



UNIVERSAL DESTINATIONS & EXPERIENCES UK PROJECT

Former Kempston Hardwick Brickworks
and adjoining land, Bedford

Environmental Statement Volume 3

Appendix 12.1 - Flood Risk Assessment

Part 6/6

Report reference: 4.12.1.0

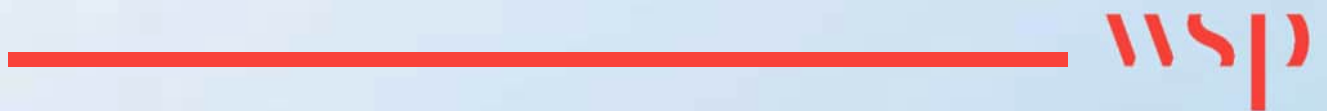
Revision number: 00

Date: June 2025



Annex 7

GROUNDSURE REPORTS



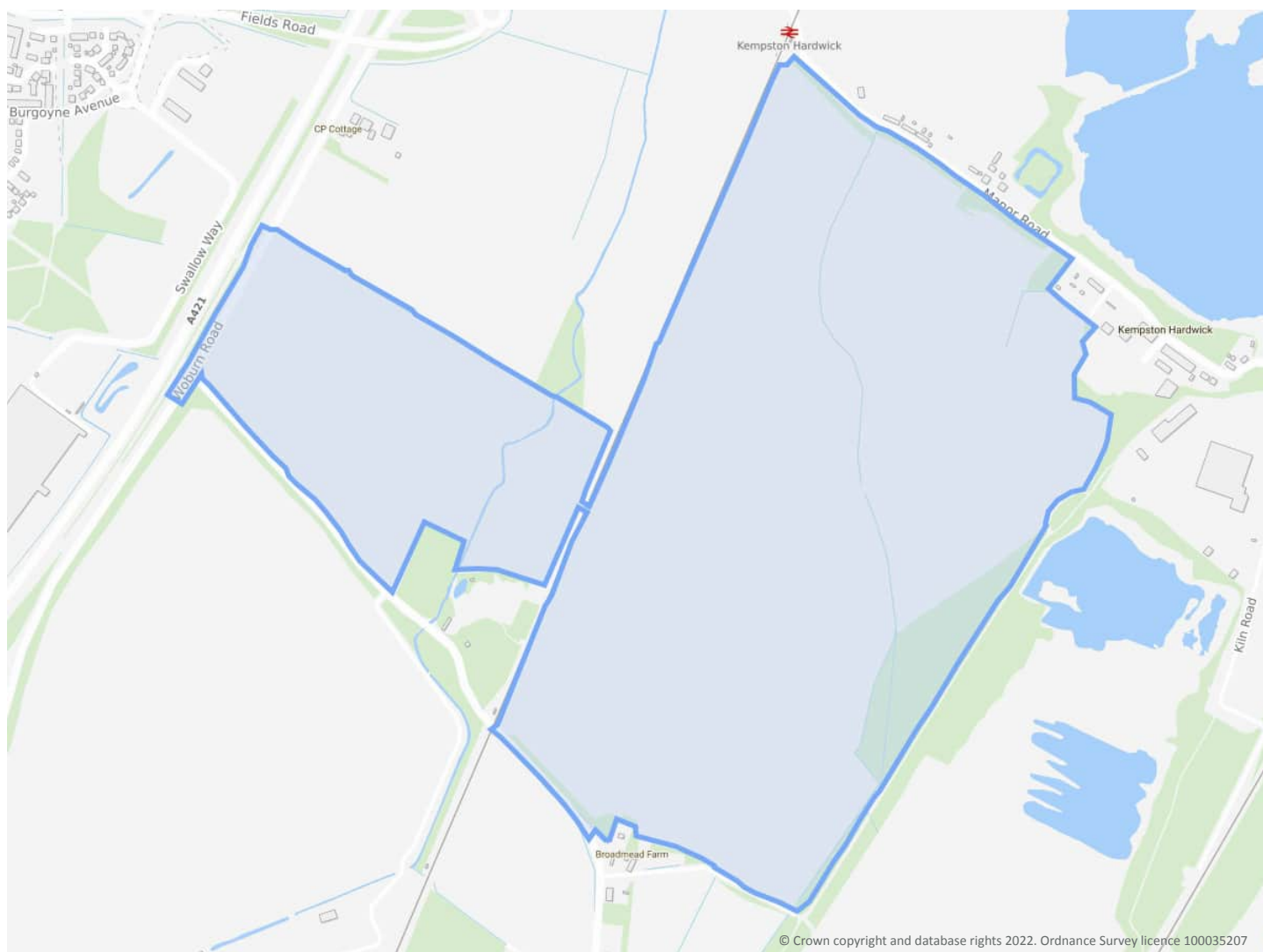
Bedford Parcel B and D,

Order Details

Date: 30/11/2022
Your ref: Bedford_Parcel_B_and_D
Our Ref: GS-9231563

Site Details

Location: 502463 243993
Area: 122.79 ha
Authority: [Bedford Council \(Unitary\)](#)



Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

N/A: >10ha

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Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
13	1.1	<u>Historical industrial land uses</u>	5	16	18	49	-
17	1.2	<u>Historical tanks</u>	0	0	0	2	-
17	1.3	<u>Historical energy features</u>	0	2	0	4	-
18	1.4	Historical petrol stations	0	0	0	0	-
18	1.5	Historical garages	0	0	0	0	-
18	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
19	2.1	<u>Historical industrial land uses</u>	7	23	25	60	-
24	2.2	<u>Historical tanks</u>	0	0	0	2	-
24	2.3	<u>Historical energy features</u>	0	4	0	4	-
25	2.4	Historical petrol stations	0	0	0	0	-
25	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
26	3.1	<u>Active or recent landfill</u>	0	1	0	0	-
27	3.2	Historical landfill (BGS records)	0	0	0	0	-
27	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
27	3.4	<u>Historical landfill (EA/NRW records)</u>	0	4	0	1	-
28	3.5	<u>Historical waste sites</u>	0	0	3	0	-
29	3.6	<u>Licensed waste sites</u>	0	3	5	24	-
38	3.7	<u>Waste exemptions</u>	1	1	21	2	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
41	4.1	<u>Recent industrial land uses</u>	0	4	13	-	-
43	4.2	Current or recent petrol stations	0	0	0	0	-
43	4.3	Electricity cables	0	0	0	0	-
43	4.4	Gas pipelines	0	0	0	0	-
43	4.5	Sites determined as Contaminated Land	0	0	0	0	-



43	4.6	<u>Control of Major Accident Hazards (COMAH)</u>	0	0	0	1	-
44	4.7	Regulated explosive sites	0	0	0	0	-
44	4.8	Hazardous substance storage/usage	0	0	0	0	-
44	4.9	<u>Historical licensed industrial activities (IPC)</u>	0	0	4	0	-
45	4.10	<u>Licensed industrial activities (Part A(1))</u>	0	3	0	0	-
46	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	3	0	-
46	4.12	Radioactive Substance Authorisations	0	0	0	0	-
46	4.13	<u>Licensed Discharges to controlled waters</u>	2	23	20	8	-
54	4.14	<u>Pollutant release to surface waters (Red List)</u>	0	0	0	2	-
55	4.15	Pollutant release to public sewer	0	0	0	0	-
55	4.16	<u>List 1 Dangerous Substances</u>	0	0	0	1	-
55	4.17	<u>List 2 Dangerous Substances</u>	0	0	2	1	-
56	4.18	<u>Pollution Incidents (EA/NRW)</u>	2	0	15	6	-
58	4.19	Pollution inventory substances	0	0	0	0	-
59	4.20	Pollution inventory waste transfers	0	0	0	0	-
59	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
60	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
62	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
63	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
69	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
69	5.5	Groundwater vulnerability- local information	None (within 0m)				
70	5.6	<u>Groundwater abstractions</u>	0	0	0	0	2
71	5.7	<u>Surface water abstractions</u>	0	0	1	3	3
73	5.8	Potable abstractions	0	0	0	0	0
73	5.9	Source Protection Zones	0	0	0	0	-
74	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
75	6.1	<u>Water Network (OS MasterMap)</u>	24	15	19	-	-



80	6.2	<u>Surface water features</u>	1	12	17	-	-
80	6.3	<u>WFD Surface water body catchments</u>	2	-	-	-	-
81	6.4	<u>WFD Surface water bodies</u>	1	0	0	-	-
81	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
82	7.1	<u>Risk of flooding from rivers and the sea</u>	High (within 50m)				
83	7.2	Historical Flood Events	0	0	0	-	-
83	7.3	Flood Defences	0	0	0	-	-
83	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
83	7.5	Flood Storage Areas	0	0	0	-	-
84	7.6	<u>Flood Zone 2</u>	Identified (within 50m)				
85	7.7	<u>Flood Zone 3</u>	Identified (within 50m)				
Page	Section	Surface water flooding					
86	8.1	<u>Surface water flooding</u>	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding					
88	9.1	<u>Groundwater flooding</u>	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
89	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
90	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
90	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
90	10.4	Special Protection Areas (SPA)	0	0	0	0	0
90	10.5	National Nature Reserves (NNR)	0	0	0	0	0
91	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
91	10.7	<u>Designated Ancient Woodland</u>	0	0	0	0	1
91	10.8	Biosphere Reserves	0	0	0	0	0
91	10.9	Forest Parks	0	0	0	0	0
92	10.10	Marine Conservation Zones	0	0	0	0	0
92	10.11	Green Belt	0	0	0	0	0
92	10.12	Proposed Ramsar sites	0	0	0	0	0



92	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
92	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
93	10.15	Nitrate Sensitive Areas	0	0	0	0	0
93	10.16	<u>Nitrate Vulnerable Zones</u>	2	0	0	0	9
94	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
95	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
96	11.1	World Heritage Sites	0	0	0	-	-
97	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
97	11.3	National Parks	0	0	0	-	-
97	11.4	Listed Buildings	0	0	0	-	-
97	11.5	Conservation Areas	0	0	0	-	-
98	11.6	<u>Scheduled Ancient Monuments</u>	0	0	1	-	-
98	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
99	12.1	<u>Agricultural Land Classification</u>	Grade 3b (within 250m)				
100	12.2	Open Access Land	0	0	0	-	-
101	12.3	Tree Felling Licences	0	0	0	-	-
101	12.4	Environmental Stewardship Schemes	0	0	0	-	-
101	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
102	13.1	<u>Priority Habitat Inventory</u>	3	12	5	-	-
103	13.2	Habitat Networks	0	0	0	-	-
103	13.3	<u>Open Mosaic Habitat</u>	0	2	0	-	-
104	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
105	14.1	<u>10k Availability</u>	Identified (within 500m)				
106	14.2	<u>Artificial and made ground (10k)</u>	1	4	5	3	-
108	14.3	<u>Superficial geology (10k)</u>	7	0	1	5	-



109	14.4	Landslip (10k)	0	0	0	0	-
110	14.5	<u>Bedrock geology (10k)</u>	1	0	1	0	-
111	14.6	<u>Bedrock faults and other linear features (10k)</u>	4	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
112	15.1	<u>50k Availability</u>	Identified (within 500m)				
113	15.2	<u>Artificial and made ground (50k)</u>	0	4	2	0	-
114	15.3	<u>Artificial ground permeability (50k)</u>	0	4	-	-	-
115	15.4	<u>Superficial geology (50k)</u>	7	0	0	3	-
116	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
117	15.6	Landslip (50k)	0	0	0	0	-
117	15.7	Landslip permeability (50k)	None (within 50m)				
118	15.8	<u>Bedrock geology (50k)</u>	1	0	0	0	-
119	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
119	15.10	<u>Bedrock faults and other linear features (50k)</u>	2	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
120	16.1	<u>BGS Boreholes</u>	24	16	50	-	-
Page	Section	Natural ground subsidence					
125	17.1	<u>Shrink swell clays</u>	Moderate (within 50m)				
126	17.2	<u>Running sands</u>	Low (within 50m)				
128	17.3	<u>Compressible deposits</u>	Moderate (within 50m)				
130	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
131	17.5	<u>Landslides</u>	Low (within 50m)				
133	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
135	18.1	Natural cavities	0	0	0	0	-
136	18.2	<u>BritPits</u>	1	0	2	3	-
137	18.3	<u>Surface ground workings</u>	30	21	25	-	-
140	18.4	Underground workings	0	0	0	0	0
140	18.5	<u>Historical Mineral Planning Areas</u>	2	2	1	2	-



141	18.6	Non-coal mining	0	0	0	0	0
141	18.7	Mining cavities	0	0	0	0	0
141	18.8	JPB mining areas	None (within 0m)				
141	18.9	Coal mining	None (within 0m)				
141	18.10	Brine areas	None (within 0m)				
142	18.11	Gypsum areas	None (within 0m)				
142	18.12	Tin mining	None (within 0m)				
142	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
<u>143</u>	<u>19.1</u>	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
<u>144</u>	<u>20.1</u>	<u>BGS Estimated Background Soil Chemistry</u>	54	4	-	-	-
147	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
148	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
149	21.1	Underground railways (London)	0	0	0	-	-
149	21.2	Underground railways (Non-London)	0	0	0	-	-
150	21.3	Railway tunnels	0	0	0	-	-
<u>150</u>	<u>21.4</u>	<u>Historical railway and tunnel features</u>	0	7	13	-	-
151	21.5	Royal Mail tunnels	0	0	0	-	-
151	21.6	Historical railways	0	0	0	-	-
<u>151</u>	<u>21.7</u>	<u>Railways</u>	5	5	2	-	-
152	21.8	Crossrail 1	0	0	0	0	-
152	21.9	Crossrail 2	0	0	0	0	-
152	21.10	HS2	0	0	0	0	-



Recent aerial photograph



Capture Date: 07/04/2020

Site Area: 122.79ha



Contact us with any questions at:

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Date: 30 November 2022

Recent site history - 2017 aerial photograph

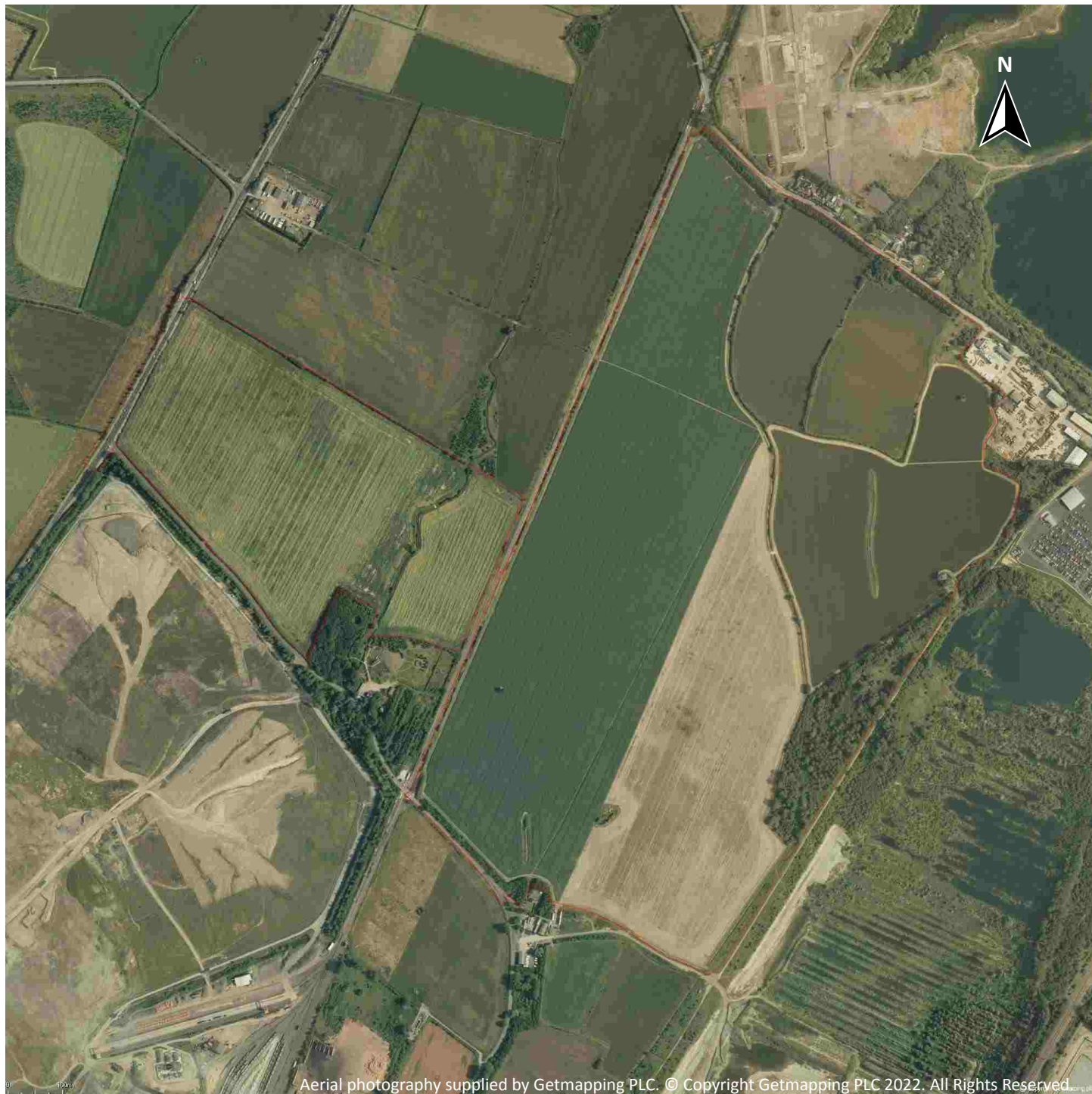


Capture Date: 21/06/2017

Site Area: 122.79ha



Recent site history - 2006 aerial photograph



Capture Date: 01/07/2006

Site Area: 122.79ha



Recent site history - 2000 aerial photograph



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Capture Date: 10/06/2000

Site Area: 122.79ha



Recent site history - 1999 aerial photograph

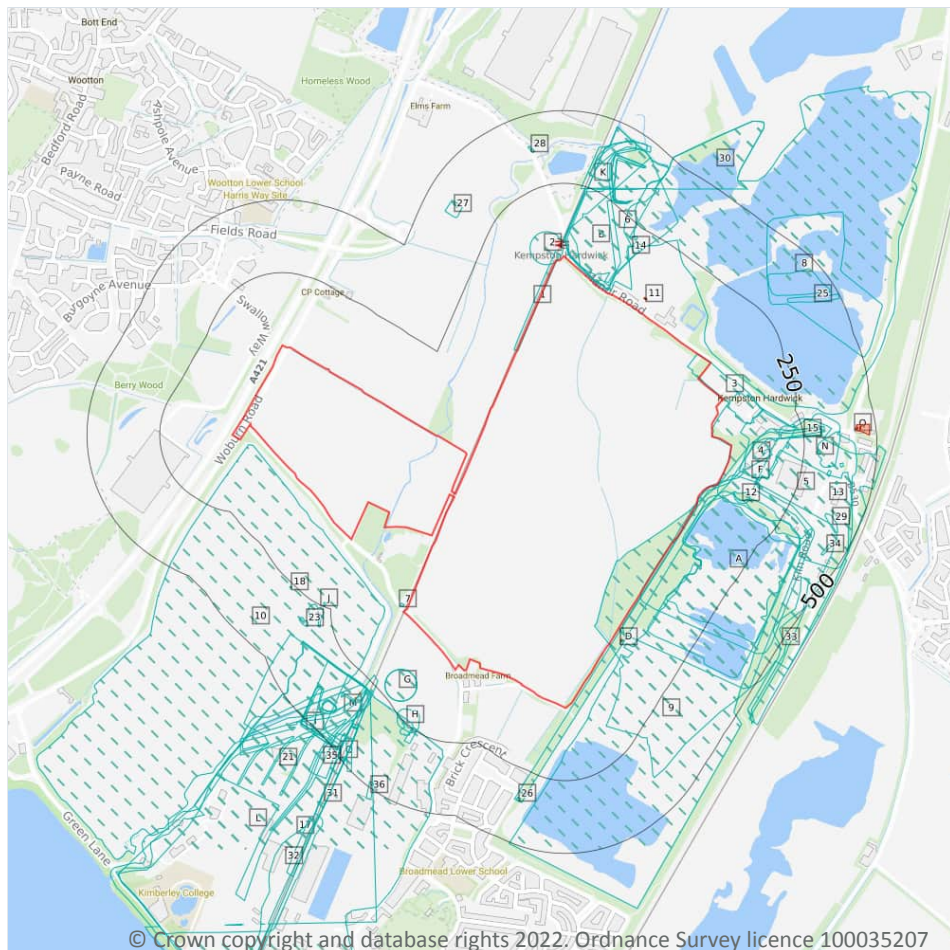


Capture Date: 01/05/1999

Site Area: 122.79ha



1 Past land use



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

1.1 Historical industrial land uses

Records within 500m

88

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 13**

ID	Location	Land use	Dates present	Group ID
1	On site	Cuttings	1882	2061444



ID	Location	Land use	Dates present	Group ID
2	On site	Railway Station	1980 - 1989	2083773
3	On site	Unspecified Works	1980 - 1989	2086450
A	On site	Brick Works	1948	2066509
A	On site	Unspecified Works	1959	2122589
4	0m E	Railway Sidings	1980	2114587
A	2m E	Tramway Sidings	1959	2052185
B	3m N	Unspecified Works	1959	2046254
B	8m N	Brick Works	1948	2121667
5	8m E	Brick Works	1980	2100587
6	9m N	Bricks Works	1938	2094376
C	10m N	Brick Works	1978 - 1989	2064290
B	12m N	Railway Sidings	1959	2087313
7	15m SW	Railway Building	1959	2051486
A	17m E	Unspecified Pit	1948	2041045
A	23m E	Clay Pit	1959	2048208
8	28m NE	Unspecified Disused Pit	1980 - 1989	2114565
9	29m E	Unspecified Disused Pit	1980 - 1989	2096934
D	29m SE	Electric Substation	1980 - 1989	2067565
10	33m W	Unspecified Disused Pit	1980 - 1989	2116491
E	45m E	Bricks Works	1938	2081316
12	62m E	Unspecified Heap	1948	2053931
F	97m E	Unspecified Tank	1980	2044078
E	111m E	Unspecified Tank	1948	2044077
F	112m E	Unspecified Tank	1948	2044079
13	122m E	Railway Sidings	1948 - 1959	2111154
G	129m SW	Railway Sidings	1948	2116390
G	129m SW	Railway Sidings	1882 - 1900	2116862
14	130m NE	Unspecified Heap	1948	2053933



