

CAMBRIAN QUARRY, GWERNYMYNYDD, FLINTSHIRE, CH7 5LW

Order Details

Date: 07/10/2024
Your ref: OE1437-0426-H
Our Ref: GS-R7K-FYP-E5C-HQE

Site Details

Location: 321446 362069
Area: 5.32 ha
Authority: [Sir y Fflint - Flintshire County Council](#) ↗



Summary of findings

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Aerial image

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OS MasterMap site plan

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[Insight User Guide](#) ↗

Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	66	41	101	158	-
29 >	1.2 >	Historical tanks >	0	0	0	4	-
29	1.3	Historical energy features	0	0	0	0	-
30	1.4	Historical petrol stations	0	0	0	0	-
30 >	1.5 >	Historical garages >	0	0	3	0	-
30	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
31 >	2.1 >	Historical industrial land uses >	87	55	131	213	-
49 >	2.2 >	Historical tanks >	0	0	0	5	-
49	2.3	Historical energy features	0	0	0	0	-
50	2.4	Historical petrol stations	0	0	0	0	-
50 >	2.5 >	Historical garages >	0	0	4	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
51	3.1	Active or recent landfill	0	0	0	0	-
51 >	3.2 >	Historical landfill (BGS records) >	1	0	0	0	-
52	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
52 >	3.4 >	Historical landfill (EA/NRW records) >	3	0	0	0	-
53	3.5	Historical waste sites	0	0	0	0	-
53 >	3.6 >	Licensed waste sites >	0	0	5	0	-
55 >	3.7 >	Waste exemptions >	0	1	4	1	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
56 >	4.1 >	Recent industrial land uses >	2	2	2	-	-
57 >	4.2 >	Current or recent petrol stations >	0	0	1	0	-
57	4.3	Electricity cables	0	0	0	0	-
57	4.4	Gas pipelines	0	0	0	0	-
58	4.5	Sites determined as Contaminated Land	0	0	0	0	-



58	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
58	4.7	Regulated explosive sites	0	0	0	0	-
58	4.8	Hazardous substance storage/usage	0	0	0	0	-
58	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
59	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
59	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
59	4.12	Radioactive Substance Authorisations	0	0	0	0	-
59 >	4.13 >	<u>Licensed Discharges to controlled waters ></u>	0	0	0	3	-
60	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
60	4.15	Pollutant release to public sewer	0	0	0	0	-
60	4.16	List 1 Dangerous Substances	0	0	0	0	-
60	4.17	List 2 Dangerous Substances	0	0	0	0	-
61 >	4.18 >	<u>Pollution Incidents (EA/NRW) ></u>	0	0	7	0	-
62	4.19	Pollution inventory substances	0	0	0	0	-
62	4.20	Pollution inventory waste transfers	0	0	0	0	-
62	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
63 >	5.1 >	<u>Superficial aquifer ></u>	Identified (within 500m)				
65 >	5.2 >	<u>Bedrock aquifer ></u>	Identified (within 500m)				
67 >	5.3 >	<u>Groundwater vulnerability ></u>	Identified (within 50m)				
68 >	5.4 >	<u>Groundwater vulnerability- soluble rock risk ></u>	Identified (within 0m)				
69 >	5.5 >	<u>Groundwater vulnerability- local information ></u>	Identified (within 0m)				
70 >	5.6 >	<u>Groundwater abstractions ></u>	0	0	0	0	3
71 >	5.7 >	<u>Surface water abstractions ></u>	0	0	0	0	1
72	5.8	Potable abstractions	0	0	0	0	0
72	5.9	Source Protection Zones	0	0	0	0	-
72	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<u>Hydrology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
73	6.1	Water Network (OS MasterMap)	0	0	0	-	-



73	6.2	Surface water features	0	0	0	-	-
74 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
74 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
75 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
76	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
76	7.2	Historical Flood Events	0	0	0	-	-
76	7.3	Flood Defences	0	0	0	-	-
77	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
77	7.5	Flood Storage Areas	0	0	0	-	-
78	7.6	Flood Zone 2	None (within 50m)				
78	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
79 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
81 >	9.1 >	Groundwater flooding >	Negligible (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
82 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	1	0	0	1	8
83	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
83 >	10.3 >	Special Areas of Conservation (SAC) >	0	0	0	0	4
85	10.4	Special Protection Areas (SPA)	0	0	0	0	0
85	10.5	National Nature Reserves (NNR)	0	0	0	0	0
85 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	1
86 >	10.7 >	Designated Ancient Woodland >	0	0	0	2	57
88	10.8	Biosphere Reserves	0	0	0	0	0
88	10.9	Forest Parks	0	0	0	0	0
89	10.10	Marine Conservation Zones	0	0	0	0	0
89	10.11	Green Belt	0	0	0	0	0
89	10.12	Proposed Ramsar sites	0	0	0	0	0



89	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
89	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
90	10.15	Nitrate Sensitive Areas	0	0	0	0	0
90 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	0
91	10.17	SSSI Impact Risk Zones	0	-	-	-	-
91	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
92	11.1	World Heritage Sites	0	0	0	-	-
93 >	11.2 >	Area of Outstanding Natural Beauty >	1	0	0	-	-
93	11.3	National Parks	0	0	0	-	-
93	11.4	Listed Buildings	0	0	0	-	-
94	11.5	Conservation Areas	0	0	0	-	-
94	11.6	Scheduled Ancient Monuments	0	0	0	-	-
94	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
95 >	12.1 >	Agricultural Land Classification >	Grade 4 (within 250m)				
96	12.2	Open Access Land	0	0	0	-	-
97	12.3	Tree Felling Licences	0	0	0	-	-
97	12.4	Environmental Stewardship Schemes	0	0	0	-	-
97	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
98	13.1	Priority Habitat Inventory	0	0	0	-	-
98	13.2	Habitat Networks	0	0	0	-	-
98	13.3	Open Mosaic Habitat	0	0	0	-	-
98	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
99 >	14.1 >	10k Availability >	Identified (within 500m)				
100	14.2	Artificial and made ground (10k)	0	0	0	0	-
101	14.3	Superficial geology (10k)	0	0	0	0	-

101	14.4	Landslip (10k)	0	0	0	0	-
102	14.5	Bedrock geology (10k)	0	0	0	0	-
102	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
103 >	15.1 >	50k Availability >	Identified (within 500m)				
104 >	15.2 >	Artificial and made ground (50k) >	1	1	0	0	-
105 >	15.3 >	Artificial ground permeability (50k) >	1	1	-	-	-
106 >	15.4 >	Superficial geology (50k) >	0	0	2	1	-
107	15.5	Superficial permeability (50k)	None (within 50m)				
107 >	15.6 >	Landslip (50k) >	0	0	0	1	-
107	15.7	Landslip permeability (50k)	None (within 50m)				
108 >	15.8 >	Bedrock geology (50k) >	6	5	35	29	-
112 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
113 >	15.10 >	Bedrock faults and other linear features (50k) >	2	4	8	9	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
115 >	16.1 >	BGS Boreholes >	1	0	0	-	-
Page	Section	Natural ground subsidence >					
116 >	17.1 >	Shrink swell clays >	Negligible (within 50m)				
117 >	17.2 >	Running sands >	Very low (within 50m)				
119 >	17.3 >	Compressible deposits >	Very low (within 50m)				
121 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
122 >	17.5 >	Landslides >	Very low (within 50m)				
123 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
125 >	18.1 >	BritPits >	6	2	8	21	-
132 >	18.2 >	Surface ground workings >	55	30	82	-	-
139 >	18.3 >	Underground workings >	14	10	11	42	123
146	18.4	Underground mining extents	0	0	0	0	-
146 >	18.5 >	Historical Mineral Planning Areas >	3	2	0	4	-



147 >	18.6 >	Non-coal mining >	6	0	4	7	13
150 >	18.7 >	JPB mining areas >	Identified (within 0m)				
151	18.8	The Coal Authority non-coal mining	0	0	0	0	-
151 >	18.9 >	Researched mining >	0	0	4	5	-
152 >	18.10 >	Mining record office plans >	1	0	2	0	-
152 >	18.11 >	BGS mine plans >	2	1	0	0	-
152 >	18.12 >	Coal mining >	Identified (within 0m)				
153	18.13	Brine areas	None (within 0m)				
153	18.14	Gypsum areas	None (within 0m)				
153	18.15	Tin mining	None (within 0m)				
153	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes >	On site	0-50m	50-250m	250-500m	500-2000m
154 >	19.1 >	Natural cavities >	0	0	0	2	-
155 >	19.2 >	Mining cavities >	2	2	1	3	14
156	19.3	Reported recent incidents	0	0	0	0	-
157	19.4	Historical incidents	0	0	0	0	-
157	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
158 >	20.1 >	Radon >	Greater than 30% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
160 >	21.1 >	BGS Estimated Background Soil Chemistry >	14	9	-	-	-
161	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
162	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
163	22.1	Underground railways (London)	0	0	0	-	-
163	22.2	Underground railways (Non-London)	0	0	0	-	-
164	22.3	Railway tunnels	0	0	0	-	-
164 >	22.4 >	Historical railway and tunnel features >	0	0	2	-	-
164	22.5	Royal Mail tunnels	0	0	0	-	-



164	22.6	Historical railways	0	0	0	-	-
165	22.7	Railways	0	0	0	-	-
165	22.8	Crossrail 1	0	0	0	0	-
165	22.9	Crossrail 2	0	0	0	0	-
165	22.10	HS2	0	0	0	0	-

Recent aerial photograph

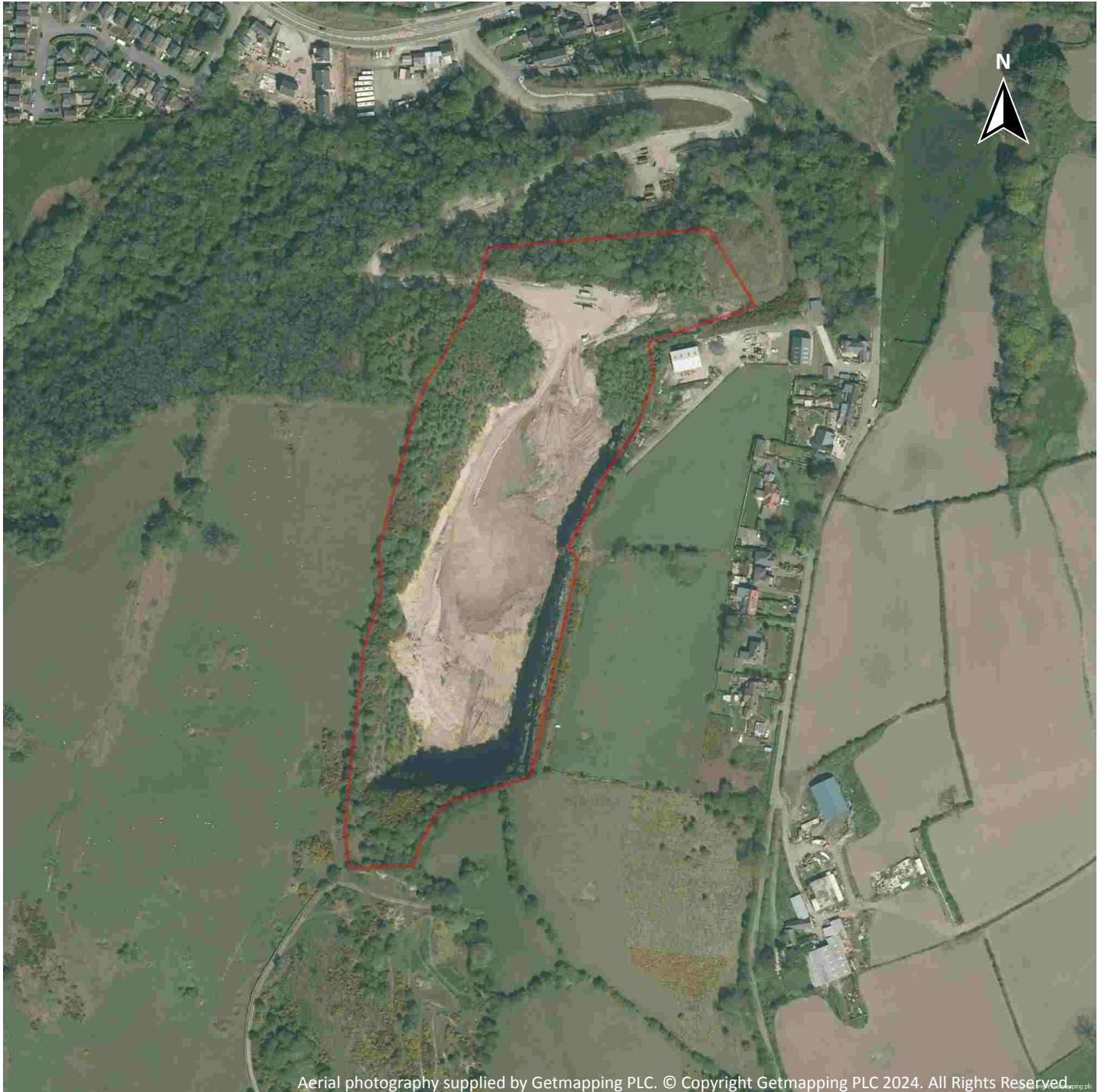


Capture Date: 10/04/2020

Site Area: 5.32ha



Recent site history - 2017 aerial photograph



Capture Date: 07/05/2017

Site Area: 5.32ha



Recent site history - 2013 aerial photograph



Capture Date: 04/06/2013

Site Area: 5.32ha



Recent site history - 2009 aerial photograph

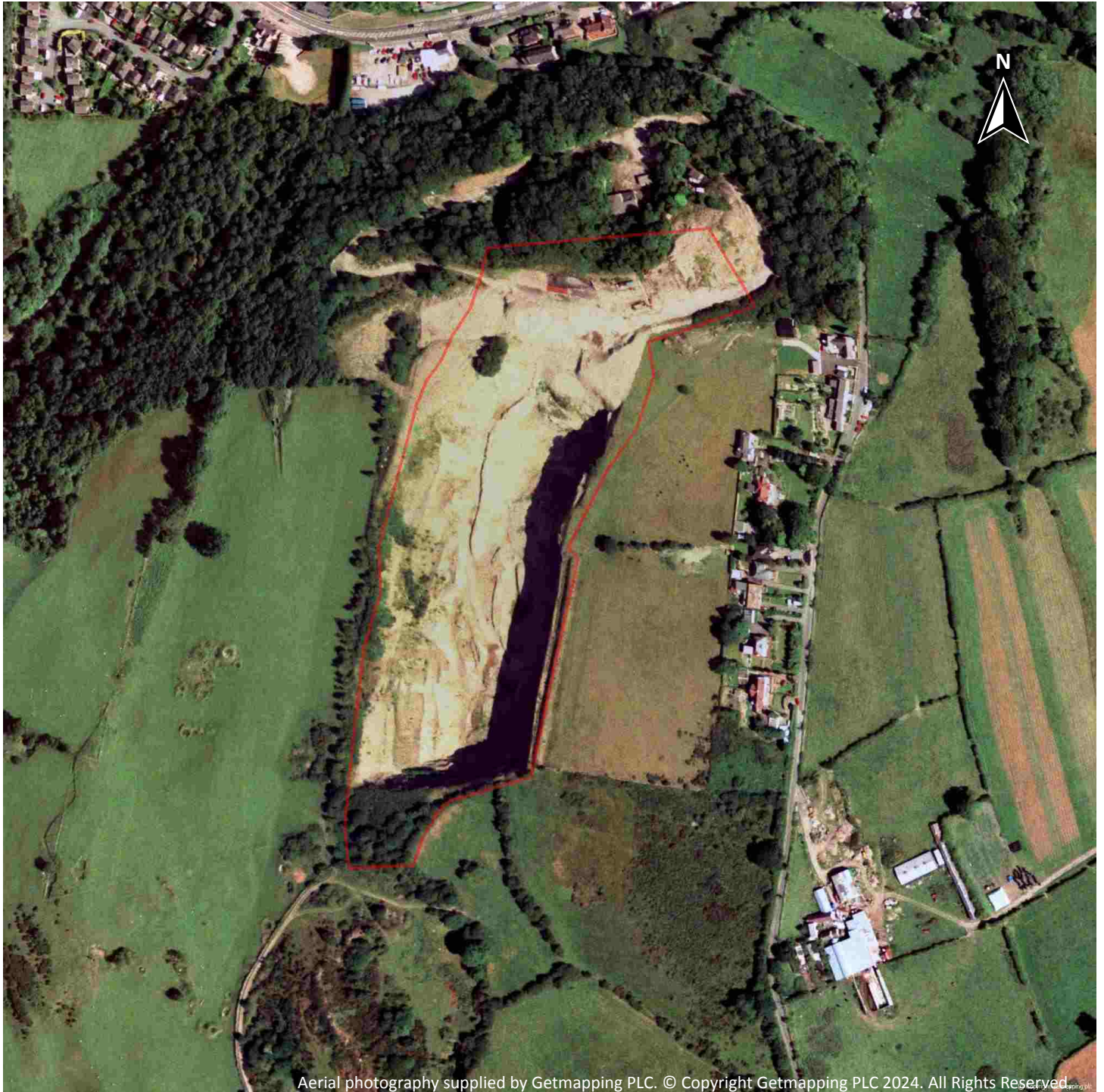


Capture Date: 01/06/2009

Site Area: 5.32ha



Recent site history - 2001 aerial photograph

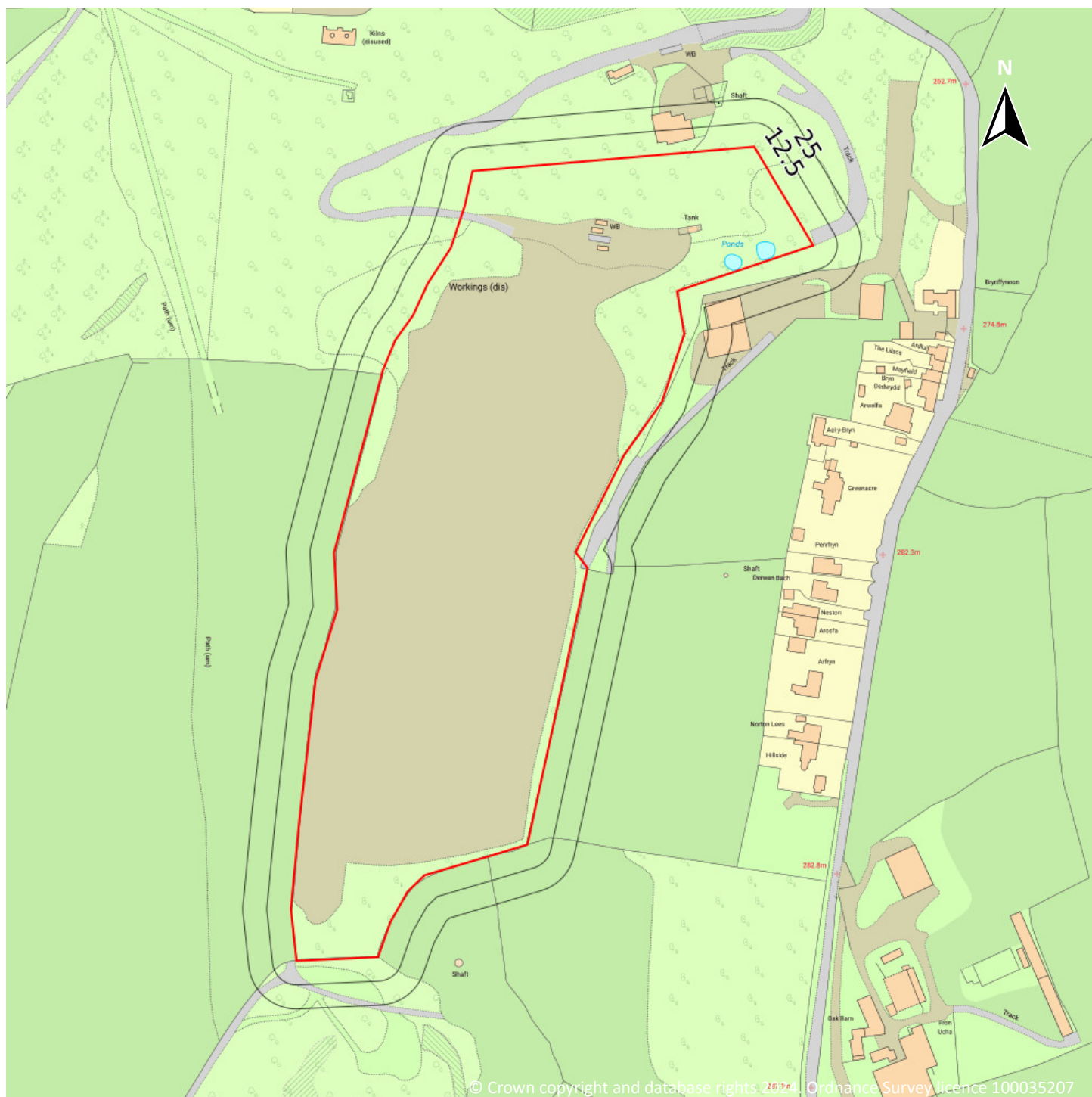


Capture Date: 28/07/2001

Site Area: 5.32ha



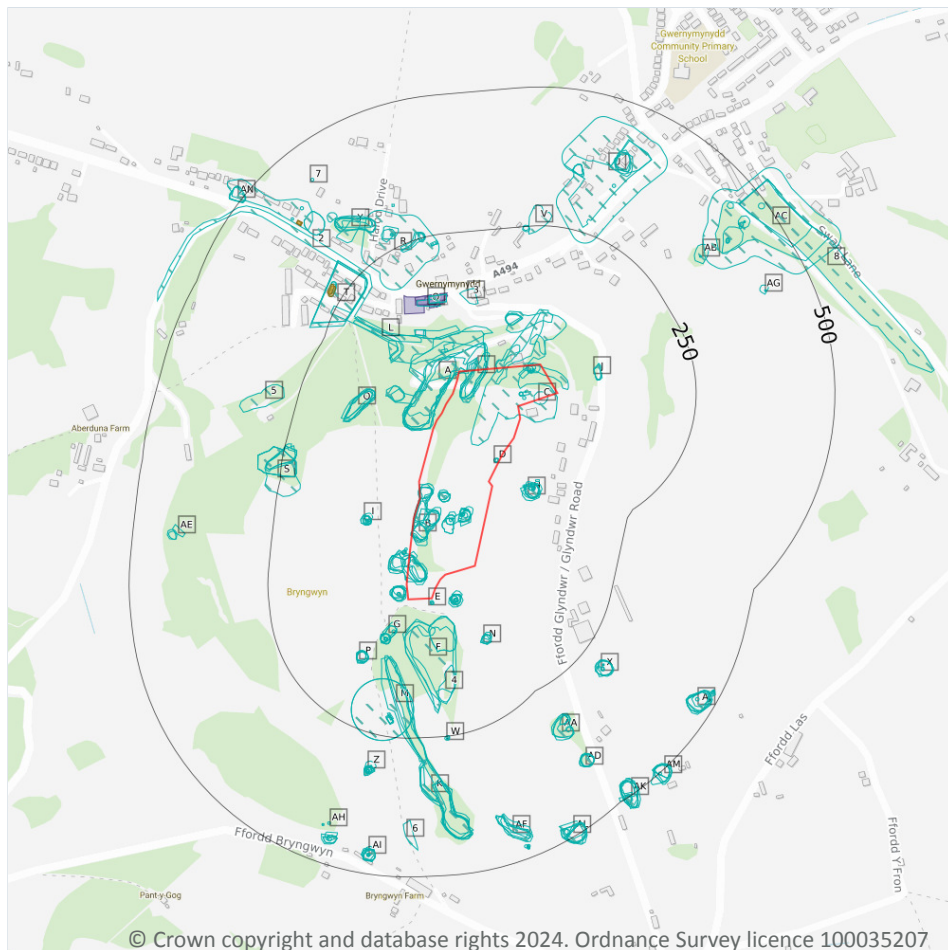
OS MasterMap site plan



Site Area: 5.32ha



1 Past land use



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

1.1 Historical industrial land uses

Records within 500m

366

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

Features are displayed on the Past land use map on [page 15](#) >

ID	Location	Land use	Dates present	Group ID
1	On site	Unspecified Quarry	1872	840769



ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Disused Quarries	1981	806095
A	On site	Unspecified Ground Workings	1964	816432
A	On site	Unspecified Quarries	1910 - 1938	886283
A	On site	Unspecified Quarries	1900	949282
A	On site	Unspecified Quarries	1948	952171
B	On site	Refuse Heap	1872	810135
B	On site	Unspecified Ground Workings	1910	816349
B	On site	Lead Shaft	1872	820779
B	On site	Unspecified Disused Quarry	1981	836605
B	On site	Unspecified Quarry	1992	840711
B	On site	Unspecified Heap	1872	844256
B	On site	Unspecified Old Shafts	1900	846340
B	On site	Unspecified Heap	1948	860362
B	On site	Unspecified Heaps	1900	865382
B	On site	Old Lead Shafts	1910	868733
B	On site	Old Lead Shafts	1910 - 1948	870403
B	On site	Unspecified Heaps	1948	887285
B	On site	Unspecified Heaps	1964	891126
B	On site	Unspecified Heap	1981	893216
B	On site	Unspecified Heaps	1948	894036
B	On site	Unspecified Heap	1900	897809
B	On site	Unspecified Ground Workings	1910 - 1938	898242
B	On site	Unspecified Heap	1992	899519
B	On site	Unspecified Heap	1938	900935
B	On site	Unspecified Heap	1910 - 1938	912973
B	On site	Unspecified Heap	1964	921499
B	On site	Unspecified Heap	1964	933750
B	On site	Unspecified Heap	1964	937975



