close to this site and any application for such could be rejected due to the potential negative ecological impact. A suitable buffer would be needed for mitigation of environmental effects on such a site. This leaves limited areas of the MSA. The proposed development itself has a 50m buffer to mitigate environmental effects as well as contributing to biodiversity.

Potential Future Mineral Sites

4.19 Southworth Quarry is a sandstone quarry located immediately south east of the site, which could be extended in the future to provide additional mineral resource. The development of the site is not considered to represent a constraint to extension of the Southworth Quarry, as no proposed buildings of significant infrastructure are proposed south east of Winwick Lane, near the quarry.



5. CONCLUSION

- 5.1 The construction proposed at the site is a non-mineral commercial development, and the site is located partially in a MSA for sand and gravels.
- 5.2 BWB ground investigation data indicates that sand and gravel deposits within the MSA have limited, patchy distribution with significant fine particle presence within material reducing its quality. The deposits in the MSA parts of the site are typically not sand and gravel and have proportions of fines of greater than 40% for most samples analysed Shallow groundwater is also present within the area of the MSA and would necessitate groundwater control measures/dewatering reducing economic viability for extraction.
- 5.3 The glacial sand and gravel deposits are considered to be of limited value in terms of extraction due to the site not being considered to be in an area where silica sand is typically extracted. The proximity to Highfield Moss SSSI would also require a suitable buffer would also significantly reduce the area of the MSA that could be extracted.
- 5.4 Deep coal between 50m and 1,200m bgl was not recorded during ground investigation works carried out in 2025. However, due to the depth of the minerals, these minerals would remain accessible after the site is developed, as a deep coal mine could be set up and access the coal hundreds of meters laterally from the mineral's location.
- 5.5 The development of the site is not considered to represent a constraint to surrounding potential mineral resources. The distance to surrounding potential resources provides a degree of separation from potential further extraction sites.
- 5.6 For the reasons given above it is considered that in accordance with Policy 8 (Prior Extraction of Mineral Resources) of the Greater Manchester Joint Minerals Plan Policy, the need for the proposed rail freight development, and its associated benefits, outweigh the need to safeguard any mineral resources at the site, particularly as this mineral is present at surface in the wider region (to the east), in areas that are much less developed, where extraction would be easier, more economic and have fewer impacts. As set out in Policy 8 of the Greater Manchester Joint Minerals Plan Policy, the information and assessment undertaken clearly demonstrates that minerals extraction at the site would not be environmentally acceptable (Policy 8, ii)), sand and gravel is not present (Policy 8, iii)) and the deposits at the site are of no economic value (Policy 8, iii)) and therefore, non-mineral development should not be refused on the ground of minerals safeguarding.

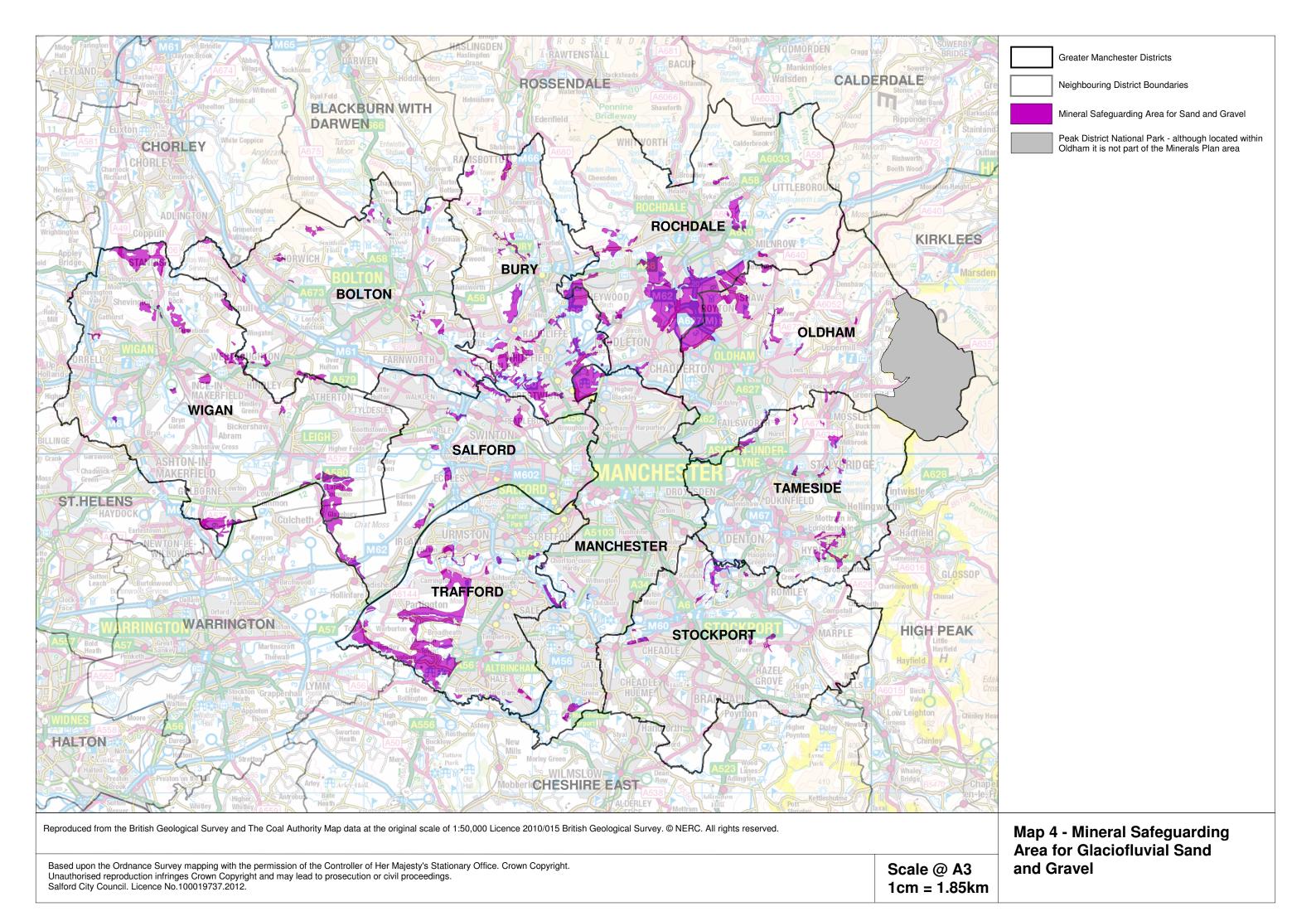


Appendix 1: Proposed Masterplan



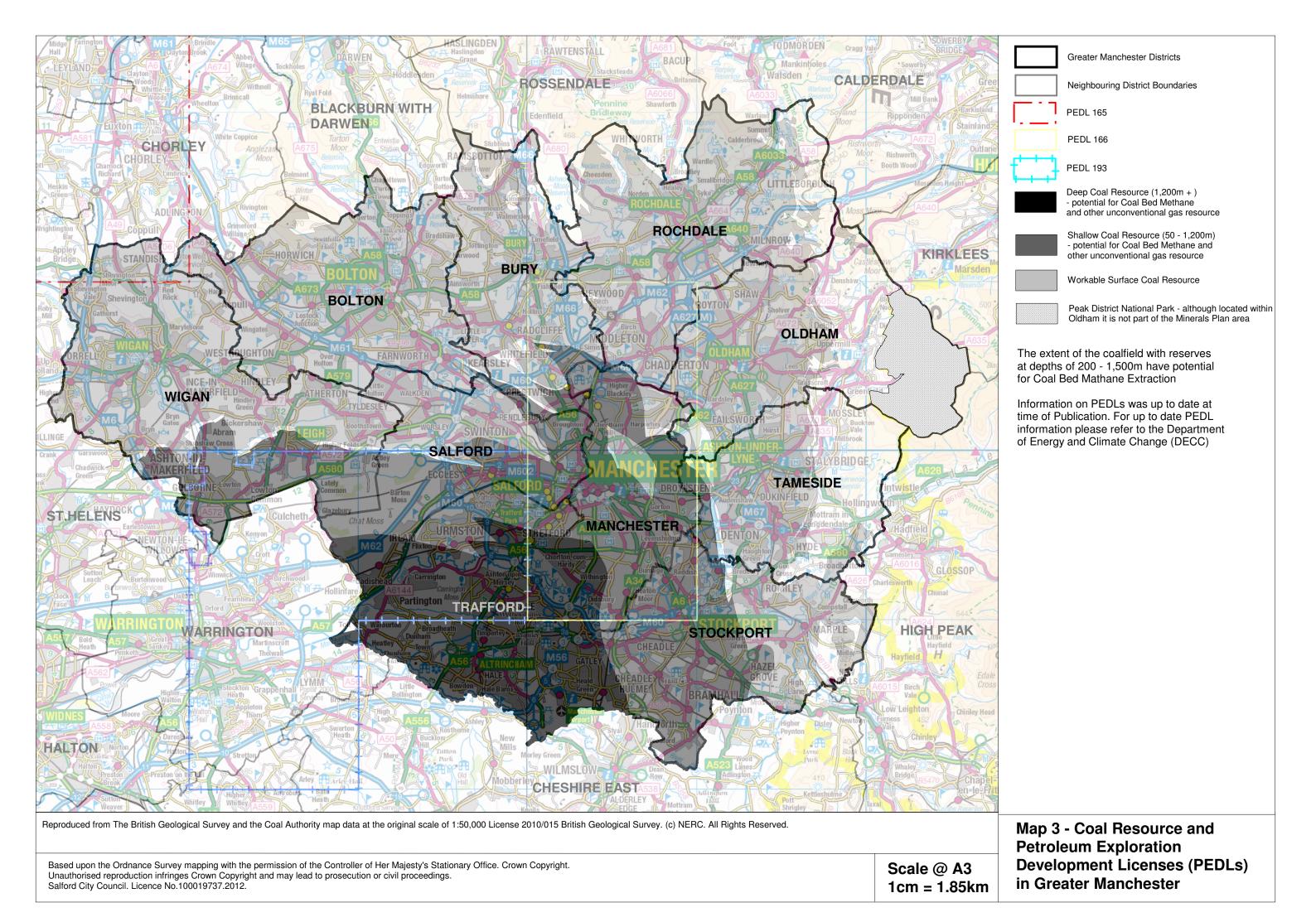


Appendix 2: Mineral Safeguarding Map





Appendix 3: Coal Resources and Petroleum Exploration Development Licences Map





Appendix 4: Groundsure Report



Enviro+Geo

ILP North Wigan Site

Order Details

Date: 02/06/2025

Your ref: 233398 / 11496

Our Ref: GS-SUF-6NK-EKV-F2X

Site Details

Location: 361922 395578

Area: 28.34 ha

Authority: <u>Wigan Council</u> **⊅**, <u>Warrington Borough</u>



Summary of findings

<u>p. 2</u> > **Aerial image** p. 9 >

OS MasterMap site plan

N/A: >10ha





Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
<u>14</u> >	<u>1.1</u> >	<u>Historical industrial land uses</u> >	11	15	6	13	-
<u>16</u> >	<u>1.2</u> >	<u>Historical tanks</u> >	0	0	0	3	-
17	1.3	Historical energy features	0	0	0	0	-
17	1.4	Historical petrol stations	0	0	0	0	-
17	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
<u>19</u> >	<u>2.1</u> >	<u>Historical industrial land uses</u> >	11	18	7	20	-
<u>22</u> >	<u>2.2</u> >	<u>Historical tanks</u> >	0	0	0	3	-
22	2.3	Historical energy features	0	0	0	0	-
22	2.4	Historical petrol stations	0	0	0	0	-
22	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
Page 23	Section 3.1	Waste and landfill > Active or recent landfill	On site	0-50m 0	50-250m 0	250-500m 0	500-2000m
							500-2000m - -
23	3.1	Active or recent landfill	0	0	0	0	500-2000m - -
23	3.1	Active or recent landfill Historical landfill (BGS records)	0	0	0	0	500-2000m
23 23 24	3.1 3.2 3.3	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records)	0 0	0 0	0 0	0 0	500-2000m
23 23 24 24	3.1 3.2 3.3 3.4	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records)	0 0 0	0 0 0	0 0 0	0 0 0	500-2000m
23 23 24 24 24	3.1 3.2 3.3 3.4 3.5	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	500-2000m
23 23 24 24 24 24	3.1 3.2 3.3 3.4 3.5 3.6	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	500-2000m 500-2000m
23 24 24 24 24 24 24 24 24 26 27 28 28 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	3.1 3.2 3.3 3.4 3.5 3.6 3.7 >	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions >	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0 37	- - - -
23 24 24 24 24 24 24 Page	3.1 3.2 3.3 3.4 3.5 3.6 3.7 > Section	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions > Current industrial land use >	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 37	- - - -
23 24 24 24 24 24 24 29 >	3.1 3.2 3.3 3.4 3.5 3.6 3.7 > Section 4.1 >	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions > Current industrial land use > Recent industrial land uses >	0 0 0 0 0 0 On site	0 0 0 0 0 0 0-50m	0 0 0 0 0 0 50-250m	0 0 0 0 0 37 250-500m	- - - -
23 24 24 24 24 24 24 29 > 30	3.1 3.2 3.3 3.4 3.5 3.6 3.7 > Section 4.1 > 4.2	Active or recent landfill Historical landfill (BGS records) Historical landfill (LA/mapping records) Historical landfill (EA/NRW records) Historical waste sites Licensed waste sites Waste exemptions > Current industrial land use > Recent industrial land uses > Current or recent petrol stations	0 0 0 0 0 0 On site	0 0 0 0 0 0 0-50m	0 0 0 0 0 0 50-250m	0 0 0 0 0 37 250-500m	- - - -



Date: 2 June 2025



30	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
31	4.7	Regulated explosive sites	0	0	0	0	-
31	4.8	Hazardous substance storage/usage	0	0	0	0	-
31	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	0	0	-
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	0	0	-
33	4.19	Pollution inventory substances	0	0	0	0	-
33	4.20	Pollution inventory waste transfers	0	0	0	0	-
33	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology</u> >	On site	0-50m	50-250m	250-500m	500-2000m
<u>34</u> >	<u>5.1</u> >	Superficial aquifer >	Identified (within 500m)		
<u>36</u> >	<u>5.2</u> >	Bedrock aquifer >	Identified (within 500m)		
<u>38</u> >	<u>5.3</u> >	Groundwater vulnerability >	Identified (
			identined (within 50m)			
40	5.4	Groundwater vulnerability- soluble rock risk	None (with				
40 40	5.4 5.5	Groundwater vulnerability- soluble rock risk Groundwater vulnerability- local information		in 0m)			
		·	None (with	in 0m)	0	0	4
40	5.5	Groundwater vulnerability- local information	None (with	in 0m) in 0m)	0	0	4 0
40 <u>41</u> >	5.5 <u>5.6</u> >	Groundwater vulnerability- local information Groundwater abstractions >	None (with None (with	in 0m) in 0m)			
40 <u>41</u> > 42	5.5 <u>5.6</u> > 5.7	Groundwater vulnerability- local information Groundwater abstractions > Surface water abstractions	None (with None (with 0	in 0m) in 0m) 0	0	0	0
40 41 > 42 43 >	5.5 5.6 > 5.7 5.8 >	Groundwater vulnerability- local information Groundwater abstractions > Surface water abstractions Potable abstractions >	None (with None (with 0 0	in 0m) in 0m) 0 0	0	0	0
40 41 > 42 43 > 44 >	5.5 5.6 > 5.7 5.8 > 5.9 >	Groundwater vulnerability- local information Groundwater abstractions > Surface water abstractions Potable abstractions > Source Protection Zones >	None (with None (with 0 0 1	in 0m) in 0m) 0 0 0 0	0 0	0 0 1	0
40 41 > 42 43 > 44 > 44	5.5 5.6 > 5.7 5.8 > 5.9 > 5.10	Groundwater vulnerability- local information Groundwater abstractions > Surface water abstractions Potable abstractions > Source Protection Zones > Source Protection Zones (confined aquifer)	None (with None (with 0 0 1	in 0m) in 0m) 0 0 0 0 0	0 0 0	0 0 1	0 3 -





<u>46</u> >	<u>6.2</u> >	<u>Surface water features</u> >	0	3	5	-	-				
<u>46</u> >	<u>6.3</u> >	WFD Surface water body catchments >	2	-	-	-	-				
<u>47</u> >	<u>6.4</u> >	WFD Surface water bodies >	0	0	0	-	-				
<u>47</u> >	<u>6.5</u> >	WFD Groundwater bodies >	1								
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m				
48	7.1	Risk of flooding from rivers and the sea	None (within 50m)								
48	7.2	Historical Flood Events	0	0	0	-	-				
48	7.3	Flood Defences	0	0	0	-	-				
49	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-				
49	7.5	Flood Storage Areas	0	0	0	-	-				
50	7.6	Flood Zone 2	None (within 50m)								
50	7.7	Flood Zone 3	None (within 50m)								
Page	Section	Surface water flooding >									
<u>51</u> >	<u>8.1</u> >	Surface water flooding >	1 in 30 yea	r, 0.3m - 1.0r	n (within 50	m)					
Page	Section	Groundwater flooding >									
<u>53</u> >	<u>9.1</u> >	Groundwater flooding >	Moderate ((within 50m)							
<u>53</u> >	<u>9.1</u> >	Groundwater flooding > Environmental designations >	Moderate ((within 50m) 0-50m	50-250m	250-500m	500-2000m				
						250-500m	500-2000m				
Page	Section	Environmental designations >	On site	0-50m	50-250m						
Page 54 >	Section 10.1 >	Environmental designations > Sites of Special Scientific Interest (SSSI) >	On site	0-50m	50-250m	0	0				
Page <u>54</u> > 55	Section 10.1 > 10.2	Environmental designations > Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites)	On site 1	0-50m 0	50-250m 0	0	0				
Page 54 > 55 55	Section 10.1 > 10.2 10.3	Environmental designations > Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC)	On site 1 0 0	0-50m 0 0	50-250m 0 0	0 0	0 0				
Page 54 > 55 55 55	Section 10.1 > 10.2 10.3 10.4	Environmental designations > Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA)	On site 1 0 0 0	0-50m 0 0 0	50-250m 0 0 0	0 0 0	0 0 0				
Page 54 > 55 55 55 55	Section 10.1 > 10.2 10.3 10.4 10.5	Environmental designations > Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR)	On site 1 0 0 0 0	0-50m 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0				
Page 54 > 55 55 55 55 56	Section 10.1 > 10.2 10.3 10.4 10.5 10.6	Environmental designations > Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR)	On site 1 0 0 0 0 0	0-50m 0 0 0 0	50-250m 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0				
Page 54 > 55 55 55 56 56	Section 10.1 > 10.2 10.3 10.4 10.5 10.6 10.7	Environmental designations > Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR) Designated Ancient Woodland	On site 1 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0	50-250m 0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0				
Page 54 > 55 55 55 56 56 56	Section 10.1 > 10.2 10.3 10.4 10.5 10.6 10.7 10.8	Environmental designations > Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR) Designated Ancient Woodland Biosphere Reserves	On site 1 0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0 0 0	50-250m 0 0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0				
Page 54 > 55 55 56 56 56 56	Section 10.1 > 10.2 10.3 10.4 10.5 10.6 10.7 10.8 10.9	Environmental designations > Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR) Designated Ancient Woodland Biosphere Reserves Forest Parks	On site 1 0 0 0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0 0 0 0	50-250m 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0				
Page 54 > 55 55 55 56 56 56 56 57	Section 10.1 > 10.2 10.3 10.4 10.5 10.6 10.7 10.8 10.9 10.10	Environmental designations > Sites of Special Scientific Interest (SSSI) > Conserved wetland sites (Ramsar sites) Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR) Designated Ancient Woodland Biosphere Reserves Forest Parks Marine Conservation Zones	On site 1 0 0 0 0 0 0 0 0 0 0 0	0-50m 0 0 0 0 0 0 0 0 0 0 0	50-250m 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0				





57	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
58	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
58	10.15	Nitrate Sensitive Areas	0	0	0	0	0
<u>58</u> >	<u>10.16</u> >	Nitrate Vulnerable Zones >	0	2	3	0	4
<u>60</u> >	<u>10.17</u> >	SSSI Impact Risk Zones >	6	-	-	-	-
<u>63</u> >	<u>10.18</u> >	SSSI Units >	1	0	2	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
65	11.1	World Heritage Sites	0	0	0	-	-
65	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
65	11.3	National Parks	0	0	0	-	-
65	11.4	Listed Buildings	0	0	0	-	-
66	11.5	Conservation Areas	0	0	0	-	-
66	11.6	Scheduled Ancient Monuments	0	0	0	-	-
66	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
<u>67</u> >	<u>12.1</u> >	<u>Agricultural Land Classification</u> >	Grade 3 (wi	thin 250m)			
<u>68</u> >	<u>12.2</u> >	Open Access Land >	2	0	2	-	-
68	12.3	Tree Felling Licences					
<u>69</u> >		0 11 111	0	0	0	-	-
	<u>12.4</u> >	Environmental Stewardship Schemes >	0	0	0 2	-	-
<u>69</u> >	12.4 > 12.5 >					-	-
		Environmental Stewardship Schemes >	0	1	2	- - - 250-500m	- - 500-2000m
<u>69</u> >	<u>12.5</u> >	Environmental Stewardship Schemes > Countryside Stewardship Schemes >	0	1 2	2	- - 250-500m	- - 500-2000m
69 > Page	<u>12.5</u> >	Environmental Stewardship Schemes > Countryside Stewardship Schemes > Habitat designations >	0 1 On site	1 2 0-50m	2 1 50-250m	- - 250-500m -	- - 500-2000m
69 > Page 70 >	12.5 > Section 13.1 >	Environmental Stewardship Schemes > Countryside Stewardship Schemes > Habitat designations > Priority Habitat Inventory >	0 1 On site	1 2 0-50m	2 1 50-250m	- - 250-500m - -	- 500-2000m - -
69 > Page 70 > 71 >	12.5 > Section 13.1 > 13.2 >	Environmental Stewardship Schemes > Countryside Stewardship Schemes > Habitat designations > Priority Habitat Inventory > Habitat Networks >	0 1 On site 1 2	1 2 0-50m 9	2 1 50-250m 6	- - 250-500m - - -	- - 500-2000m - - -
69 > Page 70 > 71 >	12.5 > Section 13.1 > 13.2 > 13.3	Environmental Stewardship Schemes > Countryside Stewardship Schemes > Habitat designations > Priority Habitat Inventory > Habitat Networks > Open Mosaic Habitat	0 1 On site 1 2	1 2 0-50m 9 0	2 1 50-250m 6 0	- 250-500m - - - - 250-500m	500-2000m 500-2000m
69 > Page 70 > 71 > 71	12.5 > Section 13.1 > 13.2 > 13.3 13.4	Environmental Stewardship Schemes > Countryside Stewardship Schemes > Habitat designations > Priority Habitat Inventory > Habitat Networks > Open Mosaic Habitat Limestone Pavement Orders	0 1 On site 1 2 0 0 On site	1 2 0-50m 9 0 0	2 1 50-250m 6 0 0	- - -	- - -
69 > Page 70 > 71 > 71 Page	12.5 > Section 13.1 > 13.2 > 13.3 13.4 Section	Environmental Stewardship Schemes > Countryside Stewardship Schemes > Habitat designations > Priority Habitat Inventory > Habitat Networks > Open Mosaic Habitat Limestone Pavement Orders Geology 1:10,000 scale >	0 1 On site 1 2 0 0 On site	1 2 0-50m 9 0 0 0 0 0-50m	2 1 50-250m 6 0 0	- - -	- - -
69 > Page 70 > 71 > 71 72 Page	12.5 > Section 13.1 > 13.2 > 13.3 13.4 Section 14.1 >	Environmental Stewardship Schemes > Countryside Stewardship Schemes > Habitat designations > Priority Habitat Inventory > Habitat Networks > Open Mosaic Habitat Limestone Pavement Orders Geology 1:10,000 scale > 10k Availability >	On site 1 2 0 On site On site Identified (v	1 2 0-50m 9 0 0 0 0-50m within 500m	2 1 50-250m 6 0 0 50-250m	- - - - 250-500m	- - -





75	1.4.4	Londolin (10k)	0	0	0	0				
75	14.4	Landslip (10k)	0	0	0	0	-			
76	14.5	Bedrock geology (10k)	0	0	0	0	-			
76	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-			
Page	Section	<u>Geology 1:50,000 scale</u> >	On site	0-50m	50-250m	250-500m	500-2000m			
<u>77</u> >	<u>15.1</u> >	50k Availability >	Identified (within 500m)							
78	15.2	Artificial and made ground (50k)	0	0	0	0	-			
78	15.3	Artificial ground permeability (50k)	0	0	-	-	-			
<u>79</u> >	<u>15.4</u> >	Superficial geology (50k) >	5	2	2	5	-			
<u>80</u> >	<u>15.5</u> >	<u>Superficial permeability (50k)</u> >	Identified (within 50m)						
81	15.6	Landslip (50k)	0	0	0	0	-			
81	15.7	Landslip permeability (50k)	None (with	in 50m)						
<u>82</u> >	<u>15.8</u> >	Bedrock geology (50k) >	1	0	0	0	-			
<u>83</u> >	<u>15.9</u> >	Bedrock permeability (50k) >	Identified (within 50m)						
<u>83</u> >	<u>15.10</u> >	Bedrock faults and other linear features (50k) >	0	0	1	0	-			
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m			
<u>84</u> >	<u>16.1</u> >	BGS Boreholes >	3	0	1	-	-			
Page	Section	Natural ground subsidence >								
<u>86</u> >	<u>17.1</u> >	Shrink swell clays >	Low (withir	n 50m)						
<u>88</u> >	<u>17.2</u> >	Running sands >	Low (withir	n 50m)						
<u>90</u> >	<u>17.3</u> >	<u>Compressible deposits</u> >	High (within	n 50m)						
<u>92</u> >	<u>17.4</u> >	<u>Collapsible deposits</u> >	Very low (w	vithin 50m)						
<u>93</u> >	<u>17.5</u> >	<u>Landslides</u> >	Very low (within 50m)							
<u>94</u> >	<u>17.6</u> >	Ground dissolution of soluble rocks >	Negligible (within 50m)							
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m			
<u>96</u> >	<u>18.1</u> >	BritPits >	0	0	1	1	-			
<u>97</u> >	<u>18.2</u> >	Surface ground workings >	25	18	40	-	-			
100	18.3	Underground workings	0	0	0	0	0			
		Underground workings Underground mining extents	0	0	0	0	0			
100	18.3						-			





101	18.6	Non-coal mining	0	0	0	0	0				
101	18.7	JPB mining areas	None (with	rithin 0m)							
101	18.8	The Coal Authority non-coal mining	0	0	0	0	-				
102	18.9	Researched mining	0	0	0	0	-				
102	18.10	Mining record office plans	0	0	0	0	-				
102	18.11	BGS mine plans	0 0 0 -								
<u>102</u> >	<u>18.12</u> >	<u>Coal mining</u> >	Identified (within 0m)								
103	18.13	Brine areas	None (within 0m)								
103	18.14	Gypsum areas	None (with	in 0m)							
103	18.15	Tin mining	None (with	in 0m)							
103	18.16	Clay mining	None (with	in 0m)							
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m				
104	19.1	Natural cavities	0	0	0	0	-				
104	19.2	Mining cavities	0	0	0	0	0				
104	19.3	Reported recent incidents	0	0	0	0	-				
104	19.4	Historical incidents	0	0	0	0	-				
Page	Section	Radon >									
<u>106</u> >	<u>20.1</u> >	Radon >	Less than 1	% (within 0r	n)						
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m				
<u>108</u> >	<u>21.1</u> >	BGS Estimated Background Soil Chemistry >	14	4	-	-	-				
109	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-				
109	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				
110	22.1	Underground railways (London)	0	0	0	-	-				
110	22.2	Underground railways (Non-London)	0	0	0	-	-				
111	22.3	Railway tunnels	0	0	0	-	-				
111	22.4	Historical railway and tunnel features	0	0	0	-	-				
111	22.5	Royal Mail tunnels	0	0	0	-	-				
111											
111	22.6	Historical railways	0	0	0	-	-				







<u>111</u> >	<u>22.7</u> >	Railways >	0	4	0	-	-
112	22.8	Crossrail 2	0	0	0	0	-
112	22.9	HS2	0	0	0	0	_



Date: 2 June 2025



Recent aerial photograph



Capture Date: 20/05/2023

Site Area: 28.34ha





Recent site history - 2019 aerial photograph



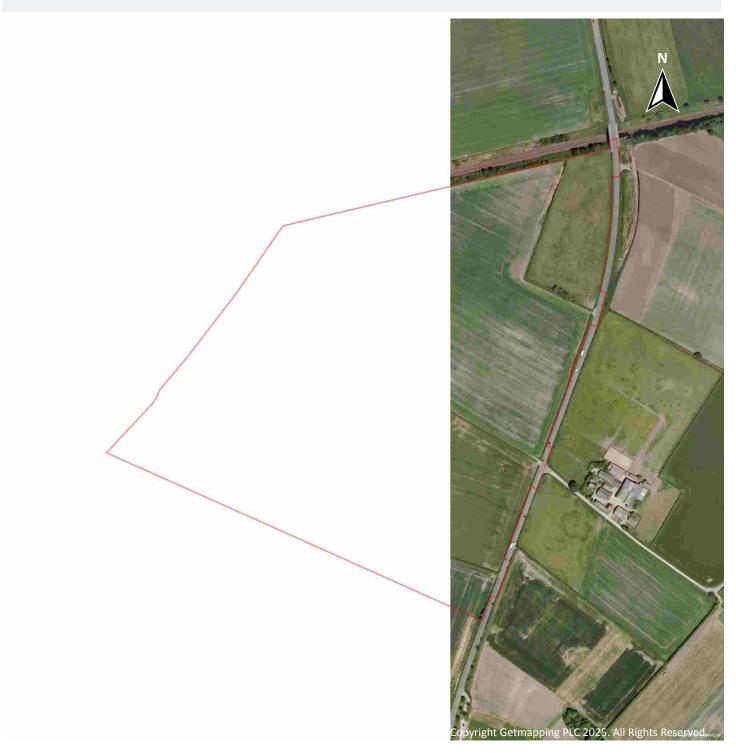
Capture Date: 22/04/2019

Site Area: 28.34ha





Recent site history - 2009 aerial photograph



Capture Date: 02/06/2009

Site Area: 28.34ha





Recent site history - 2001 aerial photograph



Capture Date: 07/05/2001

Site Area: 28.34ha



01273 257 755



Recent site history - 2000 aerial photograph



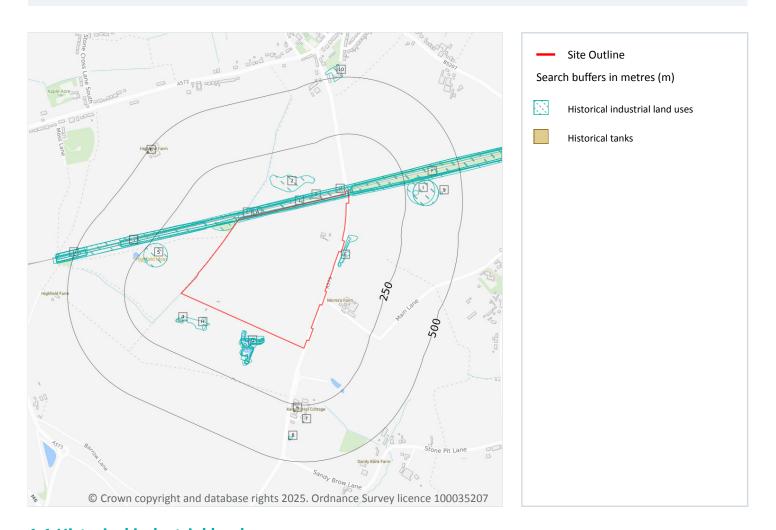
Capture Date: 04/09/2000

Site Area: 28.34ha





1 Past land use



1.1 Historical industrial land uses

Records within 500m 45

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 14 >

ID	Location	Land use	Dates present	Group ID
1	On site	Cuttings	1849	915000



ct us with any questions at: Date: 2 June 2025



ID	Location	Land use	Dates present	Group ID
Α	On site	Cuttings	1892	895262
В	On site	Cuttings	1965	896943
В	On site	Cuttings	1972	926327
В	On site	Cuttings	1984	954131
В	On site	Cuttings	1992	973752
С	On site	Cuttings	1938	917512
С	On site	Cuttings	1906	966725
D	On site	Cuttings	1955	918760
D	On site	Cuttings	1925	921734
D	On site	Cuttings	1947	953955
А	1m NW	Sand Pit	1849	827360
Е	7m SE	Unspecified Pits	1906	855960
Е	7m E	Pits	1849	838176
F	12m E	Cuttings	1892	988081
F	18m E	Cuttings	1938	873265
F	18m E	Cuttings	1906	987313
F	21m E	Cuttings	1849	972735
G	24m SW	Pits	1849	838161
G	31m SW	Unspecified Pits	1972 - 1992	992120
G	33m SW	Unspecified Pits	1955 - 1965	891699
G	35m SW	Unspecified Pits	1926	984547
G	39m SW	Unspecified Pits	1906	879065
G	39m SW	Unspecified Pits	1938	945589
G	39m SW	Unspecified Pits	1926	991747
G	44m SW	Unspecified Pits	1891	927195
Н	55m SW	Pits	1849	838177
2	65m N	Old Sand Pit	1947 - 1955	894463
Н	81m SW	Unspecified Pits	1906	855962
		P		





ID	Location	Land use	Dates present	Group ID
3	95m NW	Cuttings	1849	936136
4	97m SW	Unspecified Pits	1906	855961
5	144m NW	Rifle Range	1892	820316
I	259m E	Battery	1955 - 1992	943940
I	283m E	Battery	1938	954579
I	283m E	Battery	1906	1005961
I	284m E	Battery	1925	950797
7	320m S	Pump	1849	834620
8	393m S	Sand Pit	1849	827346
9	403m E	Battery	1849	840841
J	447m W	Cuttings	1906	1002016
J	447m W	Cuttings	1938	1004608
J	448m W	Cuttings	1925	963869
J	450m W	Cuttings	1947	883132
J	456m NW	Cuttings	1955	893659
10	483m N	Unspecified Depot	1965 - 1992	981903

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m 3

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 ungrouped 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 14 >

ID	Location	Land use	Dates present	Group ID
6	274m S	Unspecified Tank	1994	120786
K	493m NW	Sewage Tank	1928	112569





ID	Location	Land use	Dates present	Group ID
Κ	493m NW	Unspecified Tank	1907	120800

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 ungrouped 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 ungrouped 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 ungrouped 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



2.1 Historical industrial land uses

Records within 500m 56

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 ungrouped 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
1	On site	Cuttings	1849	915000
Α	On site	Cuttings	1938	917512
Α	On site	Cuttings	1906	966725





ID	Location	Land Use	Date	Group ID
В	On site	Cuttings	1992	973752
В	On site	Cuttings	1972	926327
В	On site	Cuttings	1984	954131
В	On site	Cuttings	1965	896943
С	On site	Cuttings	1892	895262
D	On site	Cuttings	1955	918760
D	On site	Cuttings	1925	921734
D	On site	Cuttings	1947	953955
С	1m NW	Sand Pit	1849	827360
Е	7m SE	Unspecified Pits	1906	855960
Е	7m E	Pits	1849	838176
F	12m E	Cuttings	1892	988081
F	18m E	Cuttings	1938	873265
F	18m E	Cuttings	1906	987313
F	21m E	Cuttings	1849	972735
G	24m SW	Pits	1849	838161
G	31m SW	Unspecified Pits	1992	992120
G	31m SW	Unspecified Pits	1972	992120
G	31m SW	Unspecified Pits	1984	992120
G	33m SW	Unspecified Pits	1965	891699
G	33m SW	Unspecified Pits	1955	891699
G	35m SW	Unspecified Pits	1926	984547
G	39m SW	Unspecified Pits	1938	945589
G	39m SW	Unspecified Pits	1926	991747
G	39m SW	Unspecified Pits	1906	879065
G	44m SW	Unspecified Pits	1891	927195
Н	55m SW	Pits	1849	838177
I	65m N	Old Sand Pit	1947	894463





ID	Location	Land Use	Date	Group ID
I	73m N	Old Sand Pit	1955	894463
Н	81m SW	Unspecified Pits	1906	855962
2	95m NW	Cuttings	1849	936136
3	97m SW	Unspecified Pits	1906	855961
4	144m NW	Rifle Range	1892	820316
J	259m E	Battery	1992	943940
J	259m E	Battery	1972	943940
J	259m E	Battery	1984	943940
J	259m E	Battery	1965	943940
J	259m E	Battery	1955	943940
J	283m E	Battery	1938	954579
J	283m E	Battery	1906	1005961
J	284m E	Battery	1925	950797
6	320m S	Pump	1849	834620
7	393m S	Sand Pit	1849	827346
8	403m E	Battery	1849	840841
K	447m W	Cuttings	1938	1004608
K	447m W	Cuttings	1906	1002016
K	448m W	Cuttings	1925	963869
K	450m W	Cuttings	1947	883132
K	456m NW	Cuttings	1955	893659
L	483m N	Unspecified Depot	1992	981903
L	483m N	Unspecified Depot	1972	981903
L	483m N	Unspecified Depot	1984	981903
L	483m N	Unspecified Depot	1965	981903

This data is sourced from Ordnance Survey / Groundsure.





