

APPENDIX C

Geo-Environmental Data Report

71, MYRTLE ROAD, HAMPTON HILL, TW12 1QB

Order Details

Date: 17/08/2022
Your ref: C5179-3399-SD
Our Ref: BRO-8990257

Site Details

Location: 514155 170549
Area: 0.21 ha
Authority: [London Borough of Richmond upon Thames](#)



Summary of findings

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Aerial image

p. 8

OS MasterMap site plan

p.13

groundsure.com/insightuserguide

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	<u>Historical industrial land uses</u>	0	0	41	61	-
18	1.2	Historical tanks	0	0	0	0	-
19	1.3	<u>Historical energy features</u>	0	0	3	9	-
19	1.4	Historical petrol stations	0	0	0	0	-
20	1.5	<u>Historical garages</u>	0	0	1	4	-
20	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
21	2.1	<u>Historical industrial land uses</u>	0	0	49	100	-
27	2.2	Historical tanks	0	0	0	0	-
27	2.3	<u>Historical energy features</u>	0	0	5	15	-
28	2.4	Historical petrol stations	0	0	0	0	-
28	2.5	<u>Historical garages</u>	0	0	1	7	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
30	3.1	Active or recent landfill	0	0	0	0	-
30	3.2	Historical landfill (BGS records)	0	0	0	0	-
31	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
31	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
31	3.5	Historical waste sites	0	0	0	0	-
31	3.6	Licensed waste sites	0	0	0	0	-
31	3.7	<u>Waste exemptions</u>	0	0	1	1	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
33	4.1	<u>Recent industrial land uses</u>	1	0	5	-	-
34	4.2	Current or recent petrol stations	0	0	0	0	-
34	4.3	Electricity cables	0	0	0	0	-
34	4.4	Gas pipelines	0	0	0	0	-
34	4.5	Sites determined as Contaminated Land	0	0	0	0	-



35	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
35	4.7	Regulated explosive sites	0	0	0	0	-
35	4.8	Hazardous substance storage/usage	0	0	0	0	-
35	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
35	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
36	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	0	1	-
36	4.12	Radioactive Substance Authorisations	0	0	0	0	-
36	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
36	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
37	4.15	Pollutant release to public sewer	0	0	0	0	-
37	4.16	List 1 Dangerous Substances	0	0	0	0	-
37	4.17	List 2 Dangerous Substances	0	0	0	0	-
37	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	0	1	-
38	4.19	Pollution inventory substances	0	0	0	0	-
38	4.20	Pollution inventory waste transfers	0	0	0	0	-
38	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
39	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
41	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
42	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
43	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
43	5.5	<u>Groundwater vulnerability- local information</u>	Identified (within 0m)				
44	5.6	<u>Groundwater abstractions</u>	0	0	0	1	4
46	5.7	<u>Surface water abstractions</u>	0	0	0	0	5
47	5.8	<u>Potable abstractions</u>	0	0	0	0	4
48	5.9	Source Protection Zones	0	0	0	0	-
48	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
49	6.1	<u>Water Network (OS MasterMap)</u>	0	5	6	-	-



50	6.2	<u>Surface water features</u>	0	2	3	-	-
51	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
51	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
52	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
53	7.1	<u>Risk of flooding from rivers and the sea</u>	High (within 50m)				
54	7.2	<u>Historical Flood Events</u>	0	2	0	-	-
54	7.3	Flood Defences	0	0	0	-	-
54	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
55	7.5	Flood Storage Areas	0	0	0	-	-
56	7.6	<u>Flood Zone 2</u>	Identified (within 50m)				
57	7.7	<u>Flood Zone 3</u>	Identified (within 50m)				
Page	Section	Surface water flooding					
58	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding					
60	9.1	<u>Groundwater flooding</u>	Moderate-High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
61	10.1	<u>Sites of Special Scientific Interest (SSSI)</u>	0	1	0	0	4
62	10.2	<u>Conserved wetland sites (Ramsar sites)</u>	0	0	0	0	2
63	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
63	10.4	<u>Special Protection Areas (SPA)</u>	0	0	0	0	2
63	10.5	National Nature Reserves (NNR)	0	0	0	0	0
64	10.6	<u>Local Nature Reserves (LNR)</u>	0	0	0	0	2
64	10.7	Designated Ancient Woodland	0	0	0	0	0
64	10.8	Biosphere Reserves	0	0	0	0	0
64	10.9	Forest Parks	0	0	0	0	0
65	10.10	Marine Conservation Zones	0	0	0	0	0
65	10.11	<u>Green Belt</u>	0	0	0	0	8
65	10.12	Proposed Ramsar sites	0	0	0	0	0



66	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
66	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
66	10.15	Nitrate Sensitive Areas	0	0	0	0	0
66	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
67	<u>10.17</u>	<u>SSSI Impact Risk Zones</u>	2	-	-	-	-
68	<u>10.18</u>	<u>SSSI Units</u>	0	1	1	0	6

Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
72	11.1	World Heritage Sites	0	0	0	-	-
73	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
73	11.3	National Parks	0	0	0	-	-
73	<u>11.4</u>	<u>Listed Buildings</u>	0	0	1	-	-
74	<u>11.5</u>	<u>Conservation Areas</u>	1	1	0	-	-
74	<u>11.6</u>	<u>Scheduled Ancient Monuments</u>	0	0	1	-	-
74	<u>11.7</u>	<u>Registered Parks and Gardens</u>	0	1	0	-	-

Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
76	<u>12.1</u>	<u>Agricultural Land Classification</u>	Non Agricultural (within 250m)				
77	12.2	Open Access Land	0	0	0	-	-
77	12.3	Tree Felling Licences	0	0	0	-	-
77	12.4	Environmental Stewardship Schemes	0	0	0	-	-
77	12.5	Countryside Stewardship Schemes	0	0	0	-	-

Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
78	<u>13.1</u>	<u>Priority Habitat Inventory</u>	0	1	7	-	-
79	13.2	Habitat Networks	0	0	0	-	-
79	13.3	Open Mosaic Habitat	0	0	0	-	-
79	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
80	<u>14.1</u>	<u>10k Availability</u>	Identified (within 500m)				
81	<u>14.2</u>	<u>Artificial and made ground (10k)</u>	0	0	3	5	-
83	<u>14.3</u>	<u>Superficial geology (10k)</u>	1	0	2	0	-



84	14.4	Landslip (10k)	0	0	0	0	-
85	14.5	<u>Bedrock geology (10k)</u>	1	0	0	0	-
86	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
87	15.1	<u>50k Availability</u>	Identified (within 500m)				
88	15.2	<u>Artificial and made ground (50k)</u>	0	0	3	3	-
89	15.3	Artificial ground permeability (50k)	0	0	-	-	-
90	15.4	<u>Superficial geology (50k)</u>	1	0	2	0	-
91	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
91	15.6	Landslip (50k)	0	0	0	0	-
91	15.7	Landslip permeability (50k)	None (within 50m)				
92	15.8	<u>Bedrock geology (50k)</u>	1	0	0	0	-
93	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
93	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
94	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
95	17.1	<u>Shrink swell clays</u>	Low (within 50m)				
96	17.2	<u>Running sands</u>	Very low (within 50m)				
97	17.3	<u>Compressible deposits</u>	Negligible (within 50m)				
98	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
99	17.5	<u>Landslides</u>	Very low (within 50m)				
100	17.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
102	18.1	Natural cavities	0	0	0	0	-
103	18.2	BritPits	0	0	0	0	-
103	18.3	<u>Surface ground workings</u>	0	0	47	-	-
105	18.4	Underground workings	0	0	0	0	0
105	18.5	Historical Mineral Planning Areas	0	0	0	0	-



105	18.6	Non-coal mining	0	0	0	0	0
105	18.7	Mining cavities	0	0	0	0	0
106	18.8	JPB mining areas	None (within 0m)				
106	18.9	Coal mining	None (within 0m)				
106	18.10	Brine areas	None (within 0m)				
106	18.11	Gypsum areas	None (within 0m)				
106	18.12	Tin mining	None (within 0m)				
107	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
108	19.1	Radon	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
109	20.1	BGS Estimated Background Soil Chemistry	1	1	-	-	-
109	20.2	BGS Estimated Urban Soil Chemistry	2	7	-	-	-
110	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
111	21.1	Underground railways (London)	0	0	0	-	-
111	21.2	Underground railways (Non-London)	0	0	0	-	-
112	21.3	Railway tunnels	0	0	0	-	-
112	21.4	Historical railway and tunnel features	0	0	2	-	-
112	21.5	Royal Mail tunnels	0	0	0	-	-
112	21.6	Historical railways	0	0	0	-	-
113	21.7	Railways	0	0	5	-	-
113	21.8	Crossrail 1	0	0	0	0	-
113	21.9	Crossrail 2	0	0	1	0	-
114	21.10	HS2	0	0	0	0	-



Recent aerial photograph



Capture Date: 13/06/2021

Site Area: 0.21ha



Recent site history - 2019 aerial photograph



Capture Date: 29/06/2019

Site Area: 0.21ha



Recent site history - 2013 aerial photograph



Capture Date: 20/04/2013

Site Area: 0.21ha



Recent site history - 2008 aerial photograph



Capture Date: 21/09/2008

Site Area: 0.21ha



Recent site history - 1999 aerial photograph

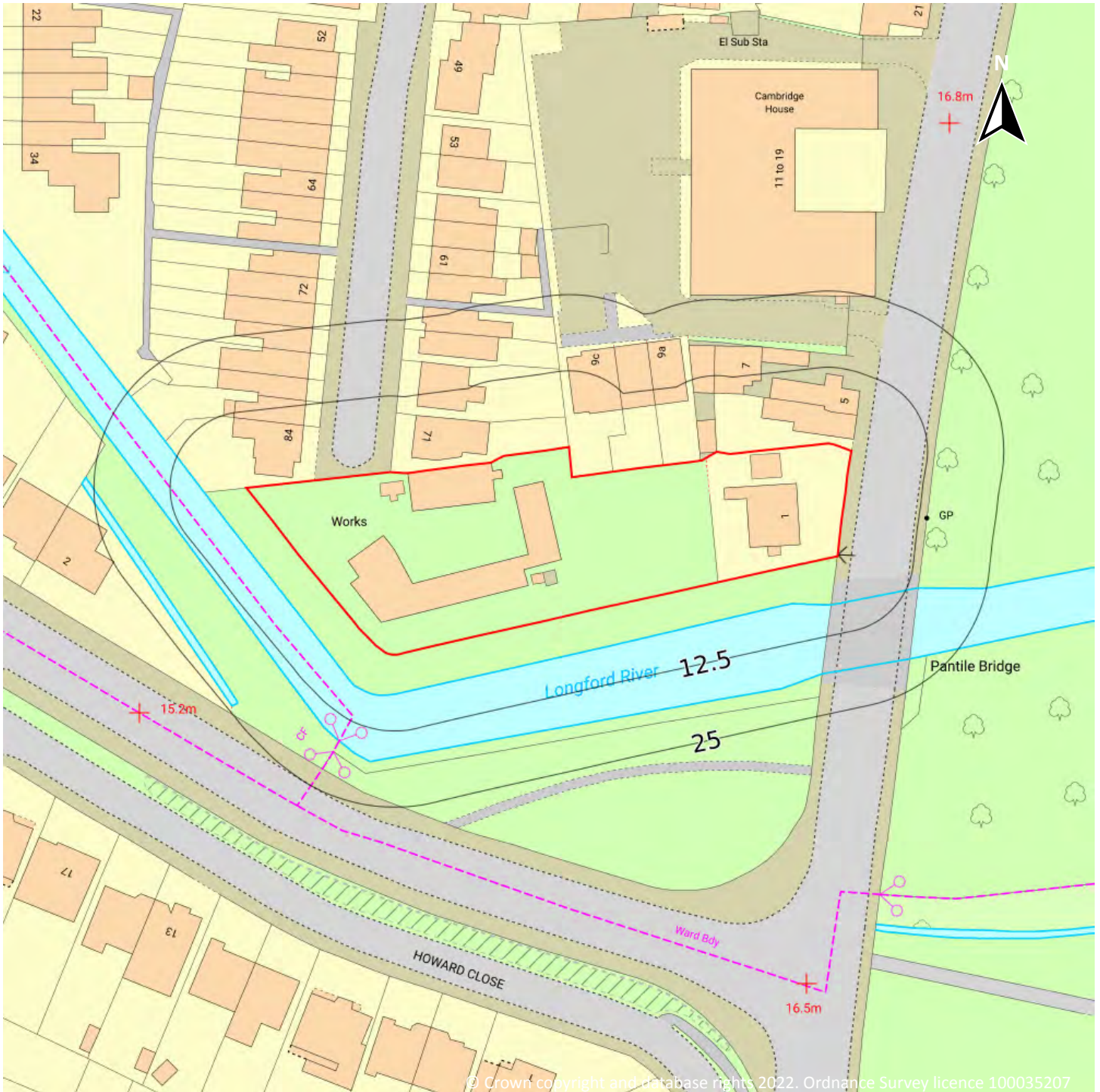


Capture Date: 29/08/1999

Site Area: 0.21ha



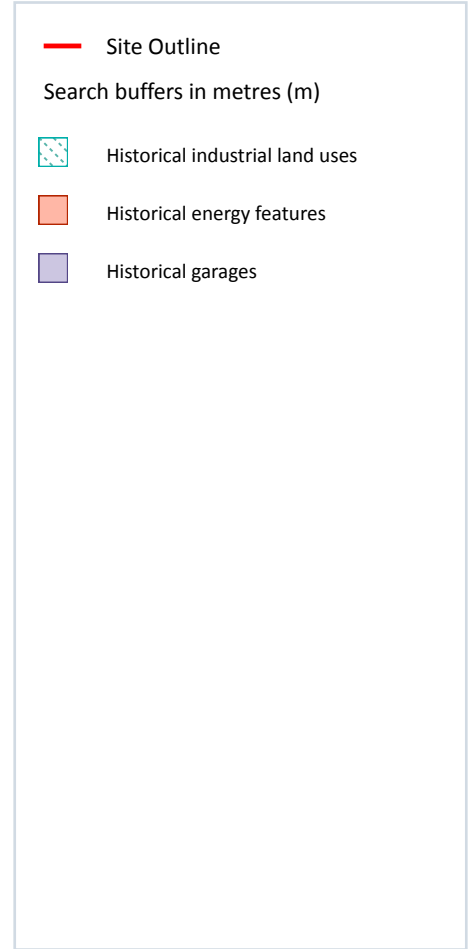
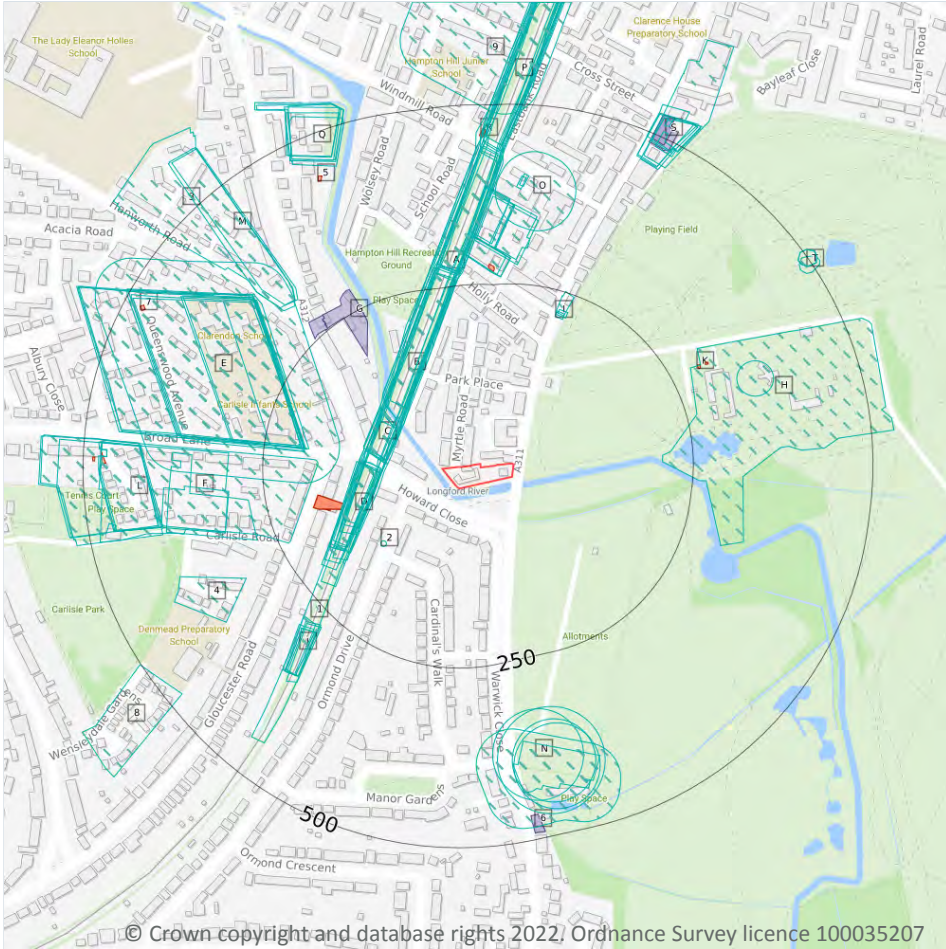
OS MasterMap site plan



Site Area: 0.21ha



1 Past land use



1.1 Historical industrial land uses

Records within 500m **102**

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

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

ID	Location	Land use	Dates present	Group ID
A	73m W	Cuttings	1894	2220191



ID	Location	Land use	Dates present	Group ID
A	75m NW	Cuttings	1913	2293570
A	75m NW	Cuttings	1895 - 1983	2195600
B	76m NW	Cuttings	1913	2169419
A	76m W	Cuttings	1934	2223134
A	76m W	Cuttings	1959	2264575
A	78m W	Cuttings	1938	2217985
C	78m W	Cuttings	1899	2239680
C	79m W	Cuttings	1865	2197723
B	80m W	Cuttings	1894 - 1895	2261402
C	81m W	Cuttings	1938	2218688
C	81m W	Cuttings	1895	2253277
A	82m W	Cuttings	1913	2193916
A	85m W	Cuttings	1912 - 1933	2276776
D	85m W	Cuttings	1913	2240016
D	86m W	Cuttings	1899	2264582
1	86m W	Cuttings	1865	2220093
A	86m W	Cuttings	1938	2279721
A	87m NW	Cuttings	1899	2194662
D	89m W	Cuttings	1894	2284538
D	92m W	Cuttings	1895	2288996
B	93m NW	Cuttings	1938	2199306
D	96m W	Cuttings	1938	2219714
B	100m NW	Cuttings	1865	2244268
2	125m SW	Old Ice House	1913	2140897
E	145m W	Nursery	1913	2234376
F	173m W	Nursery	1966	2258825
E	188m W	Nurseries	1894	2224771
E	192m W	Nursery	1934	2230747



ID	Location	Land use	Dates present	Group ID
E	193m W	Nursery	1913	2216718
E	194m W	Nursery	1938	2202610
E	194m W	Nurseries	1899	2256003
E	194m W	Nursery	1913	2229136
E	195m W	Nursery	1959 - 1966	2247165
E	195m W	Nurseries	1895	2202108
E	199m W	Nursery	1920	2198030
E	201m W	Nursery	1938	2176995
H	207m E	Unspecified Works	1966 - 1983	2268082
I	213m N	Smithy	1899	2287342
I	216m N	Smithy	1894	2291710
I	218m N	Smithy	1894 - 1895	2291017
A	260m N	Nursery	1913	2252539
A	260m N	Nursery	1938	2280748
A	264m N	Nursery	1938	2187424
A	266m N	Cuttings	1913	2259622
A	268m N	Cuttings	1865	2190269
J	270m SW	Cuttings	1934	2185634
A	270m N	Cuttings	1894 - 1895	2239443
A	270m N	Cuttings	1938	2280202
J	272m SW	Cuttings	1913	2186186
F	273m W	Nurseries	1913	2295319
J	275m SW	Cuttings	1913 - 1920	2276186
A	277m N	Nursery	1913	2285180
J	281m SW	Cuttings	1938	2246548
J	283m SW	Cuttings	1913	2287987
J	283m SW	Cuttings	1938	2291826
A	284m N	Nursery	1934	2182916



ID	Location	Land use	Dates present	Group ID
L	298m W	Nurseries	1913	2182015
F	299m W	Nurseries	1913 - 1920	2256488
A	299m N	Nursery	1913	2200565
A	301m N	Nursery	1938 - 1959	2254711
3	306m NW	Nursery	1899 - 1938	2233032
A	307m N	Nursery	1920	2261290
M	310m NW	Nursery	1894	2279519
M	312m NW	Nursery	1894 - 1895	2185887
4	312m SW	Nursery	1966	2161263
N	322m S	Rifle Range	1959	2232493
N	322m S	Rifle Range	1913	2215412
O	326m N	Smithy	1894 - 1895	2215304
H	331m E	Unspecified Tank	1966 - 1983	2196866
N	340m S	Miniature Rifle Range	1938	2268972
N	342m S	Miniature Rifle Range	1938	2270985
N	346m S	Rifle Range	1913	2196380
N	363m S	Miniature Rifle Range	1920 - 1938	2223075
O	382m N	Smithy	1899	2183302
O	386m N	Smithy	1894	2278937
L	397m W	Nursery	1934	2199242
L	398m W	Nursery	1938	2194590
L	400m W	Nursery	1959	2223797
L	402m W	Nurseries	1938	2215588
L	403m W	Nurseries	1920	2223865
P	434m N	Cuttings	1894 - 1938	2217432
P	435m N	Cuttings	1913	2291903
P	443m N	Cuttings	1865	2250540
Q	446m N	Nursery	1913	2220643



ID	Location	Land use	Dates present	Group ID
Q	453m N	Nursery	1938	2254395
Q	455m N	Nursery	1934	2287990
Q	455m N	Nursery	1959	2243238
S	457m NE	Laundry	1934 - 1959	2250360
S	459m NE	Laundry	1938	2245270
S	460m NE	Laundry	1920	2240191
Q	460m N	Nursery	1920	2215602
Q	461m N	Nursery	1938	2279893
S	463m NE	Unspecified Works	1966 - 1973	2283968
8	478m SW	Nursery	1966	2161264
S	481m NE	Laundry	1913	2180351
T	482m NE	Gravel Pit	1913	2171679
S	486m NE	Laundry	1913	2169773
9	486m N	Nursery	1913	2183759
T	487m NE	Gravel Pit	1912	2200485
T	487m NE	Gravel Pit	1938	2225522
S	488m NE	Laundry	1938	2241271

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m **0**

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'.