ID	Location	Land use	Dates present	Group ID
B	On site	Unspecified Heap	1900	938453
B	On site	Unspecified Heaps	1938	942624
B	On site	Unspecified Heaps	1872	945266
B	On site	Unspecified Heap	1964 - 1981	946324
B	On site	Unspecified Heaps	1872	946992
B	On site	Old Lead Shafts	1938	949493
B	On site	Unspecified Ground Workings	1900 - 1910	950566
B	On site	Unspecified Heap	1872	953750
B	On site	Unspecified Heaps	1948	957214
B	On site	Unspecified Heap	1872	957649
B	On site	Old Lead Shafts	1910 - 1948	971738
B	On site	Unspecified Heap	1992	977467
B	On site	Unspecified Heap	1910	985490
B	On site	Unspecified Heap	1900	987499
B	On site	Unspecified Heaps	1938	996333
B	On site	Unspecified Heap	1938	999898
B	On site	Old Lead Shafts	1948	1009296
C	On site	Refuse Heap	1964	810213
C	On site	Unspecified Old Quarry	1900	812895
C	On site	Unspecified Ground Workings	1910	816430
C	On site	Old Clay Shafts	1938	824832
C	On site	Old Clay Shafts	1938	824833
C	On site	Unspecified Shafts	1900	839293
C	On site	Unspecified Shafts	1900	839294
C	On site	Lead Shafts	1872	848155
C	On site	Lead Shafts	1872	848165
C	On site	Unspecified Disused Shaft	1964	852598
C	On site	Old Lead Shafts	1948	863440



ID	Location	Land use	Dates present	Group ID
C	On site	Old Lead Shafts	1910	893195
C	On site	Unspecified Heap	1964	927144
C	On site	Unspecified Heap	1910	928092
C	On site	Old Lead Shafts	1910	958995
C	On site	Old Lead Shafts	1948	967482
C	On site	Unspecified Heap	1872	983263
C	On site	Unspecified Quarries	1938 - 1948	990191
D	On site	Unspecified Old Shaft	1900	823949
D	On site	Old Lead Shaft	1910 - 1948	935370
B	1m SW	Unspecified Heap	1872	987446
B	3m SW	Unspecified Heap	1948	979205
B	3m SW	Unspecified Heap	1910	985522
B	3m SW	Unspecified Heap	1938	960713
E	4m S	Old Lead Shafts	1910 - 1948	891059
B	5m SW	Unspecified Kiln	1872	846733
B	6m SW	Unspecified Heap	1964 - 1981	927169
B	6m SW	Unspecified Heap	1992	930054
B	6m SW	Unspecified Pit	1992	904010
B	6m SW	Unspecified Pit	1964 - 1981	939268
E	6m S	Unspecified Old Shafts	1900	846342
B	7m SW	Unspecified Old Kiln	1938	865947
B	7m SW	Unspecified Old Kiln	1910	952570
B	7m SW	Unspecified Old Kiln	1948	889483
A	7m N	Unspecified Quarry	1872	840770
B	7m SW	Unspecified Old Shafts	1900	846345
B	9m SW	Unspecified Pit	1900	1009039
A	12m NW	Stone Quarry	1992	821575
B	13m SW	Unspecified Old Shafts	1900	846341



ID	Location	Land use	Dates present	Group ID
B	13m SW	Old Lead Shafts	1910 - 1948	996933
C	19m NE	Unspecified Heap	1964	844328
E	30m S	Unspecified Heap	1900	934392
E	31m S	Unspecified Heap	1910	911817
E	31m S	Unspecified Heap	1948	986039
E	32m S	Unspecified Heap	1872	878721
E	32m S	Unspecified Heap	1938	949771
E	33m S	Unspecified Disused Shaft	1964 - 1981	933757
E	33m S	Unspecified Disused Shaft	1992	964613
F	36m S	Unspecified Pits	1964	855968
F	37m S	Unspecified Pit	1992	831180
F	37m S	Unspecified Quarry	1981	840712
E	38m S	Unspecified Old Shafts	1900	846344
E	39m S	Old Lead Shafts	1948	934868
E	39m S	Old Lead Shafts	1938	865451
E	40m S	Old Lead Shafts	1910	1001433
F	41m S	Unspecified Old Quarry	1910 - 1938	999298
A	41m N	Unspecified Quarries	1948	980633
A	41m N	Old Lime Kilns	1938	822834
A	42m N	Lime Kiln	1872	833797
G	46m SW	Unspecified Heaps	1872	862835
F	47m S	Stone Quarry	1948	821573
H	51m E	Unspecified Heap	1964 - 1992	913763
G	55m SW	Unspecified Heaps	1964 - 1981	907039
G	55m SW	Unspecified Heaps	1992	955989
H	55m E	Unspecified Old Shafts	1900	846450
H	56m E	Unspecified Heap	1900	990348
H	57m E	Unspecified Heap	1948	904318



ID	Location	Land use	Dates present	Group ID
H	57m E	Unspecified Heap	1910	924431
H	59m E	Unspecified Heap	1938	982764
G	60m SW	Old Lead Shafts	1910 - 1948	936537
H	61m E	Unspecified Heap	1872	895933
C	62m N	Unspecified Ground Workings	1964	816431
H	66m E	Unspecified Disused Shaft	1981	911255
H	66m E	Unspecified Disused Shaft	1992	947565
A	70m N	Old Lime Kilns	1910	822833
H	71m E	Old Lead Shafts	1910	836230
H	71m E	Unspecified Old Shafts	1948	1001475
A	72m NW	Unspecified Quarry	1872	840772
A	72m NW	Unspecified Quarries	1910 - 1938	925499
G	72m SW	Unspecified Heap	1910	885814
H	72m E	Old Lead Shaft	1938	846896
G	73m SW	Unspecified Heap	1938	1002668
G	73m SW	Unspecified Heap	1948	906445
I	74m SW	Unspecified Heap	1872	933239
H	74m E	Lead Shaft	1872	820822
C	74m N	Unspecified Heap	1910	988107
J	74m NE	Unspecified Pit	1948	942159
J	75m NE	Unspecified Pit	1910	869346
I	75m SW	Unspecified Heap	1948 - 1981	1002762
J	75m NE	Unspecified Pit	1938	934433
C	75m N	Unspecified Heap	1938	1006008
I	76m SW	Old Lead Shaft	1938	884632
C	77m N	Unspecified Heap	1948	936807
I	77m SW	Unspecified Heap	1910	885298
G	79m SW	Old Lead Shafts	1938	863280



ID	Location	Land use	Dates present	Group ID
I	79m SW	Unspecified Heap	1992	947826
G	79m SW	Old Lead Shafts	1910	970681
G	80m SW	Old Lead Shafts	1948	982913
I	81m SW	Old Lead Shaft	1948	894045
I	81m SW	Unspecified Old Shafts	1900	846343
I	81m SW	Old Lead Shaft	1910	943806
2	86m N	Tramway Sidings	1900	856560
A	88m N	Unspecified Disused Kilns	1992	1005495
A	88m N	Unspecified Disused Kilns	1964 - 1981	1009194
K	107m S	Unspecified Old Quarry	1948	866395
L	107m NW	Unspecified Heap	1964	942775
K	108m SW	Unspecified Old Quarry	1910	983575
M	110m S	Unspecified Old Quarry	1900	985679
L	110m NW	Unspecified Heap	1900	977755
K	111m S	Unspecified Old Quarry	1938	950006
N	114m S	Unspecified Heap	1948 - 1981	920025
N	114m S	Unspecified Heap	1992	1009860
N	115m S	Unspecified Heap	1872	876586
N	116m S	Unspecified Heap	1910	1002907
N	116m S	Unspecified Heap	1938	901261
O	118m NW	Unspecified Quarries	1948	957507
3	118m N	Smithy	1872	833096
O	120m NW	Unspecified Quarries	1938	913173
O	120m NW	Unspecified Quarries	1910	990436
O	120m NW	Unspecified Quarry	1872	840771
P	121m SW	Unspecified Heap	1938	945013
P	122m SW	Unspecified Heap	1910	975550
P	123m SW	Unspecified Heap	1964 - 1981	888916



ID	Location	Land use	Dates present	Group ID
P	123m SW	Unspecified Heap	1992	968507
Q	123m N	Smithy	1900	833095
P	123m SW	Unspecified Heap	1872 - 1900	995298
P	123m SW	Unspecified Heap	1948	936958
O	124m NW	Unspecified Pit	1964 - 1981	904768
O	125m NW	Unspecified Quarries	1900	990173
4	125m S	Unspecified Quarry	1981	840713
Q	128m N	Garage	1981	935839
Q	128m N	Garage	1992	1004428
M	148m S	Unspecified Disused Quarry	1992	914604
M	148m S	Unspecified Disused Quarry	1981	984269
R	183m N	Lead Mine	1900	838222
M	207m S	Unspecified Kiln	1872	846734
M	209m S	Unspecified Old Kiln	1938	906911
M	211m S	Unspecified Old Kiln	1910	874321
S	212m W	Unspecified Old Quarry	1948	986175
M	214m S	Unspecified Old Kiln	1948	993410
T	220m NW	Unspecified Works	1900	835970
S	221m W	Unspecified Pit	1964	831179
S	221m W	Unspecified Disused Quarry	1992	909789
S	221m W	Unspecified Disused Quarry	1981	956453
T	222m NW	Clay Works	1948	996798
T	222m NW	Clay Works	1910 - 1938	880271
S	226m W	Unspecified Old Quarry	1938	990664
S	226m W	Unspecified Old Quarry	1910	901810
S	228m W	Unspecified Old Quarry	1900	955838
R	231m N	Old Lead Shaft	1948	871133
R	232m N	Old Lead Shafts	1938	836226



ID	Location	Land use	Dates present	Group ID
U	232m NE	Disused Lead Mine	1900	942592
R	233m N	Old Lead Shaft	1948	994748
V	236m N	Unspecified Heap	1872	844332
R	237m N	Unspecified Ground Workings	1910	935786
R	241m N	Unspecified Ground Workings	1964	944302
V	241m N	Unspecified Pit	1948	1004928
R	243m N	Old Lead Shafts	1948	918673
V	243m N	Unspecified Pit	1938	910221
R	246m N	Unspecified Pit	1938	831275
W	249m S	Old Lead Shaft	1910	893997
W	249m S	Old Lead Shaft	1938 - 1948	948301
W	250m S	Unspecified Old Shaft	1900	823880
U	259m NE	Disused Lead Mine	1910 - 1938	968899
T	265m NW	Unspecified Tanks	1900	933001
R	267m N	Unspecified Heap	1964	950321
T	267m NW	Unspecified Tanks	1910	957049
R	267m N	Unspecified Heap	1900	990472
T	268m NW	Unspecified Tanks	1938	914160
R	272m N	Old Lead Shafts	1948	901750
R	273m N	Old Lead Shafts	1910	983540
5	274m W	Unspecified Heap	1948	1001647
X	281m SE	Unspecified Ground Workings	1910	816509
X	282m SE	Unspecified Heap	1938	866286
X	282m SE	Unspecified Heap	1948	959552
X	283m SE	Unspecified Heap	1900	914623
X	286m SE	Unspecified Shaft	1900	825665
K	289m S	Unspecified Old Quarry	1900	990305
X	291m SE	Lead Shaft	1872	820821



ID	Location	Land use	Dates present	Group ID
X	292m SE	Old Lead Shaft	1938 - 1948	898467
X	292m SE	Old Lead Shaft	1910	976911
Y	296m N	Unspecified Heap	1910	872044
Y	296m N	Unspecified Heap	1948	879638
Y	296m N	Unspecified Heap	1938	1004932
Z	299m S	Unspecified Heap	1872	887951
K	304m S	Unspecified Ground Workings	1981	816351
Y	304m N	Unspecified Heap	1992	893127
Y	304m NW	Refuse Heap	1900	810178
Y	306m N	Unspecified Heap	1964	992905
Z	306m S	Lead Shaft	1872	820780
Z	307m S	Unspecified Heap	1938	936387
Z	308m S	Unspecified Heap	1910	879131
Z	309m S	Unspecified Heap	1948	959402
AA	310m S	Unspecified Old Quarry	1910 - 1938	886439
AA	310m S	Unspecified Quarry	1900	840809
Z	311m S	Unspecified Disused Shaft	1964 - 1981	920017
Z	311m S	Unspecified Disused Shaft	1992	986327
AA	313m S	Unspecified Heap	1992	931672
AA	313m S	Unspecified Heap	1964 - 1981	964853
AA	313m S	Unspecified Old Quarry	1948	916392
Z	314m S	Old Lead Shaft	1910 - 1938	881115
Z	315m S	Unspecified Shaft	1900	825601
Z	318m S	Old Lead Shaft	1948	930373
R	320m N	Old Lead Shafts	1910	836227
K	325m S	Unspecified Quarry	1872	877265
K	331m S	Unspecified Quarry	1992	882666
K	331m S	Unspecified Quarry	1964 - 1981	994669



ID	Location	Land use	Dates present	Group ID
AA	335m S	Unspecified Heap	1872	844372
AB	336m NE	Unspecified Heap	1872	844264
U	345m NE	Lead Shaft	1872	820810
U	346m N	Unspecified Quarry	1910	1007132
AB	347m NE	Unspecified Shafts	1872	839260
U	347m N	Unspecified Quarry	1938	970243
U	349m N	Unspecified Quarry	1948	925812
Y	352m NW	Unspecified Heap	1964 - 1981	859692
Y	352m NW	Unspecified Heap	1992	957161
AC	354m NE	Lead Mine	1900	838216
Y	355m NW	Unspecified Heap	1872	844329
Y	372m NW	Refuse Heap	1872	810181
U	372m NE	Unspecified Heap	1872 - 1900	1004558
U	374m NE	Disused Lead Mine	1948	937280
U	376m NE	Unspecified Heap	1948	878423
U	379m NE	Unspecified Heap	1910 - 1938	950683
U	382m NE	Unspecified Heap	1964	940945
AC	382m NE	Disused Lead Mine	1938	937928
AC	384m NE	Unspecified Shafts	1872	839261
AD	391m S	Unspecified Pit	1964 - 1981	911466
AD	391m S	Unspecified Pit	1992	998551
AD	391m SE	Gravel Pit	1900	852207
AD	392m SE	Old Gravel Pit	1938 - 1948	932282
AD	394m SE	Old Gravel Pit	1910	909093
6	398m S	Unspecified Old Quarries	1900	832307
AC	400m NE	Unspecified Old Shafts	1900	938123
AC	401m NE	Unspecified Disused Old Shafts	1910	820875
AC	402m NE	Unspecified Old Shafts	1938 - 1948	902254



ID	Location	Land use	Dates present	Group ID
Y	405m NW	Lead Shafts	1872	848157
Y	405m NW	Lead Shafts	1872	848156
AE	406m W	Unspecified Level	1872	852713
AF	408m S	Unspecified Pit	1964 - 1981	869518
AG	409m NE	Unspecified Heap	1872	844263
AF	409m S	Unspecified Quarry	1872	840810
AF	410m S	Unspecified Old Quarry	1938 - 1948	956970
AF	412m S	Unspecified Old Quarry	1910	870696
AF	413m S	Unspecified Old Quarries	1900	832325
AG	417m NE	Unspecified Shaft	1872	825606
AE	421m W	Old Lead Level	1910 - 1938	923899
AE	421m W	Old Lead Level	1948	912463
AH	425m S	Old Lead Shafts	1938	836217
AH	432m S	Old Lead Shafts	1938	836218
7	432m NW	Wind Pump	1910	825861
AC	435m NE	Unspecified Old Shafts	1900	985831
AC	437m NE	Unspecified Heap	1872	844262
AC	438m NE	Unspecified Disused Old Shafts	1910	820876
AC	438m NE	Unspecified Old Shafts	1938 - 1948	910641
AH	439m S	Unspecified Heap	1872	1009900
AC	441m NE	Unspecified Heap	1872	844250
AH	446m S	Unspecified Heap	1900	1005779
AC	447m NE	Unspecified Shafts	1872	839254
AH	448m S	Unspecified Heap	1992	880206
AH	448m S	Unspecified Heap	1964 - 1981	949806
AH	449m S	Unspecified Old Shafts	1900	846347
AI	450m S	Unspecified Heap	1872	902536
AJ	450m SE	Refuse Heap	1900	810179



ID	Location	Land use	Dates present	Group ID
AJ	451m SE	Unspecified Heap	1992	891418
AJ	451m SE	Unspecified Heap	1948 - 1981	925074
AH	451m S	Old Lead Shafts	1910 - 1948	965640
AJ	452m SE	Unspecified Heap	1910	995297
AJ	452m SE	Unspecified Heap	1938	868385
AI	454m S	Unspecified Old Shafts	1900	846346
AI	455m S	Unspecified Ground Workings	1992	816350
AI	455m S	Unspecified Heap	1964 - 1981	979973
AI	455m S	Unspecified Heap	1938	1007418
AI	456m S	Unspecified Heap	1910	898239
AI	457m S	Unspecified Heap	1948	971650
AJ	458m SE	Unspecified Heap	1872	953162
8	460m NE	Disused Lead Mine	1910	968496
AC	460m NE	Disused Lead Mine	1948	936606
AI	462m S	Old Lead Shafts	1938	940121
AI	464m S	Old Lead Shafts	1910	940348
AI	464m S	Old Lead Shafts	1948	992987
AJ	464m SE	Lead Shaft	1872	820808
AK	470m SE	Unspecified Heap	1872 - 1900	915826
AK	471m SE	Unspecified Heap	1992	943615
AL	471m S	Unspecified Heap	1872	899471
AK	472m SE	Unspecified Heap	1938	931373
AK	473m SE	Unspecified Ground Workings	1964 - 1981	871205
AK	473m SE	Unspecified Ground Workings	1910	874717
AF	475m S	Unspecified Shafts	1900	839307
AK	475m SE	Unspecified Heap	1948	955609
AF	476m S	Old Lead Shafts	1938	998388
AL	477m S	Unspecified Heap	1910	956219



ID	Location	Land use	Dates present	Group ID
AF	478m S	Old Lead Shafts	1910	870889
AL	478m S	Unspecified Heap	1948	927771
AL	479m S	Unspecified Old Shaft	1900	823950
AF	480m S	Old Lead Shafts	1948	897889
AF	480m S	Old Lead Shafts	1948	964094
AL	481m S	Unspecified Heap	1938	891092
AJ	481m SE	Unspecified Shaft	1900	825636
AL	481m S	Old Lead Shafts	1910 - 1948	979966
AJ	482m SE	Old Lead Shaft	1938	887840
AJ	483m SE	Old Lead Shaft	1910	909153
AL	484m S	Unspecified Heap	1900	898957
AJ	484m SE	Old Lead Shaft	1948	862632
AL	484m S	Unspecified Heap	1992	937611
AL	484m S	Unspecified Ground Workings	1964 - 1981	1005569
AC	485m NE	Unspecified Disused Shaft	1964	852566
AM	487m SE	Unspecified Heap	1992	946265
AM	487m SE	Unspecified Heap	1964 - 1981	971813
AM	487m SE	Unspecified Heap	1938	1006881
AM	488m SE	Refuse Heap	1900	810180
AM	488m SE	Unspecified Heap	1910	989755
AM	489m SE	Unspecified Heap	1948	967881
AK	492m SE	Unspecified Shaft	1900	825666
AN	493m NW	Unspecified Ground Workings	1948	944472
AN	494m NW	Unspecified Ground Workings	1910	911929
AN	494m NW	Unspecified Pits	1938	855976
AK	495m SE	Unspecified Pit	1938	831348
AK	496m SE	Lead Shaft	1872	820823
AK	497m SE	Unspecified Old Shaft	1948	869697



ID	Location	Land use	Dates present	Group ID
AM	498m SE	Unspecified Old Shaft	1938	823931

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	4
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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 15 >](#)

ID	Location	Land use	Dates present	Group ID
T	265m NW	Tanks	1899	110995
T	269m NW	Unspecified Tanks	1912	112502
Y	388m NW	Unspecified Tank	1974	144606
Y	389m NW	Unspecified Tank	1988 - 1991	127757

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0
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Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m**0**

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m**3**

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'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
Q	123m N	Garage	1991	23614
Q	128m N	Garage	1988	30202
Q	128m N	Garage	1961 - 1974	30034

This data is sourced from Ordnance Survey / Groundsure.

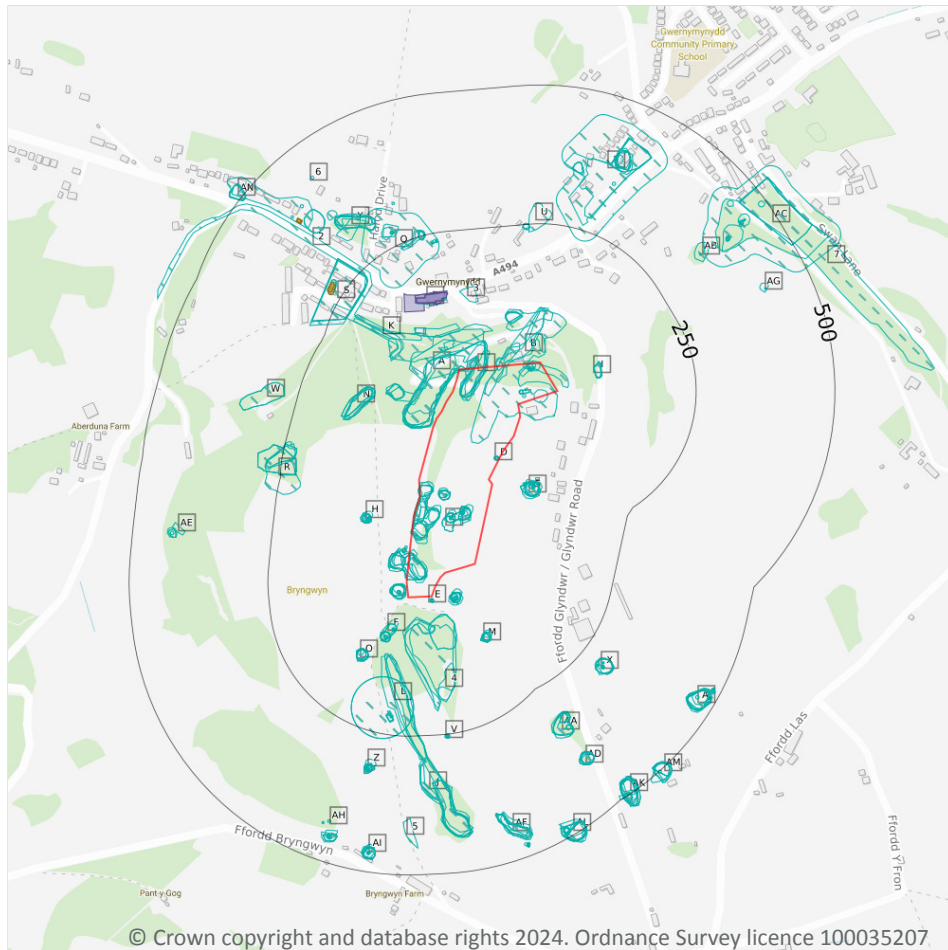
1.6 Historical military land

Records within 500m**0**

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

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

2 Past land use - un-grouped



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

2.1 Historical industrial land uses

Records within 500m

486

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 31](#) >

ID	Location	Land Use	Date	Group ID
1	On site	Unspecified Quarry	1872	840769
A	On site	Unspecified Quarries	1900	949282
A	On site	Unspecified Disused Quarries	1981	806095



ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Quarries	1938	886283
A	On site	Unspecified Quarries	1910	886283
A	On site	Unspecified Ground Workings	1964	816432
A	On site	Unspecified Quarries	1948	952171
B	On site	Unspecified Old Quarry	1900	812895
B	On site	Unspecified Quarries	1938	990191
B	On site	Old Clay Shafts	1938	824832
B	On site	Old Clay Shafts	1938	824833
B	On site	Unspecified Ground Workings	1910	816430
B	On site	Old Lead Shafts	1910	893195
B	On site	Old Lead Shafts	1910	958995
B	On site	Unspecified Heap	1910	928092
B	On site	Unspecified Shafts	1900	839293
B	On site	Unspecified Shafts	1900	839294
B	On site	Unspecified Heap	1872	983263
B	On site	Lead Shafts	1872	848165
B	On site	Lead Shafts	1872	848155
B	On site	Unspecified Disused Shaft	1964	852598
B	On site	Unspecified Heap	1964	927144
B	On site	Refuse Heap	1964	810213
B	On site	Old Lead Shafts	1948	967482
B	On site	Old Lead Shafts	1948	863440
B	On site	Old Lead Shafts	1948	967482
B	On site	Unspecified Quarries	1948	990191
B	On site	Old Lead Shafts	1948	863440
C	On site	Unspecified Quarry	1992	840711
C	On site	Unspecified Disused Quarry	1981	836605
C	On site	Old Lead Shafts	1910	868733



ID	Location	Land Use	Date	Group ID
C	On site	Old Lead Shafts	1910	870403
C	On site	Old Lead Shafts	1910	971738
C	On site	Unspecified Ground Workings	1910	950566
C	On site	Unspecified Heap	1910	985490
C	On site	Unspecified Heap	1910	912973
C	On site	Unspecified Ground Workings	1910	816349
C	On site	Unspecified Ground Workings	1910	898242
C	On site	Unspecified Old Shafts	1900	846340
C	On site	Unspecified Heap	1900	897809
C	On site	Unspecified Heaps	1900	865382
C	On site	Unspecified Heap	1900	987499
C	On site	Unspecified Ground Workings	1900	950566
C	On site	Unspecified Heap	1900	938453
C	On site	Unspecified Heaps	1872	945266
C	On site	Unspecified Heap	1872	957649
C	On site	Unspecified Heaps	1872	946992
C	On site	Unspecified Heap	1872	844256
C	On site	Refuse Heap	1872	810135
C	On site	Lead Shaft	1872	820779
C	On site	Unspecified Heap	1872	953750
C	On site	Unspecified Heap	1992	977467
C	On site	Unspecified Heap	1992	899519
C	On site	Unspecified Heap	1981	893216
C	On site	Unspecified Heap	1981	946324
C	On site	Unspecified Heap	1964	937975
C	On site	Unspecified Heap	1964	933750
C	On site	Unspecified Heaps	1964	891126
C	On site	Unspecified Heap	1964	921499



