

LAND AT, CLYWEDOG ROAD NORTH, WREXHAM INDUSTRIAL ESTATE, WREXHAM, LL13 9XN

Order Details

Date: 09/07/2020
Your ref: PO_16025_JCP_Limited_4371
Our Ref: HMD-6856313
Client: Caulmert Ltd

Site Details

Location: 337397 349436
Area: 0.54 ha
Authority: [Wrexham - Wrexham County Borough Council](#)



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Summary of findings

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Aerial image

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OS MasterMap site plan

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Contact us with any questions at:

info@groundsure.com

08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	<u>Historical industrial land uses</u>	2	0	14	22	-
16	1.2	<u>Historical tanks</u>	0	0	1	3	-
17	1.3	<u>Historical energy features</u>	0	0	20	25	-
19	1.4	Historical petrol stations	0	0	0	0	-
19	1.5	Historical garages	0	0	0	0	-
19	1.6	<u>Historical military land</u>	1	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
20	2.1	<u>Historical industrial land uses</u>	2	0	16	25	-
22	2.2	<u>Historical tanks</u>	0	0	1	12	-
23	2.3	<u>Historical energy features</u>	0	0	35	34	-
26	2.4	Historical petrol stations	0	0	0	0	-
26	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
27	3.1	Active or recent landfill	0	0	0	0	-
27	3.2	Historical landfill (BGS records)	0	0	0	0	-
28	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
28	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
28	3.5	Historical waste sites	0	0	0	0	-
28	3.6	Licensed waste sites	0	0	0	0	-
28	3.7	<u>Waste exemptions</u>	0	0	0	1	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
30	4.1	<u>Recent industrial land uses</u>	0	0	27	-	-
32	4.2	Current or recent petrol stations	0	0	0	0	-
32	4.3	Electricity cables	0	0	0	0	-
32	4.4	Gas pipelines	0	0	0	0	-
33	4.5	Sites determined as Contaminated Land	0	0	0	0	-

33	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
33	4.7	Regulated explosive sites	0	0	0	0	-
33	4.8	Hazardous substance storage/usage	0	0	0	0	-
33	4.9	<u>Historical licensed industrial activities (IPC)</u>	0	0	3	1	-
34	4.10	<u>Licensed industrial activities (Part A(1))</u>	0	0	15	0	-
37	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	1	2	-
38	4.12	Radioactive Substance Authorisations	0	0	0	0	-
38	4.13	<u>Licensed Discharges to controlled waters</u>	0	0	2	6	-
39	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
39	4.15	Pollutant release to public sewer	0	0	0	0	-
39	4.16	List 1 Dangerous Substances	0	0	0	0	-
40	4.17	List 2 Dangerous Substances	0	0	0	0	-
40	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	7	10	-
42	4.19	Pollution inventory substances	0	0	0	0	-
42	4.20	Pollution inventory waste transfers	0	0	0	0	-
42	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
43	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
45	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
47	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
48	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
48	5.5	Groundwater vulnerability- local information	None (within 0m)				
49	5.6	<u>Groundwater abstractions</u>	0	0	0	0	11
52	5.7	<u>Surface water abstractions</u>	0	0	0	0	1
52	5.8	Potable abstractions	0	0	0	0	0
53	5.9	<u>Source Protection Zones</u>	0	0	0	2	-
53	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
54	6.1	<u>Water Network (OS MasterMap)</u>	0	1	13	-	-



56	6.2	<u>Surface water features</u>	0	1	12	-	-
56	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
56	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
57	6.5	<u>WFD Groundwater bodies</u>	2	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
58	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	None (within 50m)				
58	7.2	Historical Flood Events	0	0	0	-	-
58	7.3	Flood Defences	0	0	0	-	-
58	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
59	7.5	Flood Storage Areas	0	0	0	-	-
60	7.6	Flood Zone 2	None (within 50m)				
60	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
61	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding					
63	9.1	<u>Groundwater flooding</u>	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
64	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
65	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
65	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
65	10.4	Special Protection Areas (SPA)	0	0	0	0	0
65	10.5	National Nature Reserves (NNR)	0	0	0	0	0
66	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
66	10.7	<u>Designated Ancient Woodland</u>	0	0	1	0	31
67	10.8	Biosphere Reserves	0	0	0	0	0
68	10.9	Forest Parks	0	0	0	0	0
68	10.10	Marine Conservation Zones	0	0	0	0	0
68	10.11	Green Belt	0	0	0	0	0
68	10.12	Proposed Ramsar sites	0	0	0	0	0



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



81	14.4	Landslip (10k)	0	0	0	0	-
82	14.5	<u>Bedrock geology (10k)</u>	1	0	0	1	-
83	14.6	<u>Bedrock faults and other linear features (10k)</u>	0	0	0	1	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
84	15.1	<u>50k Availability</u>	Identified (within 500m)				
85	15.2	<u>Artificial and made ground (50k)</u>	1	0	1	2	-
86	15.3	<u>Artificial ground permeability (50k)</u>	1	0	-	-	-
87	15.4	<u>Superficial geology (50k)</u>	1	0	0	2	-
88	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
88	15.6	Landslip (50k)	0	0	0	0	-
88	15.7	Landslip permeability (50k)	None (within 50m)				
89	15.8	<u>Bedrock geology (50k)</u>	1	0	0	1	-
90	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
90	15.10	<u>Bedrock faults and other linear features (50k)</u>	0	0	0	1	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
91	16.1	<u>BGS Boreholes</u>	0	0	16	-	-
Page	Section	Natural ground subsidence					
93	17.1	<u>Shrink swell clays</u>	Very low (within 50m)				
94	17.2	<u>Running sands</u>	Negligible (within 50m)				
95	17.3	<u>Compressible deposits</u>	Negligible (within 50m)				
96	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
97	17.5	<u>Landslides</u>	Very low (within 50m)				
98	17.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
99	18.1	Natural cavities	0	0	0	0	-
100	18.2	BritPits	0	0	0	0	-
100	18.3	<u>Surface ground workings</u>	1	0	16	-	-
101	18.4	Underground workings	0	0	0	0	0
101	18.5	Historical Mineral Planning Areas	0	0	0	0	-



101	18.6	Non-coal mining	0	0	0	0	0
101	18.7	Mining cavities	0	0	0	0	0
102	18.8	JPB mining areas	None (within 0m)				
102	18.9	<u>Coal mining</u>	Identified (within 0m)				
102	18.10	Brine areas	None (within 0m)				
102	18.11	Gypsum areas	None (within 0m)				
102	18.12	Tin mining	None (within 0m)				
103	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
104	19.1	<u>Radon</u>	Between 1% and 3% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
105	20.1	<u>BGS Estimated Background Soil Chemistry</u>	1	2	-	-	-
105	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
105	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
106	21.1	Underground railways (London)	0	0	0	-	-
106	21.2	Underground railways (Non-London)	0	0	0	-	-
106	21.3	Railway tunnels	0	0	0	-	-
106	21.4	Historical railway and tunnel features	0	0	0	-	-
106	21.5	Royal Mail tunnels	0	0	0	-	-
107	21.6	Historical railways	0	0	0	-	-
107	21.7	Railways	0	0	0	-	-
107	21.8	Crossrail 1	0	0	0	0	-
107	21.9	Crossrail 2	0	0	0	0	-
107	21.10	HS2	0	0	0	0	-



Recent aerial photograph



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Capture Date: 07/05/2017

Site Area: 0.54ha

Recent site history - 2013 aerial photograph



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Capture Date: 09/06/2013

Site Area: 0.54ha



Recent site history - 2009 aerial photograph



Capture Date: 01/06/2009

Site Area: 0.54ha



Recent site history - 2003 aerial photograph



Capture Date: 04/08/2003

Site Area: 0.54ha



Recent site history - 2000 aerial photograph



Capture Date: 04/09/2000

Site Area: 0.54ha



OS MasterMap site plan



Site Area: 0.54ha



1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical military land

1.1 Historical industrial land uses

Records within 500m

38

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	Unspecified Heap	1964	802668

ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Commercial/Industrial	1964	796409
A	67m SW	Unspecified Heap	1964	802667
C	94m SE	Unspecified Works	1992	963484
B	98m SE	Unspecified Tank	1909 - 1938	959968
3	117m NE	Unspecified Heap	1964	802664
4	119m NW	Unspecified Heap	1964	802670
5	143m NE	Unspecified Heap	1977	802666
6	146m SW	Unspecified Heap	1964	802655
7	191m S	Unspecified Heap	1992	802654
G	206m SE	Unspecified Works	1964 - 1977	846472
9	208m NE	Unspecified Heap	1977	802665
10	209m W	Unspecified Heap	1964	802671
J	218m NE	Unspecified Works	1977	920631
J	218m NE	Unspecified Works	1992	981460
13	247m NW	Unspecified Pit	1977	838781
14	252m SE	Unspecified Heap	1964	802653
K	263m N	Unspecified Heap	1977	802669
15	268m N	Unspecified Pit	1977	838782
16	273m W	Unspecified Heap	1964	802672
17	282m W	Unspecified Heap	1964	802673
18	283m SW	Unspecified Heap	1992	802644
L	293m NE	Unspecified Commercial/Industrial	1964	883869
O	312m NE	Unspecified Workshop	1977	880838
O	312m NE	Unspecified Workshop	1992	910726
20	312m SE	Unspecified Works	1977	867757
21	329m SE	Unspecified Commercial/Industrial	1992	890838
22	353m SE	Unspecified Factory	1977	821290
23	353m SE	Unspecified Commercial/Industrial	1964 - 1977	978415

ID	Location	Land use	Dates present	Group ID
24	355m N	Unspecified Pit	1964 - 1977	958785
25	369m NE	Unspecified Commercial/Industrial	1992	872439
26	371m NE	Unspecified Commercial/Industrial	1977	938680
28	422m NE	Unspecified Heap	1964	802661
29	452m SW	Cuttings	1964 - 1977	845808
L	457m NE	Unspecified Tank	1977	823835
L	460m NE	Unspecified Ground Workings	1977	799057
30	472m E	Industrial Estate	1992	844663
31	491m SW	Unspecified Heap	1992	802645

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

4

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
B	93m SE	Unspecified Tank	1912	109626
L	458m NE	Unspecified Tank	1993 - 1994	122268
L	459m NE	Unspecified Tank	1976 - 1991	136008
32	496m N	Unspecified Tank	1983 - 1994	139106

This data is sourced from Ordnance Survey / Groundsure.



1.3 Historical energy features

Records within 500m

45

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'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
A	77m SW	Electricity Substation	1991 - 1994	68487
A	99m W	Electricity Substations	1991	59838
D	105m E	Electricity Substation	1993	60162
A	107m W	Electricity Substation	1994	60153
D	107m NE	Electricity Substation	1994	60159
A	108m W	Electricity Substation	1993	60154
D	109m NE	Electricity Substation	1991	60160
E	116m SW	Electricity Substation	1993 - 1994	76224
E	123m SW	Electricity Substation	1983 - 1991	72990
F	130m N	Electricity Substation	1993 - 1994	64380
F	138m N	Electricity Substation	1986 - 1991	82090
8	193m SW	Electricity Substation	1993 - 1994	63902
H	209m NW	Electricity Substation	1993	60155
I	209m SE	Electricity Substation	1986 - 1991	78167
H	210m NW	Electricity Substation	1991	64454
11	213m SW	Electricity Substation	1993 - 1994	81637
H	214m NW	Electricity Substation	1994	65477
I	228m SE	Electricity Substation	1993 - 1994	76517
12	243m N	Electricity Substation	1986 - 1994	71605
C	247m E	Electricity Substation	1976 - 1982	71251
G	271m E	Electricity Substation	1991	75544



ID	Location	Land use	Dates present	Group ID
G	271m E	Electricity Substation	1986	84796
G	274m E	Electricity Substation	1993	72316
G	274m E	Electricity Substation	1994	76187
G	274m E	Electricity Substation	1983	71373
19	296m SW	Electricity Substation	1993 - 1994	80594
M	300m E	Electricity Substation	1993	60161
M	301m E	Electricity Substation	1991	83005
M	303m E	Electricity Substation	1994	65274
N	307m SE	Electricity Substation	1983	81565
N	309m SE	Electricity Substation	1976 - 1986	77249
K	322m N	Electricity Substation	1993	74816
K	326m N	Electricity Substation	1986 - 1991	66636
K	328m N	Electricity Substation	1994	70920
P	383m E	Electricity Substation	1986 - 1991	81386
P	385m E	Electricity Substation	1994	82455
P	386m E	Electricity Substation	1993	74237
P	386m E	Electricity Substation	1983	71287
Q	399m NE	Electricity Substation	1994	79821
Q	399m NE	Electricity Substation	1993	83489
27	410m N	Electricity Substation	1983 - 1993	65266
Q	418m NE	Electricity Substation	1991	67417
Q	418m NE	Electricity Substation	1982	71539
Q	418m NE	Electricity Substation	1986	73651
Q	419m NE	Electricity Substation	1976 - 1983	82436

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

1

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.

Features are displayed on the Past land use map on **page 14**

ID	Location	Site Name	Date of Operation	Activities
2	On site	ROF Wrexham	c.1938 - 1988	c. WW2: Produced cordite,; post WW2: Cordite production ceased in 1945 and the area was used as an industrial estate by the Welsh Development Agency to boost the local economy; Explosives Factory

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

2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

2.1 Historical industrial land uses

Records within 500m

43

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

Features are displayed on the Past land use - un-grouped map on **page 20**

ID	Location	Land Use	Date	Group ID
1	On site	Unspecified Heap	1964	802668
A	On site	Unspecified Commercial/Industrial	1964	796409
A	67m SW	Unspecified Heap	1964	802667

ID	Location	Land Use	Date	Group ID
C	94m SE	Unspecified Works	1992	963484
B	98m SE	Unspecified Tank	1909	959968
B	98m SE	Unspecified Tank	1938	959968
2	117m NE	Unspecified Heap	1964	802664
3	119m NW	Unspecified Heap	1964	802670
4	143m NE	Unspecified Heap	1977	802666
5	146m SW	Unspecified Heap	1964	802655
6	191m S	Unspecified Heap	1992	802654
C	206m SE	Unspecified Works	1964	846472
C	206m SE	Unspecified Works	1977	846472
7	208m NE	Unspecified Heap	1977	802665
8	209m W	Unspecified Heap	1964	802671
K	218m NE	Unspecified Works	1977	920631
K	218m NE	Unspecified Works	1992	981460
9	247m NW	Unspecified Pit	1977	838781
10	252m SE	Unspecified Heap	1964	802653
M	263m N	Unspecified Heap	1977	802669
11	268m N	Unspecified Pit	1977	838782
12	273m W	Unspecified Heap	1964	802672
13	282m W	Unspecified Heap	1964	802673
14	283m SW	Unspecified Heap	1992	802644
N	293m NE	Unspecified Commercial/Industrial	1964	883869
R	312m NE	Unspecified Workshop	1977	880838
R	312m NE	Unspecified Workshop	1992	910726
15	312m SE	Unspecified Works	1977	867757
16	329m SE	Unspecified Commercial/Industrial	1992	890838
17	353m SE	Unspecified Factory	1977	821290
S	353m SE	Unspecified Commercial/Industrial	1977	978415

ID	Location	Land Use	Date	Group ID
S	353m SE	Unspecified Commercial/Industrial	1964	978415
T	355m N	Unspecified Pit	1977	958785
T	355m N	Unspecified Pit	1964	958785
18	369m NE	Unspecified Commercial/Industrial	1992	872439
19	371m NE	Unspecified Commercial/Industrial	1977	938680
20	422m NE	Unspecified Heap	1964	802661
X	452m SW	Cuttings	1977	845808
X	452m SW	Cuttings	1964	845808
N	457m NE	Unspecified Tank	1977	823835
N	460m NE	Unspecified Ground Workings	1977	799057
21	472m E	Industrial Estate	1992	844663
22	491m SW	Unspecified Heap	1992	802645

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

13

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 20**

ID	Location	Land Use	Date	Group ID
B	93m SE	Unspecified Tank	1912	109626
N	458m NE	Unspecified Tank	1993	122268
N	458m NE	Unspecified Tank	1994	122268
N	459m NE	Unspecified Tank	1982	136008
N	459m NE	Unspecified Tank	1986	136008
N	459m NE	Unspecified Tank	1991	136008
N	460m NE	Unspecified Tank	1976	136008
N	460m NE	Unspecified Tank	1983	136008



ID	Location	Land Use	Date	Group ID
Y	496m N	Unspecified Tank	1986	139106
Y	496m N	Unspecified Tank	1991	139106
Y	496m N	Unspecified Tank	1983	139106
Y	497m N	Unspecified Tank	1993	139106
Y	497m N	Unspecified Tank	1994	139106

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

69

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'.

Features are displayed on the Past land use - un-grouped map on **page 20**

ID	Location	Land Use	Date	Group ID
A	77m SW	Electricity Substation	1991	68487
A	80m SW	Electricity Substation	1993	68487
A	80m SW	Electricity Substation	1994	68487
A	99m W	Electricity Substations	1991	59838
D	105m E	Electricity Substation	1993	60162
A	107m W	Electricity Substation	1994	60153
D	107m NE	Electricity Substation	1994	60159
A	108m W	Electricity Substation	1993	60154
D	109m NE	Electricity Substation	1991	60160
E	116m SW	Electricity Substation	1993	76224
E	116m SW	Electricity Substation	1994	76224
E	123m SW	Electricity Substation	1983	72990
E	125m SW	Electricity Substation	1986	72990
E	125m SW	Electricity Substation	1991	72990
F	130m N	Electricity Substation	1993	64380



ID	Location	Land Use	Date	Group ID
F	130m N	Electricity Substation	1994	64380
F	138m N	Electricity Substation	1986	82090
F	138m N	Electricity Substation	1991	82090
G	193m SW	Electricity Substation	1993	63902
G	193m SW	Electricity Substation	1994	63902
H	209m NW	Electricity Substation	1993	60155
I	209m SE	Electricity Substation	1986	78167
I	209m SE	Electricity Substation	1991	78167
H	210m NW	Electricity Substation	1991	64454
J	213m SW	Electricity Substation	1993	81637
J	213m SW	Electricity Substation	1994	81637
H	214m NW	Electricity Substation	1994	65477
I	228m SE	Electricity Substation	1993	76517
I	228m SE	Electricity Substation	1994	76517
L	243m N	Electricity Substation	1993	71605
L	243m N	Electricity Substation	1994	71605
L	247m N	Electricity Substation	1986	71605
L	247m N	Electricity Substation	1991	71605
C	247m E	Electricity Substation	1982	71251
C	248m E	Electricity Substation	1976	71251
C	271m E	Electricity Substation	1986	84796
C	271m E	Electricity Substation	1991	75544
C	274m E	Electricity Substation	1993	72316
C	274m E	Electricity Substation	1994	76187
C	274m E	Electricity Substation	1983	71373
O	296m SW	Electricity Substation	1993	80594
O	296m SW	Electricity Substation	1994	80594
P	300m E	Electricity Substation	1993	60161

ID	Location	Land Use	Date	Group ID
P	301m E	Electricity Substation	1991	83005
P	303m E	Electricity Substation	1994	65274
Q	307m SE	Electricity Substation	1983	81565
Q	309m SE	Electricity Substation	1982	77249
Q	309m SE	Electricity Substation	1986	77249
Q	311m SE	Electricity Substation	1976	77249
M	322m N	Electricity Substation	1993	74816
M	326m N	Electricity Substation	1986	66636
M	326m N	Electricity Substation	1991	66636
M	328m N	Electricity Substation	1994	70920
U	383m E	Electricity Substation	1986	81386
U	383m E	Electricity Substation	1991	81386
U	385m E	Electricity Substation	1994	82455
U	386m E	Electricity Substation	1993	74237
U	386m E	Electricity Substation	1983	71287
V	399m NE	Electricity Substation	1993	83489
V	399m NE	Electricity Substation	1994	79821
W	410m N	Electricity Substation	1993	65266
W	411m N	Electricity Substation	1986	65266
W	411m N	Electricity Substation	1991	65266
W	412m N	Electricity Substation	1983	65266
V	418m NE	Electricity Substation	1982	71539
V	418m NE	Electricity Substation	1986	73651
V	418m NE	Electricity Substation	1991	67417
V	419m NE	Electricity Substation	1976	82436
V	419m NE	Electricity Substation	1983	82436

This data is sourced from Ordnance Survey / Groundsure.



2.4 Historical petrol stations

Records within 500m**0**

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m**0**

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

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m**0**

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m**0**

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

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

3.5 Historical waste sites

Records within 500m**0**

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

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

3.6 Licensed waste sites

Records within 500m**0**

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

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

3.7 Waste exemptions

Records within 500m**1**

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 27**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	258m NE	LOCKWELL ELECTRICAL , Lockwell Lectrics Ltd, Unit 100, Coed Aben Road, Wrexham Industrial Estate, Wrexham, Wreccsam, LL13 9UH	NRW- WME049814	Storing waste exemption	Not on a farm	Storage of waste in a secure place

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Historical licensed industrial activities
- Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

27

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 30**

ID	Location	Company	Address	Activity	Category
1	51m SW	Decor-lam Ltd	Unit 71, Clywedog Road East, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XE	Industrial Coatings and Finishings	Industrial Products
A	54m W	A S T Plastic Containers UK LLP	Unit 70, Clywedog Road East, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XE	Packaging	Industrial Products

ID	Location	Company	Address	Activity	Category
2	72m N	Skanda	Unit 67, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN	General Construction Supplies	Industrial Products
A	81m SW	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
C	105m W	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
D	110m NE	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
C	111m W	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
D	121m E	Eriks Industrial Services	Unit 60, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN	Industrial Repairs and Servicing	Repair and Servicing
3	128m SW	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
B	129m NE	Etiquette Labels Ltd	Unit 51, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN	Stationery, Stamps, Tags and Labels	Industrial Products
D	131m E	Hydraquip	Unit 62, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN	Hydraulic Engineers	Engineering Services
4	140m N	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
E	187m NE	Roil Foods Ltd	Unit 52, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN	Dairy Products	Foodstuffs
6	188m SW	Porviar Sciences	Unit 73, Clywedog Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XS	Rubber, Silicones and Plastics	Industrial Products
7	193m SW	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
8	195m NE	Ash Manor Cheese Co	Unit 57-59, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN	Dairy Products	Foodstuffs
H	212m N	Riello U P S Ltd	Unit 50, Clywedog Road North, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XN	Electrical Equipment Repair and Servicing	Repair and Servicing
G	217m SE	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
I	217m W	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
F	218m E	D H D	Unit 107, Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH	General Construction Supplies	Industrial Products



ID	Location	Company	Address	Activity	Category
9	225m SW	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
G	226m SE	Hydro	Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9PS	Recycling, Reclamation and Disposal	Recycling Services
E	227m NE	Zaviz International Ltd	Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH	Vehicle Repair, Testing and Servicing	Repair and Servicing
10	233m NW	Silvergate	Unit 53, Clywedog Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9XS	Rubber, Silicones and Plastics	Industrial Products
11	242m E	Williams Services	Unit 11 The Bridgeway Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9QS	Vehicle Repair, Testing and Servicing	Repair and Servicing
E	247m NE	Business Print & Design	Millwood House, Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UH	Published Goods	Industrial Products
H	248m N	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m

0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m

0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.



4.5 Sites determined as Contaminated Land

Records within 500m**0**

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m**0**

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m**0**

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m**0**

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m**4**

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.

Features are displayed on the Current industrial land use map on **page 30**

ID	Location	Details	
G	223m SE	Operator: Hydro Aluminium Deeside Ltd Address: Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9SQ Process: Non-ferrous Metals Permit Number: AS4117	Original Permit Number: IPCAIRAPP Date Approved: 4-12-1995 Effective Date: 8-12-1995 Status: Superseded By Variation
G	223m SE	Operator: Hydro Aluminium Deeside Ltd Address: Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9SQ Process: Non-ferrous Metals Permit Number: AX6443	Original Permit Number: IPCMAJVAR Date Approved: 1-5-1997 Effective Date: 1-5-1997 Status: Superseded By Variation
G	223m SE	Operator: Hydro Aluminium Deeside Ltd Address: Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9SQ Process: Non-ferrous Metals Permit Number: BD8312	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked - Now Ippc
19	403m NE	Operator: Stalex Industries Ltd Address: Coed Aben Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UL Process: Di-isocyanate Processes Permit Number: BF1220	Original Permit Number: IPCAPP Date Approved: 8-6-1999 Effective Date: 9-6-1999 Status: Revoked

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

15

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

Features are displayed on the Current industrial land use map on **page 30**

ID	Location	Details	
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM PROCESSING EA/EPR/BK3638IF/V002 Process: NON-FERROUS METALS; MELTING WITH CAPACITY => 5T Permit Number: BK3638IF Original Permit Number: BK3638IF	EPR Reference: - Issue Date: 15/03/2002 Effective Date: 15/03/2002 Last date noted as effective: 17/11/2015 Status: SUPERCEDED



ID	Location	Details	
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM PROCESSING EA/EPR/BK3638IF/V002 Process: NON-FERROUS METALS; MELTING WITH CAPACITY >4T/D LEAD/CADMIUM OR 20T/D OTHERS Permit Number: BK3638IF Original Permit Number: BK3638IF	EPR Reference: - Issue Date: 15/03/2002 Effective Date: 15/03/2002 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM PROCESSING EA/EPR/BK3638IF/V002 Process: NON-FERROUS METALS; MELTING WITH CAPACITY => 5T Permit Number: BP3934LJ Original Permit Number: BK3638IF	EPR Reference: - Issue Date: 14/07/2009 Effective Date: 14/07/2009 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM PROCESSING EA/EPR/BK3638IF/V002 Process: NON-FERROUS METALS; MELTING WITH CAPACITY >4T/D LEAD/CADMIUM OR 20T/D OTHERS Permit Number: BP3934LJ Original Permit Number: BK3638IF	EPR Reference: - Issue Date: 14/07/2009 Effective Date: 14/07/2009 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM PROCESSING EA/EPR/BK3638IF/V002 Process: NON-FERROUS METALS; MELTING WITH CAPACITY => 5T Permit Number: FP3836WE Original Permit Number: BK3638IF	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 17/11/2015 Status: DETERMINATION
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM PROCESSING EA/EPR/BK3638IF/V002 Process: NON-FERROUS METALS; MELTING WITH CAPACITY >4T/D LEAD/CADMIUM OR 20T/D OTHERS Permit Number: FP3836WE Original Permit Number: BK3638IF	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 17/11/2015 Status: DETERMINATION
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM WORKS EPR/BK3638IF Process: NON-FERROUS METALS; MELTING WITH CAPACITY => 5T Permit Number: HP3338VH Original Permit Number: BK3638IF	EPR Reference: - Issue Date: 20/06/2014 Effective Date: 20/06/2014 Last date noted as effective: 17/11/2015 Status: EFFECTIVE



ID	Location	Details	
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM WORKS EPR/BK3638IF Process: NON-FERROUS METALS; MELTING WITH CAPACITY >4T/D LEAD/CADMIUM OR 20T/D OTHERS Permit Number: HP3338VH Original Permit Number: BK3638IF	EPR Reference: - Issue Date: 20/06/2014 Effective Date: 20/06/2014 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM WORKS EPR/BK3638IF Process: MELTING, INCLUDING MAKING ALLOYS, OF NON-FERROUS METALS, INCLUDING RECOVERED PRO... Permit Number: BK3638IF Original Permit Number: HP3338VH	EPR Reference: - Issue Date: 20/07/2017 Effective Date: 20/07/2017 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM WORKS EPR/BK3638IF Process: MELTING, INCLUDING MAKING ALLOYS, OF NON-FERROUS METALS, INCLUDING RECOVERED PRO... Permit Number: BK3638IF Original Permit Number: HP3338VH	EPR Reference: - Issue Date: 20/07/2017 Effective Date: 20/07/2017 Last date noted as effective: 15/05/2020 Status: EFFECTIVE
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM WORKS EPR/BK3638IF Process: - Permit Number: BK3638IF Original Permit Number: HP3338VH	EPR Reference: - Issue Date: 20/06/2014 Effective Date: 20/06/2014 Last date noted as effective: 01/12/2016 Status: EFFECTIVE
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: - Process: NON-FERROUS METALS; MELTING WITH CAPACITY => 5T Permit Number: BK3638 Original Permit Number: BK3638	EPR Reference: - Issue Date: 15/03/2002 Effective Date: 15/03/2002 Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: - Process: NON-FERROUS METALS; MELTING WITH CAPACITY >4T/D LEAD/CADMIUM OR 20T/D OTHERS Permit Number: BK3638 Original Permit Number: BK3638	EPR Reference: - Issue Date: 15/03/2002 Effective Date: 15/03/2002 Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS



ID	Location	Details	
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM WORKS EPR/BK3638IF Process: MELTING, INCLUDING MAKING ALLOYS, OF NON-FERROUS METALS, INCLUDING RECOVERED PRO... Permit Number: BK3638IF Original Permit Number: HP3338VH	EPR Reference: - Issue Date: 20/07/2017 Effective Date: 20/07/2017 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
G	223m SE	Operator: HYDRO ALUMINIUM DEESIDE LTD Installation Name: WREXHAM ALUMINIUM WORKS EPR/BK3638IF Process: MELTING, INCLUDING MAKING ALLOYS, OF NON-FERROUS METALS, INCLUDING RECOVERED PRO... Permit Number: BK3638IF Original Permit Number: HP3338VH	EPR Reference: - Issue Date: 20/07/2017 Effective Date: 20/07/2017 Last date noted as effective: 15/05/2020 Status: EFFECTIVE

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

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

Records within 500m	3
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Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 30**

ID	Location	Address	Details	
G	227m SE	Hydro Aluminium Deeside Ltd, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9SQ	Process: Non-ferrous Metal Foundry Processes Status: Historical Permit Permit Type: Part B	Enforcement: Enforcement Notified Date of enforcement: 30/03/2006 Comment: Wood processing
13	288m NW	Applied Component Technology Ltd, 54 Clywedog Road South, Wrexham Industrial Estate, Wrexham, LL13 9XS	Process: Di-isocyanate Processes Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
K	299m E	Williams Services & Steve Williams Transport, Unit 11 Bridge Way Centre, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9QS	Process: Waste Oil Burner 0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.