This data is sourced from Ordnance Survey / Groundsure.



1.3 Historical energy features

Records within 500m	12
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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'.

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

ID	Location	Land use	Dates present	Group ID
D	145m W	Electricity Substation	1969	261498
D	145m W	Electricity Substation	1991	273077
D	165m W	Electricity Substation	1971 - 1991	270715
A	268m N	Electricity Substation	1983 - 1993	274107
K	289m NE	Electricity Substation	1983	243008
K	301m NE	Electricity Substation	1993	243009
5	434m NW	Electricity Substation	1969 - 1991	258666
R	455m N	Electricity Substation	1996	243005
R	455m N	Electricity Transformer	1970 - 1990	284245
L	468m W	Electricity Substation	1991	265971
7	469m NW	Electricity Substation	1991	272116
L	484m W	Electricity Substation	1969	243426

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0
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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

5

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 14**

ID	Location	Land use	Dates present	Group ID
G	189m NW	Garage	1960	79555
G	252m NW	Garage	1961 - 1969	81339
6	466m S	Garage	1959 - 1960	80729
S	483m NE	Garage	1970	79871
S	491m NE	Garage	1990 - 1996	86128

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

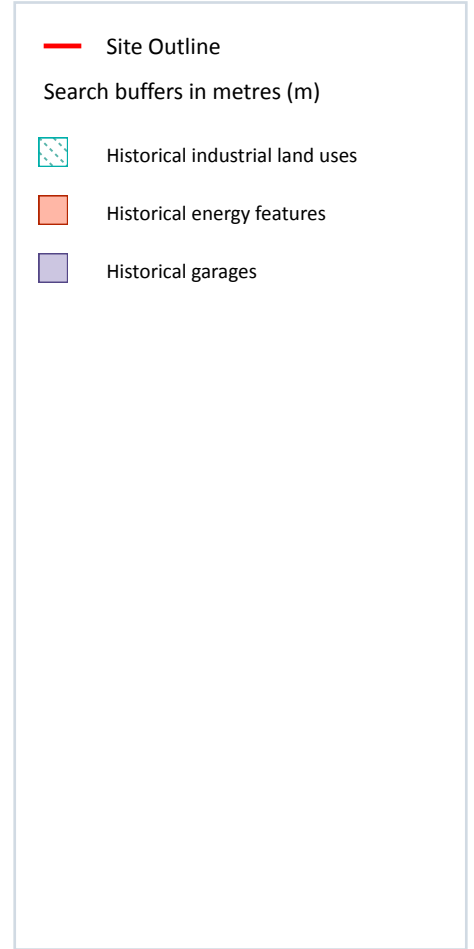
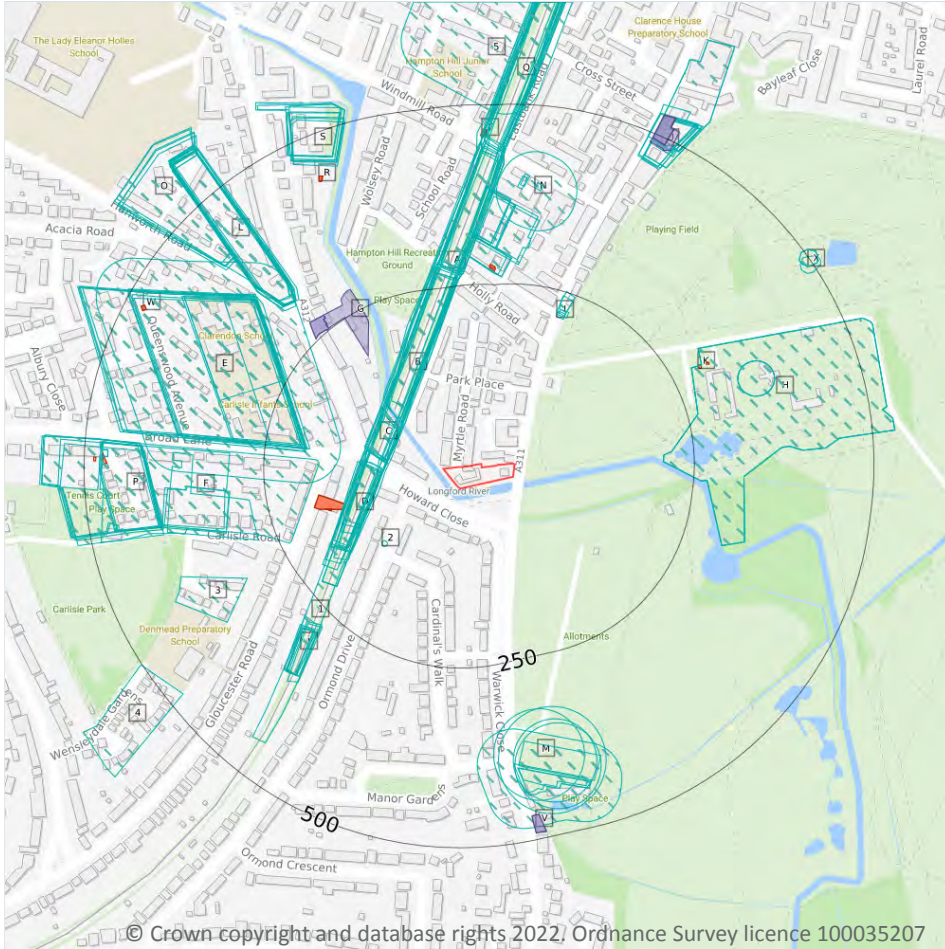
Records within 500m

0

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

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

2 Past land use - un-grouped



2.1 Historical industrial land uses

Records within 500m

149

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 21**

ID	Location	Land Use	Date	Group ID
A	73m W	Cuttings	1894	2220191
A	75m NW	Cuttings	1913	2293570
A	75m NW	Cuttings	1973	2195600

ID	Location	Land Use	Date	Group ID
A	75m NW	Cuttings	1983	2195600
A	75m NW	Cuttings	1966	2195600
B	76m NW	Cuttings	1913	2169419
A	76m W	Cuttings	1934	2223134
A	76m W	Cuttings	1959	2264575
A	78m W	Cuttings	1938	2217985
C	78m W	Cuttings	1899	2239680
C	79m W	Cuttings	1865	2197723
B	80m W	Cuttings	1894	2261402
C	81m W	Cuttings	1938	2218688
C	81m W	Cuttings	1895	2253277
A	82m W	Cuttings	1913	2193916
A	85m W	Cuttings	1920	2276776
D	85m W	Cuttings	1913	2240016
D	86m W	Cuttings	1899	2264582
1	86m W	Cuttings	1865	2220093
A	86m W	Cuttings	1938	2279721
A	87m NW	Cuttings	1899	2194662
D	89m W	Cuttings	1894	2284538
D	92m W	Cuttings	1895	2288996
B	93m NW	Cuttings	1938	2199306
B	93m NW	Cuttings	1895	2261402
D	96m W	Cuttings	1938	2219714
B	100m NW	Cuttings	1865	2244268
2	125m SW	Old Ice House	1913	2140897
E	145m W	Nursery	1913	2234376
F	173m W	Nursery	1966	2258825
E	188m W	Nurseries	1894	2224771



ID	Location	Land Use	Date	Group ID
E	191m W	Nurseries	1894	2224771
E	192m W	Nursery	1934	2230747
E	193m W	Nursery	1913	2216718
E	194m W	Nurseries	1899	2256003
E	194m W	Nursery	1938	2202610
E	194m W	Nursery	1913	2229136
E	195m W	Nursery	1959	2247165
E	195m W	Nurseries	1895	2202108
E	199m W	Nursery	1920	2198030
E	201m W	Nursery	1938	2176995
E	201m W	Nursery	1938	2176995
H	207m E	Unspecified Works	1973	2268082
H	207m E	Unspecified Works	1983	2268082
H	207m E	Unspecified Works	1966	2268082
I	213m N	Smithy	1899	2287342
I	216m N	Smithy	1894	2291710
I	218m N	Smithy	1895	2291017
I	223m N	Smithy	1894	2291017
E	252m NW	Nursery	1966	2247165
A	260m N	Nursery	1938	2280748
A	260m N	Nursery	1913	2252539
A	264m N	Nursery	1938	2187424
A	266m N	Cuttings	1913	2259622
A	268m N	Cuttings	1865	2190269
J	270m SW	Cuttings	1934	2185634
A	270m N	Cuttings	1938	2280202
A	270m N	Cuttings	1895	2239443
J	272m SW	Cuttings	1913	2186186



ID	Location	Land Use	Date	Group ID
F	273m W	Nurseries	1913	2295319
J	275m SW	Cuttings	1920	2276186
A	276m N	Cuttings	1894	2239443
A	277m N	Nursery	1913	2285180
J	281m SW	Cuttings	1938	2246548
J	282m SW	Cuttings	1913	2276186
J	283m SW	Cuttings	1938	2246548
J	283m SW	Cuttings	1938	2291826
J	283m SW	Cuttings	1913	2287987
A	284m N	Nursery	1934	2182916
F	298m W	Nurseries	1913	2182015
F	299m W	Nurseries	1913	2256488
A	299m N	Nursery	1913	2200565
A	301m N	Nursery	1959	2254711
F	305m W	Nurseries	1920	2256488
L	306m NW	Nursery	1913	2233032
A	307m N	Nursery	1920	2261290
A	308m N	Nursery	1938	2254711
L	310m NW	Nursery	1894	2279519
L	310m NW	Nursery	1913	2233032
L	312m NW	Nursery	1894	2185887
L	312m NW	Nursery	1938	2233032
L	312m NW	Nursery	1913	2233032
3	312m SW	Nursery	1966	2161263
L	312m NW	Nursery	1899	2233032
L	313m NW	Nursery	1934	2233032
L	313m NW	Nursery	1938	2233032
L	313m NW	Nursery	1895	2185887



ID	Location	Land Use	Date	Group ID
L	320m NW	Nursery	1938	2233032
M	322m S	Rifle Range	1959	2232493
L	322m NW	Nursery	1920	2233032
M	322m S	Rifle Range	1913	2215412
N	326m N	Smithy	1895	2215304
H	331m E	Unspecified Tank	1973	2196866
H	331m E	Unspecified Tank	1983	2196866
H	331m E	Unspecified Tank	1966	2196866
M	340m S	Miniature Rifle Range	1938	2268972
M	342m S	Miniature Rifle Range	1938	2270985
M	346m S	Rifle Range	1913	2196380
M	363m S	Miniature Rifle Range	1938	2223075
O	373m NW	Nursery	1920	2233032
N	381m N	Smithy	1894	2215304
N	382m N	Smithy	1899	2183302
N	386m N	Smithy	1894	2278937
M	390m S	Miniature Rifle Range	1920	2223075
M	397m S	Rifle Range	1913	2215412
M	397m S	Miniature Rifle Range	1934	2223075
P	397m W	Nursery	1934	2199242
P	398m W	Nursery	1938	2194590
P	399m W	Nurseries	1913	2182015
P	400m W	Nursery	1959	2223797
P	400m W	Nurseries	1913	2182015
P	401m W	Nurseries	1913	2182015
P	402m W	Nurseries	1938	2215588
P	403m W	Nurseries	1920	2223865
P	404m W	Nurseries	1938	2215588



ID	Location	Land Use	Date	Group ID
O	409m NW	Nursery	1913	2233032
O	414m NW	Nursery	1913	2233032
O	415m NW	Nursery	1913	2233032
O	421m NW	Nursery	1938	2233032
Q	434m N	Cuttings	1938	2217432
Q	434m N	Cuttings	1895	2217432
Q	435m N	Cuttings	1913	2291903
Q	440m N	Cuttings	1894	2217432
Q	443m N	Cuttings	1865	2250540
S	446m N	Nursery	1913	2220643
S	451m N	Nursery	1913	2220643
S	453m N	Nursery	1938	2254395
S	453m N	Nursery	1913	2220643
S	455m N	Nursery	1934	2287990
S	455m N	Nursery	1959	2243238
U	457m NE	Laundry	1959	2250360
U	459m NE	Laundry	1938	2245270
U	460m NE	Laundry	1934	2250360
U	460m NE	Laundry	1920	2240191
S	460m N	Nursery	1920	2215602
S	461m N	Nursery	1938	2279893
S	462m N	Nursery	1938	2279893
U	463m NE	Unspecified Works	1973	2283968
U	463m NE	Unspecified Works	1966	2283968
4	478m SW	Nursery	1966	2161264
U	481m NE	Laundry	1913	2180351
X	482m NE	Gravel Pit	1913	2171679
U	486m NE	Laundry	1913	2169773



ID	Location	Land Use	Date	Group ID
5	486m N	Nursery	1913	2183759
X	487m NE	Gravel Pit	1938	2225522
X	487m NE	Gravel Pit	1912	2200485
U	488m NE	Laundry	1938	2241271
U	488m NE	Laundry	1913	2169773
U	488m NE	Laundry	1938	2250360

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0
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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'.

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	20
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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'.

Features are displayed on the Past land use - un-grouped map on **page 21**

ID	Location	Land Use	Date	Group ID
D	145m W	Electricity Substation	1969	261498
D	145m W	Electricity Substation	1991	273077
D	145m W	Electricity Substation	1991	273077
D	165m W	Electricity Substation	1971	270715
D	165m W	Electricity Substation	1991	270715
A	268m N	Electricity Substation	1993	274107
A	271m N	Electricity Substation	1983	274107



ID	Location	Land Use	Date	Group ID
K	289m NE	Electricity Substation	1983	243008
K	301m NE	Electricity Substation	1993	243009
R	434m NW	Electricity Substation	1969	258666
R	435m NW	Electricity Substation	1991	258666
R	435m NW	Electricity Substation	1991	258666
T	455m N	Electricity Substation	1996	243005
T	455m N	Electricity Transformer	1970	284245
T	455m N	Electricity Transformer	1990	284245
P	468m W	Electricity Substation	1991	265971
P	468m W	Electricity Substation	1991	265971
W	469m NW	Electricity Substation	1991	272116
W	469m NW	Electricity Substation	1991	272116
P	484m W	Electricity Substation	1969	243426

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

8

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 21**

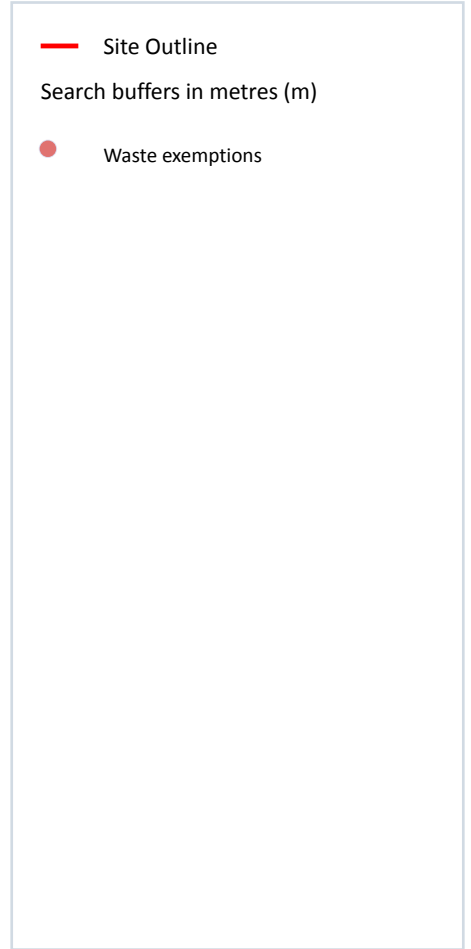
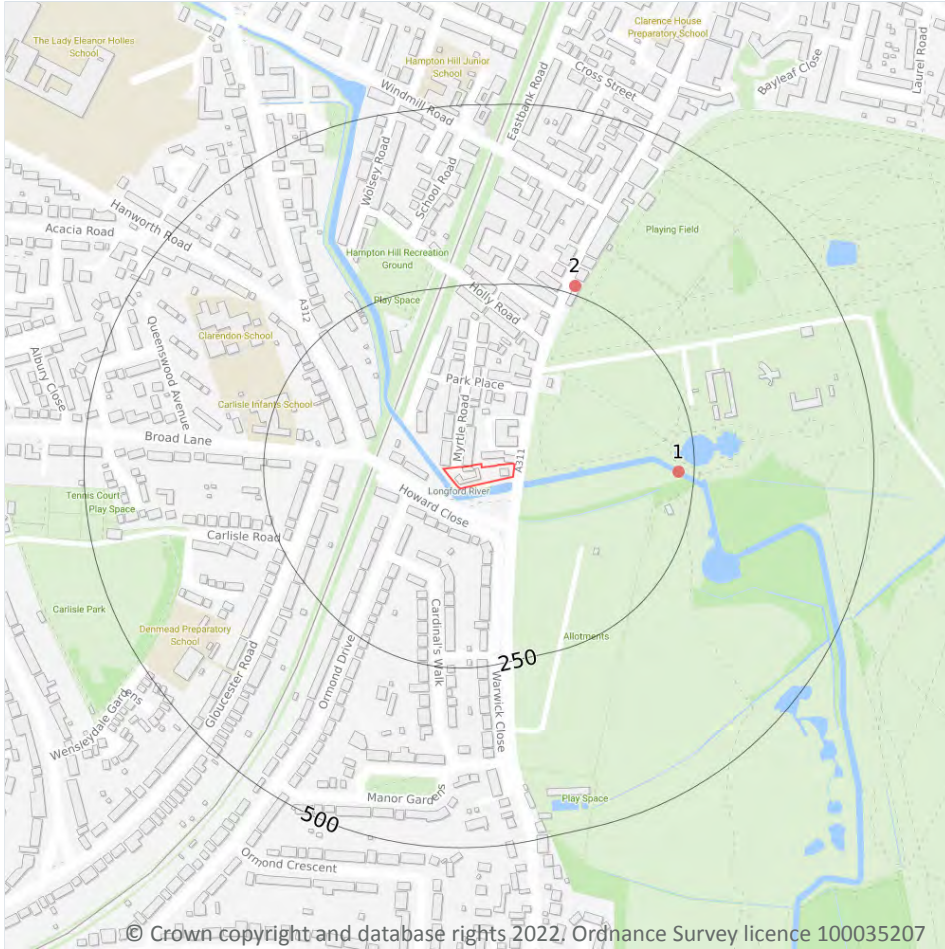


ID	Location	Land Use	Date	Group ID
G	189m NW	Garage	1960	79555
G	252m NW	Garage	1969	81339
G	252m NW	Garage	1961	81339
V	466m S	Garage	1960	80729
V	466m S	Garage	1959	80729
U	483m NE	Garage	1970	79871
U	491m NE	Garage	1996	86128
U	491m NE	Garage	1990	86128