ID	Location	Land Use	Date	Group ID
C	On site	Unspecified Heap	1964	946324
C	On site	Unspecified Heaps	1938	996333
C	On site	Unspecified Heaps	1938	942624
C	On site	Old Lead Shafts	1938	949493
C	On site	Old Lead Shafts	1938	870403
C	On site	Old Lead Shafts	1938	971738
C	On site	Unspecified Heap	1938	900935
C	On site	Unspecified Heap	1938	912973
C	On site	Unspecified Heap	1938	999898
C	On site	Old Lead Shafts	1948	1009296
C	On site	Old Lead Shafts	1948	870403
C	On site	Old Lead Shafts	1948	971738
C	On site	Unspecified Heaps	1948	887285
C	On site	Unspecified Heaps	1948	957214
C	On site	Unspecified Heaps	1948	894036
C	On site	Unspecified Heap	1948	860362
C	On site	Old Lead Shafts	1948	1009296
C	On site	Old Lead Shafts	1948	870403
C	On site	Old Lead Shafts	1948	971738
C	On site	Unspecified Heaps	1948	887285
C	On site	Unspecified Heaps	1948	957214
C	On site	Unspecified Heaps	1948	894036
C	On site	Unspecified Heap	1948	860362
D	On site	Old Lead Shaft	1910	935370
D	On site	Unspecified Old Shaft	1900	823949
D	On site	Old Lead Shaft	1938	935370
D	On site	Old Lead Shaft	1948	935370
D	On site	Old Lead Shaft	1948	935370



ID	Location	Land Use	Date	Group ID
C	1m SW	Unspecified Heap	1872	987446
C	2m SW	Unspecified Ground Workings	1938	898242
C	3m SW	Unspecified Heap	1948	979205
C	3m SW	Unspecified Heap	1948	979205
C	3m SW	Unspecified Heap	1910	985522
C	3m SW	Unspecified Heap	1938	960713
E	4m S	Old Lead Shafts	1948	891059
E	4m S	Old Lead Shafts	1948	891059
E	5m S	Old Lead Shafts	1938	891059
C	5m SW	Unspecified Kiln	1872	846733
E	5m S	Old Lead Shafts	1910	891059
C	6m SW	Unspecified Heap	1992	930054
C	6m SW	Unspecified Heap	1981	927169
C	6m SW	Unspecified Heap	1964	927169
C	6m SW	Unspecified Pit	1992	904010
C	6m SW	Unspecified Pit	1981	939268
C	6m SW	Unspecified Pit	1964	939268
E	6m S	Unspecified Old Shafts	1900	846342
C	7m SW	Unspecified Old Kiln	1938	865947
C	7m SW	Unspecified Old Kiln	1910	952570
C	7m SW	Unspecified Old Kiln	1948	889483
A	7m N	Unspecified Quarry	1872	840770
C	7m SW	Unspecified Old Shafts	1900	846345
C	9m SW	Unspecified Pit	1900	1009039
A	12m NW	Stone Quarry	1992	821575
C	13m SW	Unspecified Old Shafts	1900	846341
C	13m SW	Old Lead Shafts	1910	996933
C	13m SW	Old Lead Shafts	1938	996933



ID	Location	Land Use	Date	Group ID
C	14m SW	Old Lead Shafts	1948	996933
C	14m SW	Old Lead Shafts	1948	996933
B	19m NE	Unspecified Heap	1964	844328
E	30m S	Unspecified Heap	1900	934392
E	31m S	Unspecified Heap	1910	911817
E	31m S	Unspecified Heap	1948	986039
E	31m S	Unspecified Heap	1948	986039
E	32m S	Unspecified Heap	1872	878721
E	32m S	Unspecified Heap	1938	949771
E	33m S	Unspecified Disused Shaft	1992	964613
E	33m S	Unspecified Disused Shaft	1981	933757
E	33m S	Unspecified Disused Shaft	1964	933757
E	36m S	Unspecified Pits	1964	855968
E	37m S	Unspecified Quarry	1981	840712
E	37m S	Unspecified Pit	1992	831180
E	38m S	Unspecified Old Shafts	1900	846344
E	39m S	Old Lead Shafts	1948	934868
E	39m S	Old Lead Shafts	1948	934868
E	39m S	Old Lead Shafts	1938	865451
E	40m S	Old Lead Shafts	1910	1001433
E	41m S	Unspecified Old Quarry	1938	999298
A	41m N	Unspecified Quarries	1948	980633
A	41m N	Old Lime Kilns	1938	822834
A	42m N	Lime Kiln	1872	833797
E	43m S	Unspecified Old Quarry	1910	999298
F	46m SW	Unspecified Heaps	1872	862835
E	47m S	Stone Quarry	1948	821573
G	51m E	Unspecified Heap	1992	913763



ID	Location	Land Use	Date	Group ID
G	51m E	Unspecified Heap	1981	913763
G	51m E	Unspecified Heap	1964	913763
F	55m SW	Unspecified Heaps	1992	955989
F	55m SW	Unspecified Heaps	1981	907039
F	55m SW	Unspecified Heaps	1964	907039
G	55m E	Unspecified Old Shafts	1900	846450
G	56m E	Unspecified Heap	1900	990348
G	57m E	Unspecified Heap	1948	904318
G	57m E	Unspecified Heap	1948	904318
G	57m E	Unspecified Heap	1910	924431
G	59m E	Unspecified Heap	1938	982764
F	60m SW	Old Lead Shafts	1938	936537
F	61m SW	Old Lead Shafts	1910	936537
G	61m E	Unspecified Heap	1872	895933
B	62m N	Unspecified Ground Workings	1964	816431
F	62m SW	Old Lead Shafts	1948	936537
F	62m SW	Old Lead Shafts	1948	936537
G	66m E	Unspecified Disused Shaft	1992	947565
G	66m E	Unspecified Disused Shaft	1981	911255
A	70m N	Old Lime Kilns	1910	822833
G	71m E	Old Lead Shafts	1910	836230
G	71m E	Unspecified Old Shafts	1948	1001475
G	71m E	Unspecified Old Shafts	1948	1001475
A	72m NW	Unspecified Quarry	1872	840772
A	72m NW	Unspecified Quarries	1910	925499
F	72m SW	Unspecified Heap	1910	885814
G	72m E	Old Lead Shaft	1938	846896
A	73m NW	Unspecified Quarries	1938	925499



ID	Location	Land Use	Date	Group ID
F	73m SW	Unspecified Heap	1938	1002668
F	73m SW	Unspecified Heap	1948	906445
F	73m SW	Unspecified Heap	1948	906445
H	74m SW	Unspecified Heap	1872	933239
G	74m E	Lead Shaft	1872	820822
B	74m N	Unspecified Heap	1910	988107
I	74m NE	Unspecified Pit	1948	942159
I	74m NE	Unspecified Pit	1948	942159
I	75m NE	Unspecified Pit	1910	869346
H	75m SW	Unspecified Heap	1948	1002762
H	75m SW	Unspecified Heap	1948	1002762
I	75m NE	Unspecified Pit	1938	934433
B	75m N	Unspecified Heap	1938	1006008
H	76m SW	Old Lead Shaft	1938	884632
B	77m N	Unspecified Heap	1948	936807
B	77m N	Unspecified Heap	1948	936807
H	77m SW	Unspecified Heap	1910	885298
F	79m SW	Old Lead Shafts	1938	863280
H	79m SW	Unspecified Heap	1992	947826
H	79m SW	Unspecified Heap	1981	1002762
H	79m SW	Unspecified Heap	1964	1002762
F	79m SW	Old Lead Shafts	1910	970681
F	80m SW	Old Lead Shafts	1948	982913
F	80m SW	Old Lead Shafts	1948	982913
H	81m SW	Old Lead Shaft	1948	894045
H	81m SW	Old Lead Shaft	1948	894045
H	81m SW	Unspecified Old Shafts	1900	846343
H	81m SW	Old Lead Shaft	1910	943806



ID	Location	Land Use	Date	Group ID
2	86m N	Tramway Sidings	1900	856560
A	88m N	Unspecified Disused Kilns	1992	1005495
A	88m N	Unspecified Disused Kilns	1981	1009194
A	88m N	Unspecified Disused Kilns	1964	1009194
J	107m S	Unspecified Old Quarry	1948	866395
K	107m NW	Unspecified Heap	1964	942775
J	108m SW	Unspecified Old Quarry	1910	983575
L	110m S	Unspecified Old Quarry	1900	985679
K	110m NW	Unspecified Heap	1900	977755
J	111m S	Unspecified Old Quarry	1938	950006
M	114m S	Unspecified Heap	1992	1009860
M	114m S	Unspecified Heap	1981	920025
M	114m S	Unspecified Heap	1964	920025
M	115m S	Unspecified Heap	1872	876586
M	116m S	Unspecified Heap	1910	1002907
M	116m S	Unspecified Heap	1948	920025
M	116m S	Unspecified Heap	1948	920025
M	116m S	Unspecified Heap	1938	901261
N	118m NW	Unspecified Quarries	1948	957507
3	118m N	Smithy	1872	833096
N	120m NW	Unspecified Quarries	1938	913173
N	120m NW	Unspecified Quarries	1910	990436
N	120m NW	Unspecified Quarry	1872	840771
O	121m SW	Unspecified Heap	1938	945013
O	122m SW	Unspecified Heap	1910	975550
O	123m SW	Unspecified Heap	1992	968507
O	123m SW	Unspecified Heap	1981	888916
O	123m SW	Unspecified Heap	1964	888916



ID	Location	Land Use	Date	Group ID
P	123m N	Smithy	1900	833095
O	123m SW	Unspecified Heap	1900	995298
O	123m SW	Unspecified Heap	1872	995298
O	123m SW	Unspecified Heap	1948	936958
O	123m SW	Unspecified Heap	1948	936958
N	124m NW	Unspecified Pit	1981	904768
N	124m NW	Unspecified Pit	1964	904768
N	125m NW	Unspecified Quarries	1900	990173
4	125m S	Unspecified Quarry	1981	840713
P	128m N	Garage	1992	1004428
P	128m N	Garage	1981	935839
L	148m S	Unspecified Disused Quarry	1992	914604
L	148m S	Unspecified Disused Quarry	1981	984269
Q	183m N	Lead Mine	1900	838222
L	207m S	Unspecified Kiln	1872	846734
L	209m S	Unspecified Old Kiln	1938	906911
L	211m S	Unspecified Old Kiln	1910	874321
R	212m W	Unspecified Old Quarry	1948	986175
L	214m S	Unspecified Old Kiln	1948	993410
S	220m NW	Unspecified Works	1900	835970
R	221m W	Unspecified Disused Quarry	1992	909789
R	221m W	Unspecified Disused Quarry	1981	956453
R	221m W	Unspecified Pit	1964	831179
S	222m NW	Clay Works	1948	996798
S	222m NW	Clay Works	1910	880271
S	222m NW	Clay Works	1938	880271
R	226m W	Unspecified Old Quarry	1938	990664
R	226m W	Unspecified Old Quarry	1910	901810



ID	Location	Land Use	Date	Group ID
R	228m W	Unspecified Old Quarry	1900	955838
Q	231m N	Old Lead Shaft	1948	871133
Q	231m N	Old Lead Shaft	1948	871133
Q	232m N	Old Lead Shafts	1938	836226
T	232m NE	Disused Lead Mine	1900	942592
Q	233m N	Old Lead Shaft	1948	994748
Q	233m N	Old Lead Shaft	1948	994748
U	236m N	Unspecified Heap	1872	844332
Q	237m N	Unspecified Ground Workings	1910	935786
Q	241m N	Unspecified Ground Workings	1964	944302
U	241m N	Unspecified Pit	1948	1004928
U	241m N	Unspecified Pit	1948	1004928
Q	243m N	Old Lead Shafts	1948	918673
Q	243m N	Old Lead Shafts	1948	918673
U	243m N	Unspecified Pit	1938	910221
Q	246m N	Unspecified Pit	1938	831275
V	249m S	Old Lead Shaft	1910	893997
V	249m S	Old Lead Shaft	1938	948301
V	250m S	Unspecified Old Shaft	1900	823880
V	251m S	Old Lead Shaft	1948	948301
V	251m S	Old Lead Shaft	1948	948301
T	259m NE	Disused Lead Mine	1910	968899
S	265m NW	Unspecified Tanks	1900	933001
Q	267m N	Unspecified Heap	1964	950321
S	267m NW	Unspecified Tanks	1910	957049
Q	267m N	Unspecified Heap	1900	990472
S	268m NW	Unspecified Tanks	1938	914160
Q	272m N	Old Lead Shafts	1948	901750



ID	Location	Land Use	Date	Group ID
Q	272m N	Old Lead Shafts	1948	901750
Q	273m N	Old Lead Shafts	1910	983540
W	274m W	Unspecified Heap	1948	1001647
W	274m W	Unspecified Heap	1948	1001647
T	275m NE	Disused Lead Mine	1938	968899
X	281m SE	Unspecified Ground Workings	1910	816509
X	282m SE	Unspecified Heap	1938	866286
X	282m SE	Unspecified Heap	1948	959552
X	282m SE	Unspecified Heap	1948	959552
X	283m SE	Unspecified Heap	1900	914623
X	286m SE	Unspecified Shaft	1900	825665
J	289m S	Unspecified Old Quarry	1900	990305
X	291m SE	Lead Shaft	1872	820821
X	292m SE	Old Lead Shaft	1938	898467
X	292m SE	Old Lead Shaft	1910	976911
X	294m SE	Old Lead Shaft	1948	898467
X	294m SE	Old Lead Shaft	1948	898467
Y	296m N	Unspecified Heap	1910	872044
Y	296m N	Unspecified Heap	1948	879638
Y	296m N	Unspecified Heap	1948	879638
Y	296m N	Unspecified Heap	1938	1004932
Z	299m S	Unspecified Heap	1872	887951
J	304m S	Unspecified Ground Workings	1981	816351
Y	304m N	Unspecified Heap	1992	893127
Y	304m NW	Refuse Heap	1900	810178
Y	306m N	Unspecified Heap	1964	992905
Z	306m S	Lead Shaft	1872	820780
Z	307m S	Unspecified Heap	1938	936387



ID	Location	Land Use	Date	Group ID
Z	308m S	Unspecified Heap	1910	879131
Z	309m S	Unspecified Heap	1948	959402
Z	309m S	Unspecified Heap	1948	959402
AA	310m S	Unspecified Old Quarry	1938	886439
AA	310m S	Unspecified Quarry	1900	840809
AA	311m S	Unspecified Old Quarry	1910	886439
Z	311m S	Unspecified Disused Shaft	1992	986327
Z	311m S	Unspecified Disused Shaft	1981	920017
Z	311m S	Unspecified Disused Shaft	1964	920017
AA	313m S	Unspecified Heap	1992	931672
AA	313m S	Unspecified Heap	1981	964853
AA	313m S	Unspecified Heap	1964	964853
AA	313m S	Unspecified Old Quarry	1948	916392
Z	314m S	Old Lead Shaft	1938	881115
Z	315m S	Unspecified Shaft	1900	825601
Z	315m S	Old Lead Shaft	1910	881115
Z	318m S	Old Lead Shaft	1948	930373
Z	318m S	Old Lead Shaft	1948	930373
Q	320m N	Old Lead Shafts	1910	836227
J	325m S	Unspecified Quarry	1872	877265
J	331m S	Unspecified Quarry	1992	882666
J	331m S	Unspecified Quarry	1981	994669
J	331m S	Unspecified Quarry	1964	994669
AA	335m S	Unspecified Heap	1872	844372
AB	336m NE	Unspecified Heap	1872	844264
T	345m NE	Lead Shaft	1872	820810
T	346m N	Unspecified Quarry	1910	1007132
AB	347m NE	Unspecified Shafts	1872	839260



ID	Location	Land Use	Date	Group ID
T	347m N	Unspecified Quarry	1938	970243
T	349m N	Unspecified Quarry	1948	925812
Y	352m NW	Unspecified Heap	1992	957161
Y	352m NW	Unspecified Heap	1981	859692
Y	352m NW	Unspecified Heap	1964	859692
AC	354m NE	Lead Mine	1900	838216
Y	355m NW	Unspecified Heap	1872	844329
Y	372m NW	Refuse Heap	1872	810181
T	372m NE	Unspecified Heap	1900	1004558
T	374m NE	Disused Lead Mine	1948	937280
T	374m NE	Disused Lead Mine	1948	937280
T	376m NE	Unspecified Heap	1948	878423
T	376m NE	Unspecified Heap	1948	878423
T	379m NE	Unspecified Heap	1910	950683
T	380m NE	Unspecified Heap	1938	950683
T	382m NE	Unspecified Heap	1964	940945
AC	382m NE	Disused Lead Mine	1938	937928
T	383m NE	Unspecified Heap	1872	1004558
AC	384m NE	Unspecified Shafts	1872	839261
AD	391m S	Unspecified Pit	1992	998551
AD	391m S	Unspecified Pit	1981	911466
AD	391m S	Unspecified Pit	1964	911466
AD	391m SE	Gravel Pit	1900	852207
AD	392m SE	Old Gravel Pit	1938	932282
AD	394m SE	Old Gravel Pit	1910	909093
AD	396m S	Old Gravel Pit	1948	932282
5	398m S	Unspecified Old Quarries	1900	832307
AC	400m NE	Unspecified Old Shafts	1900	938123



ID	Location	Land Use	Date	Group ID
AC	401m NE	Unspecified Disused Old Shafts	1910	820875
AC	402m NE	Unspecified Old Shafts	1948	902254
AC	402m NE	Unspecified Old Shafts	1948	902254
AC	403m NE	Unspecified Old Shafts	1938	902254
Y	405m NW	Lead Shafts	1872	848157
Y	405m NW	Lead Shafts	1872	848156
AE	406m W	Unspecified Level	1872	852713
AF	408m S	Unspecified Pit	1981	869518
AF	408m S	Unspecified Pit	1964	869518
AG	409m NE	Unspecified Heap	1872	844263
AF	409m S	Unspecified Quarry	1872	840810
AF	410m S	Unspecified Old Quarry	1938	956970
AF	412m S	Unspecified Old Quarry	1948	956970
AF	412m S	Unspecified Old Quarry	1910	870696
AF	413m S	Unspecified Old Quarries	1900	832325
AG	417m NE	Unspecified Shaft	1872	825606
AE	421m W	Old Lead Level	1910	923899
AE	421m W	Old Lead Level	1948	912463
AE	421m W	Old Lead Level	1948	912463
AH	425m S	Old Lead Shafts	1938	836217
AE	426m W	Old Lead Level	1938	923899
AH	432m S	Old Lead Shafts	1938	836218
6	432m NW	Wind Pump	1910	825861
AC	435m NE	Unspecified Old Shafts	1900	985831
AC	437m NE	Unspecified Heap	1872	844262
AC	438m NE	Unspecified Disused Old Shafts	1910	820876
AC	438m NE	Unspecified Old Shafts	1948	910641
AC	438m NE	Unspecified Old Shafts	1948	910641



ID	Location	Land Use	Date	Group ID
AH	439m S	Unspecified Heap	1872	1009900
AC	440m NE	Unspecified Old Shafts	1938	910641
AC	441m NE	Unspecified Heap	1872	844250
AH	446m S	Unspecified Heap	1900	1005779
AC	447m NE	Unspecified Shafts	1872	839254
AH	448m S	Unspecified Heap	1992	880206
AH	448m S	Unspecified Heap	1981	949806
AH	448m S	Unspecified Heap	1964	949806
AH	449m S	Unspecified Old Shafts	1900	846347
AI	450m S	Unspecified Heap	1872	902536
AJ	450m SE	Refuse Heap	1900	810179
AJ	451m SE	Unspecified Heap	1992	891418
AJ	451m SE	Unspecified Heap	1981	925074
AJ	451m SE	Unspecified Heap	1964	925074
AH	451m S	Old Lead Shafts	1938	965640
AH	451m S	Old Lead Shafts	1948	965640
AH	451m S	Old Lead Shafts	1948	965640
AH	451m S	Old Lead Shafts	1910	965640
AJ	452m SE	Unspecified Heap	1910	995297
AJ	452m SE	Unspecified Heap	1938	868385
AJ	453m SE	Unspecified Heap	1948	925074
AJ	453m SE	Unspecified Heap	1948	925074
AI	454m S	Unspecified Old Shafts	1900	846346
AI	455m S	Unspecified Ground Workings	1992	816350
AI	455m S	Unspecified Heap	1981	979973
AI	455m S	Unspecified Heap	1964	979973
AI	455m S	Unspecified Heap	1938	1007418
AI	456m S	Unspecified Heap	1910	898239



ID	Location	Land Use	Date	Group ID
AI	457m S	Unspecified Heap	1948	971650
AI	457m S	Unspecified Heap	1948	971650
AJ	458m SE	Unspecified Heap	1872	953162
7	460m NE	Disused Lead Mine	1910	968496
AC	460m NE	Disused Lead Mine	1948	936606
AC	460m NE	Disused Lead Mine	1948	936606
AI	462m S	Old Lead Shafts	1938	940121
AI	464m S	Old Lead Shafts	1910	940348
AI	464m S	Old Lead Shafts	1948	992987
AI	464m S	Old Lead Shafts	1948	992987
AJ	464m SE	Lead Shaft	1872	820808
AK	470m SE	Unspecified Heap	1872	915826
AK	471m SE	Unspecified Heap	1900	915826
AK	471m SE	Unspecified Heap	1992	943615
AL	471m S	Unspecified Heap	1872	899471
AK	472m SE	Unspecified Heap	1938	931373
AK	473m SE	Unspecified Ground Workings	1981	871205
AK	473m SE	Unspecified Ground Workings	1964	871205
AK	473m SE	Unspecified Ground Workings	1910	874717
AF	475m S	Unspecified Shafts	1900	839307
AK	475m SE	Unspecified Heap	1948	955609
AK	475m SE	Unspecified Heap	1948	955609
AF	476m S	Old Lead Shafts	1938	998388
AL	477m S	Unspecified Heap	1910	956219
AF	478m S	Old Lead Shafts	1910	870889
AL	478m S	Unspecified Heap	1948	927771
AL	478m S	Unspecified Heap	1948	927771
AL	479m S	Unspecified Old Shaft	1900	823950



ID	Location	Land Use	Date	Group ID
AF	480m S	Old Lead Shafts	1948	964094
AF	480m S	Old Lead Shafts	1948	897889
AL	481m S	Unspecified Heap	1938	891092
AJ	481m SE	Unspecified Shaft	1900	825636
AL	481m S	Old Lead Shafts	1938	979966
AL	482m S	Old Lead Shafts	1910	979966
AJ	482m SE	Old Lead Shaft	1938	887840
AJ	483m SE	Old Lead Shaft	1910	909153
AL	483m S	Old Lead Shafts	1948	979966
AL	483m S	Old Lead Shafts	1948	979966
AL	484m S	Unspecified Heap	1900	898957
AJ	484m SE	Old Lead Shaft	1948	862632
AJ	484m SE	Old Lead Shaft	1948	862632
AL	484m S	Unspecified Heap	1992	937611
AL	484m S	Unspecified Ground Workings	1981	1005569
AL	484m S	Unspecified Ground Workings	1964	1005569
AC	485m NE	Unspecified Disused Shaft	1964	852566
AM	487m SE	Unspecified Heap	1992	946265
AM	487m SE	Unspecified Heap	1981	971813
AM	487m SE	Unspecified Heap	1964	971813
AM	487m SE	Unspecified Heap	1938	1006881
AM	488m SE	Refuse Heap	1900	810180
AM	488m SE	Unspecified Heap	1910	989755
AM	489m SE	Unspecified Heap	1948	967881
AM	489m SE	Unspecified Heap	1948	967881
AK	492m SE	Unspecified Shaft	1900	825666
AN	493m NW	Unspecified Ground Workings	1948	944472
AN	493m NW	Unspecified Ground Workings	1948	944472



ID	Location	Land Use	Date	Group ID
AN	494m NW	Unspecified Ground Workings	1910	911929
AN	494m NW	Unspecified Pits	1938	855976
AK	495m SE	Unspecified Pit	1938	831348
AK	496m SE	Lead Shaft	1872	820823
AK	497m SE	Unspecified Old Shaft	1948	869697
AK	497m SE	Unspecified Old Shaft	1948	869697
AM	498m SE	Unspecified Old Shaft	1938	823931

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	5
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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 31](#) >

ID	Location	Land Use	Date	Group ID
S	265m NW	Tanks	1899	110995
S	269m NW	Unspecified Tanks	1912	112502
Y	388m NW	Unspecified Tank	1974	144606
Y	389m NW	Unspecified Tank	1988	127757
Y	389m NW	Unspecified Tank	1991	127757

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	0
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Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.



2.4 Historical petrol stations

Records within 500m**0**

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m**4**

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'.

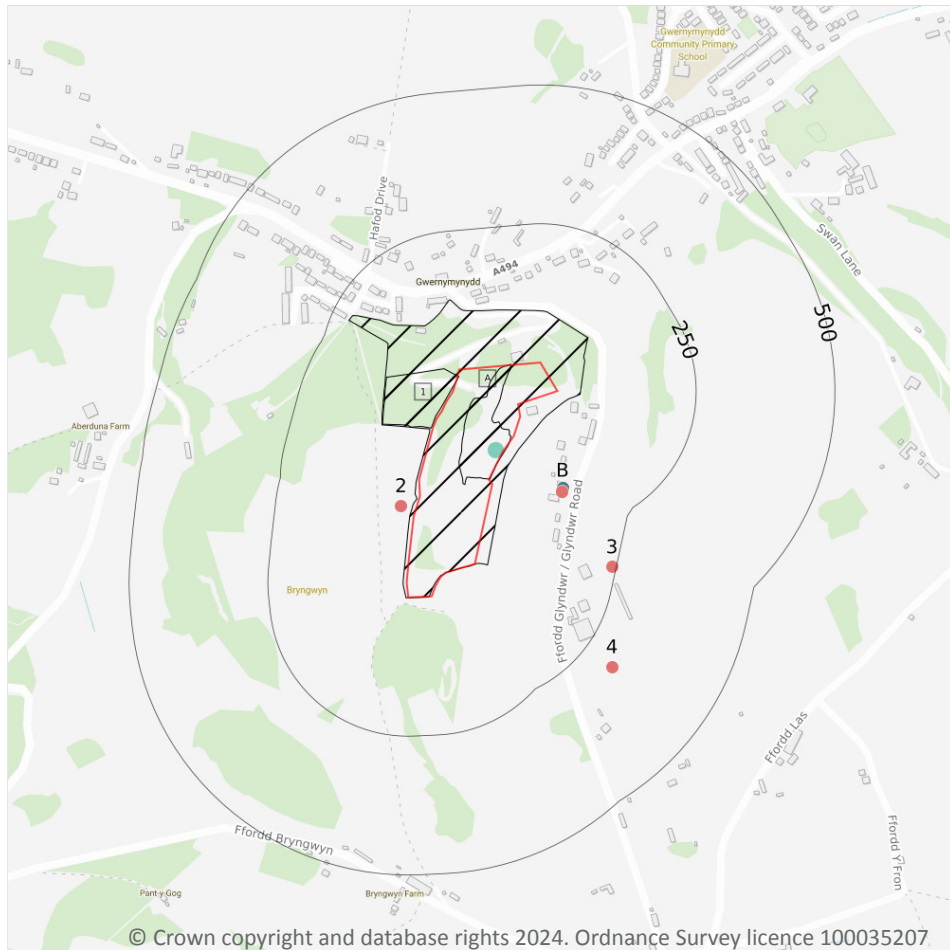
Features are displayed on the Past land use - un-grouped map on [page 31](#) >

ID	Location	Land Use	Date	Group ID
P	123m N	Garage	1991	23614
P	128m N	Garage	1988	30202
P	128m N	Garage	1961	30034
P	128m N	Garage	1974	30034

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- Historical landfill (BGS)
- Licensed waste sites
- 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

1

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.