This data is sourced from Local Authority records.



4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m

8

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

Features are displayed on the Current industrial land use map on **page 30**

ID	Location	Address	Details	
B	103m NE	PLOT 6 WREXHAM IND EST, CLYWEDOG ROAD	Effluent Type: UNSPECIFIED Permit Number: CM0207401 Permit Version: 1 Receiving Water: STREAM NR REDWITHER BROOK	Status: REVOKED - UNSPECIFIED Issue date: 01/01/1901 Effective Date: 01/01/1901 Revocation Date: 28/01/1990
B	103m NE	PLOT 6 WREXHAM IND EST, CLYWEDOG ROAD	Effluent Type: UNSPECIFIED Permit Number: CM0207401 Permit Version: 2 Receiving Water: STREAM NR REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 29/01/1990 Effective Date: 29/01/1990 Revocation Date: 06/05/1993
18	393m E	WREXHAM IND ESTATE FACTORY/COEDABEN, WREXHAM IND ESTATE FACTORY/COEDA, FACTORY/COEDABEN ROAD	Effluent Type: UNSPECIFIED Permit Number: CM0064501 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 27/04/1971 Effective Date: 27/04/1971 Revocation Date: 28/04/1993
M	393m N	Unit 2, Little Erlas, Erlas Lane, Abenbury, Wrexham, LL13 OPE	Effluent Type: - Permit Number: CG0337201 Permit Version: 0 Receiving Water: REDWITHER BROOK	Status: Effective Issue date: 22/04/1993 Effective Date: 22/04/1993 Revocation Date: -
M	409m N	Unit 2, Little Erlas, Erlas Lane, Abenbury, Wrexham, LL13 OPE	Effluent Type: - Permit Number: CG0337202 Permit Version: 0 Receiving Water: REDWITHER BROOK	Status: Effective Issue date: 22/04/1993 Effective Date: 22/04/1993 Revocation Date: -



ID	Location	Address	Details	
M	418m N	Unit 2, Little ErLas, ErLas Lane, Abenbury, Wrexham, LL13 0PE	Effluent Type: - Permit Number: CG0337203 Permit Version: 0 Receiving Water: REDWITHER BROOK	Status: Effective Issue date: 22/04/1993 Effective Date: 22/04/1993 Revocation Date: -
N	496m E	CONTINENTAL CAN CO LTD	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0085401 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: REVOKED - UNSPECIFIED Issue date: 30/04/1979 Effective Date: 30/04/1979 Revocation Date: 08/03/1994
N	496m E	CONTINENTAL CAN CO LTD	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0085401 Permit Version: 2 Receiving Water: REDWITHER BROOK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 09/03/1994 Effective Date: 09/03/1994 Revocation Date: 21/01/2004

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
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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
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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

17

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

Features are displayed on the Current industrial land use map on **page 30**

ID	Location	Details	
B	90m NE	Incident Date: 04/05/2001 Incident Identification: 4393 Pollutant: Specific Waste Materials Pollutant Description: Other Specific Waste Material	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
5	159m NE	Incident Date: 18/03/2002 Incident Identification: 64721 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Food and Drink	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
E	182m NE	Incident Date: 29/10/2015 Incident Identification: 1384243 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Food and Drink	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
F	207m E	Incident Date: 01/06/2001 Incident Identification: 7295 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
G	210m SE	Incident Date: 08/05/2002 Incident Identification: 77311 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
G	210m SE	Incident Date: 08/05/2002 Incident Identification: 77311 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

ID	Location	Details	
I	243m W	Incident Date: 09/07/2003 Incident Identification: 172217 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
J	251m S	Incident Date: 17/08/2001 Incident Identification: 25045 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
J	259m S	Incident Date: 02/07/2013 Incident Identification: 1127929 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
12	279m NE	Incident Date: 08/08/2002 Incident Identification: 98530 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
14	309m NE	Incident Date: 13/07/2004 Incident Identification: 250782 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Food and Drink	Water Impact: Category 2 (Significant) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	311m E	Incident Date: 16/07/2014 Incident Identification: 1256528 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
15	331m NE	Incident Date: 03/10/2002 Incident Identification: 112354 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
16	372m NE	Incident Date: 19/08/2019 Incident Identification: 1905523 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 2 (Significant) Land Impact: No Details Air Impact: Category 2 (Significant)
17	375m N	Incident Date: 04/02/2016 Incident Identification: 1408258 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Food and Drink	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
L	382m NE	Incident Date: 19/01/2006 Incident Identification: 371865 Pollutant: Organic Chemicals/Products Pollutant Description: Other Organic Chemical or Product	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)



ID	Location	Details	
L	382m NE	Incident Date: 19/01/2006 Incident Identification: 371865 Pollutant: Organic Chemicals/Products Pollutant Description: Pesticides and Biocides	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0
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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
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The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

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

4.21 Pollution inventory radioactive waste

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

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

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

5 Hydrogeology - Superficial aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

3

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 43**

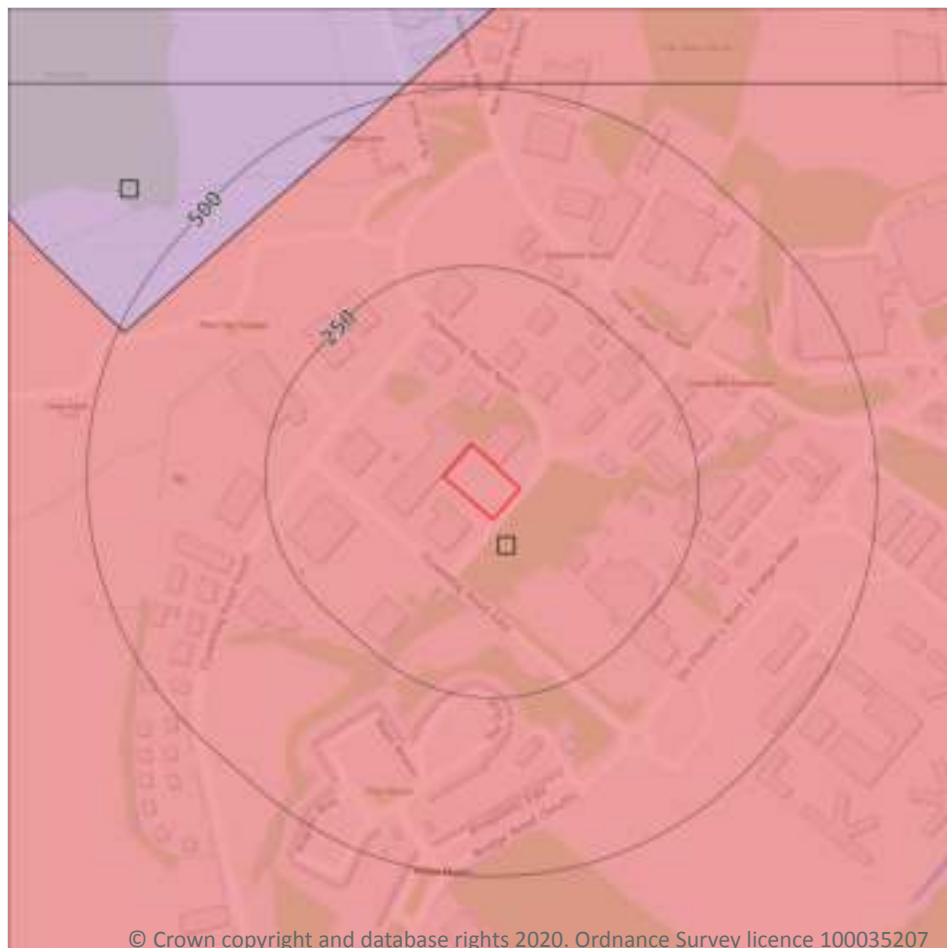
ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	322m NE	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

ID	Location	Designation	Description
3	483m NW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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



Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 45**

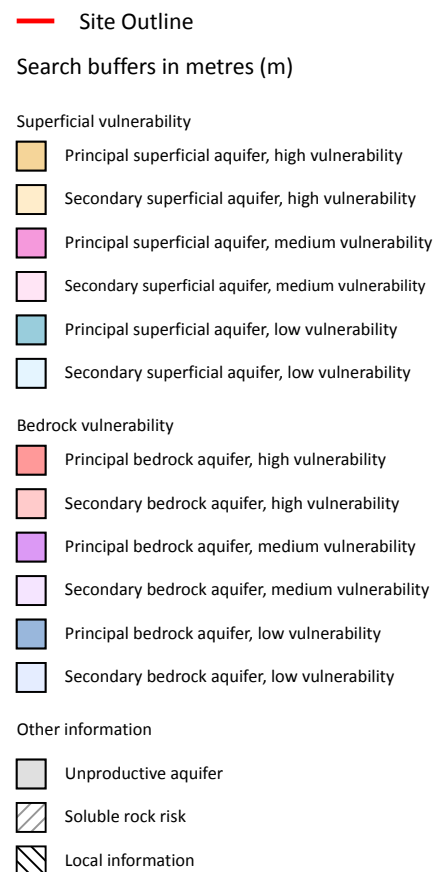
ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	440m NW	Principal	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



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

1

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

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

Features are displayed on the Groundwater vulnerability map on **page 47**



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

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

5.4 Groundwater vulnerability- soluble rock risk

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

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

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

5.5 Groundwater vulnerability- local information

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

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

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

Abstractions and Source Protection Zones



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

5.6 Groundwater abstractions

Records within 2000m

11

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 49**

ID	Location	Details	
-	848m SE	Status: Historical Licence No: 24/67/7/0213 Details: Process water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA., OB1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338240 Northing: 349090	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/09/1998 Expiry Date: 10/09/2001 Issue No: 100 Version Start Date: 10/09/1998 Version End Date: -
-	848m SE	Status: Historical Licence No: 24/67/7/0222 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA., OB1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338240 Northing: 349090	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 10/09/2001 Expiry Date: 31/03/2012 Issue No: 1 Version Start Date: 10/09/2001 Version End Date: -
-	848m SE	Status: Historical Licence No: WA/067/0007/006 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA., OB1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338240 Northing: 349090	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2012 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2012 Version End Date: -
-	877m SE	Status: Historical Licence No: 24/67/7/0213 Details: Process water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA. BOREHOLE AW1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338190 Northing: 348940	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/09/1998 Expiry Date: 10/09/2001 Issue No: 100 Version Start Date: 10/09/1998 Version End Date: -
-	877m SE	Status: Historical Licence No: 24/67/7/0222 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA. BOREHOLE AW1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338190 Northing: 348940	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 10/09/2001 Expiry Date: 31/03/2012 Issue No: 1 Version Start Date: 10/09/2001 Version End Date: -



ID	Location	Details	
-	877m SE	Status: Historical Licence No: WA/067/0007/006 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA. BOREHOLE AW1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338190 Northing: 348940	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2012 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2012 Version End Date: -
-	877m SE	Status: Active Licence No: WA/067/0007/006 Details: Process Water - Medium Direct Source: Underground strata Point: - Data Type: Point Name: - Easting: 338190 Northing: 348940	Annual Volume (m ³): 131,400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: Oct 2 2016 12:00AM Expiry Date: Mar 30 2027 12:00AM Issue No: - Version Start Date: - Version End Date: -
-	922m E	Status: Historical Licence No: WA/067/0007/006 Details: Process Water Direct Source: EAW Groundwater Point: SPECTRUM BUSINESS PARK BOREHOLE AW2 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338350 Northing: 349180	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2012 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2012 Version End Date: -
-	929m E	Status: Historical Licence No: 24/67/7/0213 Details: Process water Direct Source: EAW Groundwater Point: 144 M DEEP, 200MM DIA BH AW2 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338360 Northing: 349190	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/09/1998 Expiry Date: 10/09/2001 Issue No: 100 Version Start Date: 10/09/1998 Version End Date: -
-	929m E	Status: Historical Licence No: 24/67/7/0222 Details: Process Water Direct Source: EAW Groundwater Point: 144 M DEEP, 200MM DIA BH AW2 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338360 Northing: 349190	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 10/09/2001 Expiry Date: 31/03/2012 Issue No: 1 Version Start Date: 10/09/2001 Version End Date: -

ID	Location	Details	
-	1831m N	Status: Historical Licence No: 24/67/9/0130 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: WELL Data Type: Point Name: Taylor Easting: 337980 Northing: 351230	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/06/1968 Expiry Date: - Issue No: 100 Version Start Date: 14/06/1968 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

1

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 49**

ID	Location	Details	
-	1087m N	Status: Historical Licence No: 24/67/7/0178 Details: Non-Evaporative Cooling Direct Source: EAW Surface Water Point: TRIBUTARY OF REDWITHER BROOK Data Type: Point Name: Caparo Wire Ltd Easting: 337810 Northing: 350500	Annual Volume (m ³): 9955.74 Max Daily Volume (m ³): 27.276 Original Application No: - Original Start Date: 12/05/1972 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2007 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m

0

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

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



5.9 Source Protection Zones

Records within 500m**2**

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 49**

ID	Location	Type	Description
A	404m NW	3	Total catchment
A	405m NW	3	Total 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



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

14

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 54**

ID	Location	Type of water feature	Ground level	Permanence	Name
B	40m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
A	61m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	66m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	73m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	102m NE	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
D	114m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	117m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	118m SE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	122m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	123m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	144m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	149m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	163m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	165m E	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

13

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 54**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

1

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

Features are displayed on the Hydrology map on **page 54**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River WB catchment	Clywedog - Dee to Gwenfro	GB111067052110	Clywedog - Dee	Dee

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

6.4 WFD Surface water bodies

Records identified

1

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.

Features are displayed on the Hydrology map on **page 54**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	911m S	River	Clywedog - Dee to Gwenfro	GB111067052110	Moderate	Fail	Moderate	2016

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



6.5 WFD Groundwater bodies

Records on site

2

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on **page 54**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Dee Permo-Triassic Sandstone	GB41101G202400	Good	Good	Good	2015
A	On site	Dee Permo-Triassic Sandstone	GB41101G202400	Good	Good	Good	2016

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 Sea (RoFRaS)

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; 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).

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

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

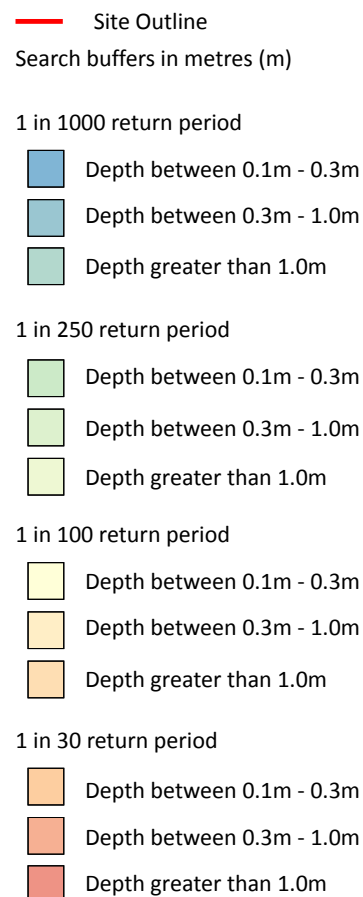
7.7 Flood Zone 3

Records within 50m	0
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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 250 year, 0.1m - 0.3m

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 61**

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

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

Return period	Maximum modelled depth
1 in 1000 year	Between 0.1m and 0.3m
1 in 250 year	Between 0.1m and 0.3m
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

Low

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

Features are displayed on the Groundwater flooding map on **page 63**

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m**0**

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m**0**

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m**0**

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m**0**

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m

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

32

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.

Features are displayed on the Environmental designations map on **page 64**

ID	Location	Name	Woodland Type
1	61m SE	Unknown	Ancient Semi Natural Woodland
2	533m NW	Unknown	Ancient Semi Natural Woodland
A	547m NE	Unknown	Restored Ancient Woodland Site
A	563m NE	Unknown	Restored Ancient Woodland Site
A	678m N	Unknown	Restored Ancient Woodland Site
3	808m NW	Unknown	Ancient Semi Natural Woodland
4	1088m NW	Unknown	Ancient Semi Natural Woodland
5	1232m N	Unknown	Ancient Semi Natural Woodland
6	1260m SW	Unknown	Ancient Semi Natural Woodland
7	1282m SW	Unknown	Restored Ancient Woodland Site
8	1304m SW	Unknown	Ancient Semi Natural Woodland
9	1359m NW	Unknown	Ancient Semi Natural Woodland
-	1510m N	Unknown	Restored Ancient Woodland Site
-	1589m W	Unknown	Ancient Semi Natural Woodland
-	1666m NW	Unknown	Ancient Semi Natural Woodland
-	1667m NW	Unknown	Ancient Semi Natural Woodland



ID	Location	Name	Woodland Type
-	1686m SE	Unknown	Ancient Semi Natural Woodland
-	1688m SE	Unknown	Ancient Semi Natural Woodland
-	1712m SW	Unknown	Ancient Semi Natural Woodland
-	1714m SW	Unknown	Ancient Semi Natural Woodland
-	1729m S	Unknown	Ancient Semi Natural Woodland
-	1734m SW	Unknown	Ancient Semi Natural Woodland
-	1788m SW	Unknown	Ancient Semi Natural Woodland
-	1796m W	Unknown	Restored Ancient Woodland Site
-	1807m SE	Unknown	Ancient Semi Natural Woodland
-	1816m W	Unknown	Restored Ancient Woodland Site
-	1845m W	Unknown	Ancient Semi Natural Woodland
-	1875m S	Unknown	Restored Ancient Woodland Site
-	1883m SW	Unknown	Ancient Semi Natural Woodland
-	1889m W	Unknown	Ancient Semi Natural Woodland
-	1915m NW	Unknown	Ancient Semi Natural Woodland
-	1933m W	Unknown	Ancient Semi Natural Woodland

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**0**

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

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

10.12 Proposed Ramsar sites

Records within 2000m**0**

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m**0**

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

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



10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

0

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.

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

SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

1

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

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

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t). Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0
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Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

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

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

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

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

11.3 National Parks

Records within 250m

0

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

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

11.4 Listed Buildings

Records within 250m

0

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



This data is sourced from English Heritage, 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 English Heritage, 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 English Heritage, 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 English Heritage, Cadw and Historic Environment Scotland.



12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Timber felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m

4

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

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

ID	Location	Classification	Description
1	On site	Grade 3a	Good to moderate quality agricultural land
6	92m S	Grade 3a	Good to moderate quality agricultural land
7	145m SW	Grade 3a	Good to moderate quality agricultural land

ID	Location	Classification	Description
9	206m W	Grade 3a	Good to moderate quality agricultural land

This data is sourced from Natural Resources Wales.

12.2 Open Access Land

Records within 250m

0

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

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

12.3 Tree Felling Licences

Records within 250m

0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

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

This data is sourced from Natural England.



13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m

0

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

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

0

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

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



- Site Outline
- Search buffers in metres (m)
- Full coverage
 - Partial coverage
 - No coverage

14.1 10k Availability

Records within 500m

1

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.

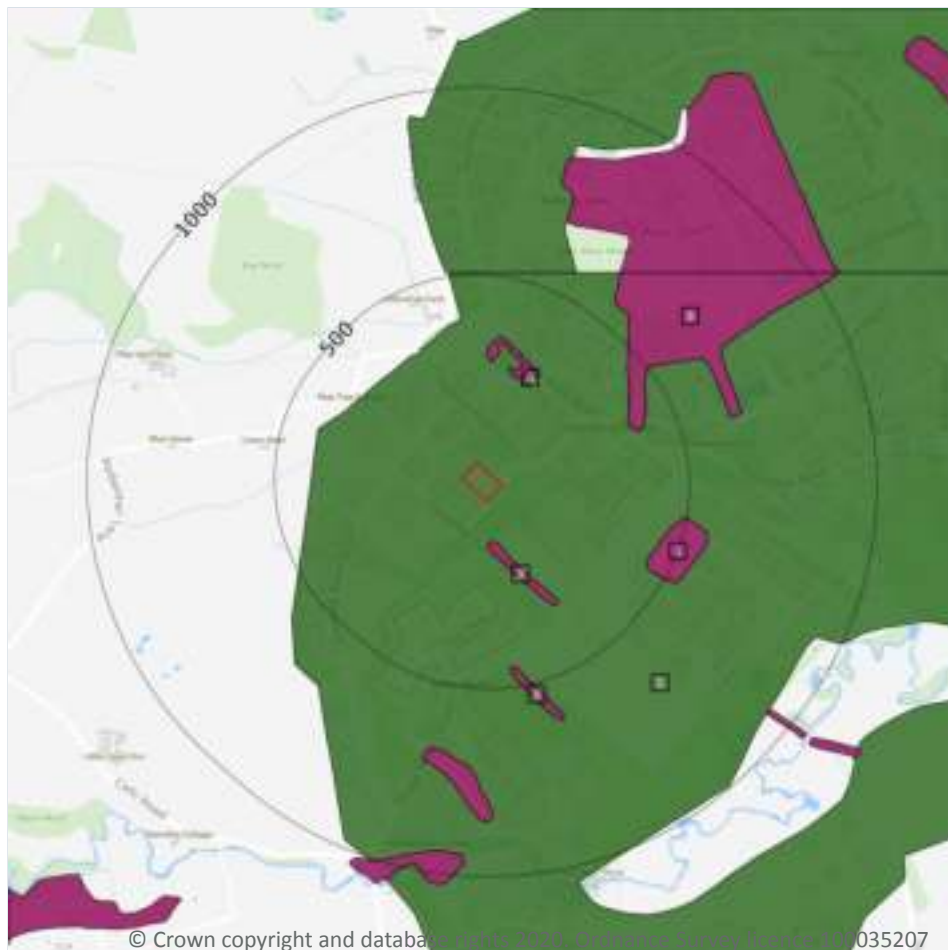
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 77**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SJ34NE

This data is sourced from the British Geological Survey.