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



3.1 Active or recent landfill

Records within 500m

0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m

0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m

0

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

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

3.5 Historical waste sites

Records within 500m

0

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

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

3.6 Licensed waste sites

Records within 500m

0

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

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

3.7 Waste exemptions

Records within 500m

2

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 30**

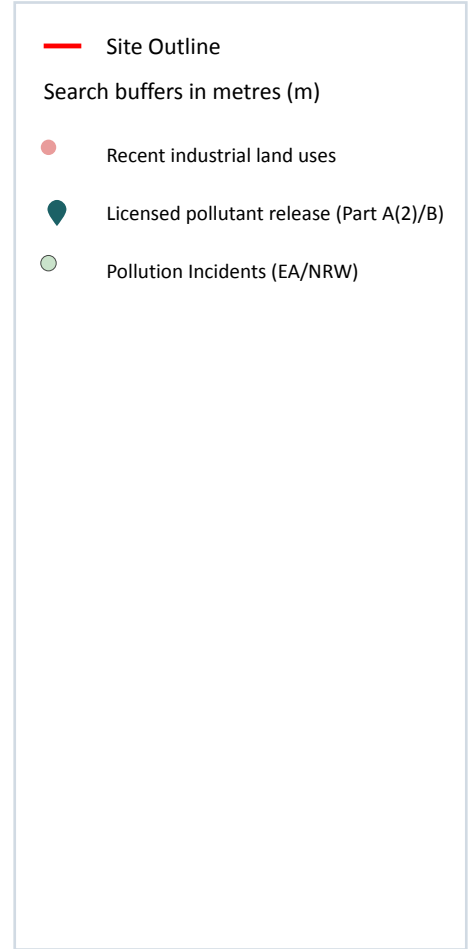
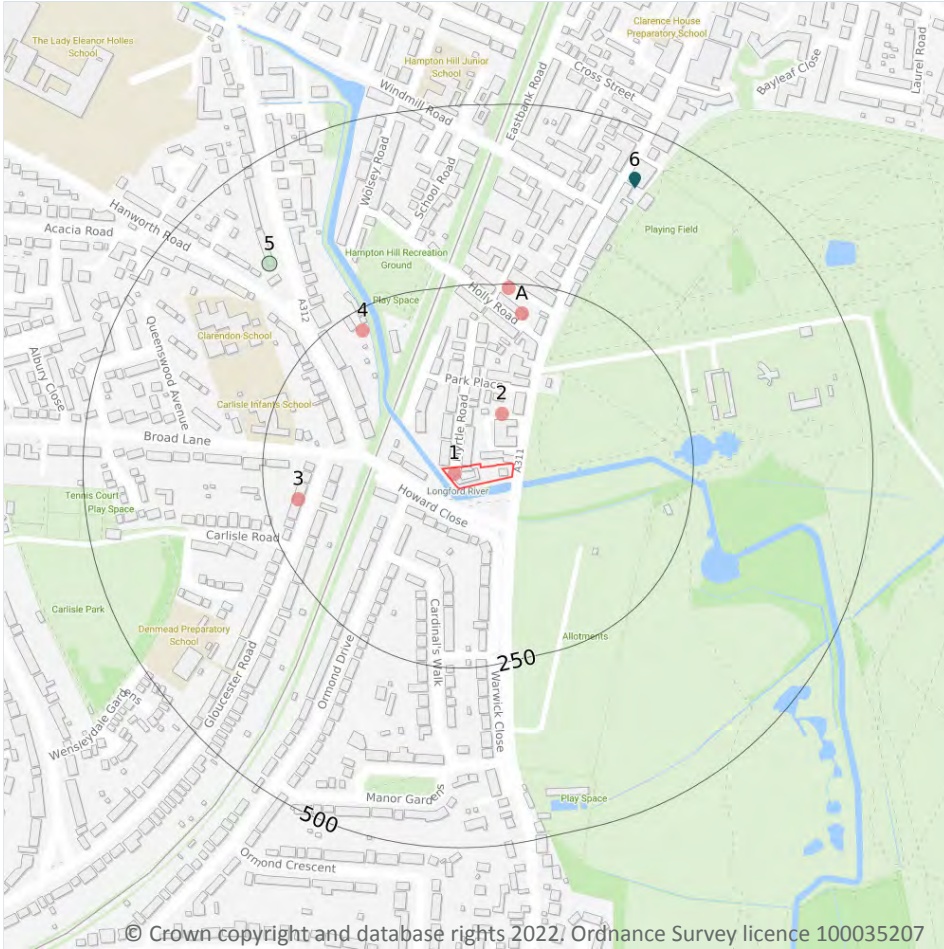


ID	Location	Site	Reference	Category	Sub-Category	Description
1	228m E	-	WEX117866	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters
2	261m N	health on the hill, 62 high street, hampton hill, middlesex, TW12 1PD	WEX290849	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal

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



4 Current industrial land use



4.1 Recent industrial land uses

Records within 250m

6

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 33**

ID	Location	Company	Address	Activity	Category
1	On site	Works	Greater London, TW12	Unspecified Works Or Factories	Industrial Features
2	71m N	Electricity Sub Station	Greater London, TW12	Electrical Features	Infrastructure and Facilities
3	205m W	Blade Sharpener	101, Gloucester Road, Hampton, Greater London, TW12 2UW	Tool Repairs	Repair and Servicing

ID	Location	Company	Address	Activity	Category
A	209m N	D & D Fine Limits S M W Ltd	2, Holly Road, Hampton Hill, Greater London, TW12 1QF	Metalworkers Including Blacksmiths	Construction Services
4	222m NW	Longford Service Station	Longford Industrial Estate 44-46, Uxbridge Road, Hampton, Greater London, TW12 3AD	Vehicle Repair, Testing and Servicing	Repair and Servicing
A	244m N	Electricity Sub Station	Greater London, TW12	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m

0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m

0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m

0

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

This data is sourced from Local Authority records.



4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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



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

Records within 500m

1

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

Features are displayed on the Current industrial land use map on **page 33**

ID	Location	Address	Details	
6	430m NE	Regal Dry Cleaners, 56 High Street, Hampton Hill, TW12 1PD	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m

0

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

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

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

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

4.15 Pollutant release to public sewer

Records within 500m 0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m 0

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

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

4.17 List 2 Dangerous Substances

Records within 500m 0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m 1

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 33**

ID	Location	Details	
5	372m NW	Incident Date: 25/01/2002 Incident Identification: 54407 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m

0

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

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

4.20 Pollution inventory waste transfers

Records within 500m

0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m

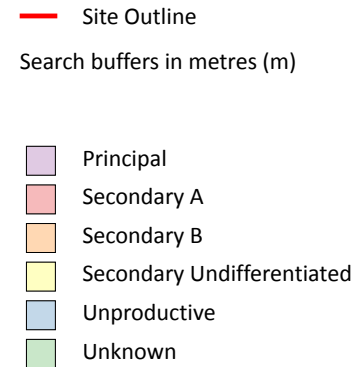
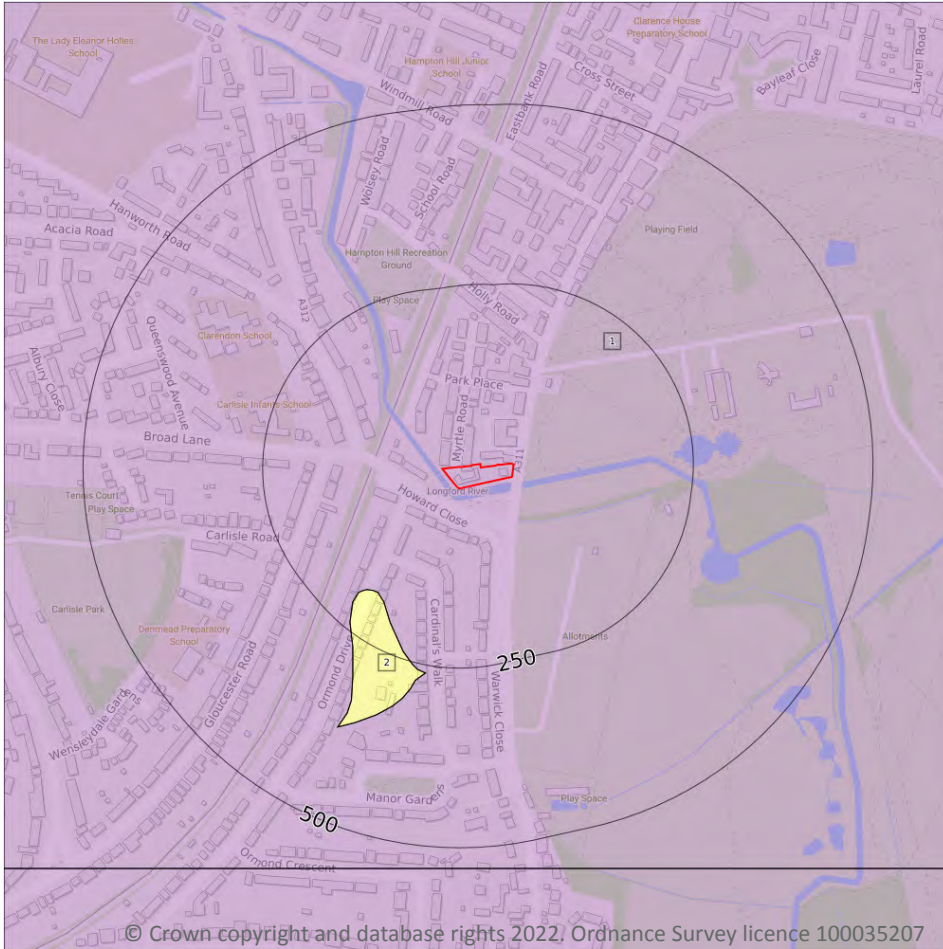
0

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

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



5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m

2

Aquifer status of groundwater held within superficial geology.

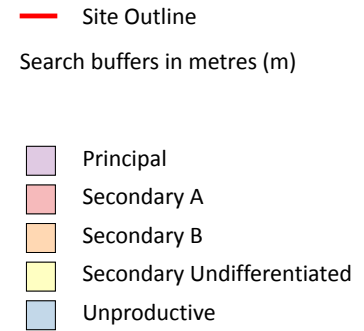
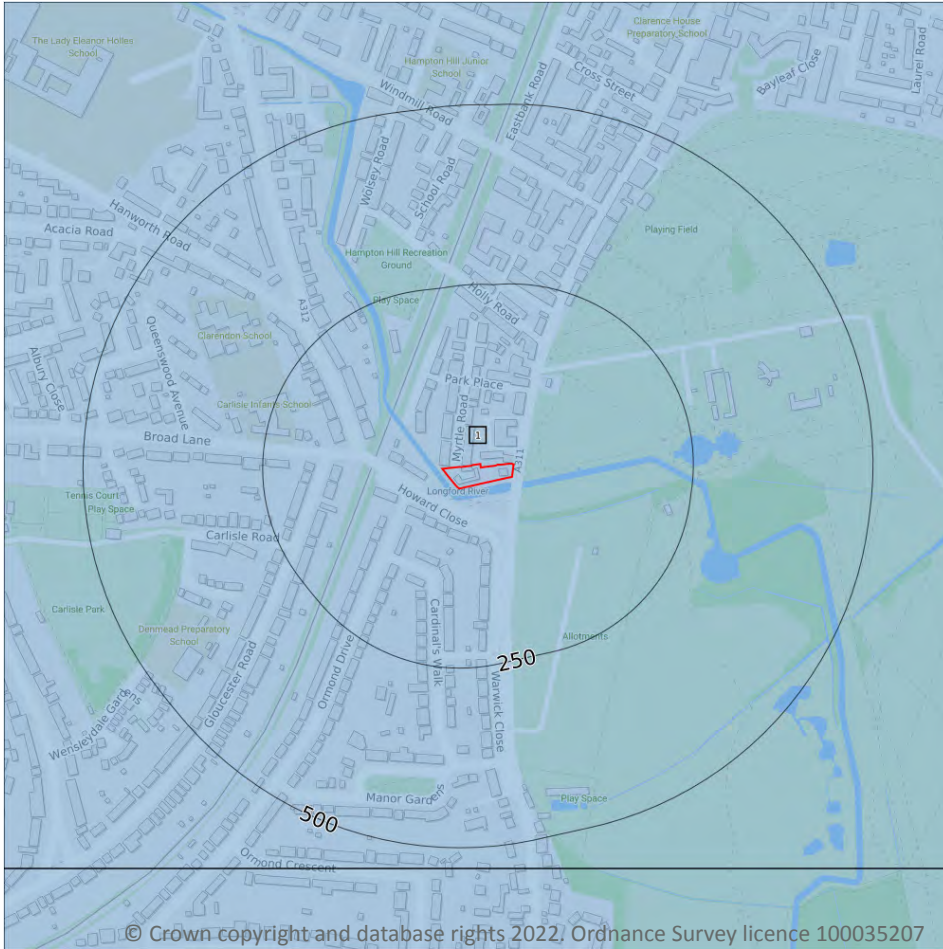
Features are displayed on the Hydrogeology map on **page 39**

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	184m SW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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



Bedrock aquifer



5.2 Bedrock aquifer

Records within 500m

1

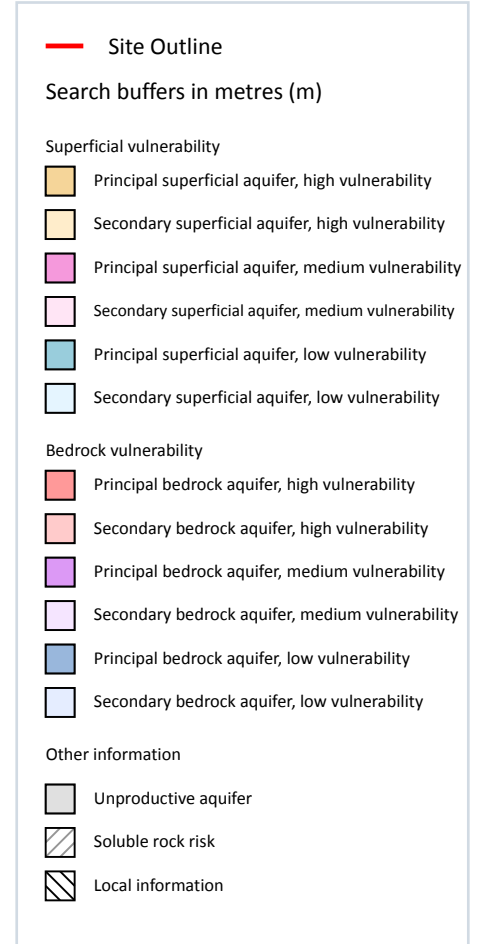
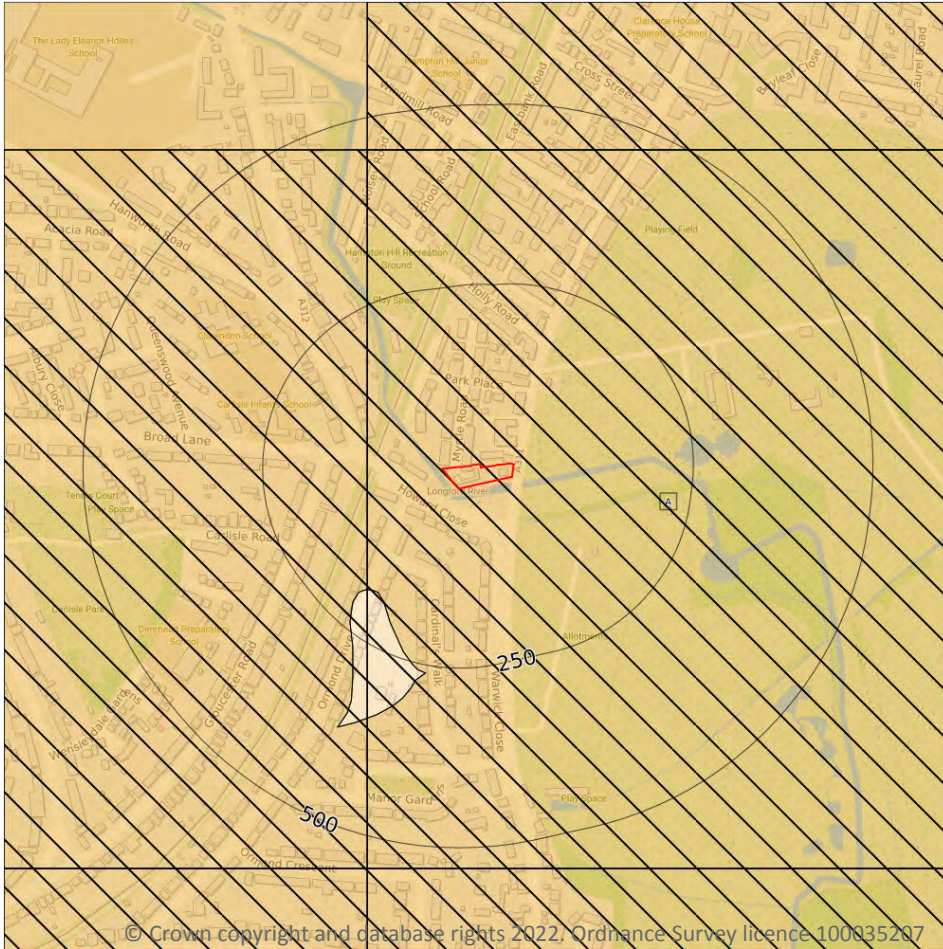
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 41**

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

1

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

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

Features are displayed on the Groundwater vulnerability map on **page 42**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
A	On site	Summary Classification: Principal superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year	Vulnerability: High Aquifer type: Principal Thickness: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
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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.

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

5.5 Groundwater vulnerability- local information

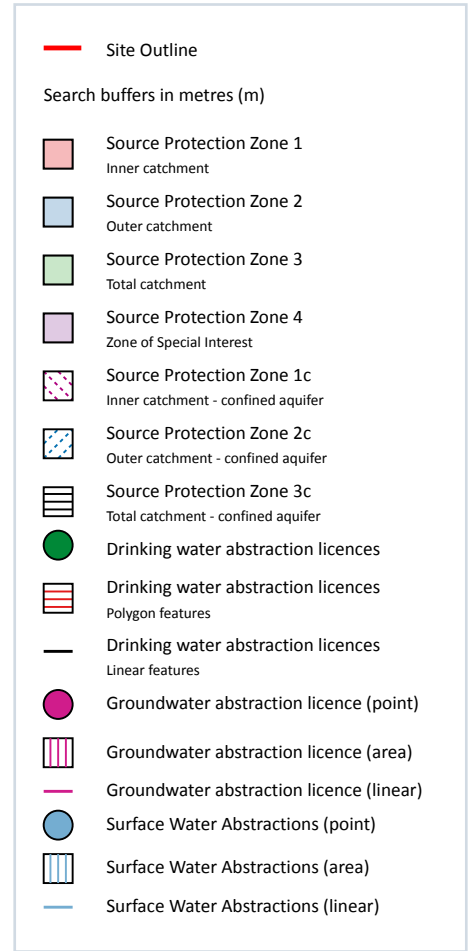
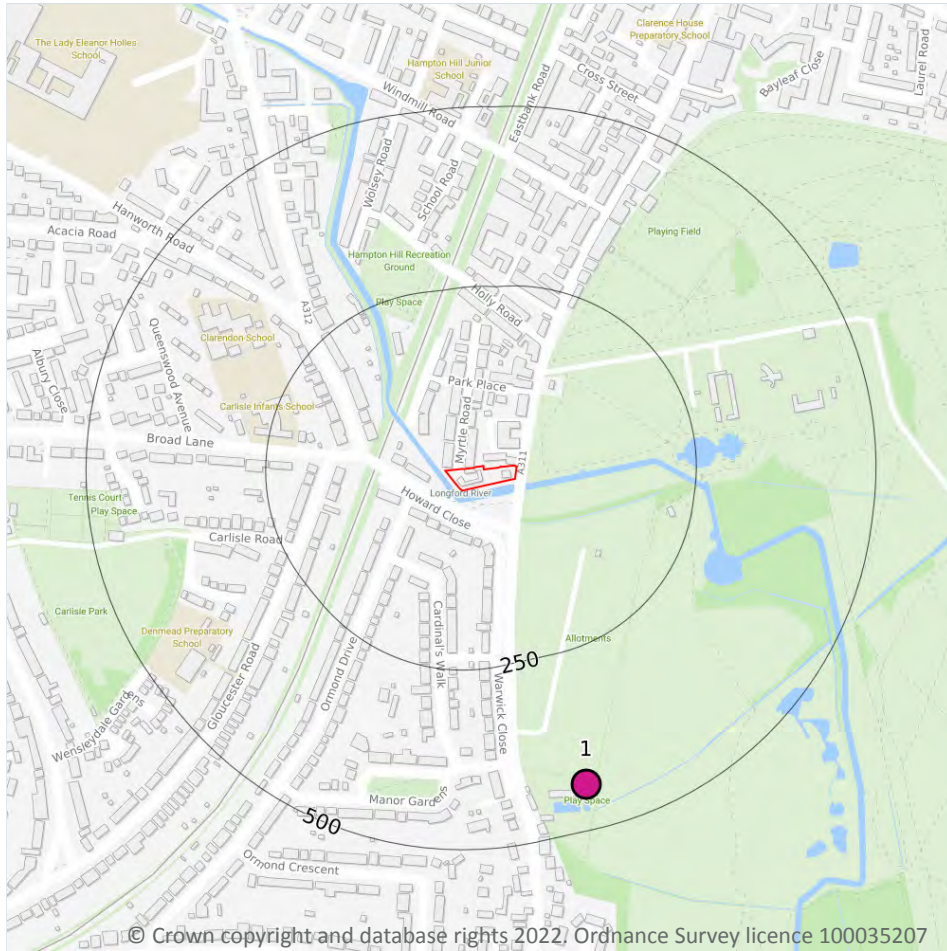
Records on site	1
------------------------	----------

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	Highly vulnerable Principal superficial aquifer present in river terrace gravels	Principal superficial aquifer in river terrace gravels with only a thin cover of low permeability silts and/or alluvium (shown as unproductive)

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

Abstractions and Source Protection Zones



5.6 Groundwater abstractions

Records within 2000m

5

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 44**

ID	Location	Details	
1	436m S	Status: Active Licence No: 28/39/31/0172 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: THAMES GROUNDWATER Point: HAMPTON POOL BOREHOLE Data Type: Point Name: HAMPTON POOL LIMITED Easting: 514300 Northing: 170120	Annual Volume (m ³): 15,000 Max Daily Volume (m ³): 200 Original Application No: WRA/6220 Original Start Date: 02/04/1997 Expiry Date: - Issue No: 100 Version Start Date: 02/04/1997 Version End Date: -
-	866m NW	Status: Historical Licence No: TH/039/0031/013 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: WELL AT HAMPTON, MIDDLESEX Data Type: Point Name: HAMPTON SCHOOL Easting: 513405 Northing: 171067	Annual Volume (m ³): 19500 Max Daily Volume (m ³): 172 Original Application No: - Original Start Date: 04/09/2013 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 04/09/2013 Version End Date: -
-	866m NW	Status: Active Licence No: TH/039/0031/013/R01 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: WELL AT HAMPTON, MIDDLESEX Data Type: Point Name: HAMPTON SCHOOL Easting: 513405 Northing: 171067	Annual Volume (m ³): 10,000 Max Daily Volume (m ³): 100 Original Application No: NPS/WR/030292 Original Start Date: 01/04/2019 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 01/04/2019 Version End Date: -
-	1287m N	Status: Active Licence No: TH/039/0034/005 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: THAMES GROUNDWATER Point: RIVER GRAVELS AT FULWELL RAILWAY STATION Data Type: Point Name: Network Rail Infrastructure Limited Easting: 514690 Northing: 171754	Annual Volume (m ³): 745,796 Max Daily Volume (m ³): 5,212 Original Application No: NPS/NA/001795 Original Start Date: 14/05/2021 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/05/2021 Version End Date: -
-	1752m NW	Status: Active Licence No: TH/039/0036/020 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT HAMPTON Data Type: Point Name: David Lloyd Leisure Limited Easting: 513161 Northing: 172033	Annual Volume (m ³): 26,280 Max Daily Volume (m ³): 72 Original Application No: NPS/WR/030185 Original Start Date: 12/02/2021 Expiry Date: 31/03/2037 Issue No: 1 Version Start Date: 12/02/2021 Version End Date: -