Features are displayed on the Waste and landfill map on [page 51 >](#)

ID	Location	Address	BGS Number	Risk	Waste Type
A	On site	Cumbrian Quarry, Gwernymynydd, Mold, Clwyd	688	Risk to major aquifer	N/A

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0
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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	3
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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.

Features are displayed on the Waste and landfill map on [page 51](#) >

ID	Location	Details		
1	On site	Site Address: Gwernymyndd No.1, Cambrian Quarries, Gwernymyndd Licence Holder Address: -	Waste Licence: Yes Site Reference: B/W/8/10 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 26/10/1987 Licence Surrender: 21/01/1993	Operator: - Licence Holder: Mr Geoff Ellison First Recorded 31/12/1963 Last Recorded: 21/01/1993
A	On site	Site Address: Cambrian Quarry, Gwernymynydd, Mold, Clwyd Licence Holder Address: -	Waste Licence: Yes Site Reference: - Waste Type: Inert, Industrial, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 20/08/1981 Licence Surrender: 21/01/1993	Operator: Messrs Cabot Carbon Limited Licence Holder: - First Recorded 31/12/1963 Last Recorded: 06/07/1972

ID	Location	Details		
A	On site	Site Address: Gwernymyndd No.2, Cambrian Quarries, Gwernymyndd Licence Holder Address: -	Waste Licence: Yes Site Reference: B/W/8/10 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 26/10/1987 Licence Surrender: 21/01/1993	Operator: - Licence Holder: Mr Geoff Ellison First Recorded 31/12/1963 Last Recorded: 21/01/1993

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

3.5 Historical waste sites

Records within 500m	0
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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	5
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Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on [page 51 >](#)

ID	Location	Details		
B	127m E	Site Name: - Site Address: Cambrian Quarry, Gwernymynydd, Clwyd, CH7 5LW Correspondence Address: -	Type of Site: Deposit of waste to land as a recovery operation Size: - Environmental Permitting Regulations (Waste) Licence Number: JB3034RN EPR reference: - Operator: Ash Resource Management (Cambrian Quarry) Ltd Waste Management licence No: - Annual Tonnage: 200000	Issue Date: 17/10/2014 Effective Date: 17/10/2014 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective

ID	Location	Details		
B	127m E	Site Name: - Site Address: Cambrian Quarry, Gwernymynydd, Clwyd, CH7 5LW Correspondence Address: -	Type of Site: Deposit of waste to land as a recovery operation Size: - Environmental Permitting Regulations (Waste) Licence Number: JB3034RN EPR reference: - Operator: Ash Resource Management (Cambrian Quarry) Ltd Waste Management licence No: - Annual Tonnage: 200000	Issue Date: 17/10/2014 Effective Date: 17/10/2014 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
B	127m E	Site Name: - Site Address: Cambrian Quarry, Gwernymynydd, Clwyd, CH7 5LW Correspondence Address: -	Type of Site: Deposit of waste to land as a recovery operation Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: JB3034RN EPR reference: - Operator: - Waste Management licence No: 104422 Annual Tonnage: 200000	Issue Date: 17/10/2014 Effective Date: 17/10/2014 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
B	127m E	Site Name: - Site Address: Cambrian Quarry, Gwernymynydd, Flintshire, CH7 5LW Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: JB3034RN EPR reference: - Operator: Ash Resource Management (Cambrian Quarry) Ltd Waste Management licence No: 0 Annual Tonnage: 200000	Issue Date: 17/10/2014 Effective Date: 17/10/2014 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
B	127m E	Site Name: - Site Address: Cambrian Quarry, Clwyd, Gwernymynydd, Flintshire, CH7 5LW Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: JB3034RN EPR reference: - Operator: Ash Resource Management (Cambrian Quarry) Ltd Waste Management licence No: 104422 Annual Tonnage: 200000	Issue Date: 17/10/2014 Effective Date: 17/10/2014 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective

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



3.7 Waste exemptions

Records within 500m	6
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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 51 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
2	27m SW	United Utilities, Brynffynnon, Glyndwr Road, Gwernymynydd, Mold, Flintshire, Ch7 5Lw	NRW-WME097508	Storing waste exemption	Not on a farm	Storage of sludge
B	125m E	Trade Effluent Services Ltd, Fron Ucha Farm, Glyndwr Road, Gwernymynydd, Yr Wyddgrug, Flintshire, Ch75Lw	NRW-WME022584	Storing waste exemption	Not on a farm	Storage of sludge
B	125m E	Fron Ucha Farm, Glyndwr Road, Gwernymynydd, Yr Wyddgrug, Ch75Lw	NRW-WME013559	Disposing of waste exemption	On a farm	Burning waste in the open
B	125m E	Fron Ucha Farm, Glyndwr Road, Gwernymynydd, Yr Wyddgrug, Ch75Lw	NRW-WME013559	Using waste exemption	On a farm	Use of waste in construction
3	243m SE	United Utilities Plc, Lingley Green Avenue, Lingley Mere Business Park, Great Sankey, Warrington, Wa5 3lp	NRW-WME069082	Storing waste exemption	Not on a farm	Storage of sludge
4	309m SE	United Utilities Plc, Lingley Green Avenue, Lingley Mere Business Park, Great Sankey, Warrington, Wa5 3lp	NRW-WME053023	Storing waste exemption	Not on a farm	Storage of sludge

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
- △ Current or recent petrol stations
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

6

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 56 >](#)

ID	Location	Company	Address	Activity	Category
1	On site	Tank	Clwyd, CH7	Tanks (Generic)	Industrial Features
2	On site	Workings (Dis)	Clwyd, CH7	Unspecified Quarries Or Mines	Extractive Industries
3	25m NE	Shaft	Clwyd, CH7	Unspecified Quarries Or Mines	Extractive Industries



ID	Location	Company	Address	Activity	Category
4	43m S	Shaft	Clwyd, CH7	Unspecified Quarries Or Mines	Extractive Industries
5	85m E	Shaft	Clwyd, CH7	Unspecified Quarries Or Mines	Extractive Industries
A	125m N	Bus Depot	Clwyd, CH7	Bus and Coach Stations, Depots and Companies	Public Transport, Stations and Infrastructure

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m

1

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on [page 56 >](#)

ID	Location	Company	Address	LPG	Status
A	148m N	UNBRANDED	Ruthin Road, Gwernymynydd, Mold, Flintshire, CH7 5LG	Not Applicable	Obsolete

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m

0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.



4.5 Sites determined as Contaminated Land

Records within 500m**0**

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m**0**

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m**0**

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m**0**

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m**0**

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

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



4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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

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

Records within 500m

0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m

3

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 56 >](#)

ID	Location	Address	Details	
6	379m SE	MOLD GLYNDWR ROAD FRON UCHA FARM, GLYNDWR ROAD FRON UCHA FARM, FRON UCHA FARM	Effluent Type: UNSPECIFIED Permit Number: CM0016101 Permit Version: 1 Receiving Water: DITCH	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 14/06/1963 Effective Date: 14/06/1963 Revocation Date: 11/07/1991
7	381m NW	GWERNMYNYDD NO 1 - CHLORINATED	Effluent Type: UNSPECIFIED Permit Number: CM0204401 Permit Version: 1 Receiving Water: GROUND	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 02/10/1989 Effective Date: 02/10/1989 Revocation Date: 17/03/1994



ID	Location	Address	Details	
8	452m S	GLYNDWR - CHLORINATED O/F	Effluent Type: UNSPECIFIED Permit Number: CM0204201 Permit Version: 1 Receiving Water: GROUND	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 02/10/1989 Effective Date: 02/10/1989 Revocation Date: 17/03/1994

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
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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
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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

7

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 56](#) >

ID	Location	Details	
B	188m SE	Incident Date: 18/05/2007 Incident Identification: 495823 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
B	195m SE	Incident Date: 12/01/2016 Incident Identification: 1402335 Pollutant: Multiple Pollutants Pollutant Description: 3 Pollutants Including Other General Biodegradable	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
B	195m SE	Incident Date: 12/01/2016 Incident Identification: 1402335 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
B	195m SE	Incident Date: 12/01/2016 Incident Identification: 1402335 Pollutant: Specific Waste Materials Pollutant Description: Containers	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
B	195m SE	Incident Date: 12/01/2016 Incident Identification: 1402335 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
B	203m SE	Incident Date: 16/02/2016 Incident Identification: 1411617 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
B	216m SE	Incident Date: 24/03/2015 Incident Identification: 1323083 Pollutant: Multiple Pollutants Pollutant Description: 2 Pollutants Including Not Identified	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

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



4.19 Pollution inventory substances

Records within 500m**0**

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

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

4.20 Pollution inventory waste transfers

Records within 500m**0**

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

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

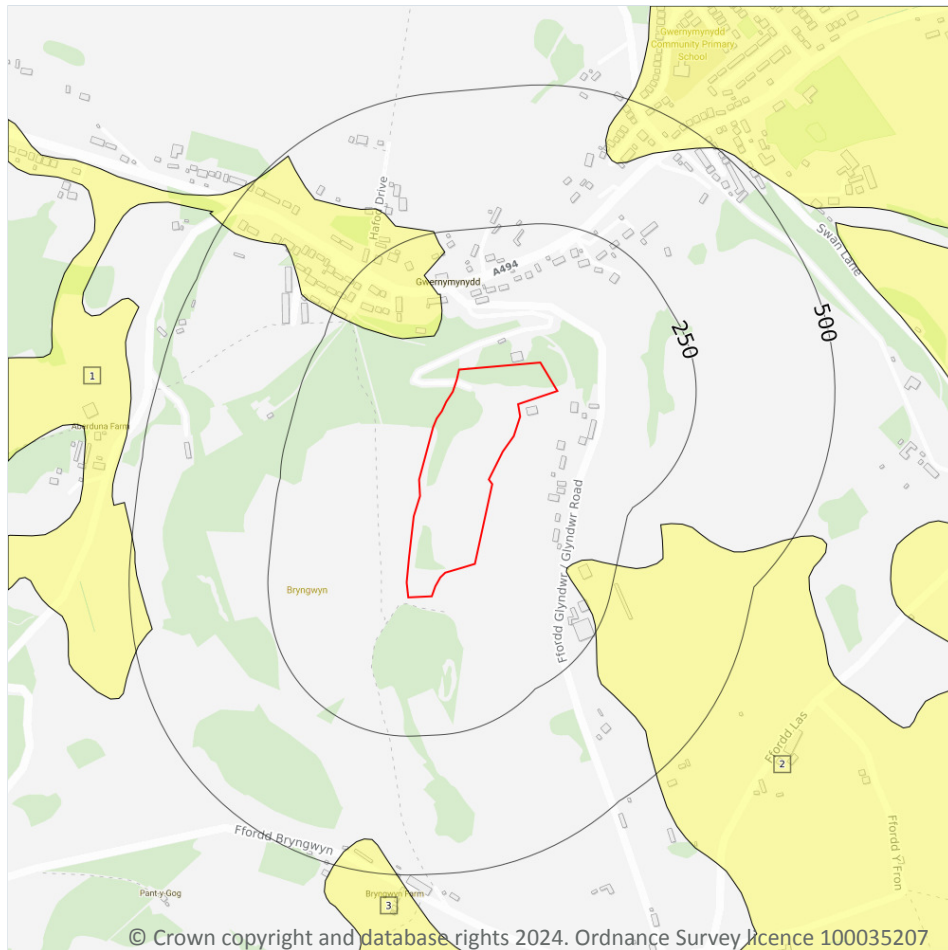
4.21 Pollution inventory radioactive waste

Records within 500m**0**

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

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

5 Hydrogeology - Superficial aquifer



- 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 63](#) >

ID	Location	Designation	Description
1	75m N	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	164m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

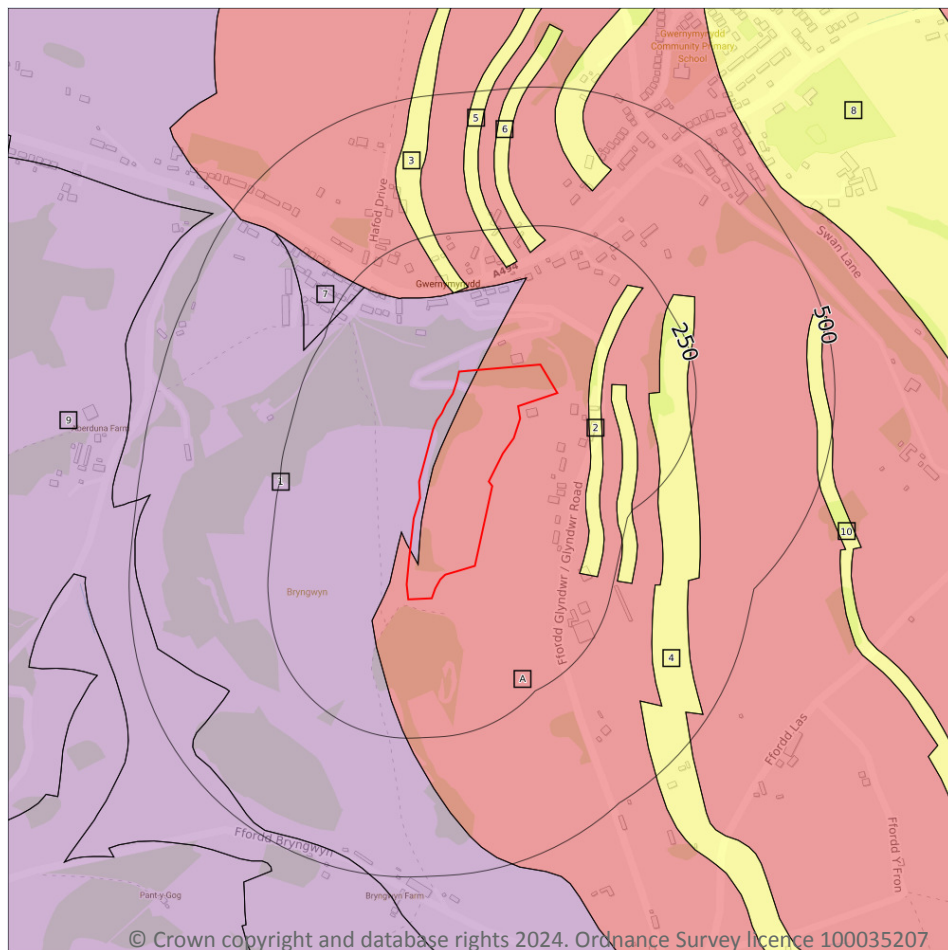


ID	Location	Designation	Description
3	441m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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



Bedrock aquifer



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

5.2 Bedrock aquifer

Records within 500m

12

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 65](#) >

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

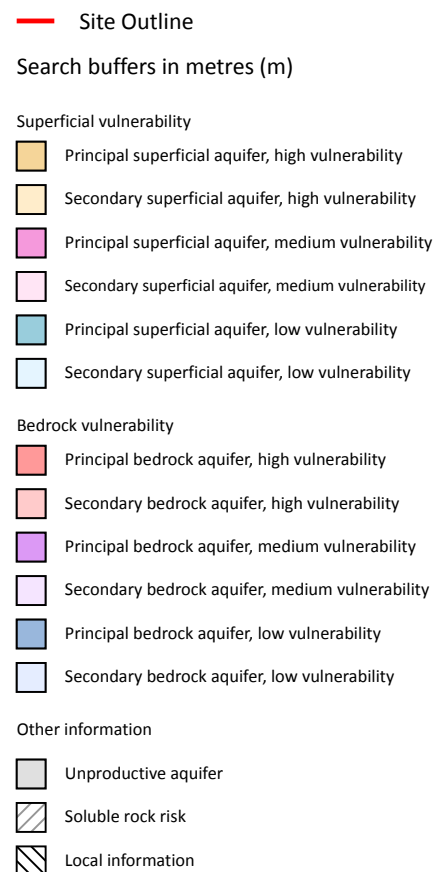
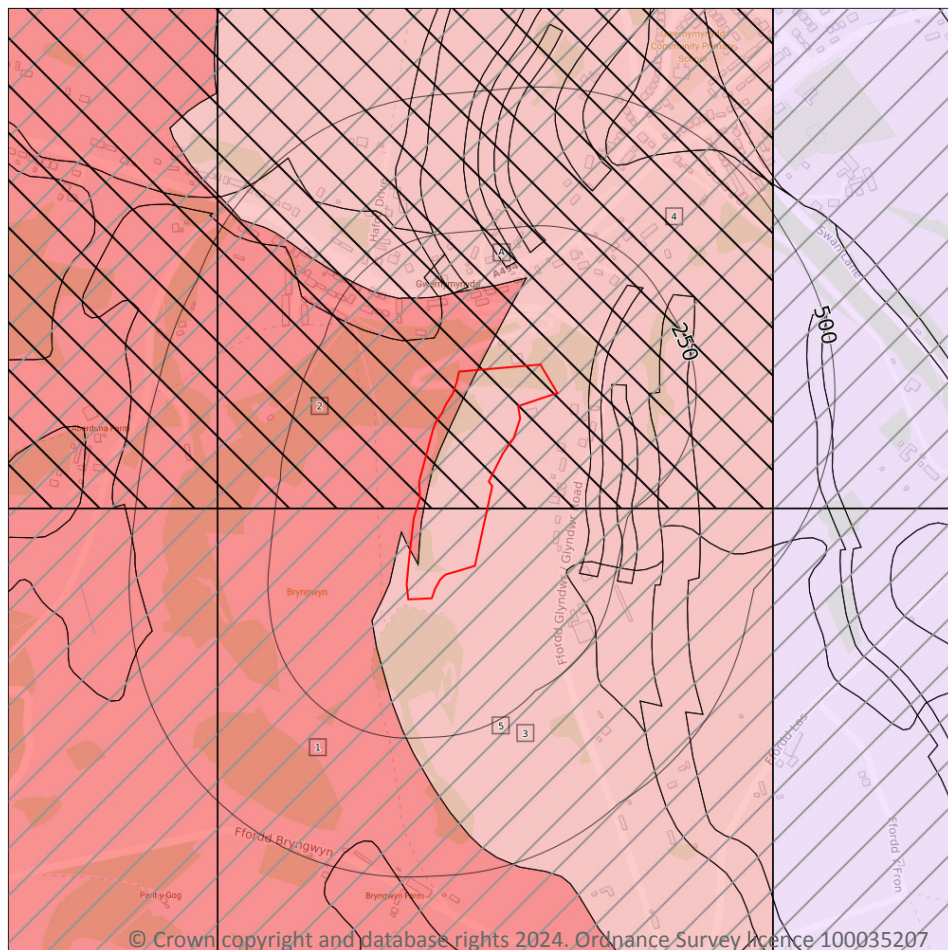


ID	Location	Designation	Description
2	57m NE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
A	98m NE	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
3	142m N	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
4	165m NE	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
5	180m N	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	203m N	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
7	228m 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
8	327m NE	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
9	362m SW	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
10	453m E	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

4

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 67](#) >

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
2	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High 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	2
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This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
5	Very significant soluble rocks are likely to be present with a moderate possibility of localised natural subsidence or dissolution-related degradation of bedrock, especially in adverse conditions such as concentrated surface or subsurface water flow.	2.0%
A	Significant soluble rocks are likely to be present. Low possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow.	1.0%



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

5.5 Groundwater vulnerability- local information

Records on site

1

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 ↗.

ID	Summary	Additional information
A	Rapid flow pathways	Milwr (Low Level) Drainage Tunnel

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

3

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 70 >](#)

ID	Location	Details	
-	1770m NE	Status: Historical Licence No: 24/67/8/0014 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: WELL Data Type: Point Name: Booth Easting: 322470 Northing: 363790	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 09/08/1966 Expiry Date: - Issue No: 100 Version Start Date: 13/06/1995 Version End Date: -
-	1840m E	Status: Historical Licence No: 24/67/8/0093 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: BOREHOLE Data Type: Point Name: Wynne-Eyton Easting: 323440 Northing: 362000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 22/11/1990 Expiry Date: - Issue No: 100 Version Start Date: 22/11/1990 Version End Date: -
-	1875m S	Status: Historical Licence No: 24/67/8/0016 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: WELL Data Type: Point Name: Griffiths Easting: 321950 Northing: 360050	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 09/08/1966 Expiry Date: - Issue No: 100 Version Start Date: 09/08/1966 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 70 >](#)



ID	Location	Details	
-	1665m W	Status: Historical Licence No: 24/67/8/0109 Details: Make-Up Or Top Up Water Direct Source: EAW Surface Water Point: RIVER ALYN Data Type: Point Name: Liverpool City Council Easting: 319740 Northing: 362420	Annual Volume (m ³): 5000 Max Daily Volume (m ³): 200 Original Application No: - Original Start Date: 12/07/2006 Expiry Date: 31/12/2007 Issue No: 1 Version Start Date: 12/07/2006 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	0
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Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

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

5.9 Source Protection Zones

Records within 500m	0
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Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

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

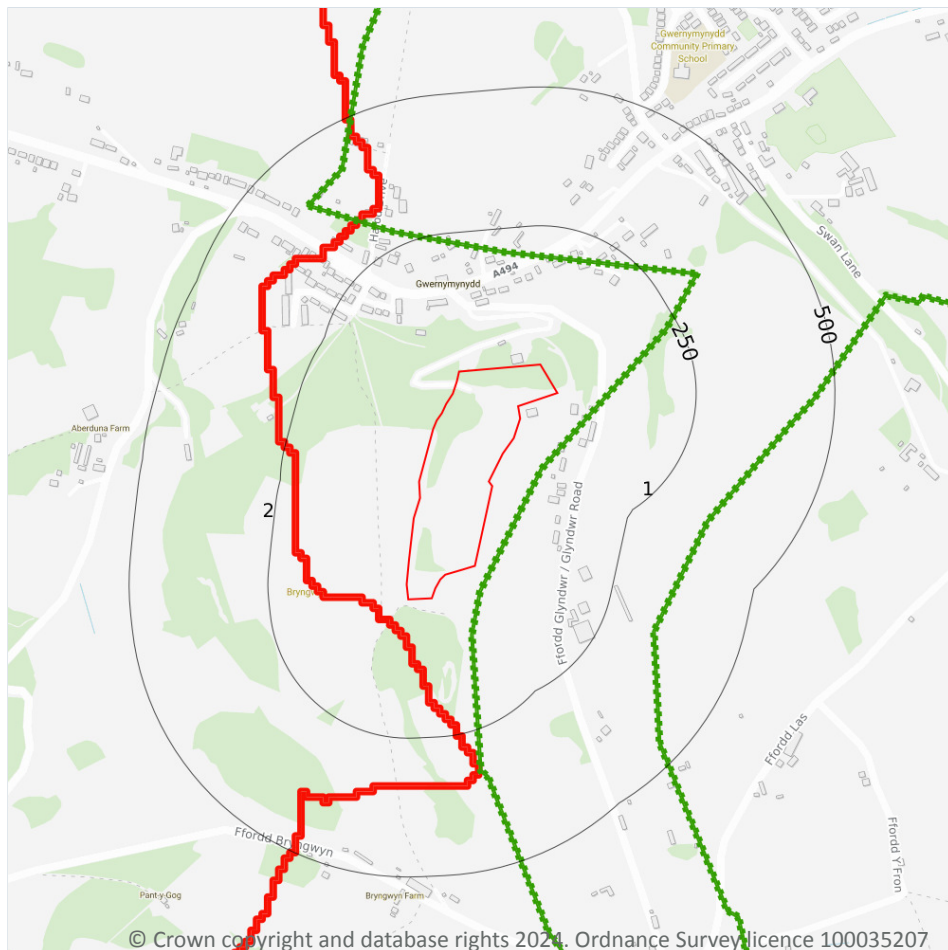
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0
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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

0

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

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

0

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.