ID	Location	Land use	Dates present	Group ID
15	172m E	Railway Sidings	1989	2112083
16	189m E	Chimney	1980	2058682
H	195m SW	Unspecified Works	1959	2046252
I	226m SW	Railway Sidings	1980 - 1989	2107998
J	235m SW	Unspecified Ground Workings	1920	2060272
17	236m SW	Brick Works	1980 - 1989	2112572
K	239m N	Railway Sidings	1959	2092166
H	245m SW	Sewage Works	1980 - 1989	2076251
K	247m N	Brick Works	1971	2107269
H	250m SW	Unspecified Tanks	1948 - 1959	2086329
C	255m N	Unspecified Ground Workings	1959	2096069
J	256m SW	Old Gravel Pit	1920	2057653
K	257m N	Unspecified Ground Workings	1948	2076602
18	260m SW	Disused Windmill	1920	2043339
L	274m SW	Unspecified Works	1959	2046251
L	276m SW	Brick Works	1924	2110352
M	277m SW	Brick Field	1882	2063535
19	278m SW	Brick Works	1938 - 1947	2121942
M	279m SW	Brick Works	1900	2067444
20	280m SW	Tramway Sidings	1924	2052187
21	282m SW	Railway Sidings	1959	2070424
K	291m N	Railway Sidings	1971	2086766
22	292m NE	Clay Pit	1959	2048205
K	292m N	Unspecified Heap	1959	2053934
N	296m E	Chimney	1980	2058683
N	297m E	Unspecified Old Quarry	1920	2056739
K	316m N	Railway Sidings	1948	2065517
23	317m SW	Unspecified Old Quarry	1920	2056733



ID	Location	Land use	Dates present	Group ID
24	319m NE	Unspecified Pit	1948	2041046
O	331m SW	Cuttings	1882	2074054
M	334m SW	Unspecified Kiln	1882	2045741
25	338m NE	Unspecified Heap	1948	2053932
P	339m E	Unspecified Tank	1948	2044076
P	339m E	Unspecified Kilns	1980	2057485
26	348m S	Railway Building	1980	2051480
27	370m N	Cemetery	1920	2047446
28	371m N	Smithy	1920	2059241
P	374m E	Unspecified Kilns	1980	2057483
P	378m E	Unspecified Kilns	1980	2057484
29	378m E	Unspecified Ground Workings	1948	2060264
30	381m NE	Clay Pit	1978	2048209
I	383m SW	Unspecified Pit	1938	2107700
31	384m SW	Railway Sidings	1900	2096999
O	384m SW	Cuttings	1900 - 1924	2087379
I	385m SW	Unspecified Pit	1924	2091873
I	386m SW	Unspecified Ground Workings	1900	2060270
32	390m SW	Tramway Sidings	1924	2094600
O	393m SW	Cuttings	1924	2066714
O	393m SW	Cuttings	1938	2102356
O	394m SW	Cuttings	1959	2100888
M	395m SW	Unspecified Heap	1924	2120501
M	398m SW	Unspecified Heap	1924	2076548
M	398m SW	Unspecified Heap	1938	2105326
O	426m SW	Railway Sidings	1959	2110283
33	430m E	Unspecified Ground Workings	1948 - 1959	2114957
34	430m E	Unspecified Ground Workings	1948	2060265



ID	Location	Land use	Dates present	Group ID
O	442m SW	Chimney	1959 - 1989	2091616
35	448m SW	Unspecified Kilns	1980 - 1989	2072321
36	478m SW	Railway Sidings	1980 - 1989	2115516

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

2

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
M	302m SW	Unspecified Tank	1974	343530
M	326m SW	Unspecified Tank	1974	343531

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

6

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 13**

ID	Location	Land use	Dates present	Group ID
D	27m SE	Electricity Substation	1974 - 1993	230235
11	46m NE	Electricity Substation	1968 - 1993	234047
Q	429m E	Electricity Substation	1979	228341



ID	Location	Land use	Dates present	Group ID
Q	431m E	Electricity Substation	1988	228407
Q	434m E	Electricity Substation	1997	228091
Q	444m E	Electricity Substation	1968	227812

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

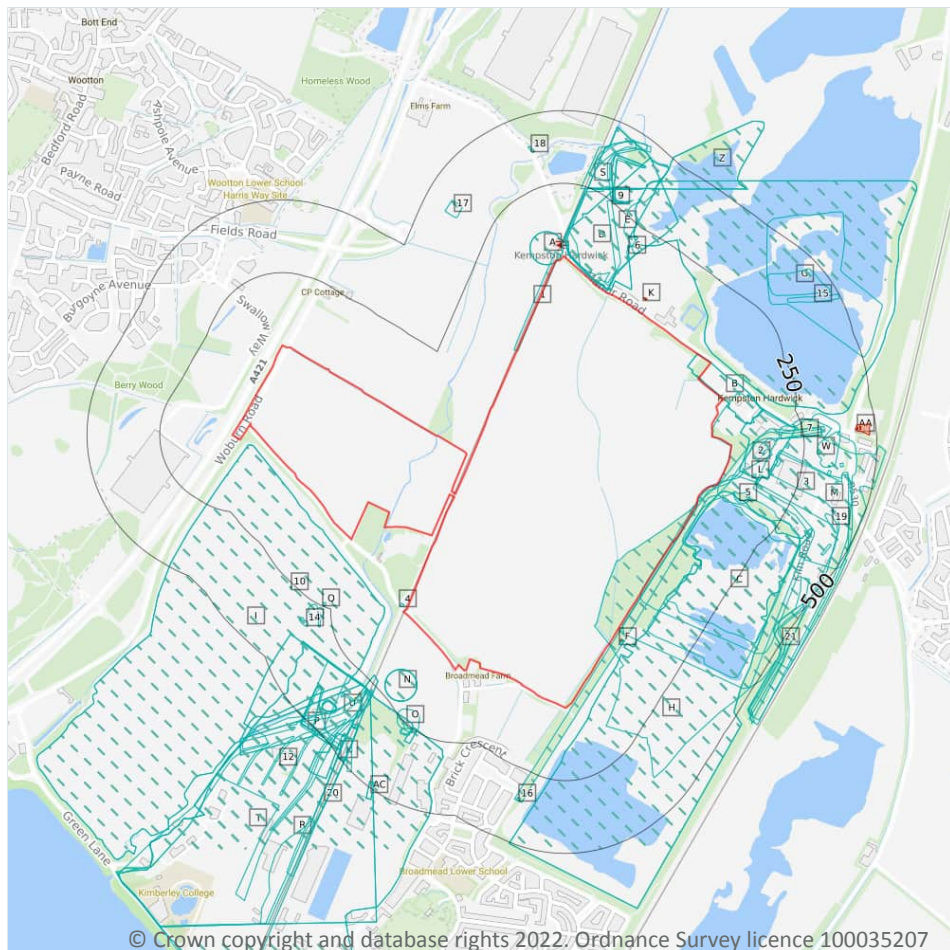
0

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

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



2 Past land use - un-grouped



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

2.1 Historical industrial land uses

Records within 500m

115

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

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

ID	Location	Land Use	Date	Group ID
1	On site	Cuttings	1882	2061444
A	On site	Railway Station	1989	2083773
A	On site	Railway Station	1980	2083773



ID	Location	Land Use	Date	Group ID
B	On site	Unspecified Works	1989	2086450
B	On site	Unspecified Works	1980	2086450
C	On site	Unspecified Works	1959	2122589
C	On site	Brick Works	1948	2066509
2	0m E	Railway Sidings	1980	2114587
C	2m E	Tramway Sidings	1959	2052185
D	3m N	Unspecified Works	1959	2046254
D	8m N	Brick Works	1948	2121667
3	8m E	Brick Works	1980	2100587
E	9m N	Bricks Works	1938	2094376
E	9m N	Bricks Works	1938	2094376
D	10m N	Brick Works	1989	2064290
D	10m N	Brick Works	1980	2064290
D	12m N	Railway Sidings	1959	2087313
4	15m SW	Railway Building	1959	2051486
C	17m E	Unspecified Pit	1948	2041045
C	23m E	Clay Pit	1959	2048208
G	28m NE	Unspecified Disused Pit	1989	2114565
G	28m NE	Unspecified Disused Pit	1980	2114565
H	29m E	Unspecified Disused Pit	1989	2096934
H	29m E	Unspecified Disused Pit	1980	2096934
F	29m SE	Electric Substation	1989	2067565
F	29m SE	Electric Substation	1980	2067565
I	33m W	Unspecified Disused Pit	1989	2116491
I	33m W	Unspecified Disused Pit	1980	2116491
J	45m E	Bricks Works	1938	2081316
J	45m E	Bricks Works	1938	2081316
5	62m E	Unspecified Heap	1948	2053931



ID	Location	Land Use	Date	Group ID
L	97m E	Unspecified Tank	1980	2044078
J	111m E	Unspecified Tank	1948	2044077
L	112m E	Unspecified Tank	1948	2044079
M	122m E	Railway Sidings	1959	2111154
N	129m SW	Railway Sidings	1900	2116862
N	129m SW	Railway Sidings	1882	2116862
N	129m SW	Railway Sidings	1948	2116390
6	130m NE	Unspecified Heap	1948	2053933
M	142m E	Railway Sidings	1948	2111154
7	172m E	Railway Sidings	1989	2112083
8	189m E	Chimney	1980	2058682
O	195m SW	Unspecified Works	1959	2046252
P	226m SW	Railway Sidings	1989	2107998
P	226m SW	Railway Sidings	1980	2107998
Q	235m SW	Unspecified Ground Workings	1920	2060272
R	236m SW	Brick Works	1989	2112572
R	236m SW	Brick Works	1980	2112572
S	239m N	Railway Sidings	1959	2092166
O	245m SW	Sewage Works	1989	2076251
O	245m SW	Sewage Works	1980	2076251
S	247m N	Brick Works	1971	2107269
S	247m N	Brick Works	1987	2064290
S	247m N	Brick Works	1978	2064290
O	250m SW	Unspecified Tanks	1948	2086329
9	255m N	Unspecified Ground Workings	1959	2096069
O	256m SW	Unspecified Tanks	1959	2086329
Q	256m SW	Old Gravel Pit	1920	2057653
S	257m N	Unspecified Ground Workings	1948	2076602



ID	Location	Land Use	Date	Group ID
10	260m SW	Disused Windmill	1920	2043339
T	274m SW	Unspecified Works	1959	2046251
T	276m SW	Brick Works	1924	2110352
U	277m SW	Brick Field	1882	2063535
V	278m SW	Brick Works	1938	2121942
V	278m SW	Brick Works	1938	2121942
U	279m SW	Brick Works	1900	2067444
11	280m SW	Tramway Sidings	1924	2052187
12	282m SW	Railway Sidings	1959	2070424
S	291m N	Railway Sidings	1971	2086766
13	292m NE	Clay Pit	1959	2048205
S	292m N	Unspecified Heap	1959	2053934
W	296m E	Chimney	1980	2058683
W	297m E	Unspecified Old Quarry	1920	2056739
S	316m N	Railway Sidings	1948	2065517
14	317m SW	Unspecified Old Quarry	1920	2056733
G	319m NE	Unspecified Pit	1948	2041046
X	331m SW	Cuttings	1882	2074054
U	334m SW	Unspecified Kiln	1882	2045741
15	338m NE	Unspecified Heap	1948	2053932
Y	339m E	Unspecified Tank	1948	2044076
Y	339m E	Unspecified Kilns	1980	2057485
16	348m S	Railway Building	1980	2051480
17	370m N	Cemetery	1920	2047446
18	371m N	Smithy	1920	2059241
Y	374m E	Unspecified Kilns	1980	2057483
Y	378m E	Unspecified Kilns	1980	2057484
19	378m E	Unspecified Ground Workings	1948	2060264



ID	Location	Land Use	Date	Group ID
Z	381m NE	Clay Pit	1978	2048209
Z	381m NE	Unspecified Disused Pit	1987	2114565
P	383m SW	Unspecified Pit	1938	2107700
P	383m SW	Unspecified Pit	1938	2107700
20	384m SW	Railway Sidings	1900	2096999
X	384m SW	Cuttings	1924	2087379
X	384m SW	Cuttings	1900	2087379
P	385m SW	Unspecified Pit	1924	2091873
P	386m SW	Unspecified Ground Workings	1900	2060270
R	390m SW	Tramway Sidings	1924	2094600
X	393m SW	Cuttings	1924	2066714
X	393m SW	Cuttings	1938	2102356
X	394m SW	Cuttings	1959	2100888
U	395m SW	Unspecified Heap	1924	2120501
U	398m SW	Unspecified Heap	1924	2076548
U	398m SW	Unspecified Heap	1938	2105326
U	398m SW	Unspecified Heap	1938	2105326
X	426m SW	Railway Sidings	1959	2110283
21	430m E	Unspecified Ground Workings	1948	2114957
M	430m E	Unspecified Ground Workings	1948	2060265
X	442m SW	Chimney	1989	2091616
X	442m SW	Chimney	1959	2091616
X	442m SW	Chimney	1980	2091616
AB	448m SW	Unspecified Kilns	1989	2072321
AB	448m SW	Unspecified Kilns	1980	2072321
22	451m SE	Unspecified Ground Workings	1959	2114957
AC	478m SW	Railway Sidings	1989	2115516
AC	478m SW	Railway Sidings	1980	2115516

This data is sourced from Ordnance Survey / Groundsure.



2.2 Historical tanks

Records within 500m

2

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

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

ID	Location	Land Use	Date	Group ID
U	302m SW	Unspecified Tank	1974	343530
U	326m SW	Unspecified Tank	1974	343531

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

8

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 19**

ID	Location	Land Use	Date	Group ID
F	27m SE	Electricity Substation	1993	230235
F	27m SE	Electricity Substation	1974	230235
K	46m NE	Electricity Substation	1993	234047
K	47m NE	Electricity Substation	1968	234047
AA	429m E	Electricity Substation	1979	228341
AA	431m E	Electricity Substation	1988	228407
AA	434m E	Electricity Substation	1997	228091
AA	444m E	Electricity Substation	1968	227812

This data is sourced from Ordnance Survey / Groundsure.



2.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

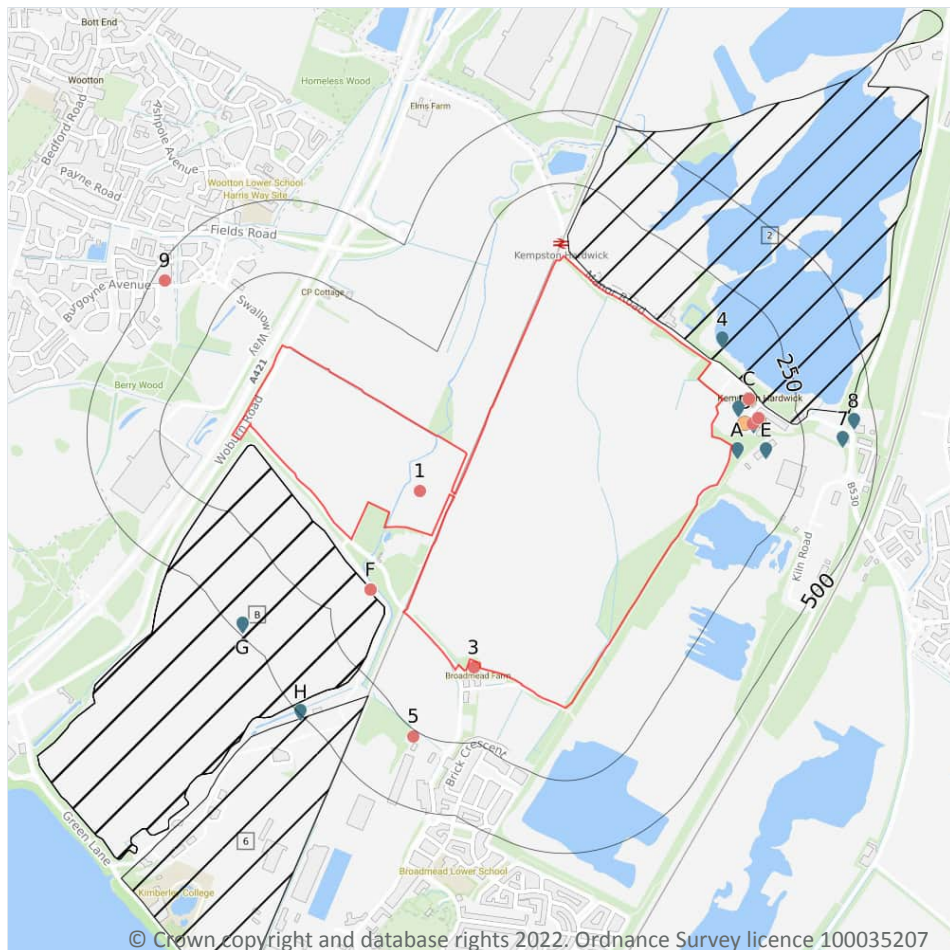
Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Active or recent landfill
- Historical landfill (EA/NRW)
- Historical waste sites
- Licensed waste sites
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

1

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation. Features are displayed on the Waste and landfill map on **page 26**

ID	Location	Details	
B	32m W	Operator: FCC Waste Services (UK) Limited Site Address: Stewartby Lanfill Site, Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY	WML Number: 0 EPR Reference: - Landfill type: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Status: Effective IPPC Reference: - EPR Number: -



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

5

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

Features are displayed on the Waste and landfill map on **page 26**

ID	Location	Details		
2	10m N	Site Address: Clay Pit, Adjacent Kempston Hardwick Works, Kempston Hardwick, Bedfordshire Licence Holder Address: Property Department, Stewartby, Bedford	Waste Licence: Yes Site Reference: 18/1977, PIT 63 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 05/12/1977 Licence Surrender: 28/04/1994	Operator: - Licence Holder: London Brick Landfill Limited First Recorded 31/12/1977 Last Recorded: 31/12/1993
B	34m W	Site Address: L Field Clay Pit, Vicarage Farm, Stewartby Licence Holder Address: Property Department, Stewartby, Bedford	Waste Licence: Yes Site Reference: 9/1977, PIT 61 Waste Type: Inert, Industrial, Commercial, Household, Special, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 05/12/1977 Licence Surrender: 15/05/1978	Operator: - Licence Holder: London Brick Landfill Limited First Recorded 17/07/1952 Last Recorded: 01/01/1988



ID	Location	Details		
B	34m W	Site Address: L Field Clay Pit, Stewartby Licence Holder Address: Property Department, Stewartby, Bedford	Waste Licence: Yes Site Reference: 2/1978 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 15/05/1978 Licence Surrender: 29/06/1984	Operator: - Licence Holder: London Brick Landfill Limited First Recorded 17/07/1952 Last Recorded: 01/01/1988
B	34m W	Site Address: Clay Pit known as L Field, Stewartby Licence Holder Address: Property Department, Stewartby, Bedford	Waste Licence: Yes Site Reference: 4/1984 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 29/06/1984 Licence Surrender: 06/11/1986	Operator: - Licence Holder: London Brick Landfill Limited First Recorded 17/07/1952 Last Recorded: 06/11/1986
6	291m SW	Site Address: Stewarby, Bedfordshire Licence Holder Address: -	Waste Licence: - Site Reference: PIT 62 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: London Brick Company Licence Holder: - First Recorded - Last Recorded: -

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

3.5 Historical waste sites

Records within 500m

3

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

Features are displayed on the Waste and landfill map on **page 26**

ID	Location	Address	Further Details	Date
C	63m E	Site Address: Manor Road, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9NT	Type of Site: Waste Transfer Station Planning application reference: 96/0293 Description: Erection of new building for use with Class C1 waste. An application (ref: 96/0293) for Detailed Planning permission was submitted to Bedford B.C. on 7th March 1996. Data source: Historic Planning Application Data Type: Point	-



ID	Location	Address	Further Details	Date
D	63m E	Site Address: Kempston Court, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9PQ	Type of Site: Waste Transfer Station (Extension) - Planning application reference: 97/00999 Description: Project comprises the erection of an extension of 146 sqm. An application (ref: 97/00999) for Detailed Planning permission was submitted to Bedford B.C. on 3rd July 1997. Data source: Historic Planning Application Data Type: Point	
D	102m E	Site Address: Kempston Court (Land Off, Manor Road, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9PQ	Type of Site: Waste Transfer Station - Planning application reference: 96/0977 Description: Formation of new waste transfer station for Categories A, B and C(1) waste involving the erection of a new building with associated car parking and landscaping works. Construction - roller shutter x 2 doors. An application (ref: 96/0977) for Detailed Planning permission was submitted to Bedford B.C. on 12th August 1996. Data source: Historic Planning Application Data Type: Point	

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

3.6 Licensed waste sites

Records within 500m	32
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Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 26**

ID	Location	Details		
A	20m E	Site Name: Paul Riches Skips Site Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: Kempston Court, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: - Operator: Paul Riches Skips Waste Management licence No: 70069 Annual Tonnage: 0	Issue Date: 26/07/1995 Effective Date: - Modified: 02/08/2000 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified



ID	Location	Details		
A	20m E	Site Name: Paul Riches Skips Site Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: EA/EPR/GP3290NZ/V002 Operator: Riches Paul Waste Management licence No: 70069 Annual Tonnage: 25000	Issue Date: 26/07/1995 Effective Date: - Modified: 02/08/2000 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
A	20m E	Site Name: Paul Riches Skips Site Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: EA/EPR/GP3290NZ/V002 Operator: Riches Paul Waste Management licence No: 70069 Annual Tonnage: 25000	Issue Date: 26/07/1995 Effective Date: - Modified: 02/08/2000 Surrendered Date: - Expiry Date: 06/11/2020 Cancelled Date: - Status: Expired
C	60m E	Site Name: G Moore (Haulage) Ltd - Kempston Hardwick Site Address: Coronation Bungalow, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMO001 EPR reference: EA/EPR/FP3598NH/V002 Operator: G Moore Haulage Ltd Waste Management licence No: 71053 Annual Tonnage: 15000	Issue Date: 20/10/1997 Effective Date: - Modified: 01/06/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified



ID	Location	Details		
4	86m NE	Site Name: Kempston Court Site Address: Kempston Court, Manor Road, Kempston, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: EA/EPR/LP3796NV/A001 Operator: Paul Riches Skips Limited Waste Management licence No: 75120 Annual Tonnage: 75000	Issue Date: 25/10/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
D	101m E	Site Name: Kempston Court Site Address: Kempston Court, Manor Road, Kempston, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: EA/EPR/LP3796NV/A001 Operator: Paul Riches Skips Limited Waste Management licence No: 75120 Annual Tonnage: 75000	Issue Date: 25/10/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
E	119m E	Site Name: G Moore (Haulage) Ltd - Kempston Hardwick Site Address: Coronation Bungalow, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMO001 EPR reference: EA/EPR/FP3598NH/A001 Operator: G Moore Haulage Ltd Waste Management licence No: 71053 Annual Tonnage: 75000	Issue Date: 20/10/1997 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
E	119m E	Site Name: G Moore (Haulage) Ltd - Kempston Hardwick Site Address: Coronation Bungalow, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMO001 EPR reference: EA/EPR/FP3598NH/V002 Operator: G Moore Haulage Ltd Waste Management licence No: 71053 Annual Tonnage: 15000	Issue Date: 20/10/1997 Effective Date: - Modified: 01/06/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
7	382m E	Site Name: Japanese Car Breakers Site Address: Opp Chimney Corner Pub, Kempston Hardwick, Bedford, Bedfordshire, MK45 3JE Correspondence Address: -	Type of Site: ELV Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JAP001 EPR reference: EA/EPR/UP3896NL/A001 Operator: Mr Ghulam Mustafa & Mr Saraj Ahmed Waste Management licence No: 75140 Annual Tonnage: 2500	Issue Date: 24/09/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
8	426m E	Site Name: Japanese Car Breakers Site Address: Opp Chimney Corner Pub, Kempston Hardwick, Bedford, MK45 3JE Correspondence Address: Opp Chimney Corner Pub, Kempston Hardwick, Bedford, MK45 3JE	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JAP001 EPR reference: - Operator: Mr Ghulam Mustafa & Mr Saraj Ahmed Waste Management licence No: 75140 Annual Tonnage: 2500	Issue Date: 24/09/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
G	473m SW	Site Name: Shanks & McEwan Site Address: L Field, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Bucks, MK1 1BU	Type of Site: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: - Operator: Shanks & McEwan (Southern Waste Services) Ltd Waste Management licence No: 70053 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified



ID	Location	Details		
G	473m SW	Site Name: W R G - L Field Site Address: L Field, Green Lane, Stewartby, Bedford, Beds, MK43 9LY Correspondence Address: Charleston Road, Hardley, Hythe, Southampton, SO45 3NX	Type of Site: Co-Disposal Landfill Site Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: - Operator: W R G Waste Services Limited Waste Management licence No: 70053 Annual Tonnage: 150000	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC
G	473m SW	Site Name: Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Bedford, Beds, MK43 9LY Correspondence Address: Norwood Industrial Estate, Rotherham Road, Killamarsh, Sheffield, Derbyshire, S21 2DR	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO002 EPR reference: - Operator: Veolia Es Onyx Ltd Waste Management licence No: 70059 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: 11/04/2006 Modified: 27/01/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
G	473m SW	Site Name: Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY Correspondence Address: Veolia Environmental Services, Norwood Industrial Estate, Rotherham Road, Killamars, Sheffield, Derbyshire, S21 2DR	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO001 EPR reference: - Operator: Veolia Es Onyx Ltd Waste Management licence No: 75018 Annual Tonnage: 0	Issue Date: 29/05/2002 Effective Date: 11/04/2006 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
G	473m SW	Site Name: W R G - L Field Site Address: L Field, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: 3, Sidings Court, White Rose Way, Doncaster, DN4 5NU	Type of Site: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: - Operator: W R G Waste Services Limited Waste Management licence No: 70053 Annual Tonnage: 150000	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC



ID	Location	Details		
G	473m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Dunedin House, Mount Farm, Milton Keynes, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA012 EPR reference: - Operator: Wrg Waste Services Ltd Waste Management licence No: 70059 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 27/01/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
G	473m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: Dunedin House, Mount Farm, Milton Keynes, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA008 EPR reference: - Operator: Wrg Waste Services Ltd Waste Management licence No: 75018 Annual Tonnage: 75000	Issue Date: 29/05/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
G	473m SW	Site Name: Shanks Waste Services - L Field Stewartby Site Address: L Field, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Bucks, MK1 1BU	Type of Site: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: - Operator: Shanks Waste Services Ltd Waste Management licence No: 70053 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 09/04/2001 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
G	473m SW	Site Name: Shanks Waste Services - Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Bucks, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA012 EPR reference: - Operator: Shanks Waste Services Ltd Waste Management licence No: 70059 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 21/11/1991 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
G	473m SW	Site Name: Shanks Waste Services - Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Buckinghamshire, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA008 EPR reference: - Operator: Shanks Waste Services Limited Waste Management licence No: 75018 Annual Tonnage: 0	Issue Date: 29/05/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
G	473m SW	Site Name: W R G - L Field Site Address: L Field, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: 3, Sidings Court, White Rose Way, Doncaster, DN4 5NU	Type of Site: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: - Operator: W R G Waste Services Limited Waste Management licence No: 70053 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
G	473m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Dunedin House, Mount Farm, Milton Keynes, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA012 EPR reference: - Operator: Shanks Waste Solutions Waste Management licence No: 70059 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 21/11/1991 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
G	473m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: Dunedin House, Mount Farm, Milton Keynes, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA008 EPR reference: - Operator: Shanks Waste Solutions Waste Management licence No: 75018 Annual Tonnage: 0	Issue Date: 29/05/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
G	473m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Bucks, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA028 EPR reference: - Operator: Shanks Chemical Services Ltd Waste Management licence No: 75018 Annual Tonnage: 0	Issue Date: 29/05/2002 Effective Date: 31/03/2005 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
G	473m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Jo Lewis, Dunedin House, Auckland Park, Mount Farm, Milton Keynes, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA026 EPR reference: - Operator: Shanks Chemical Services Ltd Waste Management licence No: 70059 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: 31/03/2005 Modified: 27/01/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
G	473m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: Jo Lewis, Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Bucks, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 000018 EPR reference: - Operator: Shanks Chemical Services Ltd Waste Management licence No: 75018 Annual Tonnage: 0	Issue Date: 29/05/2002 Effective Date: 31/03/2005 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
G	473m SW	Site Name: W R G - L Field Site Address: L Field, Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: EA/EPR/XP3490NH/V002 Operator: W R G Waste Services Ltd Waste Management licence No: 70053 Annual Tonnage: 150000	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC



ID	Location	Details		
G	473m SW	Site Name: W R G - L Field Site Address: L Field, Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Co-Disposal Landfill Site Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: EA/EPR/XP3490NH/V002 Operator: W R G Waste Services Ltd Waste Management licence No: 70053 Annual Tonnage: 150000	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC
G	473m SW	Site Name: Stewartby Treatment Plant Site Address: Land/premises At, Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO001 EPR reference: EA/EPR/DP3092NH/T003 Operator: Veolia E S Onyx Ltd Waste Management licence No: 75018 Annual Tonnage: 301600	Issue Date: 29/05/2002 Effective Date: 11/04/2006 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
G	473m SW	Site Name: Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO002 EPR reference: EA/EPR/XP3790NV/T003 Operator: Veolia E S Onyx Ltd Waste Management licence No: 70059 Annual Tonnage: 75000	Issue Date: 06/11/1986 Effective Date: 11/04/2006 Modified: 27/01/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred



ID	Location	Details		
H	495m SW	Site Name: Marston Vale Leachate Treatment Plant Site Address: Wrg Waste Services, Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Biological Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA022 EPR reference: EA/EPR/SP3796NQ/A001 Operator: W R G Waste Services Ltd Waste Management licence No: 75110 Annual Tonnage: 219000	Issue Date: 01/08/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC
H	495m SW	Site Name: Marston Vale Leachate Treatment Plant Site Address: Wrg Waste Services, Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Biological Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA022 EPR reference: EA/EPR/SP3796NQ/A001 Operator: W R G Waste Services Ltd Waste Management licence No: 75110 Annual Tonnage: 219000	Issue Date: 01/08/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC

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

3.7 Waste exemptions

Records within 500m	25
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Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 26**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	On site	Land at TL0211043960	EPR/KE5444U F/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge



ID	Location	Site	Reference	Category	Sub-Category	Description
3	20m S	BROADMEAD FARM, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	WEX300630	Using waste exemption	On a Farm	Use of waste in construction
C	88m E	MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, MK43 9NT	WEX254567	Using waste exemption	Not on a farm	Use of waste in construction
C	88m E	Kempston Court, Manor Road, Kempston Hardwock, Bedford, MK43 9NT	WEX012998	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	103m E	Kempston Court Manor Road Bedford Bedfordshire MK43 9NT	EPR/JH0879BZ /A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
D	129m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, MK43 9PQ	WEX309205	Storing waste exemption	Not on a Farm	Storage of waste in a secure place
D	129m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, MK43 9PQ	WEX172222	Storing waste exemption	Not on a farm	Storage of waste in a secure place
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from a portable sanitary convenience
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Storing waste exemption	Agricultural Waste Only	Storage of waste in a secure place
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Treating waste exemption	Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Using waste exemption	Agricultural Waste Only	Spreading of plant matter to confer benefit
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose

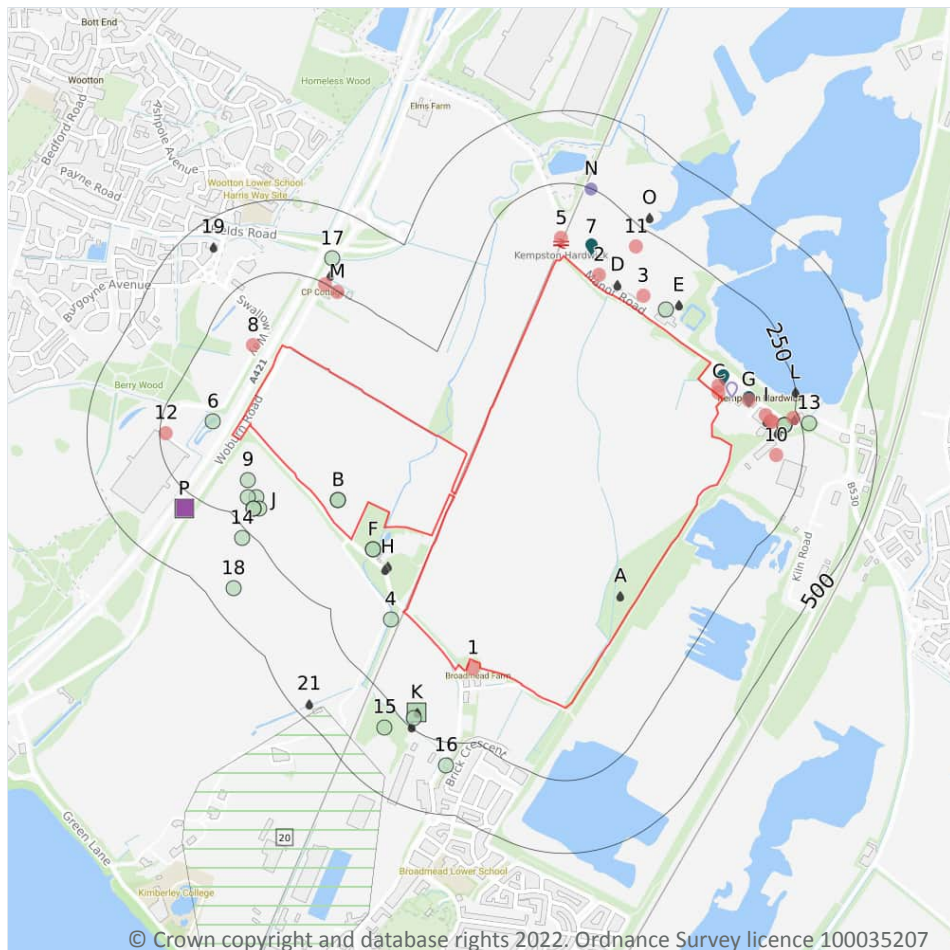


ID	Location	Site	Reference	Category	Sub-Category	Description
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from a portable sanitary convenience
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Storing waste exemption	Agricultural Waste Only	Storage of waste in a secure place
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Treating waste exemption	Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Using waste exemption	Agricultural Waste Only	Spreading of plant matter to confer benefit
F	136m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
5	272m SW	Vale House Broadmead Road Bedford Bedford MK43 9ND	EPR/AF0708C N/A001	Using waste exemption	Non- Agricultural Waste Only	Use of waste in construction
9	462m NW	-	WEX313567	Using waste exemption	Not on a Farm	Use of waste in construction

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Control of Major Accident Hazards
- Historical licensed industrial activities
- ⬮ Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollutant release to surface waters
- List 1 Dangerous Substances
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

17

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 41**

ID	Location	Company	Address	Activity	Category
C	10m NE	Mast	Bedfordshire, MK43	Telecommunications Features	Infrastructure and Facilities
1	20m S	C & J Mobile Tyre Service	Broadmead Farm, Broadmead Road, Stewartby, Bedfordshire, MK43 9ND	Vehicle Parts and Accessories	Motoring
C	27m NE	Works	Bedfordshire, MK43	Unspecified Works Or Factories	Industrial Features



ID	Location	Company	Address	Activity	Category
2	33m N	Cemex UK	Hanson Brick, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Concrete Products	Industrial Products
3	52m NE	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
5	61m N	Kempston Hardwick Rail Station	Bedfordshire, MK43	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure
G	88m E	G Moore Haulage	Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Distribution and Haulage	Transport, Storage and Delivery
8	88m NW	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
10	157m E	Coronation Business Park	Bedfordshire, MK43	Business Parks and Industrial Estates	Industrial Features
I	157m E	Specialist Power Systems	3-4, Kempston Court, Kempston Hardwick, Bedfordshire, MK43 9PQ	Electrical Production and Manipulation Equipment	Industrial Products
I	160m E	Gapp Automation	6, Kempston Court, Kempston Hardwick, Bedfordshire, MK43 9PQ	Measurement and Inspection Equipment	Industrial Products
I	163m E	Advanced Vehicle Glazing	7, Kempston Court, Kempston Hardwick, Bedfordshire, MK43 9PQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
11	185m NE	Tanks	Bedfordshire, MK43	Tanks (Generic)	Industrial Features
12	228m W	Electricity Sub Stations	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
I	231m E	Paul Riches Skips Ltd	1 Vine Cottage, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Waste Storage, Processing and Disposal	Infrastructure and Facilities
M	248m NW	Kempston Scaffolding Services Ltd	C P Farm, Woburn Road, Wootton, Bedfordshire, MK43 9EJ	Construction and Tool Hire	Hire Services
M	249m NW	Electricity Sub Station	Bedfordshire, MK43	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**1**

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.

Features are displayed on the Current industrial land use map on **page 41**

ID	Location	Company	Address	Operational status	Tier
20	425m SW	London Brick Products Ltd	London Brick Products Ltd, Stewartby, Bedford	Historical NIHHS Site	-

This data is sourced from the Health and Safety Executive.



4.7 Regulated explosive sites

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

4

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

Features are displayed on the Current industrial land use map on **page 41**

ID	Location	Details	
N	249m N	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: AI0012	Original Permit Number: IPCAIRAPP Date Approved: 30-6-1993 Effective Date: 30-6-1993 Status: Superseded By Variation
N	249m N	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: AJ3476	Original Permit Number: IPCMINVAR Date Approved: 12-7-1993 Effective Date: 12-7-1993 Status: Superseded By Variation
N	249m N	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: AL9513	Original Permit Number: IPCMINVAR Date Approved: 1-2-1994 Effective Date: 1-2-1994 Status: Superseded By Variation

ID	Location	Details	
N	249m N	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: BC8031	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

3

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

Features are displayed on the Current industrial land use map on **page 41**

ID	Location	Details	
C	41m NE	Operator: C JACKSON & SONS (BEDFORD) LTD Installation Name: MANOR ROAD HAZARDOUS WASTE TRANSFER STATION EPR/SP3932KH Process: TEMPORARY STORAGE OF HAZ WASTE NOT UNDER S 5.2 PENDING ACTIVITIES LISTED IN S 5.1, 5.2, 5.3 AND PARAGRAPH (B) OF THIS SECTION WITH A TOTAL CAPACITY > 50 TONNES, EXCL TEMP STORAGE WHERE GENERATED Permit Number: NP3034ET Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 10/01/2014 Effective Date: 10/01/2014 Last date noted as effective: 02/11/2022 Status: EFFECTIVE
C	41m NE	Operator: C JACKSON & SONS (BEDFORD) LTD Installation Name: MANOR ROAD HAZARDOUS WASTE TRANSFER STATION Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: SP3932KH Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 10/06/2010 Effective Date: 10/06/2010 Last date noted as effective: 02/11/2022 Status: SUPERCEDED
C	41m NE	Operator: C JACKSON & SONS (BEDFORD) LTD Installation Name: MANOR ROAD HAZARDOUS WASTE TRANSFER STATION Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: YP3331TF Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 28/06/2010 Effective Date: 28/06/2010 Last date noted as effective: 02/11/2022 Status: SUPERCEDED

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



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

Records within 500m

3

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 41**

ID	Location	Address	Details	
C	58m NE	Cemex Bedford Concrete Plant (RMC), Manor Road, Kempston Hardwick, Bedford, MK43 9NT	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
7	86m N	Hanson Bricks	Process: Manufacture of Clay Status: Historical Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
G	86m E	G Moore Haulage Ltd, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Process: Waste Oil Burner 0.4 MW Status: Surrendered 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

53

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

Features are displayed on the Current industrial land use map on **page 41**



ID	Location	Address	Details	
A	On site	CORONATION CLAY PIT, BROADMEAD RD, STEWARTBY, BEDS, MK43 9PR	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF05628 Permit Version: 1 Receiving Water: tributary Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 10/04/1996 Effective Date: 10/04/1996 Revocation Date: 28/07/1998
A	On site	CORONATION CLAY PIT, BROADMEAD RD, STEWARTBY, BEDS, MK43 9PR	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: PRCNF05628 Permit Version: 2 Receiving Water: tributary Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 29/07/1998 Effective Date: 29/07/1998 Revocation Date: -
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012



ID	Location	Address	Details	
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012



ID	Location	Address	Details	
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -



ID	Location	Address	Details	
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	39m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
E	96m NE	ASKERN HOUSE, MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, BEDFORDSHIRE, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1780 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 30/01/1985 Effective Date: 30/01/1985 Revocation Date: 25/02/1992
E	96m NE	ASKERN HOUSE, MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, BEDFORDSHIRE, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1780 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/02/1992 Effective Date: 26/02/1992 Revocation Date: 30/10/1996
H	115m SW	RANDALLS FARM, STEWARTBY, BEDS, MK43 9NE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NFG0884 Permit Version: 1 Receiving Water: Unknown Trib.	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 27/05/1963 Effective Date: 27/05/1963 Revocation Date: 20/02/1991



ID	Location	Address	Details	
H	115m SW	RANDALLS FARM, STEWARTBY, BEDS, MK43 9NE	Effluent Type: AGRICULTURE - UNSPECIFIED Permit Number: PR1NFG0884 Permit Version: 1 Receiving Water: Unknown Trib.	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 27/05/1963 Effective Date: 27/05/1963 Revocation Date: 20/02/1991
H	121m SW	RANDALLS FARM EDUCATION CENTRE, BROADMEAD ROAD, STEWARTBY, BUCKS, MK43 9NE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF17917 Permit Version: 1 Receiving Water: SEASONAL SOAKAWAY	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 10/10/2006 Effective Date: 10/10/2006 Revocation Date: 13/12/2011
H	121m SW	RANDALLS FARM EDUCATION CENTRE, BROADMEAD ROAD, STEWARTBY, BUCKS, MK43 9NE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF17917 Permit Version: 2 Receiving Water: SEASONAL SOAKAWAY	Status: VARIED UNDER EPR 2010 Issue date: 14/12/2011 Effective Date: 14/12/2011 Revocation Date: -
I	143m E	LOWE BROS PREMISES AT MANOR ROAD, KEMPSTON HARDWICK, BEDFORDSHIRE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: PR1NF1425 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 22/12/1983 Effective Date: 22/12/1983 Revocation Date: 18/02/1992
I	163m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF00800 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/05/1989 Effective Date: 19/05/1989 Revocation Date: 16/01/1992
I	163m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: PRCNF00799 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/05/1989 Effective Date: 19/05/1989 Revocation Date: -
I	163m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF00800 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 17/01/1992 Effective Date: 17/01/1992 Revocation Date: -