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

5.7 Surface water abstractions

Records within 2000m

5

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 44**

ID	Location	Details	
-	1408m SE	Status: Active Licence No: TH/039/0031/023 Details: Spray Irrigation - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: LEAT CHANNEL AT WATERHOUSE WOODLAND GARDEN, BUSHY PARK, HA Data Type: Point Name: The Royal Parks Easting: 515069 Northing: 169436	Annual Volume (m ³): 16,536 Max Daily Volume (m ³): 83 Original Application No: NPS/NA/000854 Original Start Date: 05/07/2021 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 05/07/2021 Version End Date: -
-	1428m SW	Status: Historical Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: M2 HAMPTON INTAKE T22 Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 513400 Northing: 169300	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -
-	1428m SW	Status: Active Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER THAMES AT M2 HAMPTON INTAKE T22 Data Type: Point Name: Thames Water Utilities Ltd Easting: 513400 Northing: 169300	Annual Volume (m ³): 665,388,000 Max Daily Volume (m ³): 5,455,000 Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -



ID	Location	Details	
-	1960m SW	Status: Historical Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: M2 HAMPTON INTAKE T20 Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 512900 Northing: 169000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -
-	1960m SW	Status: Active Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER THAMES AT M2 HAMPTON INTAKE T20 Data Type: Point Name: Thames Water Utilities Ltd Easting: 512900 Northing: 169000	Annual Volume (m ³): 665,388,000 Max Daily Volume (m ³): 5,455,000 Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	4
-----------------------------	----------

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 44**

ID	Location	Details	
-	1428m SW	Status: Historical Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: M2 HAMPTON INTAKE T22 Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 513400 Northing: 169300	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -



ID	Location	Details	
-	1428m SW	Status: Active Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER THAMES AT M2 HAMPTON INTAKE T22 Data Type: Point Name: Thames Water Utilities Ltd Easting: 513400 Northing: 169300	Annual Volume (m ³): 665,388,000 Max Daily Volume (m ³): 5,455,000 Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -
-	1960m SW	Status: Historical Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: M2 HAMPTON INTAKE T20 Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 512900 Northing: 169000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -
-	1960m SW	Status: Active Licence No: 28/39/M/0002 Details: Potable Water Supply - Storage Direct Source: THAMES SURFACE WATER - NON TIDAL Point: RIVER THAMES AT M2 HAMPTON INTAKE T20 Data Type: Point Name: Thames Water Utilities Ltd Easting: 512900 Northing: 169000	Annual Volume (m ³): 665,388,000 Max Daily Volume (m ³): 5,455,000 Original Application No: - Original Start Date: 10/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1987 Version End Date: -

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

5.9 Source Protection Zones

Records within 500m

0

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

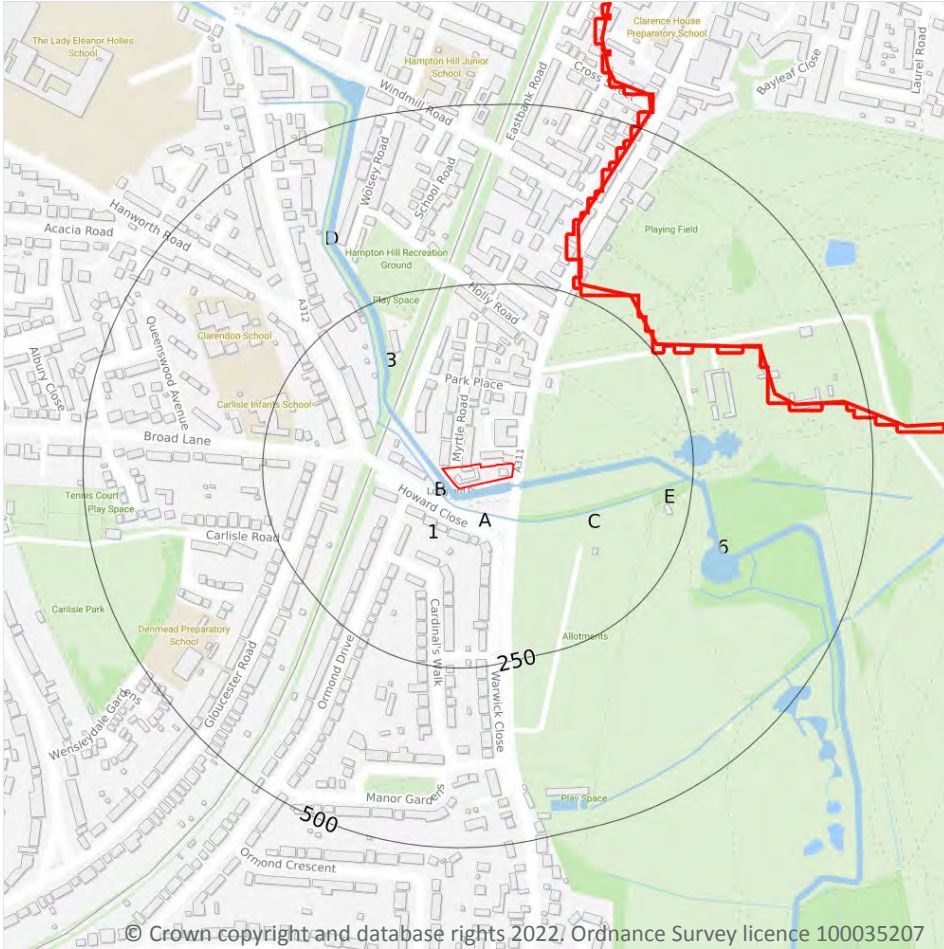
0

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

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



6 Hydrology



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

6.1 Water Network (OS MasterMap)

Records within 250m

11

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

Features are displayed on the Hydrology map on **page 49**

ID	Location	Type of water feature	Ground level	Permanence	Name
3	9m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Longford River

ID	Location	Type of water feature	Ground level	Permanence	Name
B	21m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	23m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	26m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	49m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	60m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	79m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	110m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	196m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	220m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	245m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Longford River

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

5

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

Features are displayed on the Hydrology map on **page 49**



This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

1

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

Features are displayed on the Hydrology map on **page 49**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Thames (Egham to Teddington)	GB106039023232	Thames Lower	Maidenhead and Sunbury

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

6.4 WFD Surface water bodies

Records identified

1

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

Features are displayed on the Hydrology map on **page 49**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	1131m S	River	Thames (Egham to Teddington)	GB106039023232	Poor	Fail	Poor	2019

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



6.5 WFD Groundwater bodies

Records on site

1

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

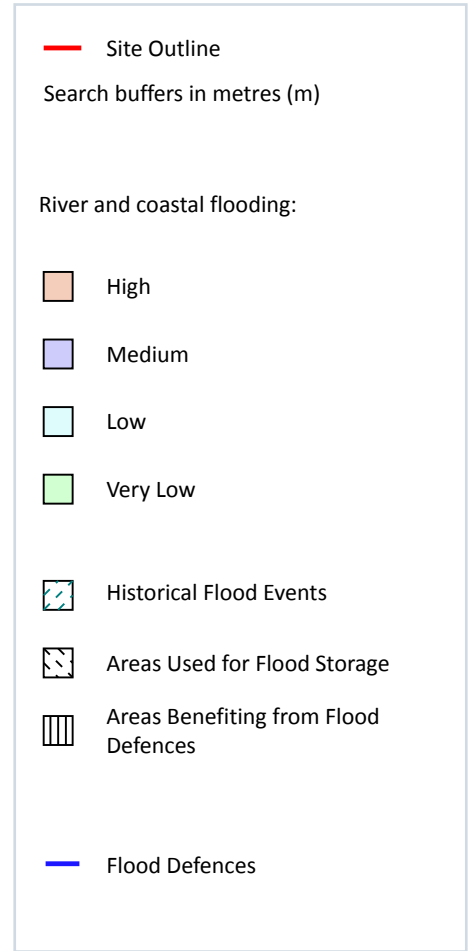
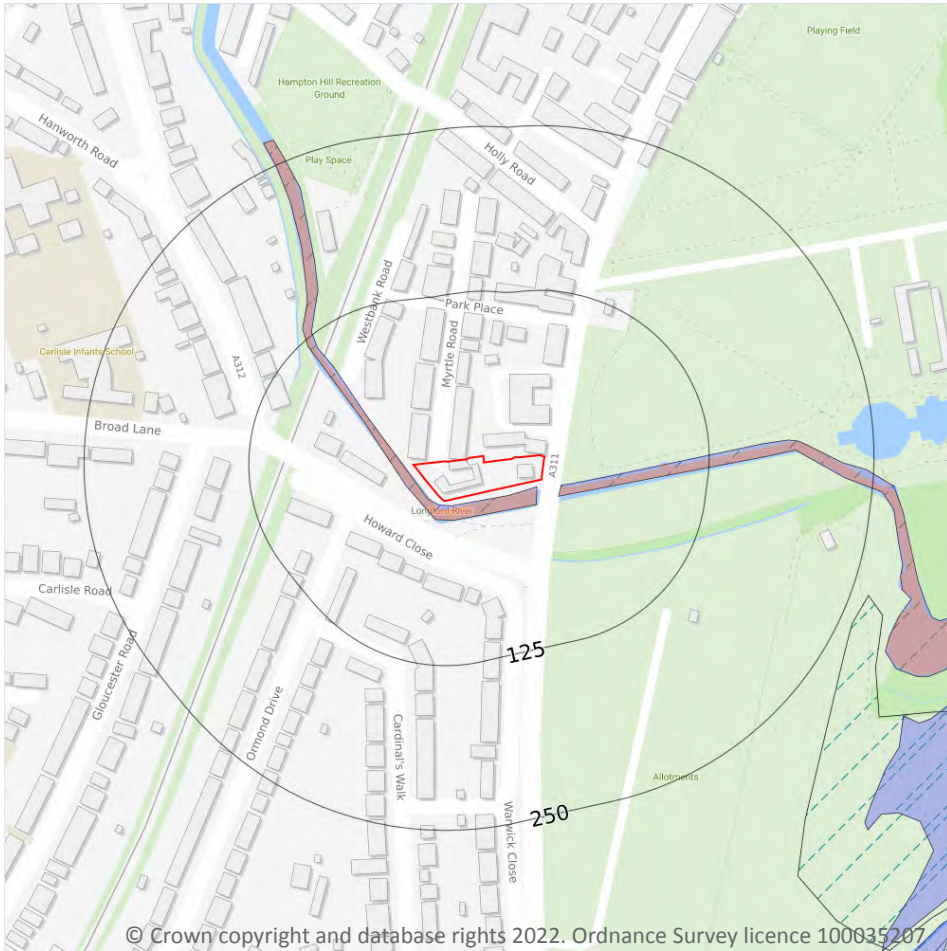
Features are displayed on the Hydrology map on **page 49**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Lower Thames Gravels	<u>GB40603G000300</u>	Poor	Good	Poor	2019

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



7 River and coastal flooding



7.1 Risk of flooding from rivers and the sea

Records within 50m

9

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).

Features are displayed on the River and coastal flooding map on **page 53**

Distance	Flood risk category
On site	N/A
0 - 50m	High

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

7.2 Historical Flood Events

Records within 250m	2
----------------------------	----------

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.

Features are displayed on the River and coastal flooding map on **page 53**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
B	4m S	06januarynewyear2003	2002-12-23 2003-01-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial
D	16m E	06januarynewyear2003	2002-12-23 2003-01-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial

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

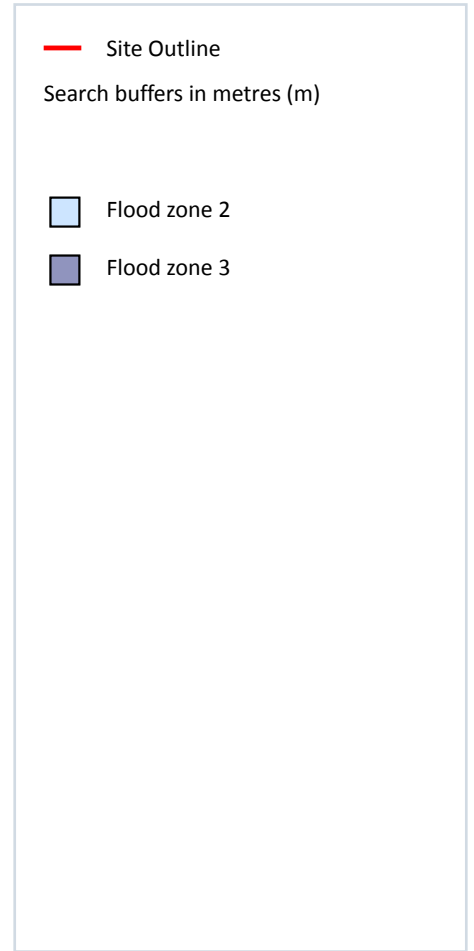
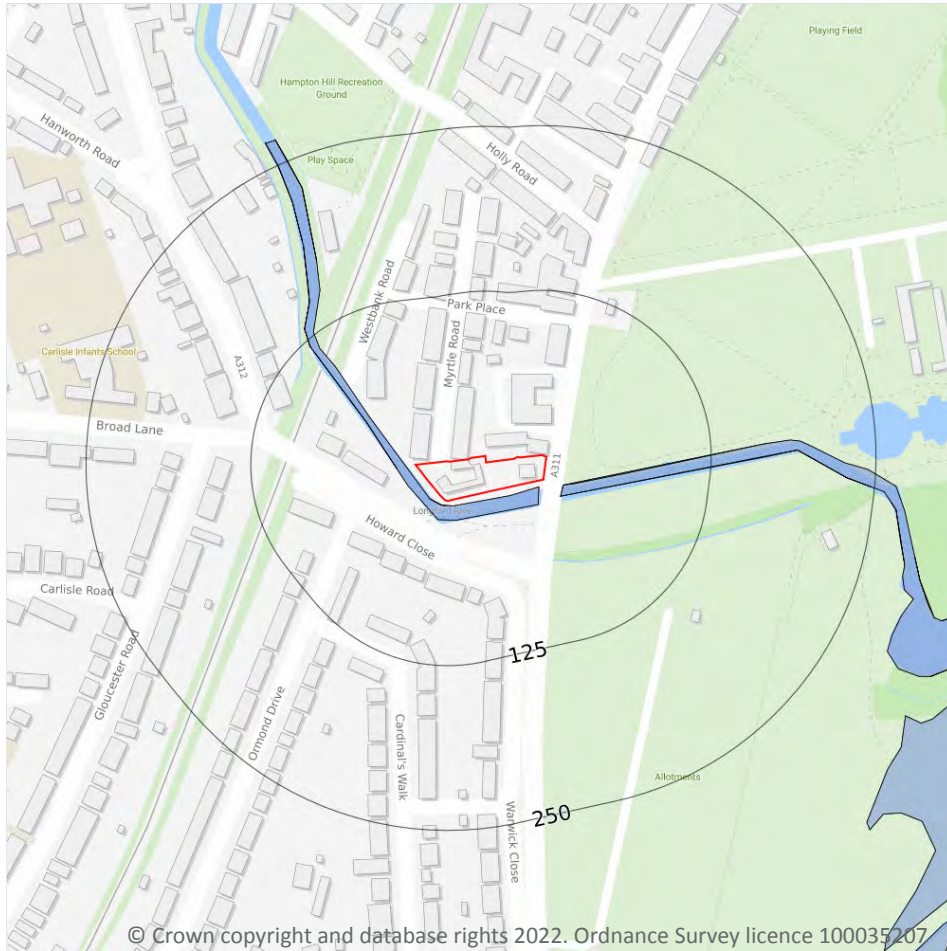
0

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

1

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.

Features are displayed on the River and coastal flooding map on **page 53**

Location	Type
4m S	Zone 2 - (Fluvial /Tidal Models)

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

7.7 Flood Zone 3

Records within 50m

1

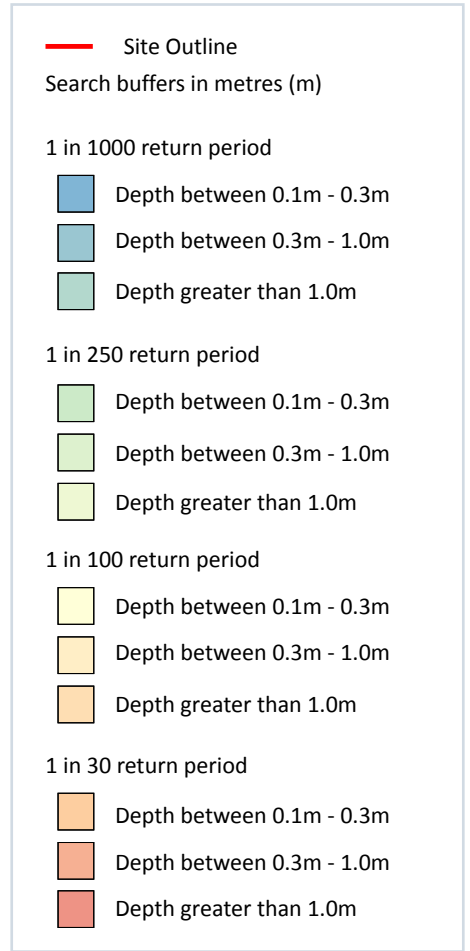
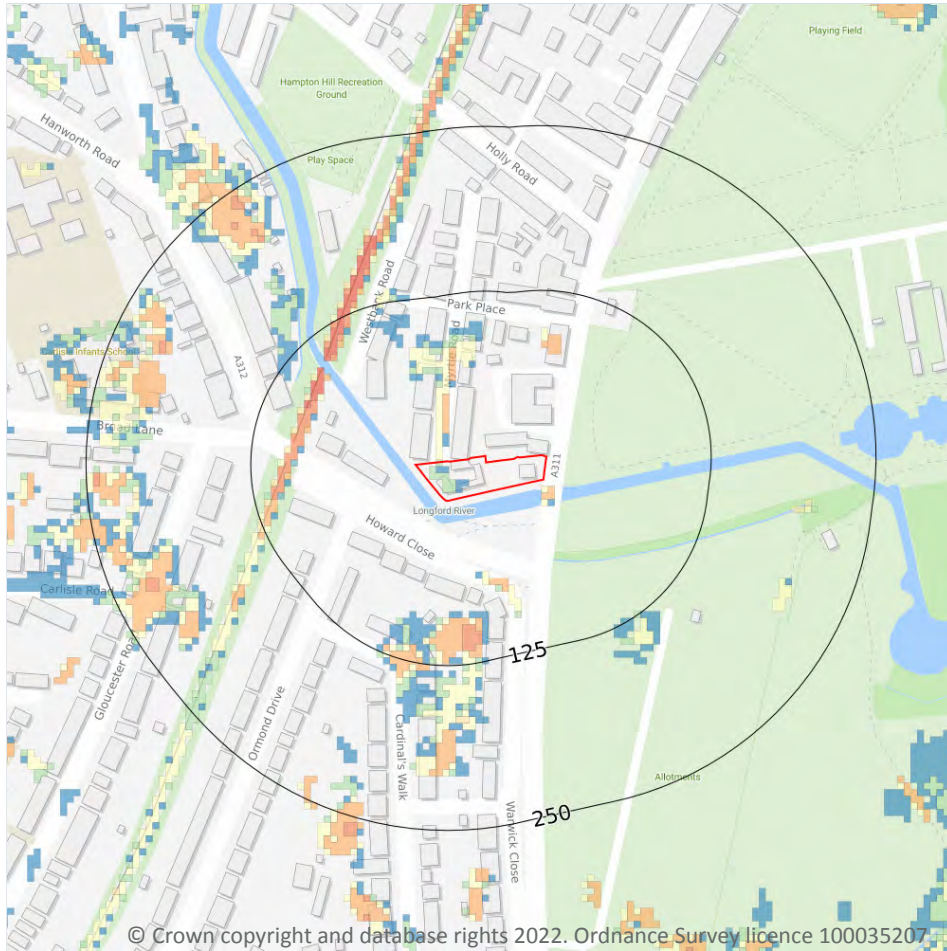
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 53**

Location	Type
4m S	Zone 3 - (Fluvial Models)

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

8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 250 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.1m - 0.3m

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 58**

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

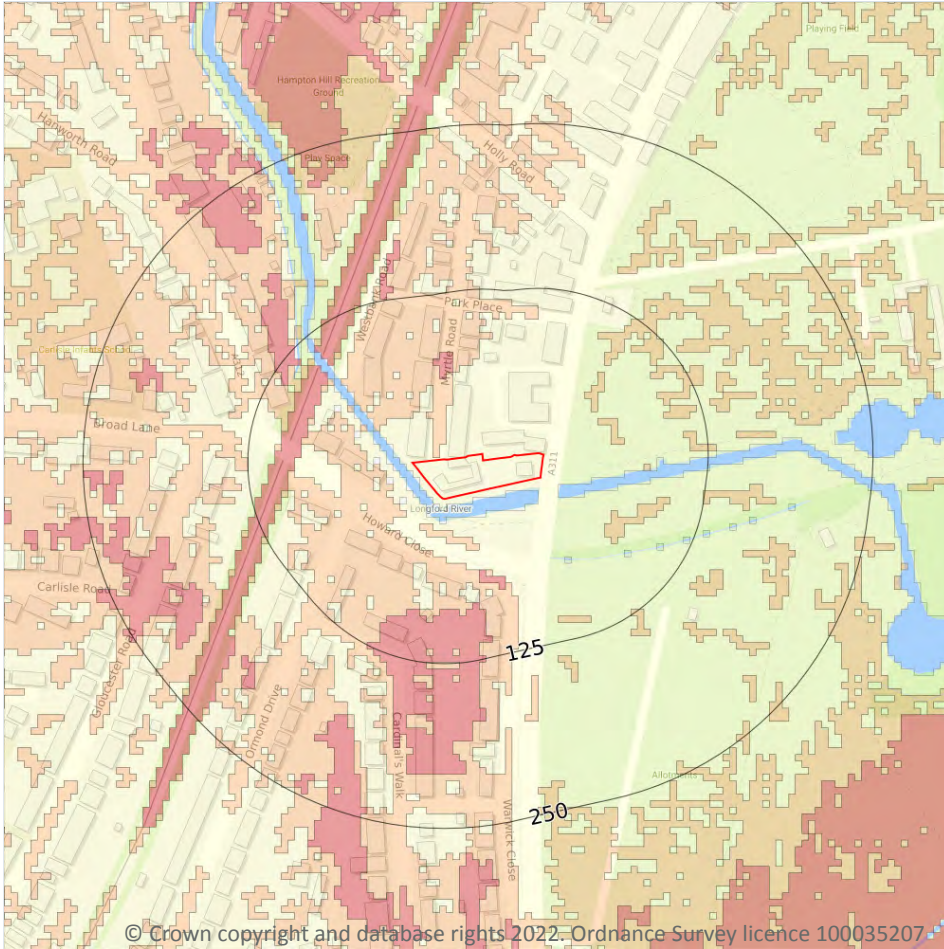
The table below shows the maximum flood depths for a range of return periods for the site.