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



- Site Outline**
- Search buffers in metres (m)**
- Reclaimed ground
 - Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m

7

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

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 78**

ID	Location	LEX Code	Description	Rock description
1	On site	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
2	107m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	242m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	247m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

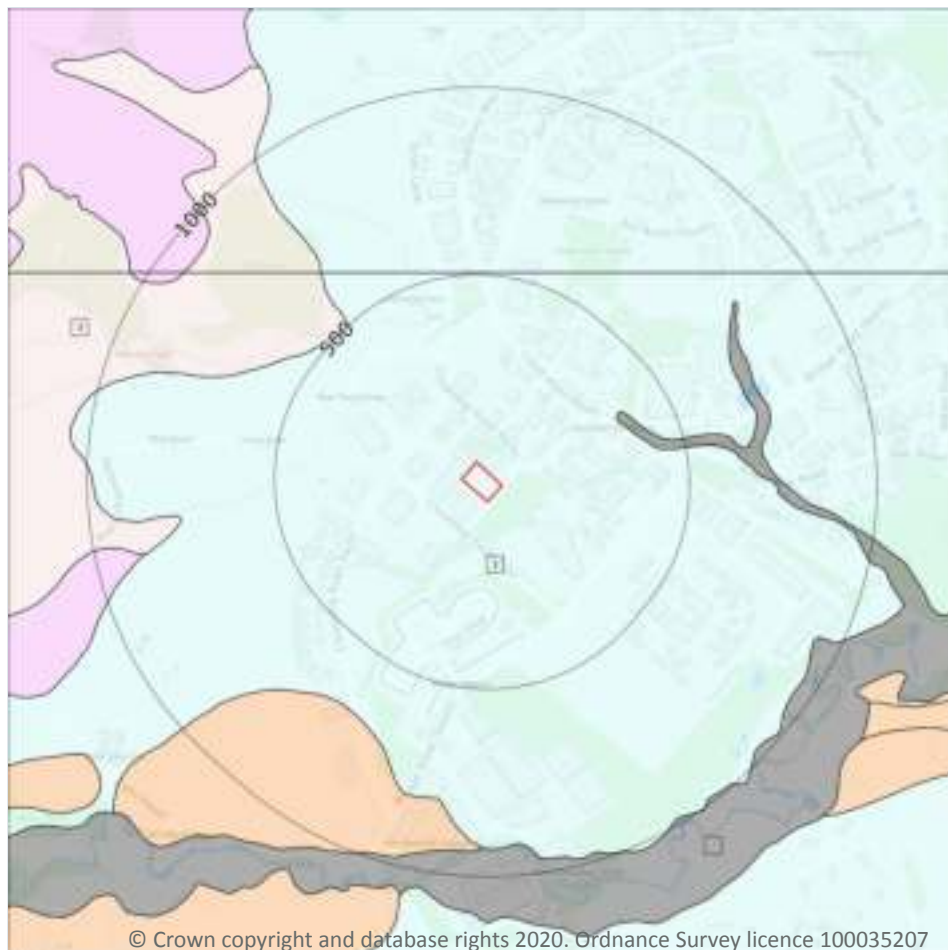


ID	Location	LEX Code	Description	Rock description
3	374m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	436m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
5	446m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

3

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 80**

ID	Location	LEX Code	Description	Rock description
1	On site	TILL-DMTN	Till - Diamicton	Diamicton
2	354m NE	ALV-C	Alluvium - Clay (unlithified Deposits Coding Scheme)	Clay
3	500m NW	GLLD-C	Glaciolacustrine Deposits - Clay	Clay

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

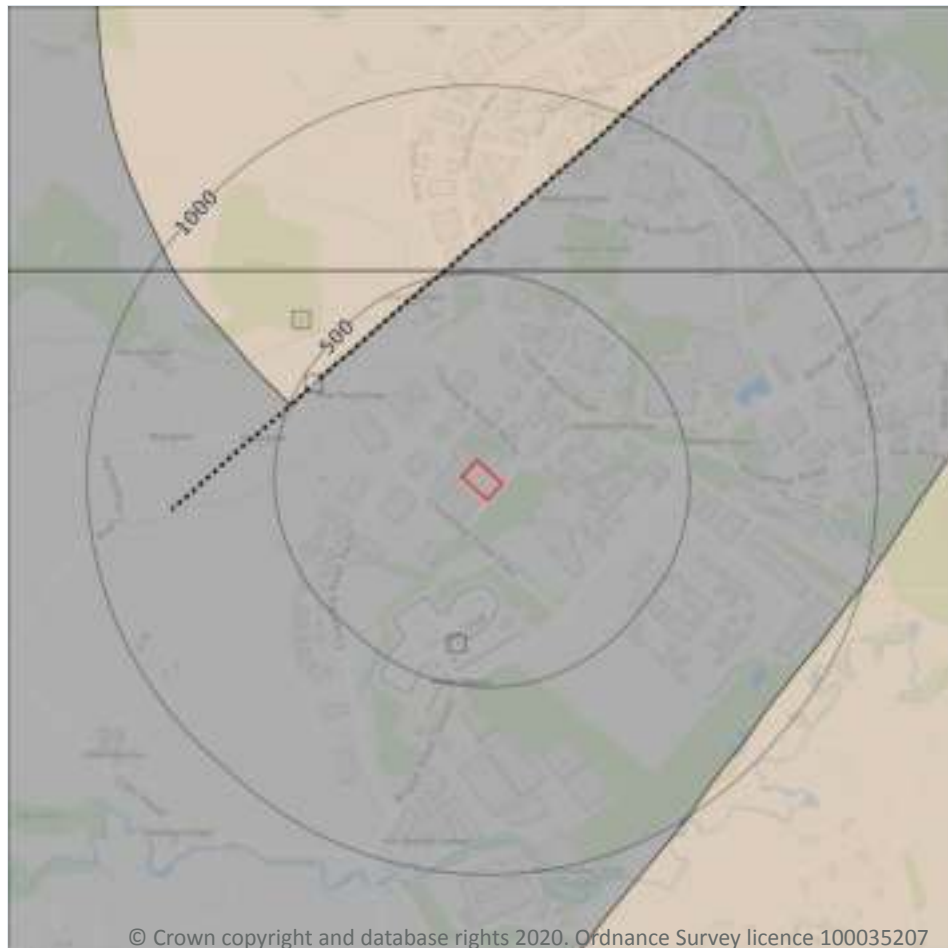
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (10k)
- Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

2

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

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

ID	Location	LEX Code	Description	Rock age
1	On site	SAL-CYCCM	Salop Formation - Sedimentary Rock Cycles, Coal Measure Type	Cisuralian Epoch - Westphalian D Sub-age
2	440m NW	KNSF-SDST	Kinnerton Sandstone Formation - Sandstone	Early Triassic Epoch

This data is sourced from the British Geological Survey.



14.6 Bedrock faults and other linear features (10k)

Records within 500m

1

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.

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

ID	Location	Category	Description
3	440m NW	FAULT	Normal fault, inferred

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



- Site Outline
- Search buffers in metres (m)
- ☐ Geological map tile

15.1 50k Availability

Records within 500m

1

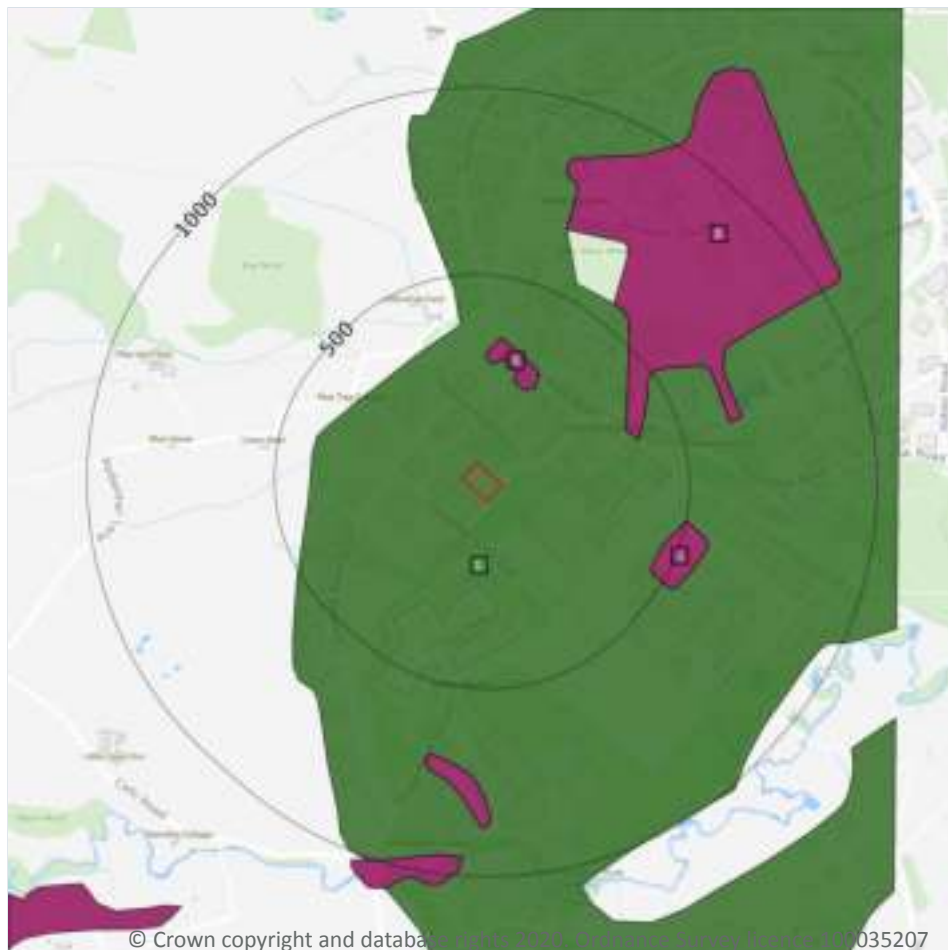
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 84**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW121_wrexham_v4

This data is sourced from the British Geological Survey.

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



- Site Outline**
- Search buffers in metres (m)
- Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m

4

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.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 85**

ID	Location	LEX Code	Description	Rock description
1	On site	LSGR-ARTGR	LANDSCAPED GROUND (UNDIVIDED)	ARTIFICIALLY MODIFIED GROUND
2	230m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
3	362m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
4	454m SE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

1

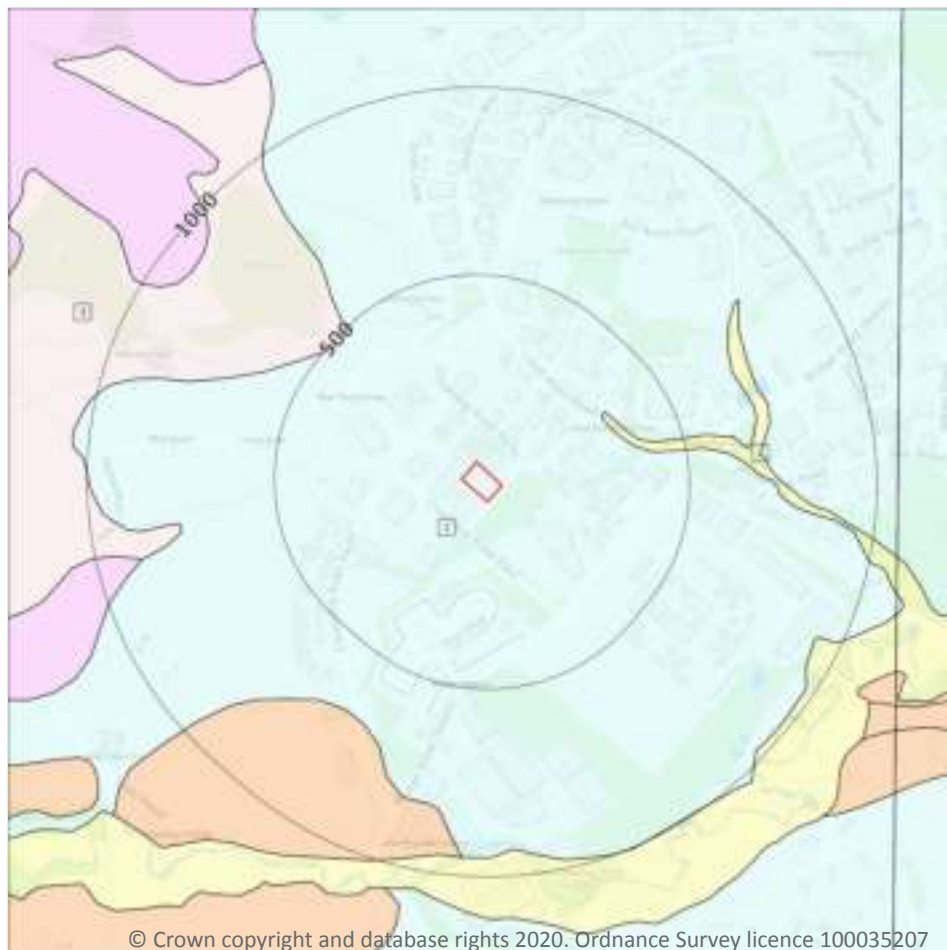
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low

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

3

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 87**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
2	322m NE	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
3	483m NW	GLLDD-XCZ	GLACIOLACUSTRINE DEPOSITS, DEVENSIAN	CLAY AND SILT

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m

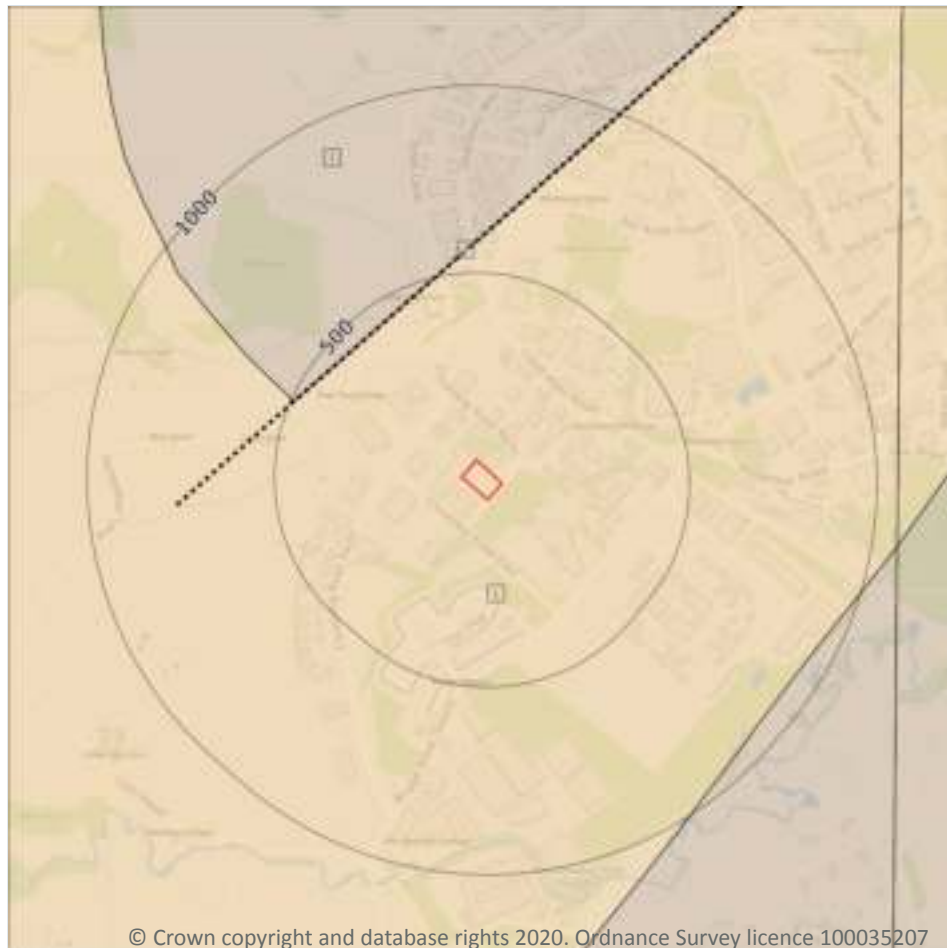
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m

2

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 89**

ID	Location	LEX Code	Description	Rock age
1	On site	SAL-MDSC	SALOP FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE	WESTPHALIAN
2	440m NW	KNSF-SDST	KINNERTON SANDSTONE FORMATION - SANDSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Moderate	Low

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 89**

ID	Location	Category	Description
3	440m NW	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

16

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 91**

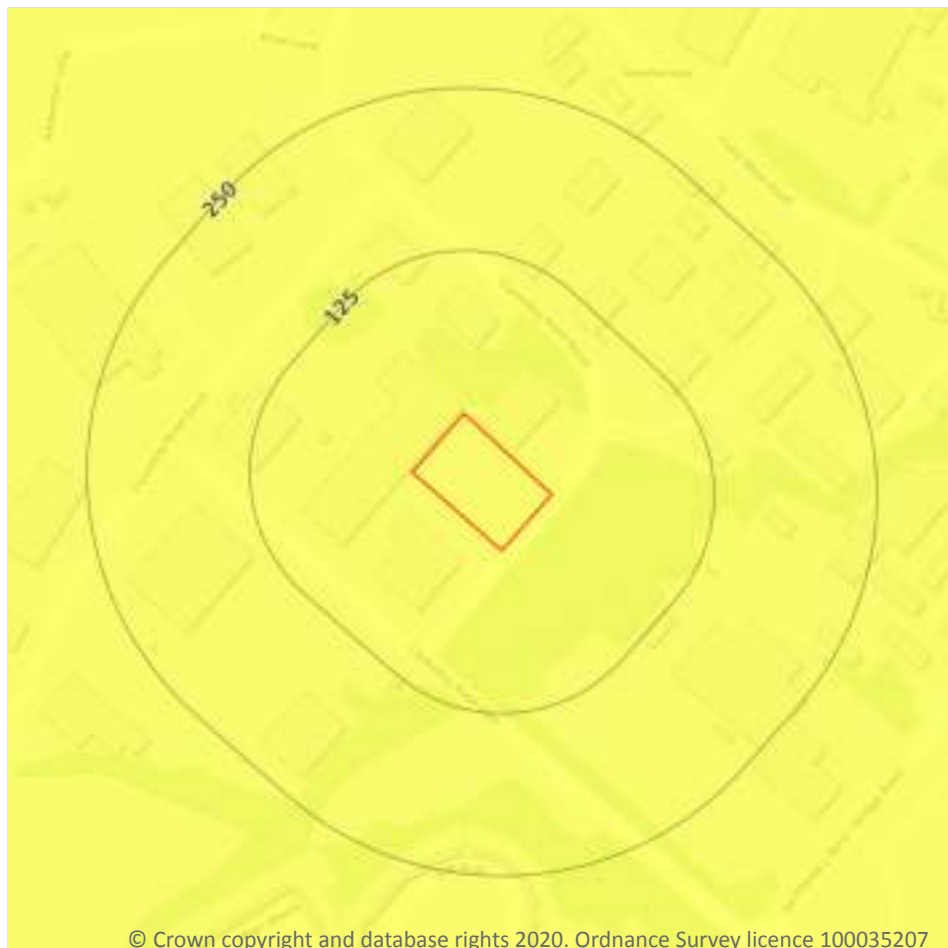
ID	Location	Grid reference	Name	Length	Confidential	Web link
1	92m S	337450 349300	WREXHAM ALUMINIUM INGOT PLANT. TP.12	1.9	N	153210
2	123m SE	337520 349310	WREXHAM ALUMINIUM INGOT PLANT. TP.11	2.4	N	153209

ID	Location	Grid reference	Name	Length	Confidential	Web link
3	128m SW	337320 349310	WELSH IND EST. PROPOSED SUBSTATION, TRIAL PIT.4	-	Y	N/A
4	132m SW	337350 349280	WELSH IND EST. PROPOSED SUBSTATION, TRIAL PIT.3	-	Y	N/A
5	146m SE	337590 349360	WREXHAM ALUMINIUM INGOT PLANT. TP.10	1.9	N	153208
6	156m SW	337300 349290	WELSH IND EST. PROPOSED SUBSTATION, TRIAL PIT.1	-	Y	N/A
7	158m SW	337320 349270	WELSH IND EST. PROPOSED SUBSTATION, TRIAL PIT.2	-	Y	N/A
A	181m SE	337570 349280	WREXHAM ALUMINIUM INGOT PLANT. 4	15.0	N	153198
B	182m SE	337590 349300	WREXHAM ALUMINIUM INGOT PLANT. 3	15.0	N	153197
A	187m SE	337570 349270	WREXHAM ALUMINIUM INGOT PLANT. TP.6	3.0	N	153204
B	190m SE	337600 349300	WREXHAM ALUMINIUM INGOT PLANT. TP.7	2.8	N	153205
8	194m SW	337300 349240	WREXHAM INDUSTRIAL ESTATE PROPOSED SEWERLINE 30	5.0	N	153246
9	218m SE	337620 349280	WREXHAM ALUMINIUM INGOT PLANT. TP.3	3.0	N	153202
C	222m SE	337590 349240	WREXHAM ALUMINIUM INGOT PLANT. TP.5	3.0	N	153203
C	231m SE	337610 349250	WREXHAM ALUMINIUM INGOT PLANT. 1	18.1	N	153195
10	240m SE	337560 349190	WREXHAM ALUMINIUM INGOT PLANT. TP.13	2.6	N	153211

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.1 Shrink swell clays

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 93**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.2 Running sands

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Running sands map on **page 94**

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.3 Compressible deposits

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 95**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

1

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

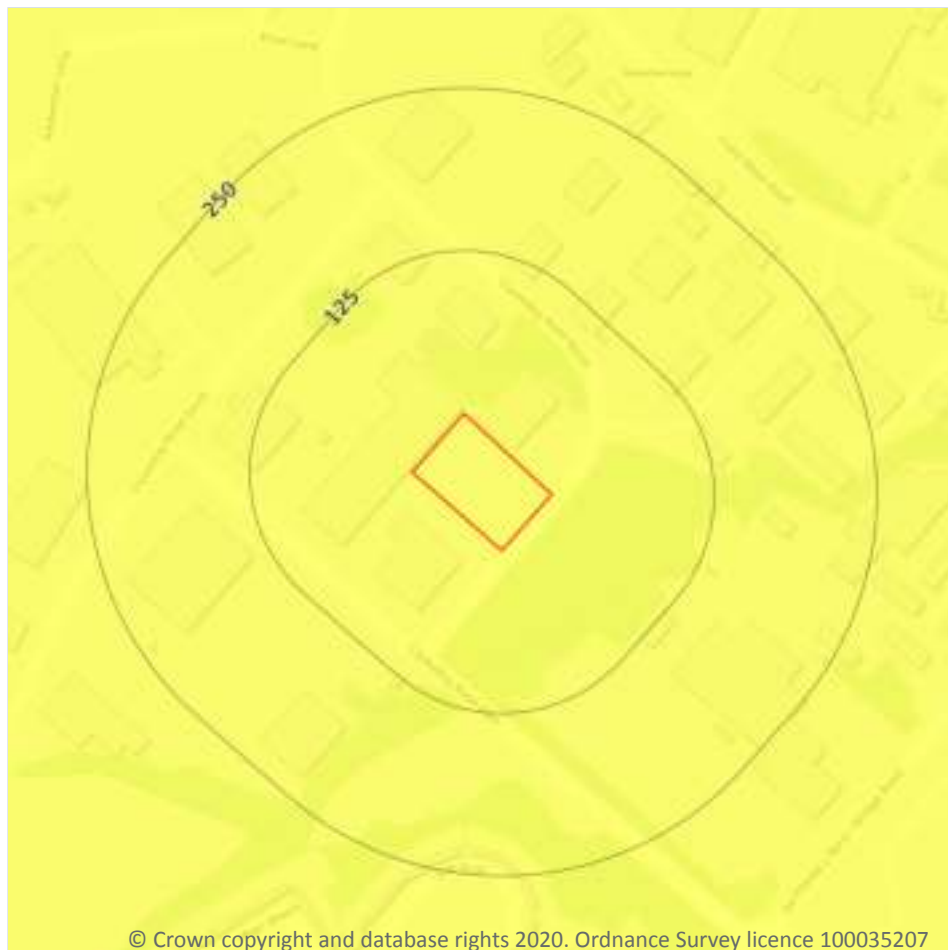
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 96**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.5 Landslides

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Landslides map on **page 97**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.6 Ground dissolution of soluble rocks

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 98**

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, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 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 Peter Brett Associates (PBA).

18.2 BritPits

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

17

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, ground workings and natural cavities map on **page 99**

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Unspecified Heap	1964	1:10560
2	67m SW	Unspecified Heap	1964	1:10560
3	117m NE	Unspecified Heap	1964	1:10560
4	119m NW	Unspecified Heap	1964	1:10560
5	143m NE	Unspecified Heap	1977	1:10000
6	146m SW	Unspecified Heap	1964	1:10560
7	169m SE	Ponds	1872	1:10560
8	191m S	Unspecified Heap	1992	1:10000
9	208m NE	Unspecified Heap	1977	1:10000
A	208m N	Ponds	1938	1:10560
B	209m W	Unspecified Heap	1964	1:10560
A	209m N	Ponds	1872	1:10560
A	213m N	Pond	1949	1:10560
A	213m N	Pond	1898	1:10560
B	219m W	Ponds	1872	1:10560
B	219m W	Ponds	1938	1:10560
10	247m NW	Unspecified Pit	1977	1:10000



This is data is sourced from Ordnance Survey/Groundsure.

18.4 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.

18.5 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 Mining cavities

Records within 1000m

0

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

This data is sourced from Peter Brett Associates (PBA).

18.8 JPB mining areas

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

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

This data is sourced from Johnson Poole and Bloomer.

18.9 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.

18.10 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.

18.11 Gypsum areas

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

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

18.13 Clay mining

Records on site

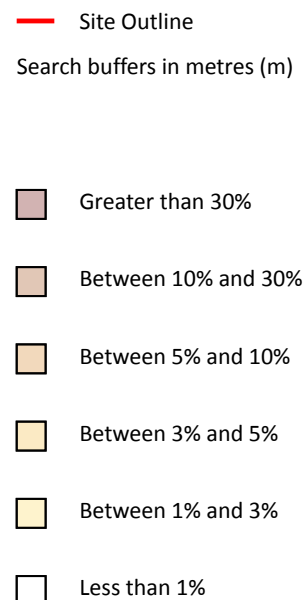
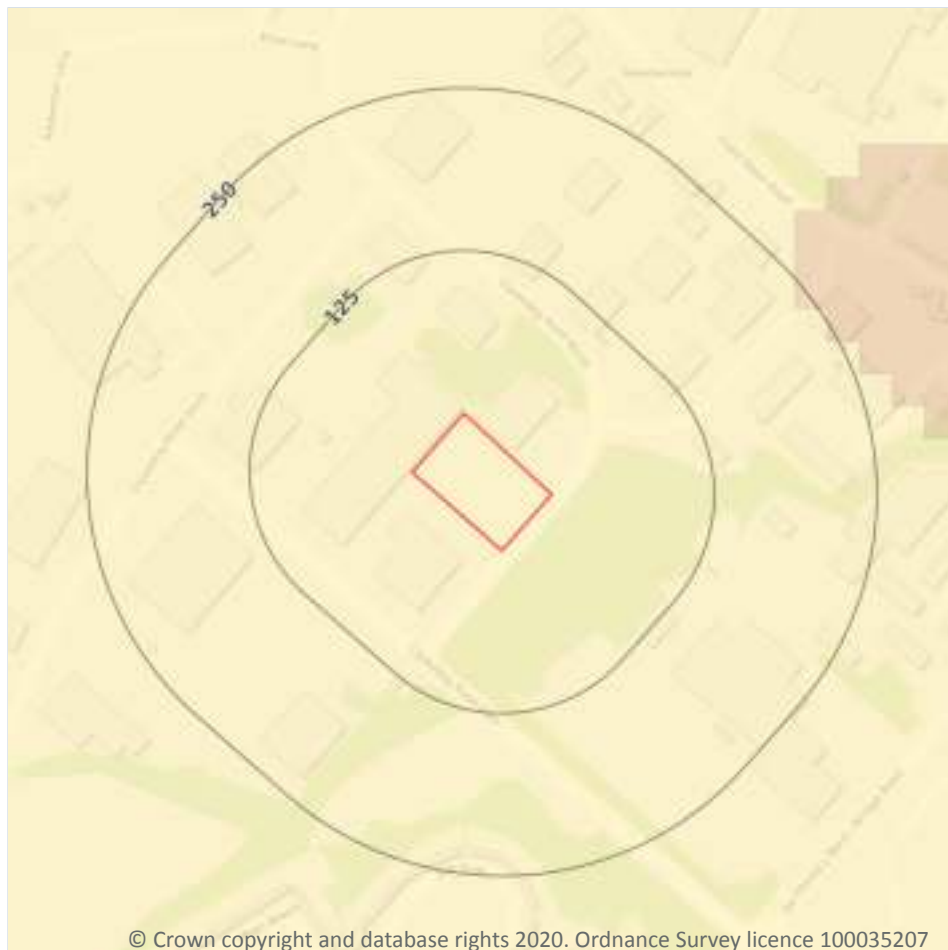
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Generalised areas that may be affected by kaolin and ball clay extraction.