2.2 Historical tanks

Records within 500m

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
5	274m S	Unspecified Tank	1994	120786
M	493m NW	Unspecified Tank	1907	120800
M	493m NW	Sewage Tank	1928	112569

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

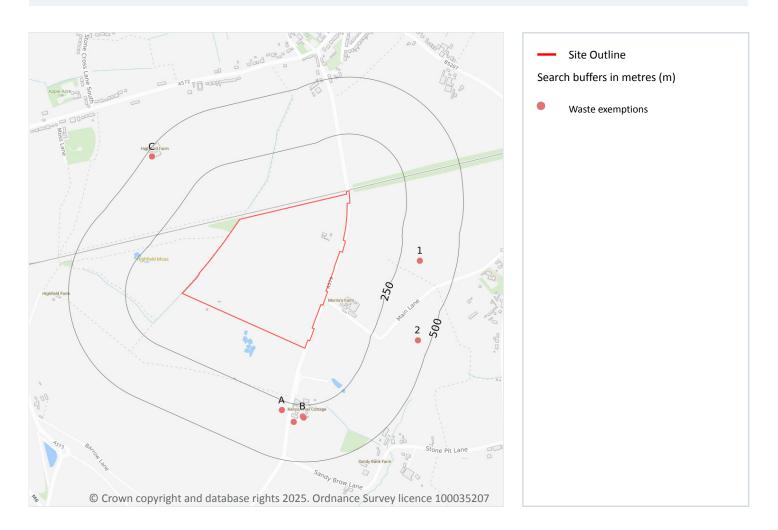
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.





3 Waste and landfill



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 37

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 23 >

ID	Location	Site	Reference	Category	Sub-Category	Description
А	292m S	Kenyon Hall Winwick Lane Warrington Wa3 7ed	EPR/AE5046U Y/A001	Using waste exemption	Non- agricultural waste only	Spreading waste on agricultural land to confer benefit





Non- agricultural waste only Non- agricultural waste only Agricultural waste only	Description Storage of waste in a secure place Use of waste for a specified purpose Deposit of waste from dredging of inland waters Aerobic composting and associated prior treatment Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
agricultural waste only Non-agricultural waste only Agricultural waste only	Use of waste for a specified purpose Deposit of waste from dredging of inland waters Aerobic composting and associated prior treatment Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
agricultural waste only	Deposit of waste from dredging of inland waters Aerobic composting and associated prior treatment Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
Agricultural waste only Agricultural waste only Agricultural waste only	Aerobic composting and associated prior treatment Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
Agricultural waste only Agricultural	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
waste only Agricultural	and waste plant matter by chipping, shredding, cutting or pulverising
_	
waste only	Use of waste in construction
Agricultural waste only	Use of waste for a specified purpose
Agricultural waste only	Burning waste in the open
Agricultural waste only	Spreading waste on agricultural land to confer benefit
Agricultural waste only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
On a farm	Use of waste in construction
On a farm	Use of waste for a specified purpose
On a farm	Use of waste in construction
Aşww Aşww O	gricultural raste only n a farm





ID	Location	Site	Reference	Category	Sub-Category	Description
В	329m S	Dolly Bridge Stud, Winnick Lane, Lowton, Warrington, Wa37ed	WEX285642	Using waste exemption	On a farm	Use of waste in construction
1	338m E	-	WEX245797	Storing waste exemption	On a farm	Storage of sludge
2	444m E	-	WEX245795	Storing waste exemption	On a farm	Storage of sludge
С	475m NW	Highfield Farm Newton Road Warrington Wa3 1ny	EPR/TE5483BL /A001	Disposing of waste exemption	Agricultural waste only	Deposit of waste from dredging of inland waters
С	475m NW	Highfield Farm Newton Road Warrington Wa3 1ny	EPR/TE5483BL /A001	Using waste exemption	Agricultural waste only	Use of waste in construction
С	475m NW	Highfield Farm Newton Road Warrington Wa3 1ny	EPR/TE5483BL /A001	Disposing of waste exemption	Agricultural waste only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
С	475m NW	Highfield Farm Newton Road Warrington Wa3 1ny	EPR/TE5483BL /A001	Disposing of waste exemption	Agricultural waste only	Burning waste in the open
С	475m NW	Highfield Farm Newton Road Warrington Wa3 1ny	EPR/TE5483BL /A001	Using waste exemption	Both agricultural and non- agricultural waste	Spreading waste on agricultural land to confer benefit
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX318728	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX318728	Using waste exemption	On a farm	Use of waste in construction
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX318728	Disposing of waste exemption	On a farm	Burning waste in the open
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX318728	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice





ID	Location	Site	Reference	Category	Sub-Category	Description
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX318728	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX190881	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX190881	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX190881	Disposing of waste exemption	On a farm	Burning waste in the open
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX190881	Using waste exemption	On a farm	Use of waste in construction
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX190881	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX027382	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX027382	Disposing of waste exemption	On a farm	Burning waste in the open
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX027382	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX027382	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters





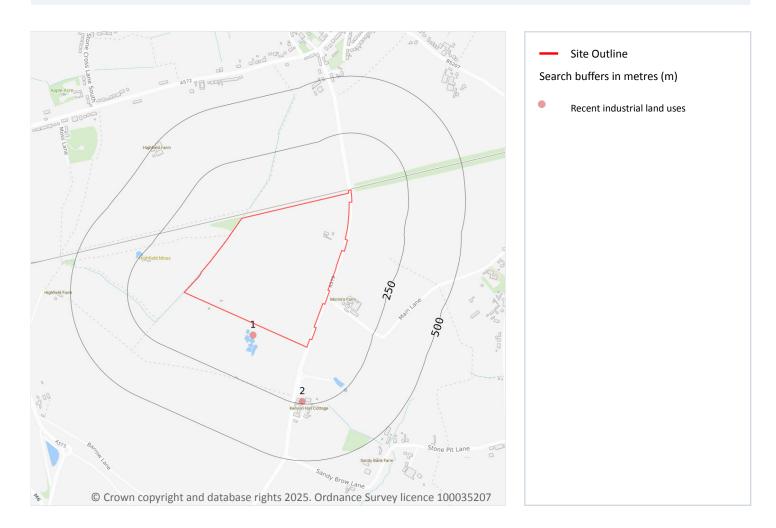
ID	Location	Site	Reference	Category	Sub-Category	Description
С	476m NW	Highfield Farm, Highfield Lane, Newton Road, Lowton, Warrington, Wa3 1ny	WEX027382	Using waste exemption	On a farm	Use of waste in construction

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





4 Current industrial land use



4.1 Recent industrial land uses

Records within 250m 2

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on page 29 >

ID	Location	Company	Address	Activity	Category
1	47m SW	Workings (Dis)	Greater Manchester, WA3	Unspecified Quarries Or Mines	Extractive Industries
2	239m S	Tank	Cheshire, WA3	Tanks (Generic)	Industrial Features

This data is sourced from Ordnance Survey.



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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.





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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

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 0

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.

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 0

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

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

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.

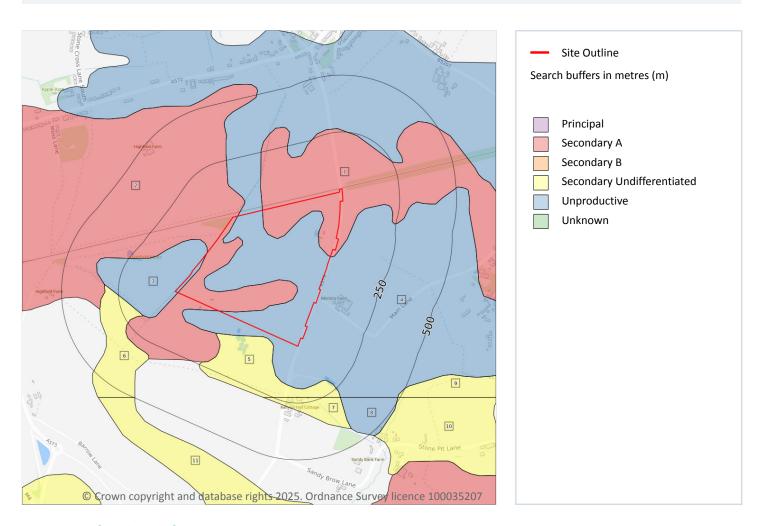
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5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m 11

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 34 >

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



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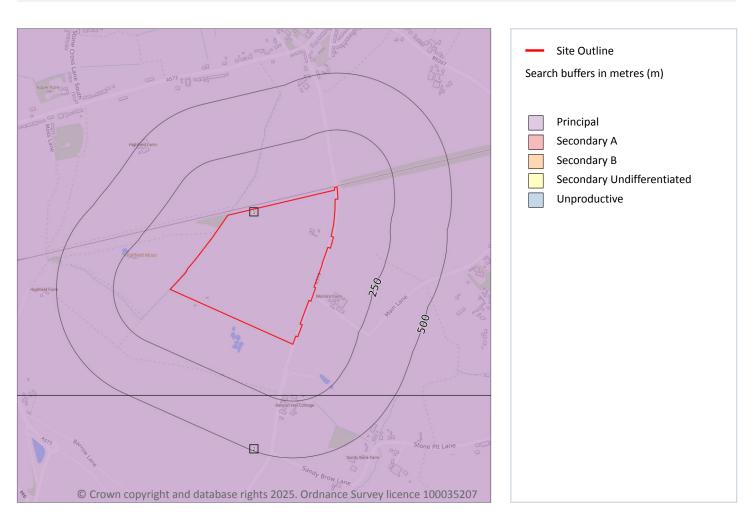
ID	Location	Designation	Description
3	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
4	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
5	23m SW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	176m SW	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
7	226m 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
8	293m SE	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
9	488m SE	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
10	492m SE	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
11	499m SW	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



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 36 >

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	226m S	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers



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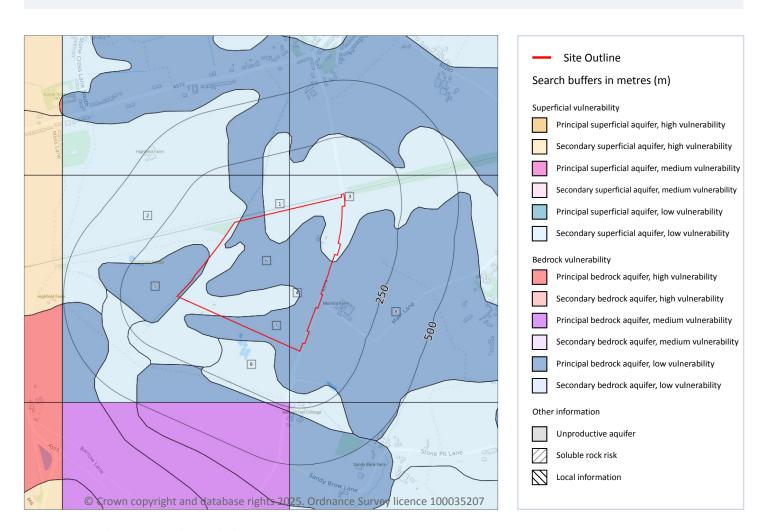


This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.





Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m 9

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 38 >





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: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
2	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: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
3	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: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
4	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: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
5	On site	Summary Classification: Principal bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Unproductive Aquifer type: Unproductive Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
6	On site	Summary Classification: Principal bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Unproductive Aquifer type: Unproductive Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
7	On site	Summary Classification: Principal bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Unproductive Aquifer type: Unproductive Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed





ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
8	On site	Summary Classification: Principal bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Unproductive Aquifer type: Unproductive Thickness: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed
9	23m SW	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: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed

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

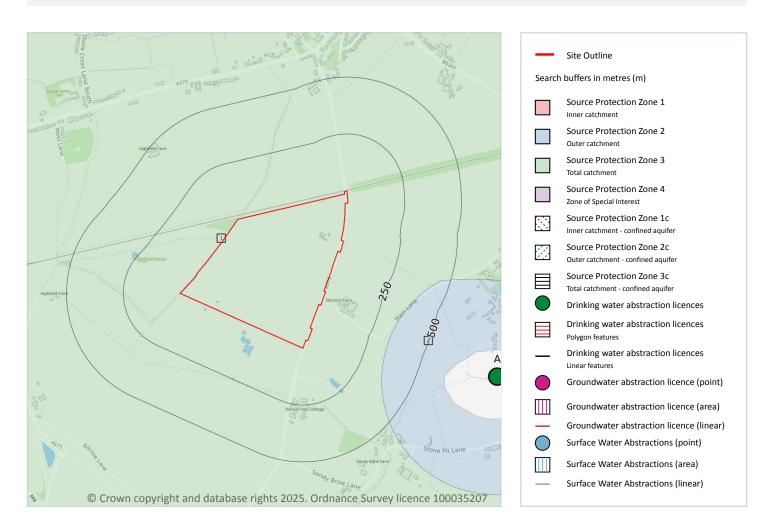
This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 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



5.6 Groundwater abstractions

Records within 2000m 4

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	
A	837m E	Status: Active Licence No: 2569023005 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: BOREHOLES (2) AT KENYON, GOLBORNE Data Type: Point Name: United Utilities Water Ltd Easting: 362900 Northing: 395100	Annual Volume (m³): 1659290 Max Daily Volume (m³): 4546 Original Application No: 2183 Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 13/06/1973 Version End Date: -
A	837m E	Status: Historical Licence No: 2569023005 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: "BOREHOLES (2) AT KENYON, GOLBORNE" Data Type: Point Name: UNITED UTILITIES WATER PLC Easting: 362900 Northing: 395100	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 13/06/1973 Version End Date: -
-	1206m S	Status: Active Licence No: NW/069/0015/011 Details: Dewatering Direct Source: Ground Water - North West Region Point: SOUTHWORTH QUARRY Data Type: Poly4 Name: GASKELL BROS (WM. & C.) LIMITED Easting: 362173 Northing: 394026	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: NPS/NA/001639 Original Start Date: 22/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 22/03/2022 Version End Date: -
-	1959m NW	Status: Active Licence No: 2569025036 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: BANK HEATH BOREHOLE IN THE URBAN DISTRICT OF GOLBORNE Data Type: Point Name: United Utilities Water Ltd Easting: 360300 Northing: 397100	Annual Volume (m³): 1250150 Max Daily Volume (m³): 3864.1 Original Application No: 0751 Original Start Date: 11/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/03/1991 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m 0

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.





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

5.8 Potable abstractions

Records within 2000m 3

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.

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

ID	Location	Details	
Α	837m E	Status: Active Licence No: 2569023005 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: BOREHOLES (2) AT KENYON, GOLBORNE Data Type: Point Name: United Utilities Water Ltd Easting: 362900 Northing: 395100	Annual Volume (m³): 1659290 Max Daily Volume (m³): 4546 Original Application No: 2183 Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 13/06/1973 Version End Date: -
A	837m E	Status: Historical Licence No: 2569023005 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: "BOREHOLES (2) AT KENYON, GOLBORNE" Data Type: Point Name: UNITED UTILITIES WATER PLC Easting: 362900 Northing: 395100	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 02/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 13/06/1973 Version End Date: -
-	1959m NW	Status: Active Licence No: 2569025036 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: BANK HEATH BOREHOLE IN THE URBAN DISTRICT OF GOLBORNE Data Type: Point Name: United Utilities Water Ltd Easting: 360300 Northing: 397100	Annual Volume (m³): 1250150 Max Daily Volume (m³): 3864.1 Original Application No: 0751 Original Start Date: 11/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/03/1991 Version End Date: -

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





2

5.9 Source Protection Zones

Records within 500m

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on page 41 >

ID	Location	Туре	Description
1	On site	3	Total catchment
2	336m E	2	Outer catchment

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m 0

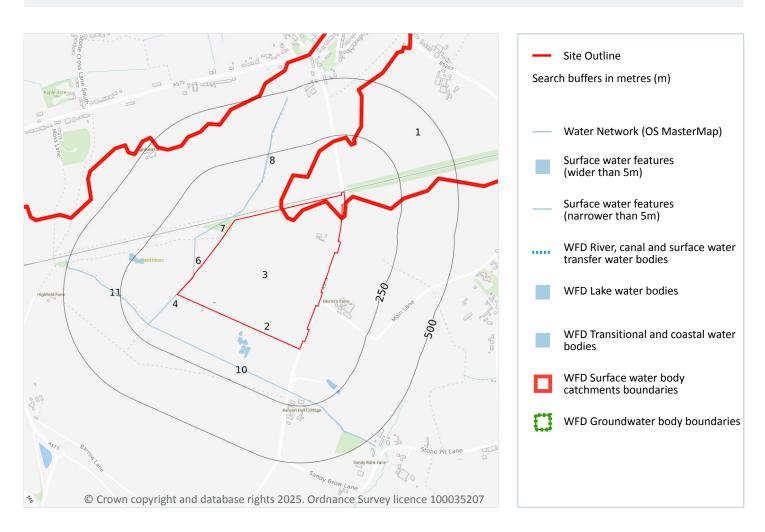
Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

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





6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m 6

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 45 >

ID	Location	Type of water feature	Ground level	Permanence	Name
4	1m NW	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
6	2m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	19m NW	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
8	32m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
10	175m SW	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
11	184m SW	Inland river not influenced by normal tidal action.	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 8

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 45 >

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site 2

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 45 >

ID	Location	Туре	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Glaze	GB112069061420	Glaze	Mersey Lower





2	On site	River	Spittle Brook	GB112069061020	Glaze	Mersey Lower
ID	Location	Туре	Water body catchment	Water body ID	Operational catchment	Management catchment

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

6.4 WFD Surface water bodies

Records identified 2

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.

Features are displayed on the Hydrology map on page 45 >

ID	Location	Туре	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	583m SE	River	Spittle Brook	GB112069061020 ↗	Moderate	Fail	Moderate	2019
_	1849m NE	River	Glaze	GB112069061420 ↗	Bad	Fail	Bad	2019

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 45 >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
3	On site	Lower Mersey Basin and North Merseyside Permo- Triassic Sandstone Aquifers	GB41201G101700 ↗	Poor	Poor	Poor	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

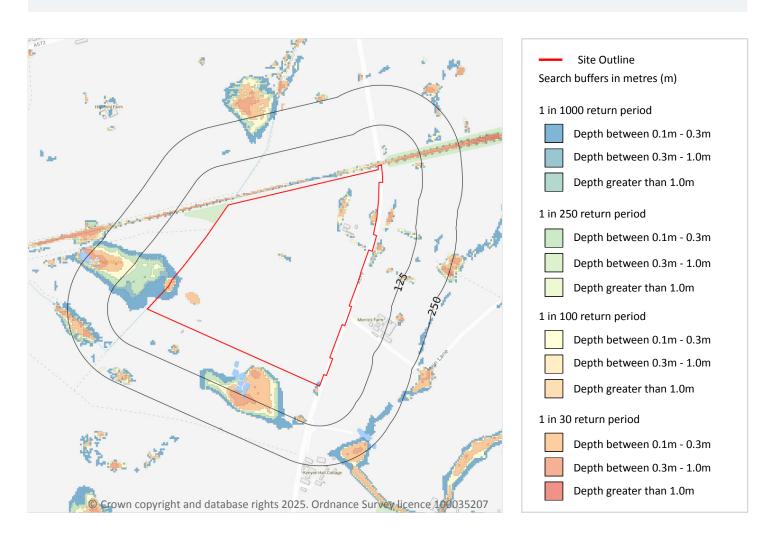
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

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





8 Surface water flooding



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 51 >

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	Greater than 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



9.1 Groundwater flooding

Highest risk on site	Moderate
Highest risk within 50m	Moderate

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 53 >

This data is sourced from Ambiental Risk Analytics.





10 Environmental designations



10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m 1

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 renotified 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.

Features are displayed on the Environmental designations map on page 54 >

ID	Location	Name	Data source
1	On site	Highfield Moss SSSI	Natural England





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 0

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.

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

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

Features are displayed on the Environmental designations map on page 54 >

ID	Location	Name	Local Authority name
2	On site	Merseyside and Greater Manchester Green Belt	Warrington
3	On site	Merseyside and Greater Manchester Green Belt	Wigan
4	185m SW	Merseyside and Greater Manchester Green Belt	St. Helens
		,	

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.



th any questions at: Date: 2 June 2025



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 9

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.

Name	Туре	NVZ ID	Status
Sankey Brook (Black Bk to Mersey) NVZ	Surface Water	639	Existing
River Glaze NVZ	Surface Water	641	Existing
River Glaze NVZ	Surface Water	641	Existing
Sankey Brook (Black Bk to Mersey) NVZ	Surface Water	639	Existing
Winwick	Groundwater	48	Existing
River Glaze NVZ	Surface Water	641	Existing
Pennington Flash Eutrophic lake NVZ	Eutrophic Water	138	Existing
River Glaze NVZ	Surface Water	641	Existing
	Sankey Brook (Black Bk to Mersey) NVZ River Glaze NVZ River Glaze NVZ Sankey Brook (Black Bk to Mersey) NVZ Winwick River Glaze NVZ Pennington Flash Eutrophic lake NVZ	Sankey Brook (Black Bk to Mersey) NVZ Surface Water Winwick Groundwater Surface Water Eutrophic Water	Sankey Brook (Black Bk to Mersey) NVZ Surface Water 639 River Glaze NVZ Surface Water 641 Sankey Brook (Black Bk to Mersey) NVZ Surface Water 639 Winwick Groundwater 48 River Glaze NVZ Surface Water 641 Eutrophic Water 138





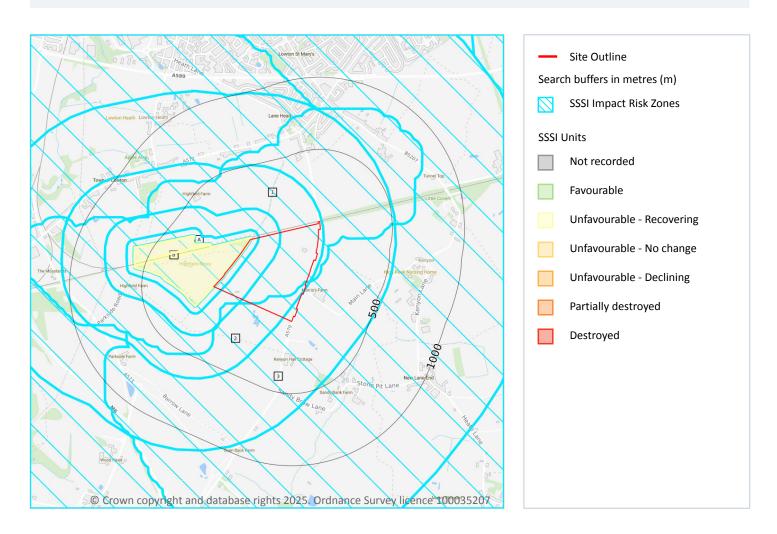
Location	Name	Туре	NVZ ID	Status
1852m E	River Glaze NVZ	Surface Water	641	Existing

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





SSSI Impact Zones and Units



10.17 SSSI Impact Risk Zones

Records on site 6

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 60 >





ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. Air pollution - Any development that could cause AIR POLLUTION (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores). Combustion - All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management. Composting - Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .
2	On site	Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. Air pollution - Any development that could cause AIR POLLUTION (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores). Combustion - All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management. Composting - Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. 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. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply.





ID	Location	Type of developments requiring consultation
3	On site	Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t). Combustion - General combustion processes >20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 500 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. 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. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply.
Α	On site	All applications - ALL PLANNING APPLICATIONS - EXCEPT HOUSEHOLDER APPLICATIONS.
Α	On site	All applications - ALL PLANNING APPLICATIONS.
A	On site	Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 50 units or more. Rural residential - Any residential development of 10 or more houses outside existing settlements/urban areas. Air pollution - Any development that could cause AIR POLLUTION or DUST either in its construction or operation (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores). Combustion - All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management. Composting - Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .





This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m 3

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.

Features are displayed on the SSSI Impact Zones and Units map on page 60 >

ID: A

Location: On site

SSSI name: Highfield Moss Unit name: Mossland

Broad habitat: Fen, Marsh And Swamp - Lowland

Condition: Unfavourable - Recovering

Reportable features:

Feature name	Feature condition	Date of assessment
Lowland dry acid grassland (U5/U6)	Unfavourable - Recovering	07/08/2013
Lowland fens, including basin, flood-plain, open water transition and valley fens	Unfavourable - Recovering	07/08/2013
Nationally scarce plant - Gentiana pneumonanthe, Marsh Gentian	Unfavourable - Recovering	07/08/2013

ID: B

Location: 183m NW

SSSI name: Highfield Moss

Unit name: The Railway Cutting

Broad habitat: Acid Grassland - Lowland

Condition: Unfavourable - Recovering

Reportable features:

Feature name	Feature condition	Date of assessment
Lowland dry acid grassland (U5/U6)	Unfavourable - Recovering	07/08/2013







ID: B

Location: 206m NW SSSI name: Highfield Moss

Unit name: The Northern Grassland
Broad habitat: Neutral Grassland - Lowland
Condition: Unfavourable - Recovering

Reportable features:

Feature name	Feature condition	Date of assessment
Nationally scarce plant - Gentiana pneumonanthe, Marsh Gentian	Unfavourable - Recovering	07/08/2013

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



12.1 Agricultural Land Classification

Records within 250m 3

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 67 >

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.





ID	Location	Classification	Description
2	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.
3	190m SW	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.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m 4

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.

Features are displayed on the Agricultural designations map on page 67 >

ID	Location	Name	Classification	Other relevant legislation
Α	On site	Highfield Moss	Section 4 Conclusive Registered Common Land	-
Α	On site	Highfield Moss	Section 15 Land	S.193 - Urban Borough District
В	206m NW	Highfield Moss	Section 4 Conclusive Registered Common Land	-

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 3

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.

Location	Reference	Scheme	Start Date	End date
1m NW	AG00452286	Higher Level Stewardship	01/05/2013	30/04/2023
184m SW	AG00295740	Entry Level plus Higher Level Stewardship	01/09/2009	31/08/2019
206m NW	AG00452286	Higher Level Stewardship	01/05/2013	30/04/2023

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m 4

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.

Location	Reference	Scheme	Start Date	End Date
On site	1273467	Countryside Stewardship (Middle Tier)	01/01/2022	31/12/2026
On site	1273467	Countryside Stewardship (Middle Tier)	01/01/2022	31/12/2026
28m NE	1255971	Countryside Stewardship (Middle Tier)	01/01/2022	31/12/2026
184m SW	1261919	Countryside Stewardship (Middle Tier)	01/01/2022	31/12/2026

This data is sourced from Natural England.





13 Habitat designations



13.1 Priority Habitat Inventory

Records within 250m 16

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 70 >

ID	Location	Main Habitat	Other habitats
1	On site	Lowland fens	Main habitat: LFENS (INV > 50%, ENSIS L1)
4	On site	Deciduous woodland	Main habitat: LFENS (INV > 50%, ENSIS L1); DWOOD (INV > 50%)
5	1m NW	Lowland fens	Main habitat: LFENS (INV > 50%, ENSIS L1)
6	1m NW	Lowland fens	Main habitat: LFENS (INV > 50%, ENSIS L1); LRBOG (FEP + HLS)





ID	Location	Main Habitat	Other habitats
7	1m NW	Lowland fens	Main habitat: LFENS (INV > 50%, ENSIS L1); LRBOG (FEP + HLS)
8	2m NW	Lowland fens	Main habitat: LFENS (INV > 50%, ENSIS L1)
9	3m NW	Deciduous woodland	Main habitat: LFENS (INV > 50%, ENSIS L1); DWOOD (INV > 50%)
10	4m NW	Lowland fens	Main habitat: LFENS (INV > 50%, ENSIS L1); Additional: LRBOG (FEP 50%)
11	5m NW	Lowland fens	Main habitat: LFENS (INV > 50%, ENSIS L1); DWOOD (INV > 50%); LRBOG (FEP + HLS)
12	7m N	Lowland fens	Main habitat: LFENS (INV > 50%)
13	111m NW	Lowland fens	Main habitat: LFENS (INV > 50%, ENSIS L1); LRBOG (FEP + HLS)
14	183m SW	Lowland fens	Main habitat: LFENS (INV > 50%, ENSIS L1); LRBOG (FEP + HLS)
А	198m NW	Lowland fens	Main habitat: LFENS (INV > 50%)
15	200m NW	Lowland fens	Main habitat: LFENS (INV > 50%, ENSIS L1); LRBOG (FEP + HLS)
16	206m NW	Lowland fens	Main habitat: LFENS (INV > 50%); PMGRP (FEP + HLS)
Α	206m NW	Lowland fens	Main habitat: LFENS (INV > 50%); PMGRP (FEP + HLS)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m 2

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.

Features are displayed on the Habitat designations map on page 70 >

ID	Location	Туре	Habitat
2	On site	Primary Habitat	Lowland fens
3	On site	Network Enhancement Zone 1	Not specified

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0
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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.



Contact us with any questions at: Date: 2 June 2025



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



14.1 10k Availability

Records within 500m

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 73 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	No coverage	No coverage	No coverage	NoCov

This data is sourced from the British Geological Survey.





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

14.2 Artificial and made ground (10k)

Records within 500m 0

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.

This data is sourced from the British Geological Survey.





Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m 0

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.

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

14.5 Bedrock geology (10k)

Records within 500m 0

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.

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



15.1 50k Availability

Records within 500m

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 77 >

1	On site	No coverage	Full	Full	No coverage	EW084_wigan_v4
ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.

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

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 79 >

ID	Location	LEX Code	Description	Rock description
1	On site	PEAT-P	PEAT	PEAT
2	On site	GFICD-XSV	GLACIOFLUVIAL ICE CONTACT DEPOSITS, DEVENSIAN	SAND AND GRAVEL
3	On site	LDE-XCZ	LACUSTRINE DEPOSITS	CLAY AND SILT
4	On site	GFICD-XSV	GLACIOFLUVIAL ICE CONTACT DEPOSITS, DEVENSIAN	SAND AND GRAVEL





ID	Location	LEX Code	Description	Rock description
5	On site	TILLD- DMTN	TILL, DEVENSIAN	DIAMICTON
6	29m NW	GFICD-XSV	GLACIOFLUVIAL ICE CONTACT DEPOSITS, DEVENSIAN	SAND AND GRAVEL
7	34m N	LDE-XCZ	LACUSTRINE DEPOSITS	CLAY AND SILT
8	190m E	GFICD-XSV	GLACIOFLUVIAL ICE CONTACT DEPOSITS, DEVENSIAN	SAND AND GRAVEL
9	232m NW	GFICD-XSV	GLACIOFLUVIAL ICE CONTACT DEPOSITS, DEVENSIAN	SAND AND GRAVEL
10	269m E	LDE-XCZ	LACUSTRINE DEPOSITS	CLAY AND SILT
11	340m W	GFICD-XSV	GLACIOFLUVIAL ICE CONTACT DEPOSITS, DEVENSIAN	SAND AND GRAVEL
12	437m NE	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
13	458m E	GFICD-XSV	GLACIOFLUVIAL ICE CONTACT DEPOSITS, DEVENSIAN	SAND AND GRAVEL
14	480m SE	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m 5

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	Low	Very Low
On site	Intergranular	Very High	High
On site	Mixed	High	Low
On site 29m NW	Mixed Intergranular	High Very High	Low High

This data is sourced from the British Geological Survey.





0

15.6 Landslip (50k)

Records within 500m

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

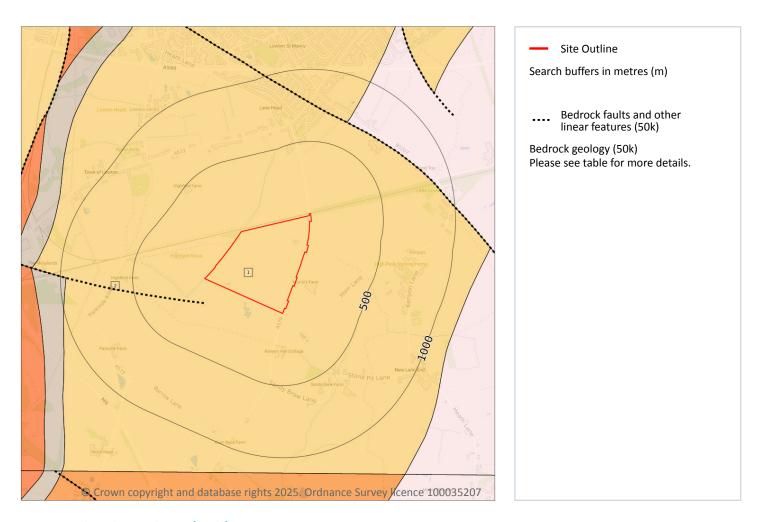
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.





Geology 1:50,000 scale - Bedrock



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 82 >

ID	Location	LEX Code	Description	Rock age
1	On site	CHES-SDST	CHESTER FORMATION - SANDSTONE	OLENEKIAN

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	Mixed	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m 1

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.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on page 82 >

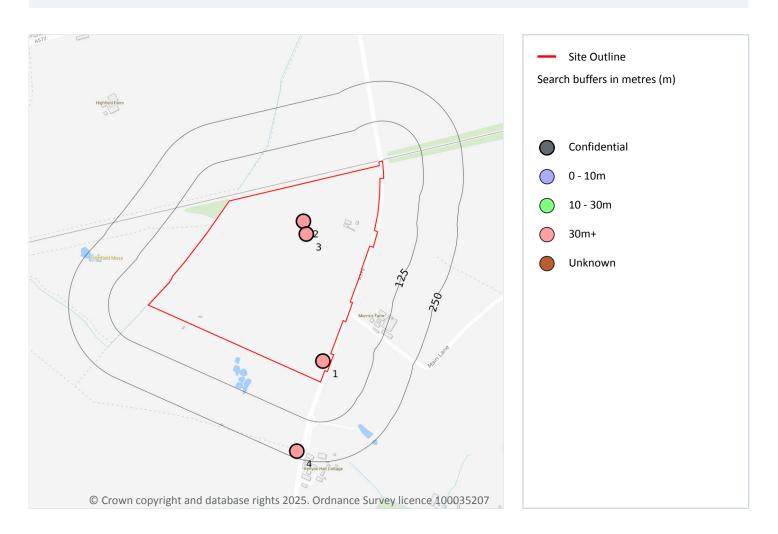
ID	Location	Category	Description
2	153m SW	FAULT	Fault, inferred

This data is sourced from the British Geological Survey.