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

This data is sourced from Ambiental Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Moderate

Highest risk within 50m

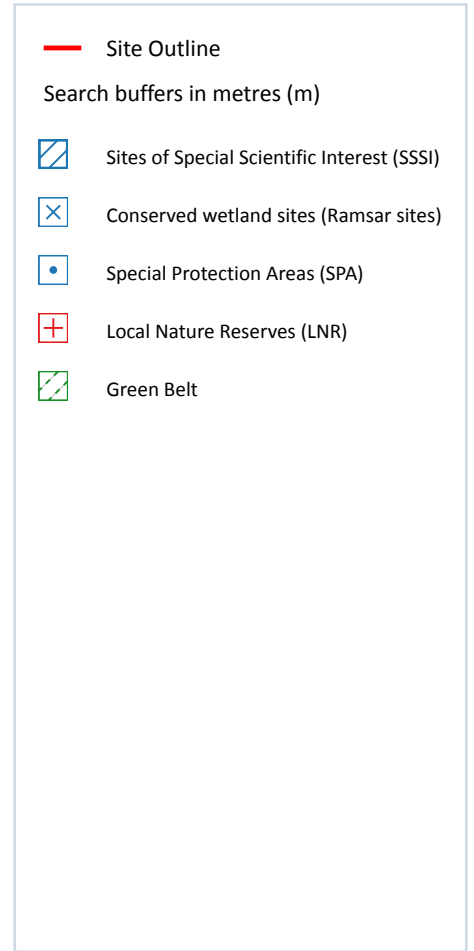
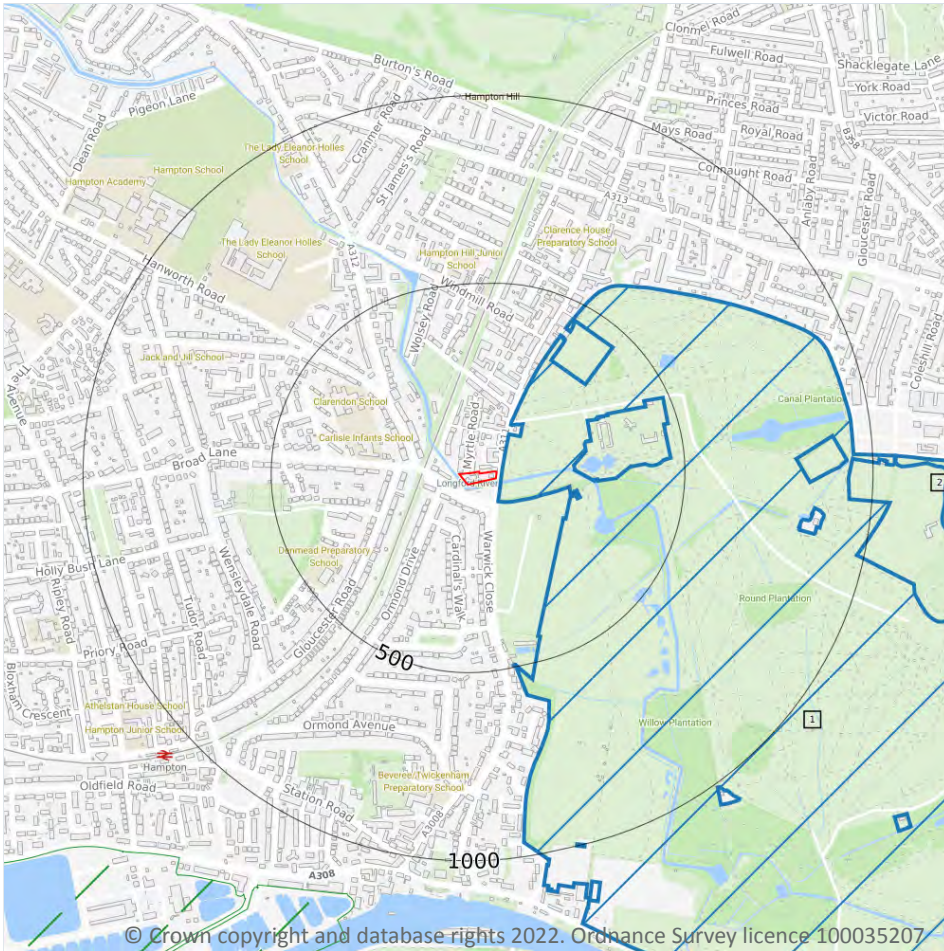
Moderate-High

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 60**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

5

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 61**

ID	Location	Name	Data source
1	14m E	Bushy Park and Home Park	Natural England



ID	Location	Name	Data source
2	1060m E	Bushy Park and Home Park	Natural England
-	1782m E	Bushy Park and Home Park	Natural England
-	1883m W	Kempton Park Reservoirs	Natural England
-	1904m W	Kempton Park Reservoirs	Natural England

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

2

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.

Features are displayed on the Environmental designations map on **page 61**

ID	Location	Site	Details
-	1882m W	Name: South West London Waterbodies Site status: Listed Data source: Natural England	Overview: The South West London Waterbodies site comprises a series of reservoirs and former gravel pits that support internationally important numbers of wintering <i>Anas strepera</i> and <i>Anas clypeata</i> . Ramsar criteria: 6. Supports nationally important populations of the following species: Great cormorant <i>Phalacrocorax carbo</i> , great crested grebe <i>Podiceps cristatus</i> , common pochard <i>Aythya ferina</i> , tufted duck <i>Aythya fuligula</i> , common coot <i>Fulica atra</i> .
-	1904m W	Name: South West London Waterbodies Site status: Listed Data source: Natural England	Overview: The South West London Waterbodies site comprises a series of reservoirs and former gravel pits that support internationally important numbers of wintering <i>Anas strepera</i> and <i>Anas clypeata</i> . Ramsar criteria: 6. Supports nationally important populations of the following species: Great cormorant <i>Phalacrocorax carbo</i> , great crested grebe <i>Podiceps cristatus</i> , common pochard <i>Aythya ferina</i> , tufted duck <i>Aythya fuligula</i> , common coot <i>Fulica atra</i> .

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



10.3 Special Areas of Conservation (SAC)

Records within 2000m

0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m

2

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.

Features are displayed on the Environmental designations map on **page 61**

ID	Location	Name	Species of interest	Habitat description	Data source
-	1883m W	South West London Waterbodies	Gadwall; Northern shoveler	Broad-leaved deciduous woodland; Inland water bodies (Standing water, Running water); Improved grassland; Humid grassland, Mesophile grassland	Natural England
-	1904m W	South West London Waterbodies	Gadwall; Northern shoveler	Broad-leaved deciduous woodland; Inland water bodies (Standing water, Running water); Improved grassland; Humid grassland, Mesophile grassland	Natural England

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

10.5 National Nature Reserves (NNR)

Records within 2000m

0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m

2

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

Features are displayed on the Environmental designations map on **page 61**

ID	Location	Name	Data source
-	1841m W	Oak Avenue Hampton	Natural England
-	1881m W	Kempton Nature Reserves	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m

0

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

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

10.8 Biosphere Reserves

Records within 2000m

0

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

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

10.9 Forest Parks

Records within 2000m

0

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

This data is sourced from the Forestry Commission.



10.10 Marine Conservation Zones

Records within 2000m

0

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

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

10.11 Green Belt

Records within 2000m

8

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

Features are displayed on the Environmental designations map on **page 61**

ID	Location	Name	Local Authority name
3	1134m S	London	Richmond upon Thames
4	1234m SW	London	Richmond upon Thames
-	1362m NW	London	Richmond upon Thames
-	1509m SW	London	Richmond upon Thames
-	1520m W	London	Richmond upon Thames
-	1653m W	London	Hounslow
-	1841m W	London	Richmond upon Thames
-	1854m W	London	Spelthorne

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

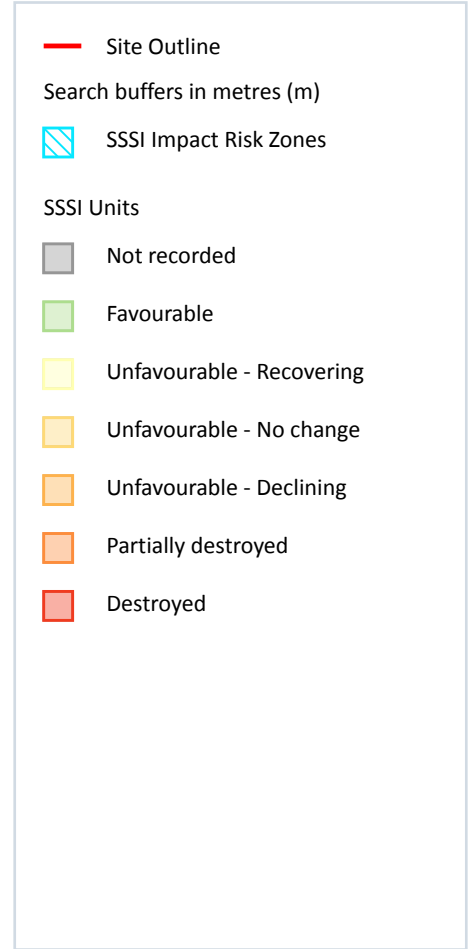
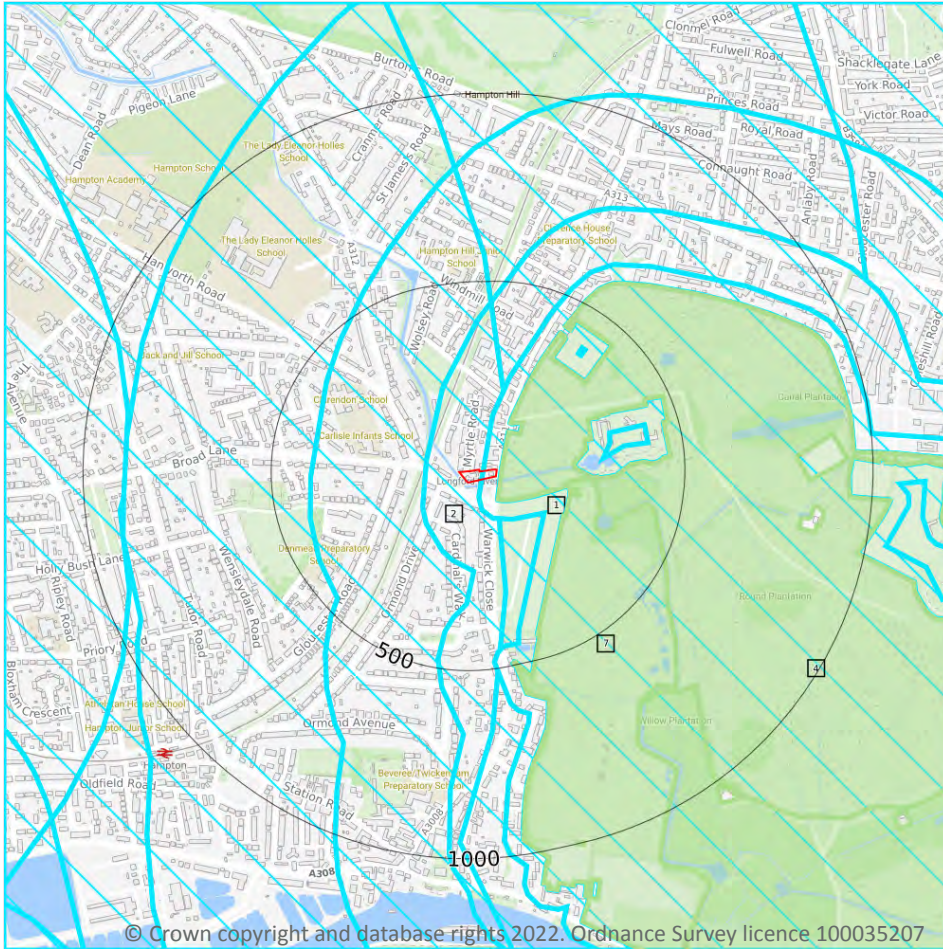
0

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

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



SSSI Impact Zones and Units



10.17 SSSI Impact Risk Zones

Records on site

2

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

Features are displayed on the SSSI Impact Zones and Units map on **page 67**

ID	Location	Type of developments requiring consultation
1	On site	All applications - All planning applications - except householder applications.

ID	Location	Type of developments requiring consultation
2	On site	<p>Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals.</p> <p>Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction.</p> <p>Air pollution - Any development that could cause air pollution or dust either in its construction or operation (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores).</p> <p>Combustion - All general combustion processes. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.</p> <p>Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management.</p> <p>Composting - Any composting proposal. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.</p> <p>Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream.</p> <p>Water supply - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m² or more.</p>

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	8
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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.

Features are displayed on the SSSI Impact Zones and Units map on **page 67**

ID: 4
 Location: 14m E
 SSSI name: Bushy Park and Home Park
 Unit name: North Bushy Park
 Broad habitat: Acid Grassland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	16/06/2014
Lowland dry acid grassland (U4)	Favourable	16/06/2014
Population of veteran trees	Favourable	28/03/2017



ID: 7
 Location: 193m E
 SSSI name: Bushy Park and Home Park
 Unit name: West Bushy Park
 Broad habitat: Acid Grassland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	16/06/2014
Lowland dry acid grassland (U4)	Favourable	16/06/2014
Population of veteran trees	Favourable	28/03/2017

ID: 12
 Location: 712m SE
 SSSI name: Bushy Park and Home Park
 Unit name: Woodland Gardens & Court Field
 Broad habitat: Acid Grassland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	16/06/2014
Lowland dry acid grassland (U4)	Favourable	16/06/2014
Population of veteran trees	Favourable	28/03/2017

ID: 18
 Location: 1060m E
 SSSI name: Bushy Park and Home Park
 Unit name: North Bushy Park
 Broad habitat: Acid Grassland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	16/06/2014
Lowland dry acid grassland (U4)	Favourable	16/06/2014
Population of veteran trees	Favourable	28/03/2017

ID: -
 Location: 1411m E
 SSSI name: Bushy Park and Home Park
 Unit name: N.p.I Woodland
 Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
 Condition: Unfavourable - Recovering
 Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	28/02/2014
Population of veteran trees	Unfavourable - Recovering	28/02/2014

ID: -
 Location: 1782m E
 SSSI name: Bushy Park and Home Park
 Unit name: East Bushy Park
 Broad habitat: Acid Grassland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Invert. assemblage A2 wood decay	Favourable	16/06/2014
Lowland dry acid grassland (U1b,c,d,f)	Favourable	16/06/2014
Lowland dry acid grassland (U4)	Favourable	16/06/2014
Population of veteran trees	Favourable	28/03/2017

ID: -
 Location: 1883m W
 SSSI name: Kempton Park Reservoirs
 Unit name: Kempton Park East Reservoir
 Broad habitat: Neutral Grassland - Lowland
 Condition: Unfavourable - Recovering
 Reportable features:

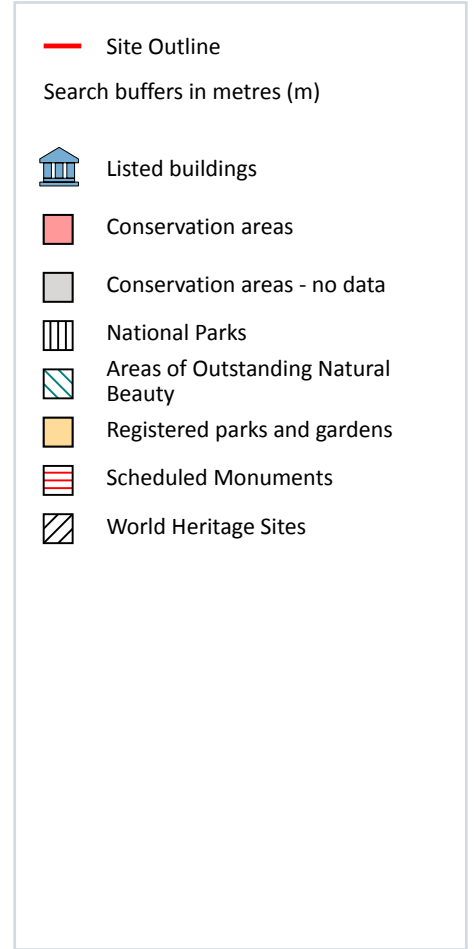
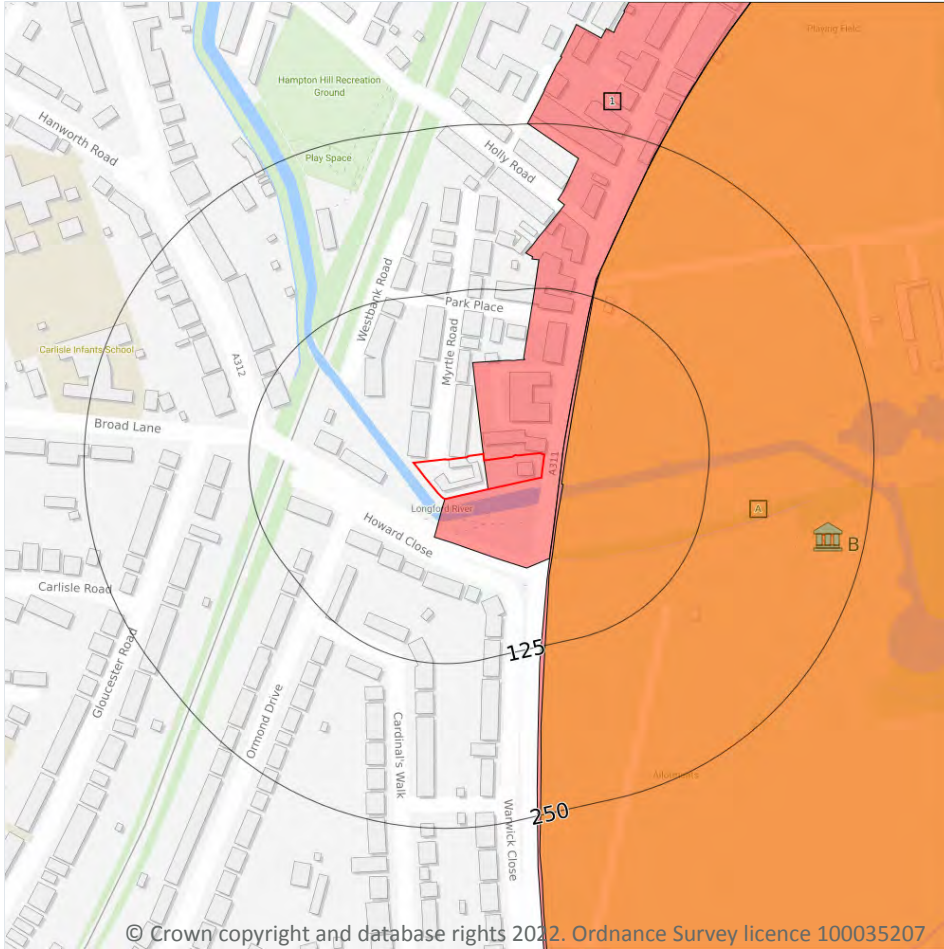
Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Gadwall, <i>Anas strepera</i>	Unfavourable - Recovering	14/10/2011

ID: -
Location: 1904m W
SSSI name: Kempton Park Reservoirs
Unit name: Redhouse Reservoir
Broad habitat: Standing Open Water And Canals
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Gadwall, <i>Anas strepera</i>	Unfavourable - Recovering	14/10/2011

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

11 Visual and cultural designations



11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m**0**

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

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

11.3 National Parks

Records within 250m**0**

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

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

11.4 Listed Buildings

Records within 250m**1**

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.