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



19 Radon



19.1 Radon

Records on site

1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 104**

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 1% and 3%	None

This data is sourced from the British Geological Survey and Public Health England.



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

3

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	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
6m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
37m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 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.

20.3 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.



21 Railway infrastructure and projects

21.1 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.

21.2 Underground railways (Non-London)

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

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

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

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

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 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.

21.5 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.

21.6 Historical railways

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

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

This data is sourced from OpenStreetMap.

21.7 Railways

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

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

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

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

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 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.

21.10 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>.

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WREXHAM, LL13 9XN

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Report Ref: HMD-6856311
Grid Ref: 337409, 349441

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Map date: 1899

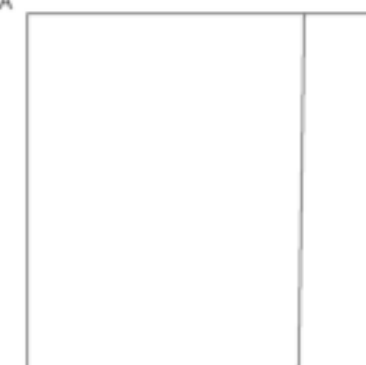
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Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

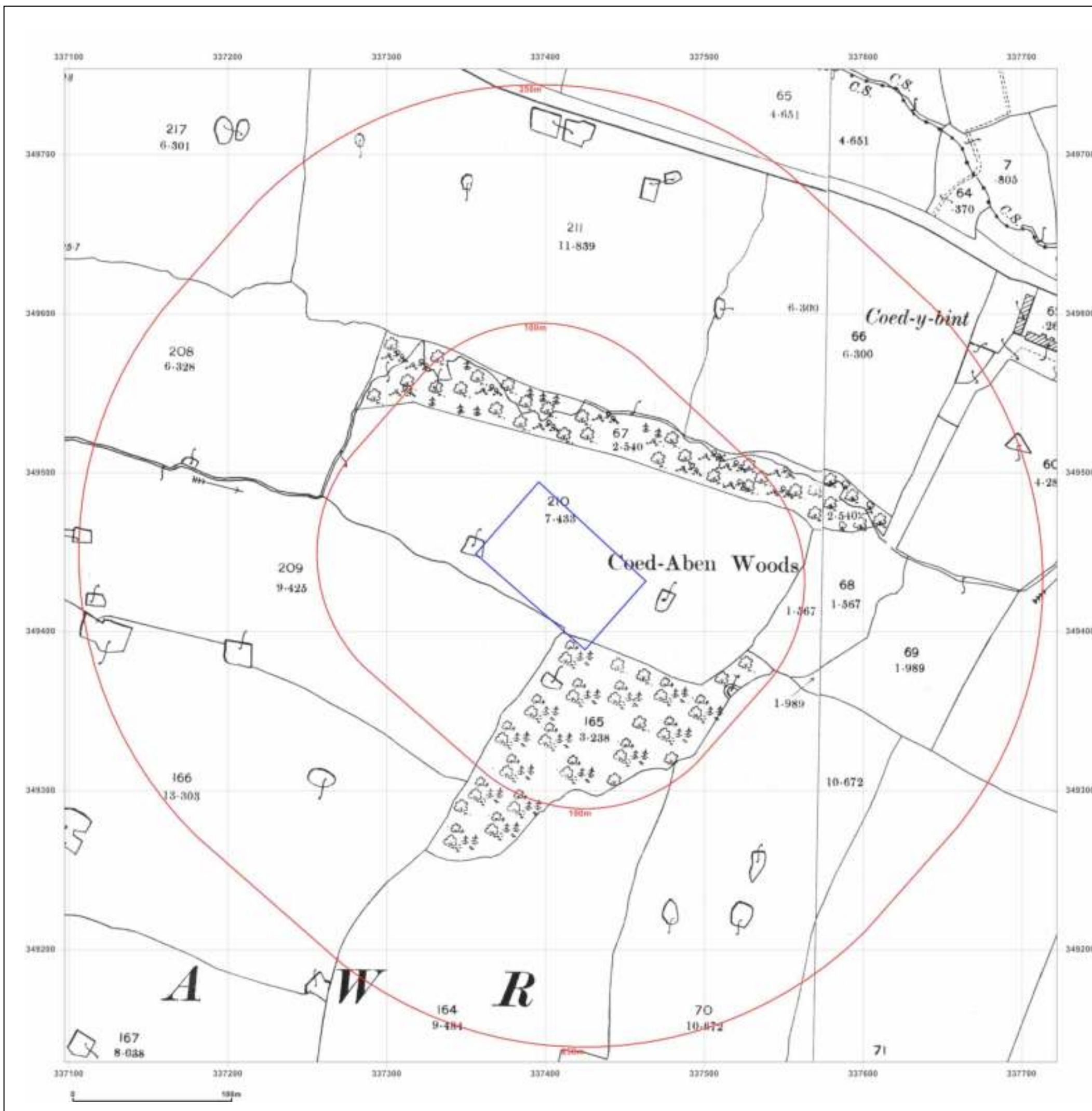


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Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: County Series

Map date: 1912

Scale: 1:2,500

Printed at: 1:2,500



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Edition N/A
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Edition N/A
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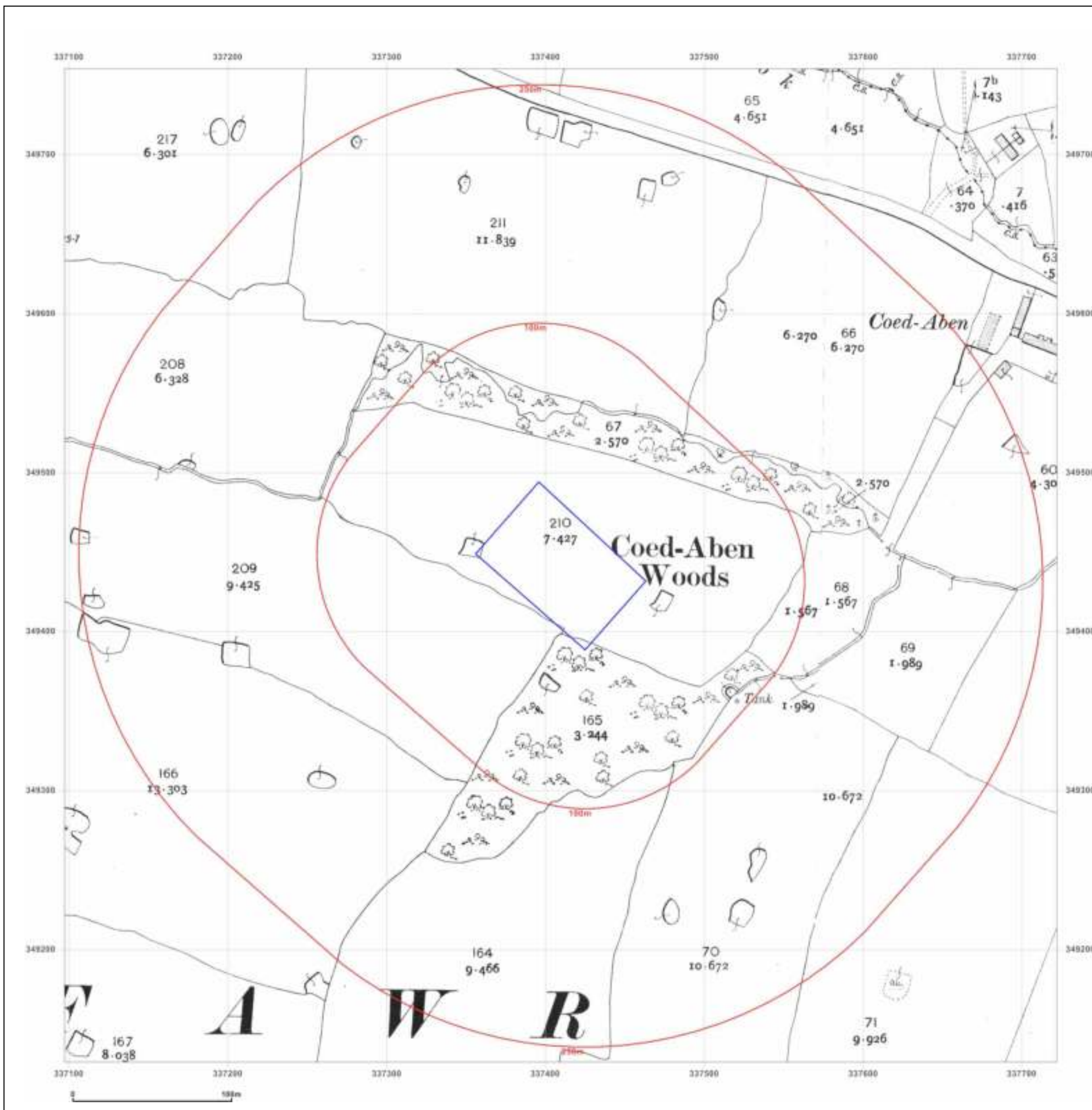


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Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

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Scale: 1:2,500

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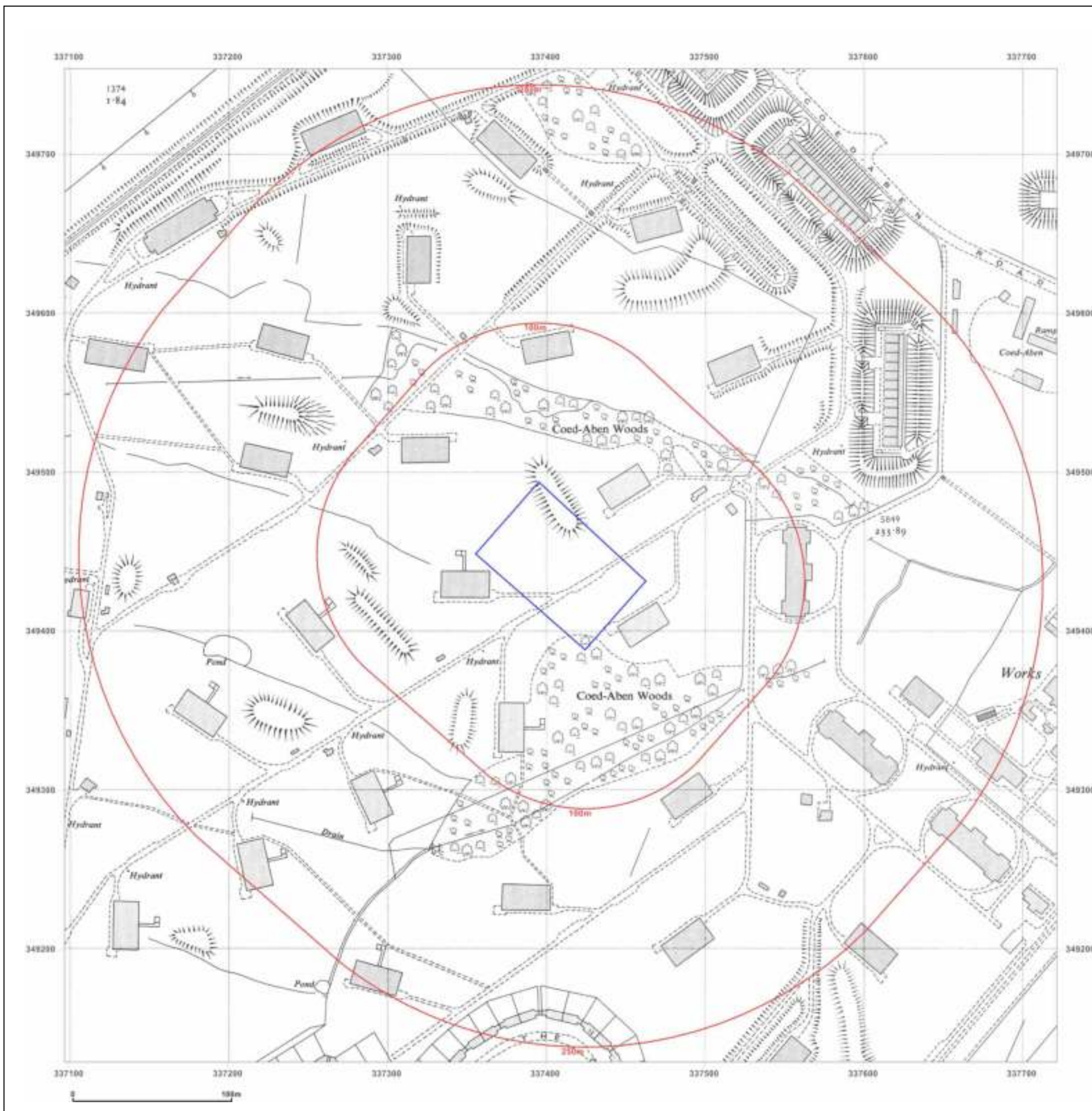


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Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

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Surveyed N/A
Revised N/A
Edition N/A
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Levelled N/A

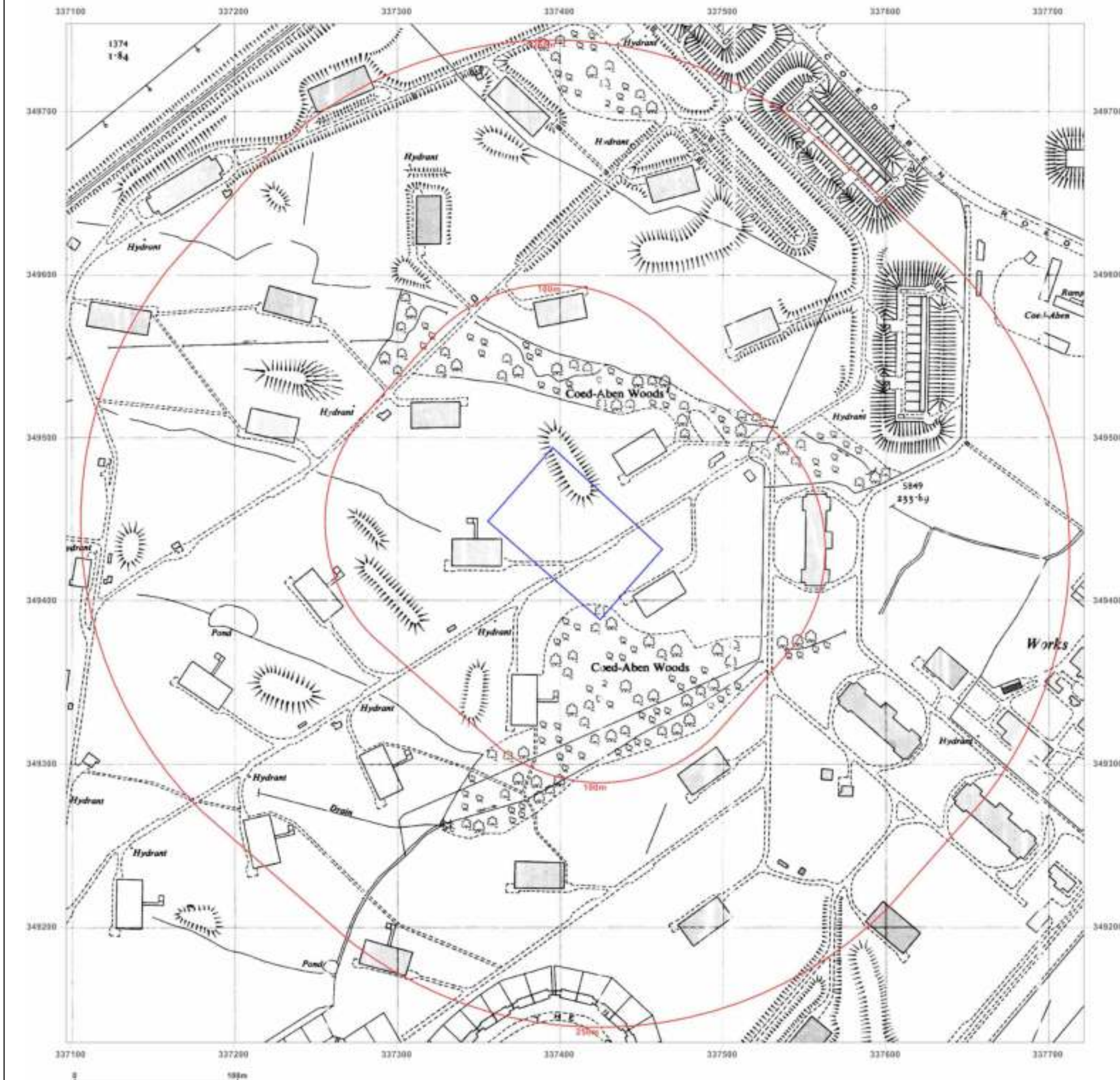


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Scale: 1:2,500

Printed at: 1:2,500



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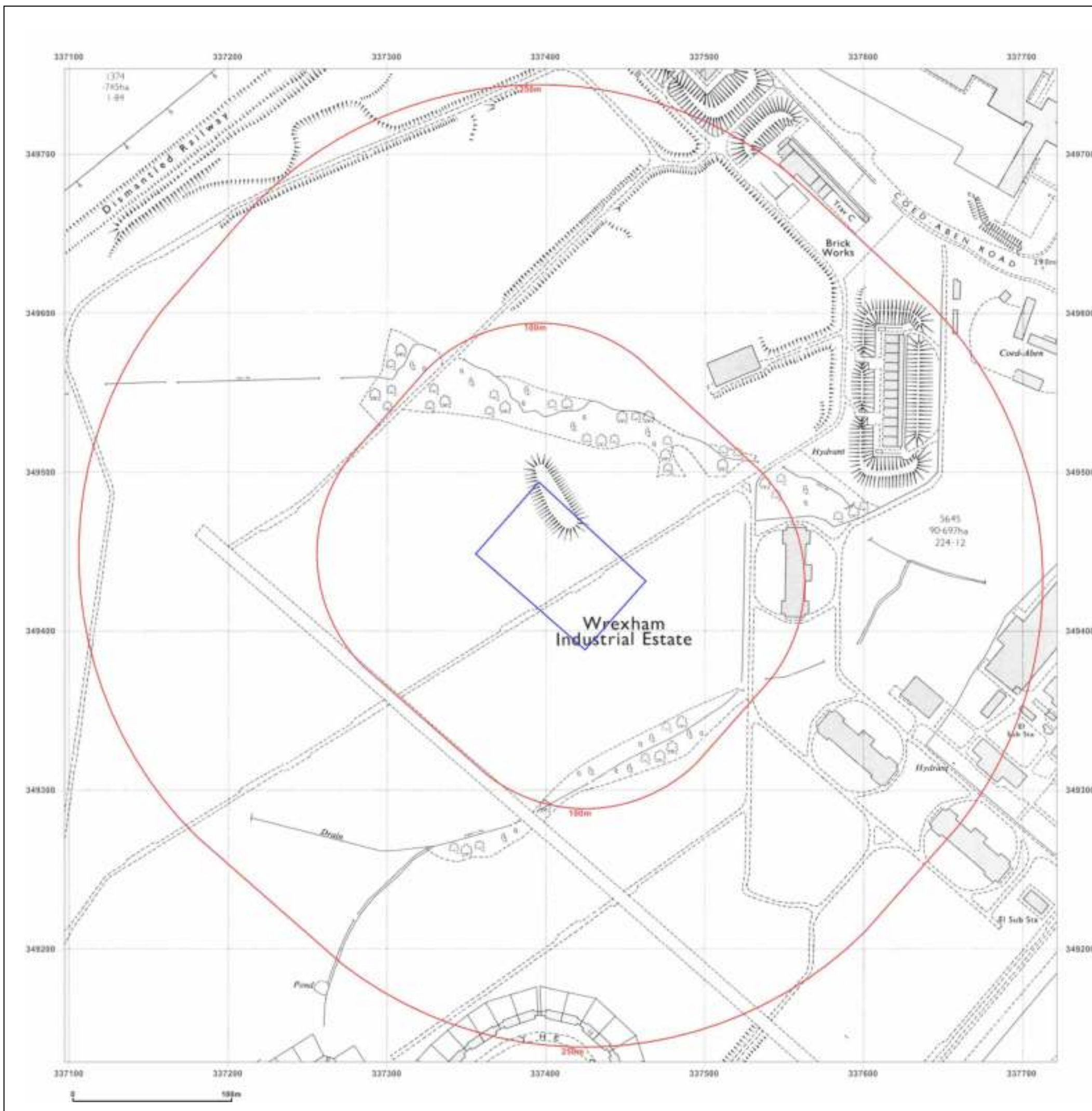


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Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1978

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
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Edition 1978
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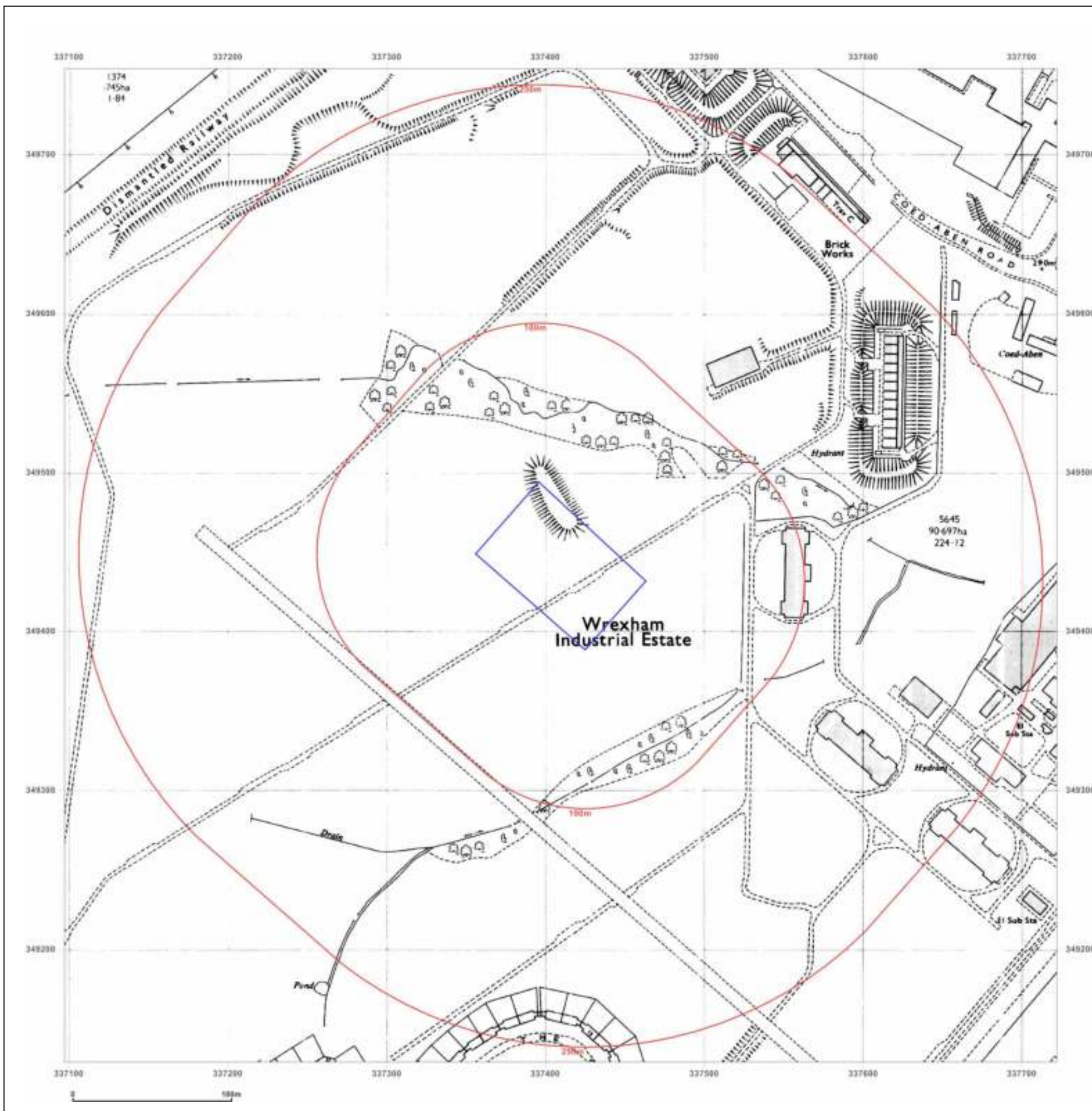


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INDUSTRIAL ESTATE,
WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1982

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1959
Revised 1982
Edition N/A
Copyright 1982
Levelled 1959

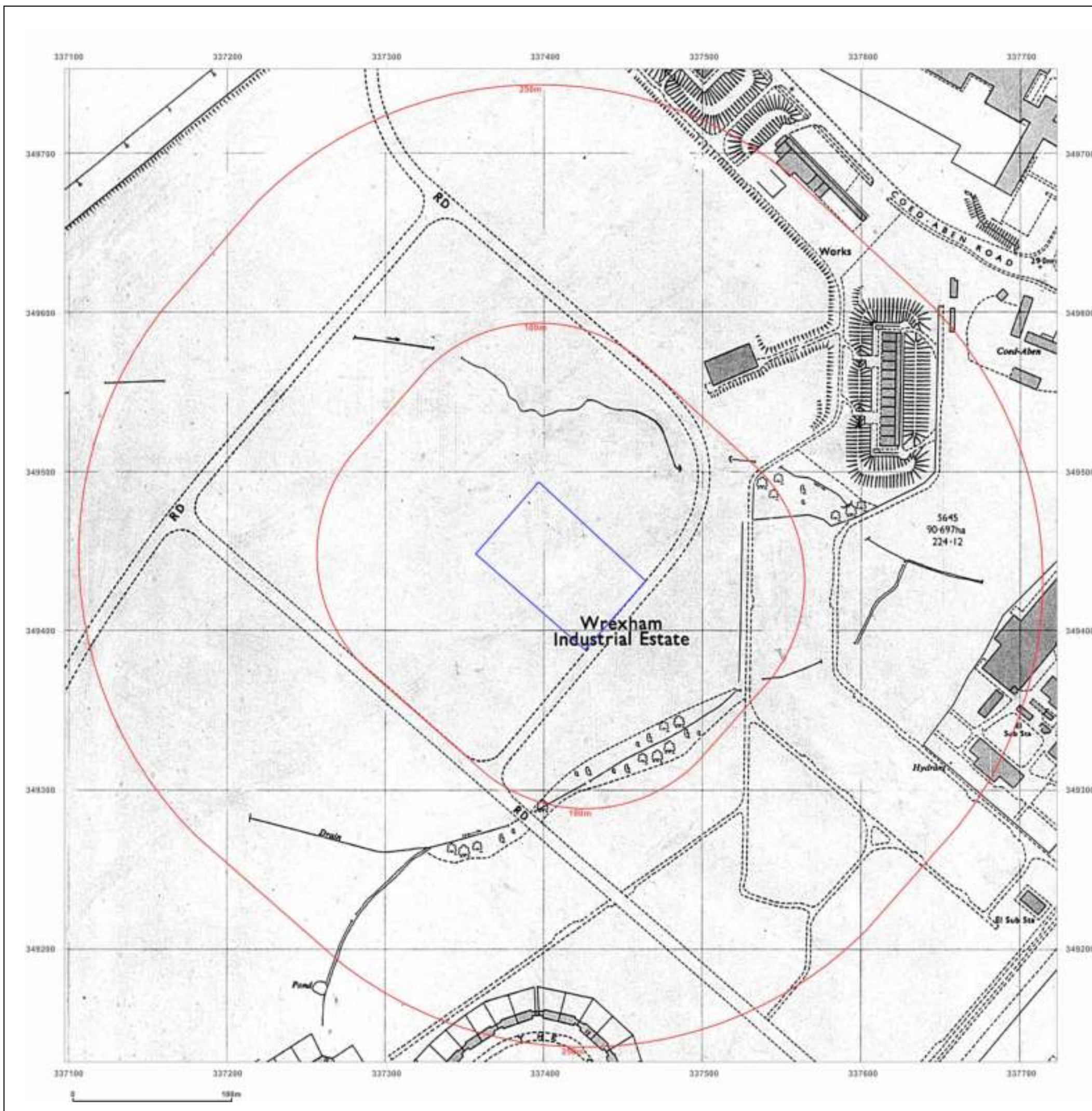


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Production date: 09 July 2020