ID	Location	Address	Details	
I	163m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF04495 Permit Version: 1 Receiving Water: Trib Elsrow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 09/09/1991 Effective Date: 09/09/1991 Revocation Date: 23/01/1992
K	198m SW	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AW1NF448A Permit Version: 1 Receiving Water: Trib of Estow Brook River Grea	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 19/03/1987 Effective Date: 19/03/1987 Revocation Date: 13/09/2000
K	198m SW	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AW1NF448A Permit Version: 2 Receiving Water: Trib of Estow Brook River Grea	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 19/03/1987 Effective Date: 14/09/2000 Revocation Date: 18/11/2007
I	233m E	THE COTTAGE, MANOR ROAD, KEMPSTONE HARDWICKE, BEDFORD, BEDS, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2047 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 26/04/1985 Effective Date: 26/04/1985 Revocation Date: 24/03/1992
L	247m E	2 MANOR ROAD, KEMPSTON HARDWICKE, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2173 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 02/11/1985 Effective Date: 02/11/1985 Revocation Date: 09/03/1992
L	247m E	2 MANOR ROAD, KEMPSTON HARDWICKE, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2047 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 25/03/1992 Effective Date: 25/03/1992 Revocation Date: 30/10/1996
K	249m SW	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AW1NF448A Permit Version: 3 Receiving Water: Trib of Estow Brook River Grea	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 19/11/2007 Effective Date: 19/11/2007 Revocation Date: 31/03/2009



ID	Location	Address	Details	
K	249m SW	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: AW1NF448A Permit Version: 3 Receiving Water: Trib of Estow Brook River Grea	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 19/11/2007 Effective Date: 19/11/2007 Revocation Date: 31/03/2009
K	249m SW	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AW1NF448A Permit Version: 4 Receiving Water: Trib of Estow Brook River Grea	Status: SURRENDERED UNDER EPR 2010 Issue date: 14/10/2008 Effective Date: 01/04/2009 Revocation Date: 28/08/2015
K	249m SW	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: AW1NF448A Permit Version: 4 Receiving Water: Trib of Estow Brook River Grea	Status: SURRENDERED UNDER EPR 2010 Issue date: 14/10/2008 Effective Date: 01/04/2009 Revocation Date: 28/08/2015
M	279m NW	COTTAGE FARM, WOOTTON.	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1784 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 30/01/1985 Effective Date: 30/01/1985 Revocation Date: 18/02/1992
O	293m NE	LONDON BRICK COMPANT LTD, MANOR ROAD, KEMPSTON, HARDWICK, BEDS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2614 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 18/02/1992 Effective Date: 18/02/1992 Revocation Date: 20/10/2005
O	293m NE	LONDON BRICK COMPANT LTD, MANOR ROAD, KEMPSTON, HARDWICK, BEDS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2614 Permit Version: 1 Receiving Water: trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 06/04/1987 Effective Date: 06/04/1987 Revocation Date: 17/02/1992
P	304m W	L FIELD L'FILL SITE, BEDS	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1821 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 30/01/1985 Effective Date: 30/01/1985 Revocation Date: 22/03/1992



ID	Location	Address	Details	
P	304m W	L FIELD L'FILL SITE, BEDS	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1821 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/03/1992 Effective Date: 23/03/1992 Revocation Date: 26/04/2005
P	304m W	L FIELD L'FILL SITE, BEDS	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1821 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/03/1992 Effective Date: 23/03/1992 Revocation Date: 26/04/2005
19	413m NW	FIELDS ROAD, WOOTTON, BEDS	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: PRCNF00725 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 25/04/1989 Effective Date: 25/04/1989 Revocation Date: 10/02/1992
21	453m SW	WORKSHOP, LAND ADJ TO RAIL TERMINAL.L FIE, STEWARTBY	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF04079 Permit Version: 1 Receiving Water: Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 27/02/1991 Effective Date: 27/02/1991 Revocation Date: 20/02/1992

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m

2

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

Features are displayed on the Current industrial land use map on **page 41**

ID	Location	Address	Details	
P	304m W	SHANKS AND MCEWAN, L FIELD L'FILL SITE, BEDS	Permit Number: PR1NF1821 Permit Version: 2 Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Discharge Type: Undefined or Other	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Catchment: MID R.OUSE / ELSTOW BRK Approval Date: 23/03/1992



ID	Location	Address	Details	
P	304m W	SHANKS AND MCEWAN, L FIELD L'FILL SITE, BEDS	Permit Number: PR1NF1821 Permit Version: 2 Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Discharge Type: Undefined or Other	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Catchment: MID R.OUSE / ELSTOW BRK Approval Date: 23/03/1992

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

1

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.

Features are displayed on the Current industrial land use map on **page 41**

ID	Location	Name	Status	Receiving Water	Authorised Substances
P	304m W	Stewartby Landfill Site	Not Active	Elstow Brook, River Ouse	Mercury (other), Cadmium

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

4.17 List 2 Dangerous Substances

Records within 500m

3

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.

Features are displayed on the Current industrial land use map on **page 41**

ID	Location	Name	Status	Receiving Water	Authorised Substances
K	198m SW	Stewartby Stw	Not Active	-	-
K	198m SW	Stewartby Stw	Not Active	-	-



ID	Location	Name	Status	Receiving Water	Authorised Substances
P	304m W	Wrc "I"Field Landfill	Active	Trib Elstow Bk R Gt Ouse	Arsenic, Chromium, Copper, Iron, Lead, Nickel

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	23
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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 41**

ID	Location	Details	
B	On site	Incident Date: 10/03/2002 Incident Identification: 62997 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
B	On site	Incident Date: 10/03/2002 Incident Identification: 62997 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
4	51m SW	Incident Date: 09/05/2002 Incident Identification: 77585 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
E	61m NE	Incident Date: 19/08/2003 Incident Identification: 183354 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
6	80m W	Incident Date: 25/01/2002 Incident Identification: 54405 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
F	82m SW	Incident Date: 08/07/2002 Incident Identification: 90058 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Algae	Water Impact: Category 1 (Major) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)



ID	Location	Details	
F	82m SW	Incident Date: 08/07/2002 Incident Identification: 90058 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Algae	Water Impact: Category 1 (Major) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
9	130m W	Incident Date: 28/03/2002 Incident Identification: 68144 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
J	149m W	Incident Date: 15/01/2002 Incident Identification: 52651 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
J	166m W	Incident Date: 18/03/2002 Incident Identification: 64881 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
J	171m W	Incident Date: 10/04/2002 Incident Identification: 70622 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
J	182m W	Incident Date: 06/03/2002 Incident Identification: 62303 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
J	182m W	Incident Date: 06/03/2002 Incident Identification: 62303 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
I	195m E	Incident Date: 08/08/2001 Incident Identification: 22803 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
I	195m E	Incident Date: 08/08/2001 Incident Identification: 22803 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
I	195m E	Incident Date: 08/08/2001 Incident Identification: 22803 Pollutant: Atmospheric Pollutants and Effects:Specific Waste Materials Pollutant Description: Smoke:Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)



ID	Location	Details	
K	219m SW	Incident Date: 09/09/2002 Incident Identification: 106621 Pollutant: Sewage Materials Pollutant Description: Final Effluent	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
13	276m E	Incident Date: 29/06/2001 Incident Identification: 12280 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
14	278m W	Incident Date: 16/05/2002 Incident Identification: 79107 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
15	312m SW	Incident Date: 18/06/2001 Incident Identification: 9912 Pollutant: Sewage Materials Pollutant Description: Sludge	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
16	329m S	Incident Date: 08/05/2002 Incident Identification: 77395 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
17	337m NW	Incident Date: 02/09/2003 Incident Identification: 186835 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
18	413m W	Incident Date: 07/01/2002 Incident Identification: 50853 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

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

4.19 Pollution inventory substances

Records within 500m

0

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

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



4.20 Pollution inventory waste transfers

Records within 500m

0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m

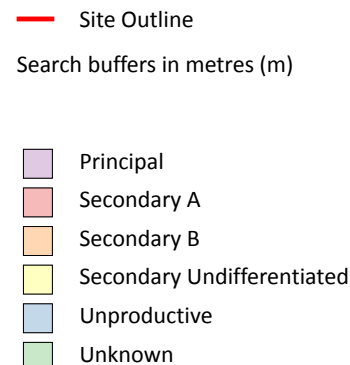
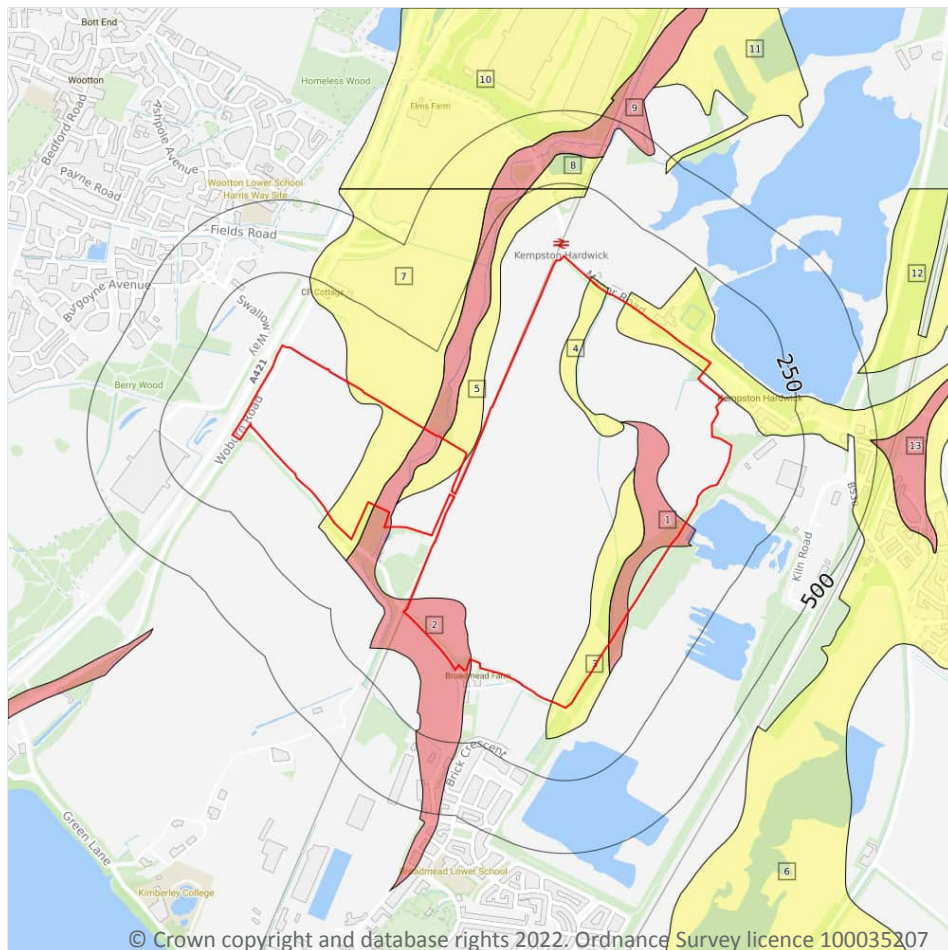
0

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

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



5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m

13

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 60**

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

ID	Location	Designation	Description
3	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
7	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
8	231m N	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
9	261m N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
10	331m N	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
11	445m NE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
12	471m E	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
13	477m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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



Bedrock aquifer



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

5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

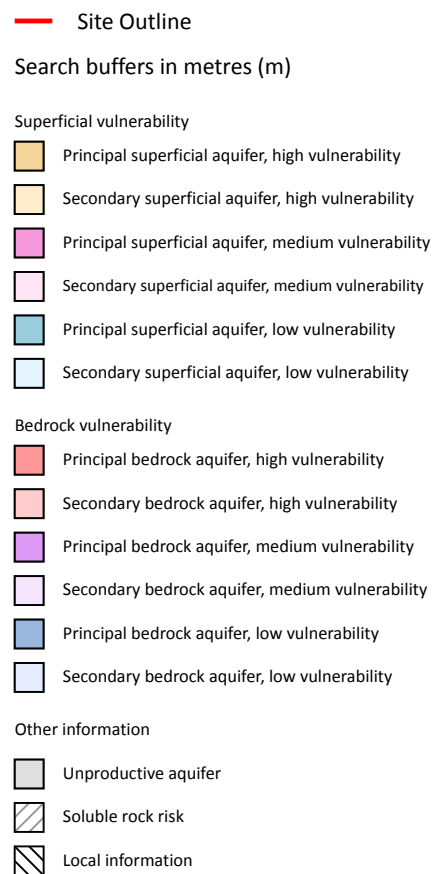
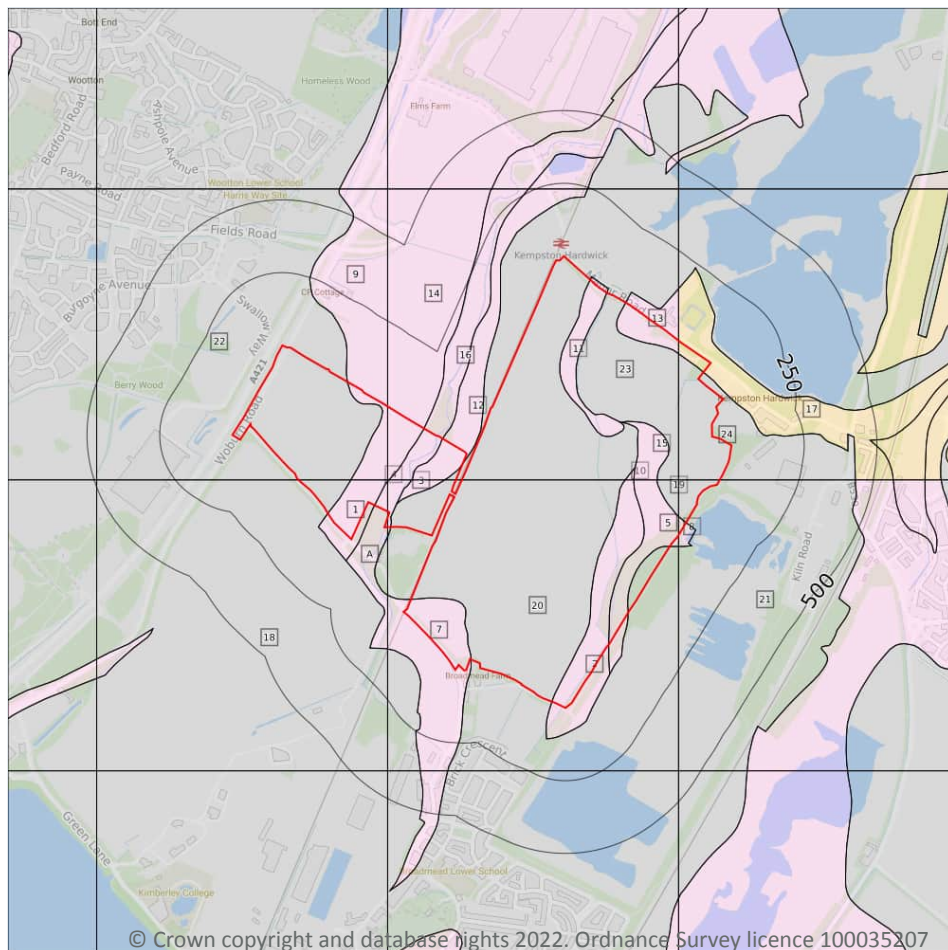
Features are displayed on the Bedrock aquifer map on **page 62**

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
2	231m N	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

26

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 63**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
6	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
7	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
8	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
11	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
12	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
13	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
14	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
15	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
16	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
17	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
18	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
19	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
20	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
21	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
22	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
23	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
24	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
A	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
A	33m W	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures

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



5.4 Groundwater vulnerability- soluble rock risk

Records on site
0

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

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

5.5 Groundwater vulnerability- local information

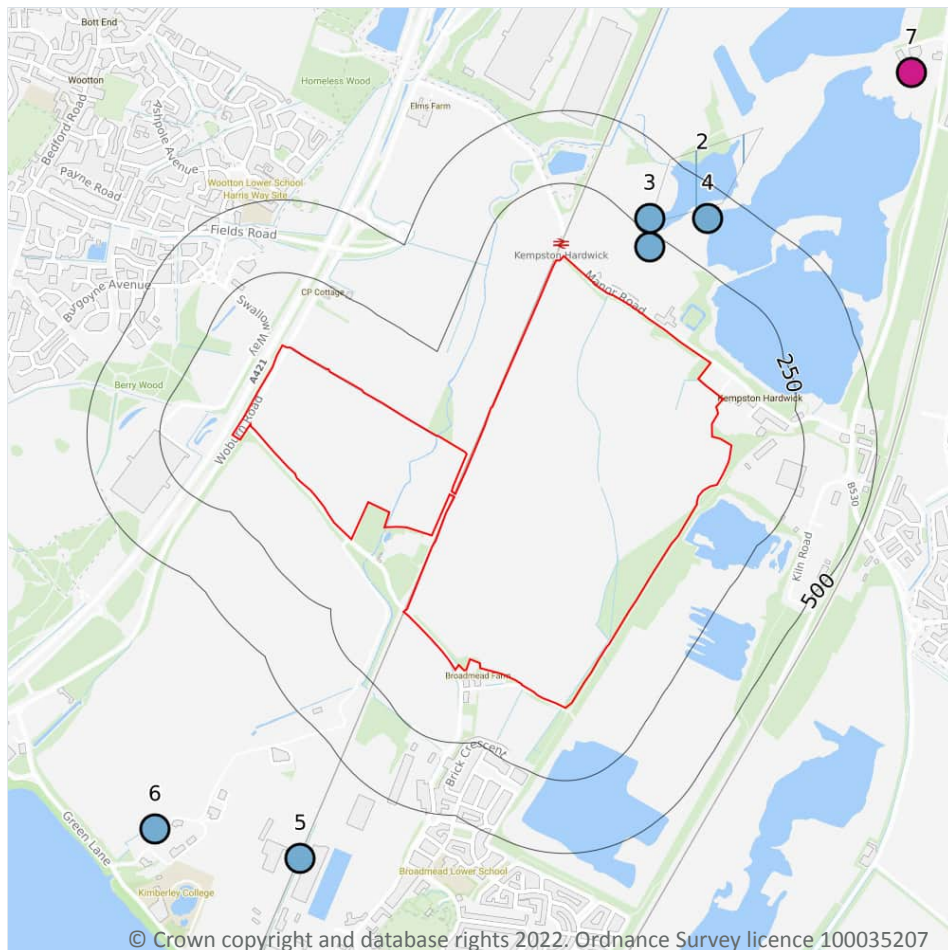
Records on site
0

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

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



Abstractions and Source Protection Zones



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

5.6 Groundwater abstractions

Records within 2000m

2

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 70**

ID	Location	Details	
7	1212m NE	Status: Historical Licence No: 6/33/12/*G/0139 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE AT KEMPSTON HARDWICK Data Type: Point Name: SUPREME CONCRETE LTD Easting: 503800 Northing: 245400	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 30/11/1996 Expiry Date: - Issue No: 102 Version Start Date: 13/07/2004 Version End Date: -
-	1456m NE	Status: Historical Licence No: 6/33/12/*G/0031 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL-RACEMEADOW FARM Data Type: Point Name: LONDON BRICK CO LTD Easting: 503800 Northing: 245700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/06/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/06/1967 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

7

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 70**

ID	Location	Details	
1	206m NE	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 502900 Northing: 244800	Annual Volume (m ³): 5164 Max Daily Volume (m ³): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -



ID	Location	Details	
2	275m NE	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: FLOODED KNOTHOLE-KEMPSTON HARD Data Type: Poly4 Name: HANSON BRICK LTD Easting: 503290 Northing: 245210	Annual Volume (m ³): 30000 Max Daily Volume (m ³): 150 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 20/10/2003 Version End Date: -
3	293m NE	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 502900 Northing: 244900	Annual Volume (m ³): 5164 Max Daily Volume (m ³): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
4	398m NE	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 503100 Northing: 244900	Annual Volume (m ³): 5164 Max Daily Volume (m ³): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
5	838m SW	Status: Historical Licence No: 6/33/12/*S/0080 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STREAM AT STEWARTBY Data Type: Point Name: HANSON BRICK LTD Easting: 501700 Northing: 242700	Annual Volume (m ³): 613710 Max Daily Volume (m ³): 2945.8 Original Application No: - Original Start Date: 01/10/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1995 Version End Date: -



ID	Location	Details	
6	1134m SW	Status: Historical Licence No: 6/33/12/*S/0080 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STREAM AT STEWARTBY Data Type: Point Name: HANSON BRICK LTD Easting: 501200 Northing: 242800	Annual Volume (m ³): 613710 Max Daily Volume (m ³): 2945.8 Original Application No: - Original Start Date: 01/10/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1995 Version End Date: -
-	1822m W	Status: Historical Licence No: 18/54/17/0332 Details: Spray Irrigation - Direct Direct Source: Surface Water Midlands Region Point: CROPTHORNE - UNNAMED BROOK Data Type: Point Name: ALLEN Easting: 499700 Northing: 244600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 08/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 08/09/1966 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m

0

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

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

5.9 Source Protection Zones

Records within 500m

0

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

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



5.10 Source Protection Zones (confined aquifer)

Records within 500m

0

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

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



6 Hydrology



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

6.1 Water Network (OS MasterMap)

Records within 250m

58

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 75**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



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



ID	Location	Type of water feature	Ground level	Permanence	Name
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
L	1m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	2m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	2m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
A	2m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
9	3m NE	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
B	8m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
M	11m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
10	11m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	12m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	14m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	18m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	27m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	33m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	40m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	47m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	59m NE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
H	63m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	92m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	99m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	111m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	111m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
Q	111m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
17	123m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
U	145m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
V	174m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
V	174m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
20	207m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	207m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	216m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
Y	232m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Z	243m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
21	244m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AA	246m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AB	249m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

30

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 75**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

2

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

Features are displayed on the Hydrology map on **page 75**



ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
6	On site	River	Harrowden Brook	GB105033038010	Great Ouse Bedford	Ouse Upper and Bedford
7	On site	River	Elstow Brook (US Shortstown)	GB105033038050	Great Ouse Bedford	Ouse Upper and Bedford

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

6.4 WFD Surface water bodies

Records identified	2
---------------------------	----------

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

Features are displayed on the Hydrology map on **page 75**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
8	On site	River	Elstow Brook (US Shortstown)	GB105033038050	Moderate	Fail	Moderate	2019
-	608m E	River	Harrowden Brook	GB105033038010	Bad	Fail	Bad	2019

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

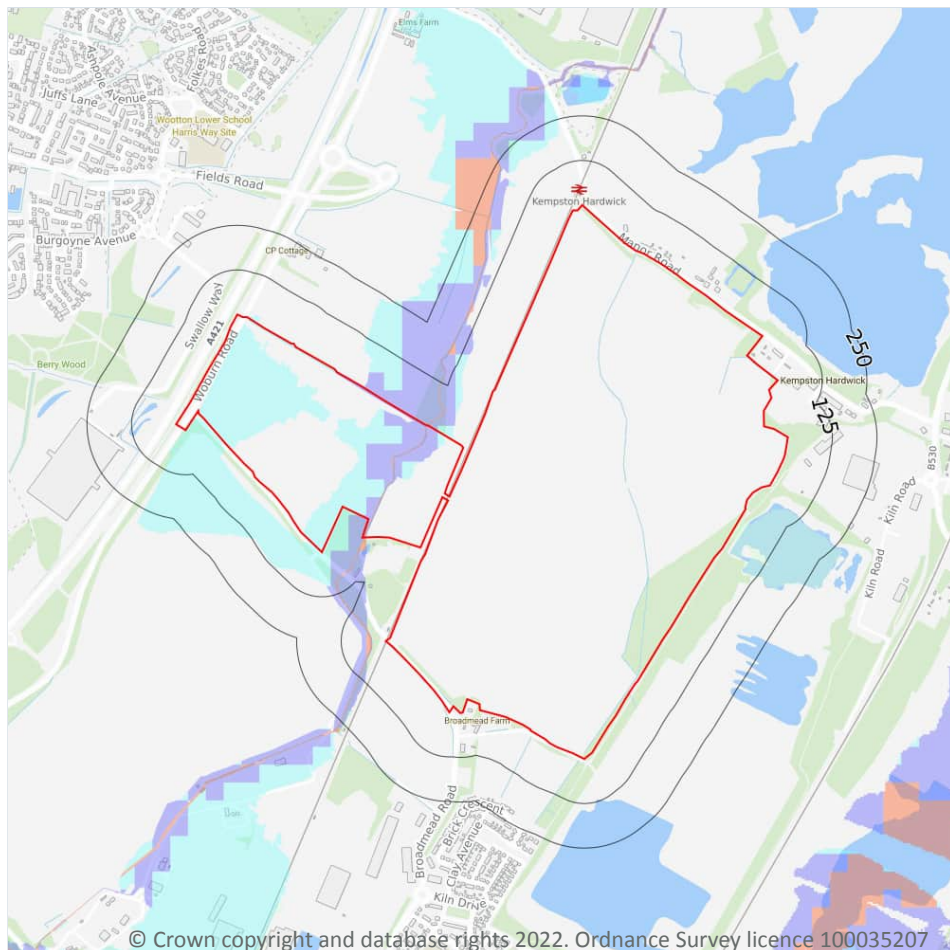
6.5 WFD Groundwater bodies

Records on site	0
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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.