This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1
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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 73 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River WB catchment	Alyn - Leadmill to Hope	GB111067052172	Alyn	Dee

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

6.4 WFD Surface water bodies

Records identified	1
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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 73 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	3435m NE	River	Alyn - Leadmill to Hope	GB111067052172	Moderate	Good	Moderate	2016

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



6.5 WFD Groundwater bodies

Records on site

1

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

Features are displayed on the Hydrology map on [page 73 >](#)

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	On site	Dee Carboniferous Limestone	GB41101G202200	Good	Good	Good	2017

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



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m**0**

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

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

7.2 Historical Flood Events

Records within 250m**0**

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

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

7.3 Flood Defences

Records within 250m**0**

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

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



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

7.5 Flood Storage Areas

Records within 250m

0

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

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

Records within 50m

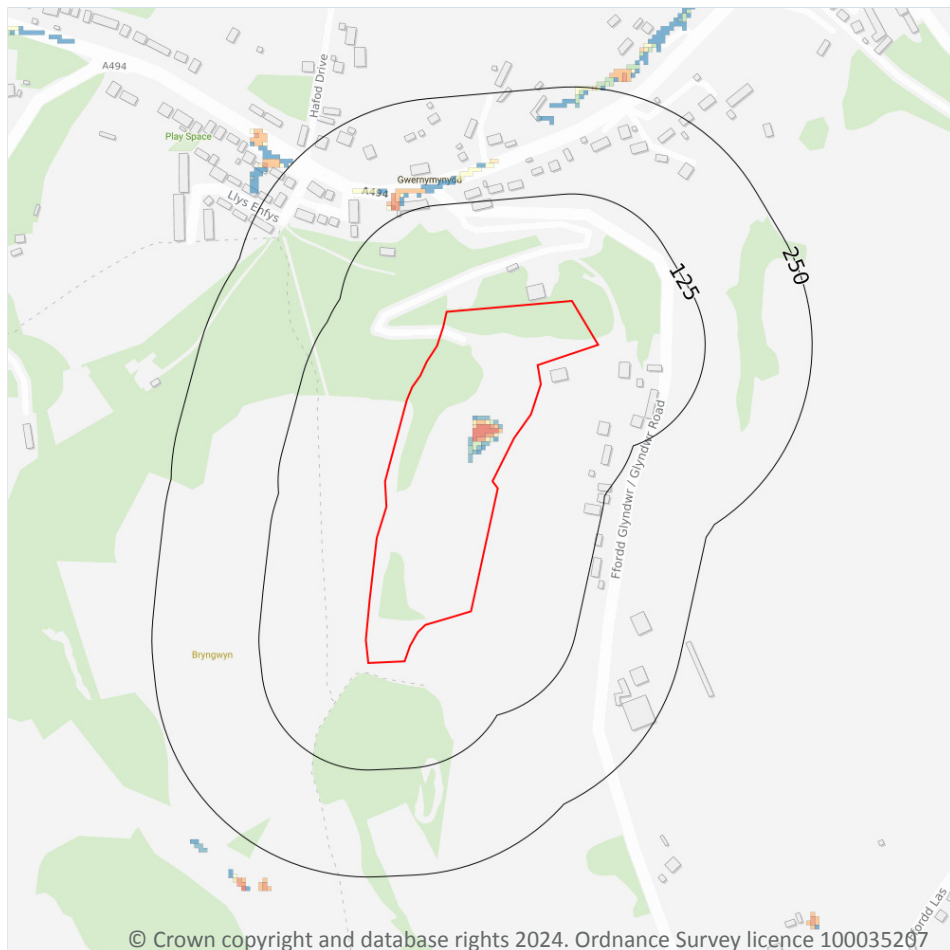
0

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

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



8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site

1 in 30 year, Greater than 1.0m

Highest risk within 50m

1 in 30 year, Greater than 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 79 >](#)

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

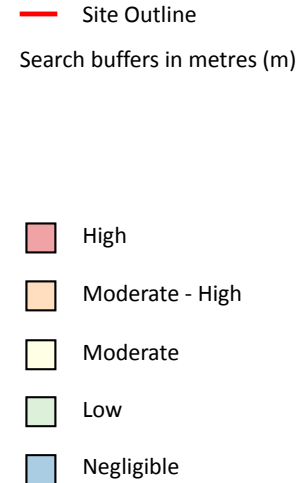
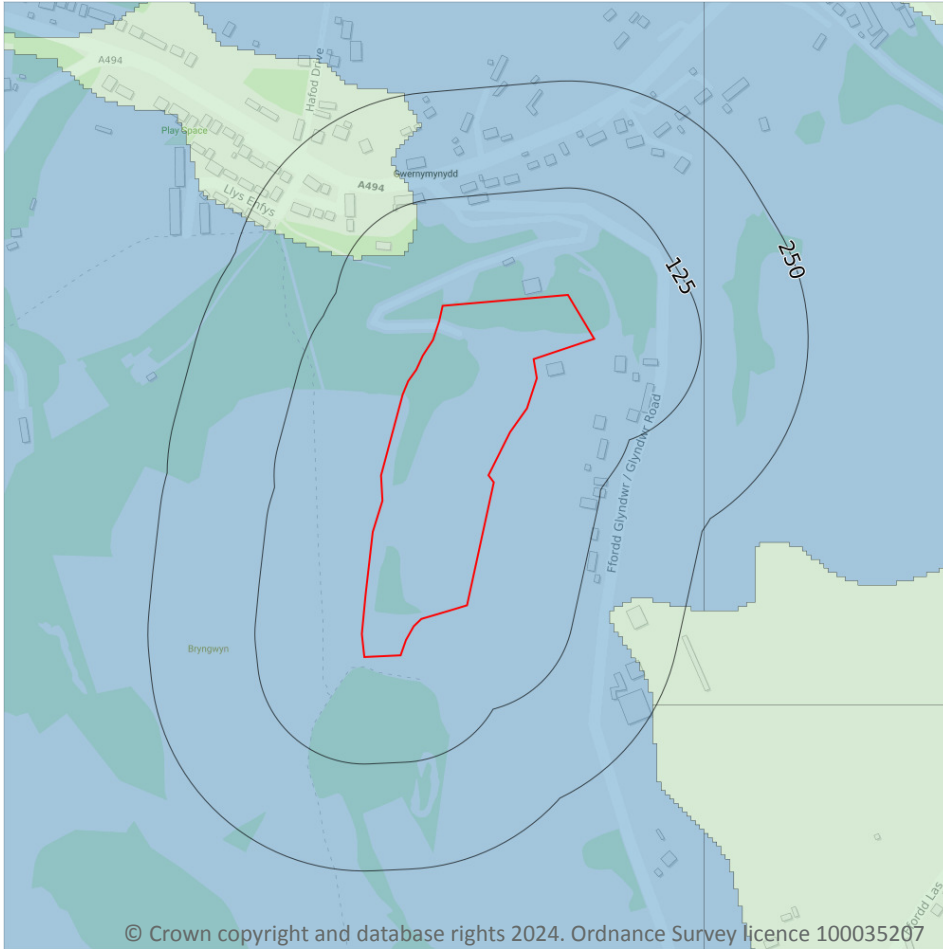
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Negligible

Highest risk within 50m

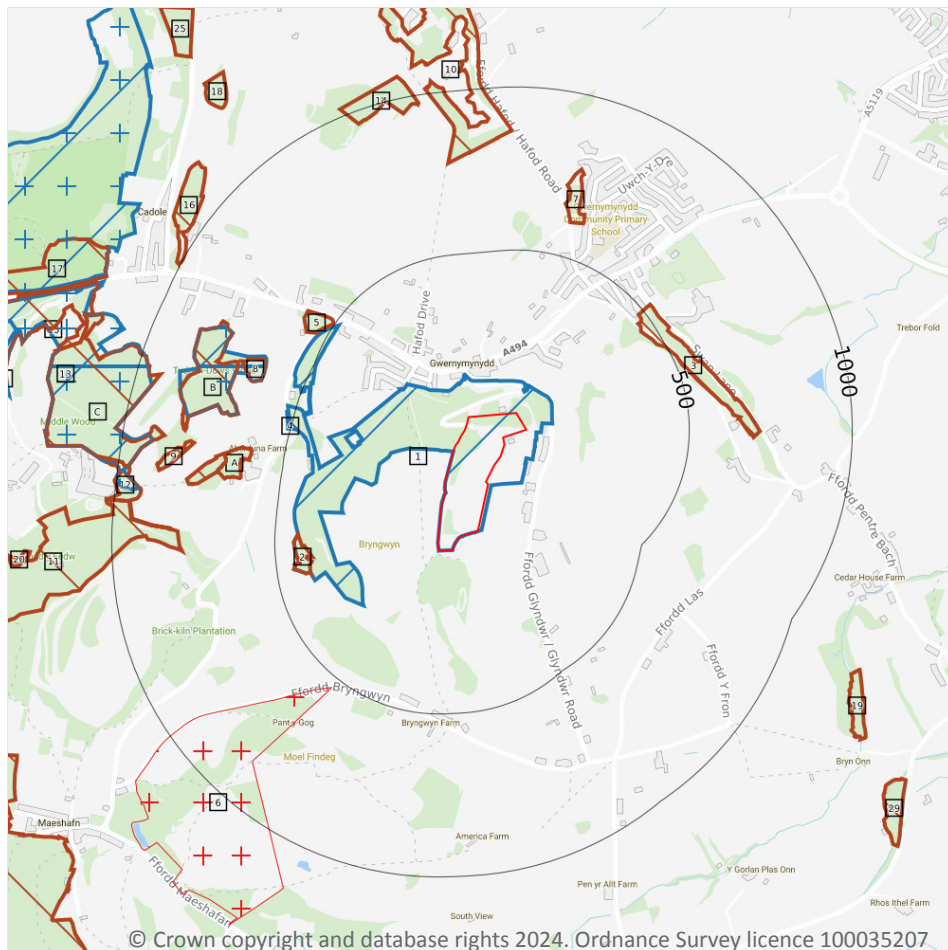
Negligible

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 81](#) >

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- + Special Areas of Conservation (SAC)
- + Local Nature Reserves (LNR)
- + Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

10

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.

Features are displayed on the Environmental designations map on [page 82](#) >

ID	Location	Name	Data source
1	On site	Chwarel Cambrian / Cambrian Quarry, Gwernymynydd	Natural Resources Wales



ID	Location	Name	Data source
4	484m W	Chwarel Cambrian / Cambrian Quarry, Gwernymynydd	Natural Resources Wales
B	627m NW	Alyn Valley Woods and Alyn Gorge Caves	Natural Resources Wales
B	631m NW	Alyn Valley Woods and Alyn Gorge Caves	Natural Resources Wales
C	907m W	Alyn Valley Woods and Alyn Gorge Caves	Natural Resources Wales
15	971m W	Alyn Valley Woods and Alyn Gorge Caves	Natural Resources Wales
D	1168m NW	Alyn Valley Woods and Alyn Gorge Caves	Natural Resources Wales
E	1364m W	Alyn Valley Woods and Alyn Gorge Caves	Natural Resources Wales
E	1384m W	Alyn Valley Woods and Alyn Gorge Caves	Natural Resources Wales
-	1432m W	Alyn Valley Woods and Alyn Gorge Caves	Natural Resources Wales

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

4

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.

Features are displayed on the Environmental designations map on [page 82 >](#)

ID	Location	Name	Features of interest	Habitat description	Data source
B	627m NW	Alyn Valley Woods / Coedwigoedd Dyffryn Alun	Dry heaths; Dry grasslands and scrublands on chalk or limestone; Limestone pavements; Caves not open to the public; Mixed woodland on base-rich soils associated with rocky slopes; Western acidic oak woodland; Alder woodland on floodplains; Yew-dominated woodland; Lesser horseshoe bat; Otter.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Mixed woodland; Inland water bodies (Standing water, Running water); Inland rocks, Scree, Sands, Permanent Snow and ice; Improved grassland; Broad-leaved deciduous woodland; Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas); Heath, Scrub, Maquis and Garrigue, Phygrana; Dry grassland, Steppes	Natural Resources Wales
13	907m W	Alyn Valley Woods / Coedwigoedd Dyffryn Alun	Dry heaths; Dry grasslands and scrublands on chalk or limestone; Limestone pavements; Caves not open to the public; Mixed woodland on base-rich soils associated with rocky slopes; Western acidic oak woodland; Alder woodland on floodplains; Yew-dominated woodland; Lesser horseshoe bat; Otter.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Mixed woodland; Inland water bodies (Standing water, Running water); Inland rocks, Scree, Sands, Permanent Snow and ice; Improved grassland; Broad-leaved deciduous woodland; Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas); Heath, Scrub, Maquis and Garrigue, Phygrana; Dry grassland, Steppes	Natural Resources Wales
D	1168m NW	Alyn Valley Woods / Coedwigoedd Dyffryn Alun	Dry heaths; Dry grasslands and scrublands on chalk or limestone; Limestone pavements; Caves not open to the public; Mixed woodland on base-rich soils associated with rocky slopes; Western acidic oak woodland; Alder woodland on floodplains; Yew-dominated woodland; Lesser horseshoe bat; Otter.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Mixed woodland; Inland water bodies (Standing water, Running water); Inland rocks, Scree, Sands, Permanent Snow and ice; Improved grassland; Broad-leaved deciduous woodland; Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas); Heath, Scrub, Maquis and Garrigue, Phygrana; Dry grassland, Steppes	Natural Resources Wales



ID	Location	Name	Features of interest	Habitat description	Data source
E	1364m W	Alyn Valley Woods / Coedwigoedd Dyffryn Alun	Dry heaths; Dry grasslands and scrublands on chalk or limestone; Limestone pavements; Caves not open to the public; Mixed woodland on base-rich soils associated with rocky slopes; Western acidic oak woodland; Alder woodland on floodplains; Yew-dominated woodland; Lesser horseshoe bat; Otter.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Mixed woodland; Inland water bodies (Standing water, Running water); Inland rocks, Scree, Sands, Permanent Snow and ice; Improved grassland; Broad-leaved deciduous woodland; Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas); Heath, Scrub, Maquis and Garrigue, Phygrana; Dry grassland, Steppes	Natural Resources Wales

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

1

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

Features are displayed on the Environmental designations map on [page 82 >](#)



ID	Location	Name	Data source
6	533m SW	Moel Findeg	Natural Resources Wales

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

10.7 Designated Ancient Woodland

Records within 2000m	59
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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 82 >](#)

ID	Location	Name	Woodland Type
2	388m SW	Unknown	Restored Ancient Woodland Site
3	457m NE	Unknown	Restored Ancient Woodland Site
5	505m NW	Unknown	Restored Ancient Woodland Site
A	600m W	Unknown	Restored Ancient Woodland Site
7	608m N	Unknown	Restored Ancient Woodland Site
8	627m NW	Unknown	Ancient Semi Natural Woodland
B	667m W	Unknown	Restored Ancient Woodland Site
A	675m W	Unknown	Ancient Semi Natural Woodland
9	779m W	Unknown	Plantation on Ancient Woodland Site
10	781m N	Unknown	Restored Ancient Woodland Site
11	785m W	Unknown	Restored Ancient Woodland Site
12	822m W	Unknown	Ancient Semi Natural Woodland
C	872m W	Unknown	Restored Ancient Woodland Site
14	952m N	Unknown	Restored Ancient Woodland Site
16	1001m NW	Unknown	Restored Ancient Woodland Site
E	1180m NW	Unknown	Ancient Semi Natural Woodland
17	1190m NW	Unknown	Restored Ancient Woodland Site
18	1212m NW	Unknown	Restored Ancient Woodland Site



ID	Location	Name	Woodland Type
19	1226m SE	Unknown	Ancient Semi Natural Woodland
20	1251m W	Unknown	Plantation on Ancient Woodland Site
-	1278m N	Unknown	Plantation on Ancient Woodland Site
-	1322m S	Unknown	Restored Ancient Woodland Site
-	1363m W	Unknown	Ancient Semi Natural Woodland
-	1388m S	Unknown	Restored Ancient Woodland Site
25	1396m NW	Unknown	Plantation on Ancient Woodland Site
-	1430m S	Unknown	Plantation on Ancient Woodland Site
F	1437m SW	Unknown	Restored Ancient Woodland Site
28	1445m SW	Unknown	Plantation on Ancient Woodland Site
29	1474m SE	Unknown	Restored Ancient Woodland Site
-	1530m S	Unknown	Restored Ancient Woodland Site
F	1560m SW	Unknown	Restored Ancient Woodland Site
-	1561m S	Unknown	Restored Ancient Woodland Site
-	1562m SW	Unknown	Restored Ancient Woodland Site
-	1569m W	Unknown	Restored Ancient Woodland Site
-	1661m NW	Unknown	Ancient Semi Natural Woodland
-	1661m E	Unknown	Ancient Semi Natural Woodland
-	1665m E	Unknown	Ancient Semi Natural Woodland
-	1682m W	Unknown	Ancient Semi Natural Woodland
-	1688m S	Unknown	Restored Ancient Woodland Site
-	1704m W	Unknown	Restored Ancient Woodland Site
-	1726m NW	Unknown	Restored Ancient Woodland Site
-	1749m NW	Unknown	Plantation on Ancient Woodland Site
-	1817m SW	Unknown	Plantation on Ancient Woodland Site
-	1818m SW	Unknown	Plantation on Ancient Woodland Site
-	1831m W	Unknown	Restored Ancient Woodland Site
-	1836m NW	Unknown	Plantation on Ancient Woodland Site



ID	Location	Name	Woodland Type
-	1842m W	Unknown	Restored Ancient Woodland Site
-	1845m W	Unknown	Plantation on Ancient Woodland Site
-	1847m W	Unknown	Restored Ancient Woodland Site
-	1847m W	Unknown	Plantation on Ancient Woodland Site
-	1875m NW	Unknown	Ancient Semi Natural Woodland
-	1901m NW	Unknown	Ancient Semi Natural Woodland
-	1902m NW	Unknown	Restored Ancient Woodland Site
-	1904m NW	Unknown	Restored Ancient Woodland Site
-	1922m S	Unknown	Restored Ancient Woodland Site
-	1927m SW	Unknown	Ancient Semi Natural Woodland
-	1937m W	Unknown	Ancient Semi Natural Woodland
-	1970m N	Unknown	Ancient Semi Natural Woodland
-	1995m SW	Unknown	Restored Ancient Woodland Site

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

1

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

Location	Name	Type	NVZ ID	Status
On site	-	Surface Water	626	Existing

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



SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0
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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.

This data is sourced from Natural England.

10.18 SSSI Units

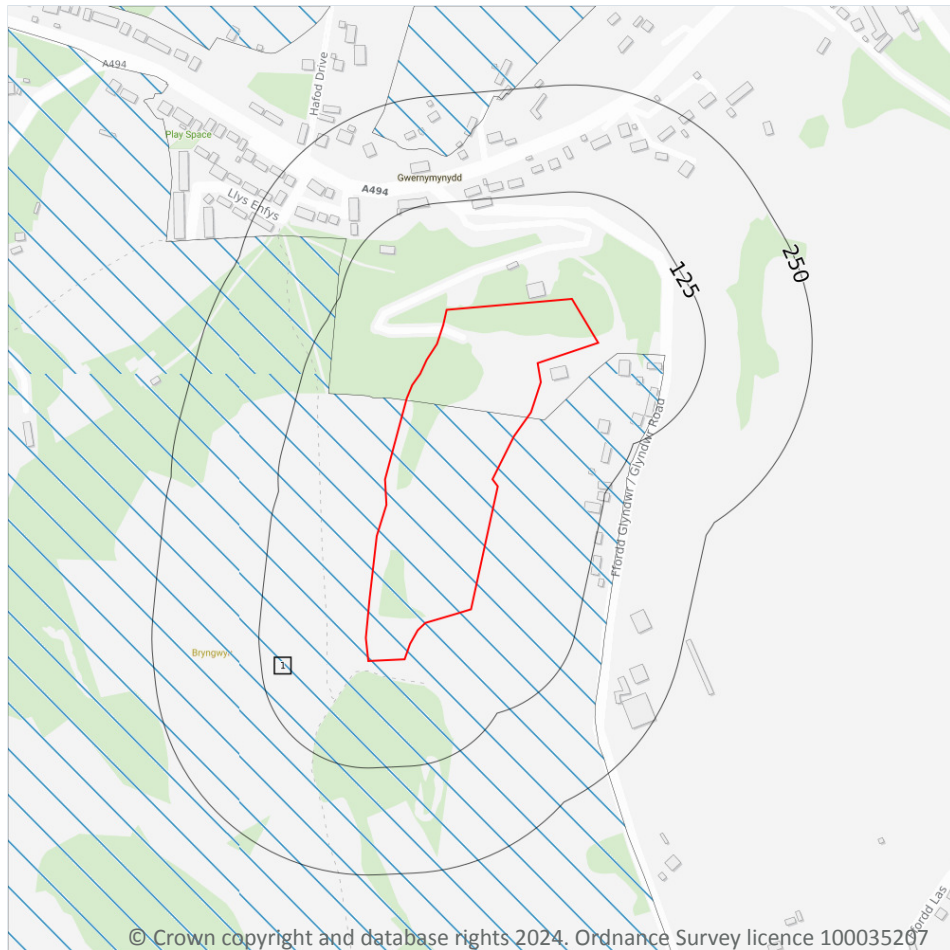
Records within 2000m	0
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Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management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

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



11 Visual and cultural designations



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

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**1**

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.

Features are displayed on the Visual and cultural designations map on [page 92](#) >

ID	Location	NAME	Data Source
1	On site	BRYNIAU CLWYD A DYFFRYN DYFRDWY/CLWYDIAN RANGE AND DEE VALLEY	Natural Resources Wales

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

11.3 National Parks

Records within 250m**0**

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

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

11.4 Listed Buildings

Records within 250m**0**

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

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



11.5 Conservation Areas

Records within 250m

0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m

0

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

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

11.7 Registered Parks and Gardens

Records within 250m

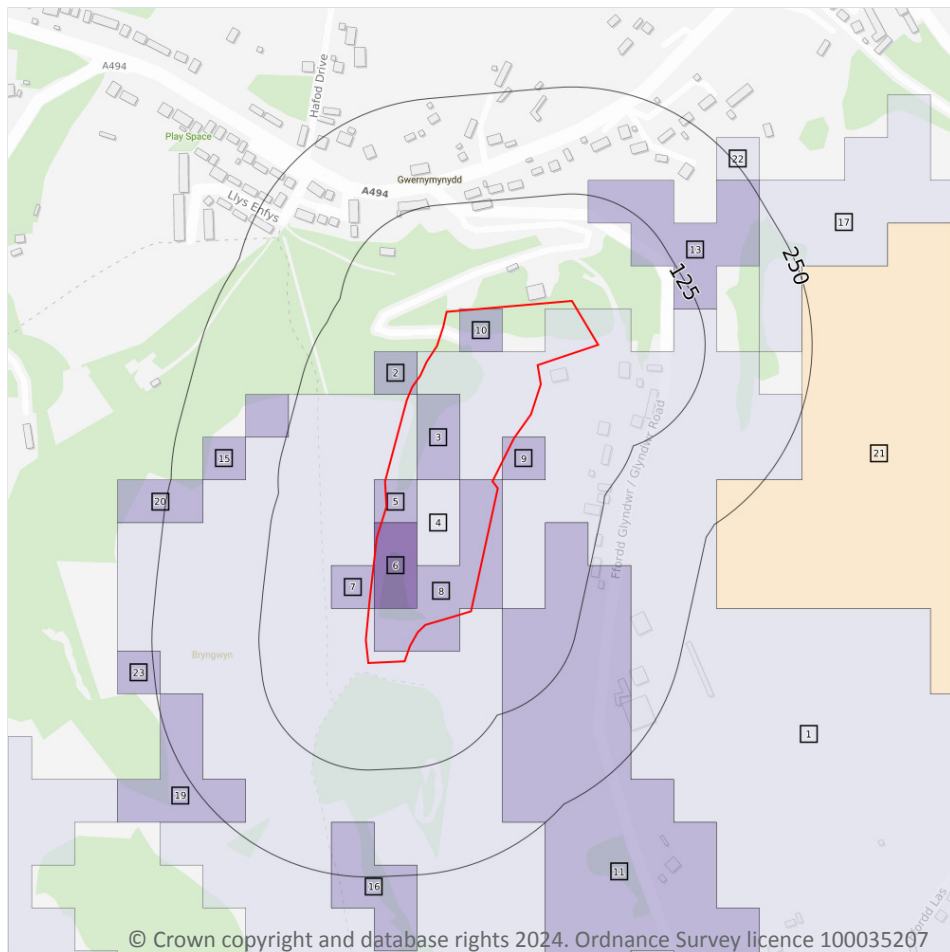
0

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

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



12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 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

21

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 95](#) >

ID	Location	Classification	Description
1	On site	Grade 3b	Moderate quality agricultural land
2	On site	Grade 4	Poor quality agricultural land
3	On site	Grade 4	Poor quality agricultural land

ID	Location	Classification	Description
4	On site	Grade 3b	Moderate quality agricultural land
5	On site	Grade 4	Poor quality agricultural land
6	On site	Grade 5	Very poor quality agricultural land
7	On site	Grade 4	Poor quality agricultural land
8	On site	Grade 4	Poor quality agricultural land
9	On site	Grade 4	Poor quality agricultural land
10	On site	Grade 4	Poor quality agricultural land
11	35m S	Grade 4	Poor quality agricultural land
13	80m NE	Grade 4	Poor quality agricultural land
A	122m W	Grade 4	Poor quality agricultural land
15	163m W	Grade 4	Poor quality agricultural land
16	186m S	Grade 4	Poor quality agricultural land
17	188m E	Grade 3b	Moderate quality agricultural land
19	197m SW	Grade 4	Poor quality agricultural land
20	204m W	Grade 4	Poor quality agricultural land
21	210m E	Grade 3a	Good to moderate quality agricultural land
22	220m NE	Grade 3b	Moderate quality agricultural land
23	241m SW	Grade 4	Poor 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. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

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

This data is sourced from Natural England.