16 Boreholes



16.1 BGS Boreholes

Records within 250m 4

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 84 >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	362052 395292	A3/10/5 MORRIS'S FARM	215.19	N	<u>761679</u> 🗷
2	On site	361991 395730	DOLLYS BRIDGE	765.5	N	<u>761783</u> 🗷
3	On site	362000 395690	N.C.B, DOLLY'S BRIDGE	290.0	N	<u>761912</u> 7





ID	Location	Grid reference	Name	Length	Confidential	Web link
4	228m S	361970 395010	KENYON HALL	33.83	N	<u>761722</u> ⊅

This data is sourced from the British Geological Survey.





17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m 5

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 86 >

On site Negligible Ground conditions predominantly non-plastic.	Location	Hazard rating	Details
	On site	Negligible	Ground conditions predominantly non-plastic.
On site Very low Ground conditions predominantly low plasticity.	On site	Very low	Ground conditions predominantly low plasticity.
On site Low Ground conditions predominantly medium plasticity.	On site	Low	Ground conditions predominantly medium plasticity.





Location	Hazard rating	Details
29m NW	Negligible	Ground conditions predominantly non-plastic.
34m N	Low	Ground conditions predominantly medium plasticity.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m 3

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 88 >

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.





Location	Hazard rating	Details
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.
34m N	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m 4

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 90 >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.





Location	Hazard rating	Details
On site	High	Highly compressible strata present. Significant constraint on land use depending on thickness.
34m N	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.





Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m 2

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 92 >

Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.
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



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 93 >

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



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 94

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.



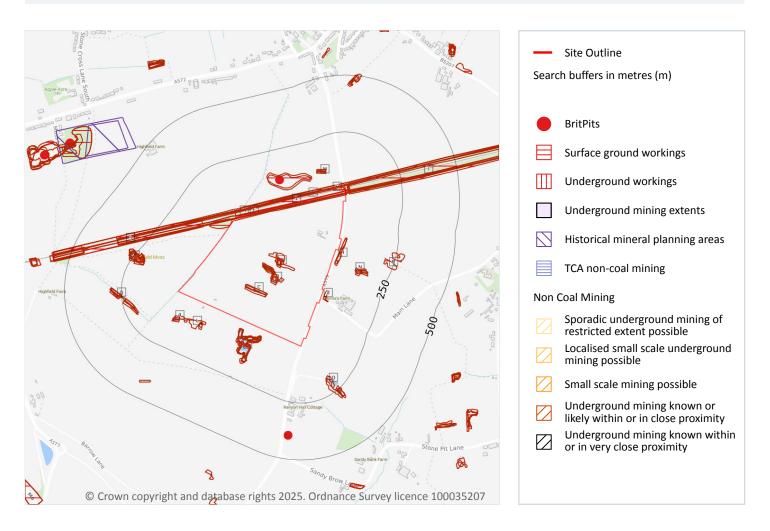


This data is sourced from the British Geological Survey.





18 Mining and ground workings



18.1 BritPits

Records within 500m 2

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 96 >





ID	Location	Details	Description
K	116m N	Name: Dolly's Bridge Farm Sand Pit Address: Golborne, WIGAN, Lancashire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
S	396m S	Name: Kenyon Hall Sand Pit Address: Croft, WARRINGTON, Cheshire Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m 83

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 96 >

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Cuttings	1849	1:10560
Α	On site	Cuttings	1938	1:10560
Α	On site	Cuttings	1906	1:10560
В	On site	Ponds	1938	1:10560
В	On site	Ponds	1906	1:10560
В	On site	Ponds	1892	1:10560
В	On site	Ponds	1892	1:10560
В	On site	Ponds	1955	1:10560





ID	Location	Land Use	Year of mapping	Mapping scale
В	On site	Ponds	1947	1:10560
В	On site	Pond	1849	1:10560
С	On site	Pond	1906	1:10560
С	On site	Pond	1892	1:10560
С	On site	Pond	1849	1:10560
D	On site	Pond	1906	1:10560
D	On site	Pond	1965	1:10560
D	On site	Ponds	1892	1:10560
D	On site	Ponds	1849	1:10560
E	On site	Cuttings	1992	1:10000
E	On site	Cuttings	1972	1:10000
E	On site	Cuttings	1984	1:10000
E	On site	Cuttings	1965	1:10560
F	On site	Cuttings	1892	1:10560
G	On site	Cuttings	1955	1:10560
G	On site	Cuttings	1947	1:10560
G	On site	Cuttings	1925	1:10560
F	1m NW	Sand Pit	1849	1:10560
Н	7m SE	Unspecified Pits	1906	1:10560
Н	9m E	Ponds	1892	1:10560
2	11m E	Pond	1849	1:10560
I	12m E	Cuttings	1892	1:10560
I	18m E	Cuttings	1938	1:10560
I	18m E	Cuttings	1906	1:10560
I	21m E	Cuttings	1849	1:10560
J	31m SW	Unspecified Pits	1992	1:10000
J	31m SW	Unspecified Pits	1972	1:10000
J	31m SW	Unspecified Pits	1984	1:10000





ID	Location	Land Use	Year of mapping	Mapping scale
J	33m SW	Unspecified Pits	1965	1:10560
J	33m SW	Unspecified Pits	1955	1:10560
J	35m SW	Unspecified Pits	1926	1:10560
J	39m SW	Unspecified Pits	1938	1:10560
	39m SW	Unspecified Pits	1936	1:10560
J				
J	39m SW	Unspecified Pits	1906	1:10560
J	44m SW	Unspecified Pits		1:10560
K	65m N	Old Sand Pit	1947	1:10560
K	73m N	Old Sand Pit	1955	1:10560
L	75m SW	Pond	1892	1:10560
L	81m SW	Unspecified Pits	1906	1:10560
3	95m NW	Cuttings	1849	1:10560
4	97m SW	Unspecified Pits	1906	1:10560
M	97m N	Pond	1892	1:10560
M	103m N	Pond	1925	1:10560
M	106m N	Pond	1938	1:10560
Ν	110m E	Ponds	1955	1:10560
Ν	115m E	Pond	1947	1:10560
Ν	116m E	Ponds	1892	1:10560
Ν	116m E	Ponds	1938	1:10560
Ν	116m E	Ponds	1906	1:10560
0	175m SE	Pond	1849	1:10560
0	180m SE	Ponds	1891	1:10560
Р	192m NW	Pond	1892	1:10560
Р	194m NW	Pond	1849	1:10560
Р	197m NW	Pond	1906	1:10560
Р	198m NW	Pond	1925	1:10560
Р	198m NW	Pond	1938	1:10560





ID	Location	Land Use	Year of mapping	Mapping scale
Q	198m SW	Pond	1849	1:10560
Р	198m NW	Pond	1947	1:10560
Q	202m W	Pond	1938	1:10560
Q	202m W	Pond	1906	1:10560
Q	203m SW	Pond	1892	1:10560
Р	206m NW	Pond	1992	1:10000
Р	206m NW	Pond	1972	1:10000
Р	206m NW	Pond	1984	1:10000
Р	206m NW	Pond	1965	1:10560
Р	206m NW	Pond	1955	1:10560
R	208m E	Ponds	1849	1:10560
R	233m E	Pond	1849	1:10560
Ο	237m SE	Pond	1849	1:10560
Q	249m W	Pond	1938	1:10560
Q	249m W	Pond	1906	1:10560
Ο	249m SE	Pond	1992	1:10000
Ο	249m SE	Pond	1972	1:10000
Ο	249m SE	Pond	1984	1:10000
0	249m SE	Pond	1965	1:10560

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 0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m

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



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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 1

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

Location Details

On site

The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.

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

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

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.



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This data is sourced from Groundsure.





20 Radon



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 106 >

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 18

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 km². 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 km²; 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	25 - 35 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	60 - 80 mg/kg
On site	25 - 35 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	60 - 80 mg/kg
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
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
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
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
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
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
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







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	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
5m W	25 - 35 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	60 - 80 mg/kg
22m SW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
24m SW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
26m NW	25 - 35 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	60 - 80 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 km²).

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 km².

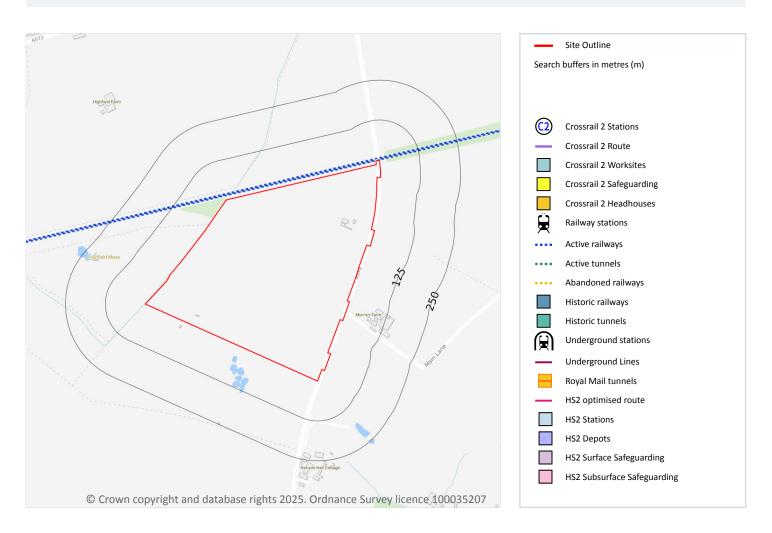
This data is sourced from the British Geological Survey.







22 Railway infrastructure and projects



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

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

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 0

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

 ${\it This\ data\ is\ sourced\ from\ OpenStreetMap.}$

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 110 >





Location	Name	Туре
On site	Liverpool to Manchester Lines	rail
4m NW	Not given	Multi Track
5m NE	Not given	Multi Track
7m N	Liverpool to Manchester Lines	rail

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

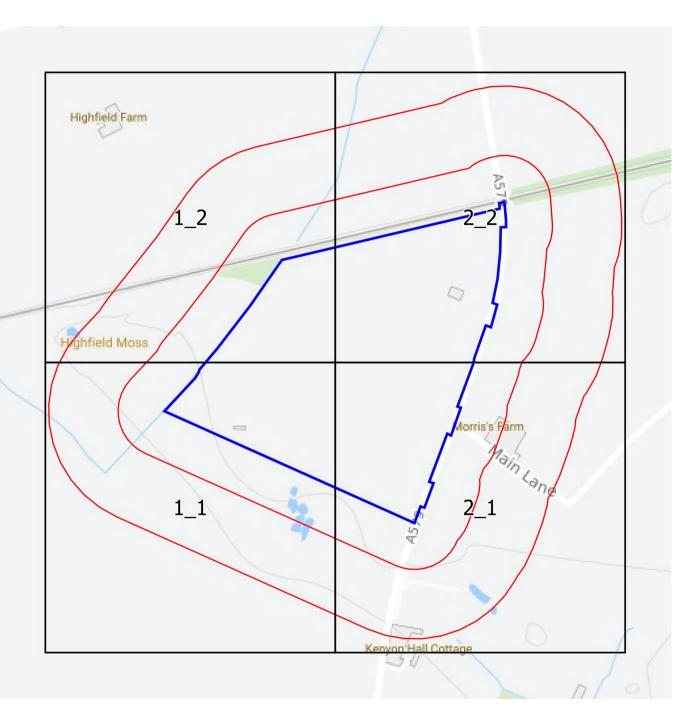
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Intermodal Logistics Park North, St Helens Minerals Assessment July 2025 ILP-BWB-SGT-XX-RP-CE-0001_MA



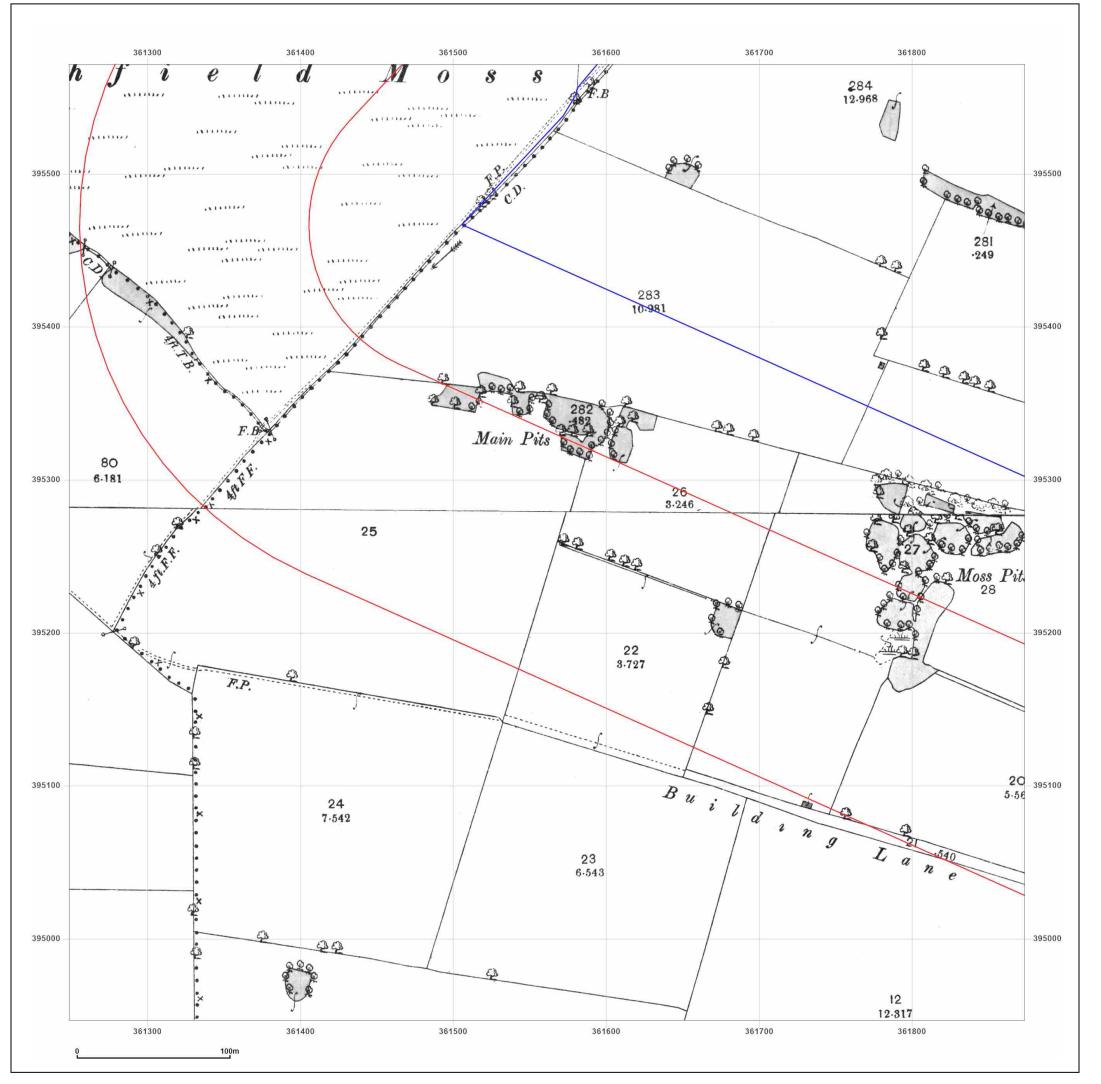
Appendix 5: Historical Maps



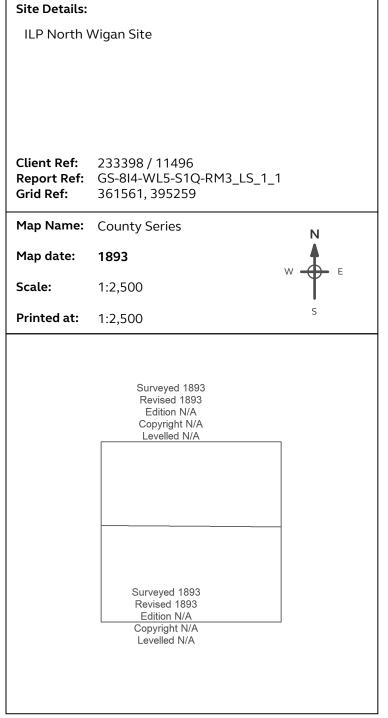


1:2,500 Scale Grid Index











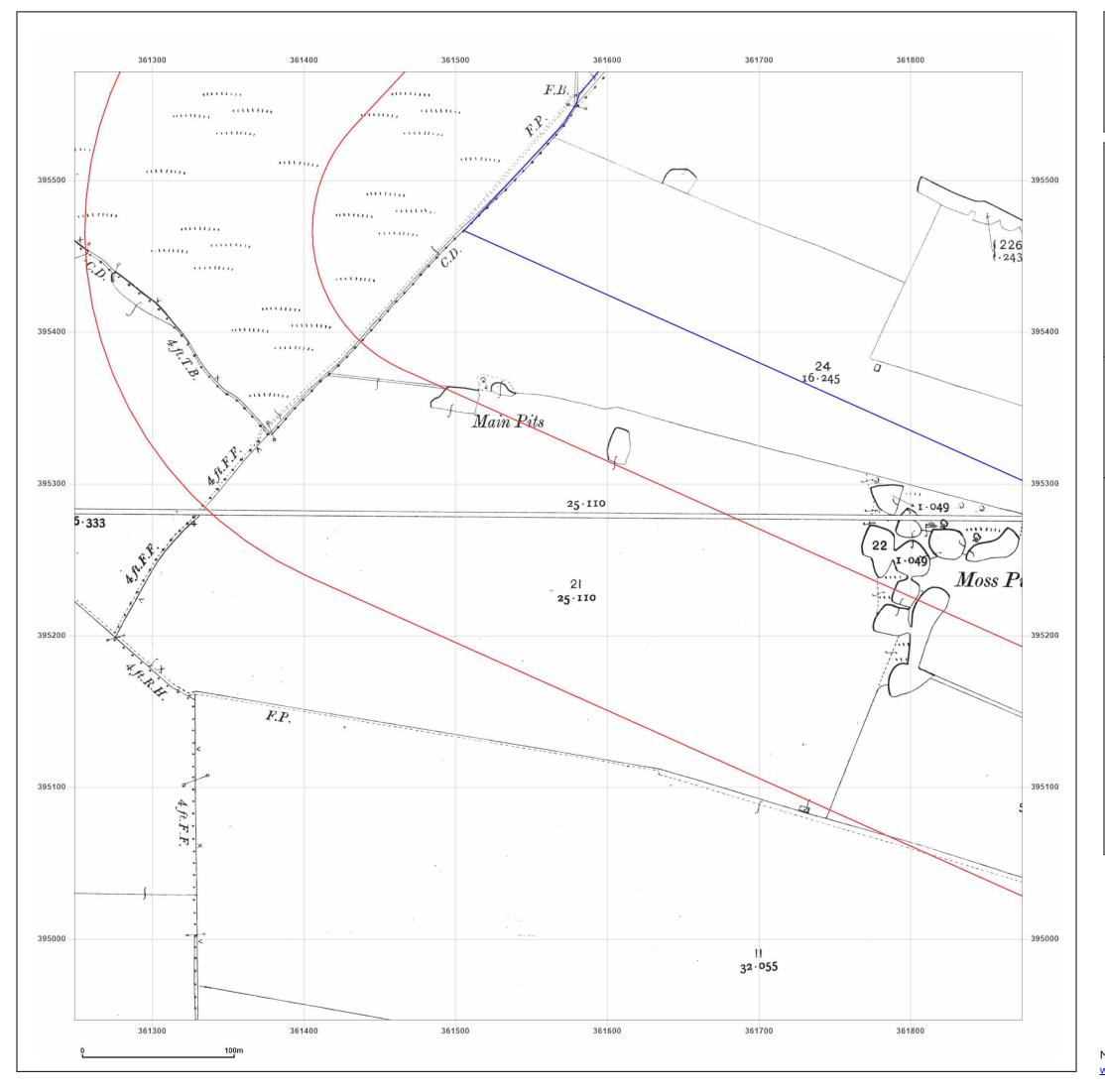
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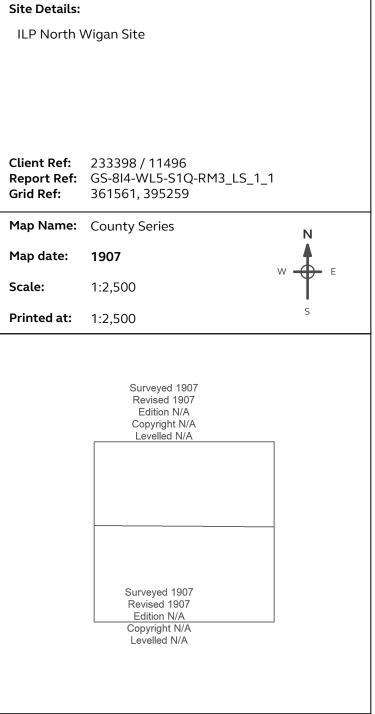
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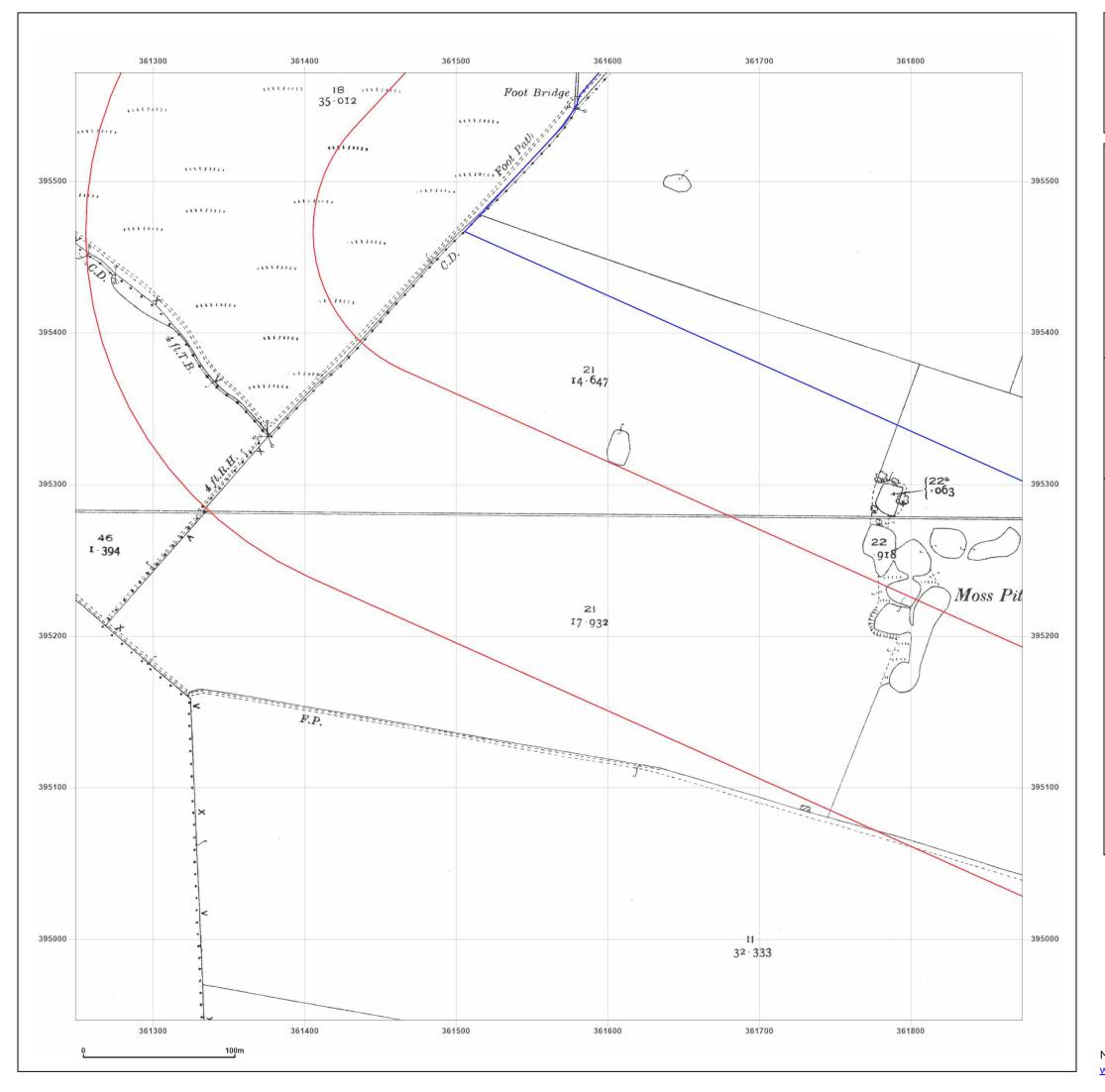




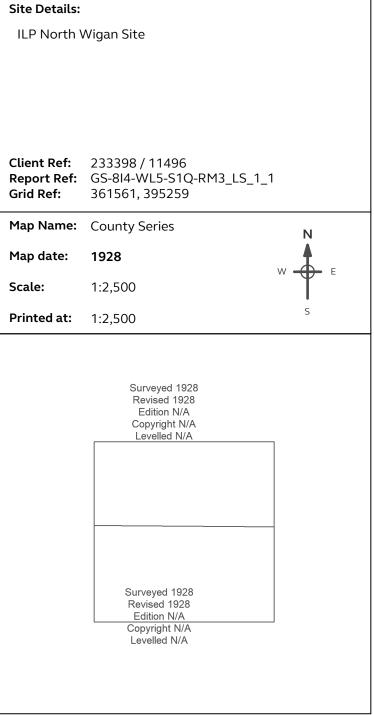
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Map legend available at:





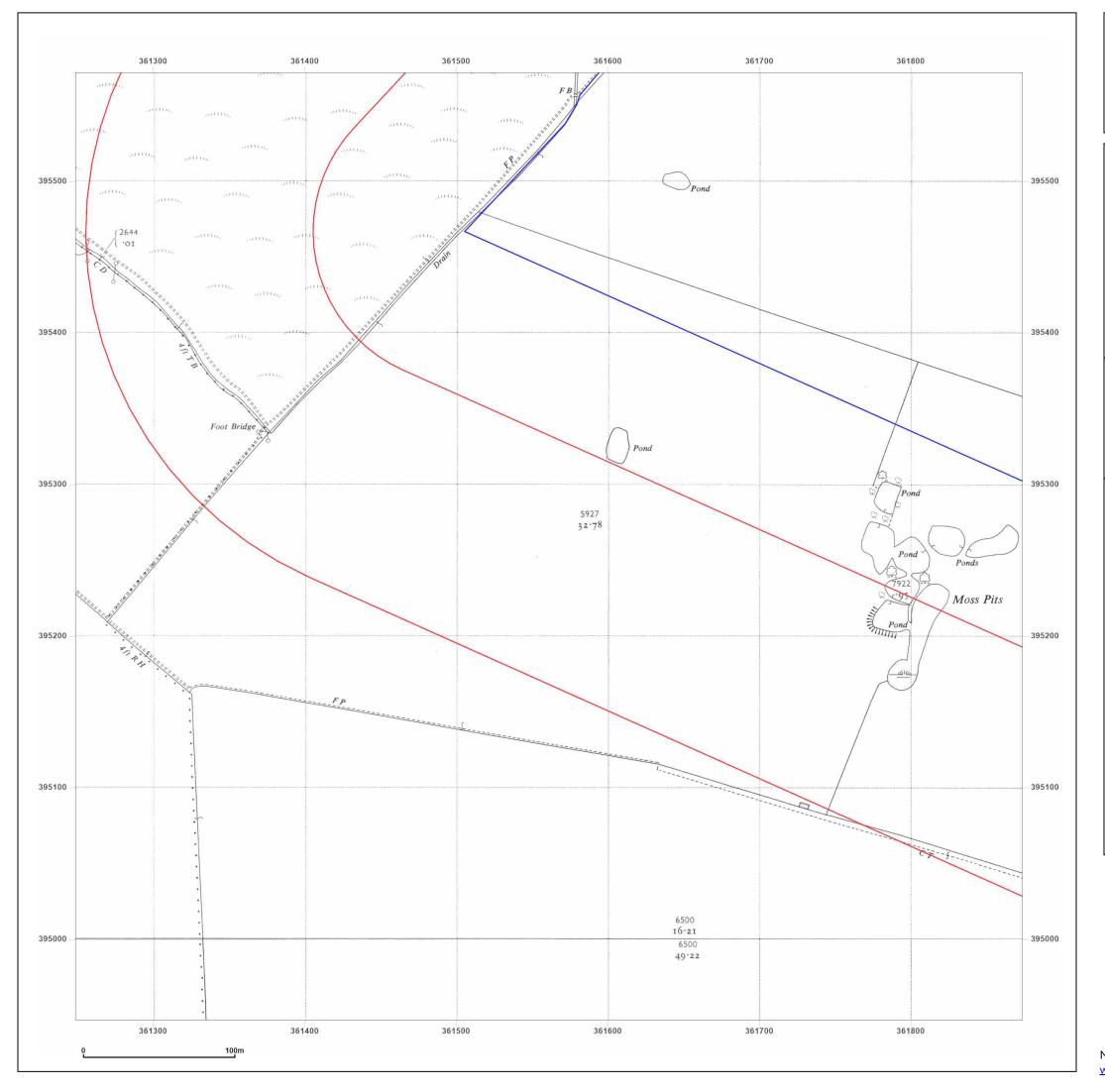




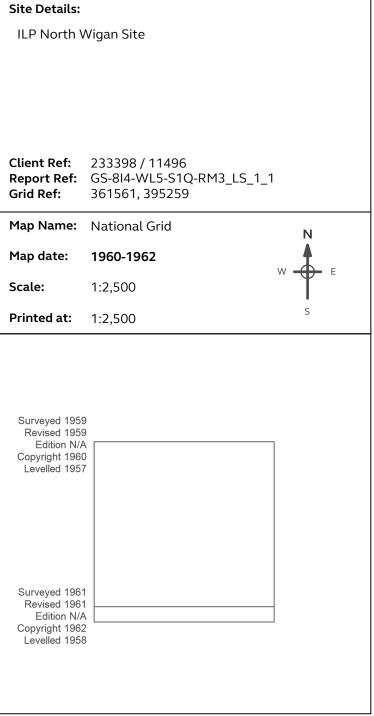
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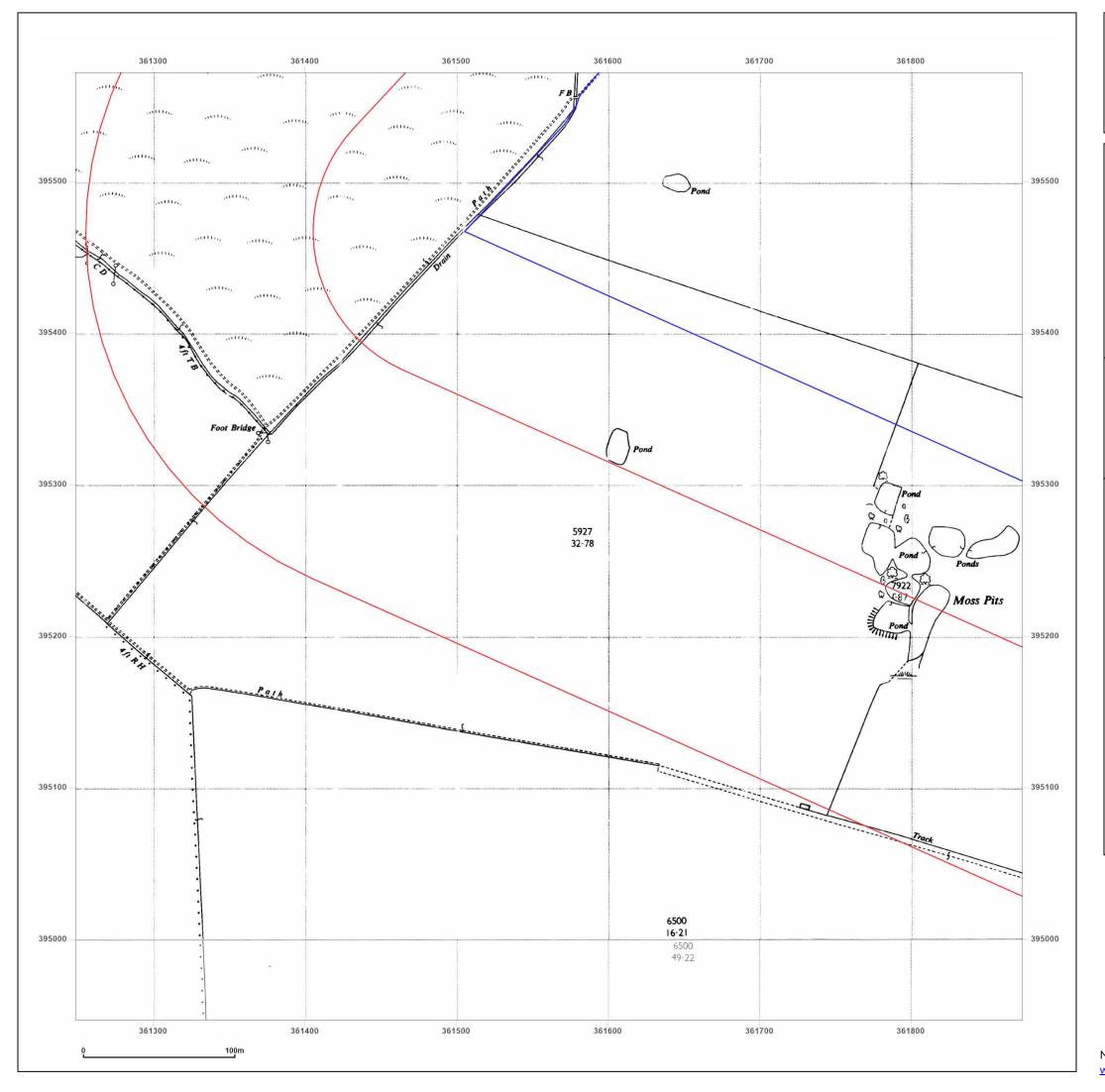