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

7 River and coastal flooding



— Site Outline
Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m

14

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 82**



Distance	Flood risk category
On site	High
0 - 50m	High

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

7.2 Historical Flood Events

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

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

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

7.3 Flood Defences

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

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

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

7.4 Areas Benefiting from Flood Defences

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

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

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

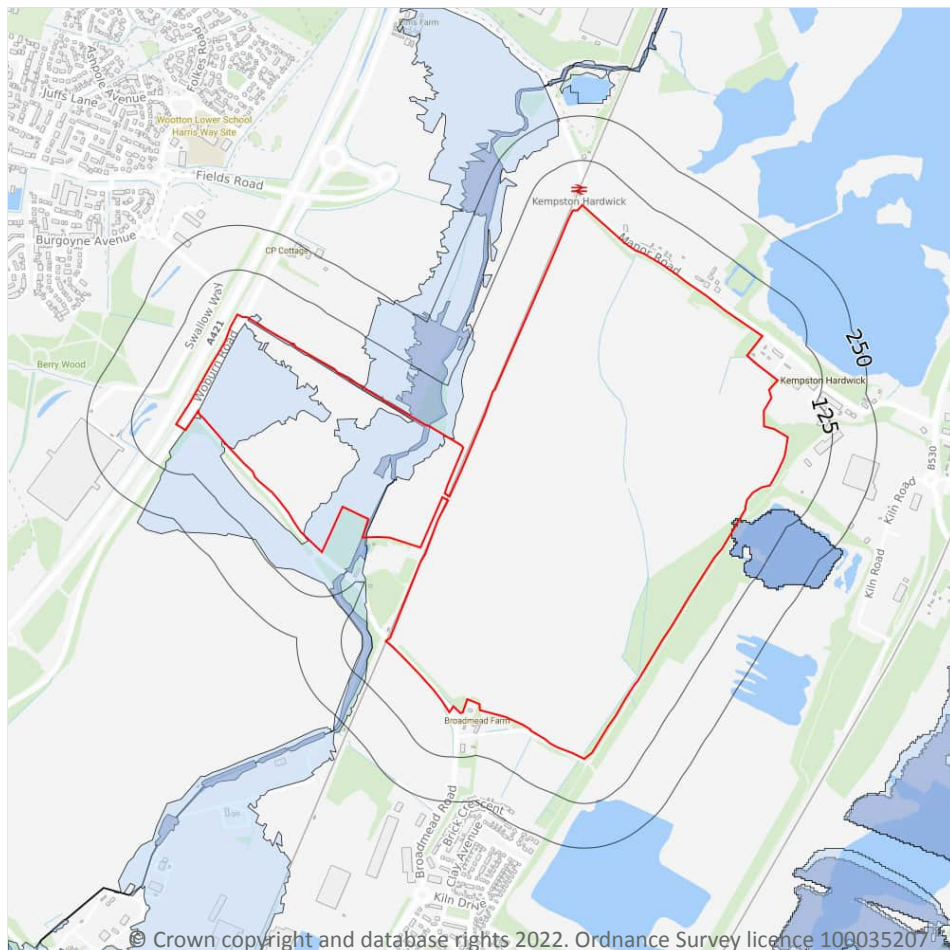
7.5 Flood Storage Areas

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

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

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

River and coastal flooding - Flood Zones



- Site Outline
- Search buffers in metres (m)
- Flood zone 2
- Flood zone 3

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 82**

Location	Type
On site	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 82**

Location	Type
On site	Zone 3 - (Fluvial Models)

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



8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

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

1 in 250 return period

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

1 in 100 return period

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

1 in 30 return period

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

8.1 Surface water flooding

Highest risk on site

1 in 30 year, Greater than 1.0m

Highest risk within 50m

1 in 30 year, Greater than 1.0m

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

Features are displayed on the Surface water flooding map on **page 86**

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

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

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

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

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

9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

Low

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

Features are displayed on the Groundwater flooding map on **page 88**

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



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

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m**0**

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m**0**

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m**0**

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m**0**

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m**0**

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

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

10.7 Designated Ancient Woodland

Records within 2000m**1**

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

Features are displayed on the Environmental designations map on **page 89**

ID	Location	Name	Woodland Type
-	1607m W	Wootton Wood	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m**0**

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

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

10.9 Forest Parks

Records within 2000m**0**

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

This data is sourced from the Forestry Commission.



10.10 Marine Conservation Zones

Records within 2000m

0

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

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

10.11 Green Belt

Records within 2000m

0

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

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.



10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

11

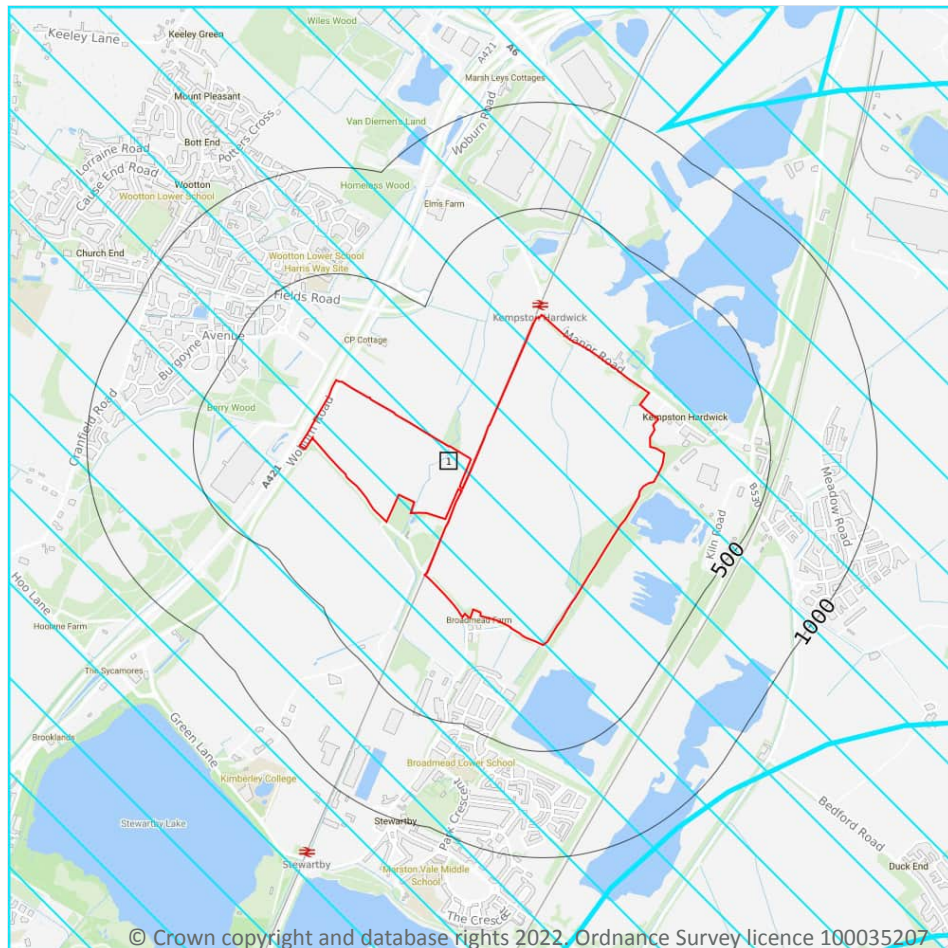
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	Great Ouse NVZ	Surface Water	391	Existing
On site	Huntingdon River Gravels	Groundwater	144	Existing
910m E	Great Ouse NVZ	Surface Water	391	Existing
910m E	Huntingdon River Gravels	Groundwater	144	Existing
1186m W	Stewartby Lake Eutrophic lake NVZ	Eutrophic Water	111	Existing
1213m N	Great Ouse NVZ	Surface Water	391	Existing
1213m N	Huntingdon River Gravels	Groundwater	144	Existing
1553m NW	Bedford Great Oolite	Groundwater	74	Existing
1571m NW	Bedford Great Oolite	Groundwater	74	Existing
1857m NE	Great Ouse NVZ	Surface Water	391	Existing
1857m NE	Huntingdon River Gravels	Groundwater	144	Existing

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



SSSI Impact Zones and Units



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

10.17 SSSI Impact Risk Zones

Records on site

1

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

Features are displayed on the SSSI Impact Zones and Units map on **page 94**

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Air pollution - Livestock & poultry units with floorspace > 500m ² , slurry lagoons & digestate stores > 750m ² , manure stores > 3500t.

This data is sourced from Natural England.



10.18 SSSI Units

Records within 2000m

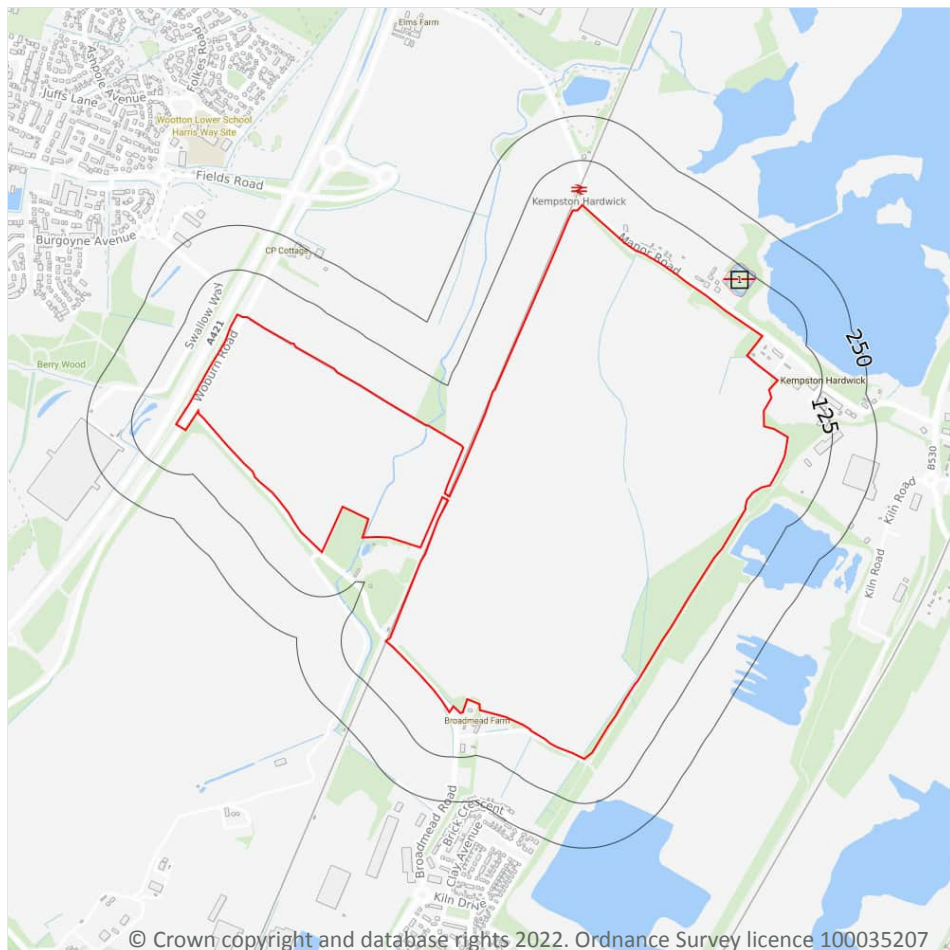
0

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

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



11 Visual and cultural designations



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

11.1 World Heritage Sites

Records within 250m

0

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

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



11.2 Area of Outstanding Natural Beauty

Records within 250m**0**

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

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

11.3 National Parks

Records within 250m**0**

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

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

11.4 Listed Buildings

Records within 250m**0**

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

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

11.5 Conservation Areas

Records within 250m**0**

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



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

11.6 Scheduled Ancient Monuments

Records within 250m

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 96**

ID	Location	Ancient monument name	Reference number
1	52m NE	Kempston Hardwick moated site	1012312

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

11.7 Registered Parks and Gardens

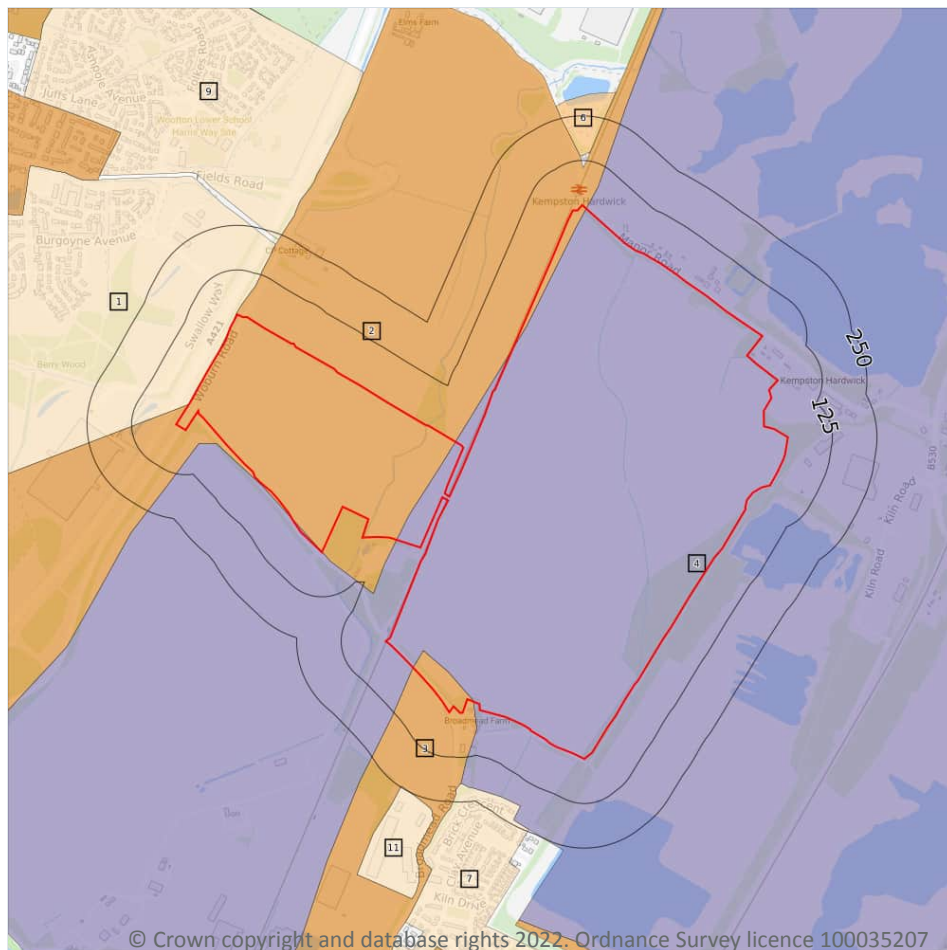
Records within 250m

0

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

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

12 Agricultural designations



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

12.1 Agricultural Land Classification

Records within 250m

8

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 99**

ID	Location	Classification	Description
1	On site	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.



ID	Location	Classification	Description
2	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
3	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
4	On site	Non Agricultural	-
6	137m N	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
7	194m S	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
9	234m NW	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
11	247m SW	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m

0

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

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



12.3 Tree Felling Licences

Records within 250m

0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

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

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

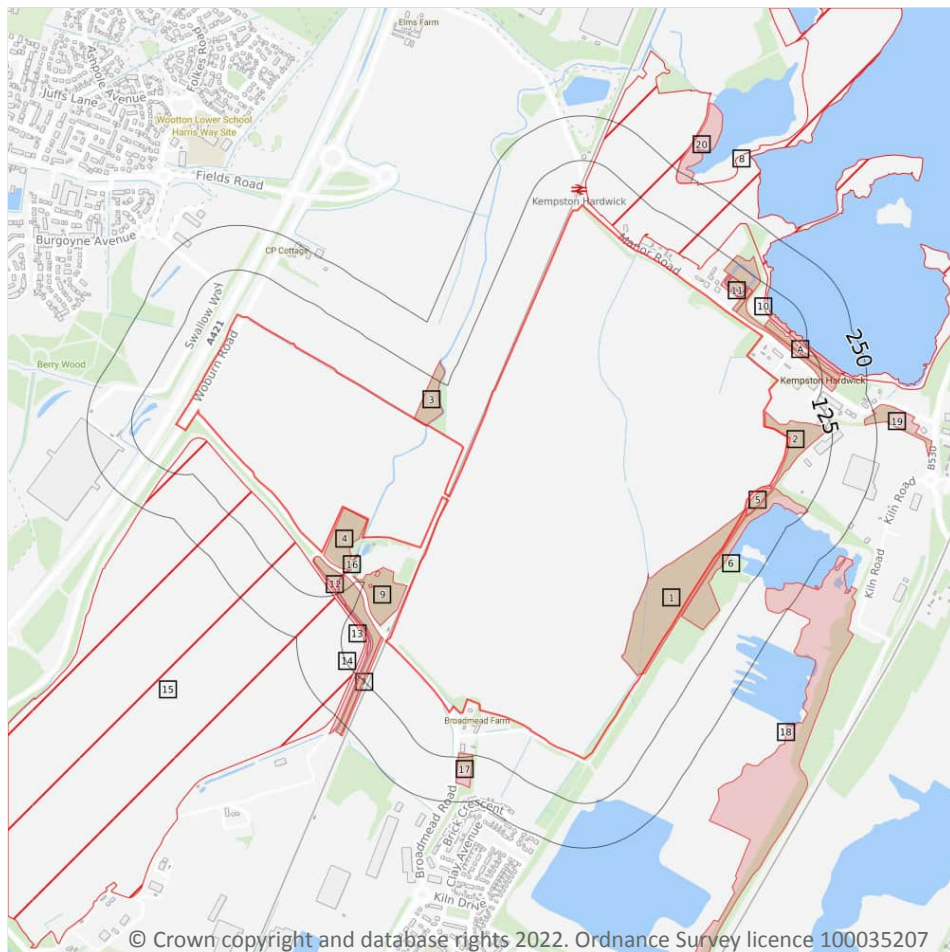
Records within 250m

0

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

This data is sourced from Natural England.

13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

20

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 102**

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	1m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
5	5m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	6m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	9m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	10m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	12m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	14m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	14m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
13	16m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
14	26m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	27m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
16	49m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	53m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
17	112m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
18	167m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
19	219m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
20	222m NE	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

2

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.