Features are displayed on the Visual and cultural designations map on **page 72**

ID	Location	Name	Grade	Reference Number	Listed date
B	222m E	Old Brew House, Bushy Park, Richmond upon Thames, London, TW12	II	1080872	25/06/1983

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



11.5 Conservation Areas

Records within 250m

2

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.

Features are displayed on the Visual and cultural designations map on **page 72**

ID	Location	Name	District	Date of designation
1	On site	High Street (Hampton Hill)	Richmond upon Thames	07/09/1982
A	14m E	Bushy Park	Richmond upon Thames	29/01/1991

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

11.6 Scheduled Ancient Monuments

Records within 250m

1

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.

Features are displayed on the Visual and cultural designations map on **page 72**

ID	Location	Ancient monument name	Reference number
B	215m E	Old Brew House, Bushy Park	1002046

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

11.7 Registered Parks and Gardens

Records within 250m

1

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.

Features are displayed on the Visual and cultural designations map on **page 72**

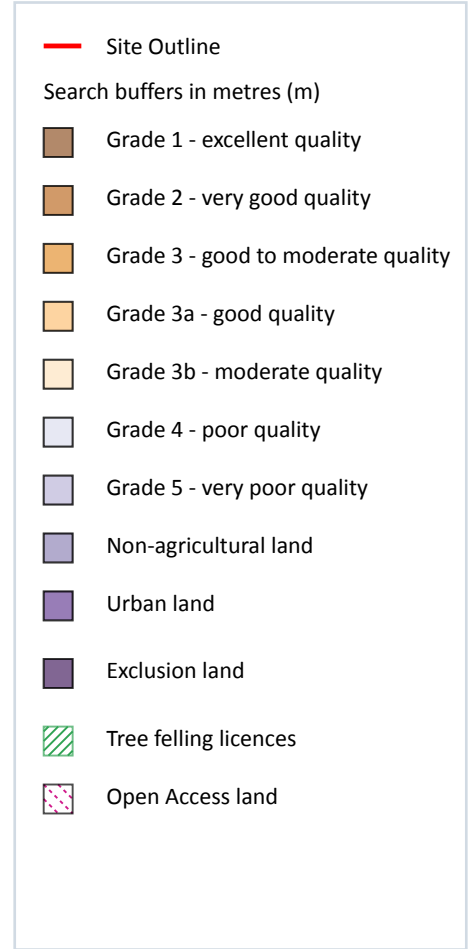
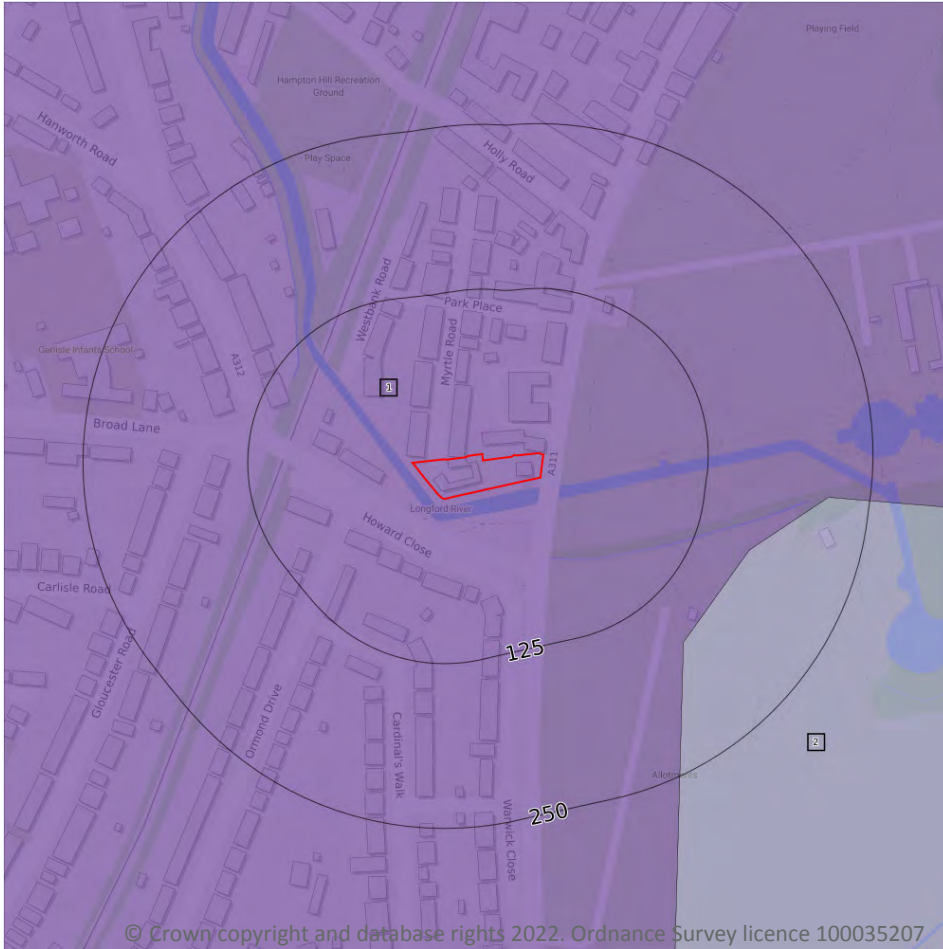


ID	Location	Name	Grade
A	16m E	Bushy Park	I

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



12 Agricultural designations



12.1 Agricultural Land Classification

Records within 250m

2

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 76**

ID	Location	Classification	Description
1	On site	Urban	-
2	161m SE	Non Agricultural	-

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m

0

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

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

12.3 Tree Felling Licences

Records within 250m

0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

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

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

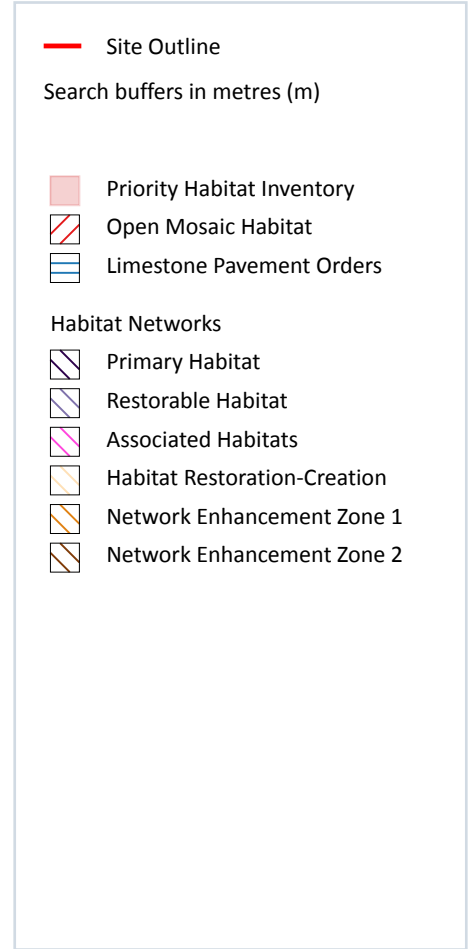
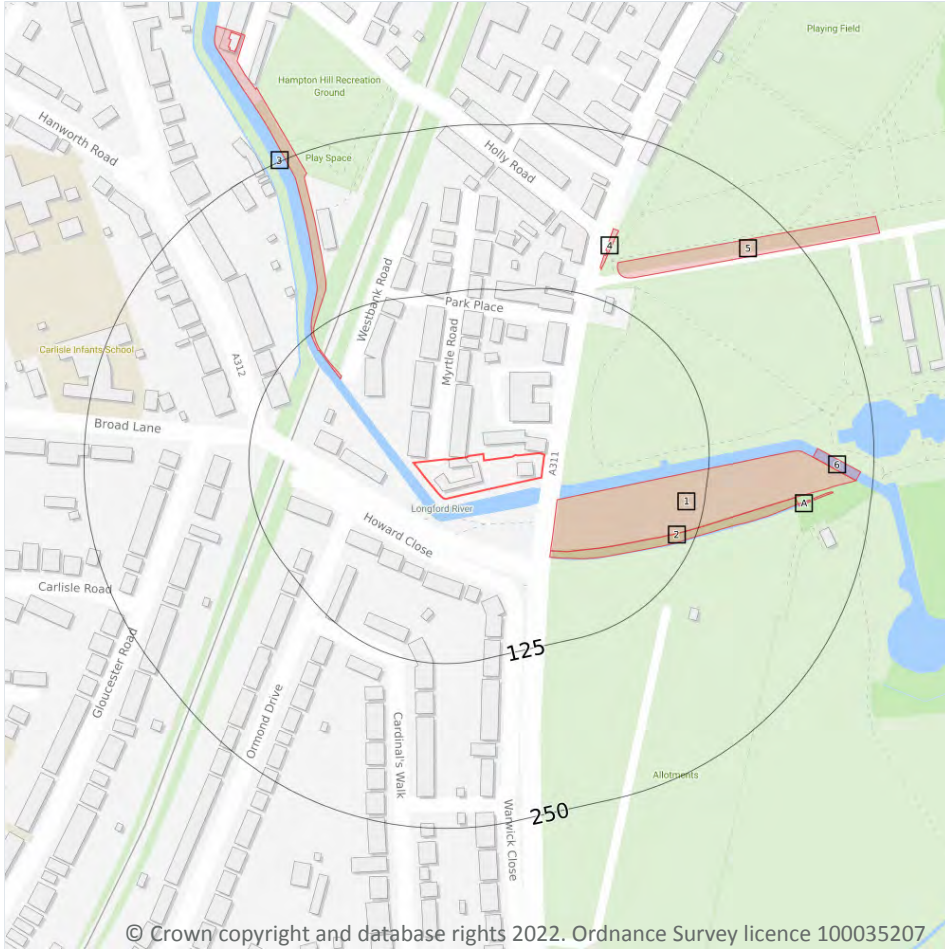
0

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

This data is sourced from Natural England.



13 Habitat designations



13.1 Priority Habitat Inventory

Records within 250m

8

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

Features are displayed on the Habitat designations map on **page 78**

ID	Location	Main Habitat	Other habitats
1	21m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	56m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	84m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	147m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
5	148m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	196m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	204m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	207m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

0

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

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



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

14.1 10k Availability

Records within 500m

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.

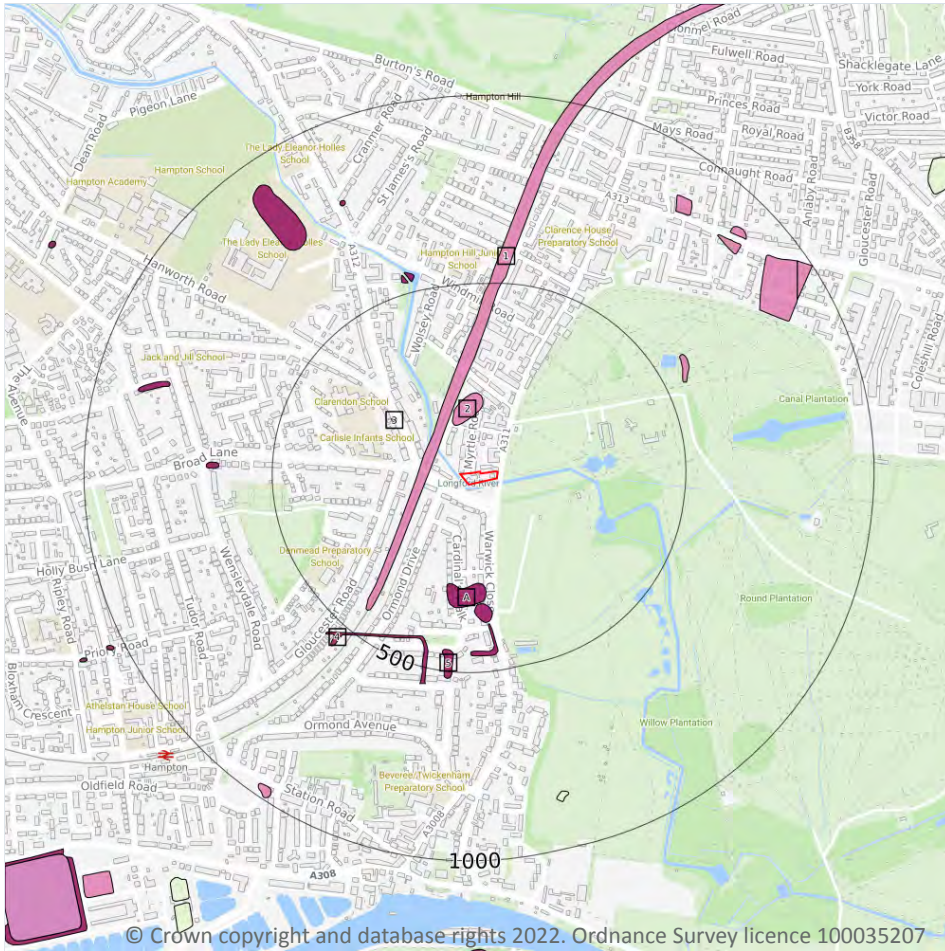
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 80**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	TQ17SW

This data is sourced from the British Geological Survey.



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



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

14.2 Artificial and made ground (10k)

Records within 500m

8

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

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 81**

ID	Location	LEX Code	Description	Rock description
1	79m W	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry
2	130m N	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry
3	219m NW	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
A	263m S	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry



ID	Location	LEX Code	Description	Rock description
A	318m S	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
A	374m S	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
4	422m S	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
5	442m S	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
- Landslip (10k)
- Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m

3

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 83**

ID	Location	LEX Code	Description	Rock description
1	On site	TPGR-XSV	Taplow Gravel Formation - Sand And Gravel	Sand And Gravel
2	184m SW	HEAD-XSC	Head - Sand And Clay	Sand And Clay
3	247m S	KPGR-XSV	Kempton Park Gravel Formation - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



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

14.5 Bedrock geology (10k)

Records within 500m

1

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 85**

ID	Location	LEX Code	Description	Rock age
1	On site	LC-CLAY	London Clay Formation - Clay	Eocene Epoch

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

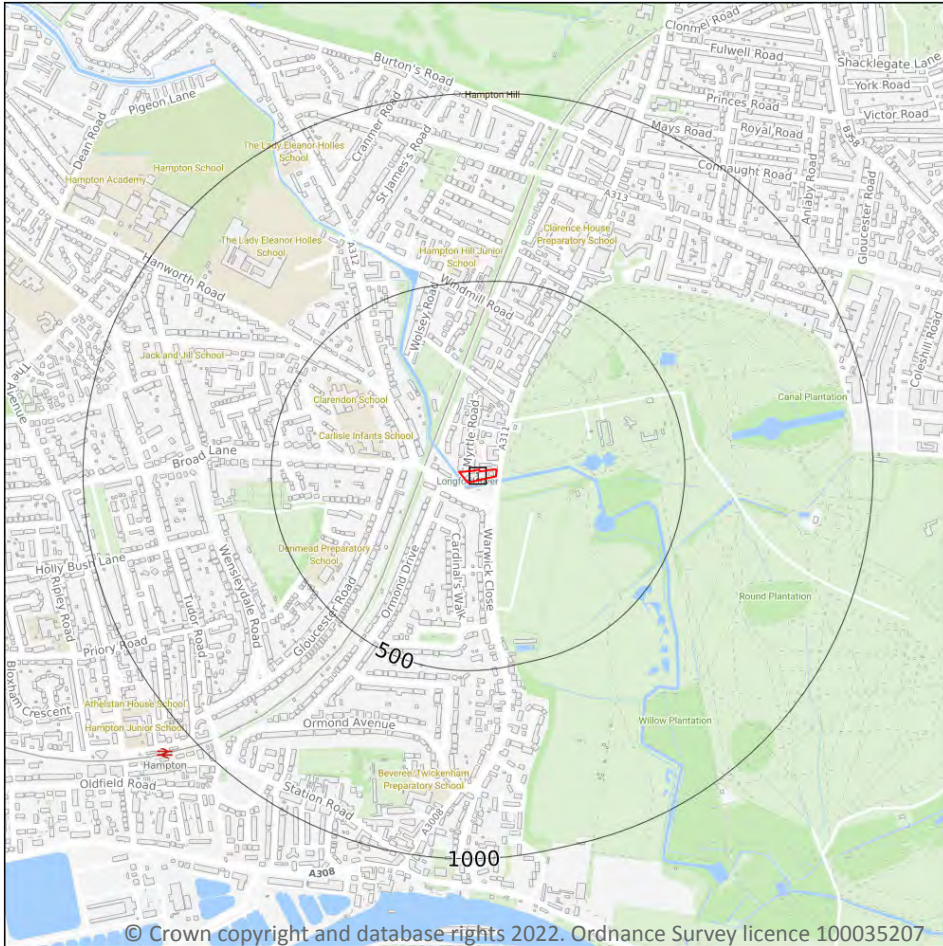
0

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

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline
Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

1

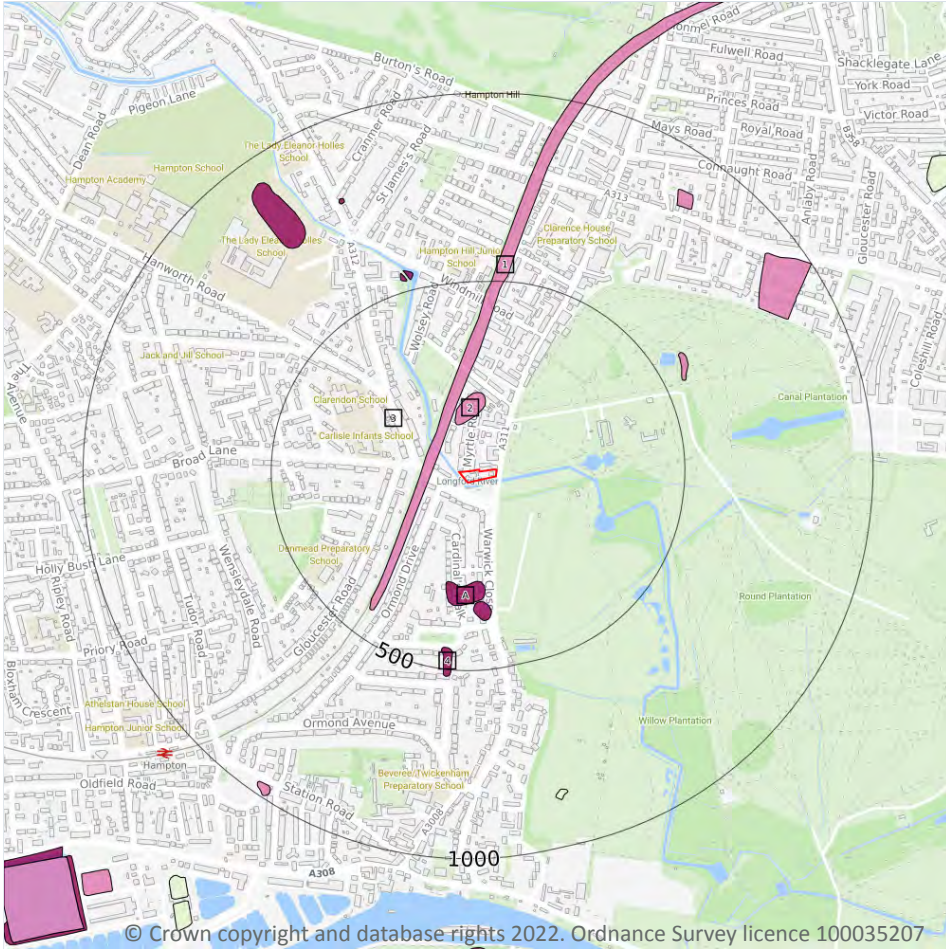
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 87**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW270_south_london_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 **6**

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 88**

ID	Location	LEX Code	Description	Rock description
1	69m W	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
2	125m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
3	219m NW	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
A	264m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

ID	Location	LEX Code	Description	Rock description
A	318m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
4	442m 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