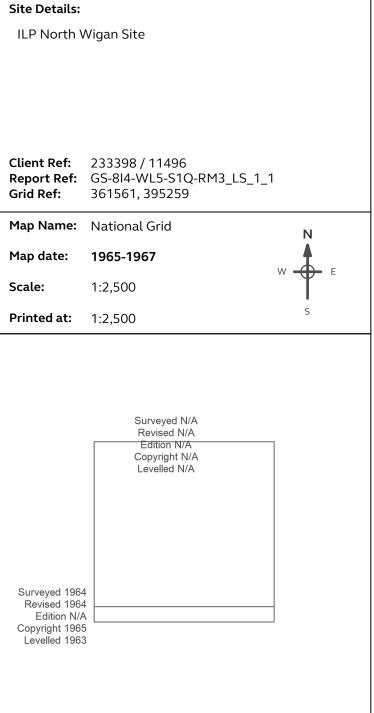
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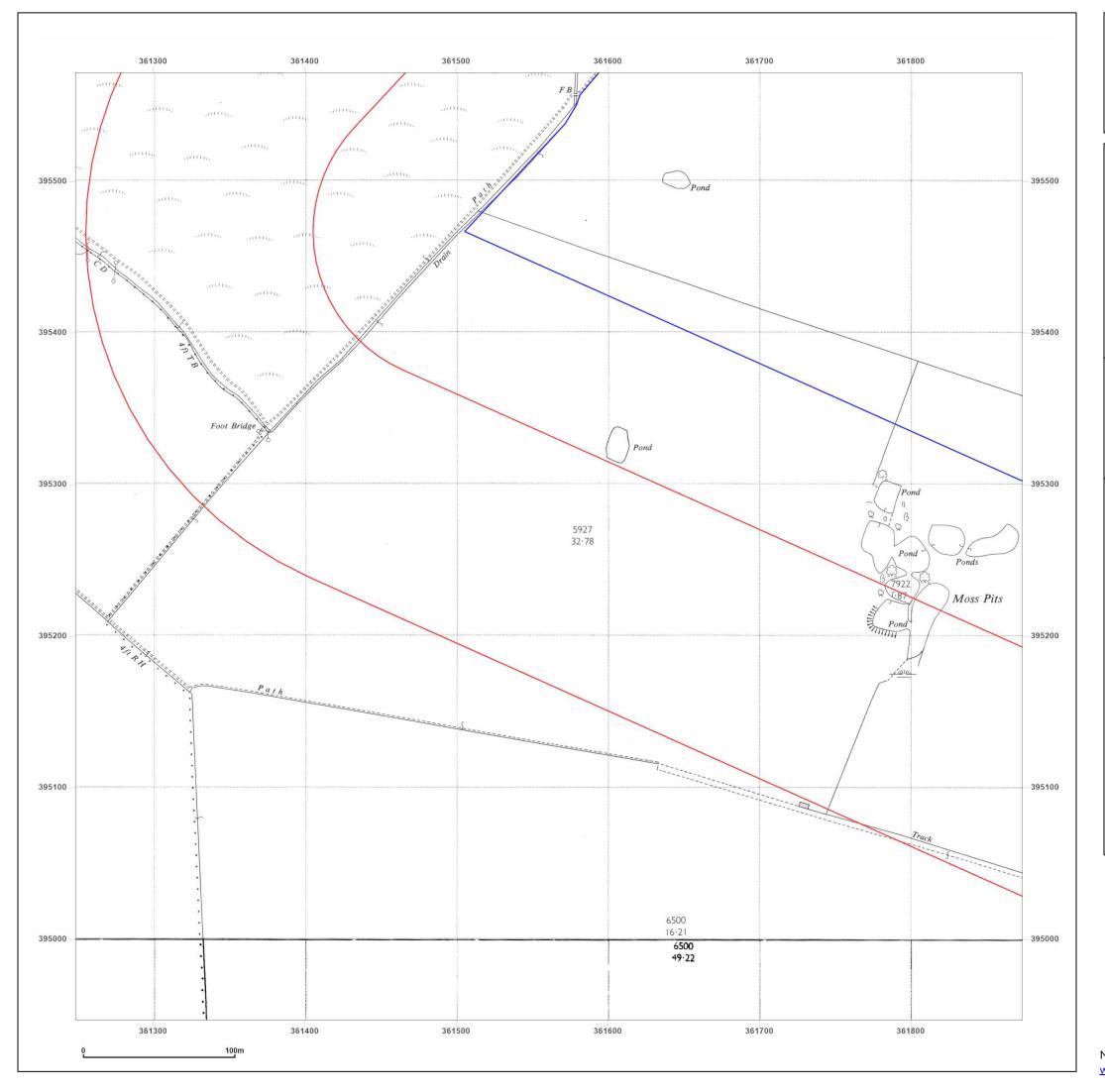




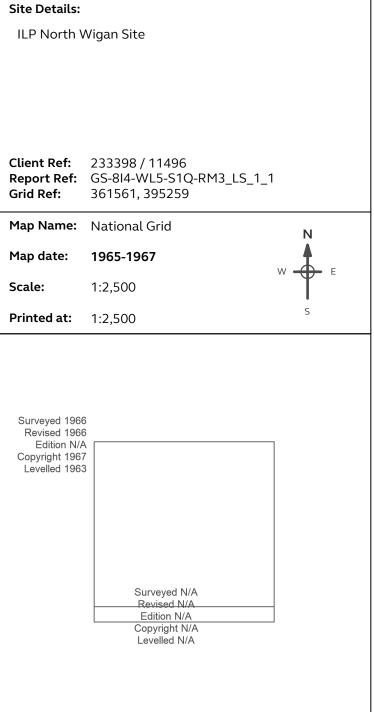
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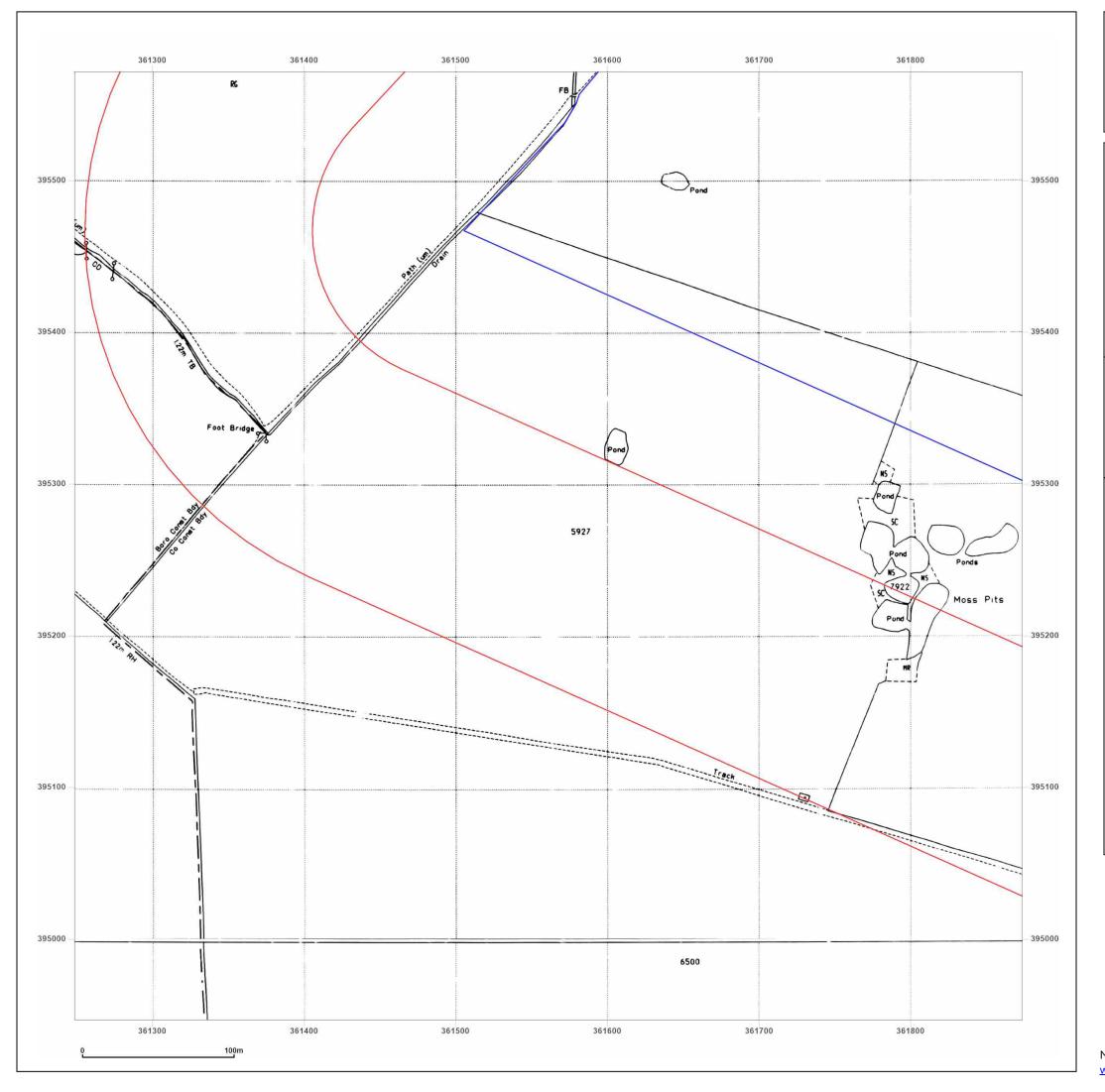




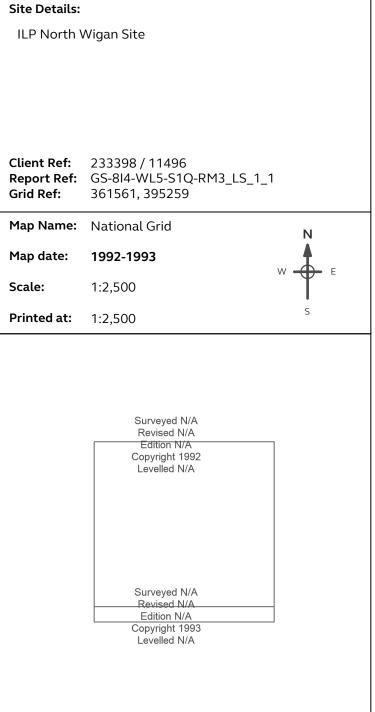
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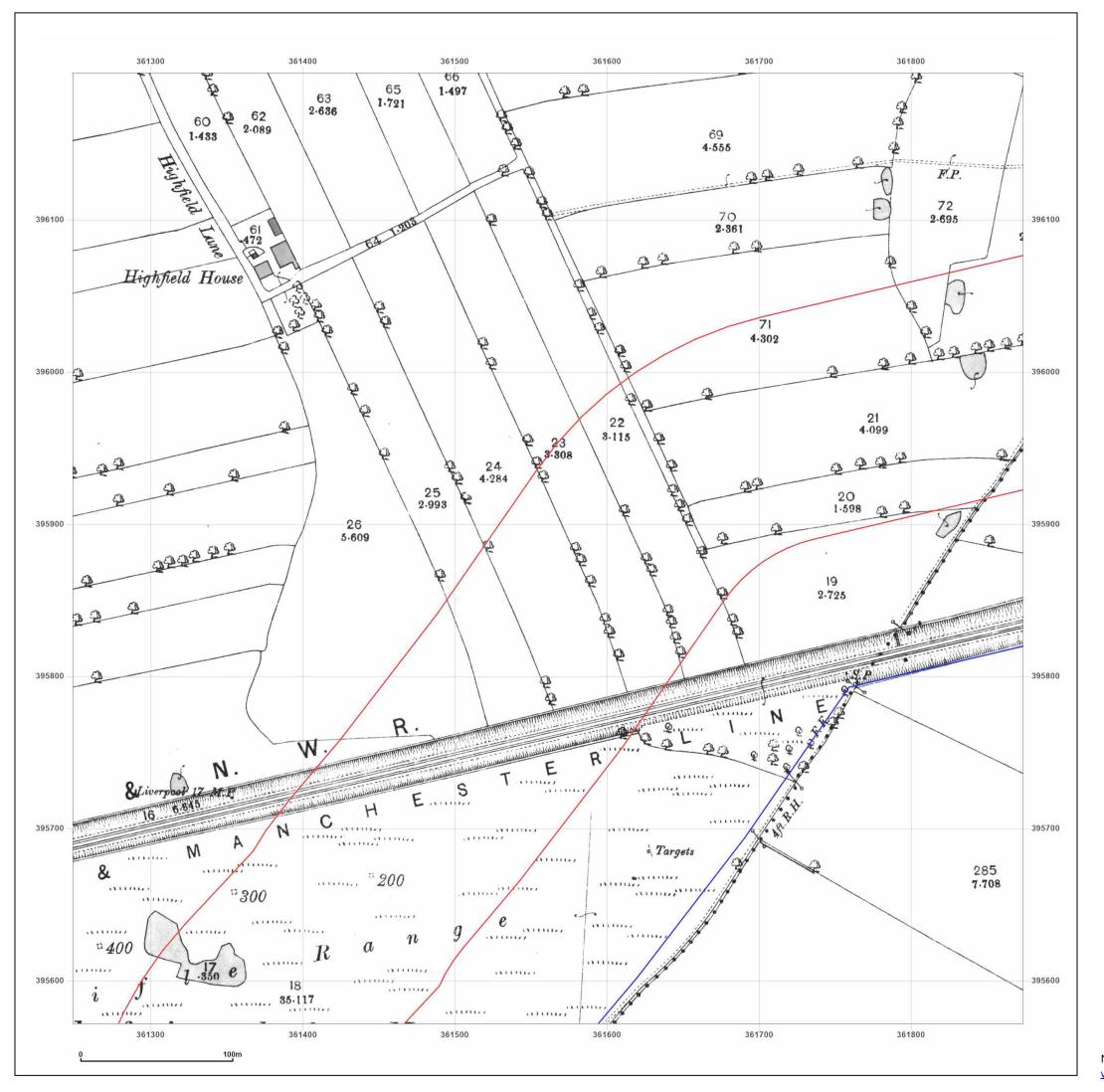




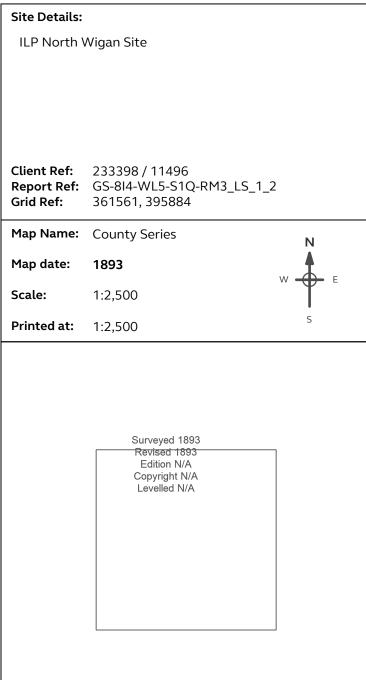
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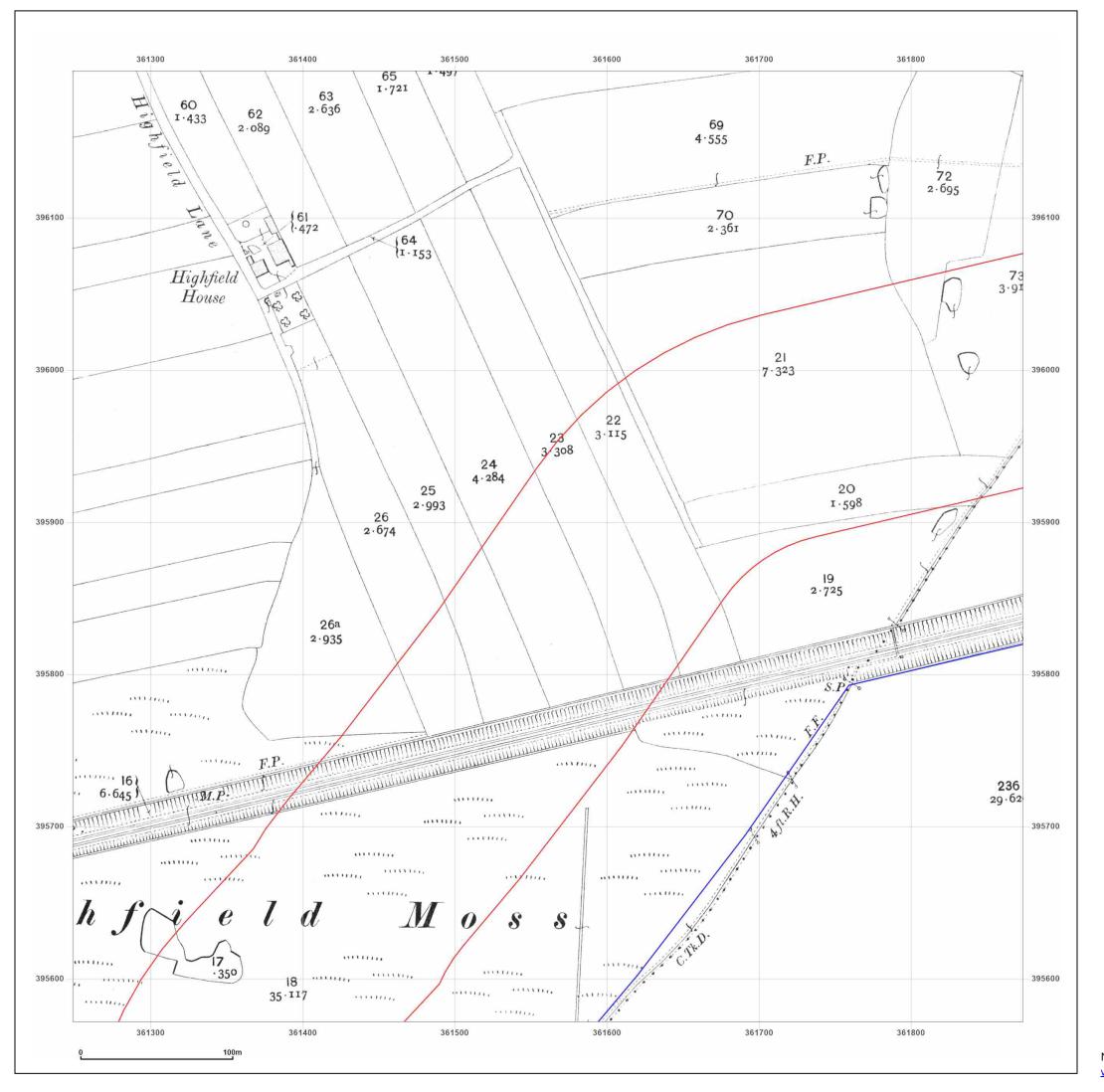




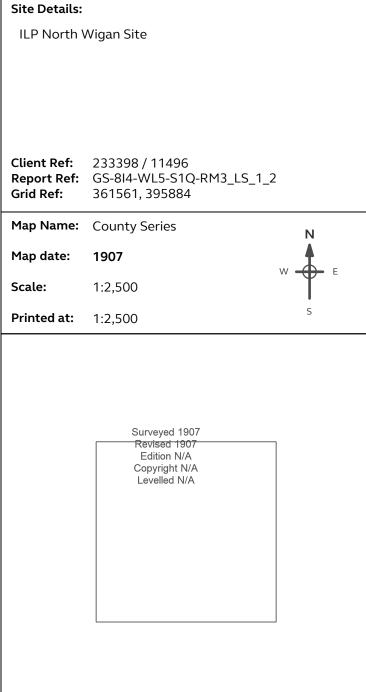
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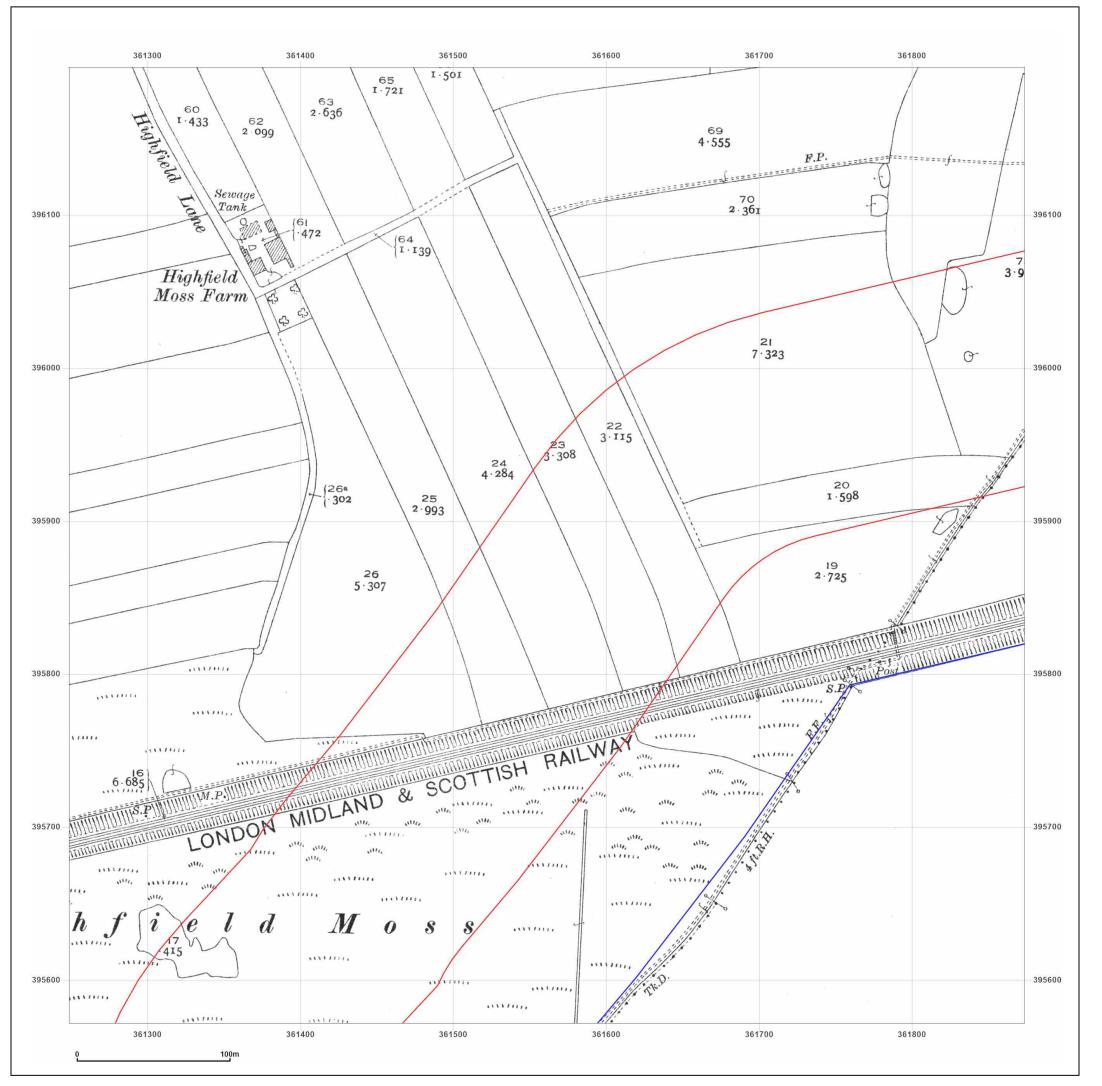




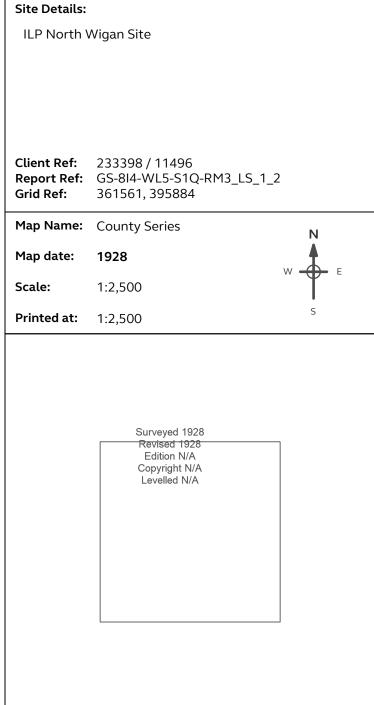
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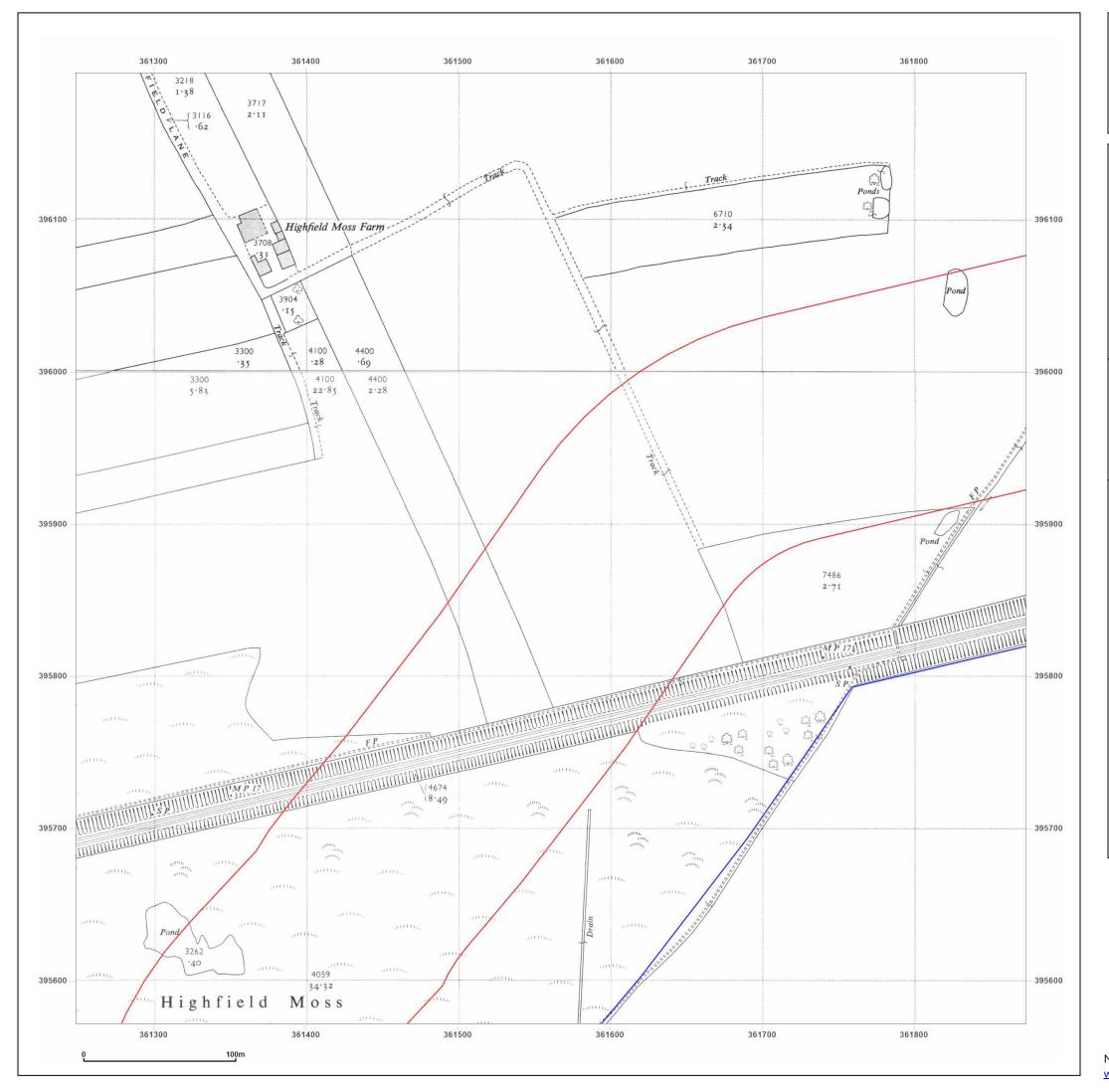




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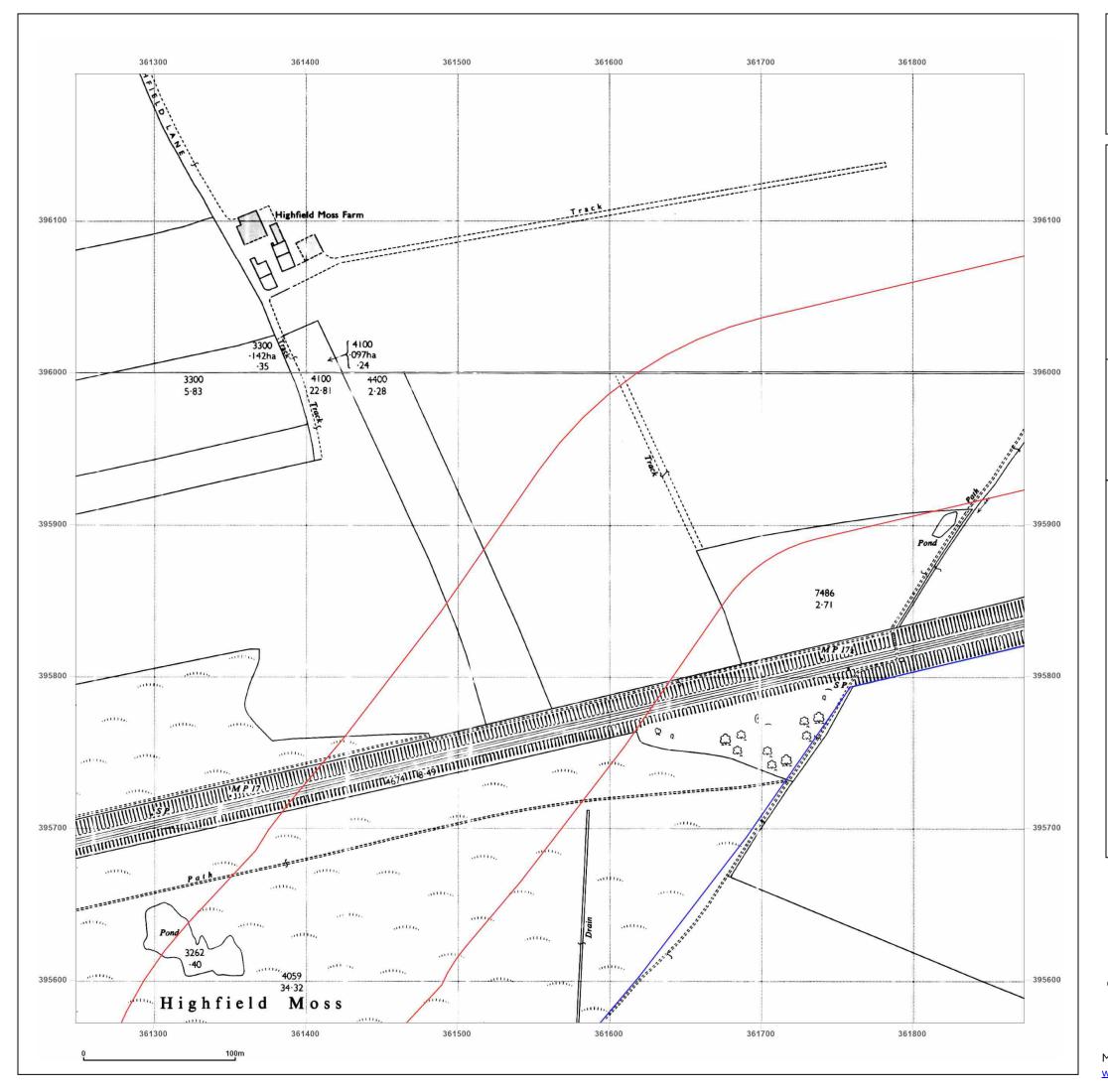
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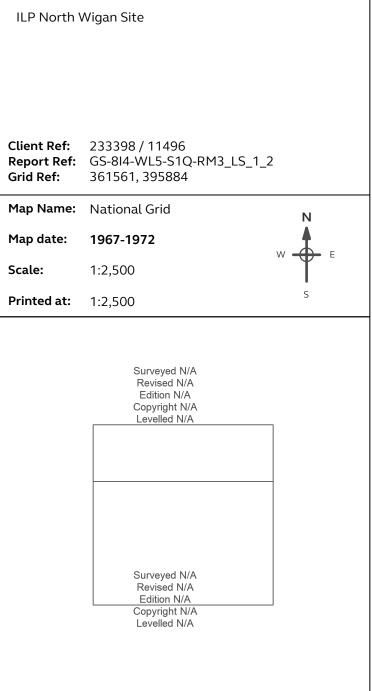
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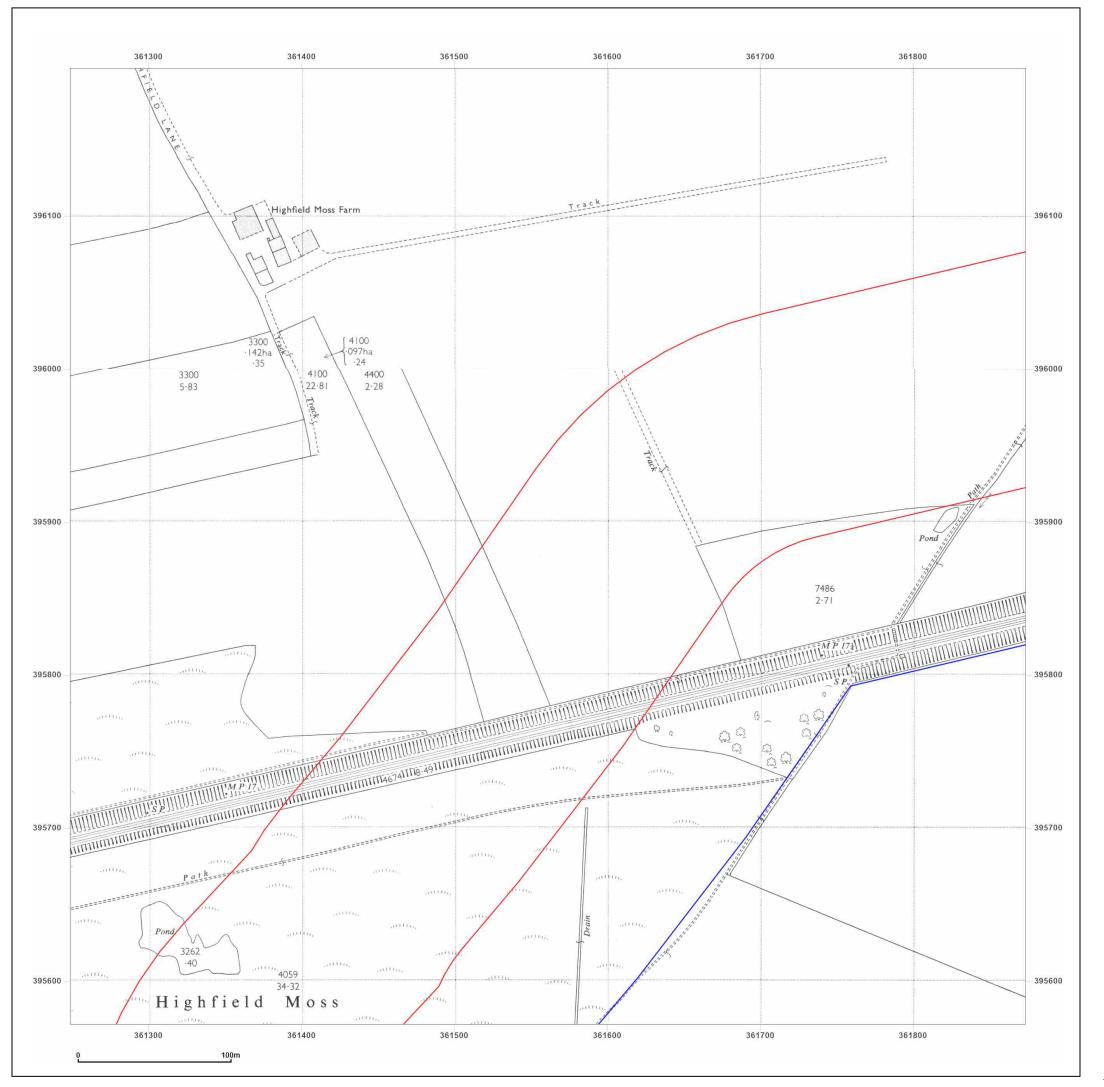