Features are displayed on the Habitat designations map on **page 102**



ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
8	10m N	BRITPITS ref: 35270	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography
15	30m W	HLD_refs: EAHLD0097 5; EAHLD0097 6; EAHLD0099 0	Low	Environment Agency Historic Landfill Sites	British Geological Survey BRITPITS database	UK Perspectives Aerial Photography

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m	0
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Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

2

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

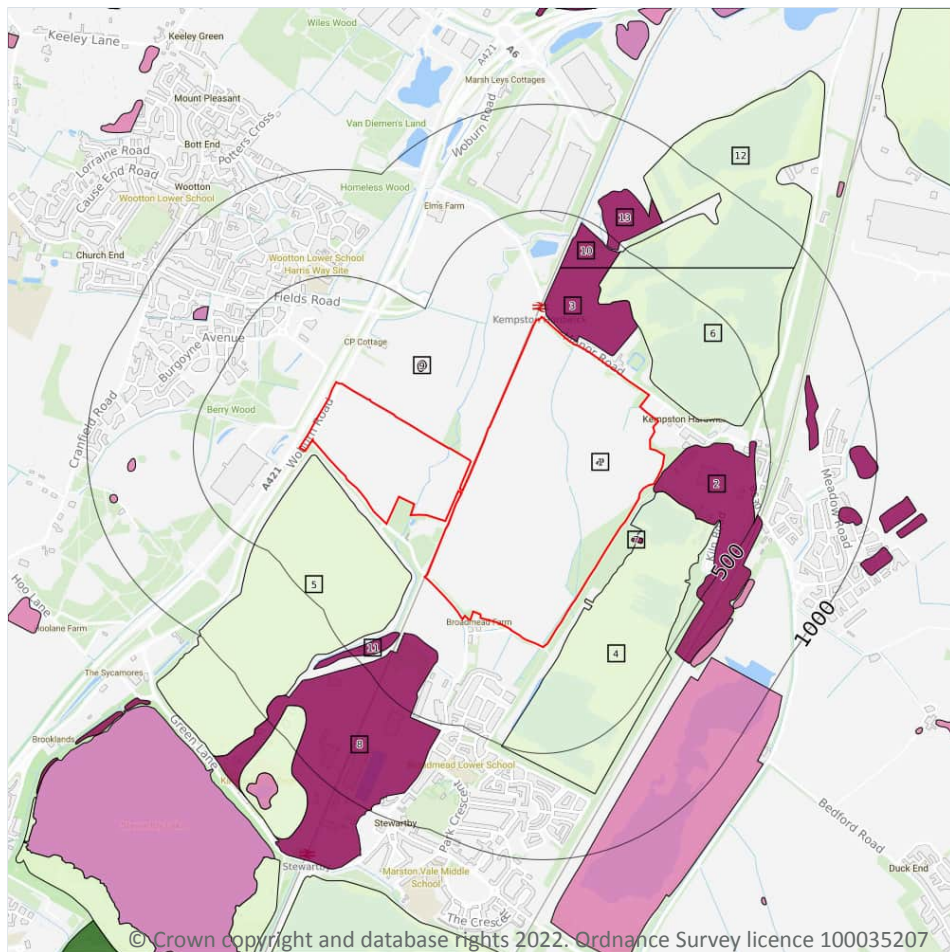
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 105**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	TL04SW
2	231m N	Full	Full	Full	No coverage	TL04NW

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

13

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 106**

ID	Location	LEX Code	Description	Rock description
1	On site	WGR-VOID	Worked Ground (Undivided)	Void
2	7m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	9m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	29m E	WMGR-ARTDP	Infilled Ground	Artificial Deposit

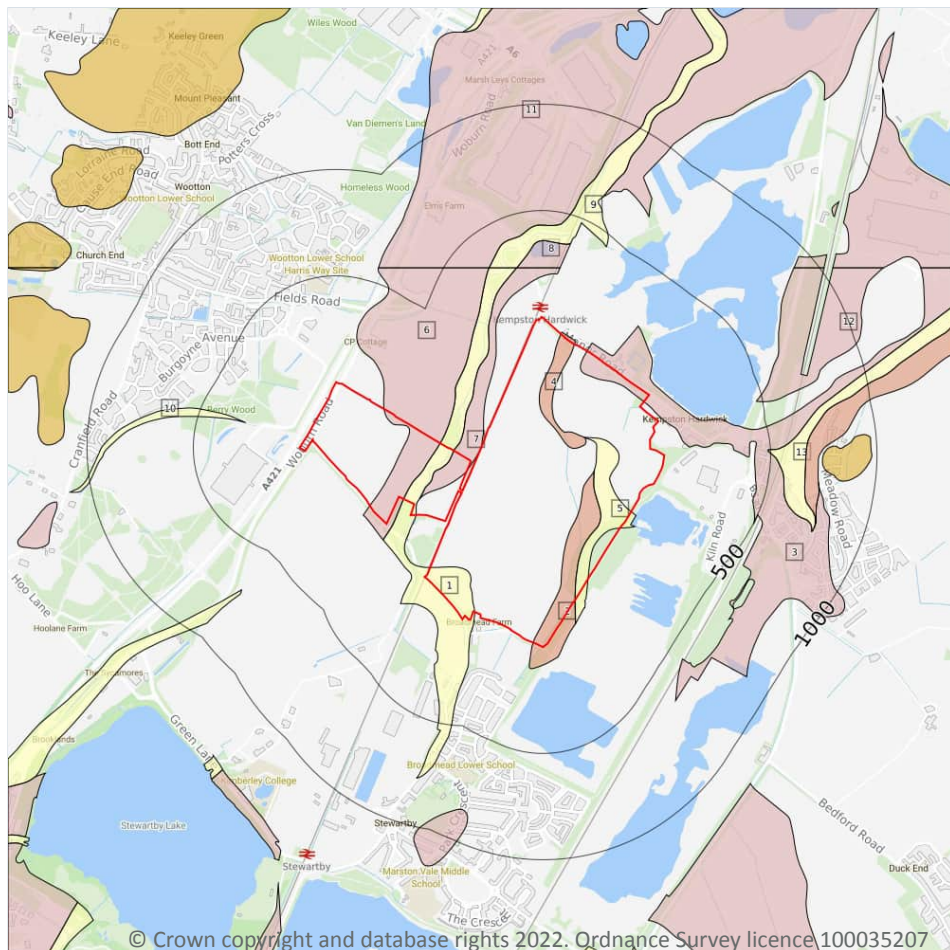


ID	Location	LEX Code	Description	Rock description
5	35m W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
6	53m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
7	75m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
8	194m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
9	237m NW	WGR-VOID	Worked Ground (Undivided)	Void
10	246m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
11	274m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
12	386m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
13	454m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

13

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 108**

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
2	On site	HEAD1-XCZSV	Head, 1 - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
3	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel



ID	Location	LEX Code	Description	Rock description
4	On site	HEAD1-XCZSV	Head, 1 - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
5	On site	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
6	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
7	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
8	231m N	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
9	259m N	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
10	286m W	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
11	331m N	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
12	471m E	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
13	488m E	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

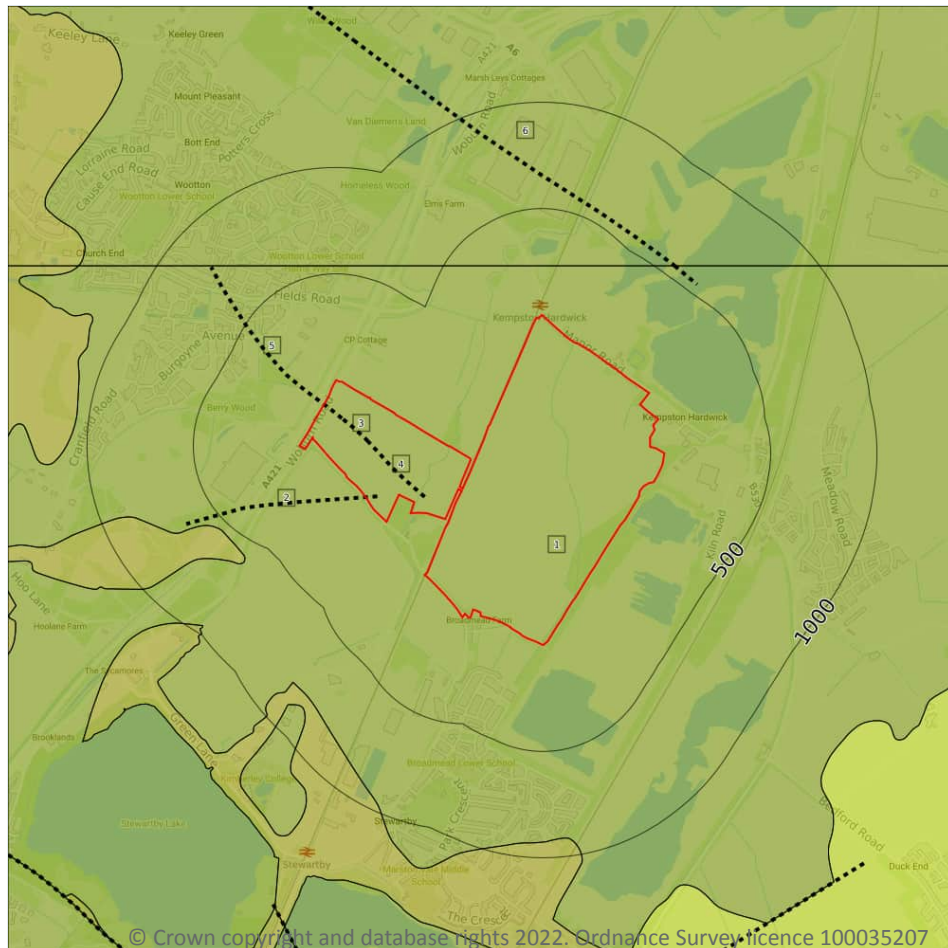
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m

2

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 110**

ID	Location	LEX Code	Description	Rock age
1	On site	PET-MDST	Peterborough Member - Mudstone	Callovian Age
6	231m N	PET-MDST	Peterborough Member - Mudstone	Callovian Age

This data is sourced from the British Geological Survey.



14.6 Bedrock faults and other linear features (10k)

Records within 500m**4**

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 110**

ID	Location	Category	Description
2	On site	FAULT	Normal fault, observed; crossmark on downthrow side
3	On site	FAULT	Normal fault, observed; crossmark on downthrow side
4	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side
5	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side

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.

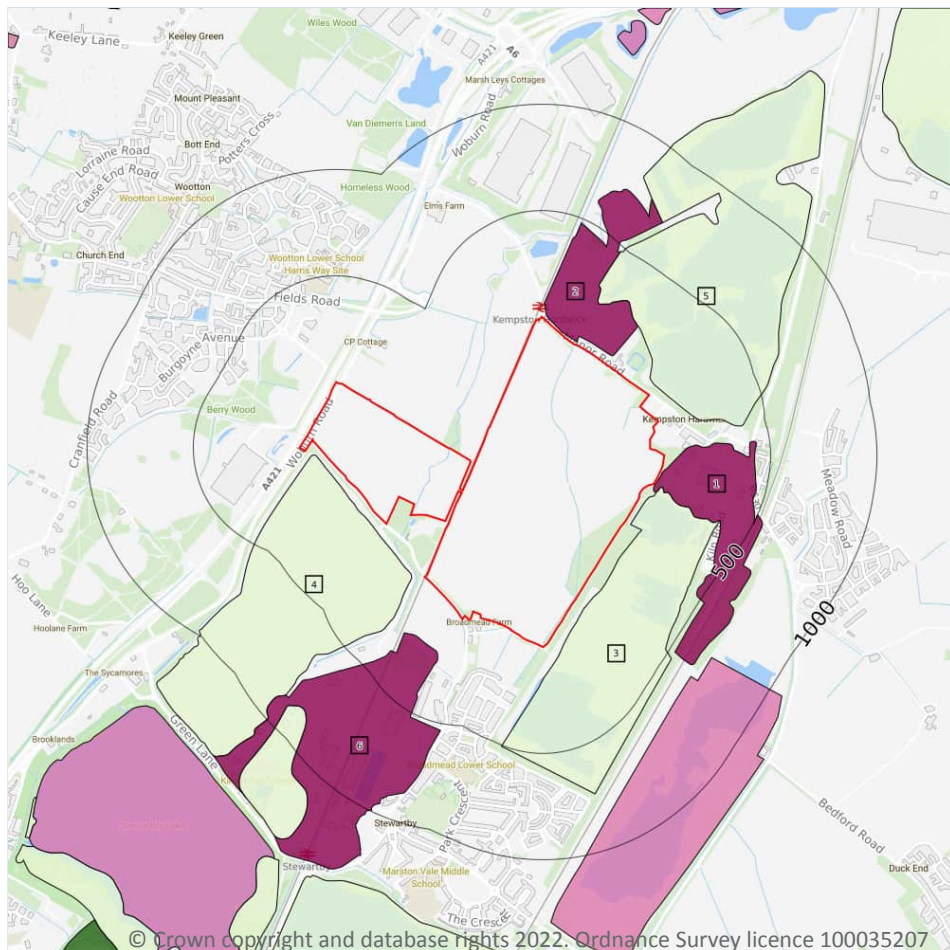
Features are displayed on the Geology 1:50,000 scale - Availability map on **page 112**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW203_bedford_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 113**

ID	Location	LEX Code	Description	Rock description
1	6m E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	9m N	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
3	28m E	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
4	35m W	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT



ID	Location	LEX Code	Description	Rock description
5	53m NE	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
6	194m SW	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

4

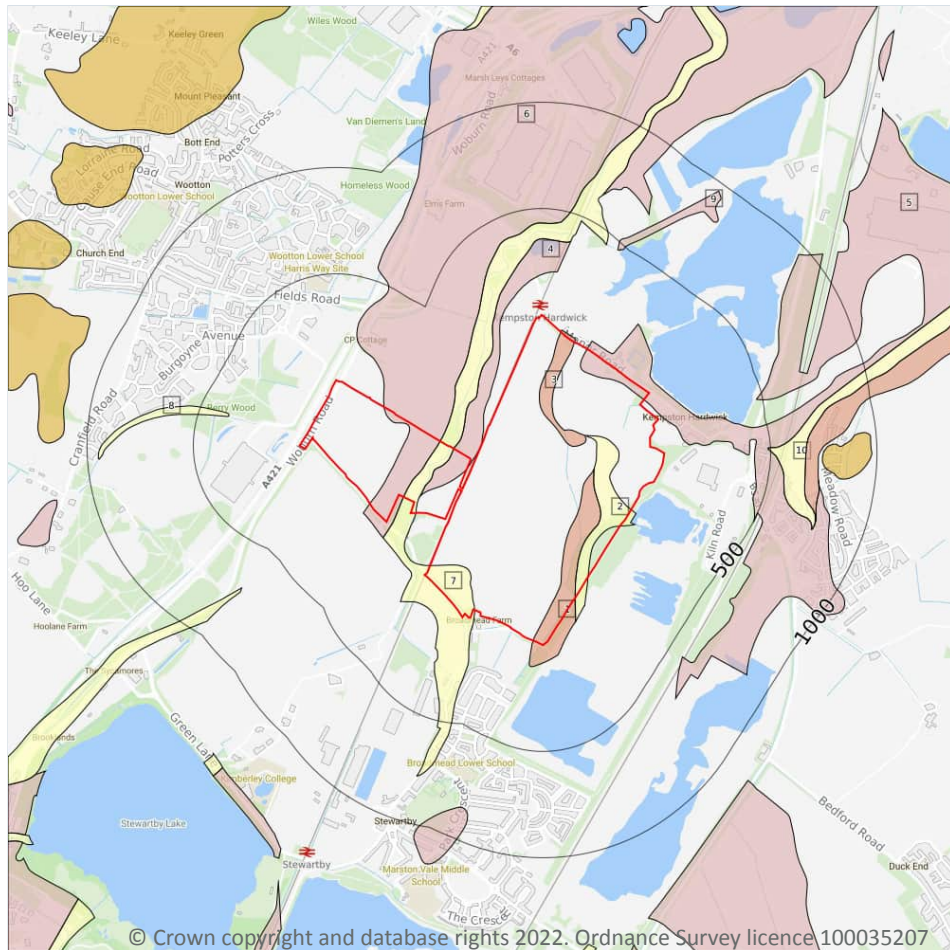
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
6m E	Mixed	Very High	Low
9m N	Mixed	Very High	Low
28m E	Mixed	Very High	Low
35m W	Mixed	Very High	Low

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m

10

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 115**

ID	Location	LEX Code	Description	Rock description
1	On site	HEAD1-XCZSV	HEAD, 1	CLAY, SILT, SAND AND GRAVEL
2	On site	ALV-XCZ	ALLUVIUM	CLAY AND SILT
3	On site	HEAD1-XCZSV	HEAD, 1	CLAY, SILT, SAND AND GRAVEL



ID	Location	LEX Code	Description	Rock description
4	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
5	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
6	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
7	On site	ALV-XCZ	ALLUVIUM	CLAY AND SILT
8	360m W	ALV-XCZ	ALLUVIUM	CLAY AND SILT
9	466m NE	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
10	488m E	ALV-XCZ	ALLUVIUM	CLAY AND SILT

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	7
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A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

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

This data is sourced from the British Geological Survey.



15.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m

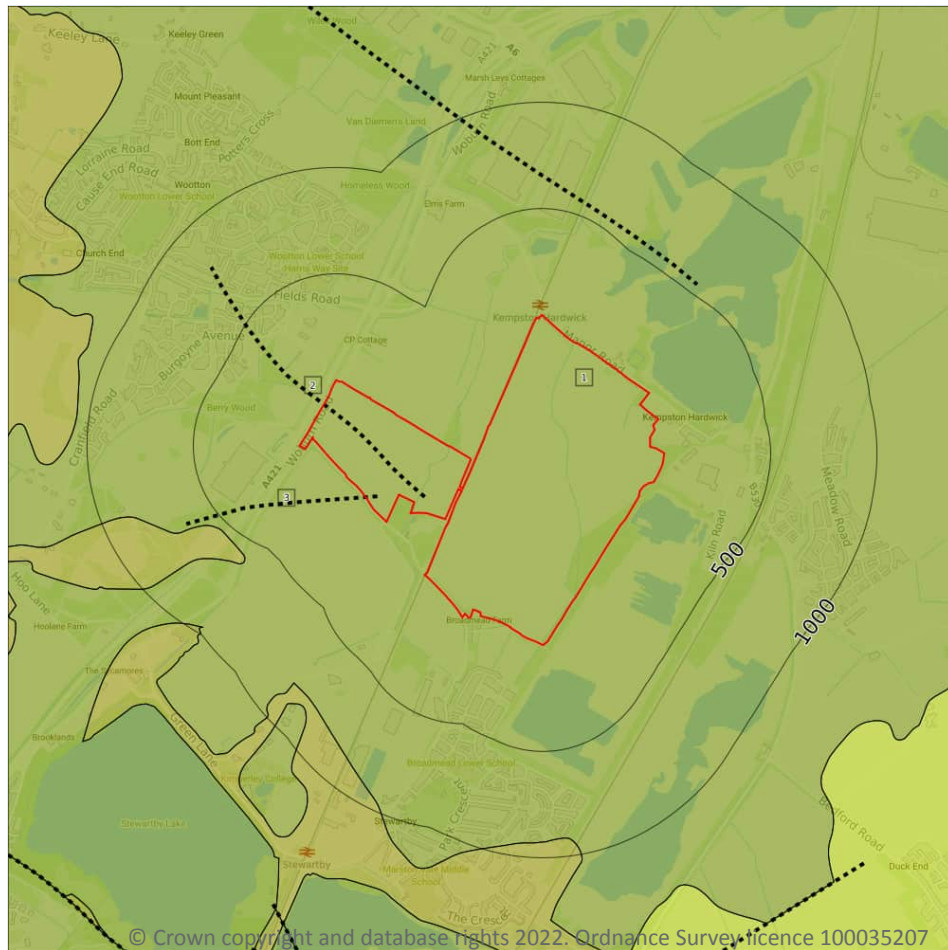
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

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

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

15.8 Bedrock geology (50k)

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 118**

ID	Location	LEX Code	Description	Rock age
1	On site	PET-MDST	PETERBOROUGH MEMBER - MUDSTONE	CALLOVIAN

This data is sourced from the British Geological Survey.



15.9 Bedrock permeability (50k)

Records within 50m

1

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

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

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

2

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

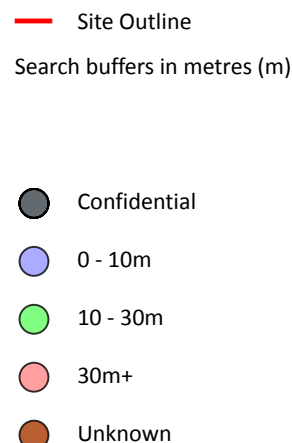
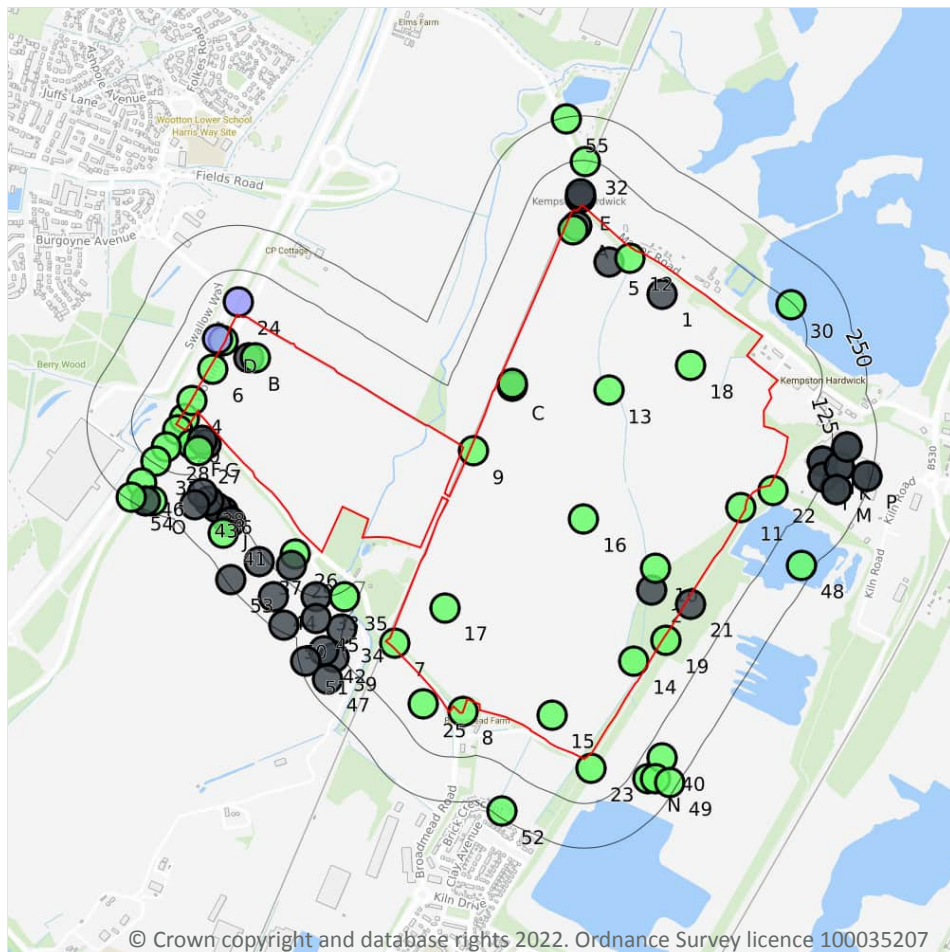
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 118**

ID	Location	Category	Description
2	On site	FAULT	Fault, inferred
3	On site	FAULT	Fault, inferred

This data is sourced from the British Geological Survey.