13 Habitat designations

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

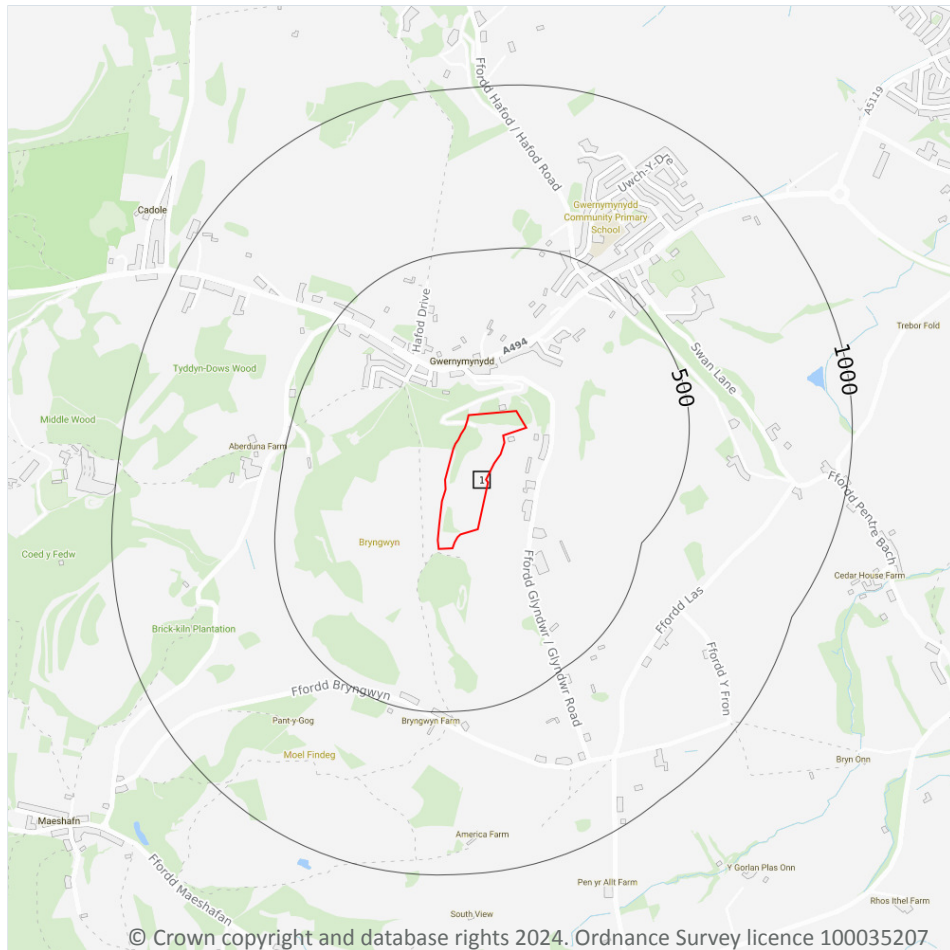
0

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 99](#) >

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

This data is sourced from the British Geological Survey.



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

14.2 Artificial and made ground (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

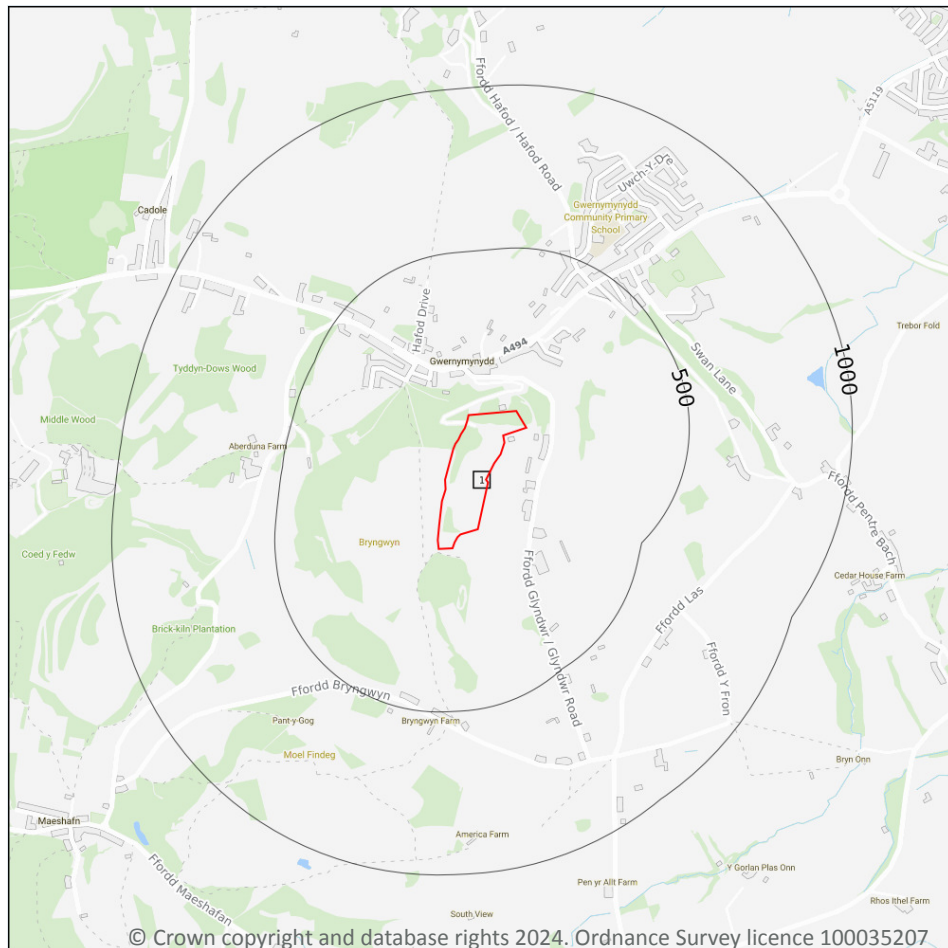
0

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

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— 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.

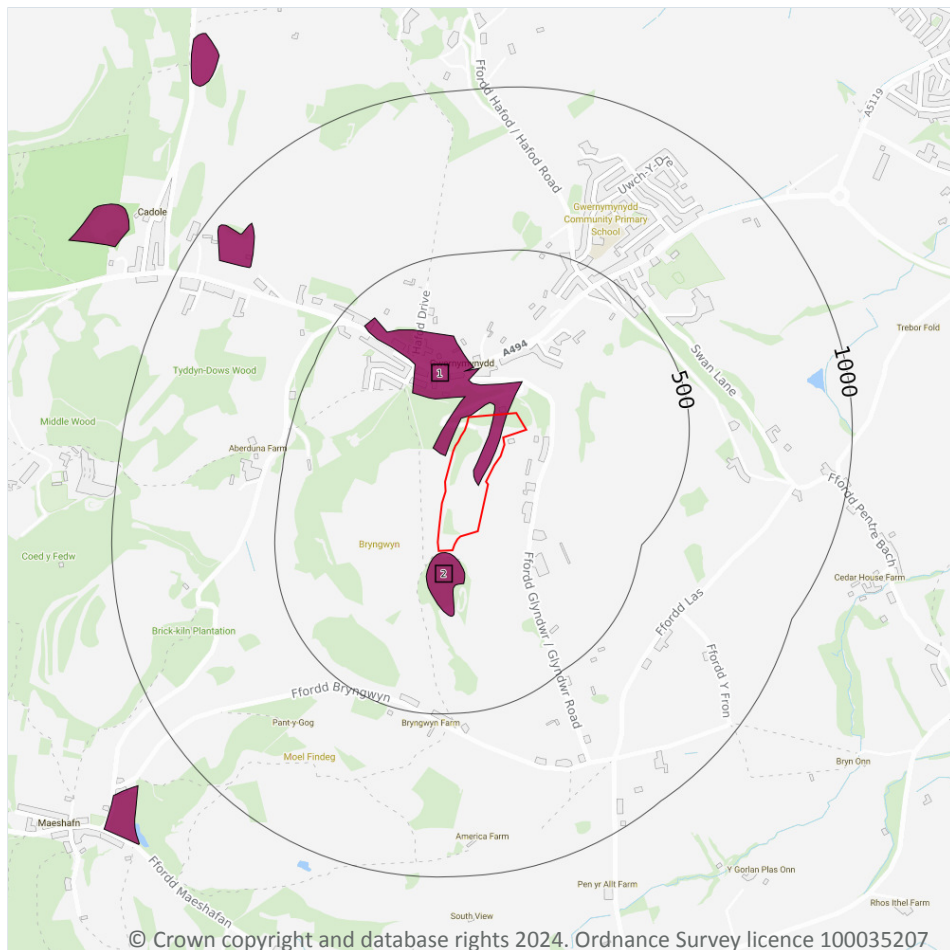
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 103](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW108_flint_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

2

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 104](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	6m S	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

2

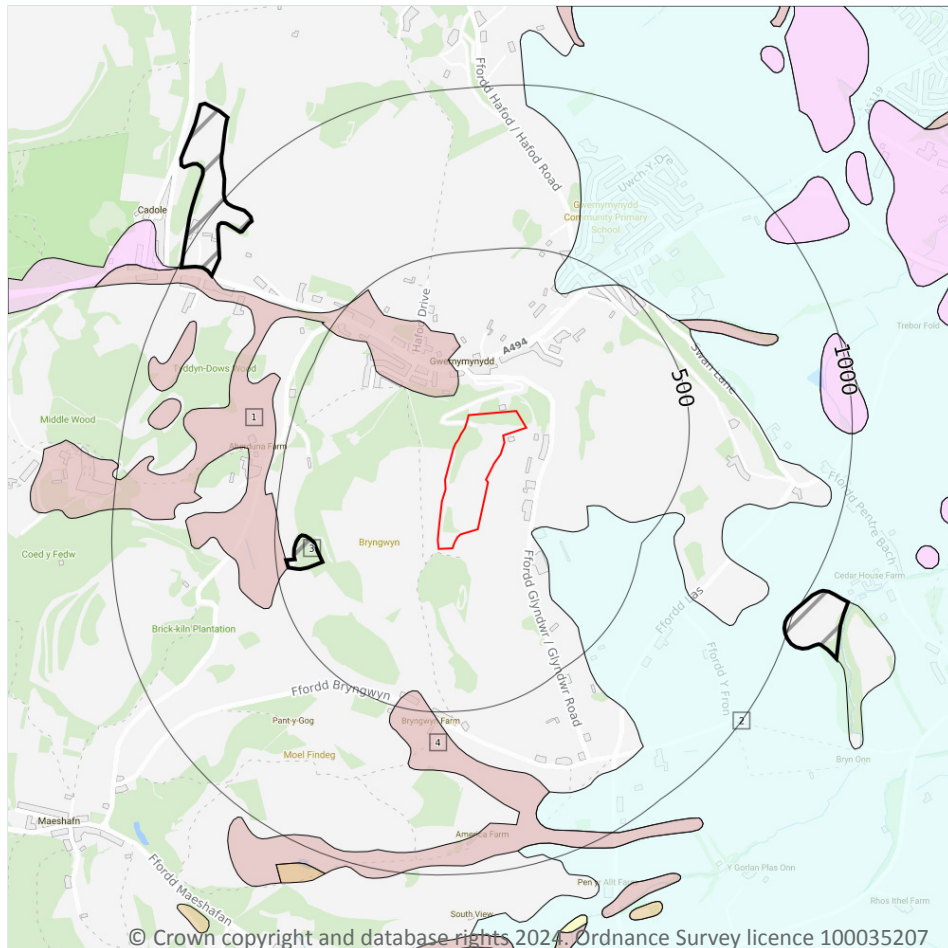
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low
6m S	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 106](#) >

ID	Location	LEX Code	Description	Rock description
1	75m N	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
2	164m SE	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON
4	441m S	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL



This data is sourced from the British Geological Survey.

15.5 Superficial 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 superficial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

1

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.

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 106 >](#)

ID	Location	LEX Code	Description	Rock description
3	359m SW	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m

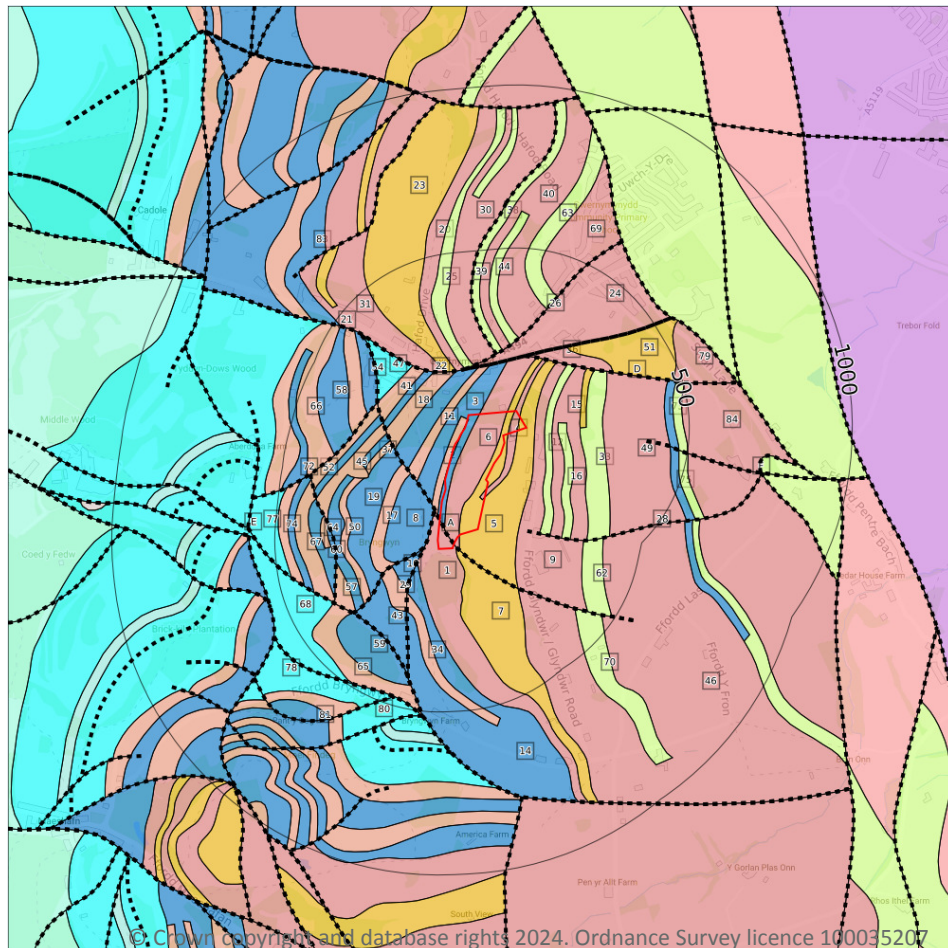
0

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

75

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 108 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
2	On site	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN

ID	Location	LEX Code	Description	Rock age
3	On site	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
4	On site	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
5	On site	CFS-CHRT	CEFN-Y-FEDW SANDSTONE FORMATION - CHERT	WISEAN
6	On site	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
7	10m S	CFS-CHRT	CEFN-Y-FEDW SANDSTONE FORMATION - CHERT	WISEAN
8	19m SW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
9	27m NE	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
10	43m SW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
11	46m N	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
12	57m NE	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
13	71m N	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
14	76m SW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
15	80m NE	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
16	98m NE	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
17	107m W	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
18	120m N	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
19	138m W	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
20	140m N	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
23	141m N	CFS-CHRT	CEFN-Y-FEDW SANDSTONE FORMATION - CHERT	WISEAN



ID	Location	LEX Code	Description	Rock age
24	142m N	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
25	142m N	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
29	151m SW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
30	151m N	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
31	151m N	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
32	165m NE	CFS-CHRT	CEFN-Y-FEDW SANDSTONE FORMATION - CHERT	WISEAN
33	165m NE	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
34	166m SW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
35	168m NW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
36	171m NE	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
37	179m W	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
38	180m N	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
40	189m N	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
41	191m NW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
42	193m W	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
43	197m SW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
44	203m N	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
45	210m NW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
46	221m S	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN



ID	Location	LEX Code	Description	Rock age
47	228m NW	CFML-LMAR	CEFN MAWR LIMESTONE FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
48	230m NW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
49	234m E	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
50	242m SW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
51	248m NE	CFS-CHRT	CEFN-Y-FEDW SANDSTONE FORMATION - CHERT	WISEAN
52	249m NW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
53	267m SW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
54	271m NW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
56	284m NW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
57	298m SW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
58	308m W	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
59	314m SW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
60	314m SW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
62	325m SE	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
63	327m NE	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
64	328m SW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
65	329m SW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
66	347m W	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
67	351m SW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
68	362m SW	CFML-LMAR	CEFN MAWR LIMESTONE FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
69	374m NE	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN



ID	Location	LEX Code	Description	Rock age
70	385m SE	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
71	403m SW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
72	422m W	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
73	427m E	CFS-LMST	CEFN-Y-FEDW SANDSTONE FORMATION - LIMESTONE	WISEAN
74	427m SW	MRF-SDST	MINERA FORMATION - SANDSTONE	WISEAN
75	445m E	CFS-LMST	CEFN-Y-FEDW SANDSTONE FORMATION - LIMESTONE	WISEAN
76	453m E	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
77	460m SW	CFML-LMAR	CEFN MAWR LIMESTONE FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
78	472m S	CFML-LMAR	CEFN MAWR LIMESTONE FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
79	473m NE	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
80	473m S	CFML-LMAR	CEFN MAWR LIMESTONE FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN
82	473m E	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	WISEAN
83	479m NW	MRF-LMSA	MINERA FORMATION - LIMESTONE AND [SUBEQUAL/SUBORDINATE] SANDSTONE, INTERBEDDED	WISEAN
84	480m E	CFS-SDAR	CEFN-Y-FEDW SANDSTONE FORMATION - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	WISEAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	5
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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	Very High	Moderate
On site	Fracture	Low	Low
On site	Fracture	Moderate	Low
On site	Fracture	High	Moderate
46m N	Fracture	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	23
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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 108 >](#)

ID	Location	Category	Description
A	On site	FAULT	Fault, inferred, displacement unknown
A	On site	MINERAL_VEIN	Mineral vein, inferred
B	19m SW	FAULT	Fault, inferred, displacement unknown
B	19m SW	MINERAL_VEIN	Mineral vein, inferred
C	43m SW	FAULT	Fault, inferred, displacement unknown
C	43m SW	MINERAL_VEIN	Mineral vein, inferred
21	140m N	FAULT	Fault, inferred, displacement unknown
22	140m N	MINERAL_VEIN	Mineral vein, inferred
26	142m N	FAULT	Fault, inferred, displacement unknown
27	142m N	FAULT	Fault, inferred, displacement unknown
28	150m SE	FAULT	Fault, inferred, displacement unknown
D	171m NE	FAULT	Fault, inferred, displacement unknown
D	171m NE	MINERAL_VEIN	Mineral vein, inferred
39	180m N	ROCK	Coal seam, inferred
55	271m NW	FAULT	Fault, inferred, displacement unknown

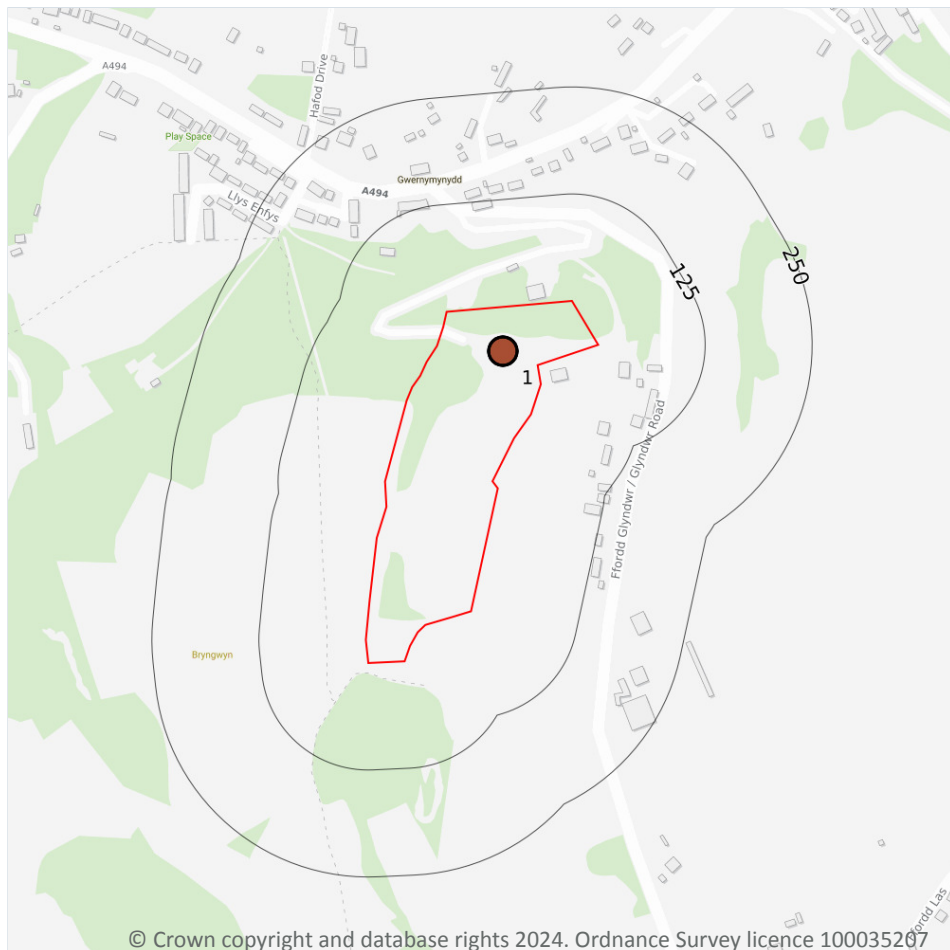


ID	Location	Category	Description
61	314m SW	FAULT	Fault, inferred, displacement unknown
E	314m SW	FAULT	Fault, inferred, displacement unknown
E	314m SW	MINERAL_VEIN	Mineral vein, inferred
F	372m E	FAULT	Fault, inferred, displacement unknown
F	372m E	MINERAL_VEIN	Mineral vein, inferred
G	472m S	FAULT	Fault, inferred, displacement unknown
G	472m S	MINERAL_VEIN	Mineral vein, inferred
81	473m S	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

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16.1 BGS Boreholes

Records within 250m

1

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.

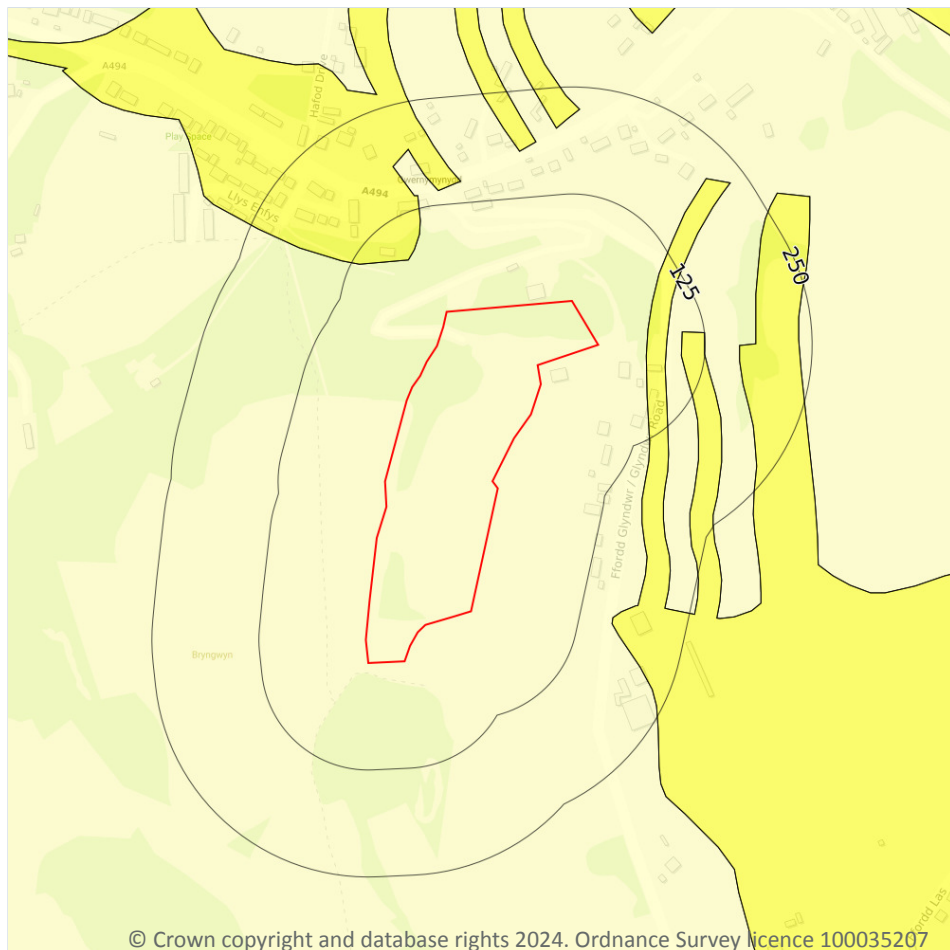
Features are displayed on the Boreholes map on [page 115 >](#)

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	321500 362200	GWERNYMYNYDD MINE, MINE PLAN	-1.0	N	150018 ↗

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).

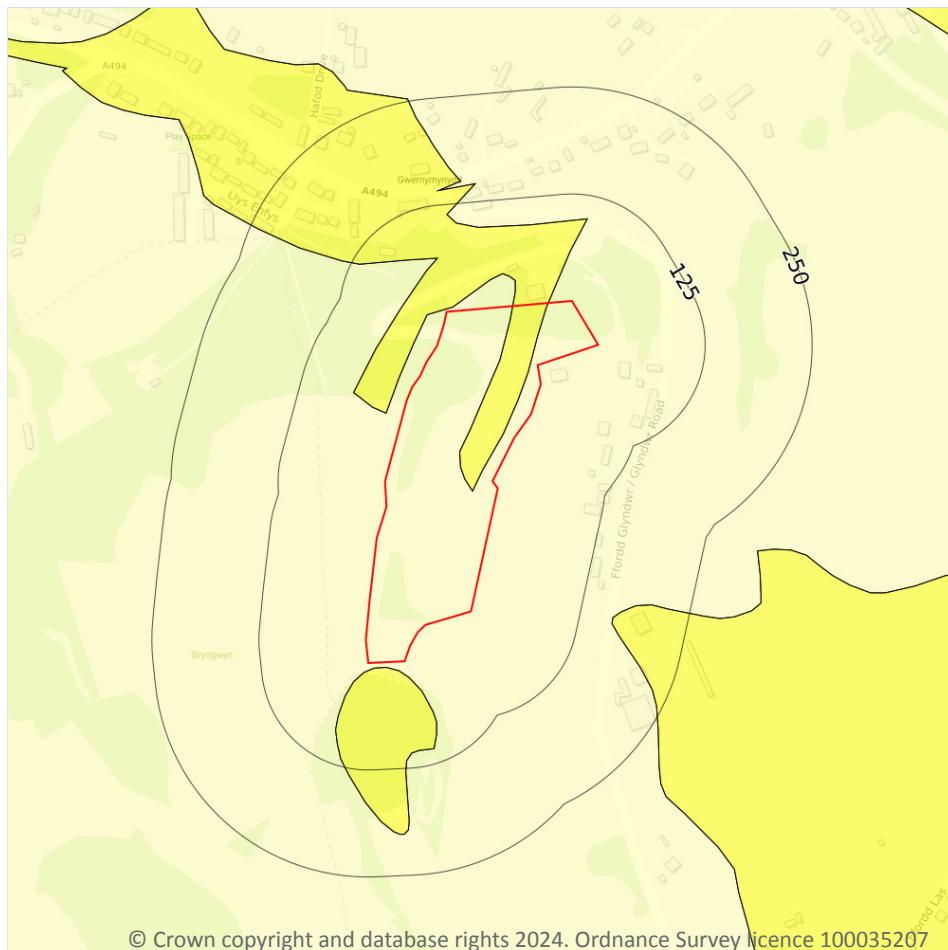
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 116 >](#)

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.