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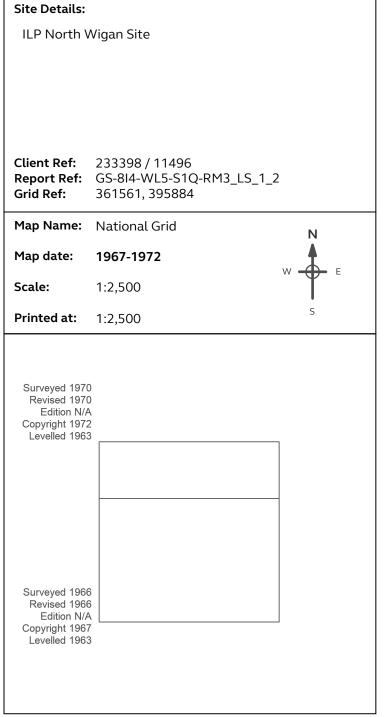
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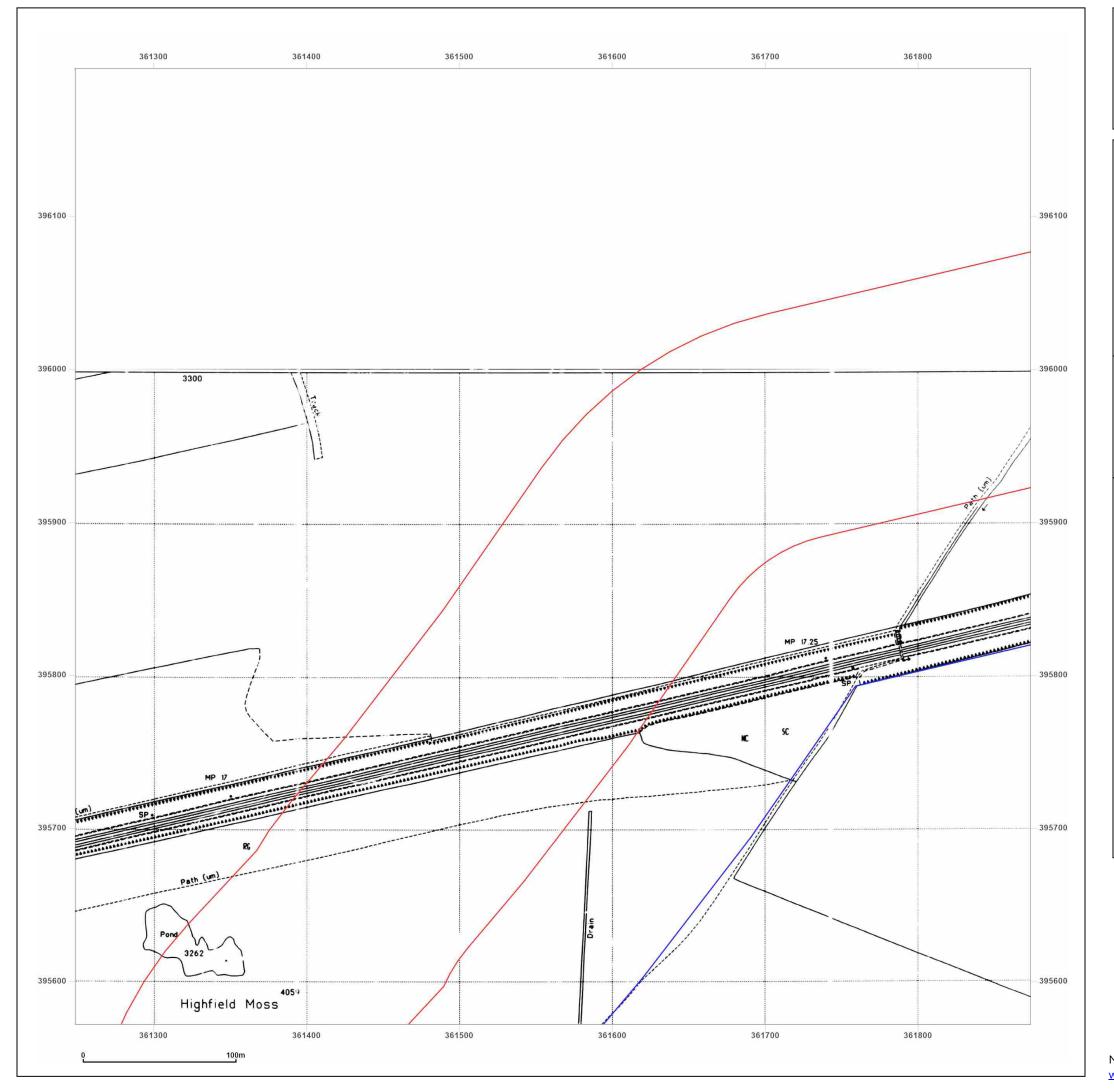




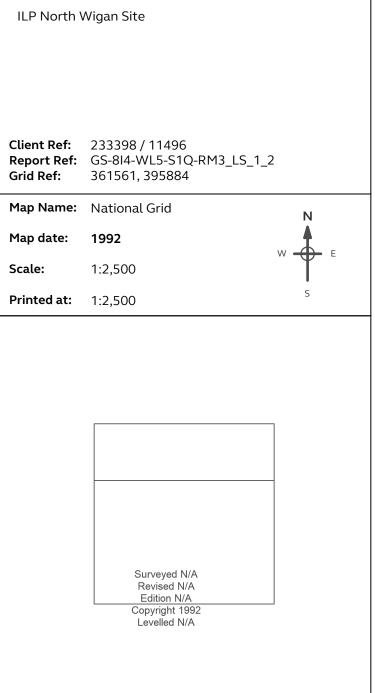
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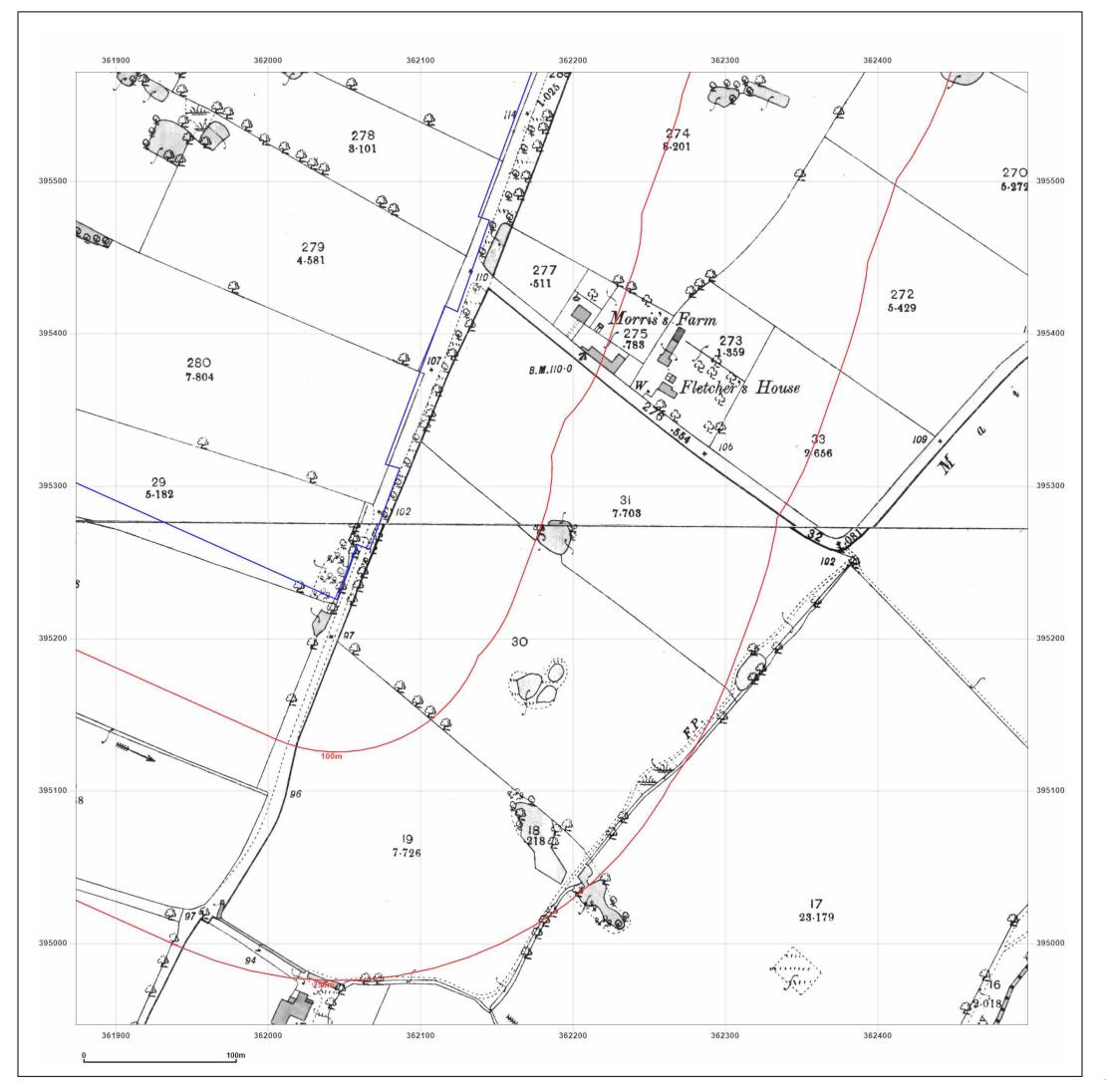


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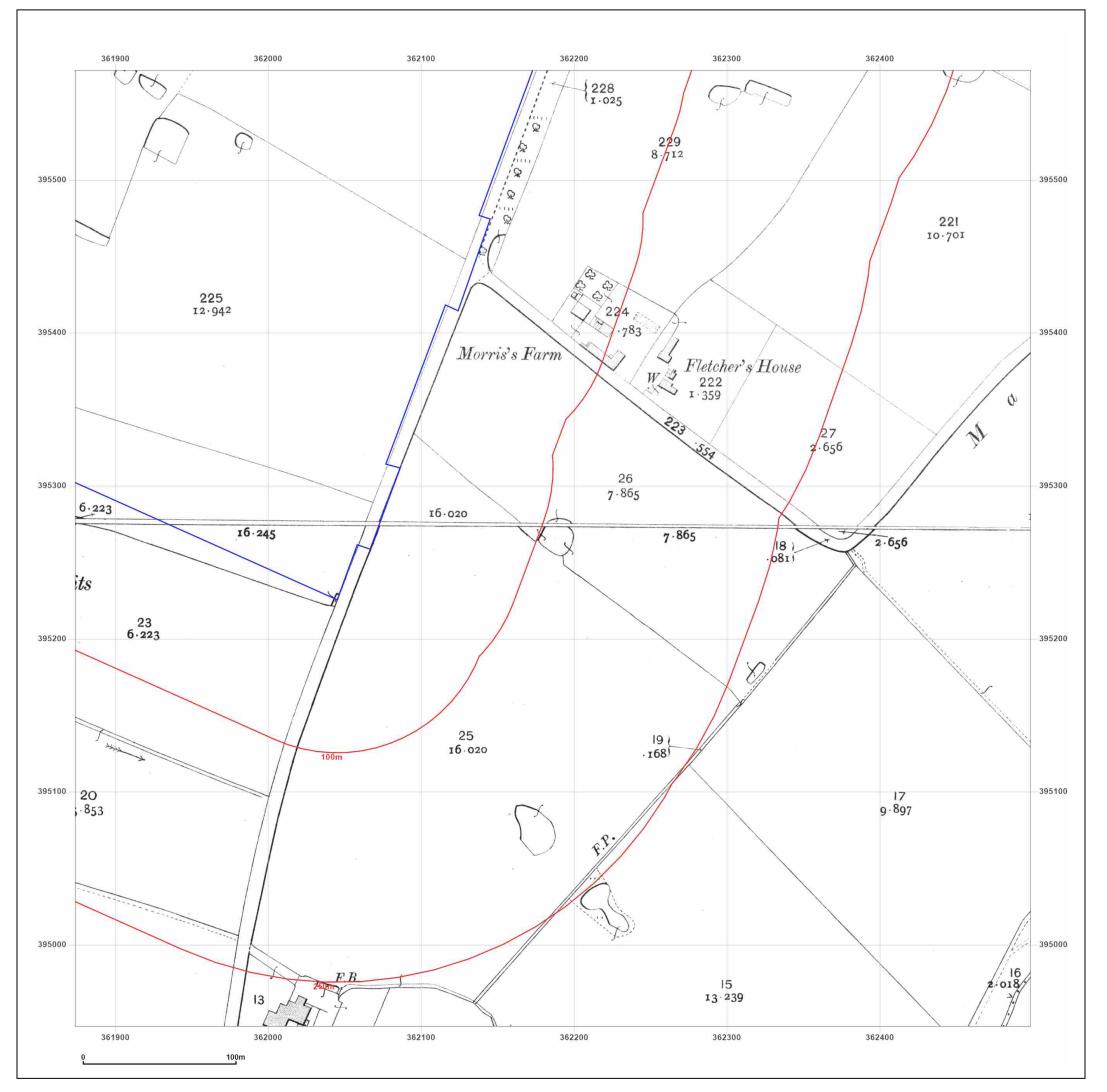
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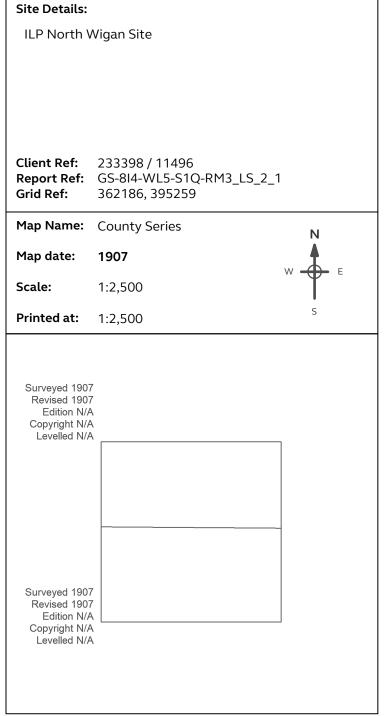
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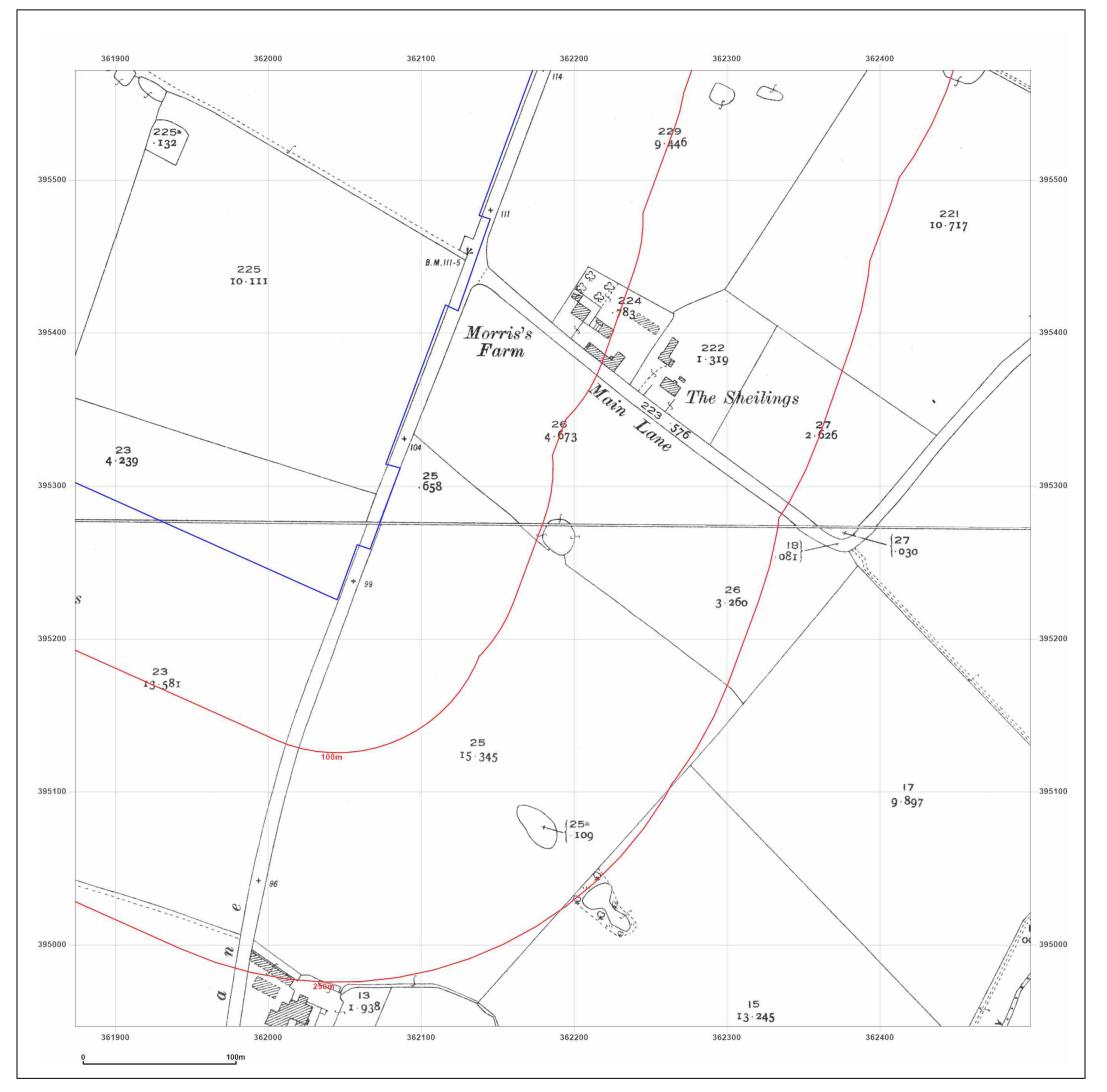




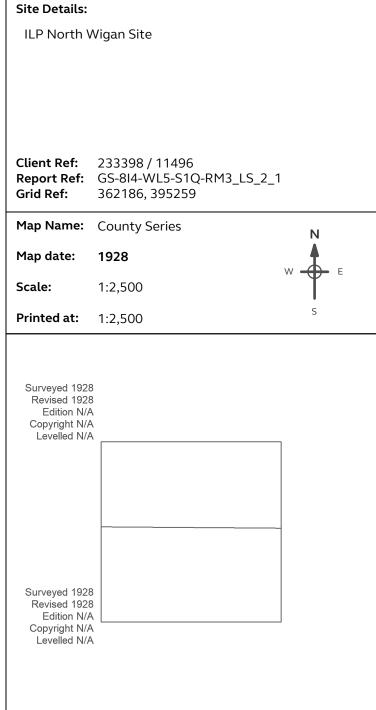
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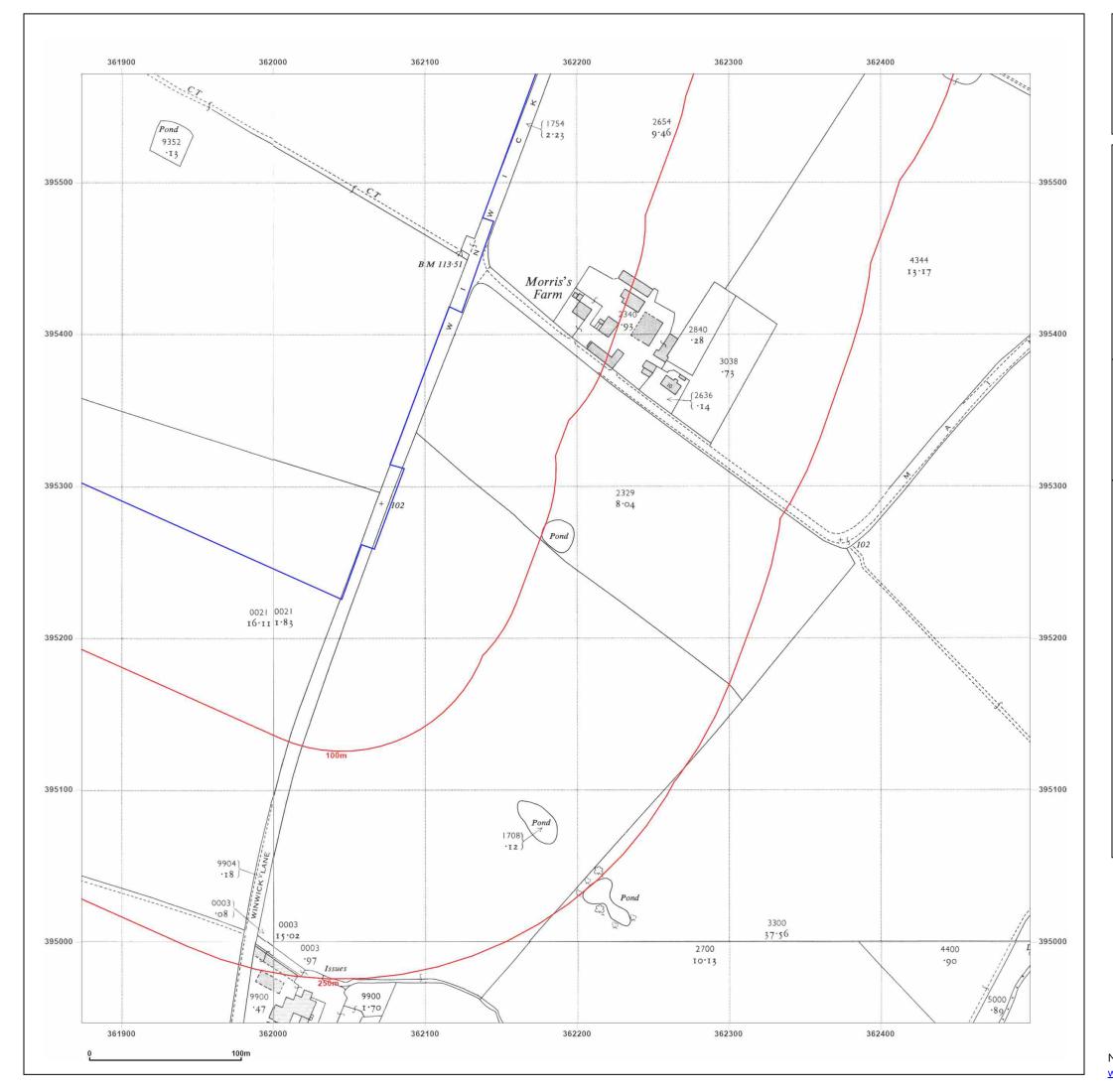




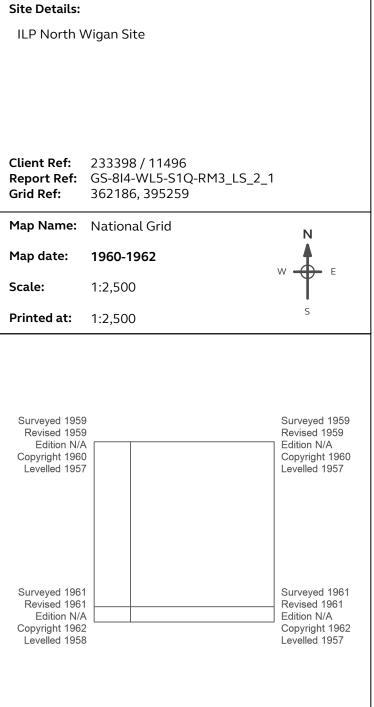
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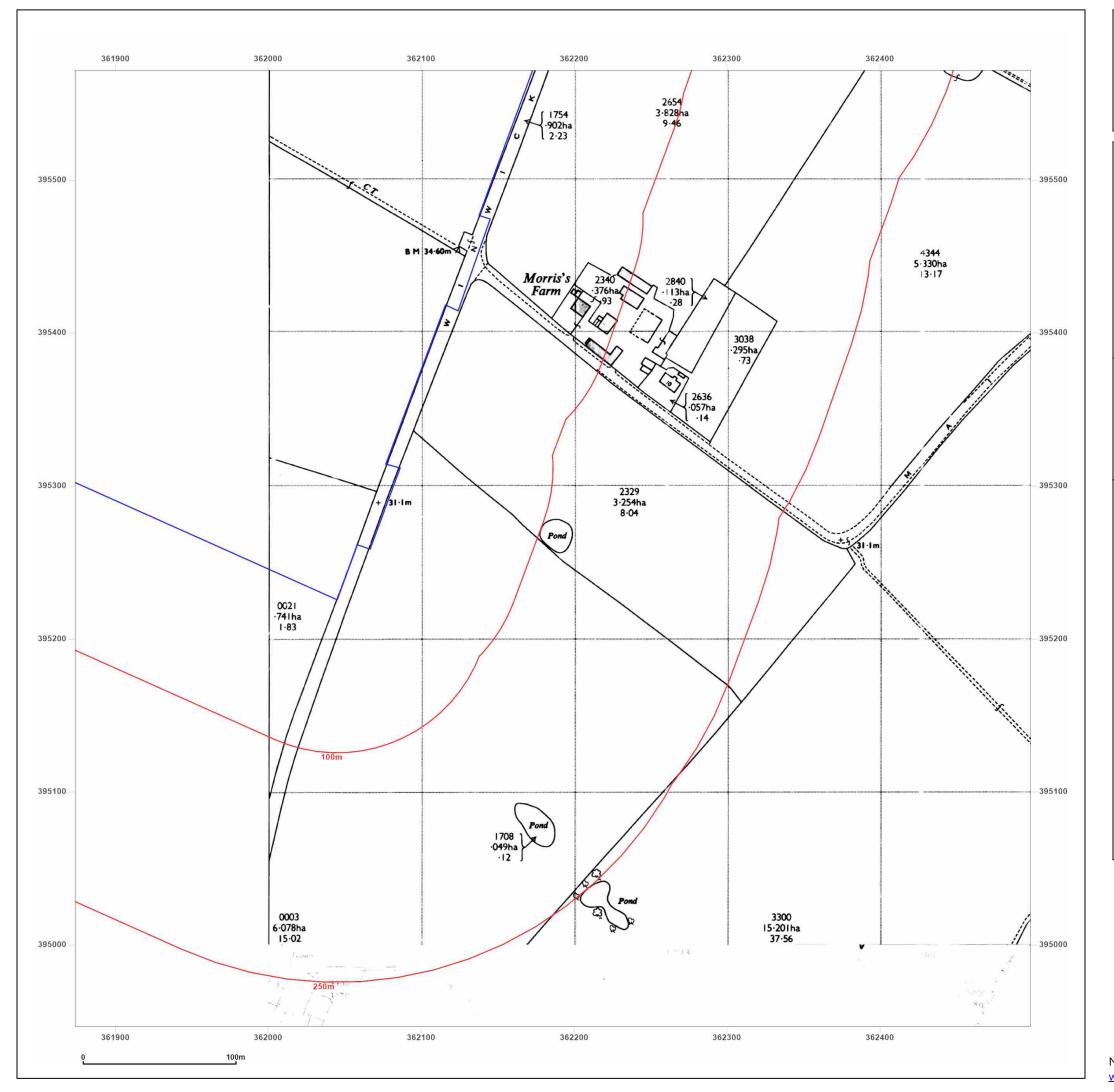




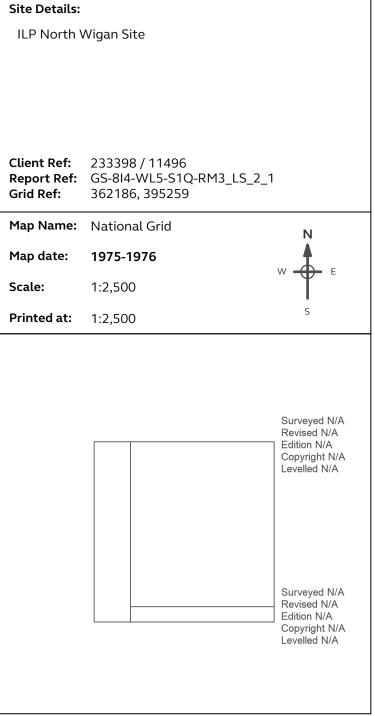
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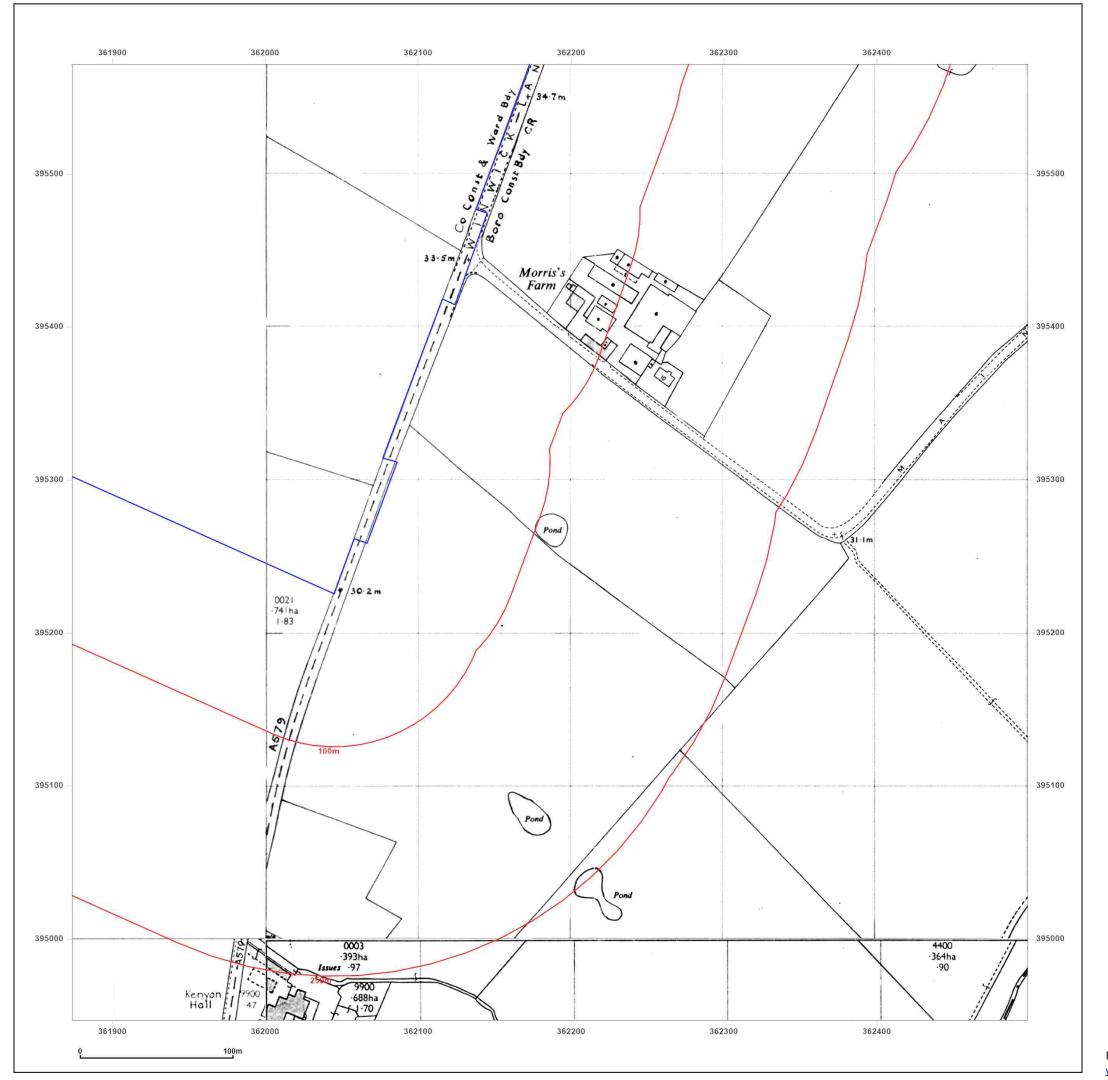




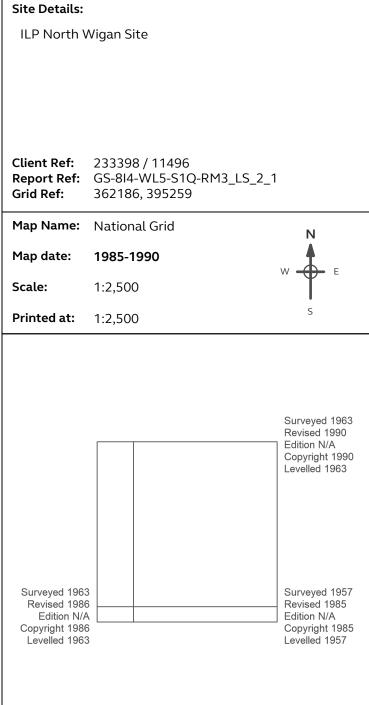
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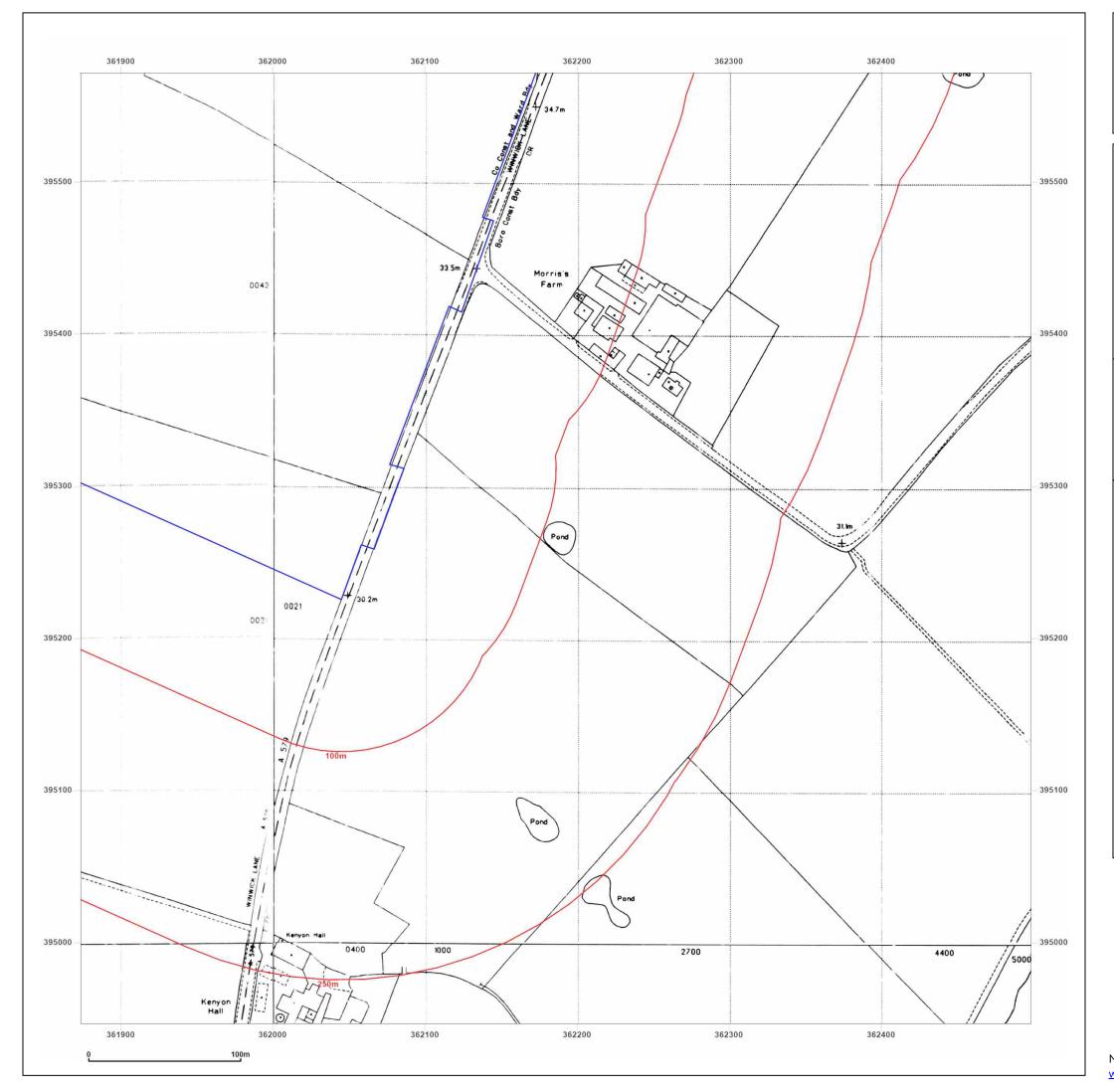