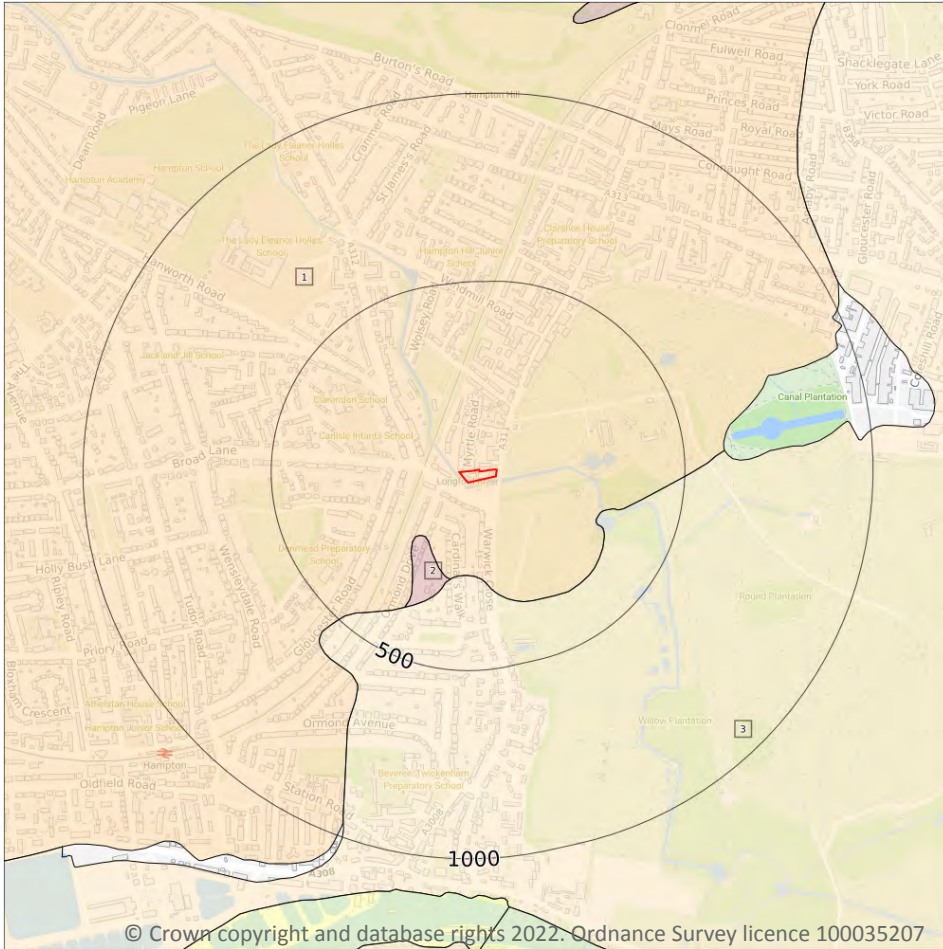
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
- Landslip (50k)
- Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

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 90**

ID	Location	LEX Code	Description	Rock description
1	On site	TPGR-XSV	TAPLOW GRAVEL MEMBER	SAND AND GRAVEL
2	184m SW	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
3	247m S	KPGR-XSV	KEMPTON PARK GRAVEL MEMBER	SAND AND GRAVEL



This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	Very High	High

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m

0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (50k)
- Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 92**

ID	Location	LEX Code	Description	Rock age
1	On site	LC-XCZ	LONDON CLAY FORMATION - CLAY AND SILT	YPRESIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

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

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

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



16 Boreholes

16.1 BGS Boreholes

Records within 250m

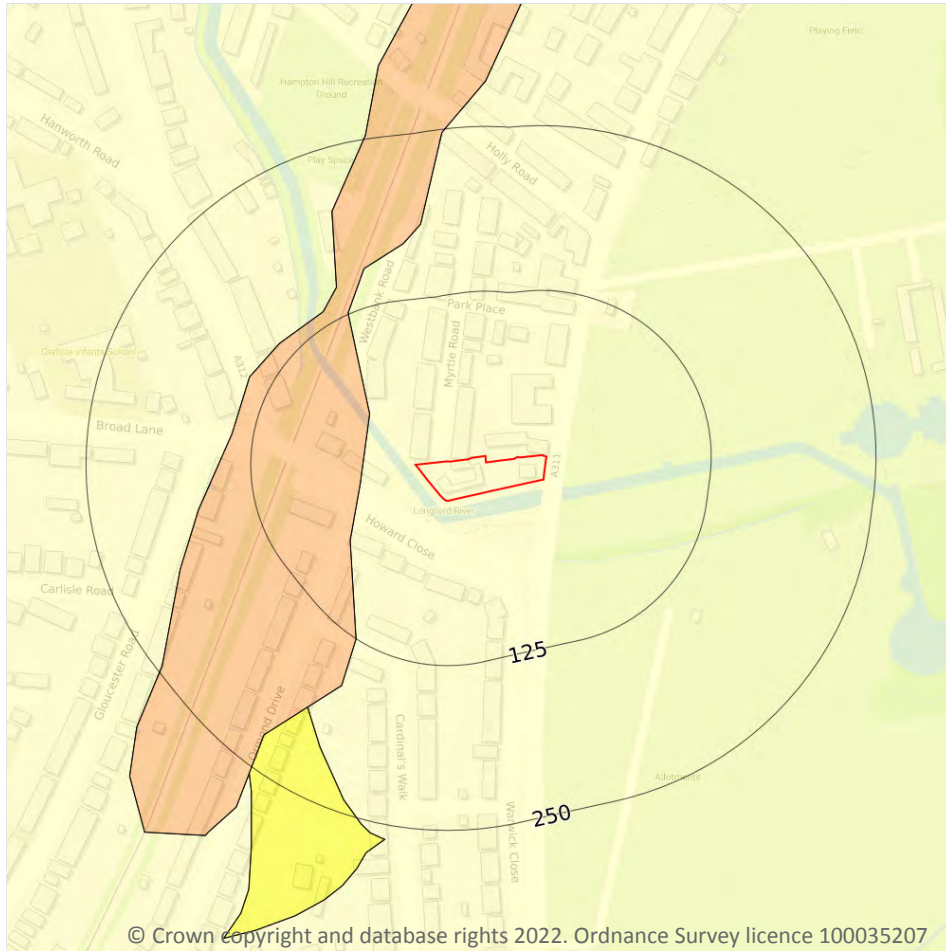
0

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.

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

2

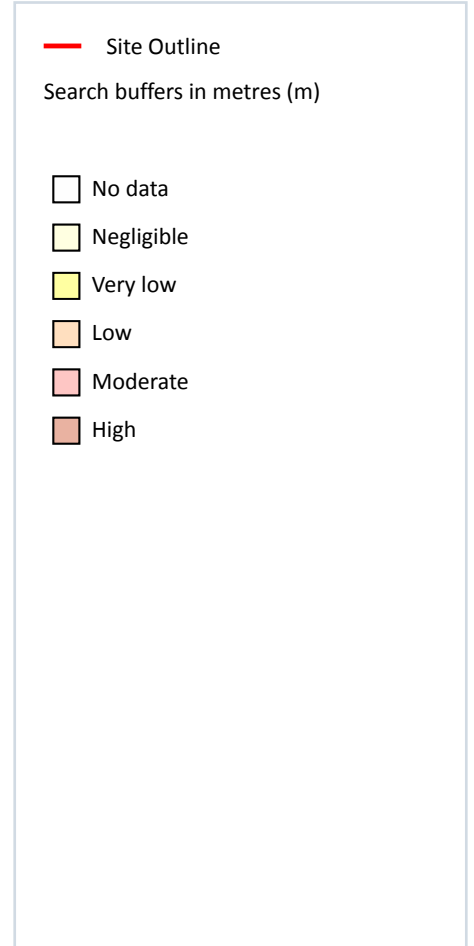
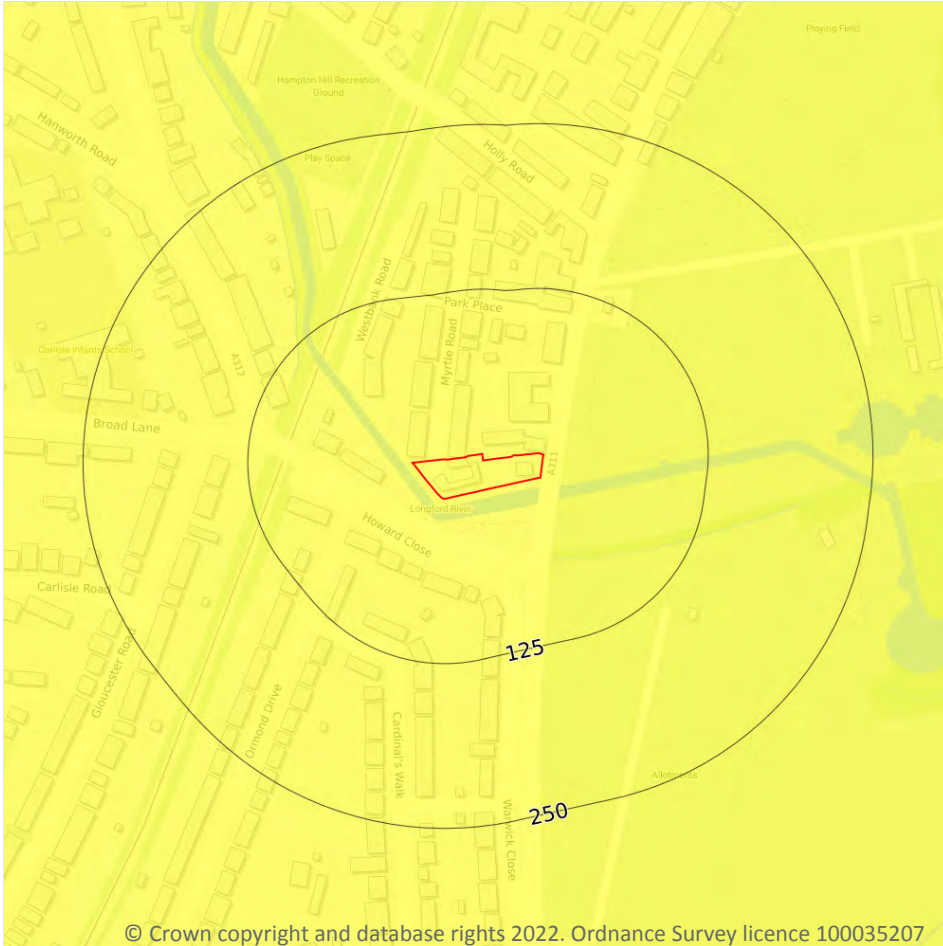
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 95**

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
40m W	Low	Ground conditions predominantly medium plasticity.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

1

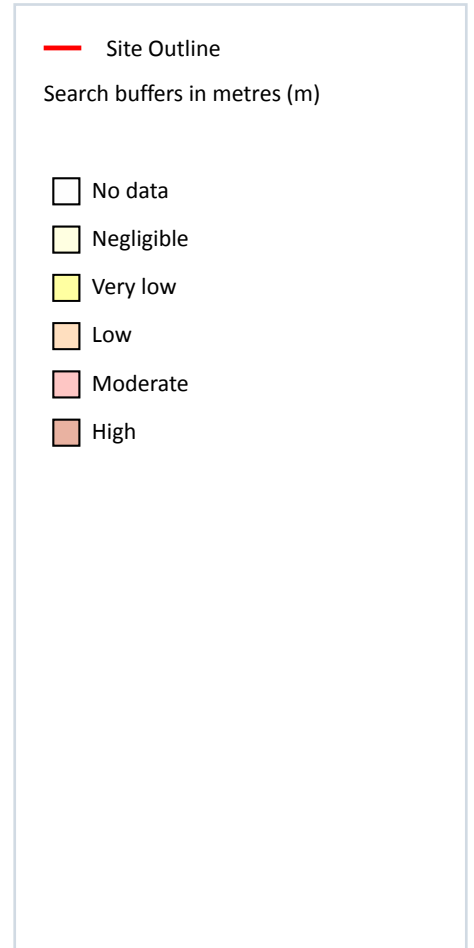
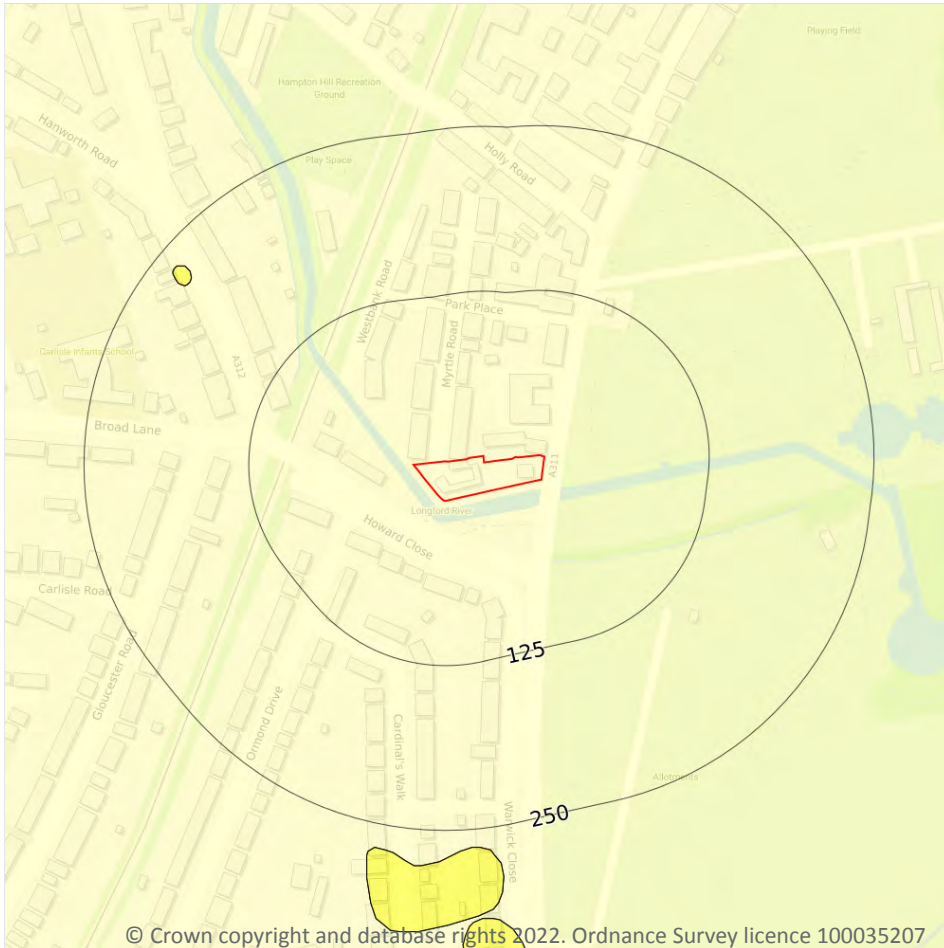
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 96**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

1

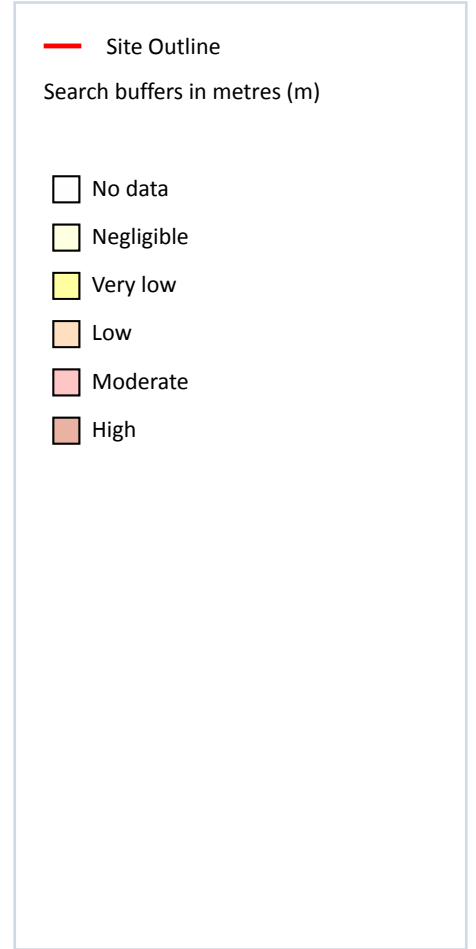
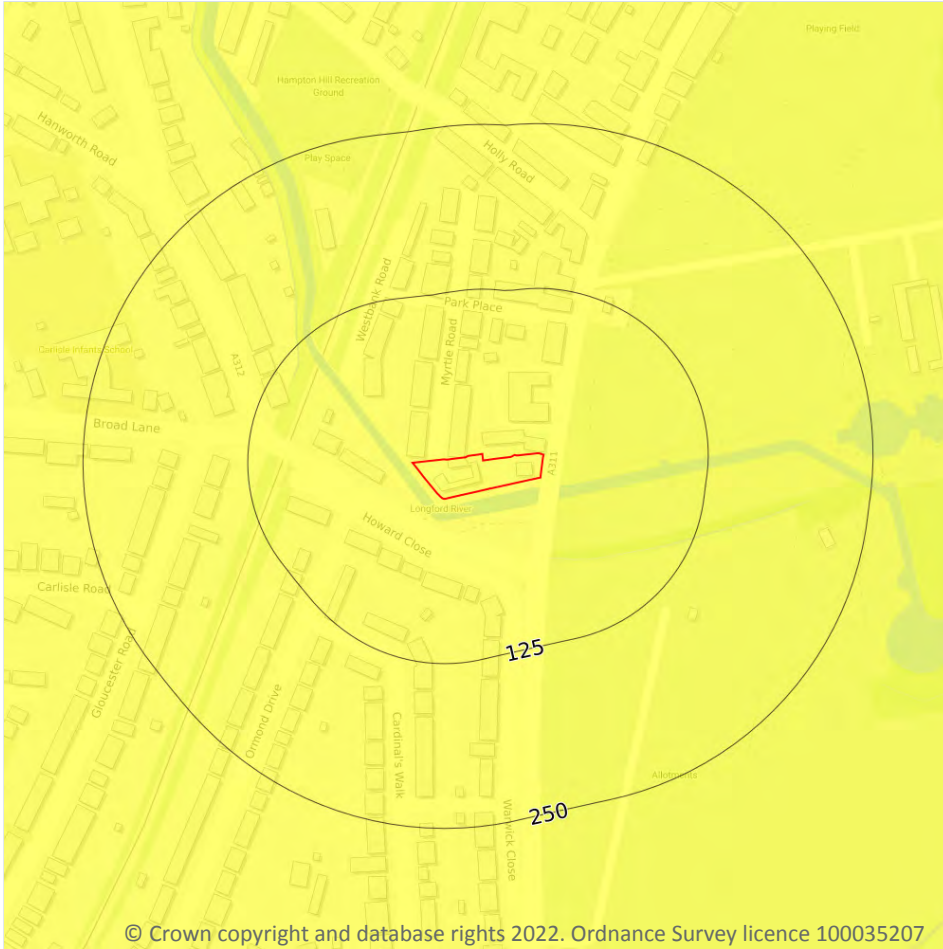
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

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

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

1

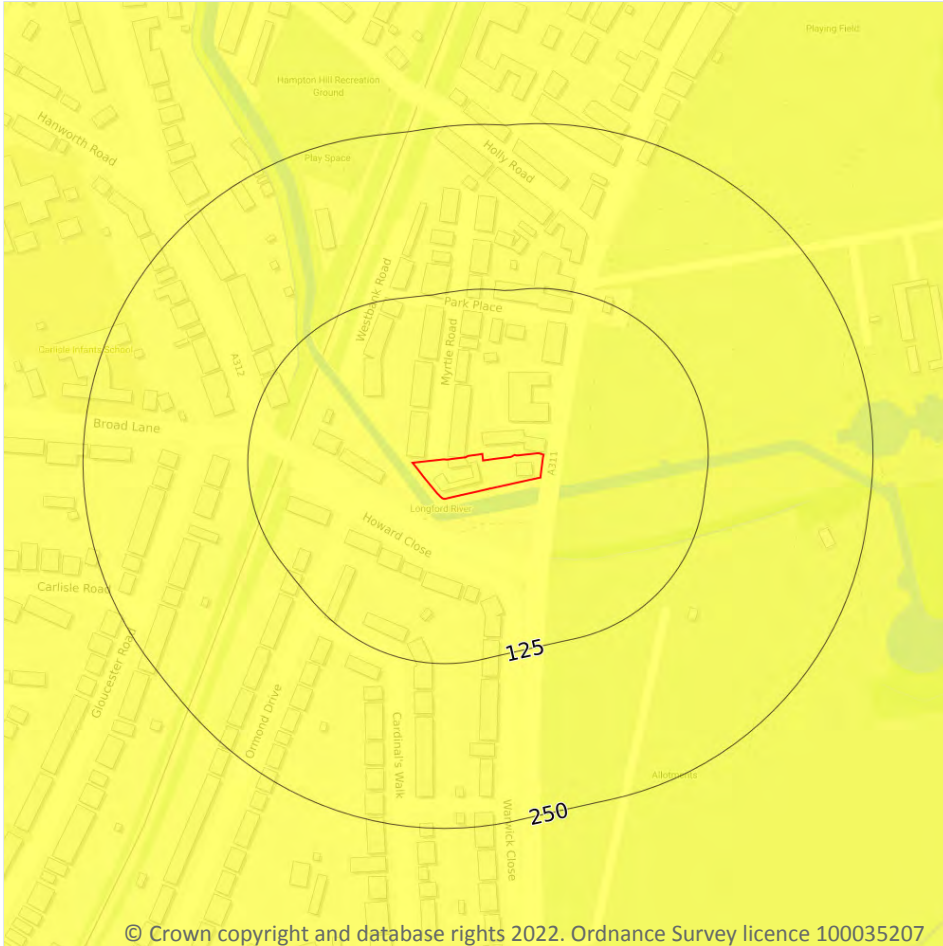
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 98**

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



17.5 Landslides

Records within 50m

1

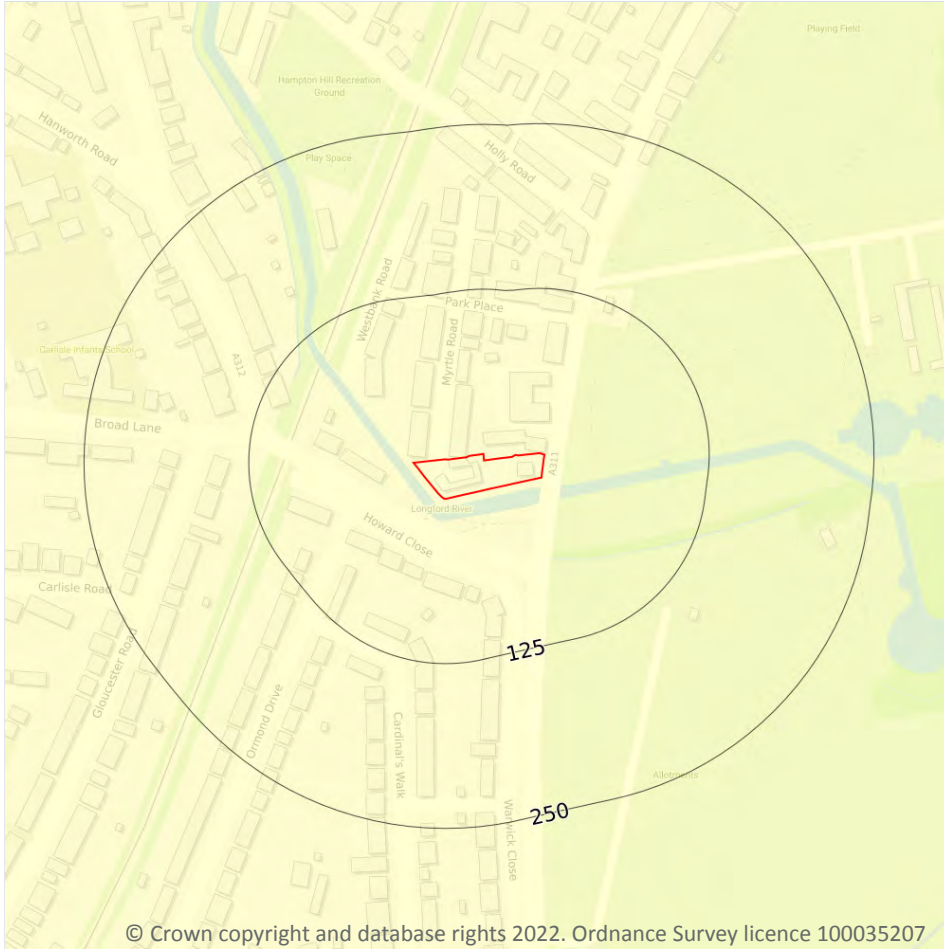
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 99**

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.