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Site Details:

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NORTH, WREXHAM
INDUSTRIAL ESTATE,
WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1982

Scale: 1:2,500

Printed at: 1:2,500



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

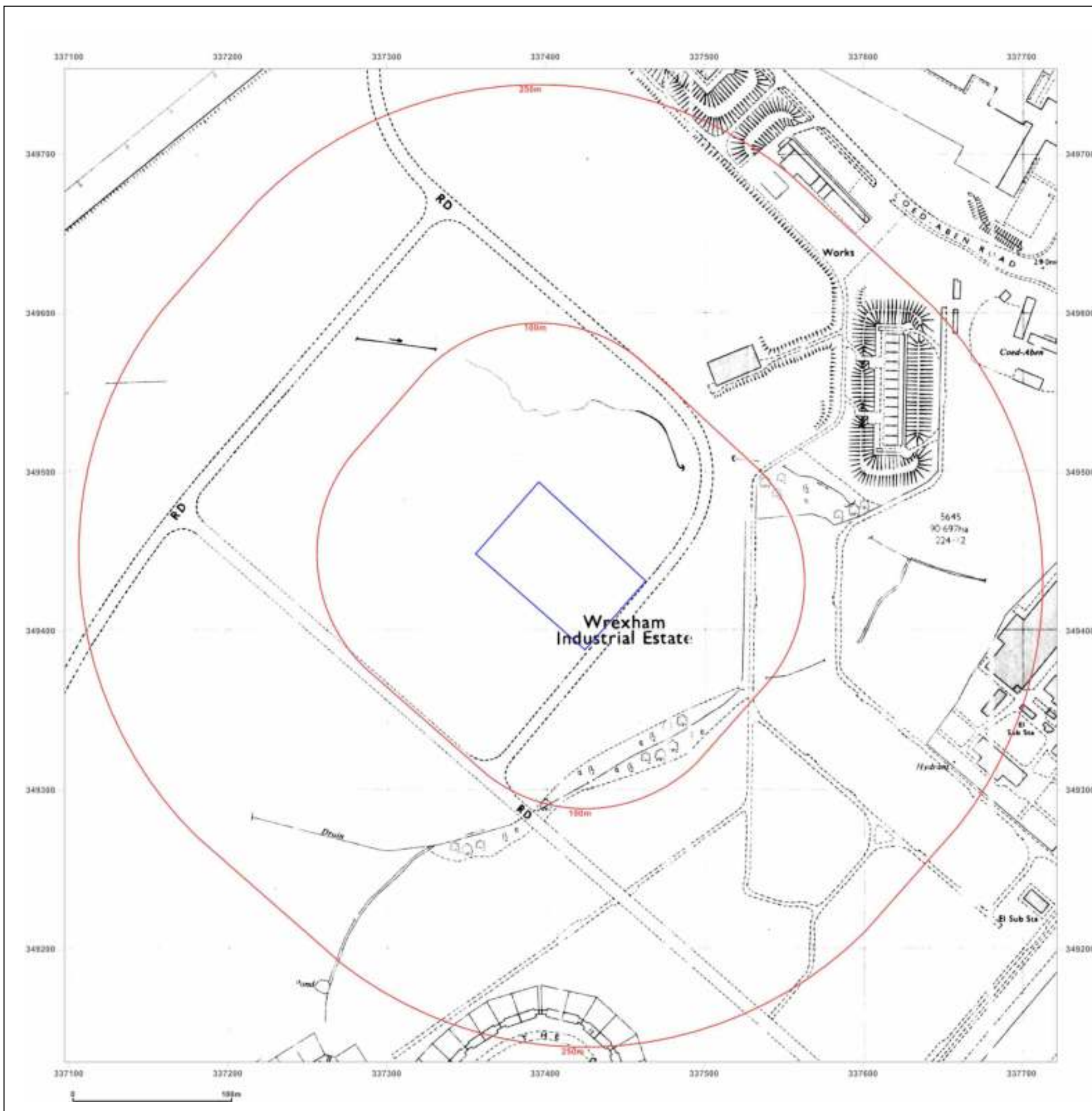


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INDUSTRIAL ESTATE,
WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1983

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1983
Revised 1983
Edition N/A
Copyright 1985
Levelled 1959

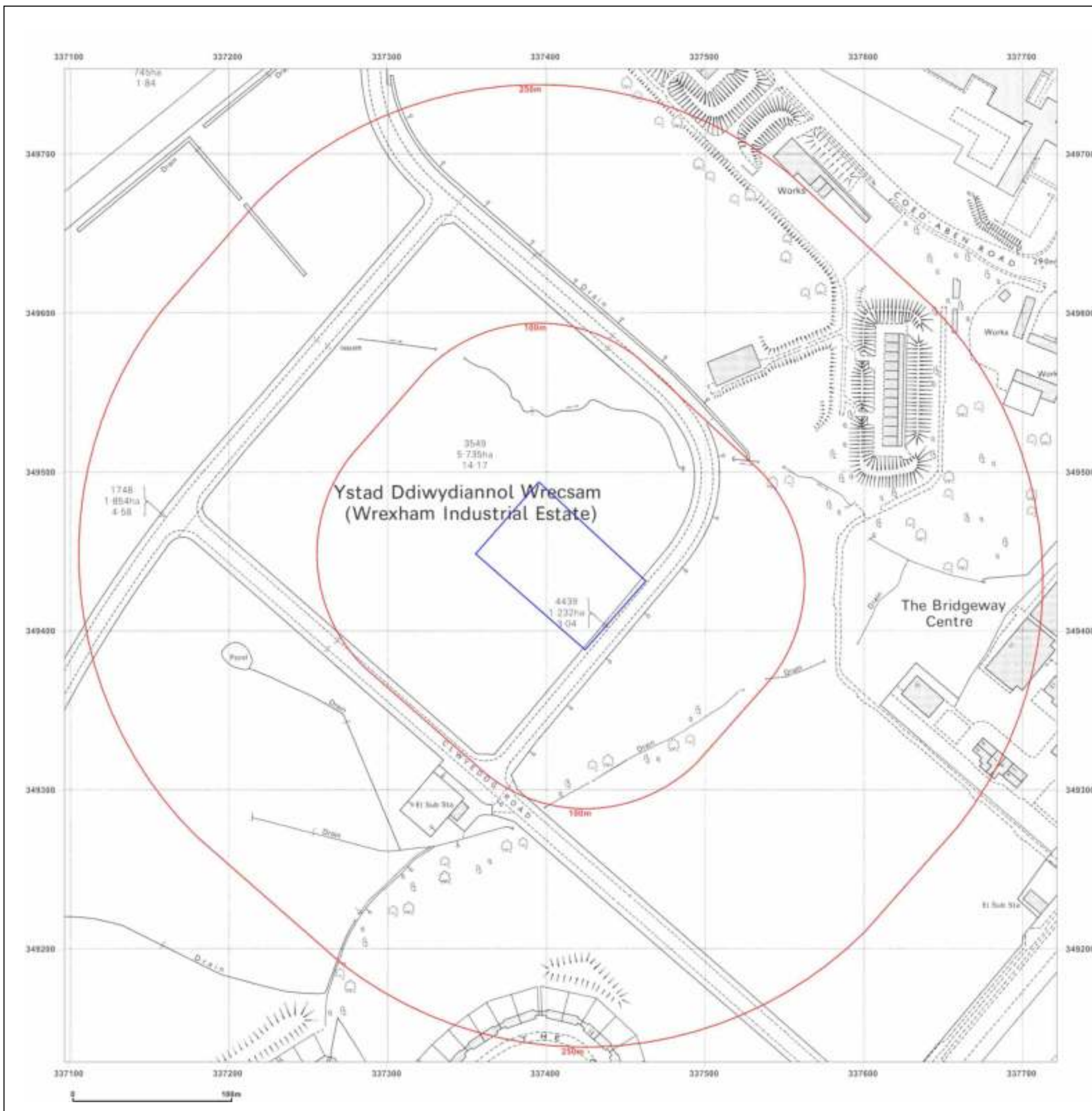


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1985

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised 1983
Edition N/A
Copyright 1985
Levelled 1959

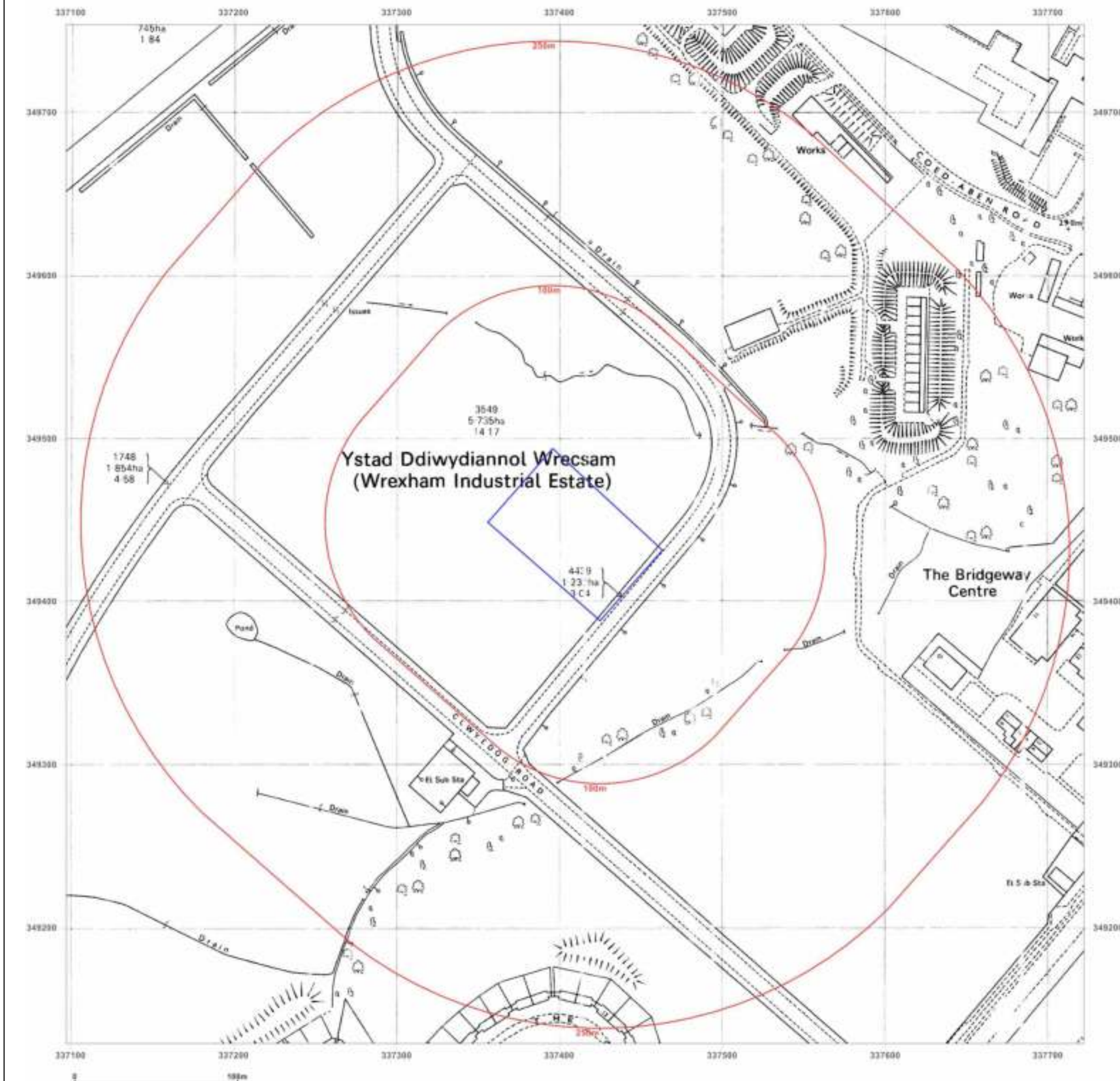


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1986

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised 1983
Edition N/A
Copyright 1986
Levelled 1959

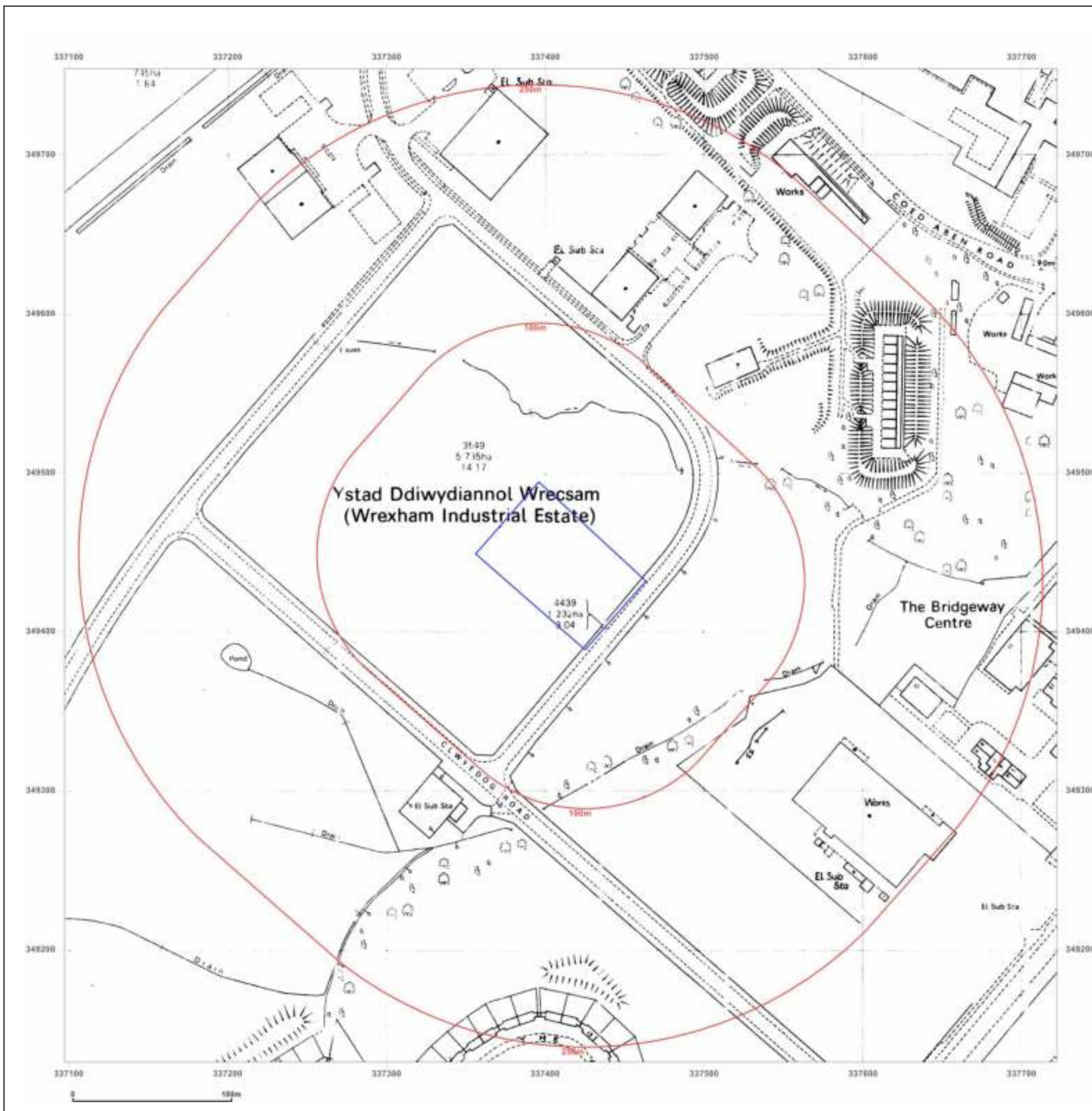


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1986

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1959
Revised 1983
Edition N/A
Copyright 1986
Levelled 1959

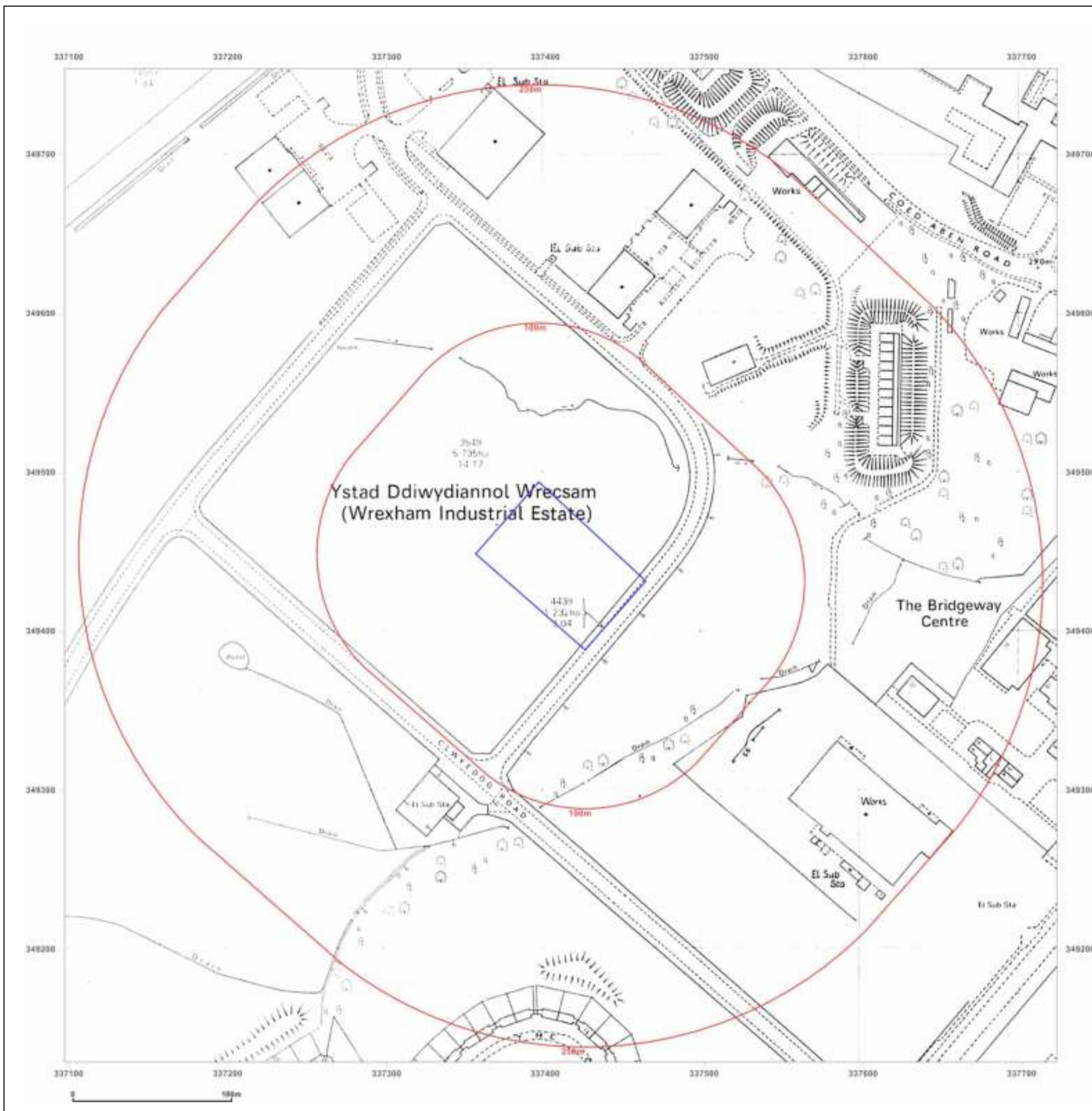


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1989

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised 1989
Edition N/A
Copyright 1988
Levelled 1959

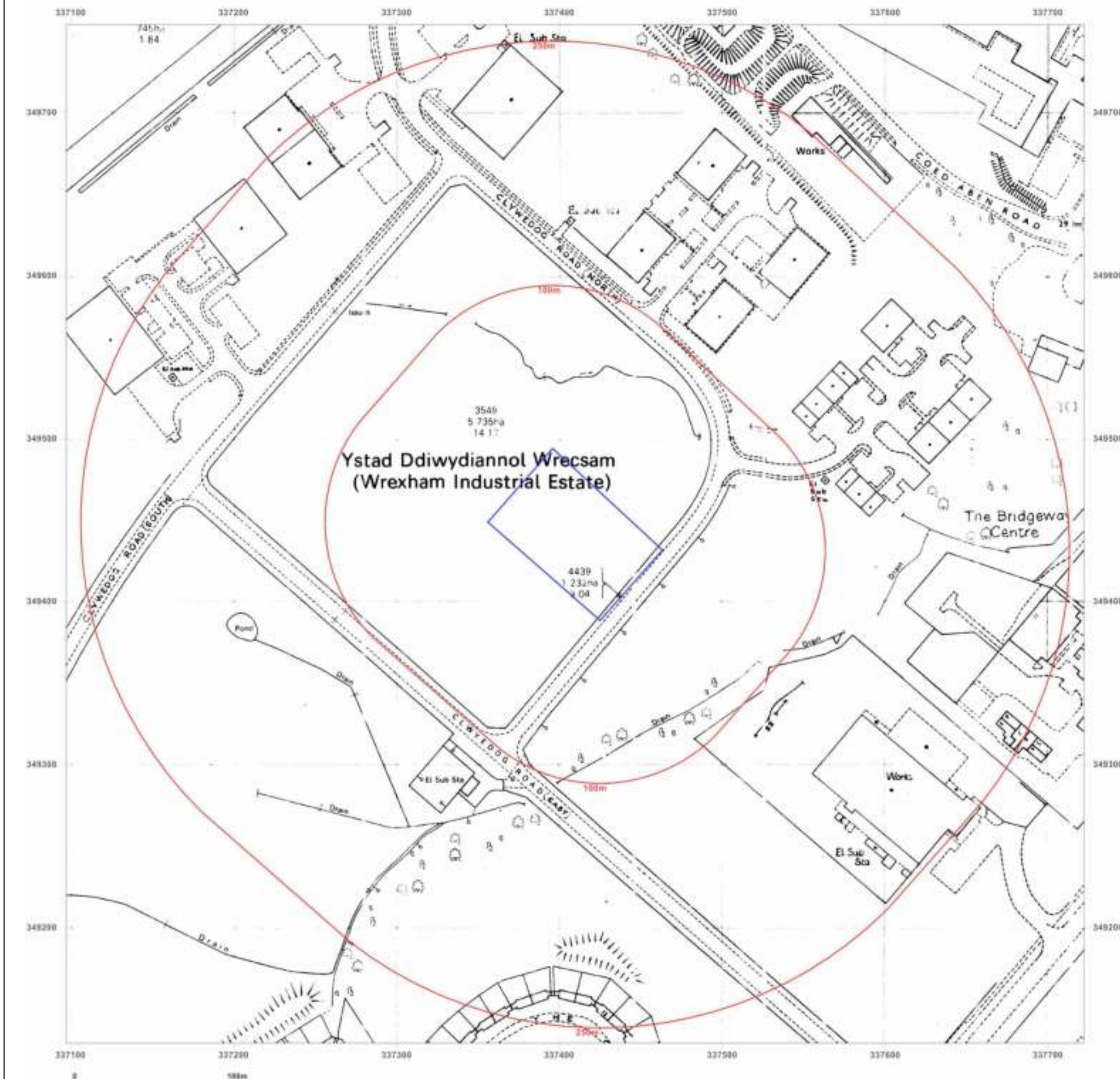


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1991

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised 1991
Edition N/A
Copyright 1991
Levelled 1959