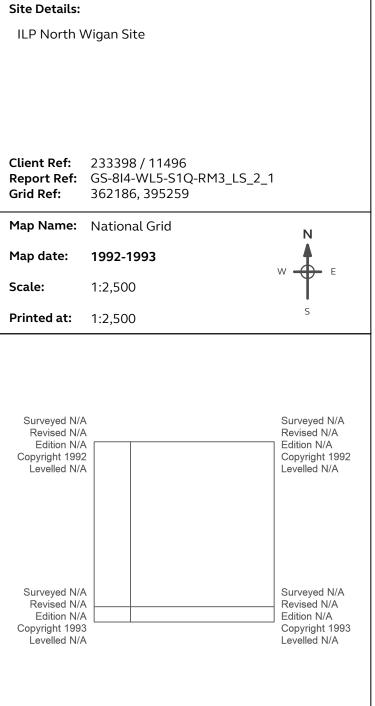
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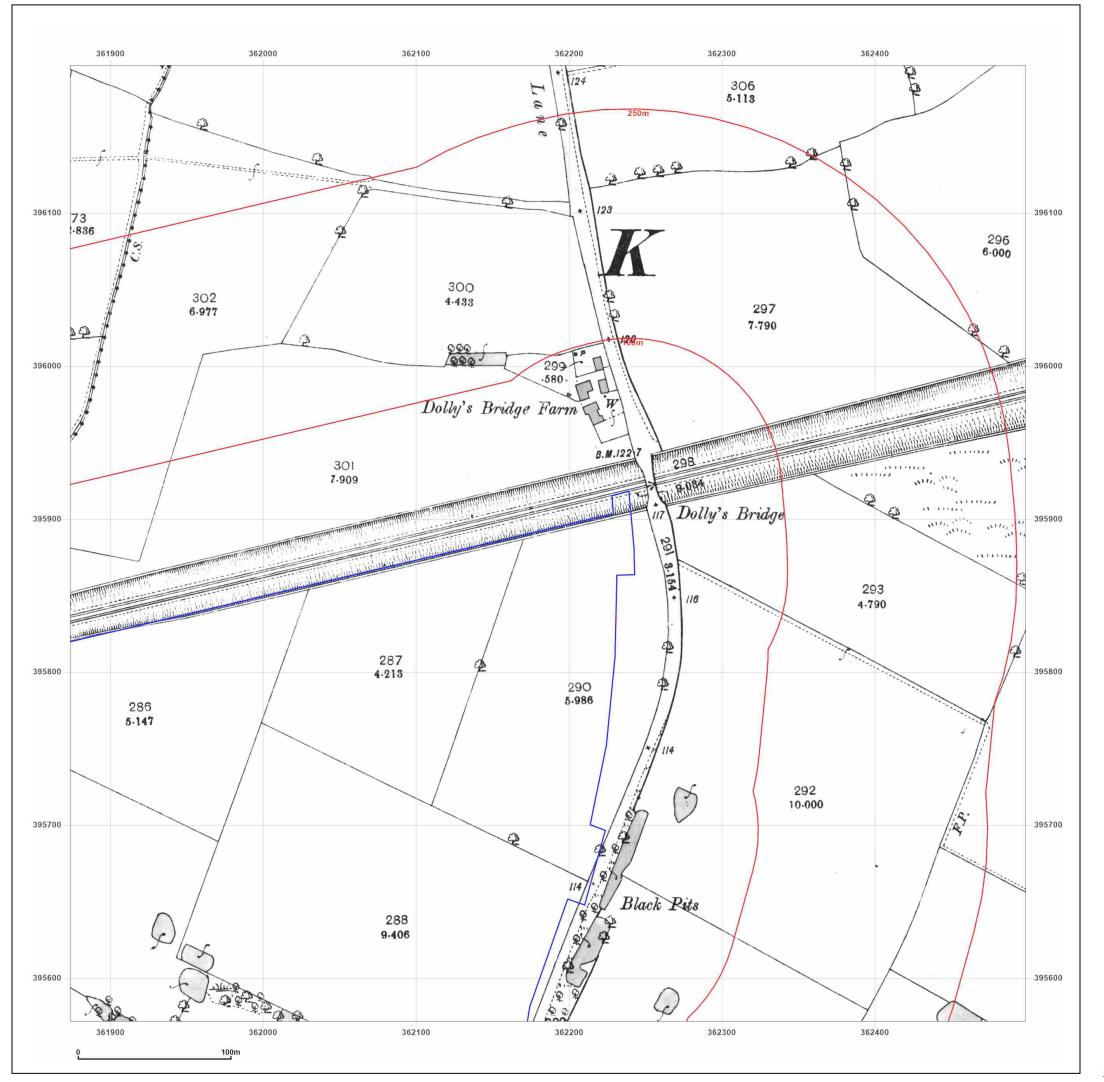




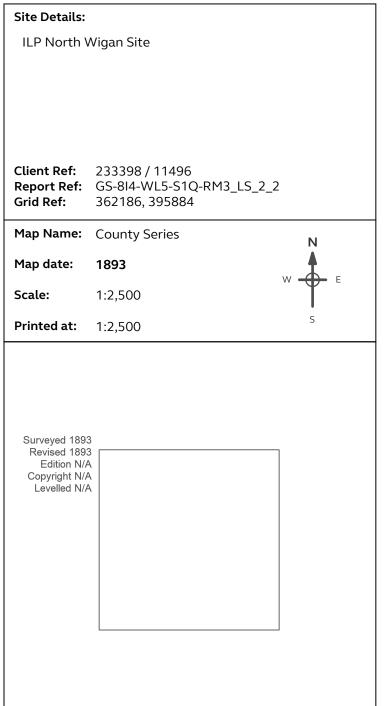
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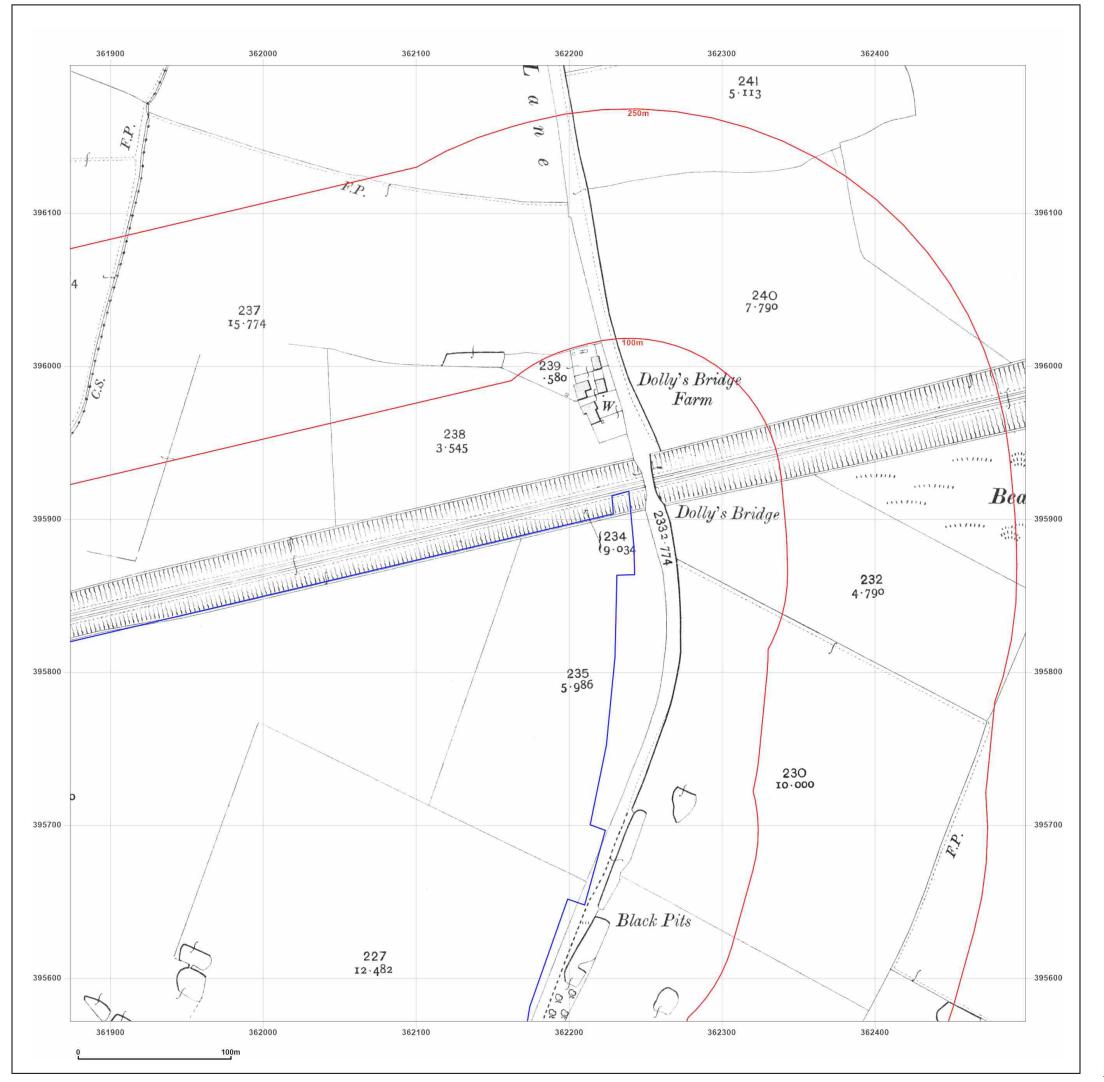




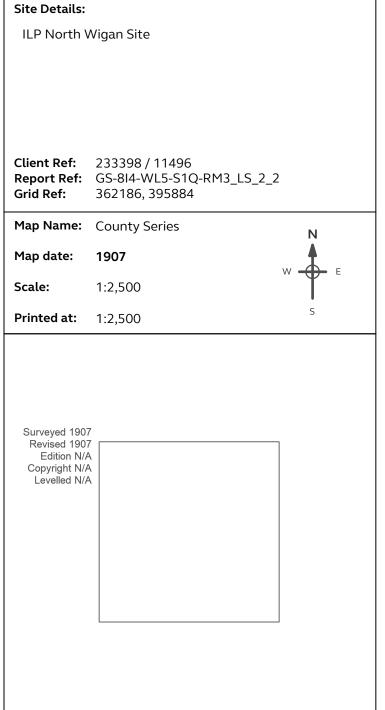
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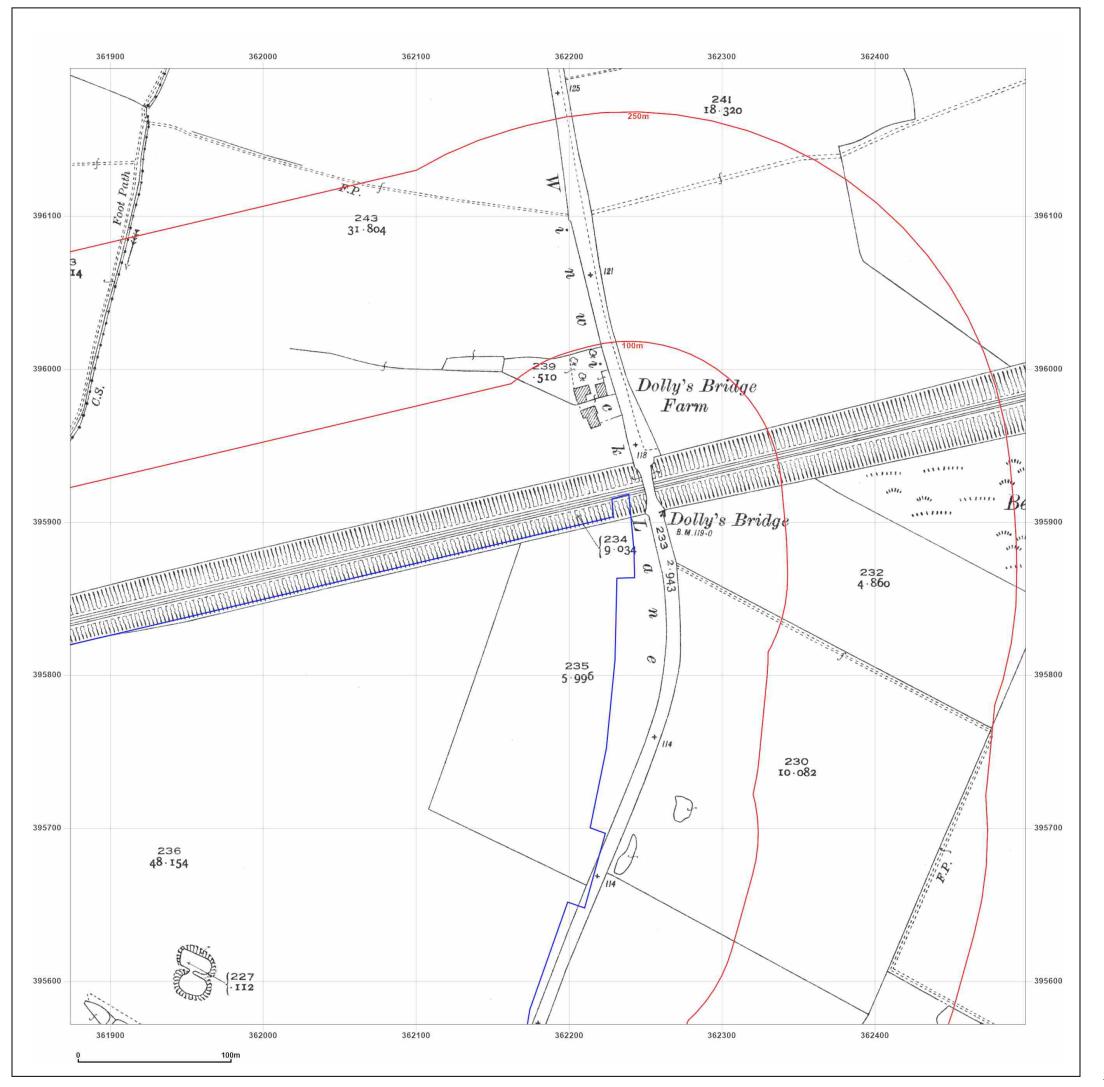




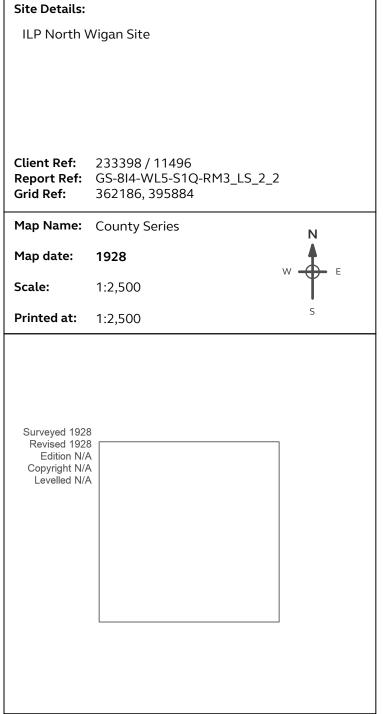
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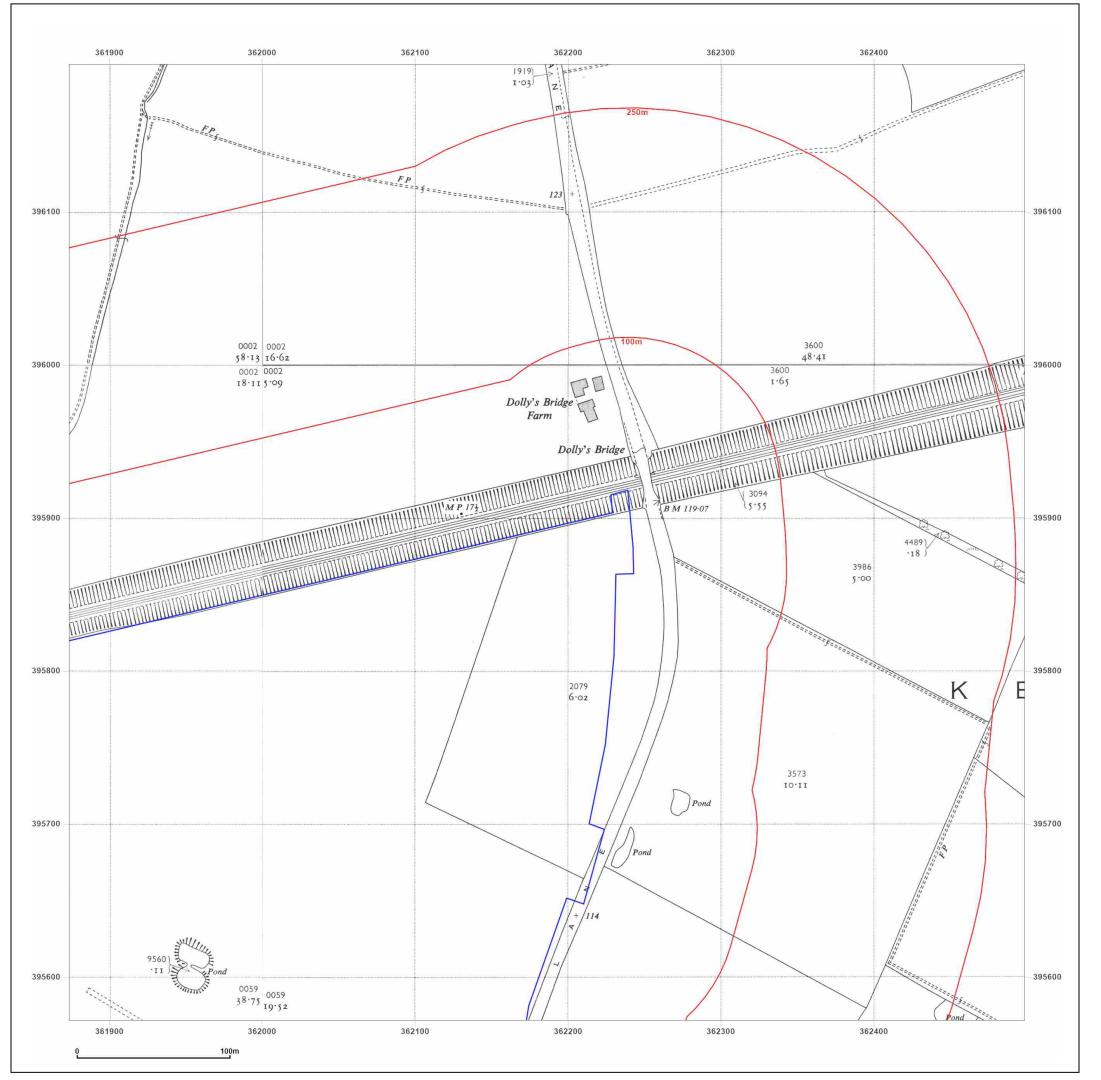




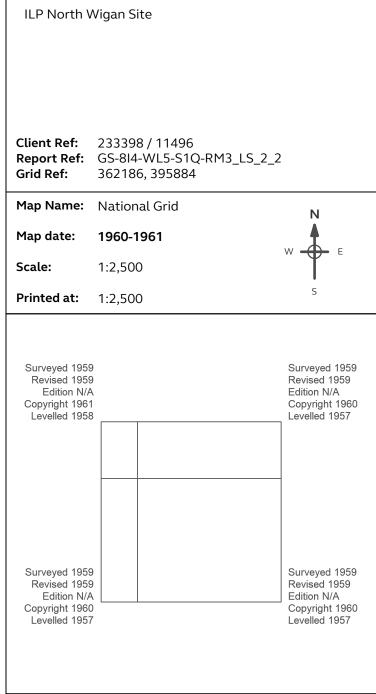
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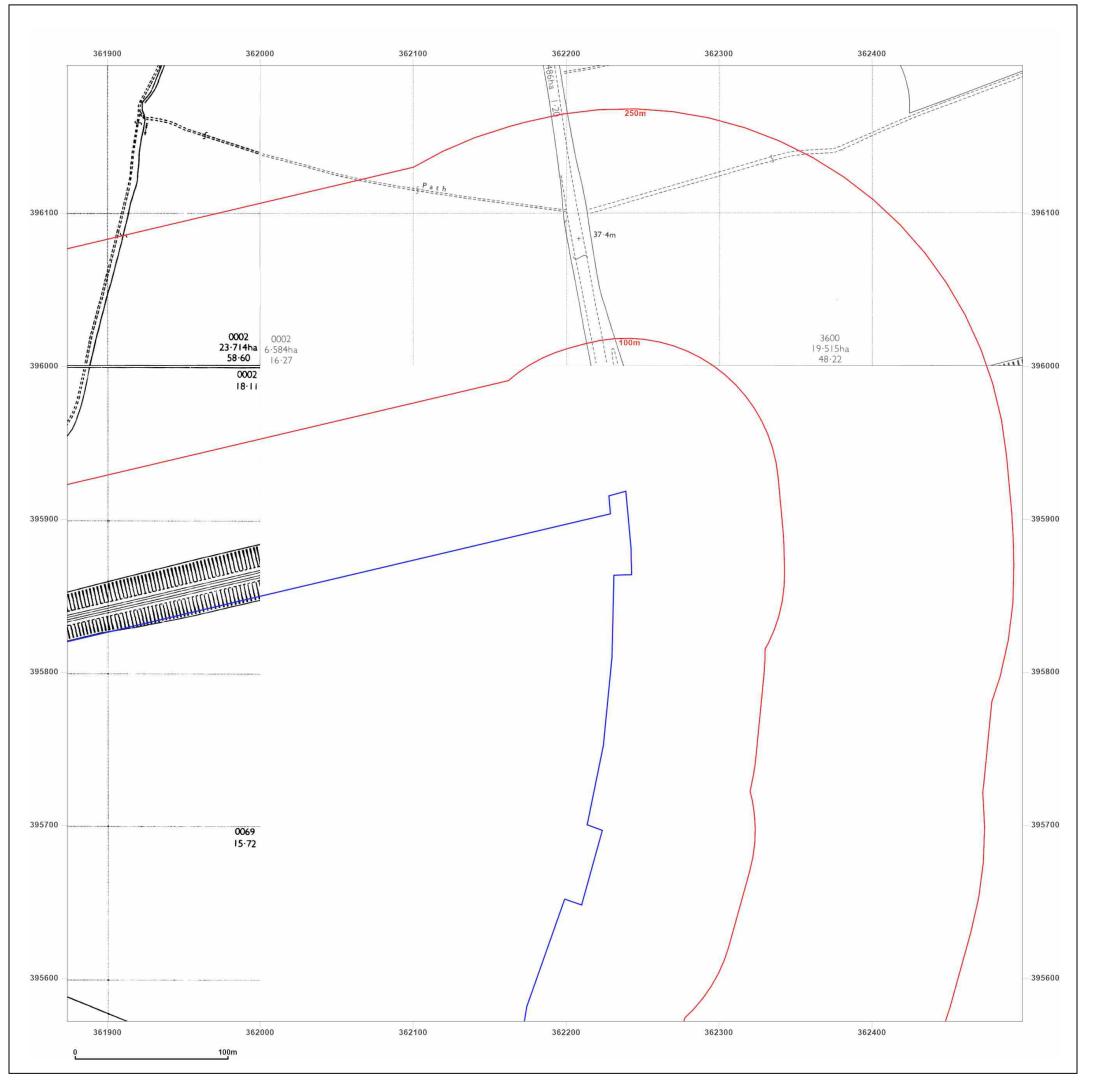


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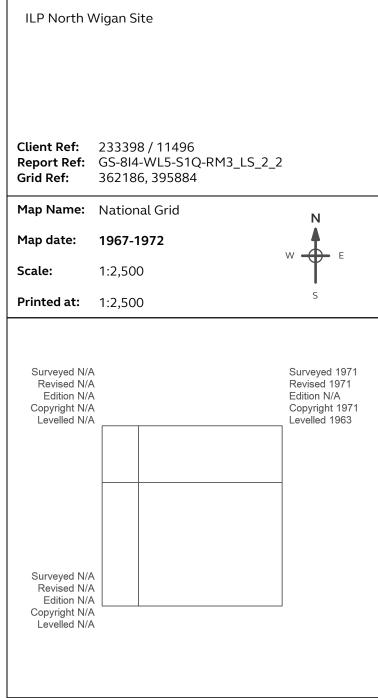
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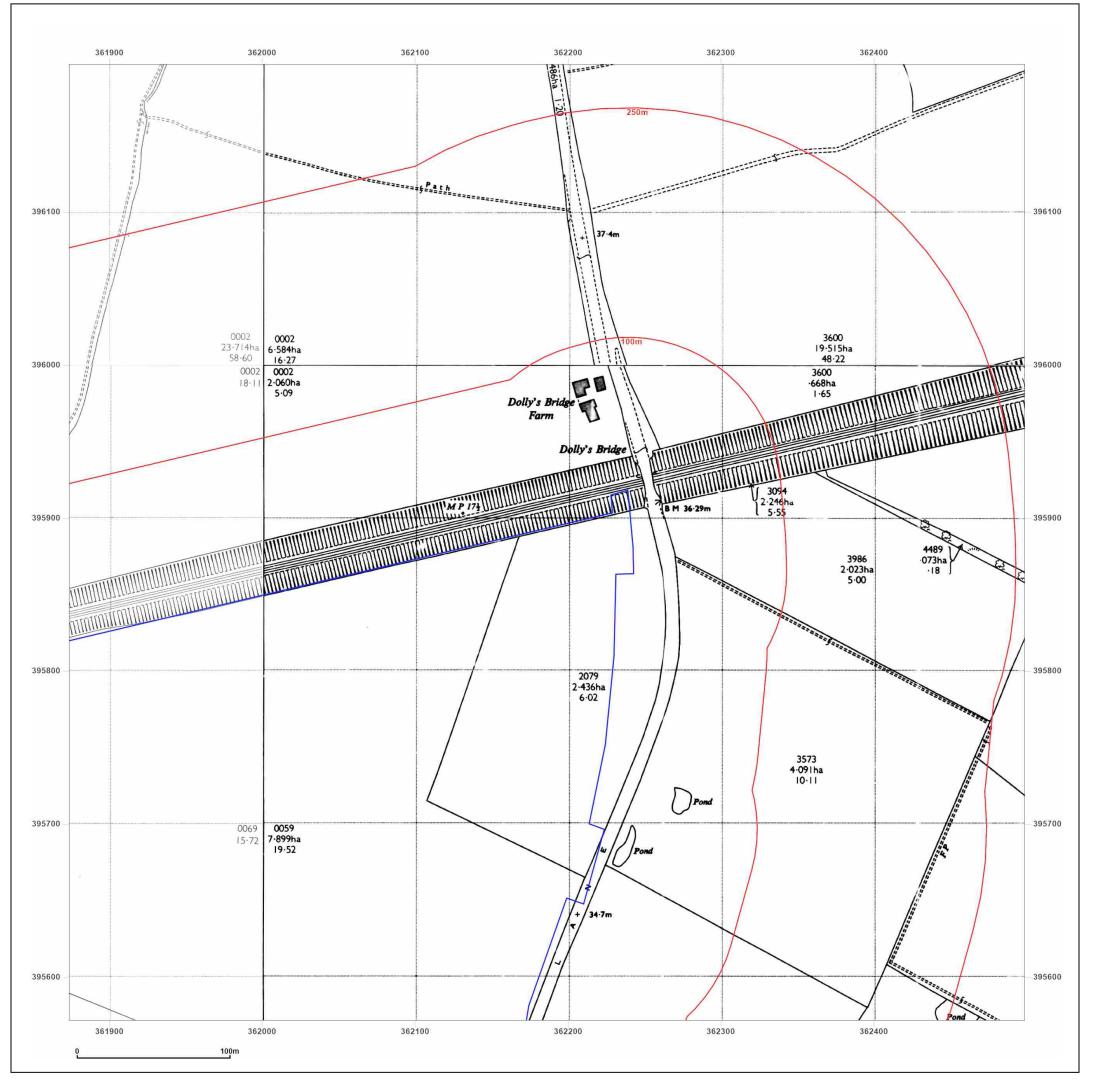


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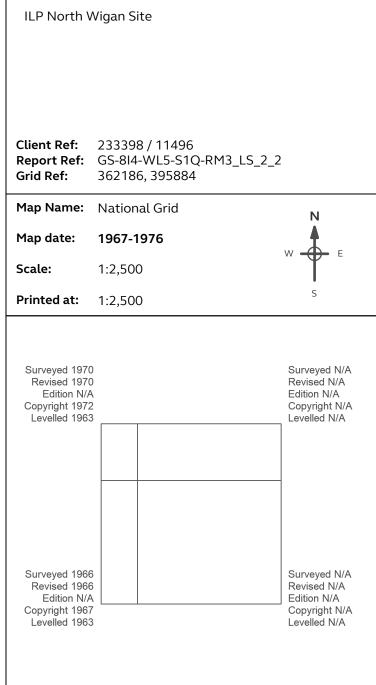
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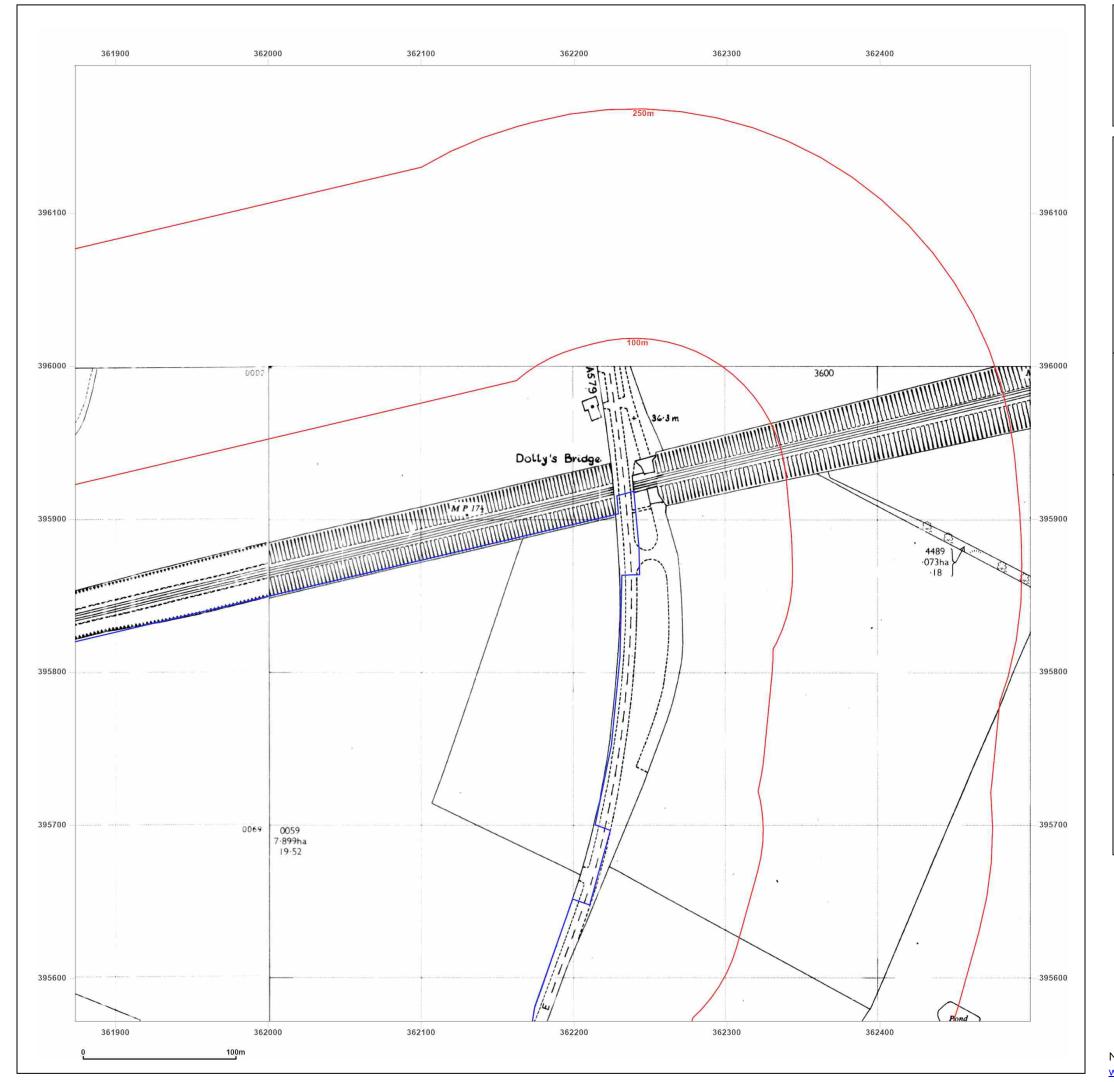


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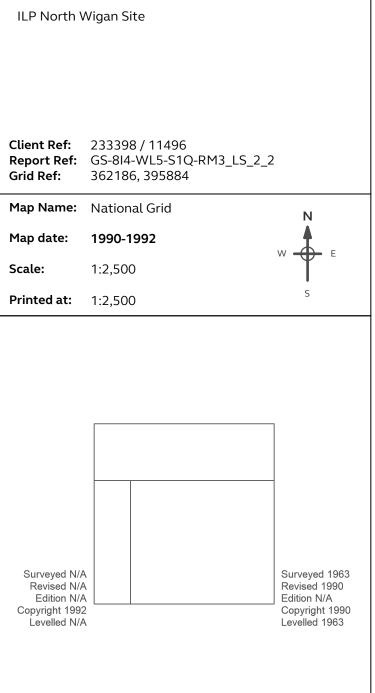
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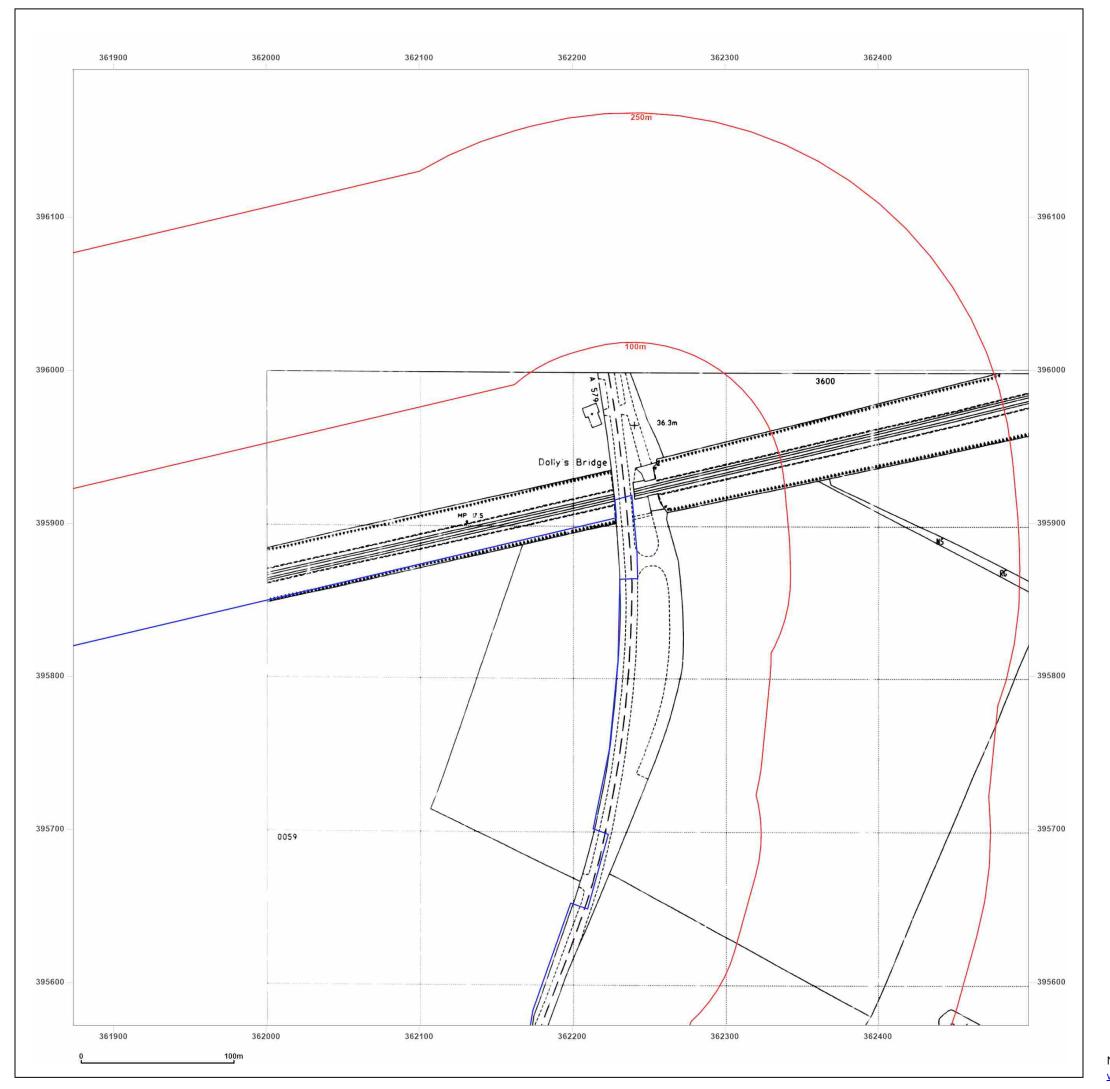