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

3

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

Features are displayed on the Natural ground subsidence - Running sands map on [page 117 >](#)

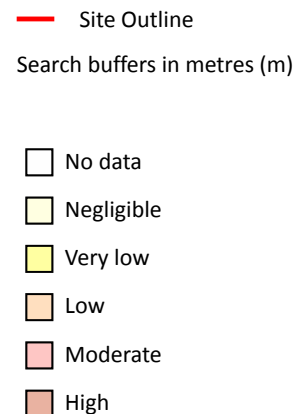
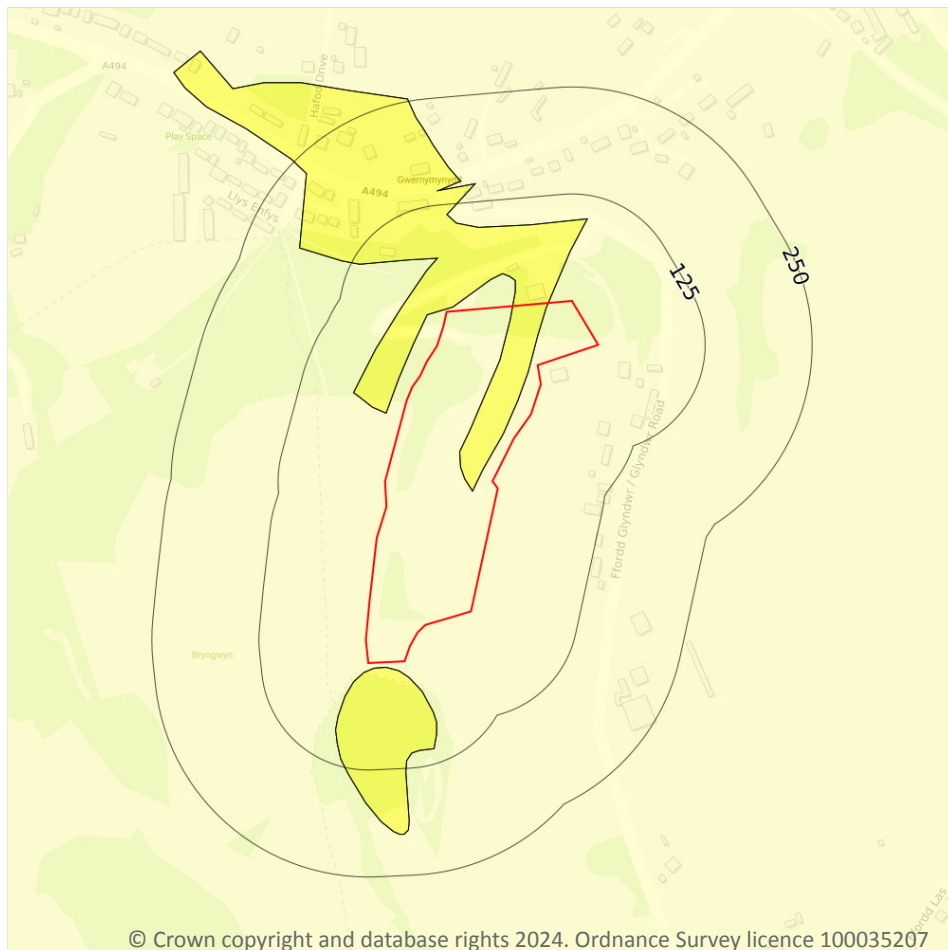
Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
6m S	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



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17.3 Compressible deposits

Records within 50m

3

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 119](#) >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

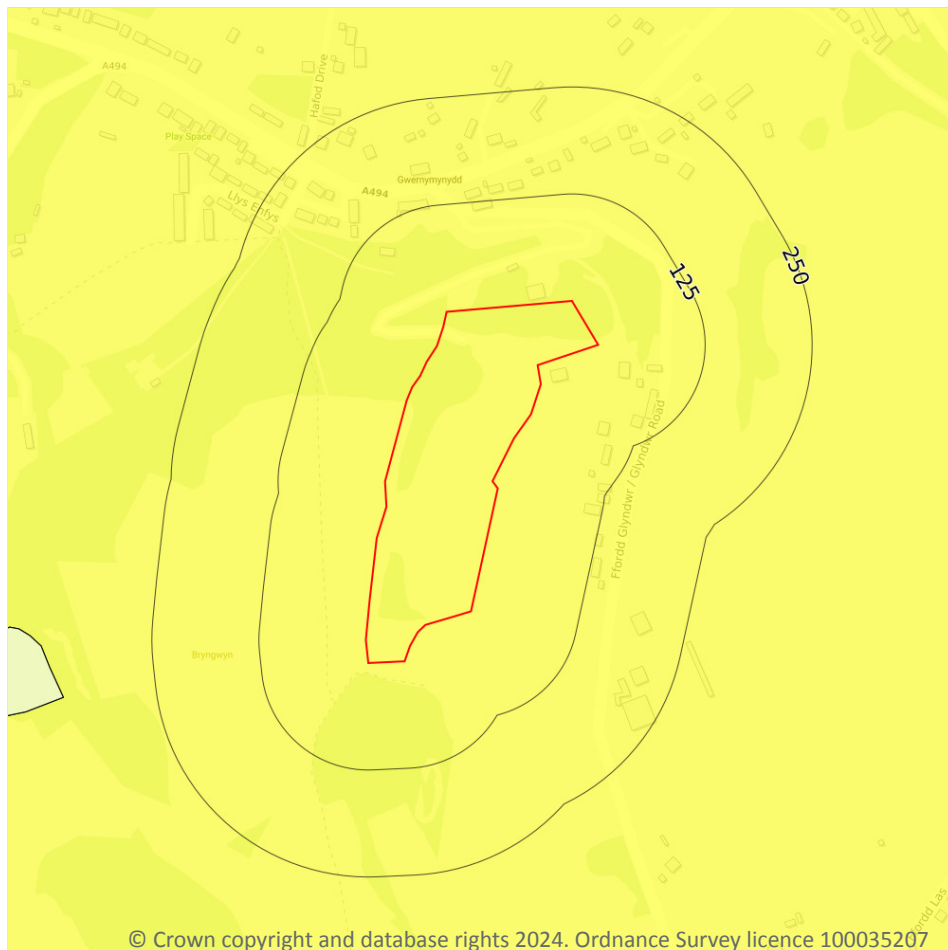


Location	Hazard rating	Details
6m S	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

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

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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.

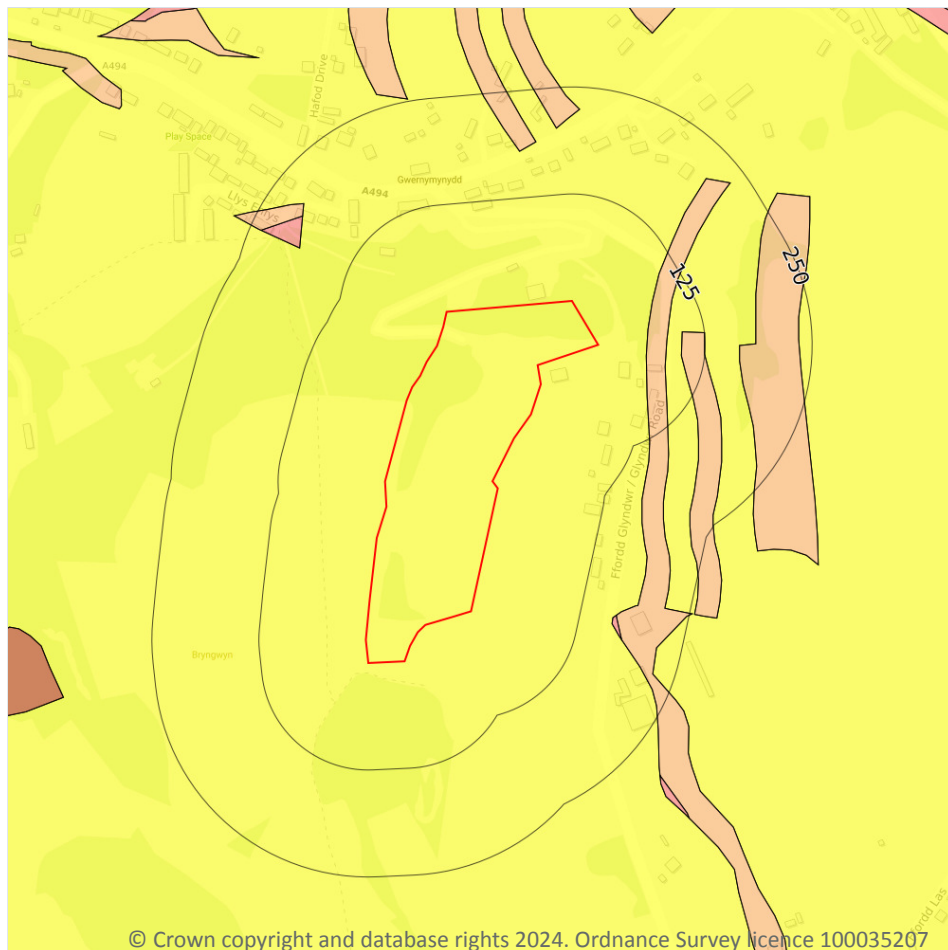
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 121 >](#)

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.

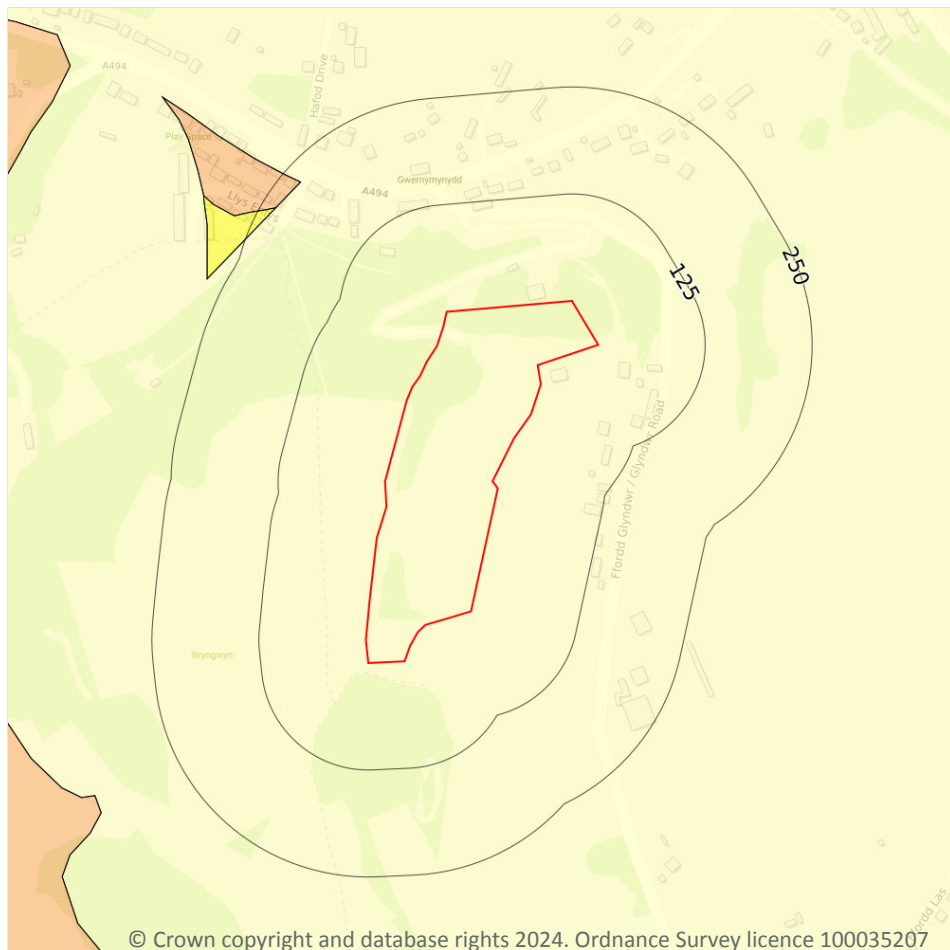
Features are displayed on the Natural ground subsidence - Landslides map on [page 122 >](#)

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 123 >](#)

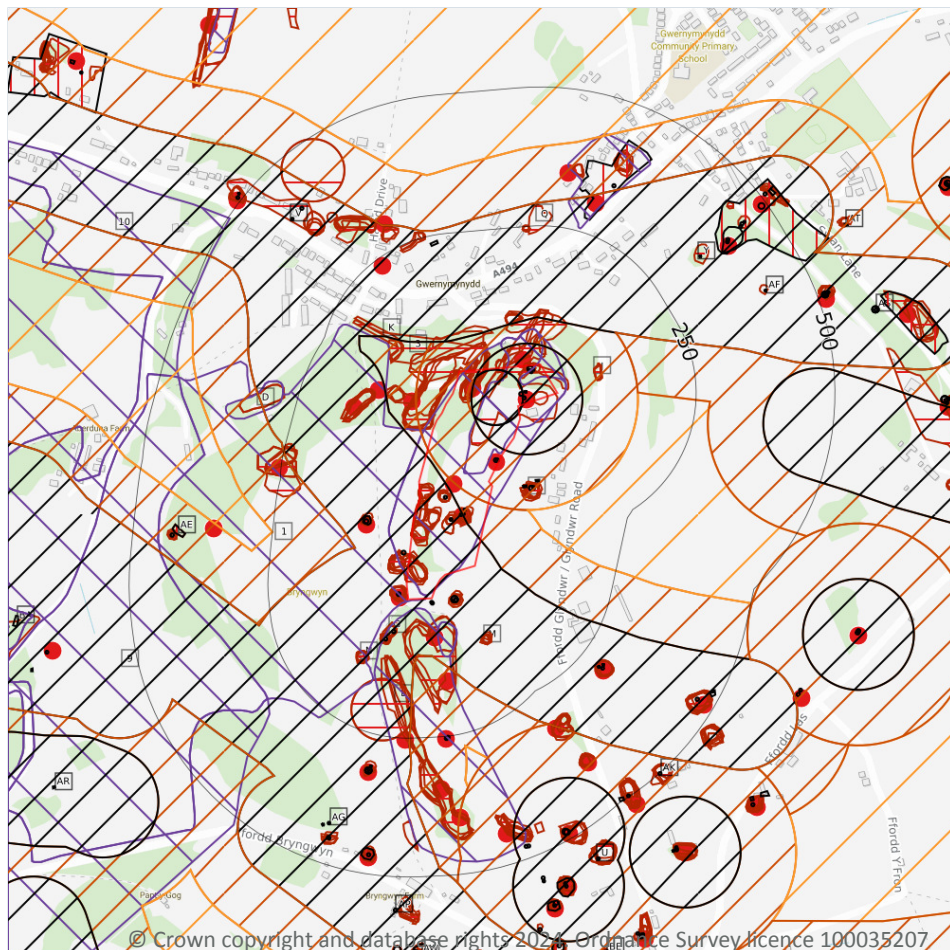
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



This data is sourced from the British Geological Survey.



18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- ▢ Surface ground workings
- ▢ Underground workings
- ▢ Underground mining extents
- ▢ Historical mineral planning areas
- ▢ TCA non-coal mining
- Non Coal Mining
- ▢ Sporadic underground mining of restricted extent possible
- ▢ Localised small scale underground mining possible
- ▢ Small scale mining possible
- ▢ Underground mining known or likely within or in close proximity
- ▢ Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m

37

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

Features are displayed on the Mining and ground workings map on [page 125](#) >



ID	Location	Details	Description
A	On site	Name: Bryn-y-ffynnon Address: Gwernymynydd, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	On site	Name: Bryn-y-ffynnon Address: Gwernymynydd, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	On site	Name: Cambrain Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
C	On site	Name: Cambrian Address: Gwernymynydd, MOLD, Flintshire Commodity: Silica Rock Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
C	On site	Name: Cambrian Address: Gwernymynydd, MOLD, Flintshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority



ID	Location	Details	Description
C	On site	Name: Fron-uchaf Address: Gwernymynydd, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	12m NE	Name: Cambrian Mine Address: Gwernymynydd, MOLD, Flintshire Commodity: Silica Rock Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
C	15m SW	Name: Fron-uchaf Address: Gwernymynydd, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	57m NW	Name: Cambrian Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	57m NW	Name: Cambrian Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Chert Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
E	70m S	Name: Bryn Gwyn Sand Quarry Address: Gwernymynydd, MOLD, Flintshire Commodity: Silica Rock Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority



ID	Location	Details	Description
I	83m SW	Name: Fron-uchaf Address: Gwernymynydd, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	118m NW	Name: Cambrian Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	149m NW	Name: Cambrian Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
E	151m S	Name: Bryn Gwyn Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Chert Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
7	235m N	Name: Ty'n-y-cornel Address: Gwernymynydd, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
R	253m S	Name: Bryn Gwyn Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Chert Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority



ID	Location	Details	Description
R	253m S	Name: Bryn Gwyn Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
R	253m S	Name: Bryn Gwyn Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
O	254m W	Name: Cae Cymro Address: Gwernymynydd, MOLD, Flintshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
F	255m S	Name: Tan-y-maes Address: Fron, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
P	297m N	Name: Swan Inn Address: Gwernymynydd, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority



ID	Location	Details	Description
T	299m SE	Name: Fron-uchaf Address: Nercwys, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
S	308m NE	Name: Gwernymynydd Address: Gwernymynydd, MOLD, Flintshire Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
W	320m S	Name: Tan-y-maes Address: Fron, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
X	325m S	Name: Tan-y-Maes Address: Gwernymynydd, MOLD, Flintshire Commodity: Chert Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
F	344m S	Name: Bryn Gwyn Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Chert Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority



ID	Location	Details	Description
S	349m N	Name: Swan Inn Address: Gwernymynydd, MOLD, Flintshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
11	356m W	Name: Cae Cymro Address: Gwernymynydd, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
F	399m S	Name: Bryn Gwyn Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Chert Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
AA	400m NE	Name: Fron Hall Address: Gwernymynydd, MOLD, Flintshire Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
AC	409m SE	Name: Tan-y-maes Address: Fron, MOLD, Flintshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
AB	446m S	Name: Bryn Gwyn Quarries Address: Gwernymynydd, MOLD, Flintshire Commodity: Chert Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority



ID	Location	Details	Description
AH	470m S	Name: Bryngwyn Farm Address: Fron, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
AI	482m SE	Name: Tan-y-maes Address: Fron, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
AB	492m S	Name: Mount Pleasant Address: Fron, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
AA	492m NE	Name: Swan Inn Address: Gwernymynydd, MOLD, Flintshire Commodity: Lead Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

167

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

Features are displayed on the Mining and ground workings map on [page 125 >](#)



ID	Location	Land Use	Year of mapping	Mapping scale
B	On site	Unspecified Quarries	1900	1:10560
B	On site	Unspecified Old Quarry	1900	1:10560
B	On site	Unspecified Quarry	1872	1:10560
B	On site	Unspecified Disused Quarries	1981	1:10000
B	On site	Unspecified Quarries	1948	1:10560
B	On site	Unspecified Quarries	1948	1:10560
B	On site	Unspecified Quarries	1938	1:10560
B	On site	Unspecified Quarries	1938	1:10560
B	On site	Unspecified Heap	1872	1:10560
B	On site	Unspecified Heap	1964	1:10560
B	On site	Refuse Heap	1964	1:10560
B	On site	Unspecified Ground Workings	1964	1:10560
B	On site	Unspecified Quarries	1910	1:10560
B	On site	Unspecified Ground Workings	1910	1:10560
B	On site	Unspecified Heap	1910	1:10560
C	On site	Unspecified Heaps	1948	1:10560
C	On site	Unspecified Heaps	1948	1:10560
C	On site	Unspecified Heaps	1948	1:10560
C	On site	Unspecified Heap	1948	1:10560
C	On site	Unspecified Quarry	1992	1:10000
C	On site	Unspecified Disused Quarry	1981	1:10000
C	On site	Unspecified Heaps	1948	1:10560
C	On site	Unspecified Heaps	1948	1:10560
C	On site	Unspecified Heaps	1948	1:10560
C	On site	Unspecified Heap	1948	1:10560
C	On site	Unspecified Heap	1900	1:10560
C	On site	Unspecified Heaps	1900	1:10560
C	On site	Unspecified Heap	1900	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
C	On site	Unspecified Ground Workings	1900	1:10560
C	On site	Unspecified Heap	1900	1:10560
C	On site	Unspecified Heaps	1872	1:10560
C	On site	Unspecified Heap	1872	1:10560
C	On site	Unspecified Heaps	1872	1:10560
C	On site	Unspecified Heap	1872	1:10560
C	On site	Refuse Heap	1872	1:10560
C	On site	Unspecified Heap	1872	1:10560
C	On site	Unspecified Heap	1992	1:10000
C	On site	Unspecified Heap	1992	1:10000
C	On site	Unspecified Heap	1981	1:10000
C	On site	Unspecified Heap	1981	1:10000
C	On site	Unspecified Heap	1964	1:10560
C	On site	Unspecified Heap	1964	1:10560
C	On site	Unspecified Heaps	1964	1:10560
C	On site	Unspecified Heap	1964	1:10560
C	On site	Unspecified Heap	1964	1:10560
C	On site	Unspecified Heaps	1938	1:10560
C	On site	Unspecified Heaps	1938	1:10560
C	On site	Unspecified Heap	1938	1:10560
C	On site	Unspecified Heap	1938	1:10560
C	On site	Unspecified Heap	1938	1:10560
C	On site	Unspecified Ground Workings	1910	1:10560
C	On site	Unspecified Heap	1910	1:10560
C	On site	Unspecified Heap	1910	1:10560
C	On site	Unspecified Ground Workings	1910	1:10560
C	On site	Unspecified Ground Workings	1910	1:10560
C	1m SW	Unspecified Heap	1872	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
C	2m SW	Unspecified Ground Workings	1938	1:10560
C	3m SW	Unspecified Heap	1948	1:10560
C	3m SW	Unspecified Heap	1948	1:10560
C	3m SW	Unspecified Heap	1910	1:10560
C	3m SW	Unspecified Heap	1938	1:10560
C	6m SW	Unspecified Heap	1992	1:10000
C	6m SW	Unspecified Heap	1981	1:10000
C	6m SW	Unspecified Heap	1964	1:10560
C	6m SW	Unspecified Pit	1992	1:10000
C	6m SW	Unspecified Pit	1981	1:10000
C	6m SW	Unspecified Pit	1964	1:10560
B	7m N	Unspecified Quarry	1872	1:10560
C	9m SW	Unspecified Pit	1900	1:10560
B	12m NW	Stone Quarry	1992	1:10000
B	19m NE	Unspecified Heap	1964	1:10560
E	30m S	Unspecified Heap	1900	1:10560
E	31m S	Unspecified Heap	1910	1:10560
E	31m S	Unspecified Heap	1948	1:10560
E	31m S	Unspecified Heap	1948	1:10560
E	32m S	Unspecified Heap	1872	1:10560
E	32m S	Unspecified Heap	1938	1:10560
E	36m S	Unspecified Pits	1964	1:10560
E	37m S	Unspecified Quarry	1981	1:10000
E	37m S	Unspecified Pit	1992	1:10000
E	41m S	Unspecified Old Quarry	1938	1:10560
3	41m N	Unspecified Quarries	1948	1:10560
E	43m S	Unspecified Old Quarry	1910	1:10560
G	46m SW	Unspecified Heaps	1872	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
E	47m S	Stone Quarry	1948	1:10560
H	51m E	Unspecified Heap	1992	1:10000
H	51m E	Unspecified Heap	1981	1:10000
H	51m E	Unspecified Heap	1964	1:10560
G	55m SW	Unspecified Heaps	1992	1:10000
G	55m SW	Unspecified Heaps	1981	1:10000
G	55m SW	Unspecified Heaps	1964	1:10560
H	56m E	Unspecified Heap	1900	1:10560
H	57m E	Unspecified Heap	1948	1:10560
H	57m E	Unspecified Heap	1948	1:10560
H	57m E	Unspecified Heap	1910	1:10560
H	59m E	Unspecified Heap	1938	1:10560
H	61m E	Unspecified Heap	1872	1:10560
B	62m N	Unspecified Ground Workings	1964	1:10560
B	72m NW	Unspecified Quarry	1872	1:10560
B	72m NW	Unspecified Quarries	1910	1:10560
G	72m SW	Unspecified Heap	1910	1:10560
B	73m NW	Unspecified Quarries	1938	1:10560
G	73m SW	Unspecified Heap	1938	1:10560
G	73m SW	Unspecified Heap	1948	1:10560
G	73m SW	Unspecified Heap	1948	1:10560
I	74m SW	Unspecified Heap	1872	1:10560
B	74m N	Unspecified Heap	1910	1:10560
J	74m NE	Unspecified Pit	1948	1:10560
J	74m NE	Unspecified Pit	1948	1:10560
J	75m NE	Unspecified Pit	1910	1:10560
I	75m SW	Unspecified Heap	1948	1:10560
I	75m SW	Unspecified Heap	1948	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
J	75m NE	Unspecified Pit	1938	1:10560
B	75m N	Unspecified Heap	1938	1:10560
B	77m N	Unspecified Heap	1948	1:10560
B	77m N	Unspecified Heap	1948	1:10560
I	77m SW	Unspecified Heap	1910	1:10560
I	79m SW	Unspecified Heap	1992	1:10000
I	79m SW	Unspecified Heap	1981	1:10000
I	79m SW	Unspecified Heap	1964	1:10560
F	107m S	Unspecified Old Quarry	1948	1:10560
K	107m NW	Unspecified Heap	1964	1:10560
F	108m SW	Unspecified Old Quarry	1910	1:10560
L	110m S	Unspecified Old Quarry	1900	1:10560
K	110m NW	Unspecified Heap	1900	1:10560
F	111m S	Unspecified Old Quarry	1938	1:10560
M	114m S	Unspecified Heap	1992	1:10000
M	114m S	Unspecified Heap	1981	1:10000
M	114m S	Unspecified Heap	1964	1:10560
M	115m S	Unspecified Heap	1872	1:10560
M	116m S	Unspecified Heap	1910	1:10560
M	116m S	Unspecified Heap	1948	1:10560
M	116m S	Unspecified Heap	1948	1:10560
M	116m S	Unspecified Heap	1938	1:10560
B	118m NW	Unspecified Quarries	1948	1:10560
B	120m NW	Unspecified Quarries	1938	1:10560
B	120m NW	Unspecified Quarries	1910	1:10560
B	120m NW	Unspecified Quarry	1872	1:10560
N	121m SW	Unspecified Heap	1938	1:10560
N	122m SW	Unspecified Heap	1910	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
N	123m SW	Unspecified Heap	1992	1:10000
N	123m SW	Unspecified Heap	1981	1:10000
N	123m SW	Unspecified Heap	1964	1:10560
N	123m SW	Unspecified Heap	1900	1:10560
N	123m SW	Unspecified Heap	1872	1:10560
N	123m SW	Unspecified Heap	1948	1:10560
N	123m SW	Unspecified Heap	1948	1:10560
B	124m NW	Unspecified Pit	1981	1:10000
B	124m NW	Unspecified Pit	1964	1:10560
B	125m NW	Unspecified Quarries	1900	1:10560
E	125m S	Unspecified Quarry	1981	1:10000
L	148m S	Unspecified Disused Quarry	1992	1:10000
L	148m S	Unspecified Disused Quarry	1981	1:10000
O	212m W	Unspecified Old Quarry	1948	1:10560
O	221m W	Unspecified Disused Quarry	1992	1:10000
O	221m W	Unspecified Disused Quarry	1981	1:10000
O	221m W	Unspecified Pit	1964	1:10560
O	226m W	Unspecified Old Quarry	1938	1:10560
O	226m W	Unspecified Old Quarry	1910	1:10560
O	228m W	Unspecified Old Quarry	1900	1:10560
Q	236m N	Unspecified Heap	1872	1:10560
P	237m N	Unspecified Ground Workings	1910	1:10560
P	241m N	Unspecified Ground Workings	1964	1:10560
Q	241m N	Unspecified Pit	1948	1:10560
Q	241m N	Unspecified Pit	1948	1:10560
Q	243m N	Unspecified Pit	1938	1:10560
P	246m N	Unspecified Pit	1938	1:10560

This is data is sourced from Ordnance Survey/Groundsure.