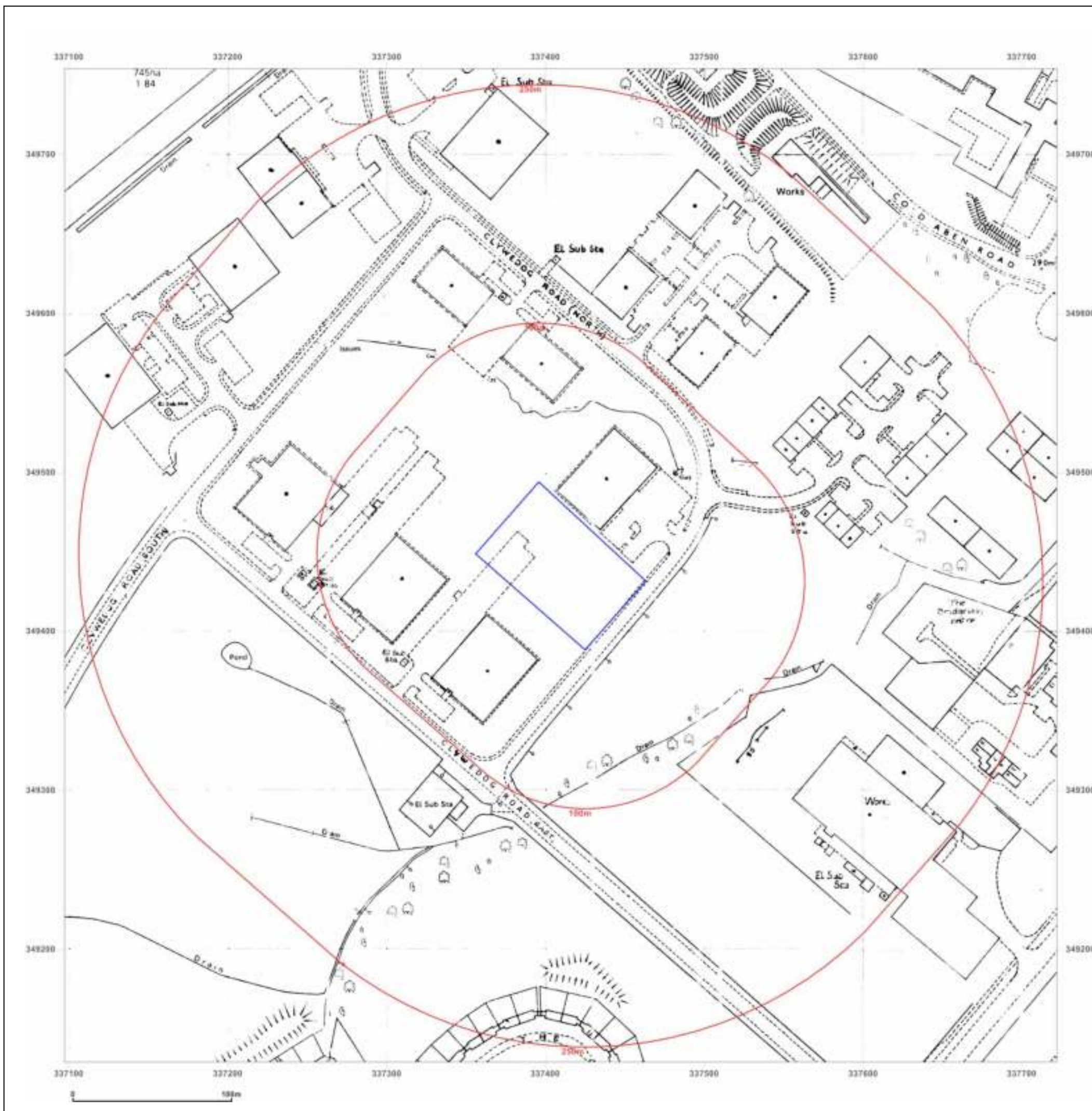


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1991

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1959
Revised 1983
Edition N/A
Copyright 1991
Levelled 1959

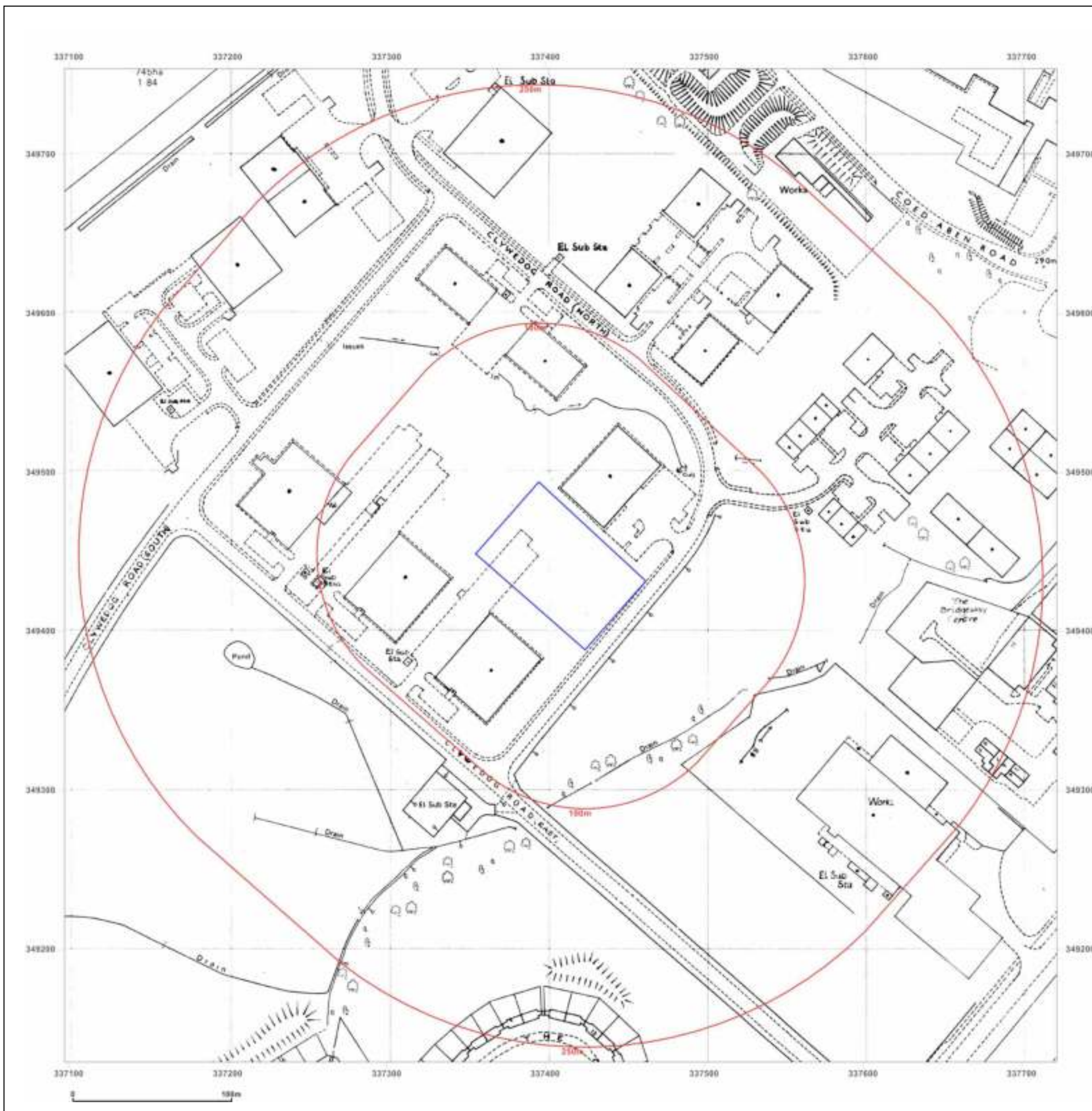


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Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1992

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1992
Levelled N/A

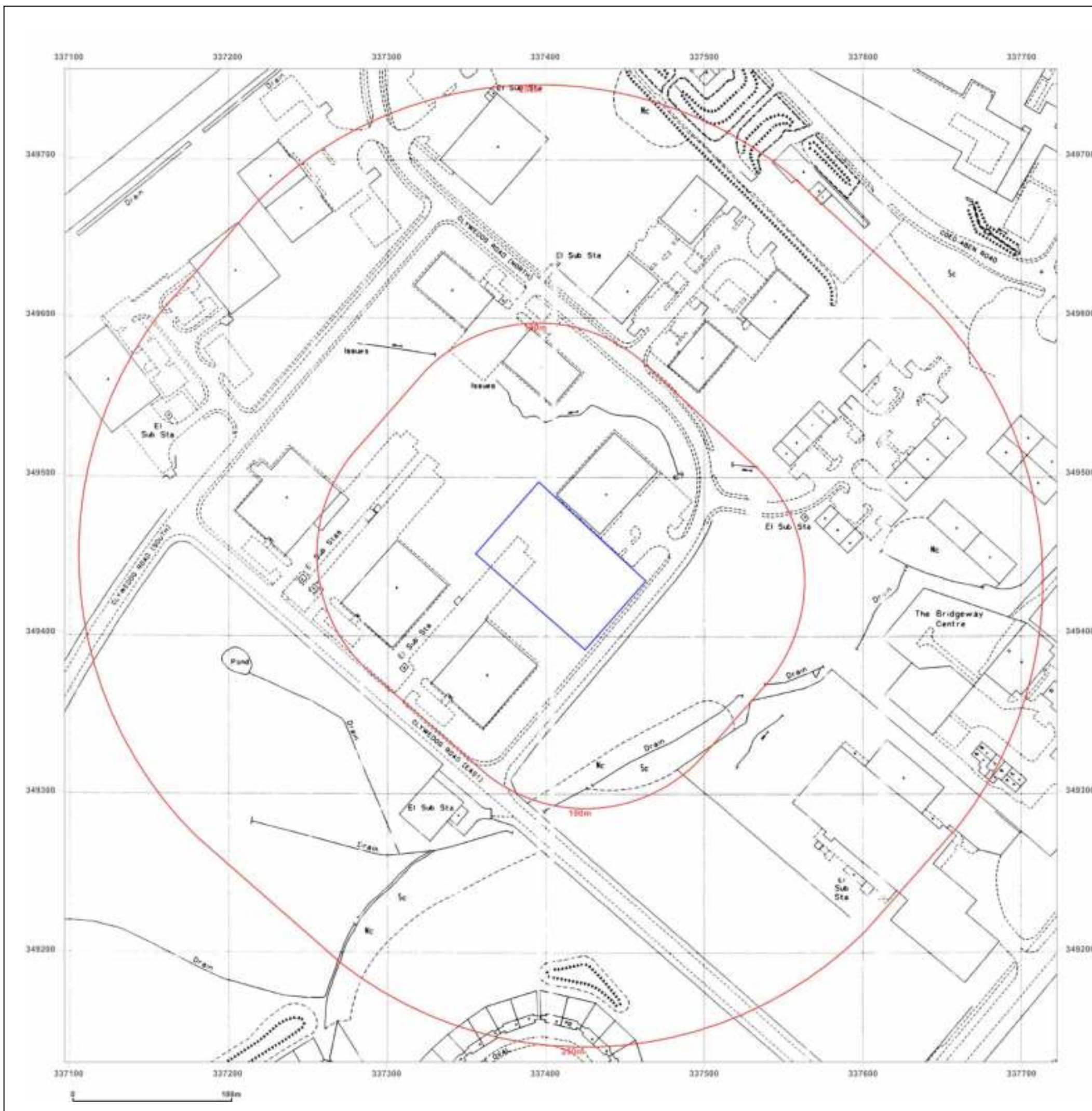


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Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1993

Scale: 1:2,500

Printed at: 1:2,500



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

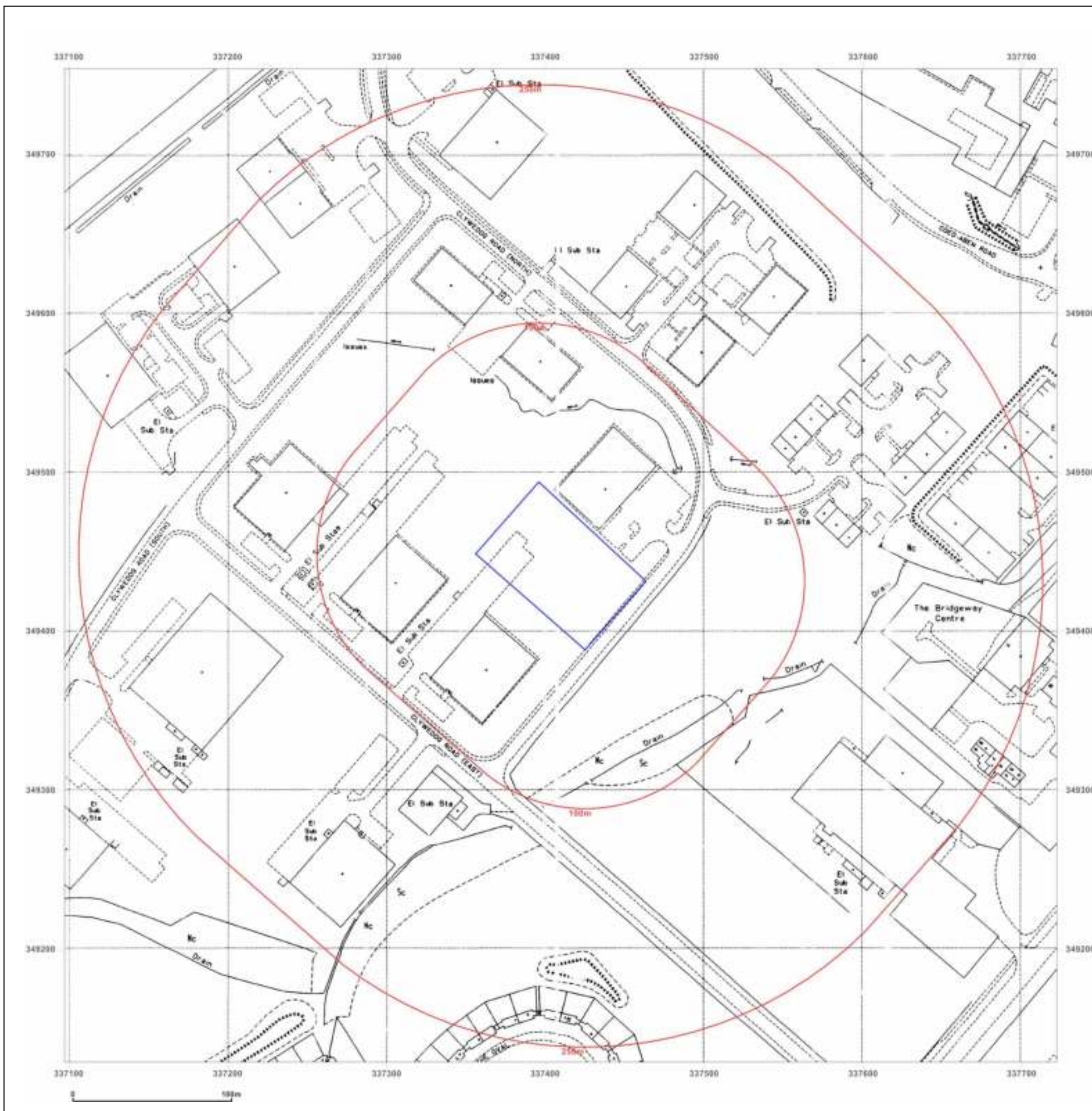


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Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1993

Scale: 1:2,500

Printed at: 1:2,500



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

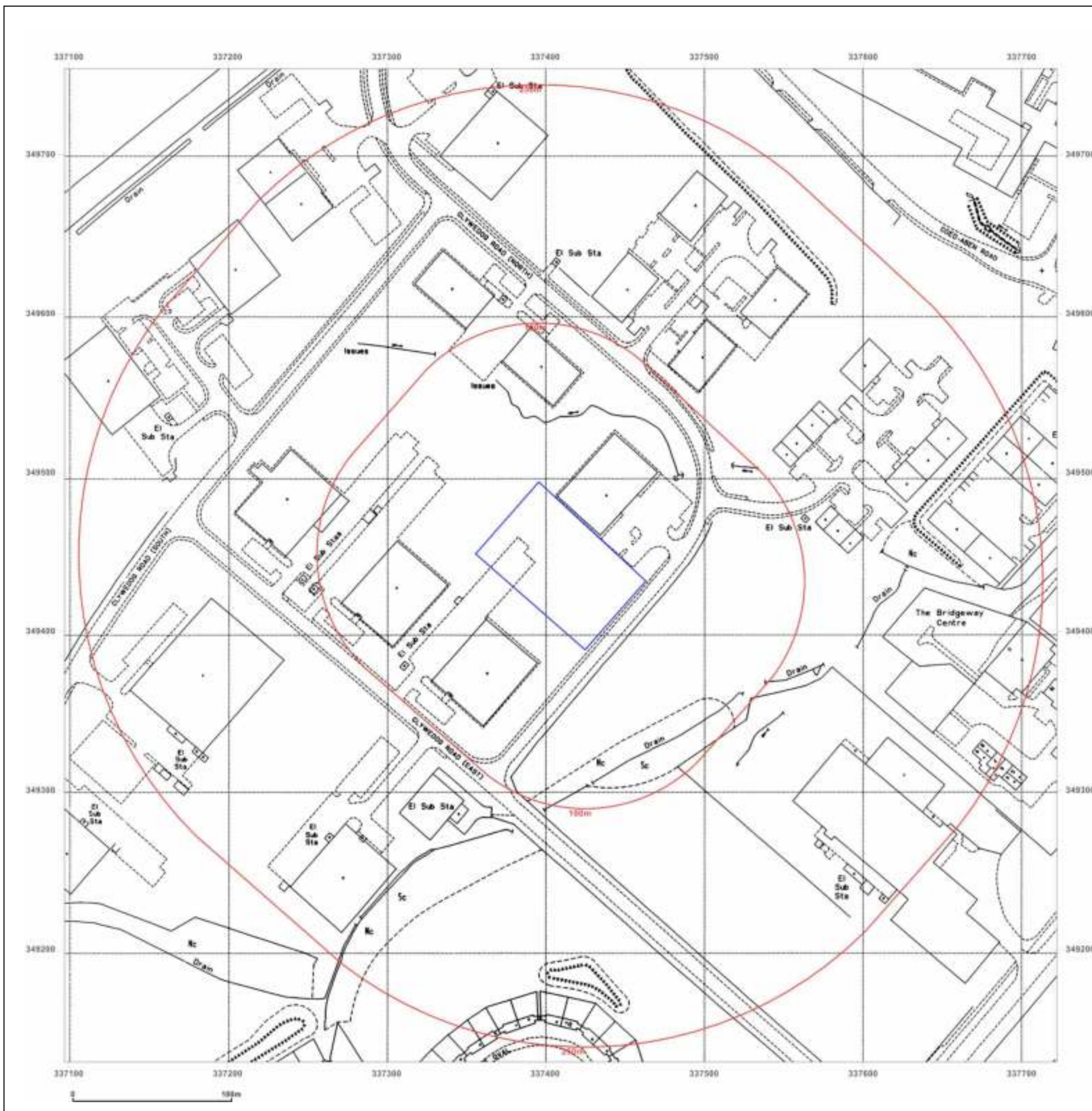


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Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1994

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1994
Levelled N/A

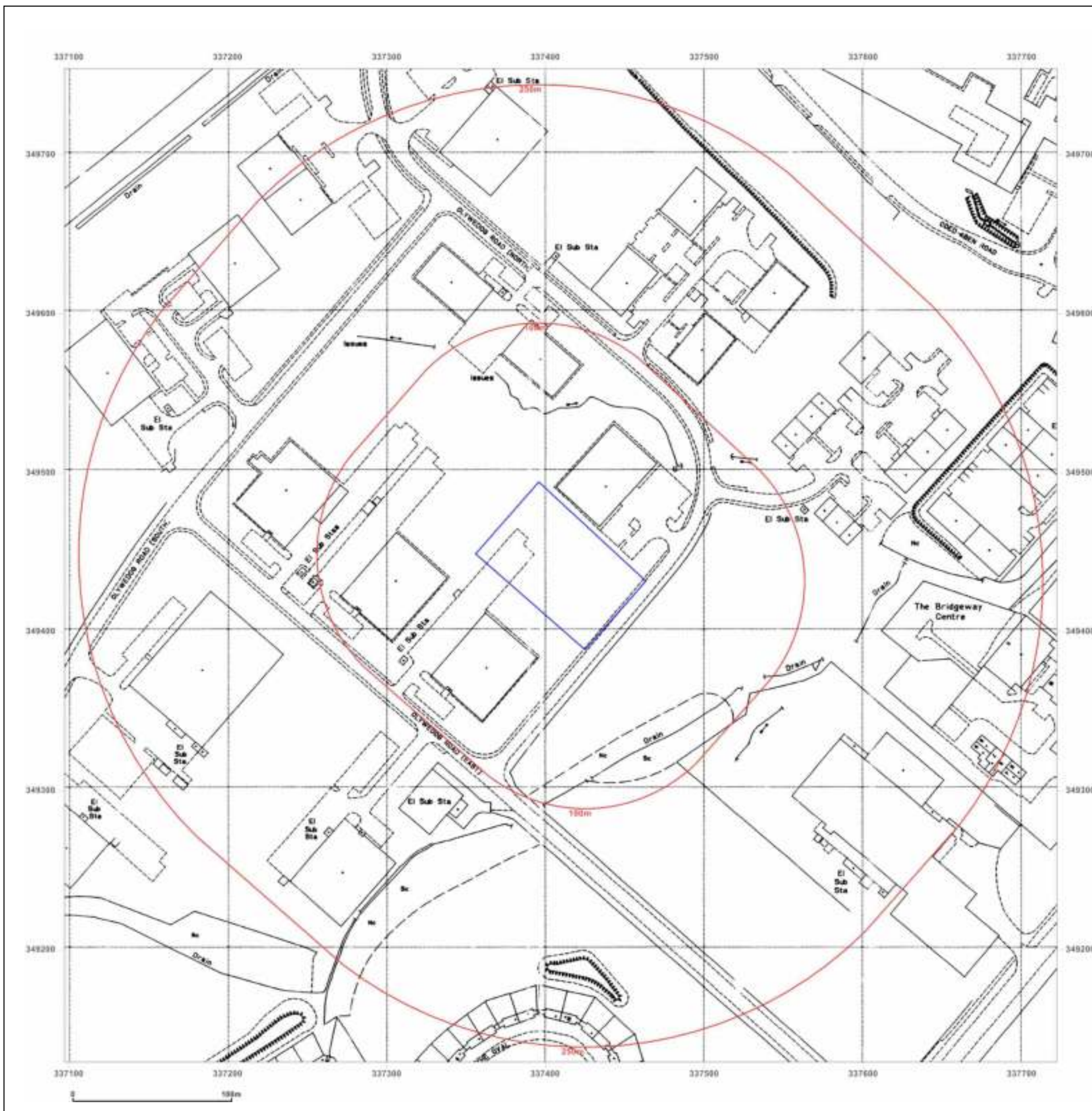


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1994

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1994
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

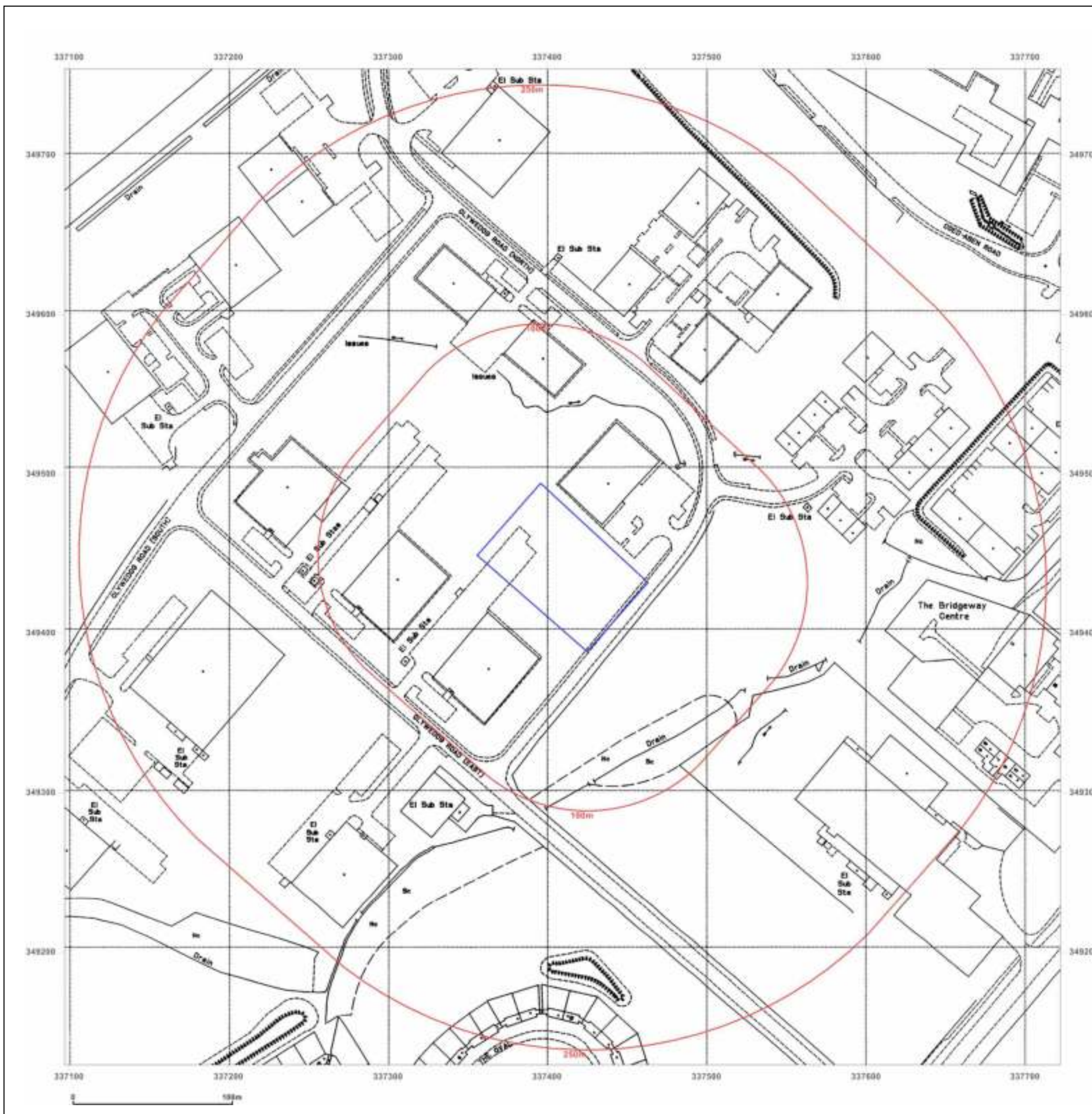


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

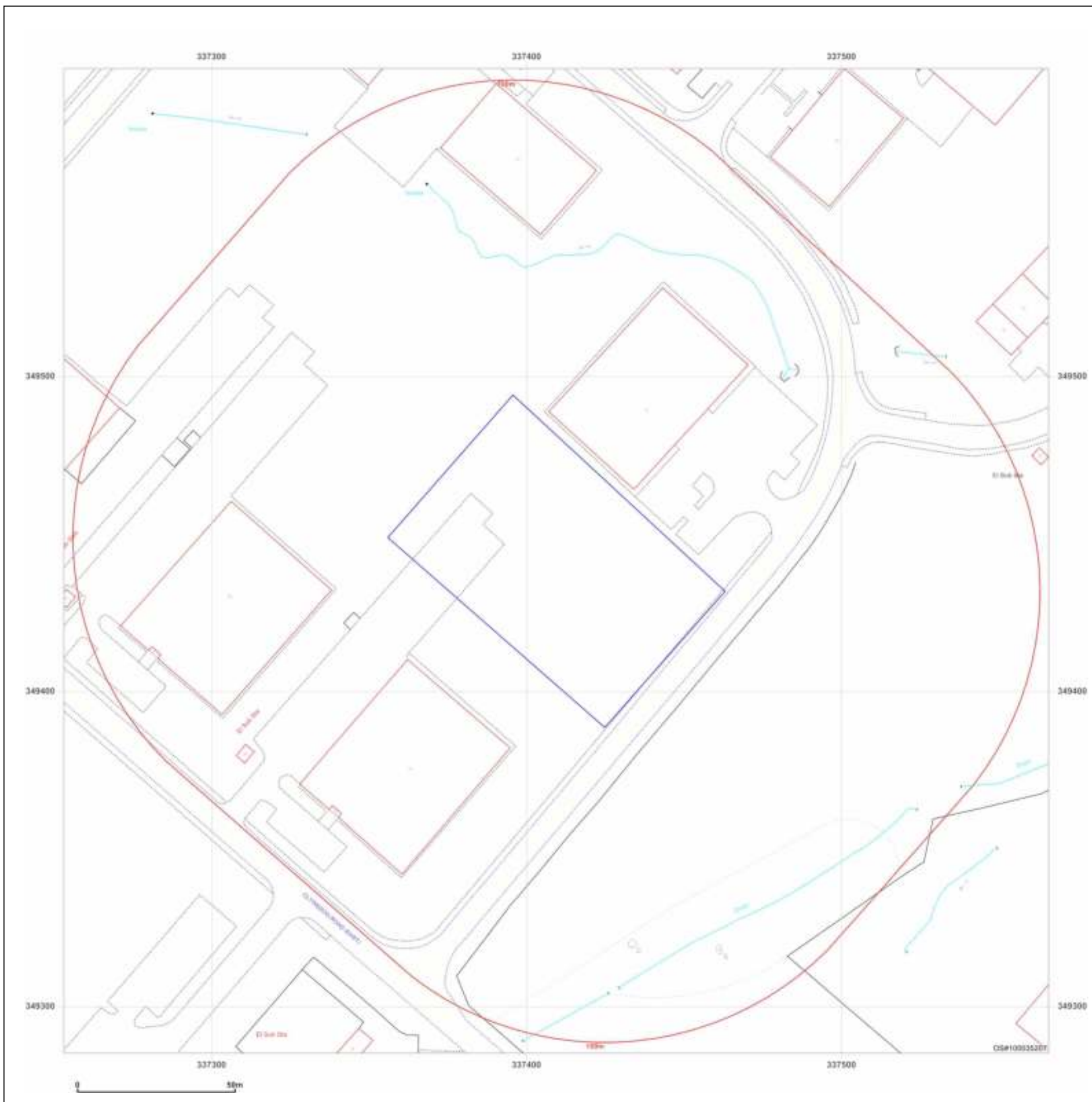


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: County Series

Map date: 1898-1900

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1872
Revised 1900
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1872
Revised 1898
Edition N/A
Copyright N/A
Levelled N/A