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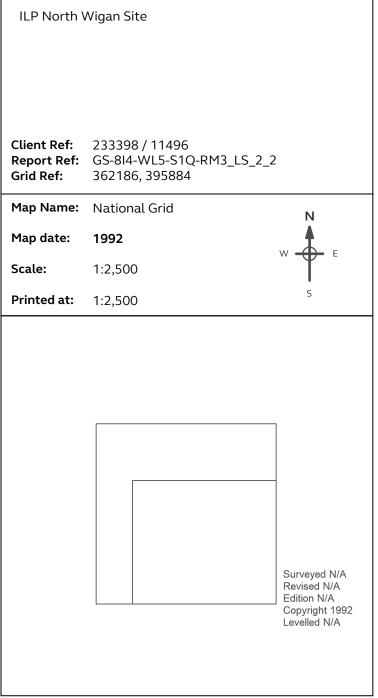
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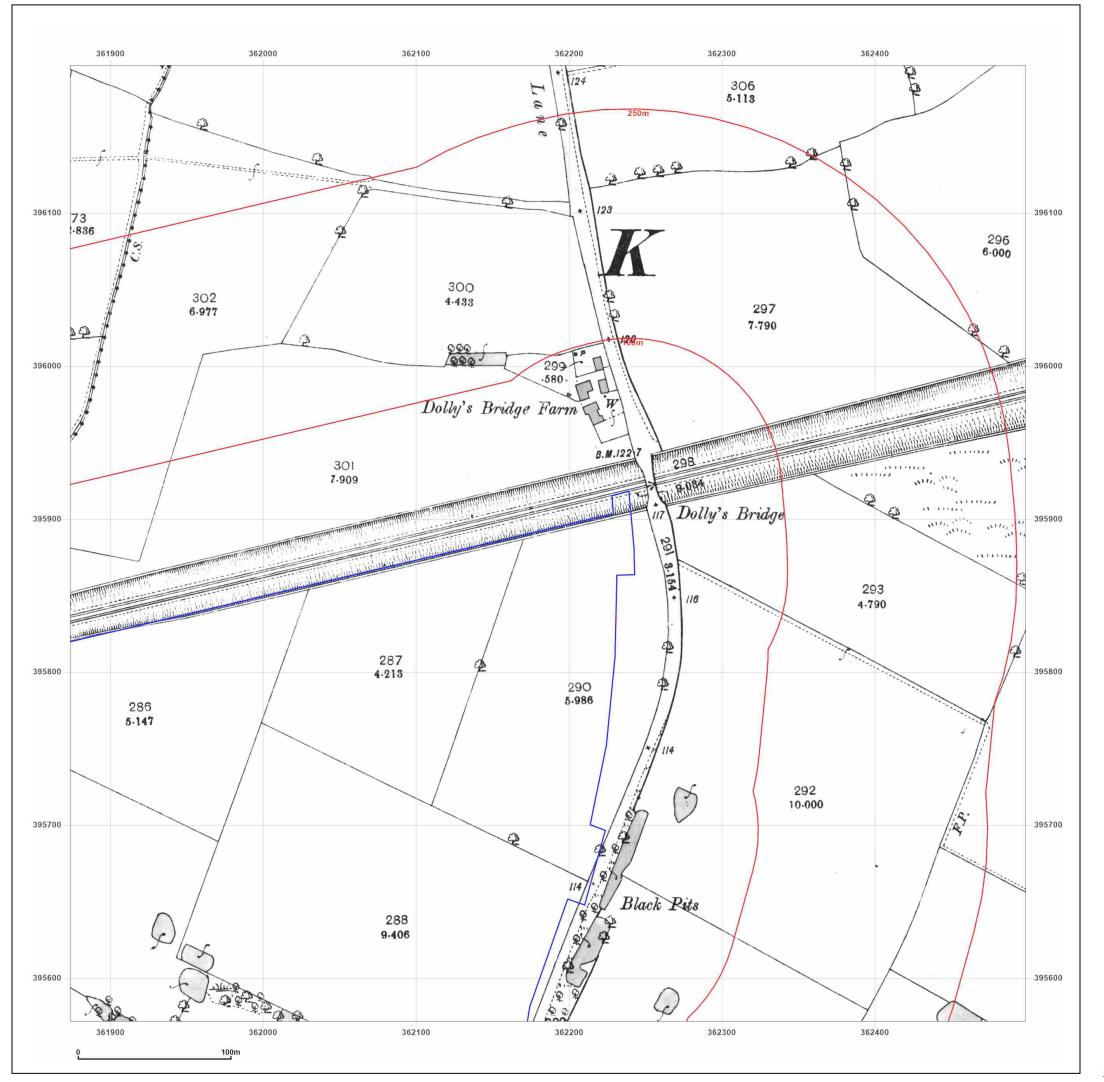


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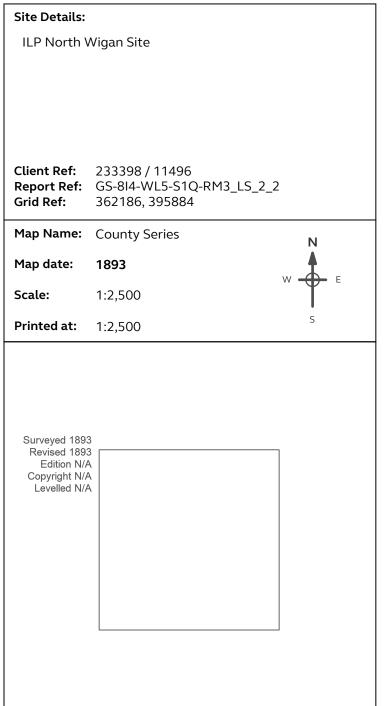
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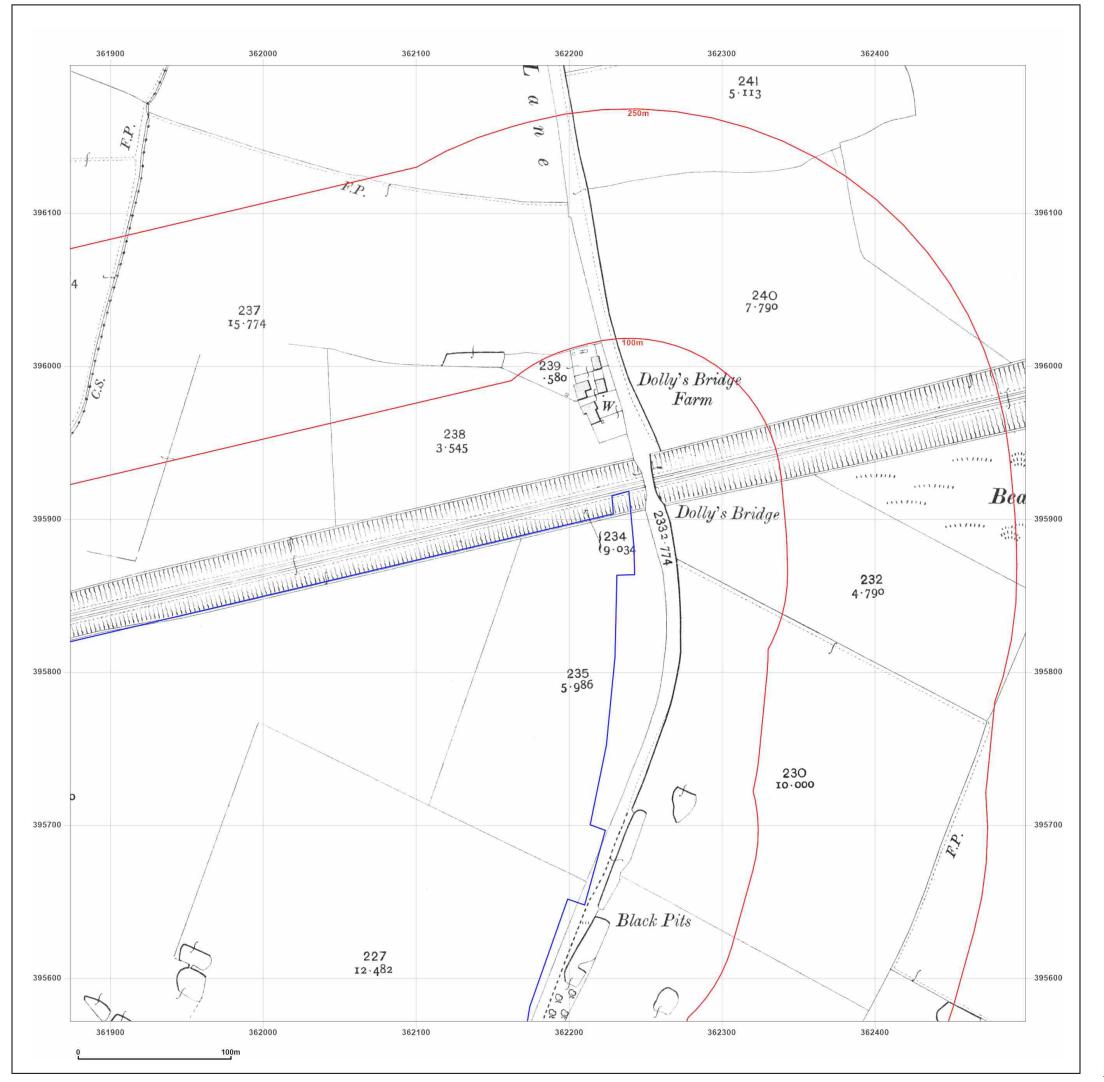




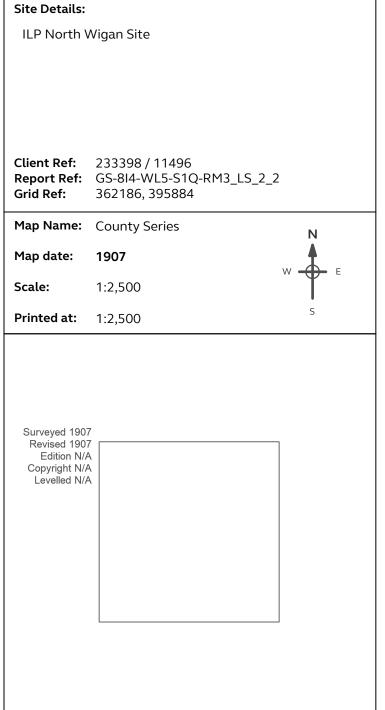
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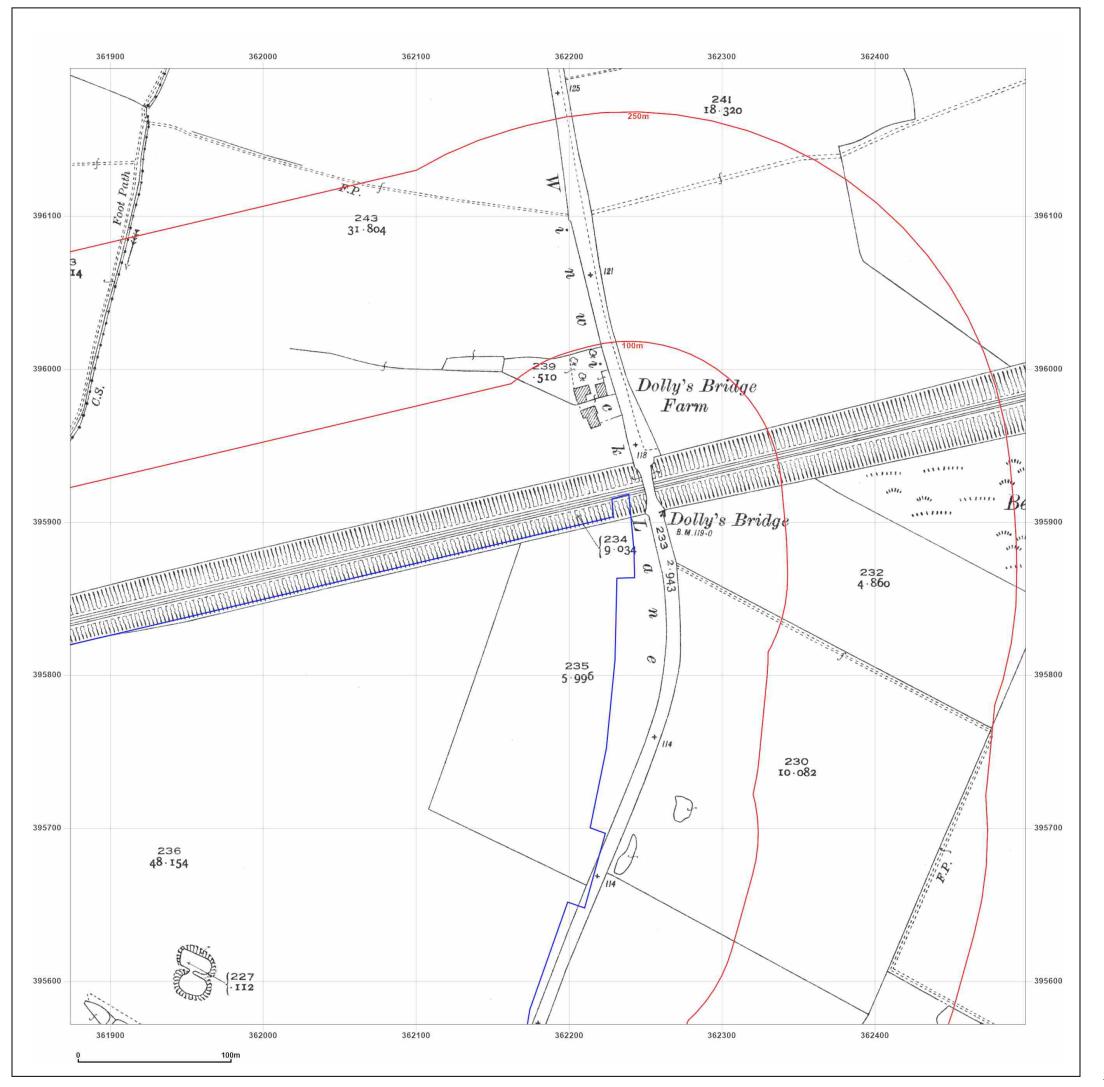




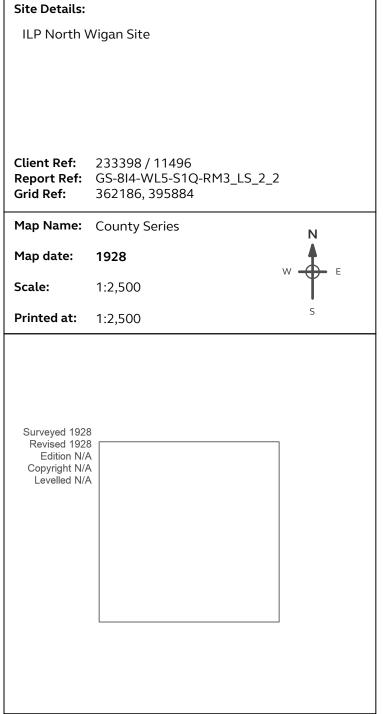
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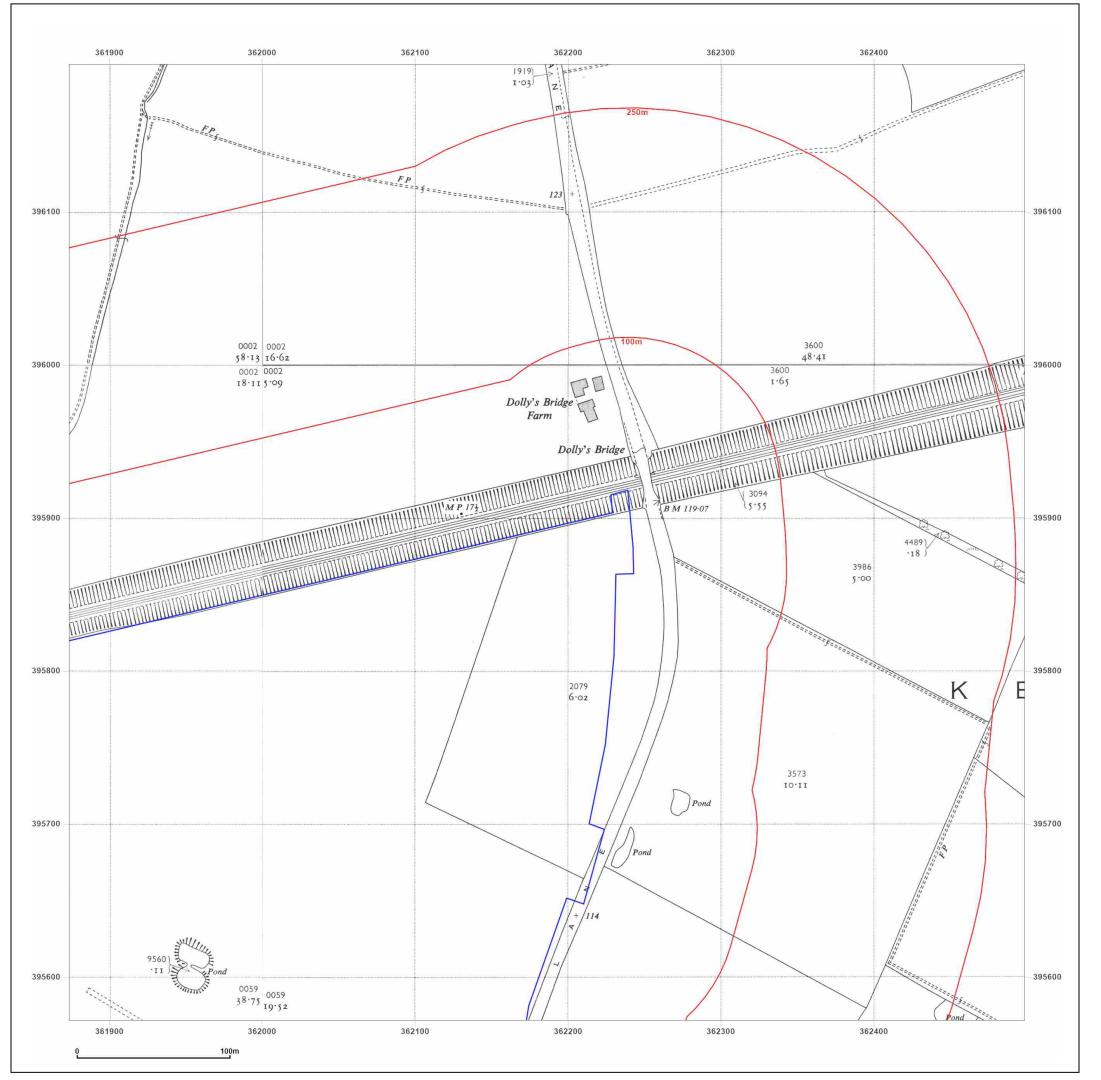




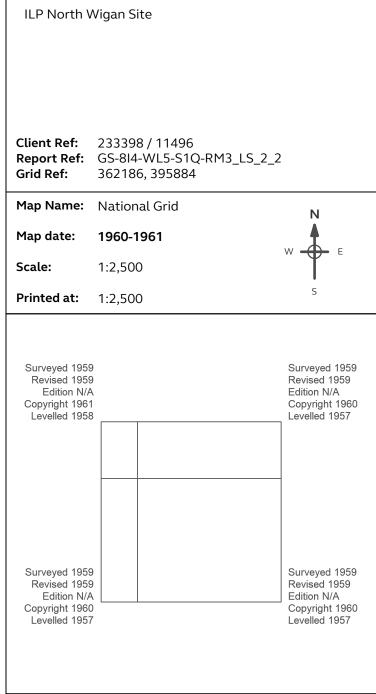
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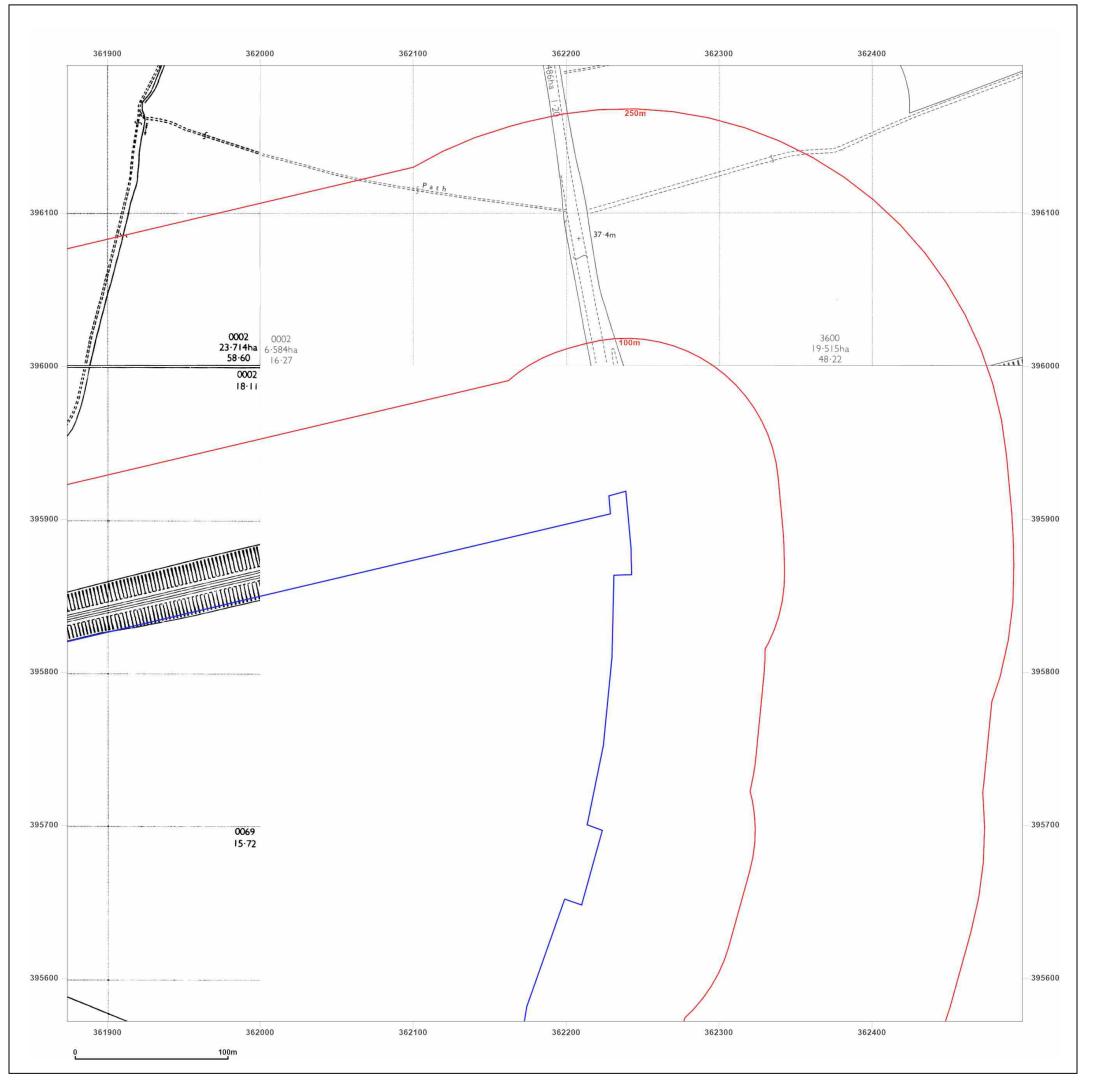


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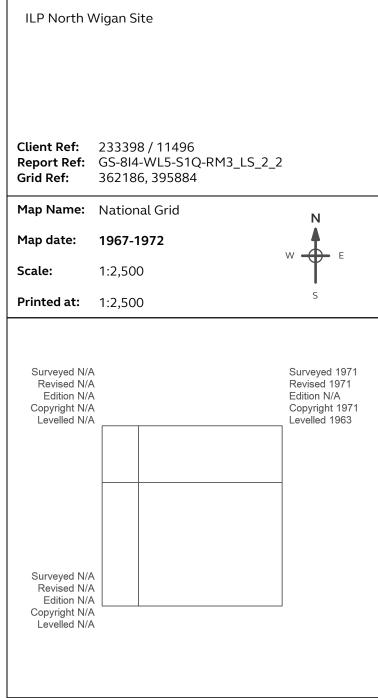
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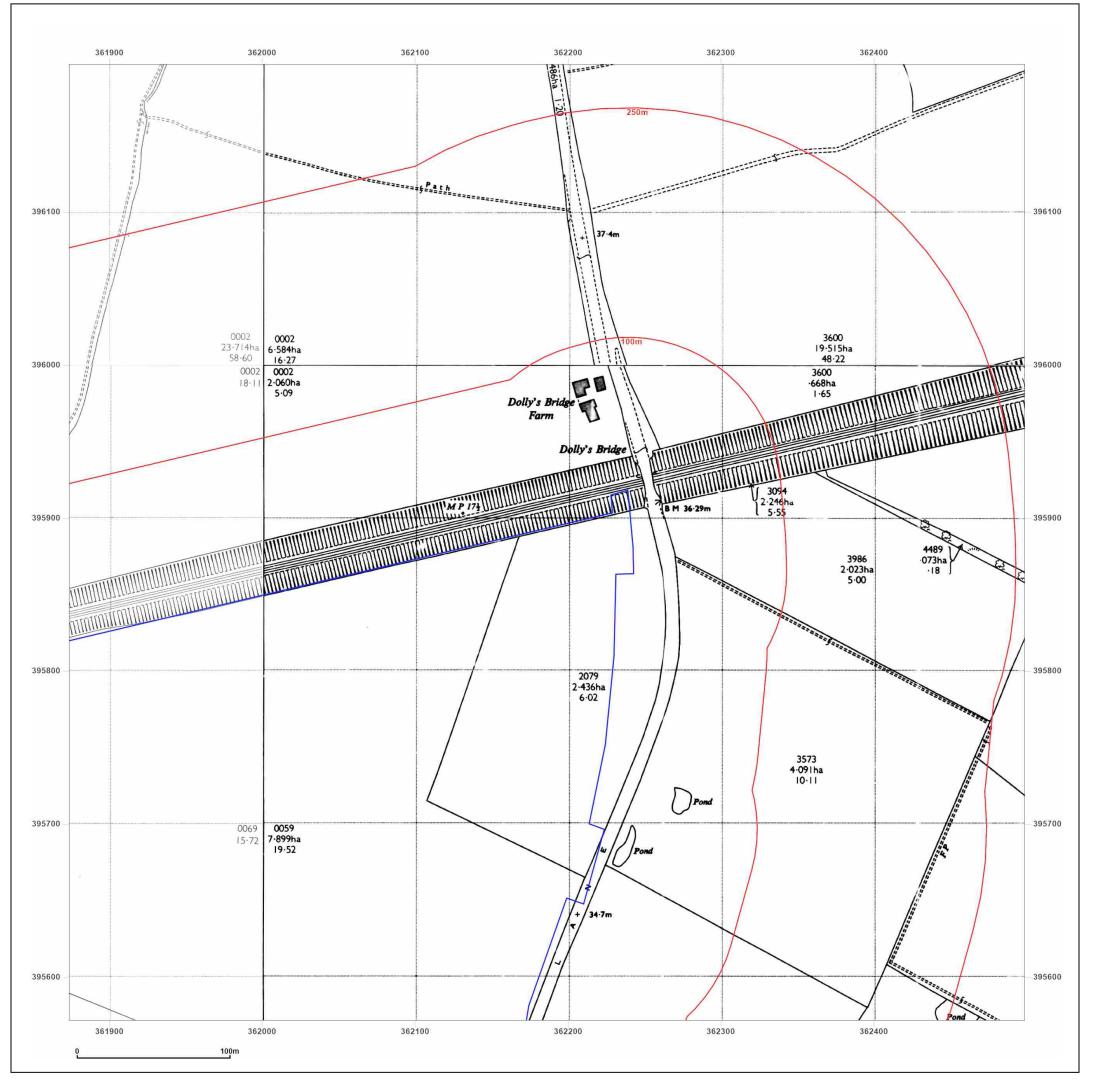


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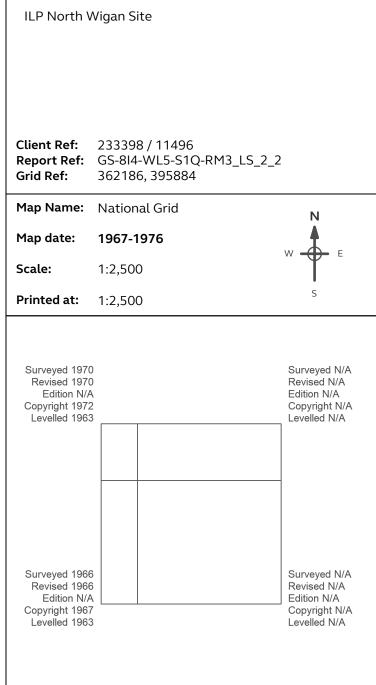
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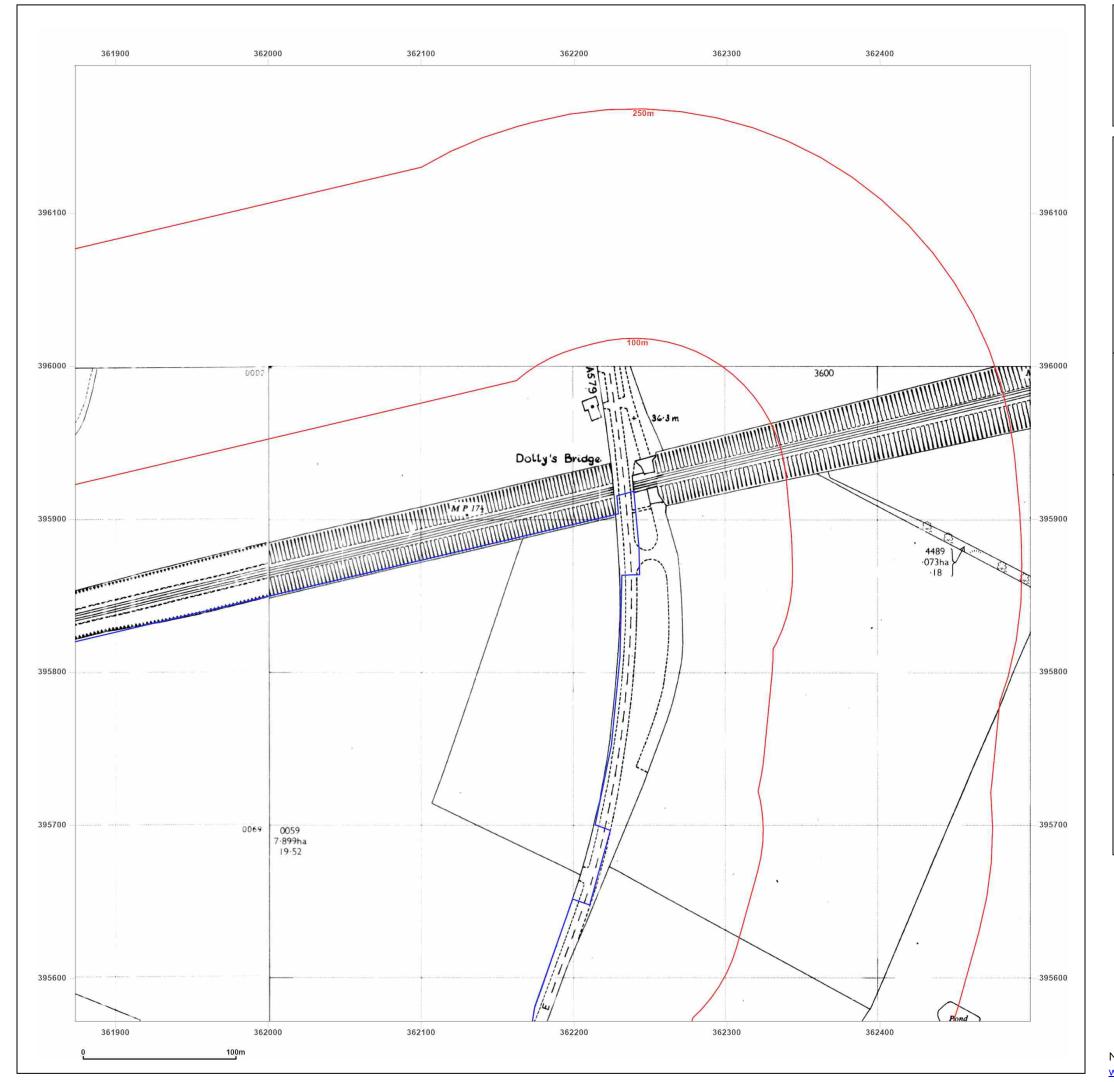


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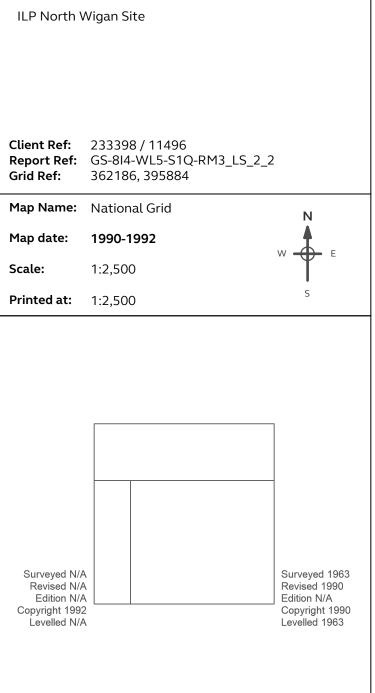
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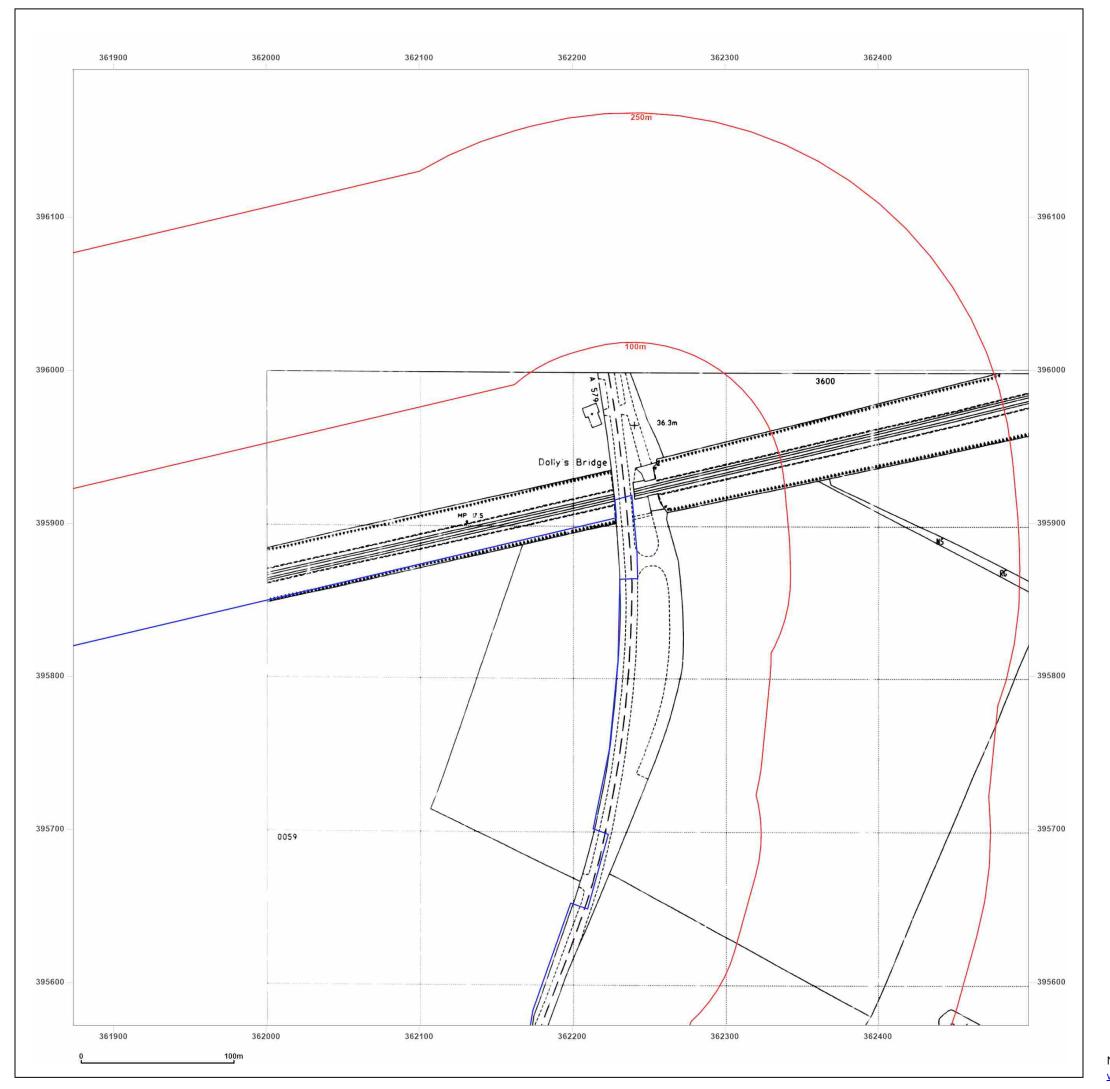