18.3 Underground workings

Records within 1000m

200

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

Features are displayed on the Mining and ground workings map on [page 125 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
A	On site	Unspecified Old Shaft	1900	1:10560
A	On site	Old Lead Shaft	1938	1:10560
B	On site	Unspecified Shafts	1900	1:10560
B	On site	Unspecified Shafts	1900	1:10560
B	On site	Lead Shafts	1872	1:10560
B	On site	Lead Shafts	1872	1:10560
B	On site	Unspecified Disused Shaft	1964	1:10560
B	On site	Old Clay Shafts	1938	1:10560
B	On site	Old Clay Shafts	1938	1:10560
C	On site	Unspecified Old Shafts	1900	1:10560
C	On site	Lead Shaft	1872	1:10560
C	On site	Old Lead Shafts	1938	1:10560
C	On site	Old Lead Shafts	1938	1:10560
C	On site	Old Lead Shafts	1938	1:10560
E	5m S	Old Lead Shafts	1938	1:10560
E	6m S	Unspecified Old Shafts	1900	1:10560
C	7m SW	Unspecified Old Shafts	1900	1:10560
C	13m SW	Unspecified Old Shafts	1900	1:10560
C	13m SW	Old Lead Shafts	1938	1:10560
E	33m S	Unspecified Disused Shaft	1992	1:10000
E	33m S	Unspecified Disused Shaft	1981	1:10000
E	33m S	Unspecified Disused Shaft	1964	1:10560
E	38m S	Unspecified Old Shafts	1900	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
E	39m S	Old Lead Shafts	1938	1:10560
H	55m E	Unspecified Old Shafts	1900	1:10560
G	60m SW	Old Lead Shafts	1938	1:10560
H	66m E	Unspecified Disused Shaft	1992	1:10000
H	66m E	Unspecified Disused Shaft	1981	1:10000
H	72m E	Old Lead Shaft	1938	1:10560
H	74m E	Lead Shaft	1872	1:10560
I	76m SW	Old Lead Shaft	1938	1:10560
G	79m SW	Old Lead Shafts	1938	1:10560
I	81m SW	Unspecified Old Shafts	1900	1:10560
P	232m N	Old Lead Shafts	1938	1:10560
F	249m S	Old Lead Shaft	1938	1:10560
F	250m S	Unspecified Old Shaft	1900	1:10560
S	275m NE	Disused Lead Mine	1938	1:10560
T	286m SE	Unspecified Shaft	1900	1:10560
T	291m SE	Lead Shaft	1872	1:10560
T	292m SE	Old Lead Shaft	1938	1:10560
W	306m S	Lead Shaft	1872	1:10560
W	311m S	Unspecified Disused Shaft	1992	1:10000
W	311m S	Unspecified Disused Shaft	1981	1:10000
W	311m S	Unspecified Disused Shaft	1964	1:10560
W	314m S	Old Lead Shaft	1938	1:10560
W	315m S	Unspecified Shaft	1900	1:10560
S	345m NE	Lead Shaft	1872	1:10560
Y	347m NE	Unspecified Shafts	1872	1:10560
AA	382m NE	Disused Lead Mine	1938	1:10560
AA	384m NE	Unspecified Shafts	1872	1:10560
AA	400m NE	Unspecified Old Shafts	1900	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
AA	403m NE	Unspecified Old Shafts	1938	1:10560
V	405m NW	Lead Shafts	1872	1:10560
V	405m NW	Lead Shafts	1872	1:10560
AE	406m W	Unspecified Level	1872	1:10560
AF	417m NE	Unspecified Shaft	1872	1:10560
AG	425m S	Old Lead Shafts	1938	1:10560
AE	426m W	Old Lead Level	1938	1:10560
AG	432m S	Old Lead Shafts	1938	1:10560
AA	435m NE	Unspecified Old Shafts	1900	1:10560
AA	440m NE	Unspecified Old Shafts	1938	1:10560
AA	447m NE	Unspecified Shafts	1872	1:10560
AG	449m S	Unspecified Old Shafts	1900	1:10560
AG	451m S	Old Lead Shafts	1938	1:10560
AH	454m S	Unspecified Old Shafts	1900	1:10560
AH	462m S	Old Lead Shafts	1938	1:10560
AI	464m SE	Lead Shaft	1872	1:10560
AB	475m S	Unspecified Shafts	1900	1:10560
AB	476m S	Old Lead Shafts	1938	1:10560
AB	479m S	Unspecified Old Shaft	1900	1:10560
AI	481m SE	Unspecified Shaft	1900	1:10560
AB	481m S	Old Lead Shafts	1938	1:10560
AI	482m SE	Old Lead Shaft	1938	1:10560
AA	485m NE	Unspecified Disused Shaft	1964	1:10560
AJ	492m SE	Unspecified Shaft	1900	1:10560
AJ	496m SE	Lead Shaft	1872	1:10560
AK	498m SE	Unspecified Old Shaft	1938	1:10560
AL	504m NW	Unspecified Shaft	1900	1:10560
AA	505m NE	Unspecified Shaft	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
AL	508m NW	Lead Shaft	1872	1:10560
AN	508m NE	Unspecified Disused Shaft	1992	1:10000
AN	508m NE	Unspecified Disused Shafts	1981	1:10000
AN	508m NE	Unspecified Disused Shafts	1964	1:10560
AN	512m NE	Unspecified Shaft	1900	1:10560
AN	513m NE	Old Lead Shaft	1938	1:10560
AA	517m NE	Unspecified Shaft	1872	1:10560
AN	520m NE	Unspecified Shaft	1872	1:10560
AB	539m S	Lead Shafts	1872	1:10560
AB	546m S	Old Lead Shafts	1938	1:10560
U	554m S	Old Lead Shafts	1938	1:10560
AP	557m S	Unspecified Old Shaft	1938	1:10560
AB	559m S	Unspecified Shafts	1900	1:10560
AB	565m S	Lead Shafts	1872	1:10560
AB	570m S	Old Lead Shafts	1938	1:10560
AS	587m E	Unspecified Disused Shaft	1992	1:10000
AS	587m E	Unspecified Disused Shafts	1981	1:10000
AS	587m E	Unspecified Disused Shafts	1964	1:10560
AB	588m S	Unspecified Old Shafts	1900	1:10560
AB	589m S	Lead Shafts	1872	1:10560
AS	590m E	Unspecified Old Shaft	1938	1:10560
AB	594m S	Old Lead Shafts	1938	1:10560
AT	600m NE	Unspecified Shaft	1872	1:10560
AV	609m NE	Lead Mine	1900	1:10560
AQ	621m SE	Lead Shaft	1872	1:10560
AW	621m S	Unspecified Old Shafts	1900	1:10560
AX	624m SE	Unspecified Shaft	1900	1:10560
AQ	624m SE	Old Lead Shaft	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
AQ	624m SE	Unspecified Old Shaft	1900	1:10560
AB	625m S	Old Lead Shafts	1938	1:10560
AX	625m SE	Unspecified Shaft	1872	1:10560
AW	625m S	Old Lead Shafts	1938	1:10560
AW	631m S	Old Lead Shafts	1938	1:10560
AY	648m SE	Lead Shaft	1872	1:10560
AZ	655m SW	Unspecified Old Shaft	1900	1:10560
AY	657m SE	Old Lead Shaft	1938	1:10560
AY	658m SE	Unspecified Old Shaft	1900	1:10560
AB	658m S	Unspecified Old Shafts	1900	1:10560
AB	664m S	Old Lead Shafts	1938	1:10560
-	682m S	Unspecified Old Shafts	1900	1:10560
-	685m S	Old Lead Shafts	1938	1:10560
-	688m S	Old Lead Shafts	1938	1:10560
AM	688m E	Old Lead Shaft	1938	1:10560
AZ	688m SW	Unspecified Old Shaft	1900	1:10560
AM	688m E	Unspecified Old Shaft	1900	1:10560
AB	691m S	Old Lead Shafts	1938	1:10560
AU	692m E	Unspecified Disused Shaft	1992	1:10000
AU	692m E	Unspecified Disused Shaft	1981	1:10000
AU	692m E	Unspecified Disused Shaft	1964	1:10560
AU	697m E	Unspecified Old Shaft	1938	1:10560
AU	699m E	Unspecified Shaft	1900	1:10560
BA	700m W	Disused Lead Mine	1949	1:10560
AU	702m E	Lead Shaft	1872	1:10560
-	705m S	Old Lead Shafts	1938	1:10560
BC	706m S	Lead Shaft	1872	1:10560
BE	707m S	Lead Shaft	1872	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
BE	711m S	Old Lead Shafts	1938	1:10560
BC	712m S	Unspecified Shaft	1900	1:10560
BC	712m S	Old Lead Shafts	1938	1:10560
AR	720m SW	Old Lead Shaft	1949	1:10560
BA	721m W	Lead Mine	1900	1:10560
-	738m W	Unspecified Old Shaft	1900	1:10560
-	748m E	Unspecified Shaft	1900	1:10560
-	758m E	Lead Shaft	1872	1:10560
-	762m W	Unspecified Disused Shaft	1981	1:10000
-	762m W	Unspecified Disused Shaft	1964	1:10560
-	770m W	Old Lead Shaft	1949	1:10560
-	770m E	Old Lead Mine	1938	1:10560
BG	783m NE	Unspecified Disused Shaft	1981	1:10000
BG	783m NE	Unspecified Disused Shaft	1964	1:10560
-	786m W	Old Lead Shaft	1949	1:10560
BG	793m NE	Unspecified Disused Shaft	1992	1:10000
BG	794m NE	Old Lead Shaft	1938	1:10560
BG	795m NE	Unspecified Shaft	1900	1:10560
BH	804m NW	Lead Mine	1872	1:10560
BG	804m NE	Lead Shaft	1872	1:10560
-	819m S	Old Lead Shafts	1938	1:10560
-	821m W	Unspecified Disused Shaft	1992	1:10000
-	822m W	Unspecified Disused Shaft	1964	1:10560
-	827m W	Old Lead Shaft	1949	1:10560
-	848m S	Unspecified Old Shafts	1900	1:10560
-	851m S	Old Lead Shafts	1938	1:10560
-	857m S	Old Lead Shafts	1938	1:10560
-	858m S	Unspecified Disused Shafts	1992	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
BH	866m NW	Unspecified Shaft	1872	1:10560
-	872m S	Unspecified Disused Shafts	1992	1:10000
-	872m S	Unspecified Disused Shafts	1981	1:10000
-	872m S	Unspecified Disused Shafts	1964	1:10560
BH	888m NW	Unspecified Disused Mine	1900	1:10560
-	900m W	Unspecified Disused Shaft	1992	1:10000
-	900m W	Unspecified Disused Shaft	1981	1:10000
-	900m W	Unspecified Disused Shaft	1964	1:10560
-	902m S	Old Lead Shafts	1938	1:10560
-	903m S	Unspecified Disused Shafts	1981	1:10000
-	903m S	Unspecified Disused Shafts	1964	1:10560
-	903m SE	Unspecified Disused Shaft	1992	1:10000
-	903m SE	Unspecified Disused Shaft	1981	1:10000
-	903m SE	Unspecified Disused Shaft	1964	1:10560
-	904m W	Unspecified Old Shaft	1900	1:10560
-	904m S	Unspecified Old Shafts	1900	1:10560
-	904m SE	Old Lead Shaft	1938	1:10560
-	905m W	Old Lead Shaft	1949	1:10560
-	907m SE	Unspecified Old Shaft	1900	1:10560
-	910m S	Unspecified Disused Shafts	1992	1:10000
-	912m NE	Unspecified Disused Shaft	1981	1:10000
-	912m NE	Unspecified Disused Shaft	1964	1:10560
-	921m NE	Unspecified Disused Shaft	1992	1:10000
-	933m S	Old Lead Shaft	1938	1:10560
-	937m NE	Unspecified Disused Shaft	1992	1:10000
-	937m NE	Unspecified Disused Shaft	1981	1:10000
-	937m NE	Unspecified Disused Shaft	1964	1:10560
-	941m NE	Old Lead Shaft	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
-	945m W	Lead Shaft	1872	1:10560
-	948m W	Unspecified Disused Shaft	1964	1:10560
-	952m W	Unspecified Disused Shaft	1992	1:10000
-	952m W	Unspecified Disused Shaft	1981	1:10000
-	958m W	Old Lead Shaft	1949	1:10560
-	968m S	Old Lead Shafts	1938	1:10560
-	968m S	Unspecified Disused Shafts	1992	1:10000
-	985m S	Old Lead Shafts	1938	1:10560
-	986m S	Unspecified Old Shafts	1900	1:10560

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m

0

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

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

9

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.

Features are displayed on the Mining and ground workings map on [page 125 >](#)

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
1	On site	Gwernymynydd	Not available	Not available	Not available	Not available
A	On site	Rainbow Quarry	Not available	Not available	Not available	Not available



ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
B	On site	Rainbow Quarry	Not available	Not available	Not available	Not available
F	17m S	Bryngwyn	Not available	Not available	Not available	Not available
E	47m S	Bryngwyn	Not available	Not available	Not available	Not available
S	256m NE	Gwernymynydd	Not available	Not available	Not available	Not available
D	278m W	Gwernymynydd	Not available	Not available	Not available	Not available
9	308m SW	Gwernymynydd	Not available	Not available	Not available	Not available
10	310m SW	Rhyd-y-bryn	Not available	Not available	Not available	Not available

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

30

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).

Features are displayed on the Mining and ground workings map on [page 125 >](#)

ID	Location	Name	Commodity	Class	Likelihood
2	On site	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
B	On site	Bryn-y-ffynnon	Vein Minerals-Lead	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
B	On site	Bryn-y-ffynnon	Vein Minerals-Lead/Limestone	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.



ID	Location	Name	Commodity	Class	Likelihood
B	On site	Bryn-y-ffynnon	Vein Minerals-Lead	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
B	On site	Bryn-y-ffynnon	Vein Minerals-Lead/Limestone	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
D	On site	Not available	Vein Mineral	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
4	72m SE	North Wales (Halkyn)	Vein Mineral	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
5	99m SW	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
F	101m S	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
6	144m NE	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
8	250m W	North Wales (Halkyn)	Vein Mineral	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
F	273m S	North Wales (Halkyn)	Vein Mineral	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
U	290m S	Bryngwyn Farm	Vein Minerals-Lead	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.



ID	Location	Name	Commodity	Class	Likelihood
12	359m N	North Wales (Halkyn)	Vein Mineral	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
Z	374m E	Not available	Vein Mineral	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
AB	390m S	Mount Pleasant	Vein Minerals-Lead	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
AM	495m E	Fron Hall	Vein Minerals-Lead	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
AQ	540m SE	Bryngwyn Farm	Vein Minerals-Lead	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
AR	560m SW	Not available	Vein Mineral	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
AM	595m E	Fron Hall	Vein Minerals-Lead	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
15	625m SE	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
16	626m SW	North Wales (Halkyn)	Vein Mineral	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
BF	742m NE	St. David's College	Vein Minerals-Lead	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.



ID	Location	Name	Commodity	Class	Likelihood
21	761m S	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
23	802m SW	Not available	Vein Mineral	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	842m NE	St. David's College	Vein Minerals-Lead	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	857m S	America	Vein Minerals-Lead	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	940m SW	North Wales (Halkyn)	Vein Mineral	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
-	957m S	America	Vein Minerals-Lead	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	974m S	East Maeshafn	Vein Minerals-Lead	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site

1

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



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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0
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This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	9
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This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

Location	Mineral type
53m SW	Metals
53m SW	Metals
57m SW	Metals
213m SW	Metals
274m E	Metals
413m SW	Metals
444m SW	Metals
468m W	Metals
498m NE	Metals



This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m

3

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

Location	Mineral
On site	SILICA ROCK
124m NE	Lead
205m N	Lead

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m

3

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

Location	Mineral
On site	Lead
On site	Lead
35m N	Lead

This data is sourced from Groundsure.

18.12 Coal mining

Records on site

1

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

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



This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0
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The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

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

18.14 Gypsum areas

Records on site	0
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Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0
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Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

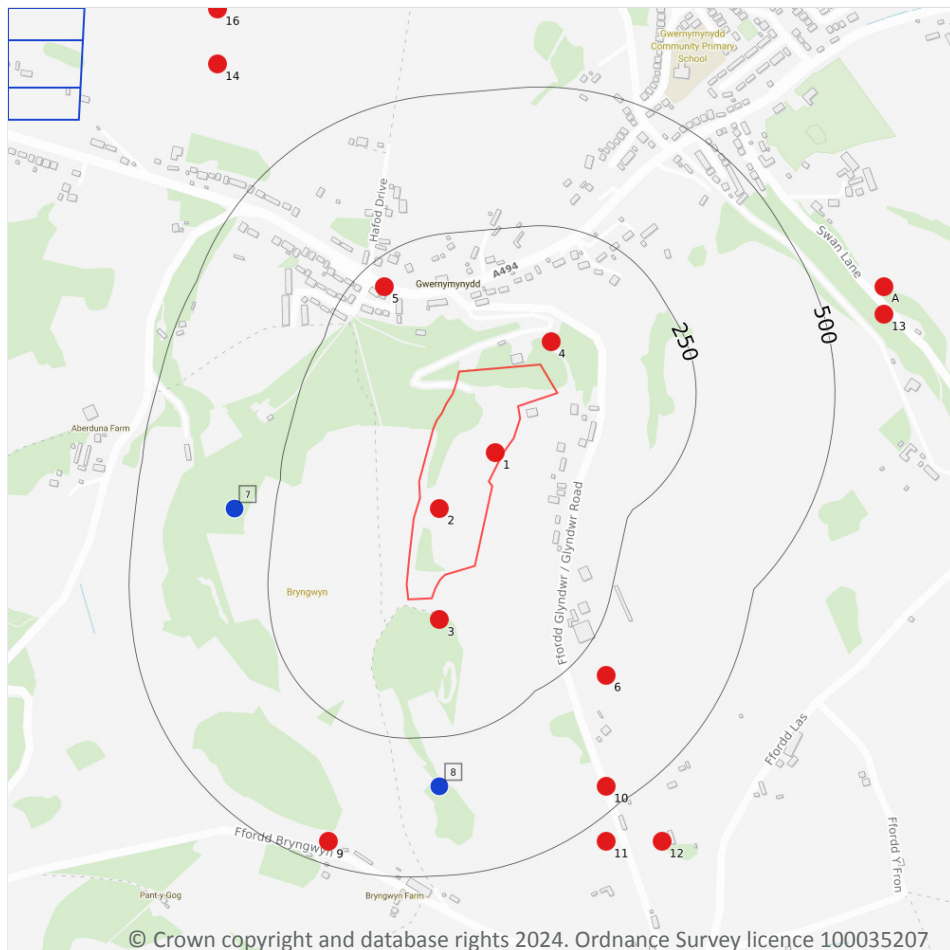
18.16 Clay mining

Records on site	0
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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 Ground cavities and sinkholes



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- Mining cavities
- Reported recent incidents
- Historical incidents
- BGS karst database (Point)
- BGS karst database (Line)
- BGS karst database (Area)

19.1 Natural cavities

Records within 500m

2

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.

Features are displayed on the Ground cavities and sinkholes map on [page 154](#) >

ID	Location	Details	Source
7	323m W	Type: Vadose Cave x 1 Superficial Geology: - Bedrock Geology: Carboniferous Limestone Supergroup, Lower Carboniferous Limestone, Upper Carboniferous Limestone	Simple Bibliography: - Full Bibliography: Oldham, T, The Concise Cave North Wales (except Anglesey), 2000; Confidentiality: Data source can be revealed, data can be used freely



ID	Location	Details	Source
8	338m S	Type: Vadose Cave x 3 Superficial Geology: - Bedrock Geology: Carboniferous Limestone Supergroup, Lower Carboniferous Limestone, Upper Carboniferous Limestone	Simple Bibliography: - Full Bibliography: Oldham, T, The Concise Cave North Wales (except Anglesey), 2000; Confidentiality: Data source can be revealed, data can be used freely

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	22
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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.

Features are displayed on the Ground cavities and sinkholes map on [page 154 >](#)

ID	Location	Mine Address	Mineral	Data source	Publisher
1	On site	Gwernymynydd, Clwyd	Bath Stone, Cornstone, Limestone	PRIVATE COMMUNICATION	NAMHO
2	On site	Brynyfryd, Mold, Flintshire	Lead	Clwyd and Powys Metal Mines Survey	-
3	41m S	Bryngwyn, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.
4	45m NE	Brynyffynon, Mold, Flintshire	Lead	Clwyd and Powys Metal Mines Survey	-
5	204m NW	Gwernymyndd, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.
6	308m SE	Fron-Uchaf, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.
9	459m S	Brynhyfryd, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.
10	462m SE	Fron Ucha, Gwernymynydd, Flintshire	Lead	Clwyd and Powys Metal Mines Survey	-
11	539m S	Mount Pleasant, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.
12	600m SE	Bryngwyn Farm, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.



ID	Location	Mine Address	Mineral	Data source	Publisher
13	605m E	Fronissa, Gwernymynydd, Flintshire	-	Clwyd and Powys Metal Mines Survey	-
A	619m NE	Fron-Isa 2.8 Sw, Fron Isaf, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.
A	619m NE	Fronissa, Gwernymynydd, Flintshire	-	Clwyd and Powys Metal Mines Survey	-
14	704m NW	Mold Cadole, Gwernymynydd, Flintshire	-	Clwyd and Powys Metal Mines Survey	-
-	743m W	Coed Cynric, Clwyd	Lead	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.
16	785m NW	Mold Cadole, Gwernymynydd, Flintshire	-	Clwyd and Powys Metal Mines Survey	-
-	796m E	Fron Hall, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.
-	900m SE	Glyndwr, Nercwys, Flintshire	Lead	Clwyd and Powys Metal Mines Survey	-
-	947m S	Lisburne Shaft, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.
-	947m S	Maeshafn Moel Findeg, Nercwys, Flintshire	-	Clwyd and Powys Metal Mines Survey	-
-	950m NW	Cat Hole, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.
-	960m SE	East Maeshafn, Glyndwr, Clwyd	-	THE NON FERROUS MINES OF FLINTSHIRE	NORTHERN CAVERN AND MINE RESEARCH SOC.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0
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This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.



19.4 Historical incidents

Records within 500m

0

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

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

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m

0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.







Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.



A map of the Brynawel Woodland Site. A red boundary outlines a central area, and a black boundary outlines a larger area. The map includes labels for 'A494', 'Halford Drive', 'Play Space', 'Llys Gwyn', 'Greenymynydd', 'Brynawel', 'Fford Glynwdr / Glynwdr Road', and 'Brynawel'. Elevation labels '125' and '250' are present on the black boundary. The map is overlaid with a grid of colored squares (yellow, green, purple, brown) representing different land use or vegetation types. The map is credited to '© Crown copyright and database rights 2024. Ordnance Survey licence 100035207'.

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

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Location	Estimated properties affected	Radon Protection Measures required
On site	Greater than 30%	Full

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



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

23

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	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
5m SE	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
8m SW	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
10m S	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
14m SE	15 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
19m SW	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
27m NE	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
29m SW	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
43m SW	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
46m N	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.



21.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

22.1 Underground railways (London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m

0

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



This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m

2

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.

Features are displayed on the Railway infrastructure and projects map on [page 163](#) >

Location	Land Use	Year of mapping	Mapping scale
86m N	Tramway Sidings	1899	2500
86m N	Tramway Sidings	1900	10560

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m

0

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

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m

0

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

This data is sourced from OpenStreetMap.



22.7 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.

22.8 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.

22.9 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.

22.10 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> ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗.