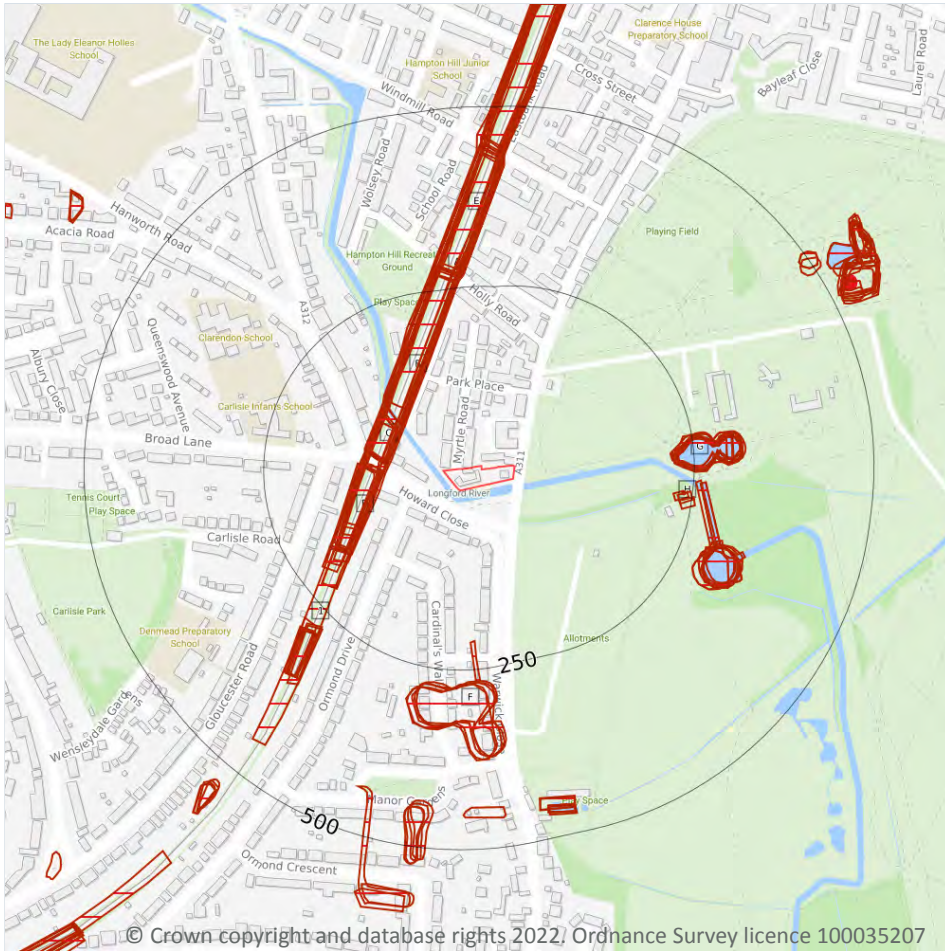
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 100**

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

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



18.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

0

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

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

47

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 102**

ID	Location	Land Use	Year of mapping	Mapping scale
A	73m W	Cuttings	1894	1:10560
A	75m NW	Cuttings	1913	1:10560
A	75m NW	Cuttings	1966	1:10560
A	75m NW	Cuttings	1973	1:10000
A	75m NW	Cuttings	1983	1:10000
B	76m NW	Cuttings	1913	1:10560
A	76m W	Cuttings	1934	1:10560
A	76m W	Cuttings	1959	1:10560
A	78m W	Cuttings	1938	1:10560
C	78m W	Cuttings	1899	1:10560
C	79m W	Cuttings	1865	1:10560
B	80m W	Cuttings	1894	1:10560
C	81m W	Cuttings	1938	1:10560
C	81m W	Cuttings	1895	1:10560
A	82m W	Cuttings	1913	1:10560
A	85m W	Cuttings	1920	1:10560
D	85m W	Cuttings	1913	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
D	86m W	Cuttings	1899	1:10560
1	86m W	Cuttings	1865	1:10560
A	86m W	Cuttings	1938	1:10560
E	87m NW	Cuttings	1899	1:10560
D	89m W	Cuttings	1894	1:10560
D	92m W	Cuttings	1895	1:10560
B	93m NW	Cuttings	1938	1:10560
B	93m NW	Cuttings	1895	1:10560
D	96m W	Cuttings	1938	1:10560
B	100m NW	Cuttings	1865	1:10560
F	210m S	Ponds	1894	1:10560
G	217m E	Ponds	1938	1:10560
G	220m E	Pond	1920	1:10560
G	221m E	Ponds	1938	1:10560
G	221m E	Ponds	1895	1:10560
H	224m E	Reservoir	1938	1:10560
G	224m E	Pond	1894	1:10560
G	224m E	Ponds	1938	1:10560
G	224m E	Ponds	1913	1:10560
G	224m E	Ponds	1934	1:10560
G	225m E	Ponds	1913	1:10560
G	226m E	Pond	1966	1:10560
G	226m E	Pond	1973	1:10000
G	226m E	Pond	1983	1:10000
G	227m E	Ponds	1959	1:10560
G	227m E	Pond	1894	1:10560
G	228m E	Pond	1865	1:10560
H	230m E	Reservoir	1913	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
H	234m E	Reservoir	1913	1:10560
H	236m E	Reservoir	1920	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m

0

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

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

0

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

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m

0

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

This data is sourced from Stantec UK Ltd.



18.8 JPB mining areas

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

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

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

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

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

This data is sourced from the Coal Authority.

18.10 Brine areas

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

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

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

18.11 Gypsum areas

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

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.



18.13 Clay mining

Records on site

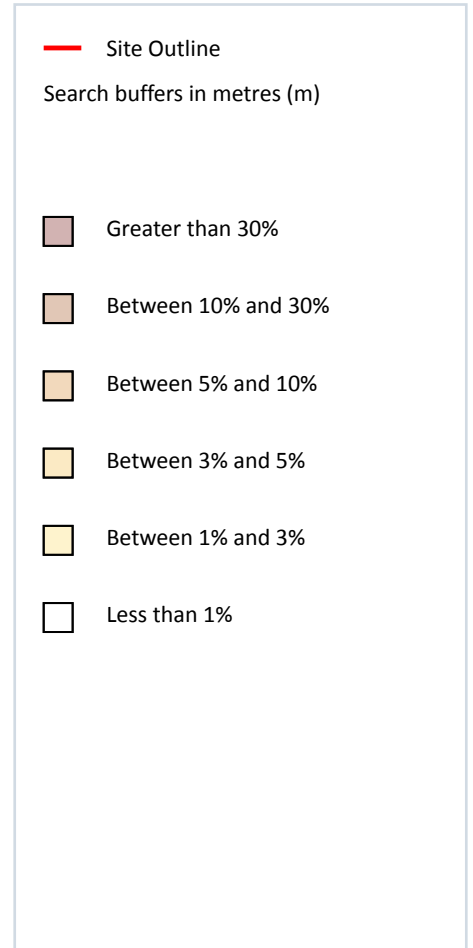
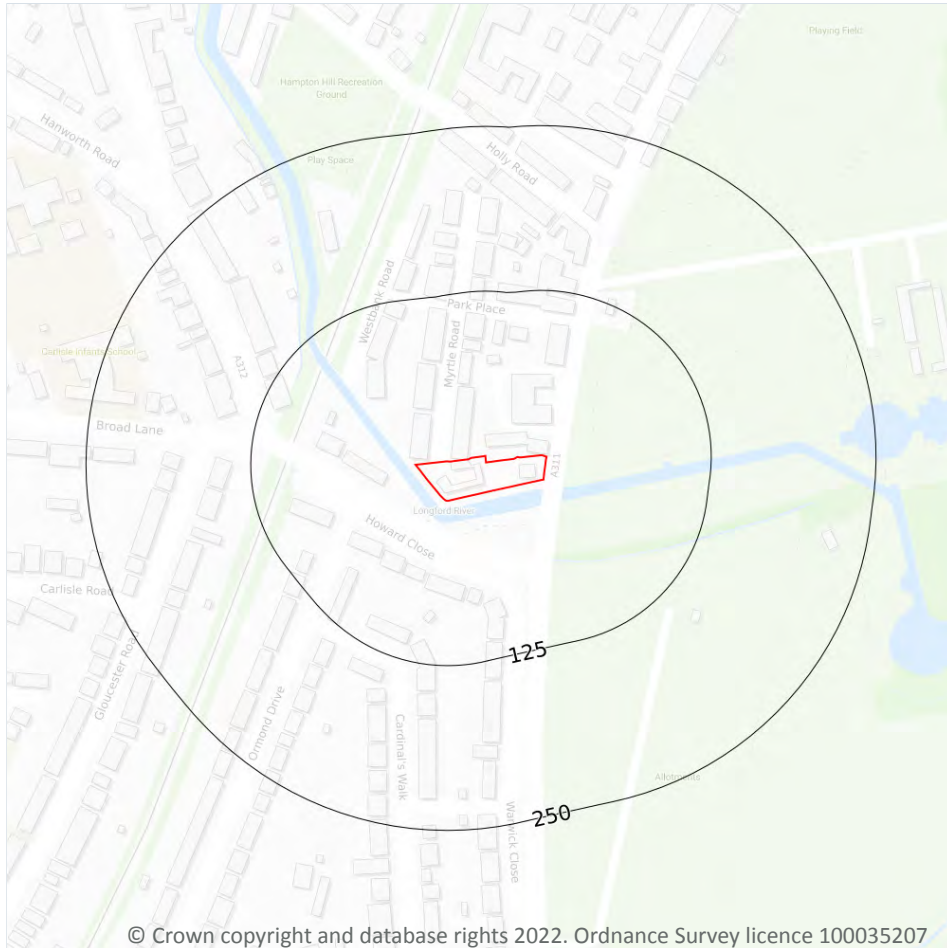
0

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

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



19 Radon



19.1 Radon

Records on site

1

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

Features are displayed on the Radon map on **page 108**

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

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

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

2

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 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	No data	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	No data	No data
29m SE	No data	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	No data	No data

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

9

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).

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	12	2.1	82	56	0.3	60	24	15	6
On site	13	2.3	104	71	0.3	61	28	16	7
4m W	14	2.5	115	79	0.4	62	30	17	8
29m S	15	2.6	119	82	0.4	60	35	18	8
36m NE	11	1.9	82	56	0.3	61	22	14	7
36m N	12	2.1	92	63	0.3	61	24	15	7
40m SW	15	2.6	122	84	0.4	61	33	18	8



Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
44m NW	13	2.3	110	76	0.3	62	28	16	8
44m SE	14	2.5	103	71	0.4	59	31	17	7

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

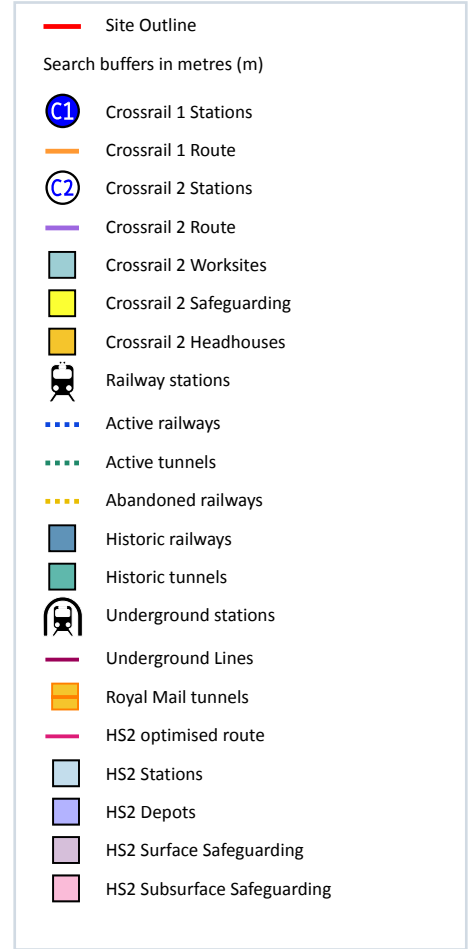
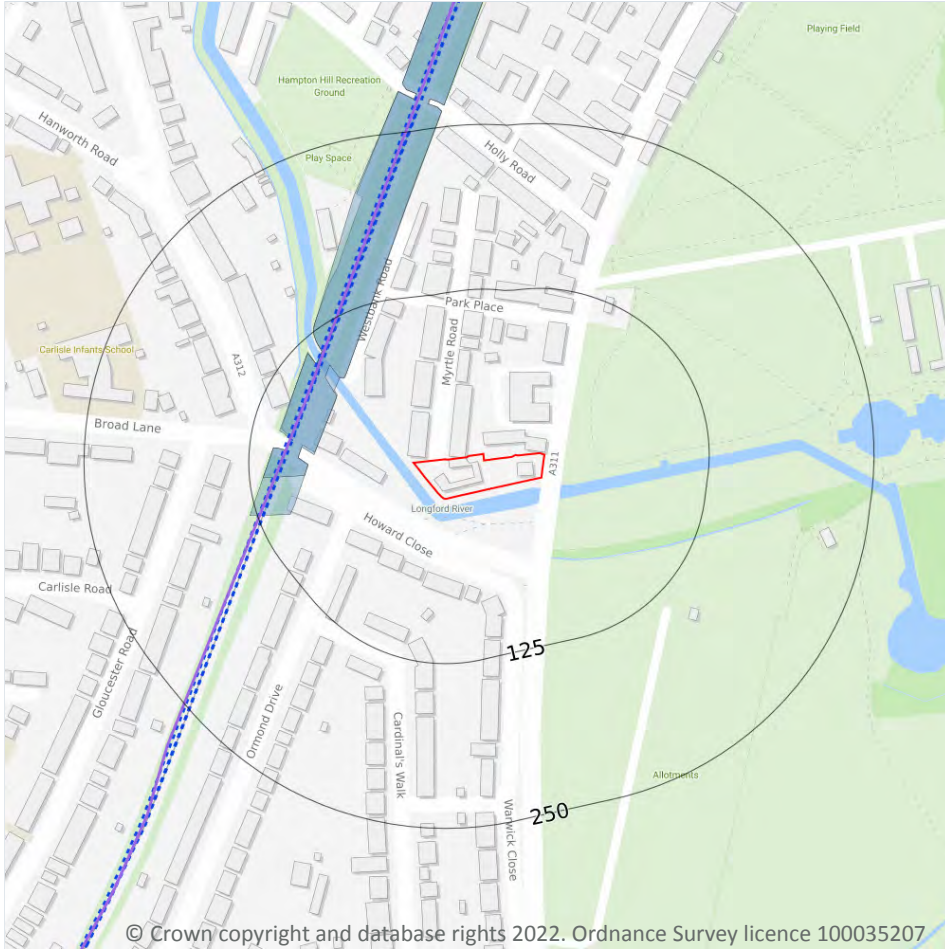
Records within 50m

0

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

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects



21.1 Underground railways (London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m

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 111**

Location	Land Use	Year of mapping	Mapping scale
73m W	Railway	1915	-
73m W	Railway	1934	-

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m

0

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

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m

0

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

This data is sourced from OpenStreetMap.



21.7 Railways

Records within 250m

5

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways. Features are displayed on the Railway infrastructure and projects map on **page 111**

Location	Name	Type
92m W	Shepperton Line	rail
93m W	Not given	Multi Track
95m W	Shepperton Line	rail
98m W	Not given	Multi Track
106m NW	Not given	Multi Track

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m

1

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

Features are displayed on the Railway infrastructure and projects map on **page 111**

Location	Route Type	Name	Under consultation
94m W	Network Rail Regional Branch	Shepperton Line	No

This data is sourced from publicly available information by Groundsure.



21.10 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.



Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference>.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: <https://www.groundsure.com/terms-and-conditions-jan-2020/>.



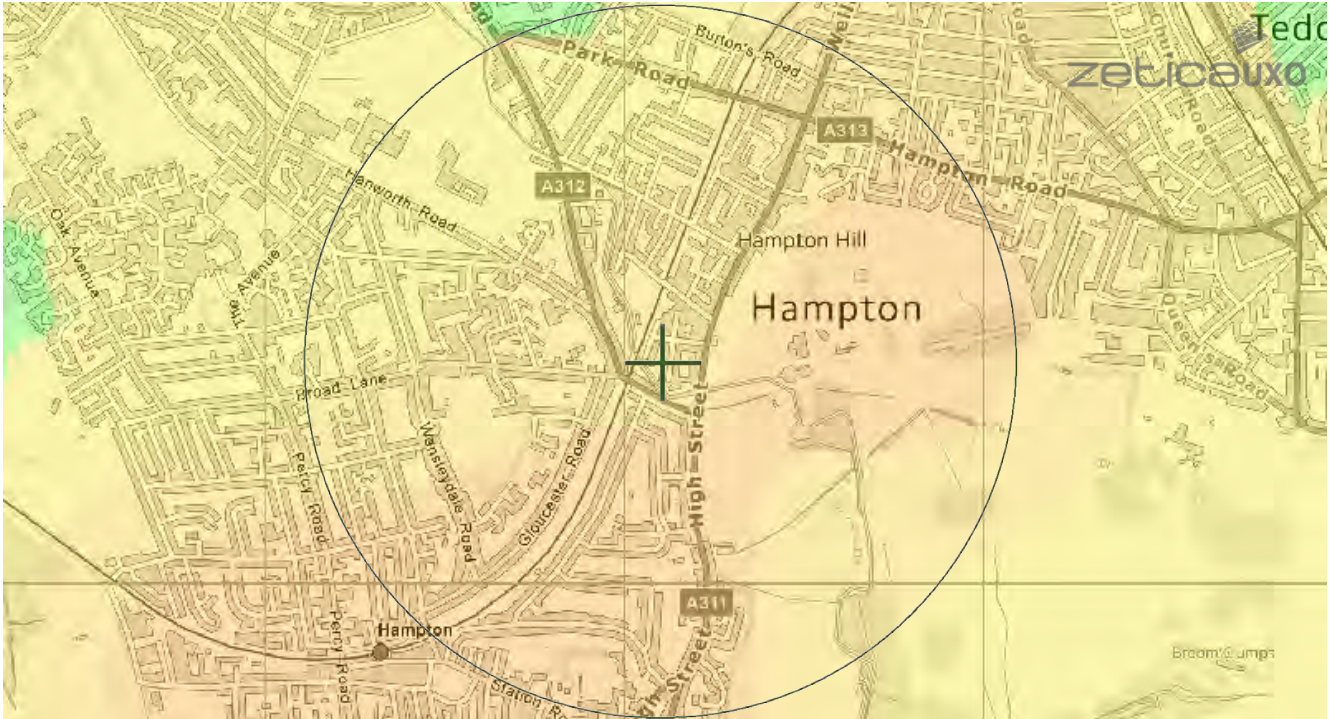
APPENDIX D

UXO Screening Map

UNEXPLODED BOMB RISK MAP

SITE LOCATION

Location: TW12 1QB,
Map Centre: 514112,170618



LEGEND

London Bomb Risk



- | | | | |
|-----------|-----------------|-------------------|-------|
| military | industry | UXO find | Other |
| transport | dock | Luftwaffe targets | |
| utilities | abandoned bombs | Bombing decoy | |

How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

Relative UXB risk across London

The relative risk for the London area is established by plotting the recorded bombing densities.

These are represented as counts of high explosive bombs in km² area. The areas coloured green represent a record of less than 10 bombs per km².

Compared to other areas of the UK, this still represents a significant density. However, this is much lower than parts of Central London, where the red colouration indicates in excess of 150 bombs falling per km², representing a very significant bombing density.

What do I do if my site is in a moderate or high density area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites with a moderate or high bombing density.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

If I have any questions, who do I contact?

tel: +44 (0) 1993 886682
email: uxo@zetica.com
web: www.zeticauxo.com

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

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It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

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