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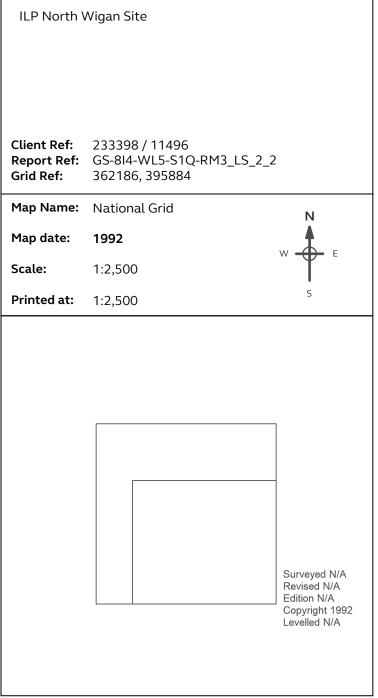
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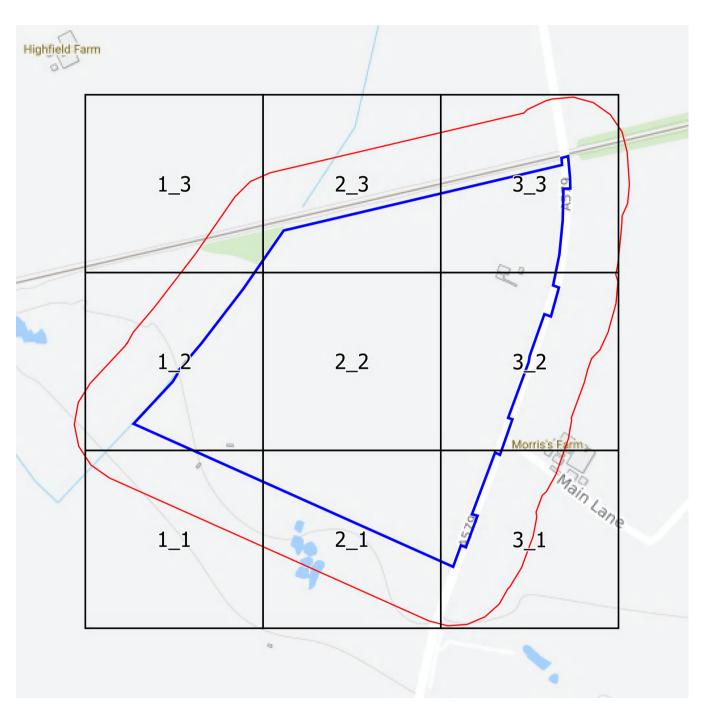


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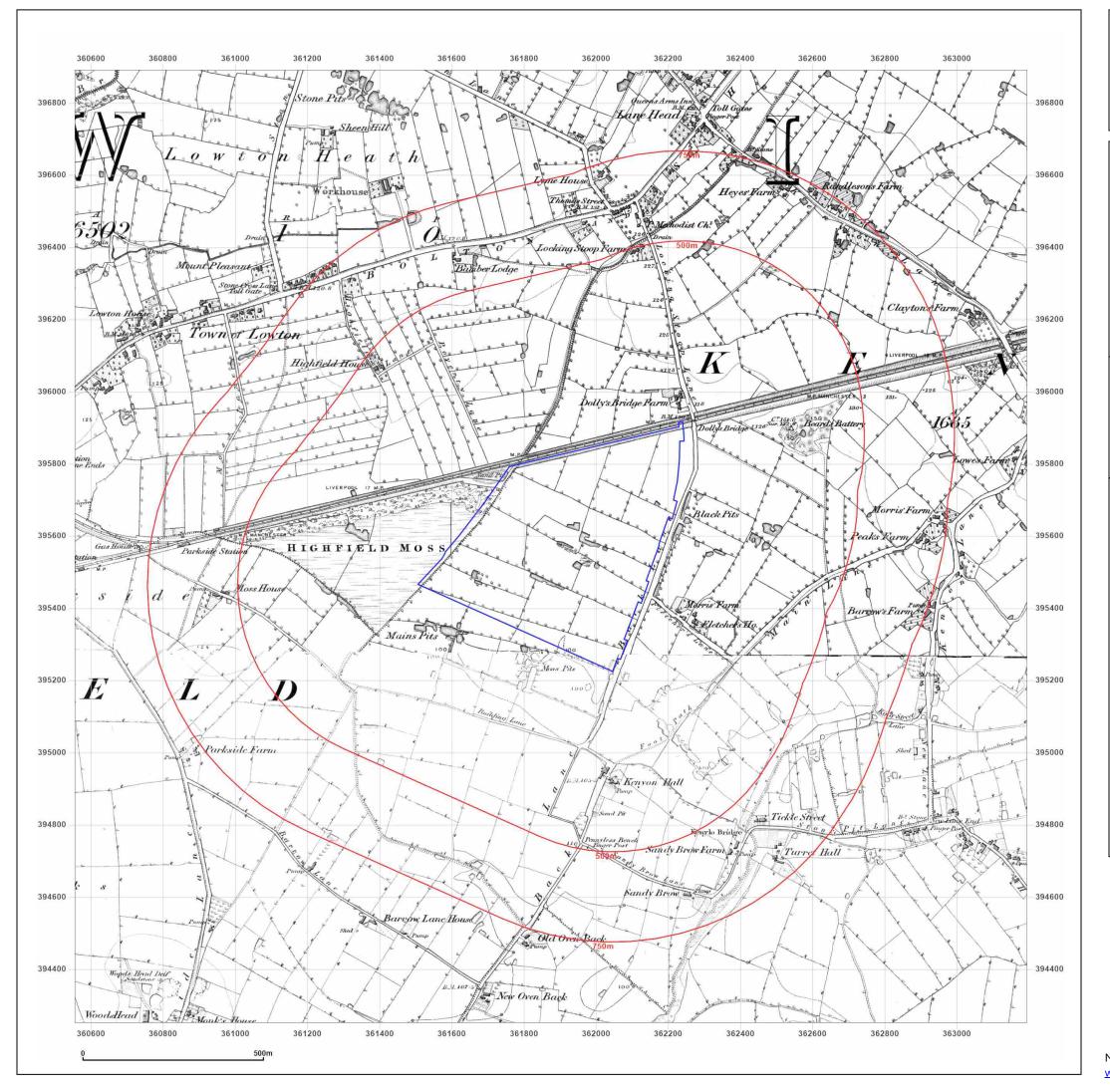
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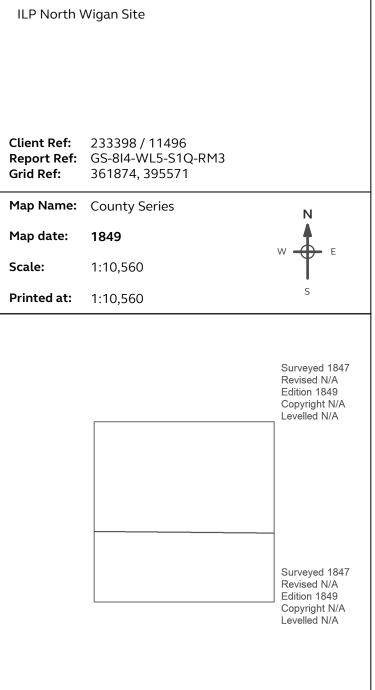


Landline Scale Grid Index









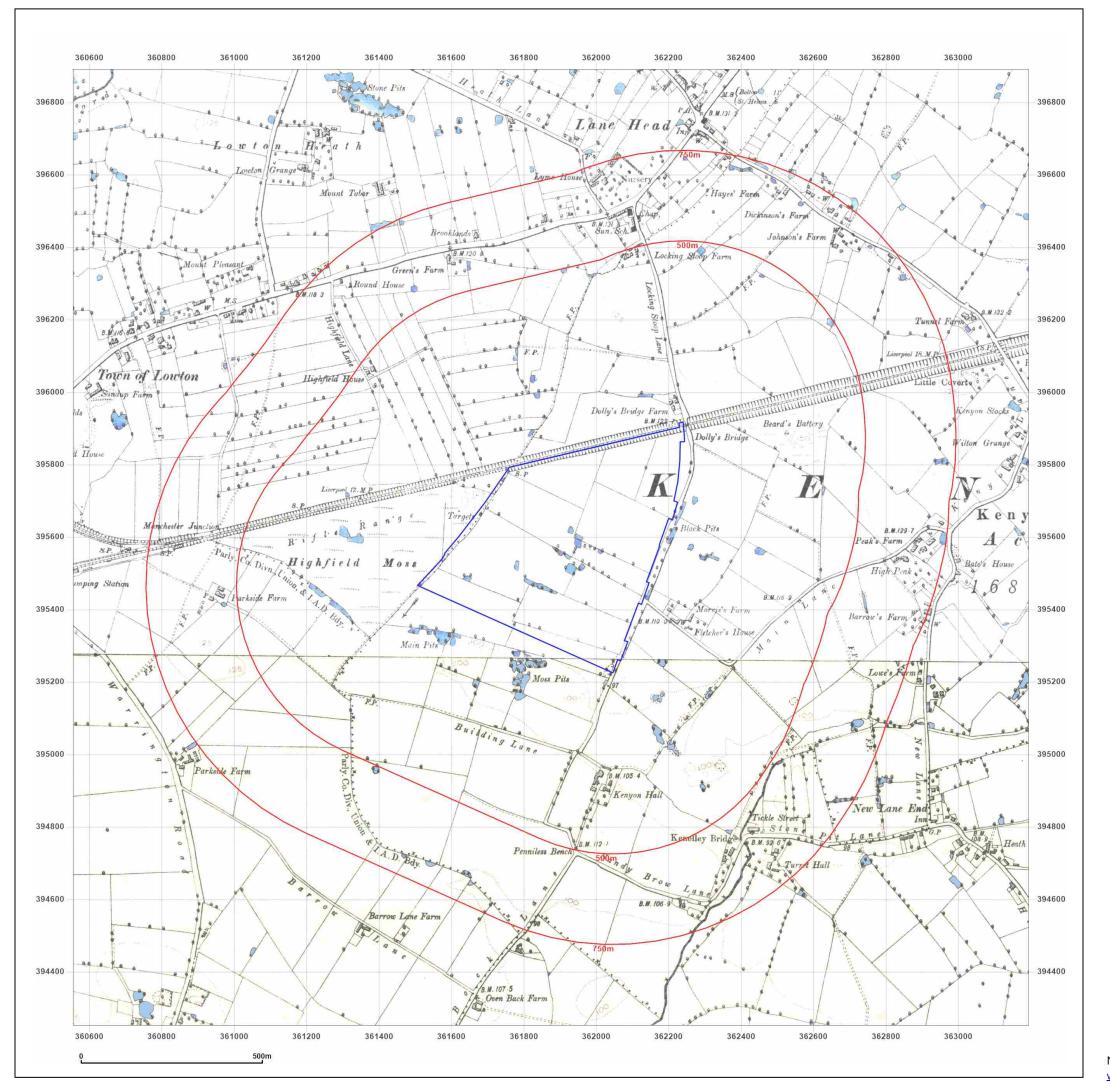


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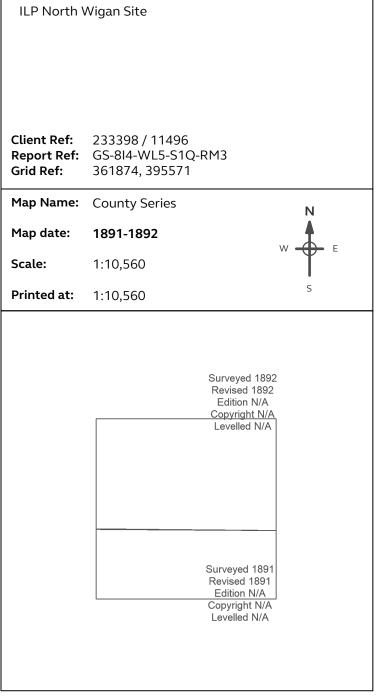
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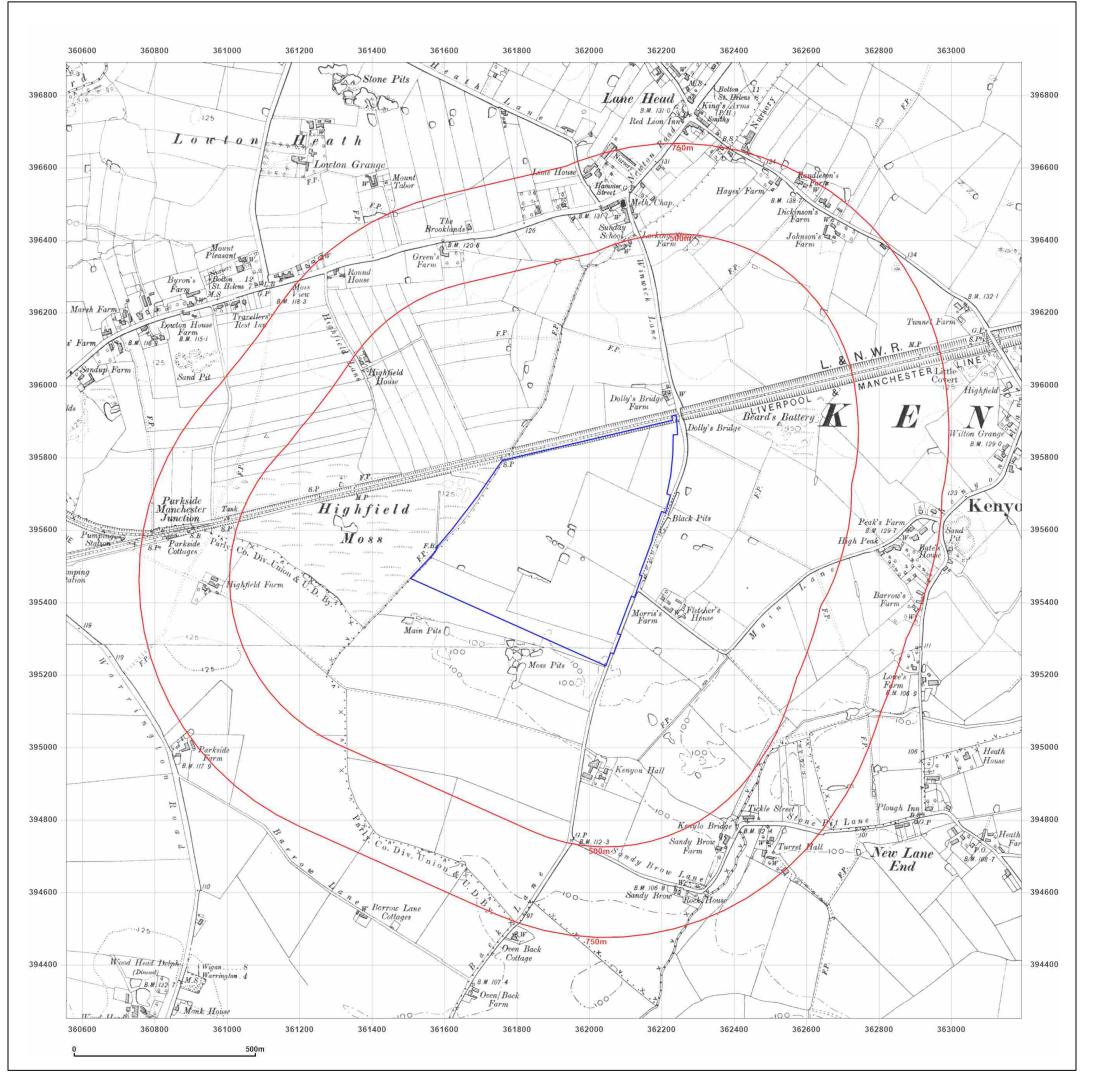


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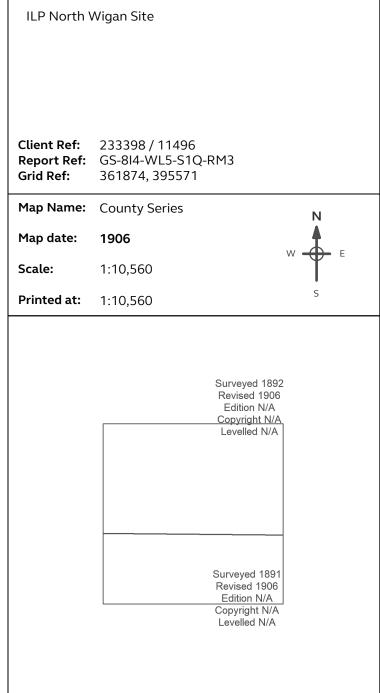
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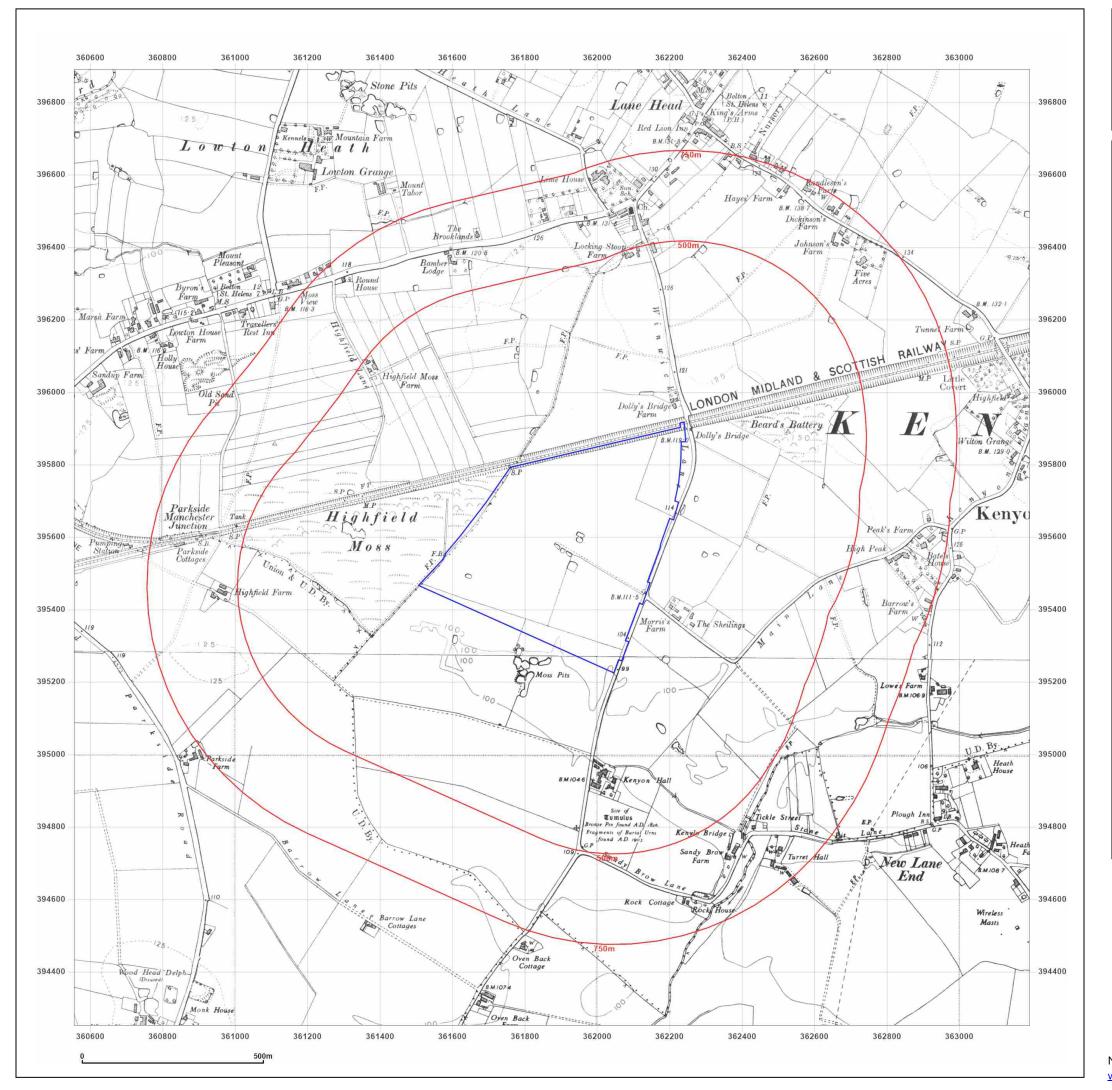


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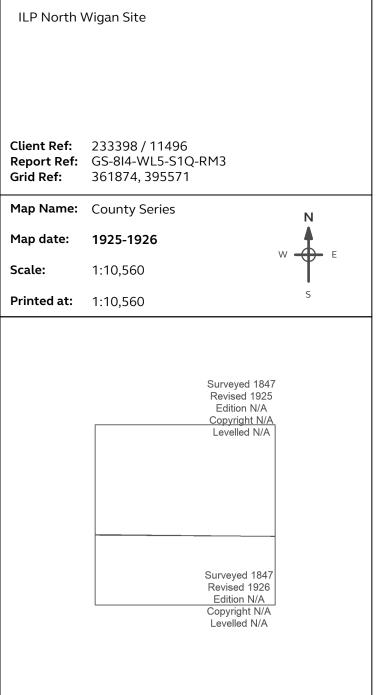
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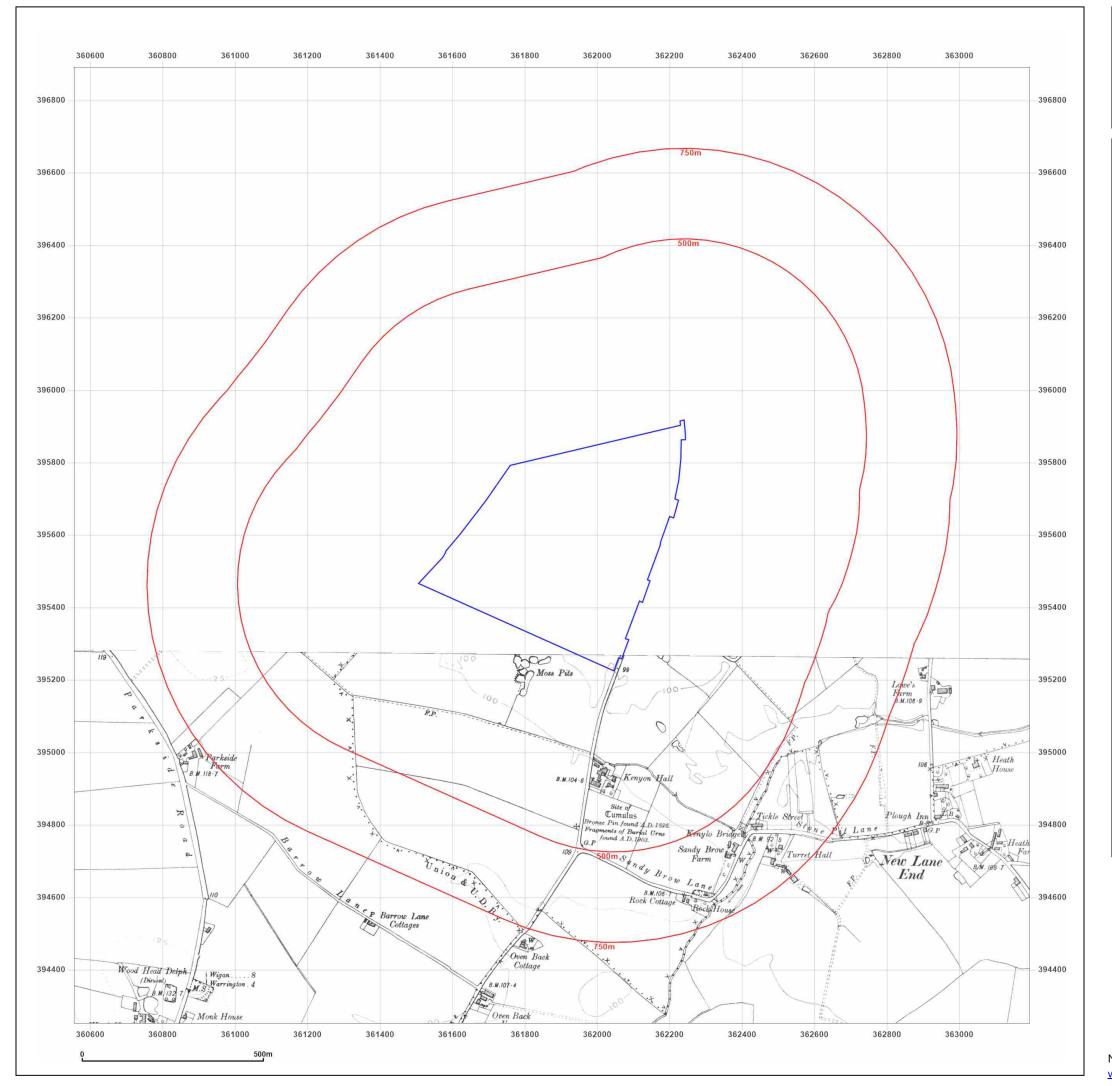


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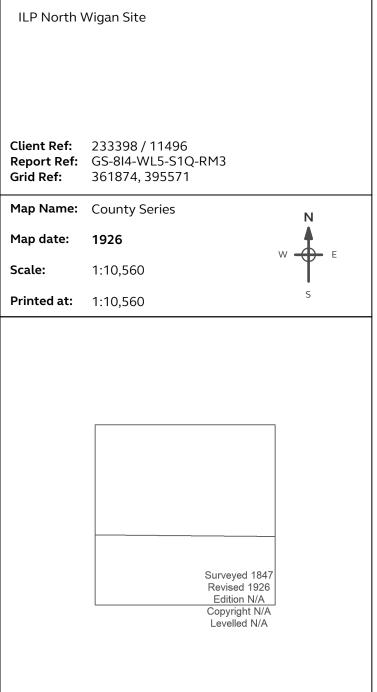
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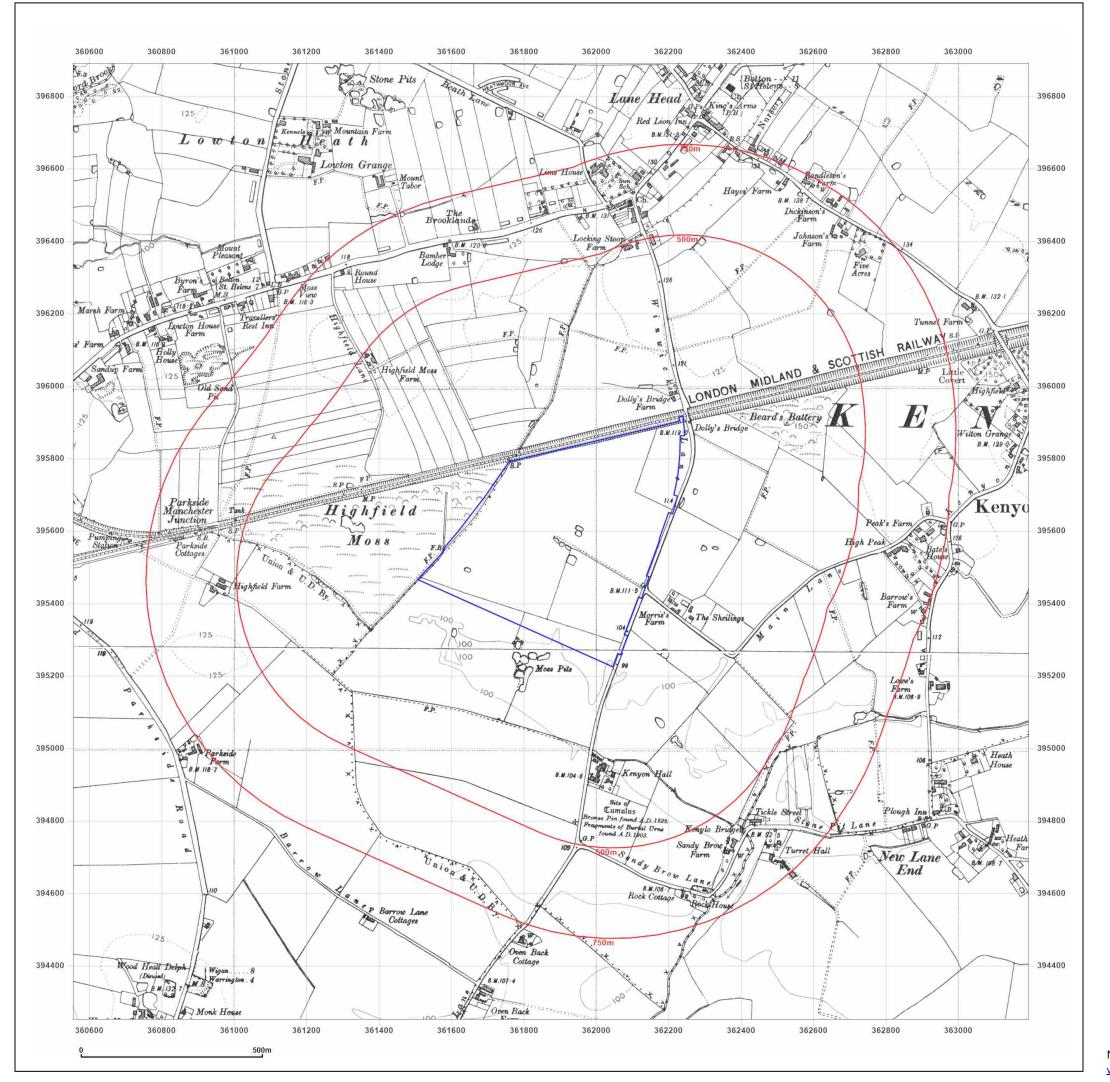


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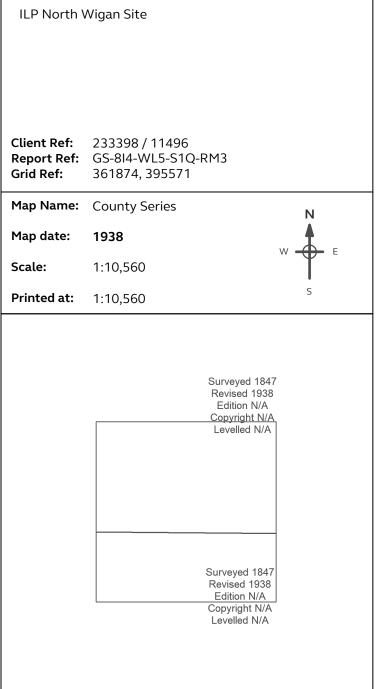
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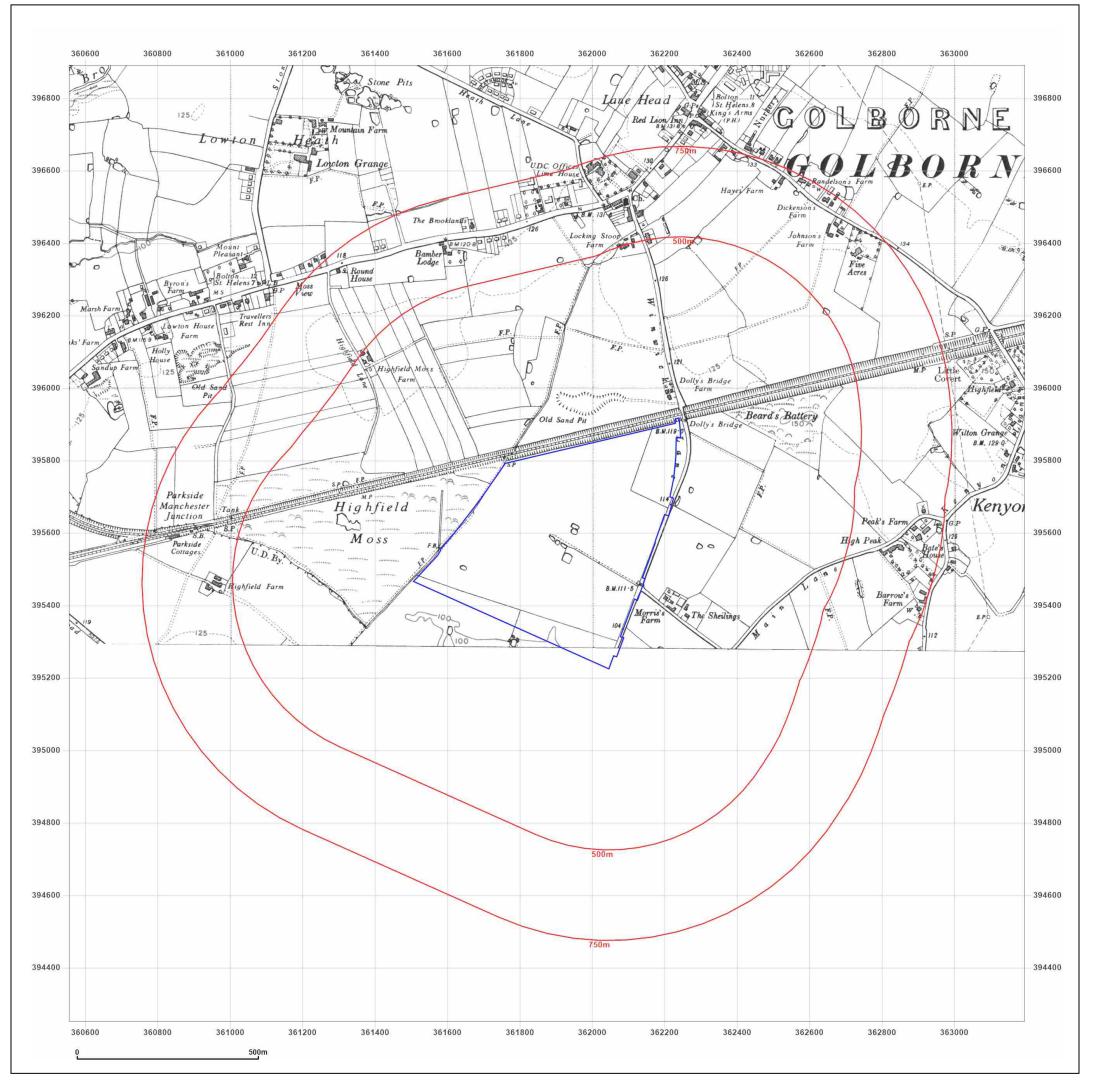


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