16 Boreholes



16.1 BGS Boreholes

Records within 250m

90

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

Features are displayed on the Boreholes map on **page 120**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	502830 244520	CORONATION PIT AREA 26	-	Y	N/A
2	On site	502800 243690	CORONATION PIT AREA 27	-	Y	N/A
3	On site	501490 244170	BERRY FARM WOOTTON 6	12.2	N	524879



ID	Location	Grid reference	Name	Length	Confidential	Web link
4	On site	501510 244220	BERRY FARM WOOTTON 5	12.5	N	524878
5	On site	502680 244610	CORONATION PIT AREA 25	-	Y	N/A
6	On site	501570 244310	BERRY FARM WOOTTON 3	10.2	N	524877
7	On site	502080 243540	ELSTOW 17	26.9	N	524619
8	On site	502270 243350	ELSTOW 15	27.4	N	524617
9	On site	502300 244080	ELSTOW 16	25.3	N	524618
10	On site	502810 243750	CORONATION PIT AREA 4	12.0	N	524761
11	On site	503050 243920	CORONATION PIT AREA 2	13.0	N	524759
12	On site	502740 244620	ELSTOW 12	23.5	N	524614
13	On site	502680 244250	ELSTOW 13	26.0	N	524615
14	On site	502750 243490	CORONATION PIT AREA 9/38	12.0	N	524763
15	On site	502520 243340	CORONATION PIT AREA 10/38	16.0	N	524764
16	On site	502610 243890	ELSTOW 14	27.1	N	524616
17	On site	502220 243640	LBC VICARAGE FARM & L FIELD 22	16.76	N	524382
18	On site	502910 244320	CORONATION PIT AREA 3	18.0	N	524760
A	On site	502590 244710	CORONATION PIT AREA 24	-	Y	N/A
A	On site	502580 244700	LBC STAVARTBY AND CORONATION 24	14.47	N	524408
B	On site	501670 244340	CORONATION PIT AREA 15	-	Y	N/A
B	On site	501690 244340	LBC STAVARTBY AND CORONATION 15	13.41	N	524405
C	On site	502410 244260	CORONATION PIT AREA 23	-	Y	N/A
C	On site	502410 244270	LBC STAVARTBY AND CORONATION 23	14.42	N	524407
D	5m NW	501600 244390	BERRY FARM WOOTTON 1	17.1	N	524876
19	8m SE	502840 243550	ELSTOW 5	27.3	N	524607
20	11m W	501470 244140	BERRY FARM WOOTTON 7	12.5	N	524880
21	14m SE	502910 243650	CORONATION PIT AREA X	-	Y	N/A
22	15m E	503140 243970	ELSTOW 4	27.6	N	524606
E	22m N	502600 244790	KEMPSTON HARDWICK 1/83	-	Y	N/A
E	22m N	502600 244790	KEMPSTON HARDWICK 3A	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
D	23m NW	501582 244394	A421 IMPROVEMENTS - 2ND PHASE TP58	2.5	N	18925610
E	31m N	502600 244800	KEMPSTON HARDWICK 2/83	-	Y	N/A
23	32m S	502630 243190	ELSTOW 6	27.4	N	524608
24	35m NW	501640 244497	A421 IMPROVEMENTS - 2ND PHASE TP59	2.5	N	18925611
F	42m W	501510 244100	LBC STEWARTBY L FIELD 1/73	28.96	N	524409
F	42m W	501510 244100	LBC STEWARTBY L FIELD 2/73	18.59	N	524410
G	42m W	501550 244100	STEWARTBY L FIELD 2/82	-	Y	N/A
G	43m W	501540 244110	L FIELD NW	-	Y	N/A
25	47m SW	502160 243370	LBC VICARAGE FARM & L FIELD 21	17.3	N	524381
26	56m W	501800 243790	GT.OUSE R A CEGB SITE INVESTIGATION 1	19.51	N	524592
27	69m W	501530 244080	LBC VICARAGE FARM & L FIELD 3/52	13.89	N	524368
28	69m W	501440 244090	BERRY FARM WOOTTON 8	12.5	N	524881
29	85m W	501790 243760	'L' FIELD LANDFILL O 1635	-	Y	N/A
H	106m E	503278 244050	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH9	-	Y	N/A
H	106m E	503278 244050	CORONATION BRICKWORKS KEMPTON HARDWICK 9	-	Y	N/A
30	119m NE	503190 244490	CORONATION PIT AREA 5	15.0	N	524762
31	119m W	501410 244050	BERRY FARM WOOTTON 9	12.5	N	524882
I	123m E	503281 244005	CORONATION BRICKWORKS KEMPTON HARDWICK 10	-	Y	N/A
I	123m E	503281 244005	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH10	-	Y	N/A
32	123m N	502615 244892	East West Rail Phase 2 CP2DKHOB_2D	19.86	N	20864544
33	127m SW	501860 243670	'L' FIELD LANDFILL O 1636	-	Y	N/A
34	129m SW	501930 243580	'L' FIELD LANDFILL O 1622	-	Y	N/A
J	130m W	501600 243910	'L' FIELD LANDFILL O 1640	-	Y	N/A
J	137m W	501610 243890	'L' FIELD LANDFILL O 1639	-	Y	N/A
J	138m W	501580 243920	'L' FIELD LANDFILL O 1641	-	Y	N/A
J	139m W	501620 243880	'L' FIELD LANDFILL O 1638	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
35	141m SW	501940 243670	LBC VICARAGE FARM & L FIELD 2/52	15.49	N	524367
36	143m W	501560 243940	'L' FIELD LANDFILL O 1642	-	Y	N/A
37	143m W	501700 243770	'L' FIELD LANDFILL O 1634	-	Y	N/A
38	143m W	501540 243960	'L' FIELD LANDFILL O 1643	-	Y	N/A
39	152m SW	501910 243500	'L' FIELD LANDFILL O 1623	-	Y	N/A
K	157m E	503327 244034	CORONATION BRICKWORKS KEMPTON HARDWICK 7	-	Y	N/A
K	157m E	503327 244034	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH7	-	Y	N/A
L	169m E	503348 244090	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH8	-	Y	N/A
L	169m E	503348 244090	CORONATION BRICKWORKS KEMPTON HARDWICK 8	-	Y	N/A
M	171m E	503319 243972	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH6	-	Y	N/A
M	171m E	503319 243972	CORONATION BRICKWORKS KEMPTON HARDWICK 6	-	Y	N/A
N	172m S	502790 243160	CORONATION PIT AREA 7/55	14.0	N	524776
40	174m SE	502830 243220	CORONATION PIT AREA 5/55	14.0	N	524774
41	174m W	501600 243850	LBC VICARAGE FARM & L FIELD 6/52	21.11	N	524371
42	177m SW	501880 243520	'L' FIELD LANDFILL O 1624	-	Y	N/A
43	178m W	501520 243930	'L' FIELD LANDFILL O 1644	-	Y	N/A
44	185m SW	501740 243670	'L' FIELD LANDFILL O 1637	-	Y	N/A
45	186m SW	501860 243610	'L' FIELD LANDFILL O 1621	-	Y	N/A
N	189m SE	502810 243160	CORONATION PIT AREA 11/38	14.0	N	524765
46	191m W	501370 243990	BERRY FARM WOOTTON 10	14.0	N	524883
47	196m SW	501890 243440	'L' FIELD LANDFILL O 1606	-	Y	N/A
48	215m E	503220 243760	CORONATION PIT AREA 1	18.0	N	524758
O	219m W	501400 243940	LBC STAVARTBY AND CORONATION 14	17.37	N	524404
O	228m W	501380 243940	CORONATION PIT AREA 14	-	Y	N/A
49	229m SE	502850 243150	CORONATION PIT AREA 8/55	15.0	N	524777

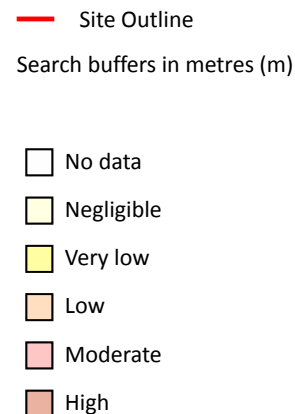
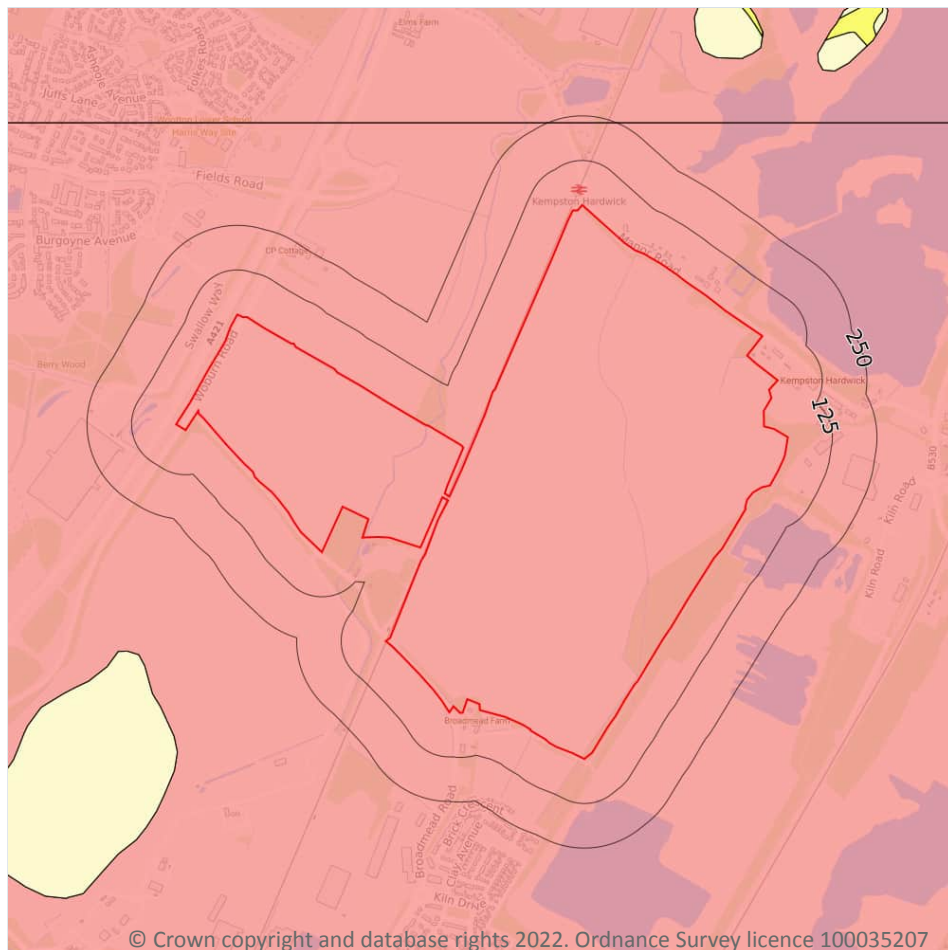


ID	Location	Grid reference	Name	Length	Confidential	Web link
50	231m SW	501770 243590	'L' FIELD LANDFILL O 1620	-	Y	N/A
51	232m SW	501830 243490	'L' FIELD LANDFILL O 1607	-	Y	N/A
52	233m S	502380 243070	CORONATION PIT AREA 13/38	17.0	N	524767
53	237m W	501620 243720	'L' FIELD LANDFILL O 1633	-	Y	N/A
P	237m E	503403 244009	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH2	-	Y	N/A
P	237m E	503403 244009	CORONATION BRICKWORKS KEMPTON HARDWICK 2	-	Y	N/A
54	241m W	501340 243950	BERRY FARM WOOTTON 11	14.5	N	524884
55	245m N	502560 245010	SUSSEX & DORKING UNITED BRICK CO K/G	14.61	N	523650

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



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17.1 Shrink swell clays

Records within 50m

1

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

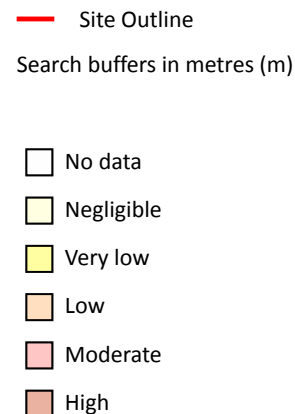
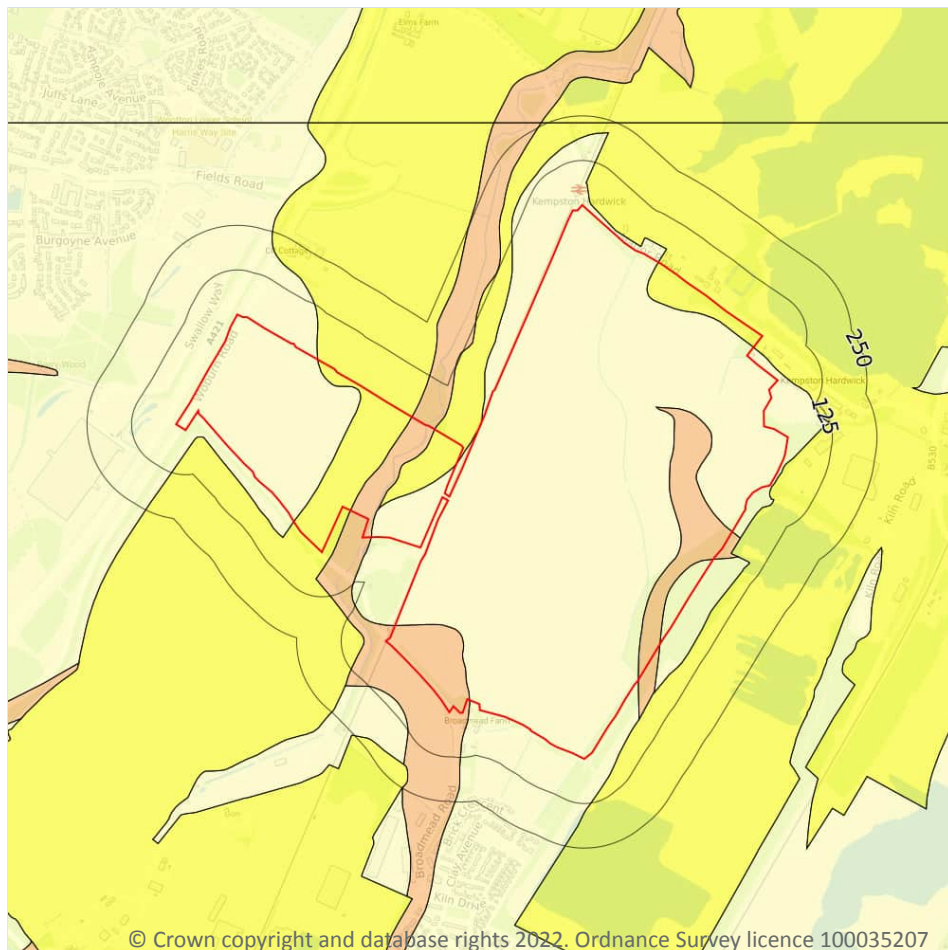
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 125**

Location	Hazard rating	Details
On site	Moderate	Ground conditions predominantly high plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

3

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

Features are displayed on the Natural ground subsidence - Running sands map on **page 126**

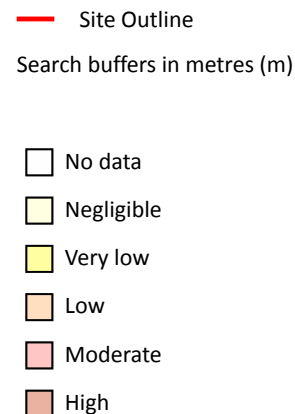
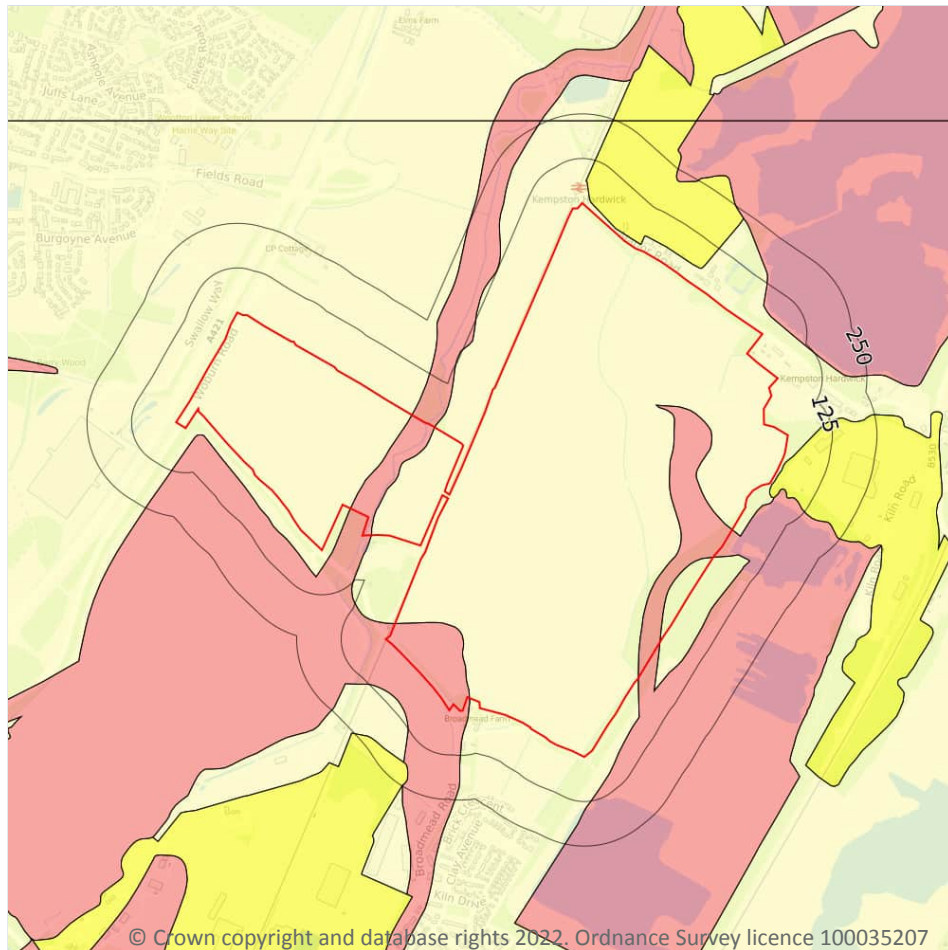
Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

4

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

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 128**

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

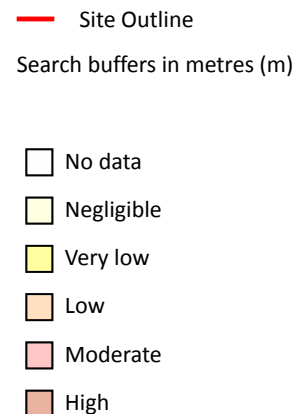
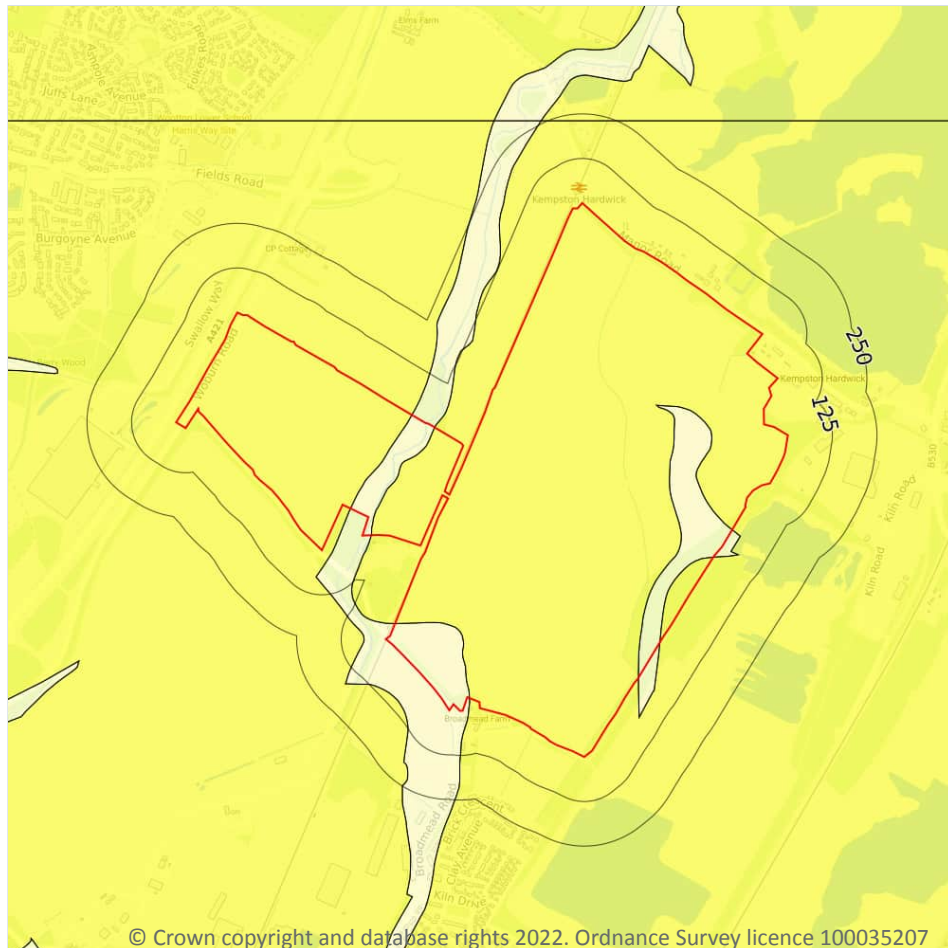