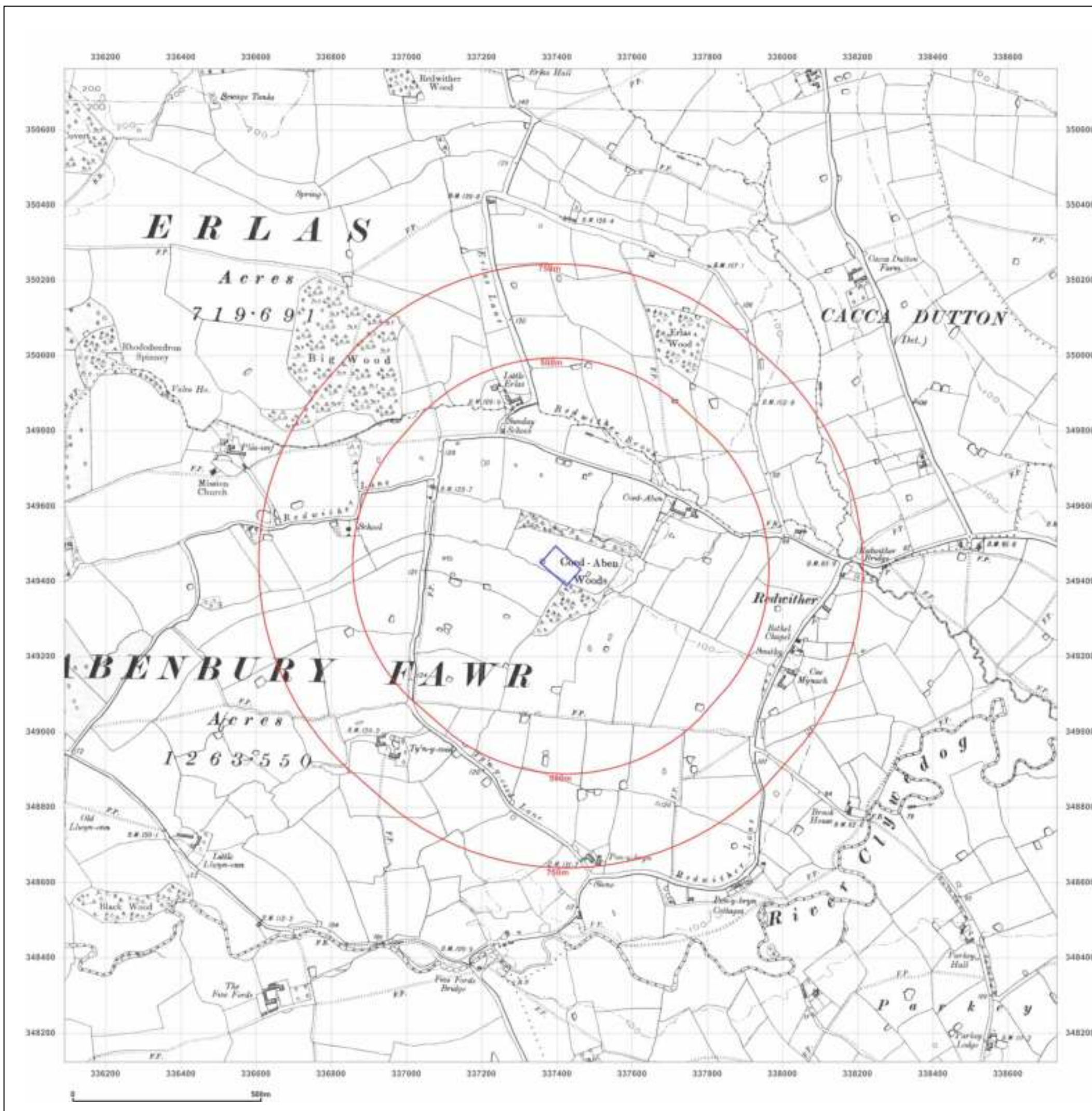


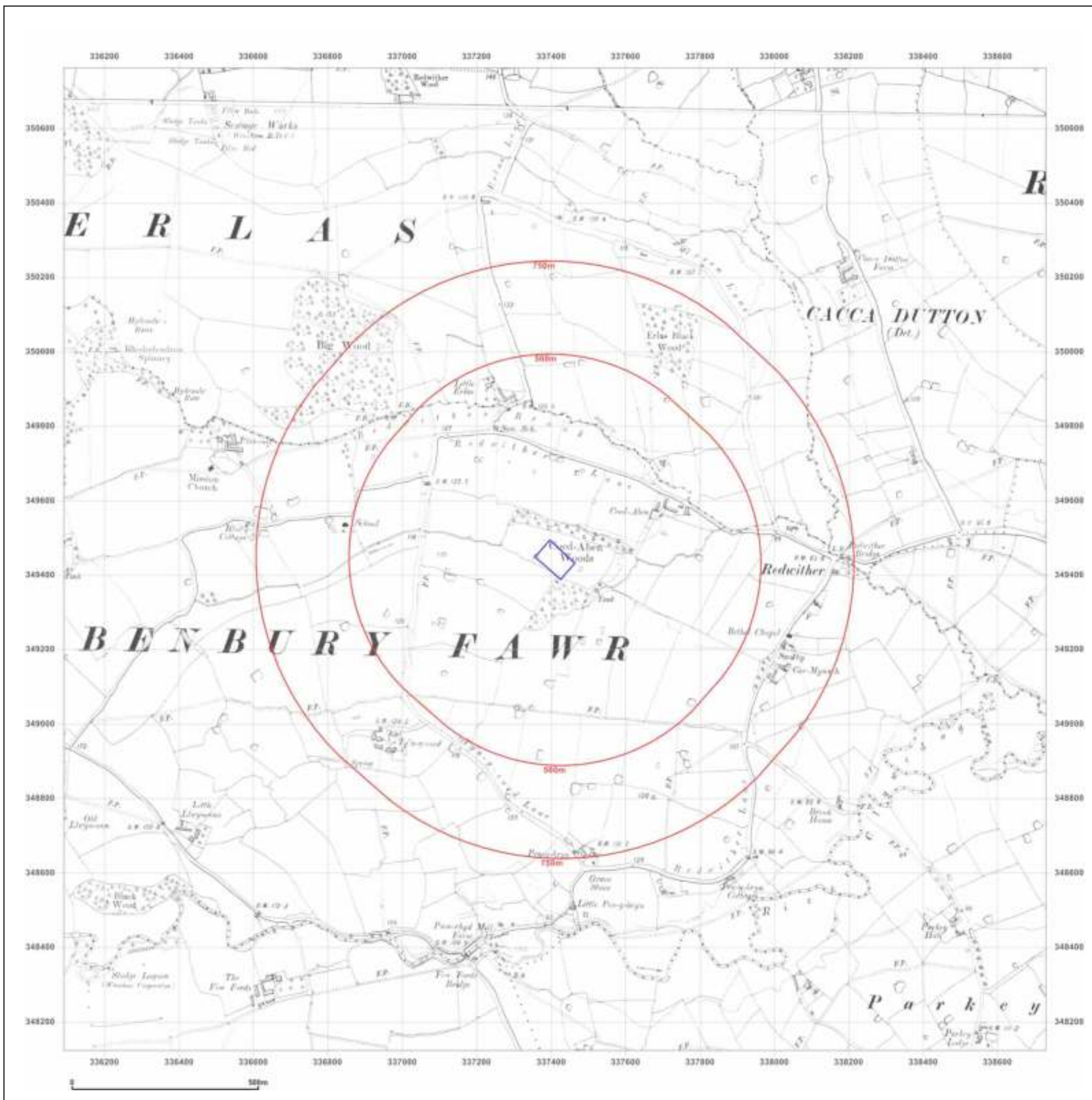
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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: County Series

Map date: 1909-1914

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1871
Revised 1914
Edition 1914
Copyright N/A
Levelled N/A

Surveyed 1872
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A



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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1872
Revised 1938
Edition 1938
Copyright N/A
Levelled N/A

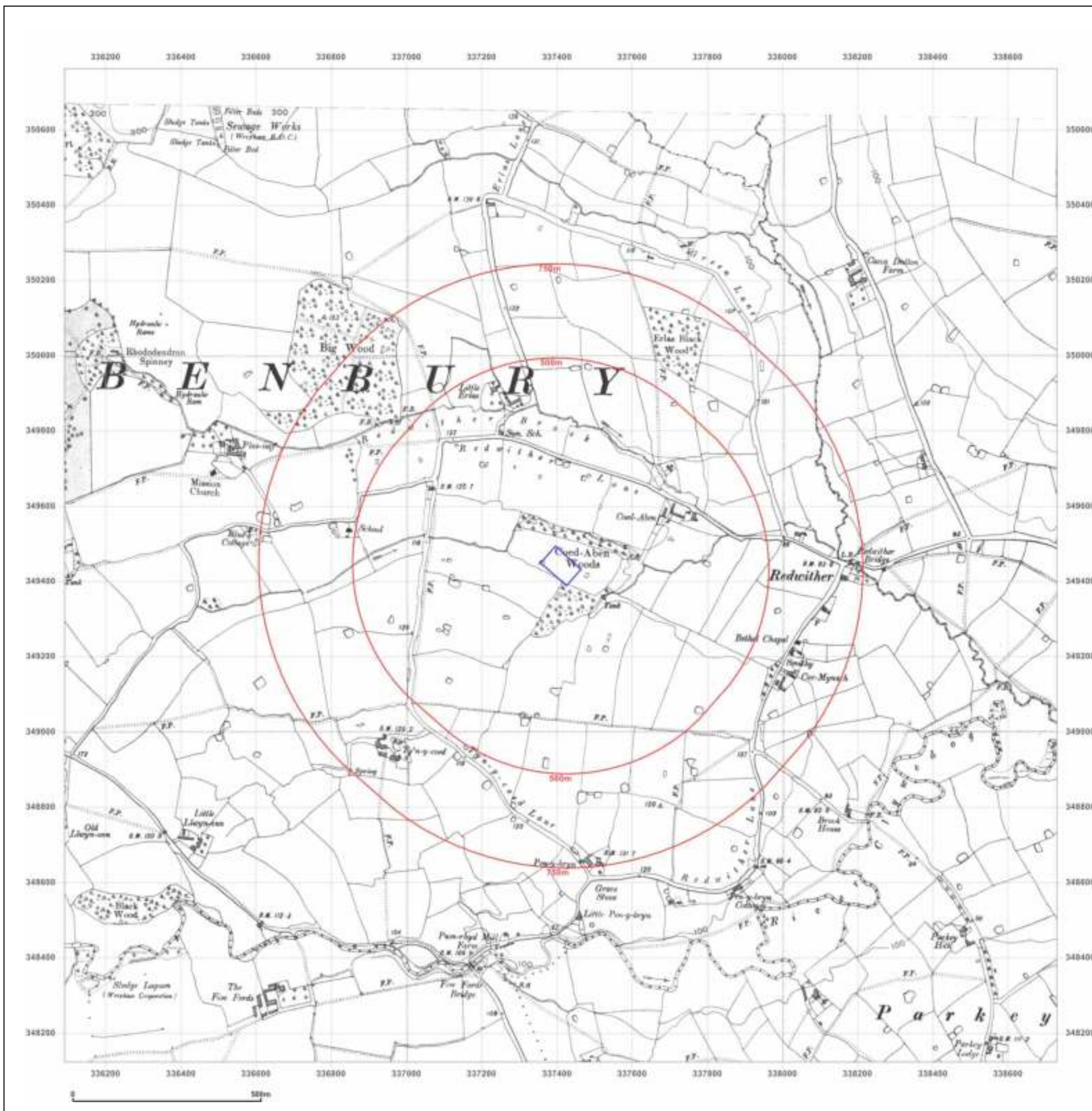


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: County Series

Map date: 1949

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1871
Revised 1949
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1872
Revised 1949
Edition N/A
Copyright N/A
Levelled N/A

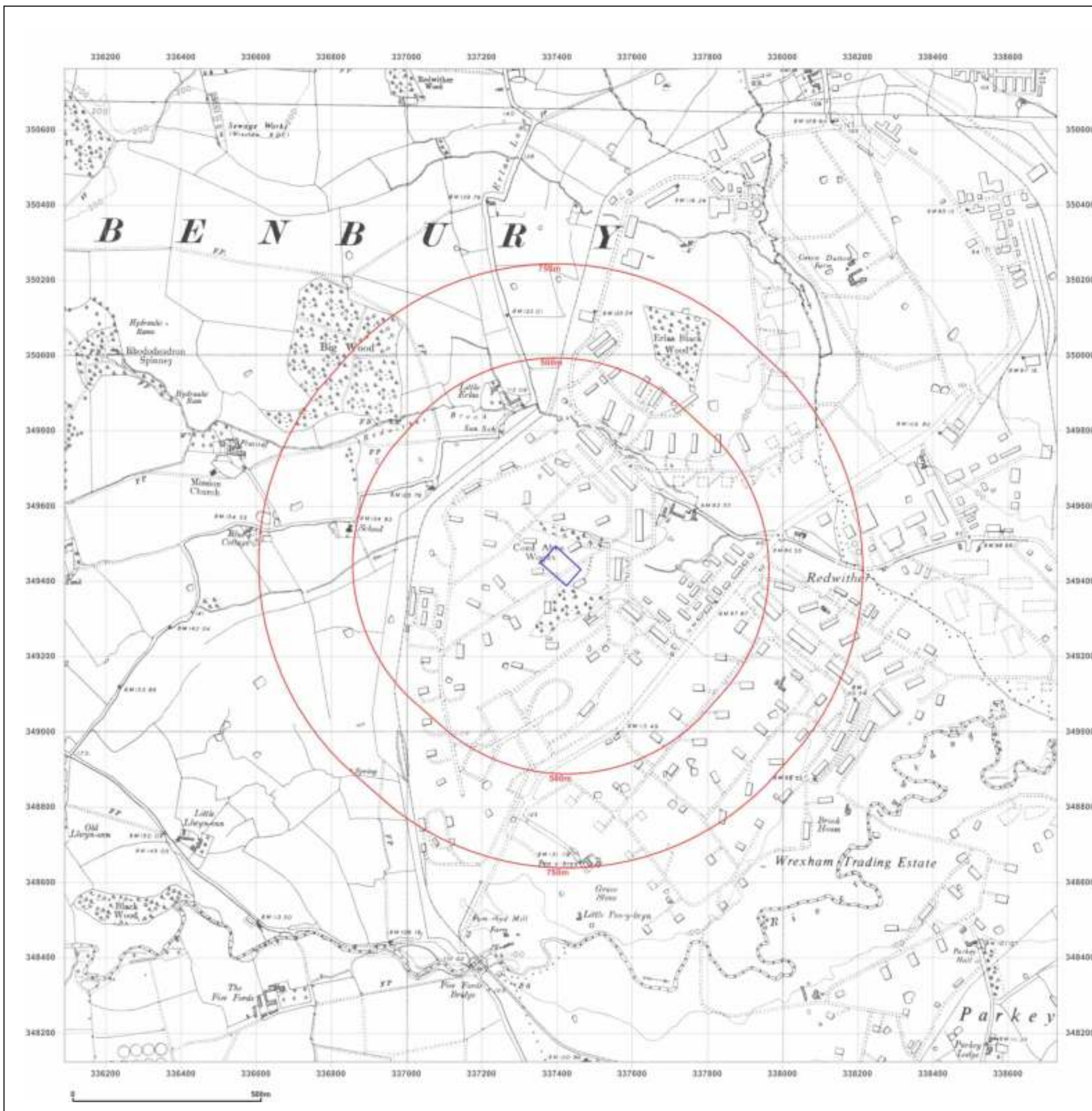


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Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: Provisional

Map date: 1960-1964

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1874
Revised 1960
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1964
Revised 1964
Edition N/A
Copyright N/A
Levelled N/A

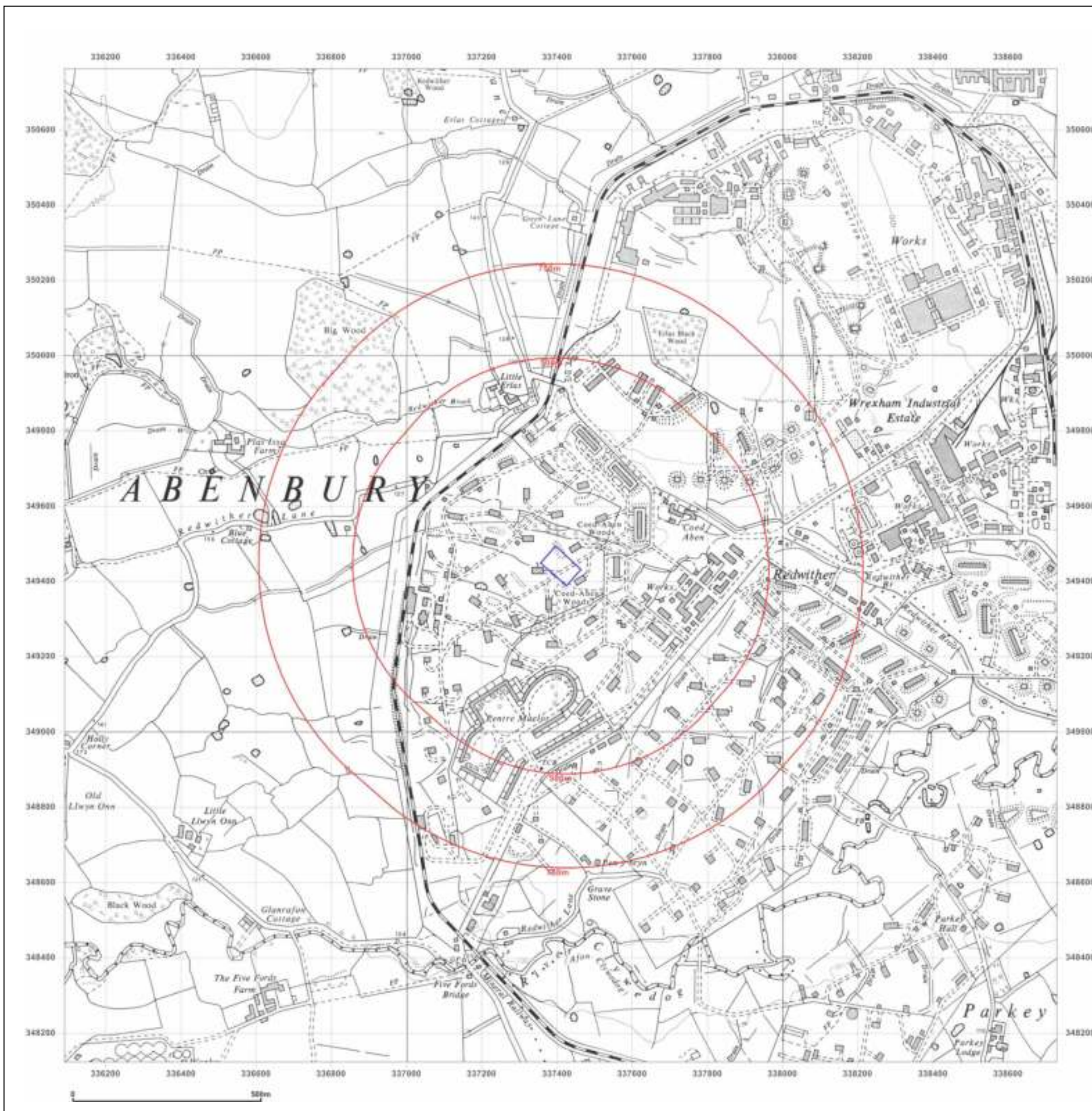


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: Provisional

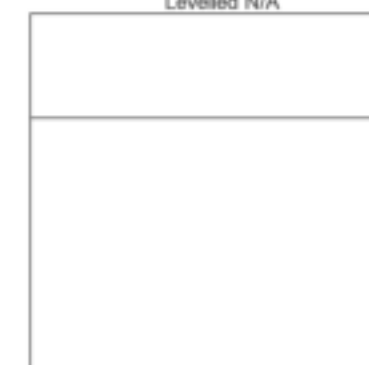
Map date: 1968

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1968
Revised 1968
Edition N/A
Copyright N/A
Levelled N/A

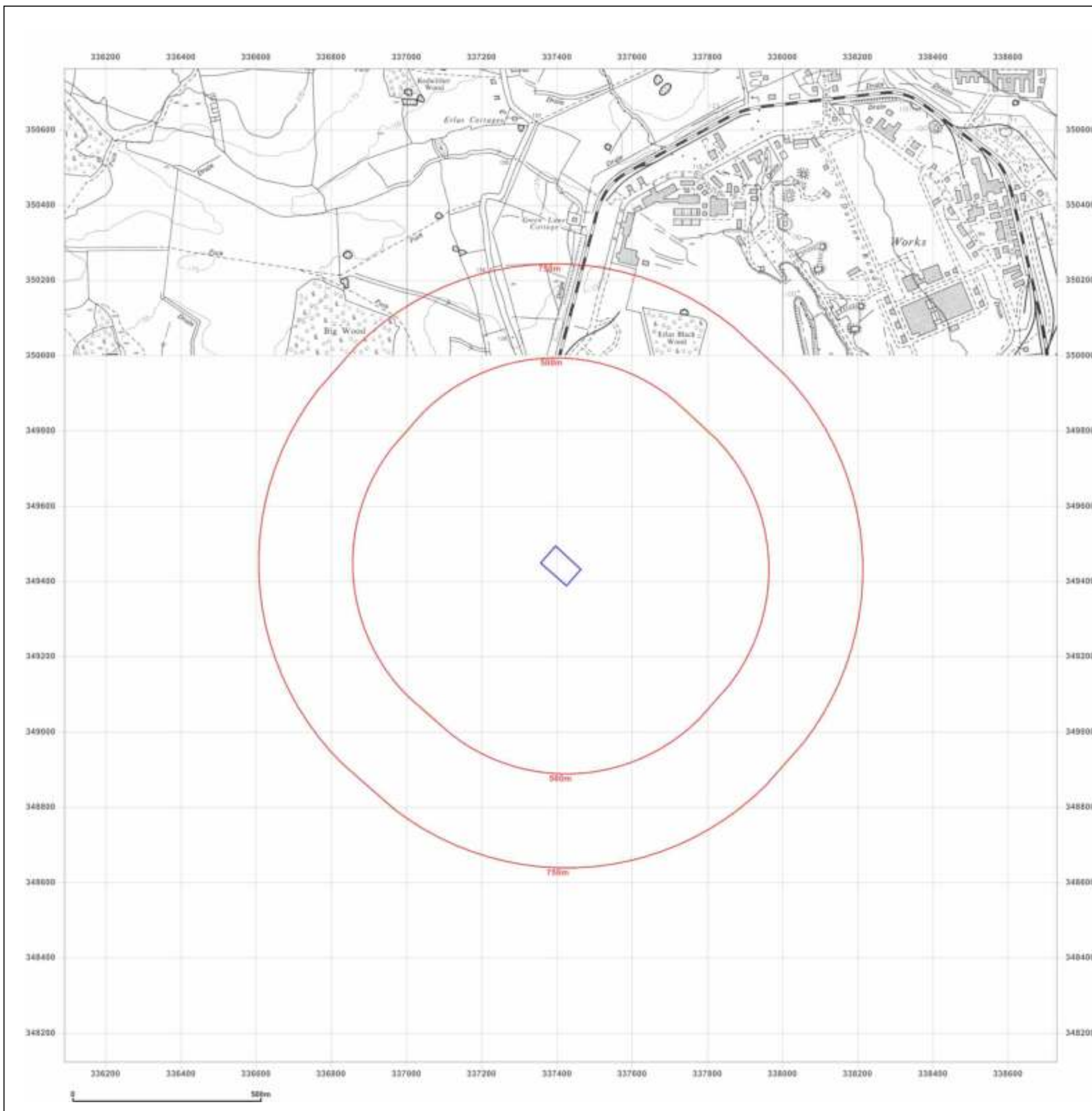


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Site Details:

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INDUSTRIAL ESTATE,
WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

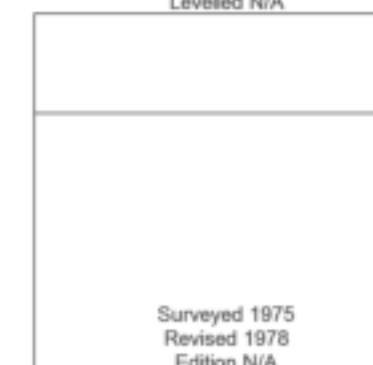
Map date: 1979-1982

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1970
Revised 1982
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1975
Revised 1978
Edition N/A
Copyright 1979
Levelled 1989

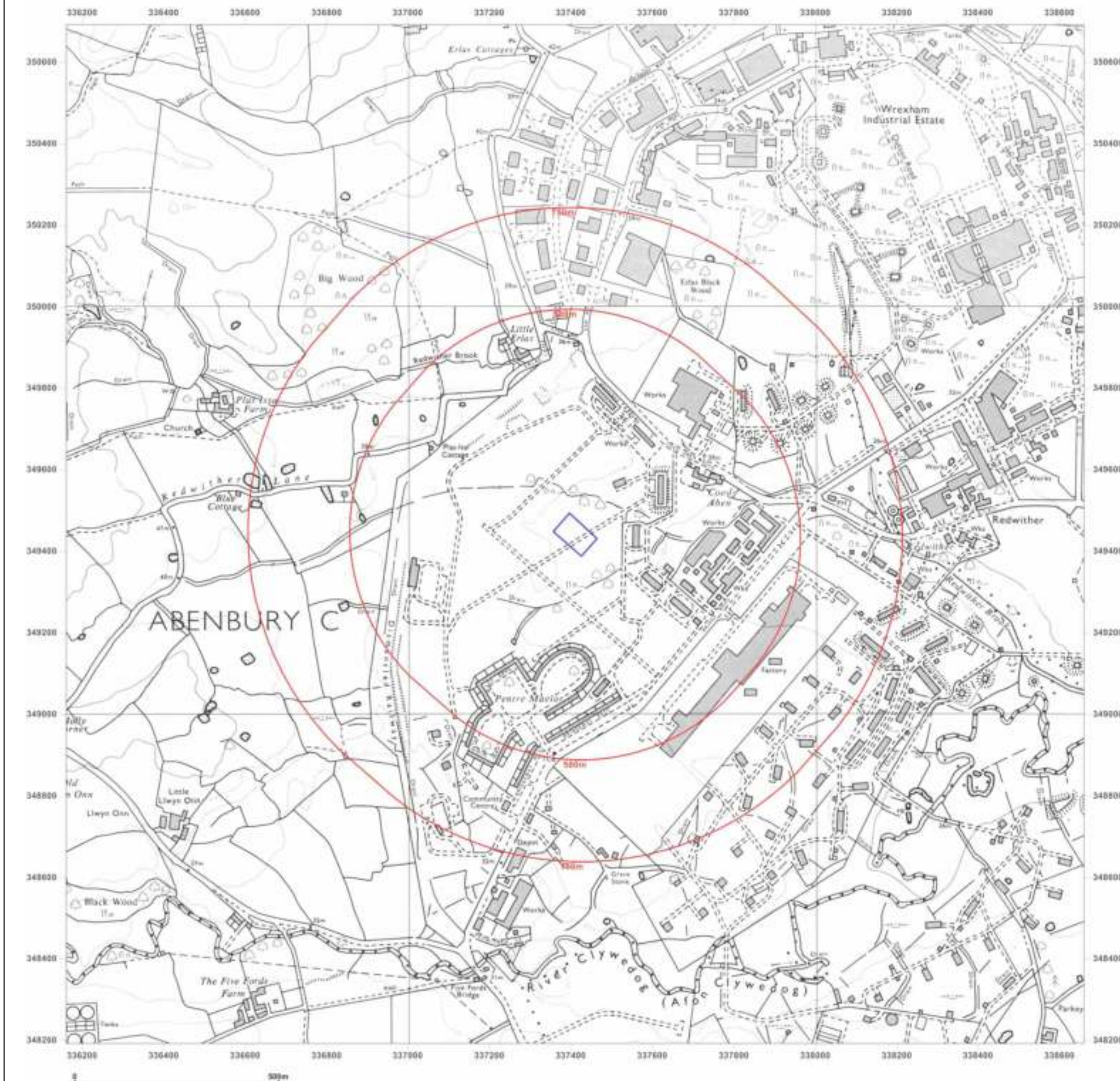


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INDUSTRIAL ESTATE,
WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 1992

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1990
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1983
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A

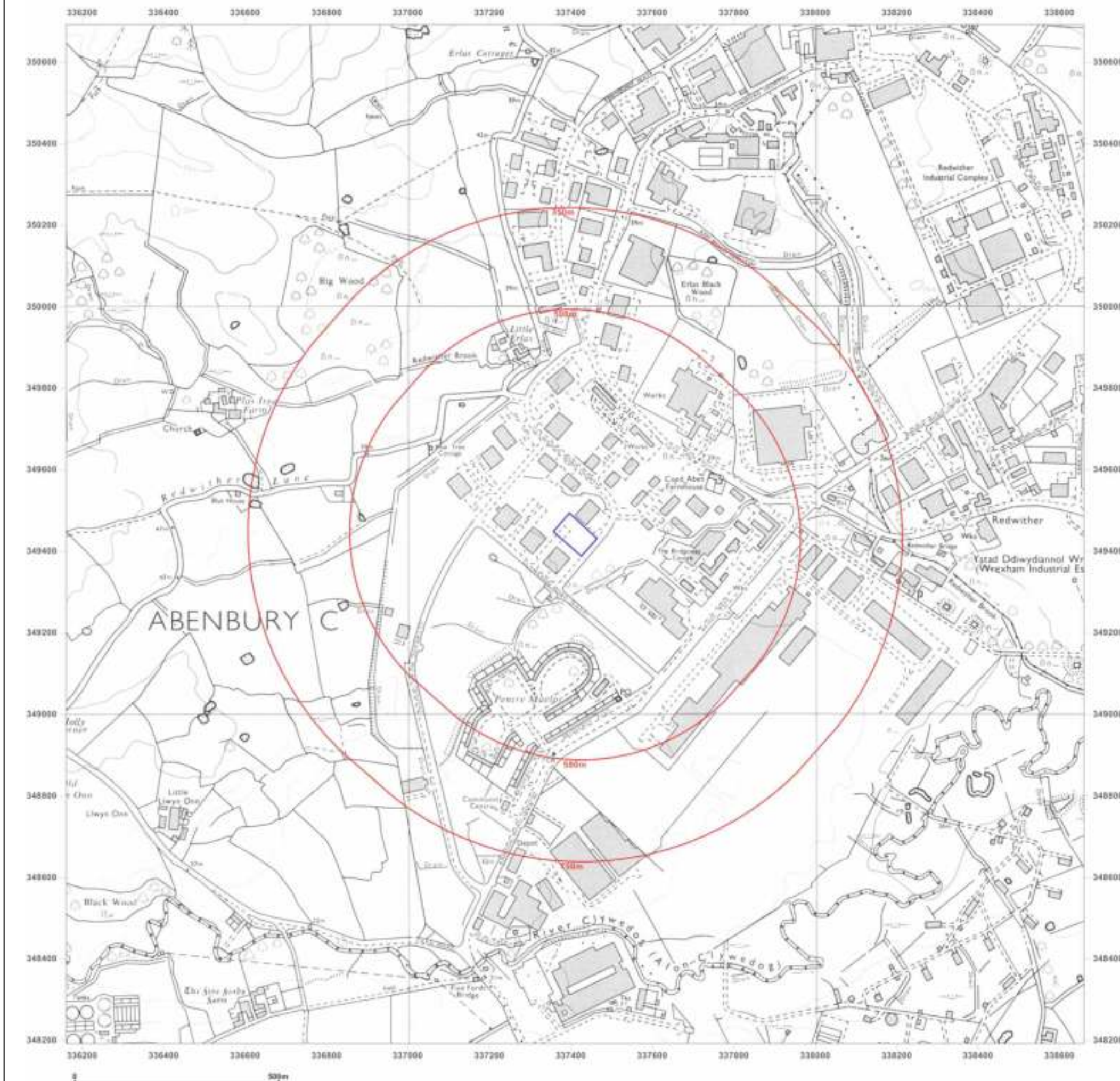


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

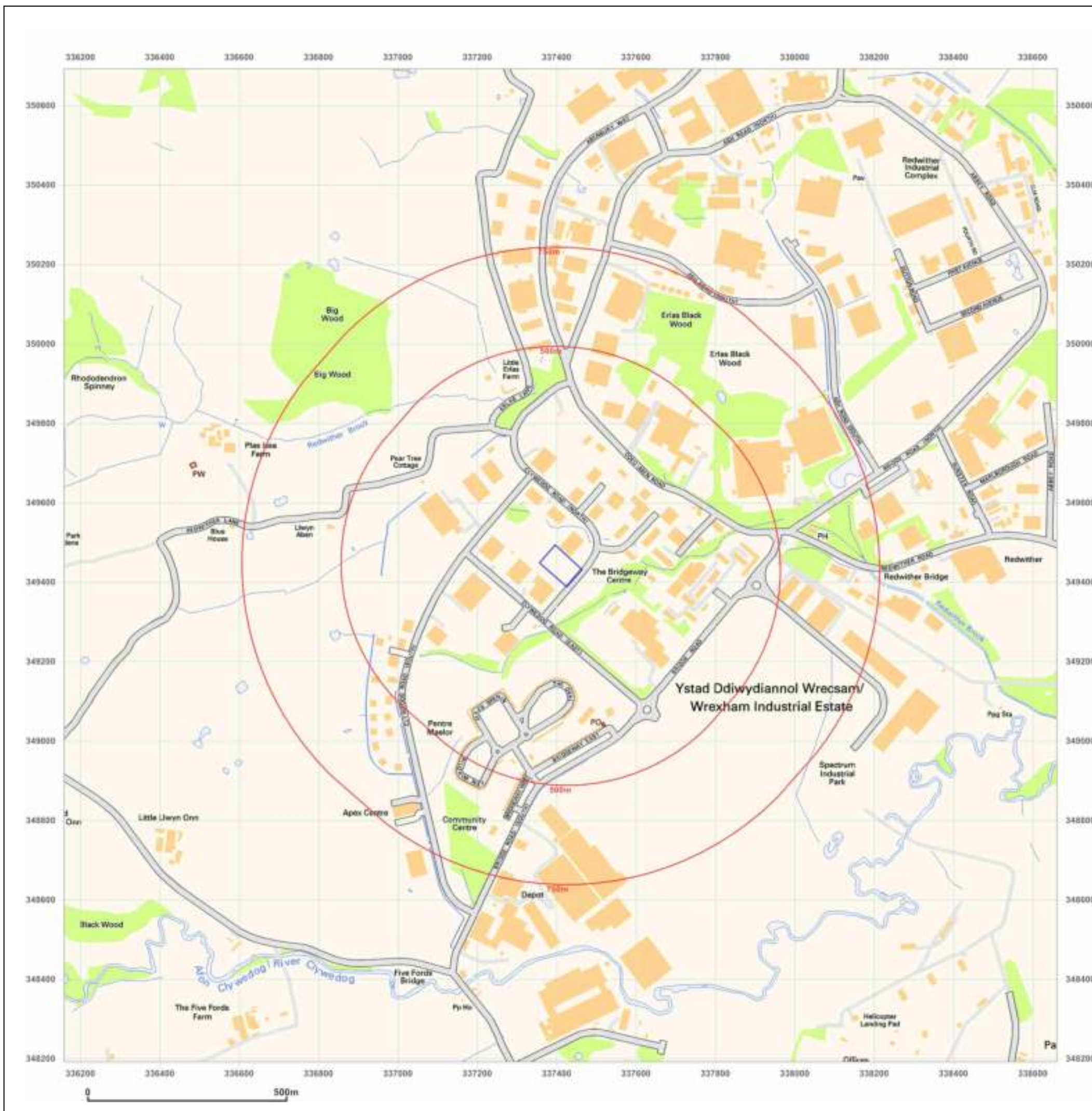


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WREXHAM, LL13 9XN

Client Ref: PO_16025_JCP_Limited_4371
Report Ref: HMD-6856311
Grid Ref: 337409, 349441

Map Name: National Grid

Map date: 2020

Scale: 1:10,000

Printed at: 1:10,000

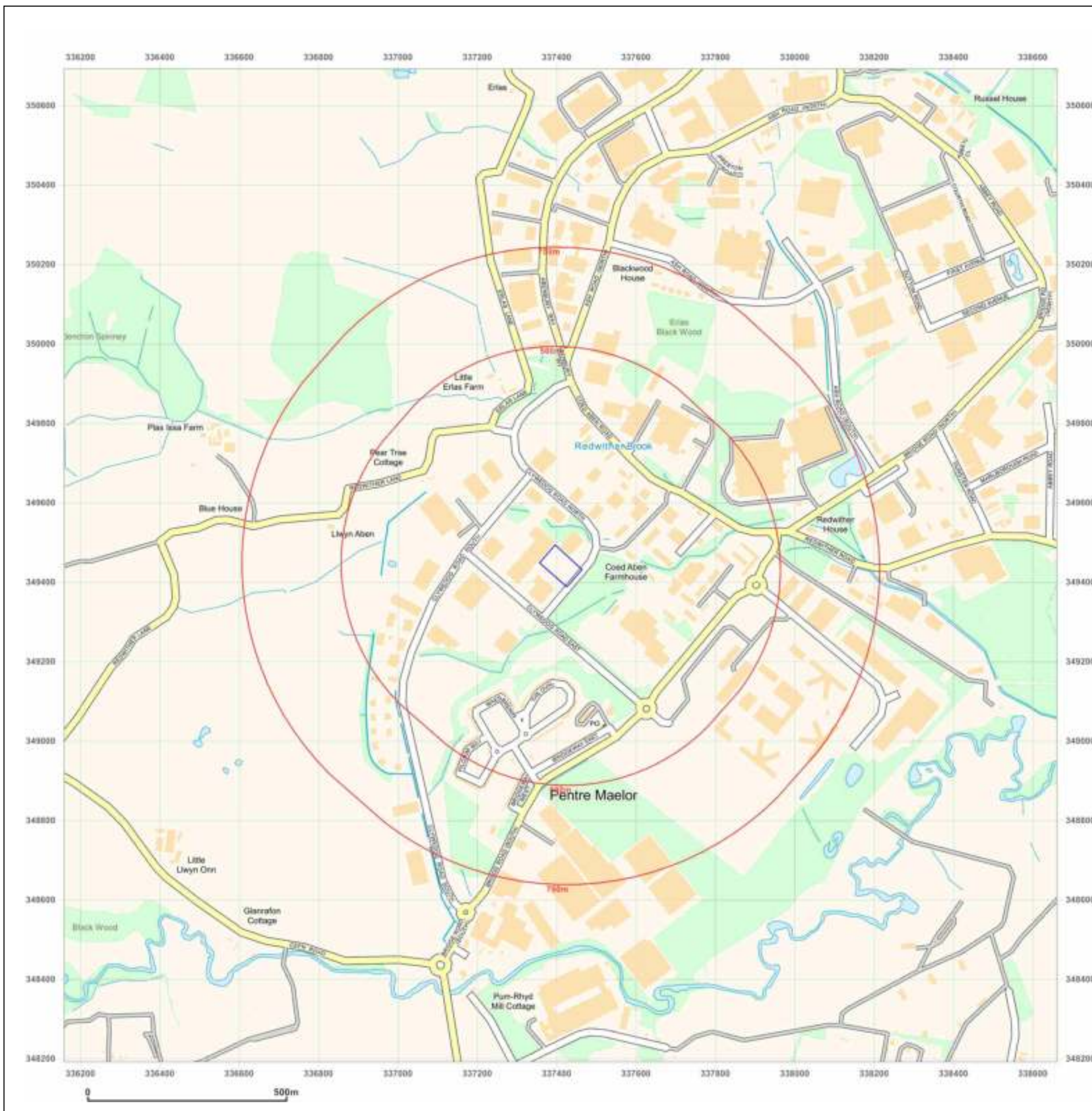


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Preliminary Unexploded Ordnance Risk Assessment



Project: LAND AT, CLYWEDOG ROAD NORTH, WREXHAM INDUSTRIAL ESTATE,
WREXHAM, LL13 9XN

Groundsure Ref: HMD-6856312

Report prepared by Dynasafe BACTEC Limited and FIND Mapping Limited

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Preliminary Unexploded Ordnance Threat Assessment

LAND AT, CLYWEDOG ROAD NORTH, WREXHAM INDUSTRIAL ESTATE, WREXHAM, LL13 9XN

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1 Executive Summary

1 Has a potential unexploded ordnance (UXO) risk been identified at the site in question?

YES

Indicative British / Allied UXO Risk

MEDIUM

Indicative German UXO Risk

NEGLIGIBLE

2 Does the site in question require further research to clarify the unexploded ordnance (UXO) risk to future ground works?

YES

3 Dynasafe BACTEC's recommendation:

A Stage 2 Detailed Unexploded Ordnance Desktop Threat Assessment of the site is carried out.

To request a quotation please call Dynasafe BACTEC Limited on 01322 284 550

If you order the recommended Stage 2 Detailed Desktop Threat Assessment, you will be refunded the fee for this BombRisk Preliminary Threat Assessment.

2 Introduction

About Dynasafe BACTEC Limited

Since 1991, Dynasafe BACTEC Limited has supported the UK construction industry by assessing the risk of encountering items of unexploded ordnance (UXO) during intrusive works. Dynasafe BACTEC's specialist advice provides essential information for threat assessments, improving safety and enhancing reputations, helping contractors avoid costly delays.

Dynasafe BACTEC holds the following accreditations: Occupational Health & Safety Management Systems (OHAS 18001:2007), Environmental Management Systems (ISO 14001:2004) and Quality Management Systems (ISO 9001:2008).

The risk of encountering UXO on most sites in the UK is low. However, where a site is at increased risk it is necessary to take measures to mitigate that risk. The factors affecting UXO threat assessment are based upon the history and previous usage of a site and its surroundings.

In 2009, the Construction Industry Research and Information Association (CIRIA) established a set of guidelines to assist industry professionals.

CIRIA recommends a four stage risk management process:

- **Preliminary threat assessment**
- **Detailed threat assessment**
- **Risk mitigation**
- **Implementation**

The preliminary threat assessment enables a non-UXO specialist to place a site in context and to identify whether a more detailed assessment is necessary. The assessment is based upon data obtained from desktop reviews of the site's history and its proximity to potential indicators of UXO contamination.

There are two principal groups of onshore UXO in the UK:

- **British / Allied Army, Air Force and Navy activities – domestic military activity**
- **Enemy bombing during WWI and WWII – aerial bombing and naval bombardment**

These two groups comprise many potential UXO risk contributing sources within the UK, the most significant of which are listed below. Georeferenced databases containing this information are used by BombRisk.com to identify areas of potentially elevated UXO risk.

- **Historic army, navy and air-force facilities**
- **Explosives / ammunition factories**
- **Munitions storage depots**
- **Historic military training areas and firing ranges**

- **British army explosive ordnance clearance tasks / recces**
- **WWII heavy anti-aircraft batteries**
- **WWII anti-invasion defensive fortifications**
- **Miscellaneous WWII pipe mined locations**
- **WWII prisoner of war camps**
- **WWII German bombing density statistics**
- **WWII bombing decoy sites**
- **Press articles regarding UXO finds**
- **Locations of Dynasafe BACTEC UXO finds**
- **Locations of Dynasafe BACTEC desktop threat assessments**
- **Locations of Dynasafe BACTEC on-site support services**

About FIND Mapping Limited

Established in 2006, FIND Mapping Limited is a pioneering web mapping and spatial data technology company offering online mapping and consultancy services. FIND technology powers the generation of this report.

www.findmaps.co.uk provides detailed mapping and a wealth of data sets to hundreds of the UK's top property, environmental and design/build companies.

FIND's consultancy services provide bespoke internet mapping solutions to a range of businesses enabling them to manage their spatial data more effectively.

While working closely with a wide range of reputable data providers including Ordnance Survey and the Environment Agency, FIND works independently of these organisations. A similar arm's-length relationship is maintained in terms of software and hardware providers. This enables the team at FIND to offer truly independent advice.

3 Methodology

Dynasafe BACTEC Limited and FIND have compiled a geo-referenced database of potential sources of UXO risk within the UK. From this information a range of risk zones have been defined.

The weighting of these zones is based upon the influence of all relevant factors. A WWII-era RAF airfield, for example, has a far greater zone of influence than a single WWII-era Anti-Aircraft Battery, as it would have covered a larger area, housed a much greater quantity / variety of munitions, seen more domestic troop training activities and would have been a more likely target for enemy bombers.

An online Preliminary Automated UXO Threat Assessment will determine an indicative level of UXO risk relating to a site. Note that these risk levels could be subject to change following the completion of any Detailed Desktop Threat Assessment for the same site.

The assessment will list all factors contributing to this weighting and will also give appropriate recommendations for further action, if considered necessary.

4 Search Results

Dynasafe BACTEC Limited's UXO Source Database

Within 10km of the site the following potential sources of explosive ordnance have been recorded:

Source	Number within 10km
Military Airfield Sites	1
Bombing Decoy Sites	2
Press Articles regarding UXO Finds	1
WWII Defence Related Positions & Pillboxes	18
Historic Army Camps	5
Army Explosive Ordnance Clearance Tasks/Recces	2
Sites Related to the Manufacture of Explosives and Explosive Ordnance	2
Dynasafe BACTEC Desk-top Threat Assessments	2
Abandoned Bombs	None recorded
Prisoner of War Camps	None recorded
Military Training Areas and Firing Ranges	None recorded
Heavy Anti-Aircraft Batteries	None recorded
Pipe Mined WWII Airfields	None recorded
Miscellaneous WWII Pipe Mined Locations	None recorded
Dynasafe BACTEC Unexploded Ordnance Finds	None recorded
Dynasafe BACTEC On-Site Support Services	None recorded

Of these sources, the following are deemed the most significant:

Sites Related to the Manufacture of Explosives and Explosive Ordnance

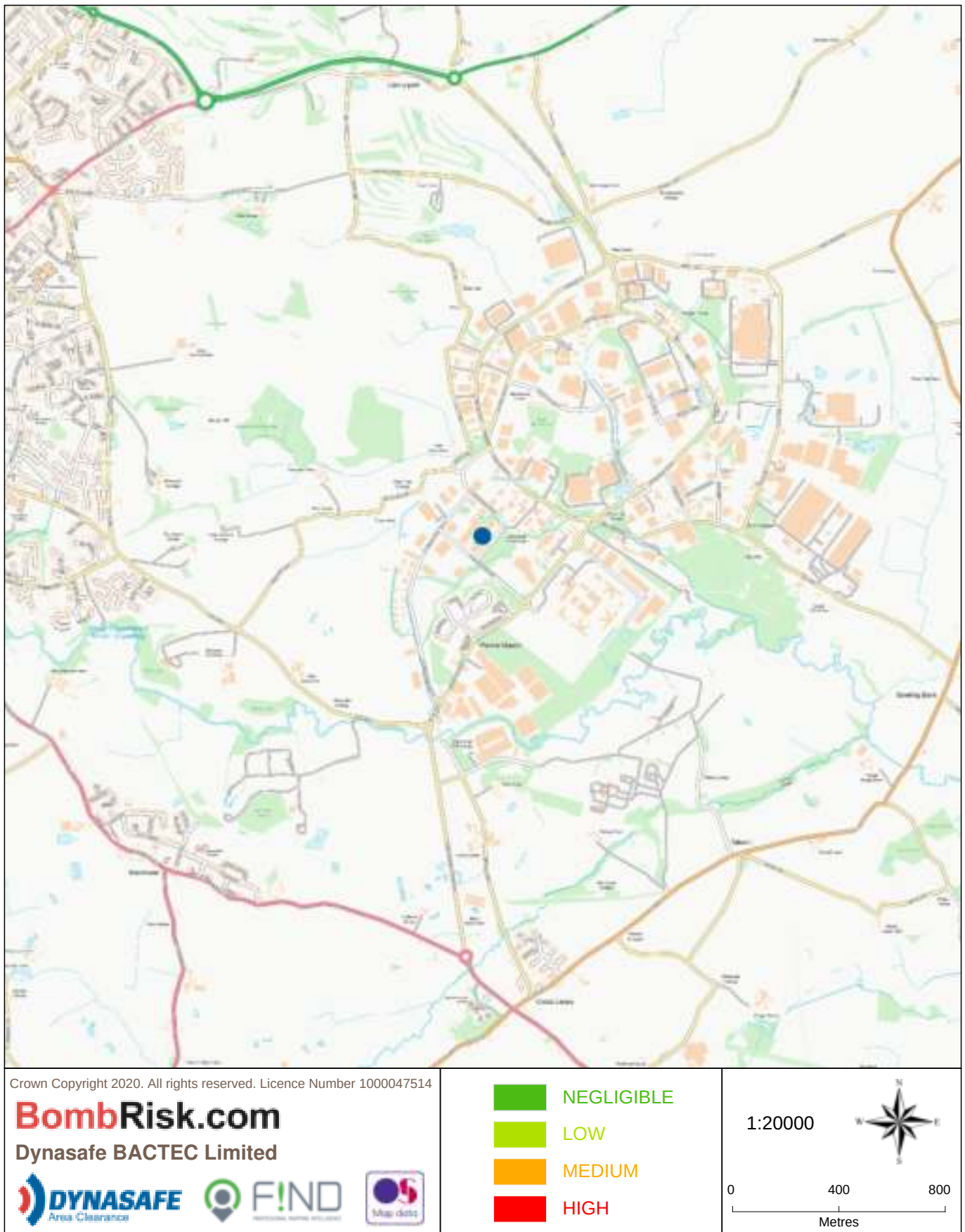
Facility Name	Approximate distance (km) from site
Wrexham, ROF, WWII	0.7

During both WWI and WWII many factories were established (or existing sites converted) to produce explosives and/or fill ordnance with explosive and chemical constituents. These ranged from small engineering works to large National Filling Factories (WWI) and Royal Ordnance Factories (WWII). The site of the proposed works lies in the vicinity of one of these facilities.

For a factory producing casings, for example, the associated risk is negligible. However, on sites handling or producing explosive and chemical weapons the risk of soil contamination can be high.

Disposal areas (often on site boundaries) can pose considerable risk. The history of the facility should be more fully researched.

5 Risk of UXO based on WWII German bombing density



6 Conclusions

Risk Levels and Recommendation

Indicative British / Allied UXO Risk

MEDIUM

There are potential sources of British / Allied UXO recorded in Dynasafe BACTEC's historical database in proximity to the site. It is recommended that further research is undertaken to determine more about these potential sources and how they may have affected the site. Given the proximity of these sources, the risk on site from UXO is considered to be Medium.

Indicative German UXO Risk

NEGLIGIBLE

Historical records indicate a negligible level of bombing density from WWII. If there is empirical evidence of UXB risk (i.e. anecdotal evidence) then please contact Dynasafe BACTEC for further advice.

This preliminary assessment has identified a Negligible risk from German unexploded bombs at this site.

Conclusion

This preliminary assessment has resulted in an overall Medium risk from UXO. Dynasafe BACTEC would recommend that a Detailed UXO Threat Assessment Desk Top Study is undertaken for this site.

Detailed assessments are conducted offline by Dynasafe BACTEC's researchers and use information such as historical mapping, WWII-era aerial photography, written air-raid precaution records and where necessary local archive research to fully qualify the risk on site. Land use, changes to building layout during WWII and post war redevelopment will also have an impact on any remaining level of risk from UXO. It is often possible to 'zone' sites into different risk categories. The lead time for a detailed assessment will vary between 3-10 working days dependent upon the complexity of the site and the additional site specific information required.

For a quotation, or more information, please contact Dynasafe BACTEC on 01322 284 550.

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