Location	Hazard rating	Details
6m E	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.
9m N	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

2

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

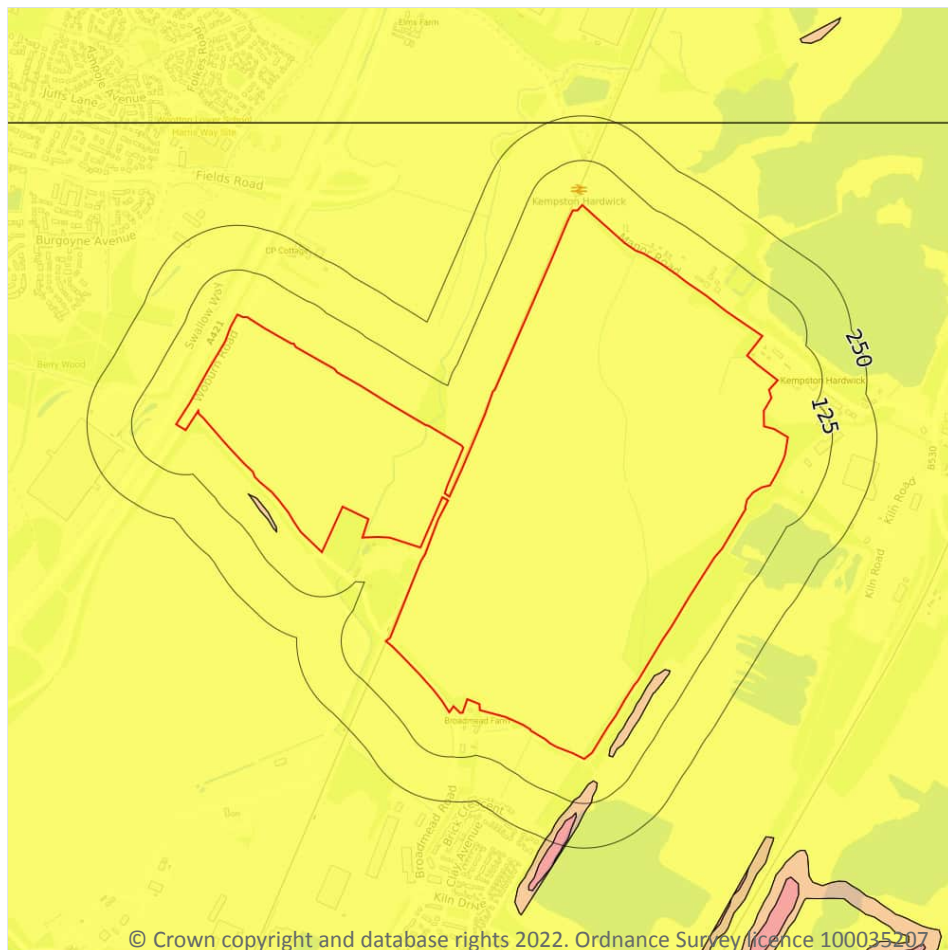
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 130**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



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

17.5 Landslides

Records within 50m

3

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 131**

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.

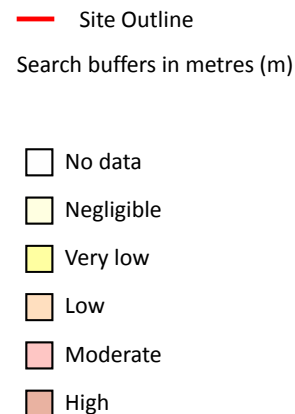
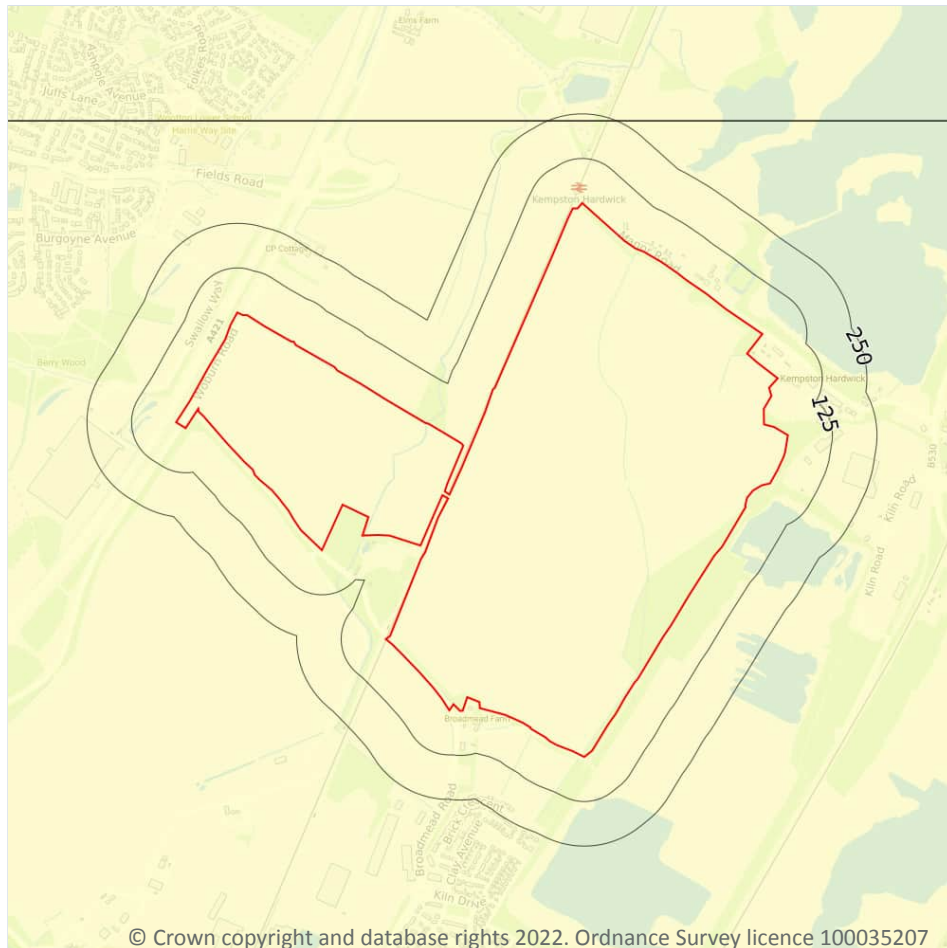


Location	Hazard rating	Details
31m SE	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.
41m W	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 133**

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

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



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

18.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

6

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 135**

ID	Location	Details	Description
1	On site	Name: Coronation Address: Stewartby, BEDFORD, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
L	232m E	Name: Coronation Brick Works Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
15	235m SE	Name: Broadmead Address: Stewartby, BEDFORD, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
N	298m NE	Name: Hardwick Hill Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
21	320m NE	Name: Kempston Hardwick (North) Address: Kempston Hardwick, BEDFORD, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority



ID	Location	Details	Description
Y	430m SW	Name: Stewartby Brick Field Address: Stewartby, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	76
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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 135**

ID	Location	Land Use	Year of mapping	Mapping scale
2	On site	Cuttings	1882	1:10560
3	On site	Ponds	1882	1:10560
4	On site	Pond	1938	1:10560
A	On site	Pond	1900	1:10560
A	On site	Pond	1938	1:10560
A	On site	Pond	1989	1:10000
A	On site	Pond	1959	1:10560
A	On site	Pond	1980	1:10000
A	On site	Pond	1948	1:10560
A	On site	Pond	1924	1:10560
B	On site	Pond	1900	1:10560
B	On site	Pond	1882	1:10560
B	On site	Pond	1938	1:10560
B	On site	Pond	1989	1:10000
B	On site	Pond	1959	1:10560
B	On site	Pond	1980	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
B	On site	Pond	1948	1:10560
B	On site	Pond	1924	1:10560
C	On site	Pond	1900	1:10560
C	On site	Pond	1882	1:10560
C	On site	Pond	1938	1:10560
C	On site	Pond	1959	1:10560
C	On site	Pond	1948	1:10560
C	On site	Pond	1924	1:10560
D	On site	Pond	1938	1:10560
D	On site	Pond	1989	1:10000
D	On site	Pond	1959	1:10560
D	On site	Pond	1980	1:10000
D	On site	Pond	1948	1:10560
E	On site	Brick Works	1948	1:10560
F	8m N	Brick Works	1948	1:10560
7	8m E	Brick Works	1980	1:10000
G	9m N	Bricks Works	1938	1:10560
G	9m N	Bricks Works	1938	1:10560
F	10m N	Brick Works	1989	1:10000
F	10m N	Brick Works	1980	1:10000
E	17m E	Unspecified Pit	1948	1:10560
H	17m E	Pond	1948	1:10560
8	23m E	Clay Pit	1959	1:10560
H	23m E	Ponds	1959	1:10560
I	28m NE	Unspecified Disused Pit	1989	1:10000
I	28m NE	Unspecified Disused Pit	1980	1:10000
J	29m E	Unspecified Disused Pit	1989	1:10000
J	29m E	Unspecified Disused Pit	1980	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
K	33m W	Unspecified Disused Pit	1989	1:10000
K	33m W	Unspecified Disused Pit	1980	1:10000
L	40m E	Ponds	1989	1:10000
L	40m E	Ponds	1980	1:10000
M	45m E	Bricks Works	1938	1:10560
M	45m E	Bricks Works	1938	1:10560
11	47m NE	Pond	1959	1:10560
12	62m E	Unspecified Heap	1948	1:10560
N	65m NE	Water Body	1989	1:10000
N	65m NE	Water Body	1980	1:10000
L	101m E	Pond	1948	1:10560
O	106m NE	Pond	1882	1:10560
O	107m NE	Pond	1959	1:10560
O	110m NE	Pond	1948	1:10560
P	117m E	Pond	1900	1:10560
P	117m E	Pond	1882	1:10560
P	117m E	Pond	1948	1:10560
P	117m E	Pond	1959	1:10560
L	119m E	Pond	1959	1:10560
P	121m E	Pond	1924	1:10560
P	121m E	Pond	1938	1:10560
13	130m NE	Unspecified Heap	1948	1:10560
Q	185m N	Pond	1948	1:10560
R	199m NE	Pond	1959	1:10560
S	235m SW	Unspecified Ground Workings	1920	1:10560
T	236m SW	Brick Works	1989	1:10000
T	236m SW	Brick Works	1980	1:10000
U	245m SW	Sewage Works	1989	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
U	245m SW	Sewage Works	1980	1:10000
V	247m N	Brick Works	1971	1:10000
V	247m N	Brick Works	1987	1:10000
V	247m N	Brick Works	1978	1:10000

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	0
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Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	7
----------------------------	----------

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 135**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
5	On site	Stewartby	Clay	Surface mineral working	Refused	1957
6	On site	Coronation	Clay	Surface mineral working	Valid	17/7/52
9	29m NE	Hardwick Hill	Clay	Surface mineral working	Valid	31/07/52
10	31m NE	Hardwick Hill	Clay	Surface mineral working	Valid	10/09/53
14	205m SW	Stewartby	Clay	Surface mineral working	Valid	17/7/52
17	280m E	Hardwick Hill	Clay	Surface mineral working	Refused	Not available
30	483m S	Coronation	Clay	Surface mineral working	Valid	27/12/62

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
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Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

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

This data is sourced from Groundsure.

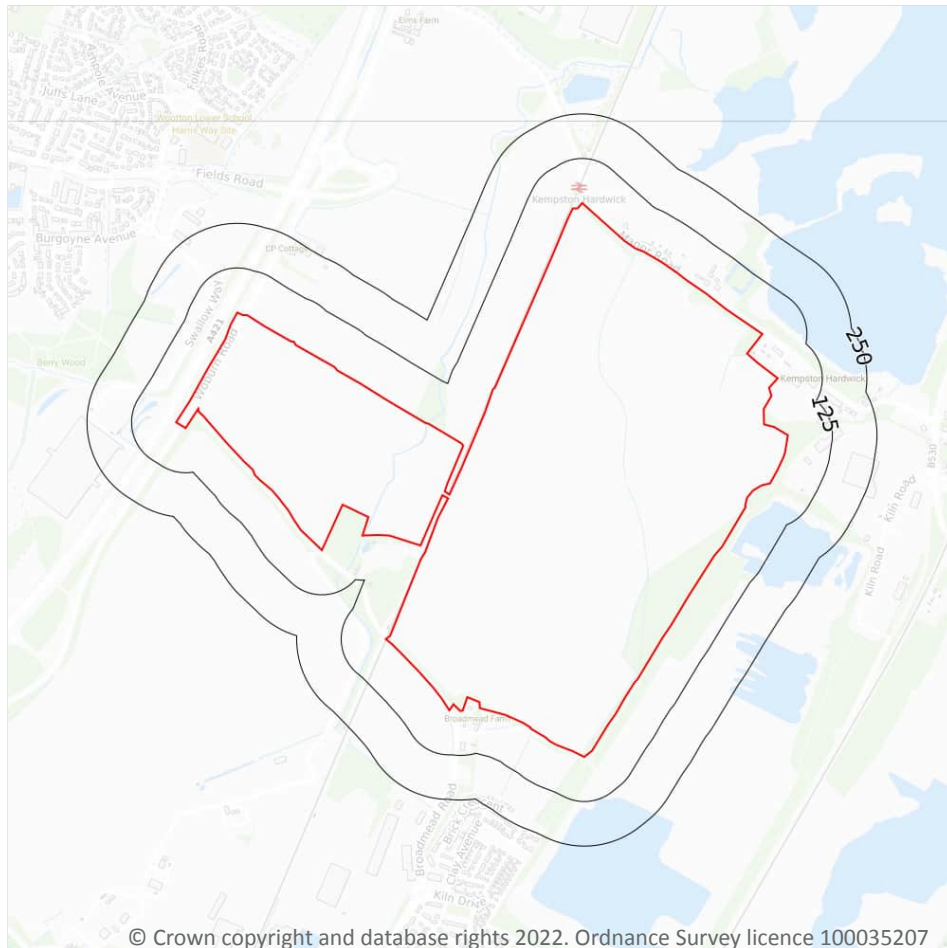
18.13 Clay mining

Records on site	0
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Generalised areas that may be affected by kaolin and ball clay extraction.

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

19 Radon



— Site Outline
Search buffers in metres (m)

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

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 143**

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

58

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 - 2.2 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	3.0 - 6.0 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 - 2.2 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	3.0 - 6.0 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
17m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
33m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
33m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
38m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

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

This data is sourced from the British Geological Survey.



20.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

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

This data is sourced from the British Geological Survey.



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

20

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 149**

Location	Land Use	Year of mapping	Mapping scale
0m E	Railway Sidings	1980	10000
2m E	Tramway Sidings	1959	10560
3m SW	Railway Sidings	1993	2500
4m SW	Railway Sidings	1974	2500
9m E	Railway Sidings	1979	2500
12m E	Railway Sidings	1968	2500
12m N	Railway Sidings	1959	10560
122m E	Railway Sidings	1959	10560
129m SW	Railway Sidings	1948	10560
129m SW	Railway Sidings	1900	10560
129m SW	Railway Sidings	1882	10560
142m E	Railway Sidings	1948	10560
170m E	Railway Sidings	1979	2500
172m E	Railway Sidings	1989	10000
226m SW	Railway Sidings	1989	10000
226m SW	Railway Sidings	1980	10000
235m E	Railway Sidings	1968	2500



Location	Land Use	Year of mapping	Mapping scale
236m S	Railway Sidings	1974	2500
239m N	Railway Sidings	1959	10560
243m N	Railway Sidings	1968	2500

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

12

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 149**

Location	Name	Type
On site	Marston Vale Line	rail
On site	Marston Vale Line	rail
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
4m SW		rail



Location	Name	Type
5m NW	Not given	Multi Track
5m N	Not given	Multi Track
9m N	Not given	Multi Track
18m SW	Forder's Sidings	rail
75m SW	Forder's Sidings	rail
206m N	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

0

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m

0

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

This data is sourced from HS2 Ltd.



Data providers

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Parcel A,

Order Details

Date: 30/11/2022

Your ref: Parcel_A

Our Ref: GS-9231538

Site Details

Location: 503259 245498

Area: 97.27 ha

Authority: [Bedford Council \(Unitary\)](#)



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Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

N/A: >10ha

groundsure.com/insightuserguide

Contact us with any questions at:

info@groundsure.com

08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
13	1.1	Historical industrial land uses	30	8	45	44	-
18	1.2	Historical tanks	0	0	2	20	-
19	1.3	Historical energy features	2	3	0	16	-
20	1.4	Historical petrol stations	0	0	0	0	-
21	1.5	Historical garages	0	0	0	0	-
21	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
22	2.1	Historical industrial land uses	37	11	56	54	-
28	2.2	Historical tanks	0	0	2	36	-
30	2.3	Historical energy features	3	6	0	35	-
32	2.4	Historical petrol stations	0	0	0	0	-
32	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
33	3.1	Active or recent landfill	0	0	1	0	-
34	3.2	Historical landfill (BGS records)	0	0	0	0	-
34	3.3	Historical landfill (LA/mapping records)	0	0	0	1	-
34	3.4	Historical landfill (EA/NRW records)	1	0	1	0	-
35	3.5	Historical waste sites	0	0	0	3	-
36	3.6	Licensed waste sites	0	0	1	5	-
38	3.7	Waste exemptions	0	0	2	11	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
40	4.1	Recent industrial land uses	3	3	21	-	-
42	4.2	Current or recent petrol stations	0	0	0	0	-
42	4.3	Electricity cables	0	0	0	0	-
42	4.4	Gas pipelines	0	0	0	0	-
43	4.5	Sites determined as Contaminated Land	0	0	0	0	-



43	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
43	4.7	Regulated explosive sites	0	0	0	0	-
43	4.8	<u>Hazardous substance storage/usage</u>	0	0	1	0	-
44	4.9	<u>Historical licensed industrial activities (IPC)</u>	4	0	0	0	-
44	4.10	<u>Licensed industrial activities (Part A(1))</u>	0	0	0	3	-
45	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	1	1	2	4	-
46	4.12	Radioactive Substance Authorisations	0	0	0	0	-
46	4.13	<u>Licensed Discharges to controlled waters</u>	2	25	0	5	-
51	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
51	4.15	<u>Pollutant release to public sewer</u>	0	0	0	1	-
52	4.16	List 1 Dangerous Substances	0	0	0	0	-
52	4.17	<u>List 2 Dangerous Substances</u>	0	0	0	2	-
52	4.18	<u>Pollution Incidents (EA/NRW)</u>	1	1	1	3	-
53	4.19	Pollution inventory substances	0	0	0	0	-
54	4.20	Pollution inventory waste transfers	0	0	0	0	-
54	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
55	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
57	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
58	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
63	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
63	5.5	Groundwater vulnerability- local information	None (within 0m)				
64	5.6	<u>Groundwater abstractions</u>	1	0	1	0	0
65	5.7	<u>Surface water abstractions</u>	3	1	0	0	6
67	5.8	Potable abstractions	0	0	0	0	0
68	5.9	Source Protection Zones	0	0	0	0	-
68	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
69	6.1	<u>Water Network (OS MasterMap)</u>	19	5	21	-	-



73	<u>6.2</u>	<u>Surface water features</u>	1	10	13	-	-
73	<u>6.3</u>	<u>WFD Surface water body catchments</u>	2	-	-	-	-
74	<u>6.4</u>	<u>WFD Surface water bodies</u>	1	0	0	-	-
74	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
75	<u>7.1</u>	<u>Risk of flooding from rivers and the sea</u>	High (within 50m)				
76	7.2	Historical Flood Events	0	0	0	-	-
76	7.3	Flood Defences	0	0	0	-	-
76	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
76	7.5	Flood Storage Areas	0	0	0	-	-
77	<u>7.6</u>	<u>Flood Zone 2</u>	Identified (within 50m)				
78	<u>7.7</u>	<u>Flood Zone 3</u>	Identified (within 50m)				
Page	Section	Surface water flooding					
79	<u>8.1</u>	<u>Surface water flooding</u>	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding					
81	<u>9.1</u>	<u>Groundwater flooding</u>	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
82	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
82	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
82	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
82	10.4	Special Protection Areas (SPA)	0	0	0	0	0
83	10.5	National Nature Reserves (NNR)	0	0	0	0	0
83	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
83	10.7	Designated Ancient Woodland	0	0	0	0	0
83	10.8	Biosphere Reserves	0	0	0	0	0
84	10.9	Forest Parks	0	0	0	0	0
84	10.10	Marine Conservation Zones	0	0	0	0	0
84	10.11	Green Belt	0	0	0	0	0
84	10.12	Proposed Ramsar sites	0	0	0	0	0



84	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
85	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
85	10.15	Nitrate Sensitive Areas	0	0	0	0	0
85	10.16	<u>Nitrate Vulnerable Zones</u>	4	0	4	0	3
87	10.17	<u>SSSI Impact Risk Zones</u>	2	-	-	-	-
88	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
89	11.1	World Heritage Sites	0	0	0	-	-
90	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
90	11.3	National Parks	0	0	0	-	-
90	11.4	Listed Buildings	0	0	0	-	-
90	11.5	Conservation Areas	0	0	0	-	-
91	11.6	<u>Scheduled Ancient Monuments</u>	0	0	1	-	-
91	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
92	12.1	<u>Agricultural Land Classification</u>	Grade 2 (within 250m)				
93	12.2	Open Access Land	0	0	0	-	-
94	12.3	<u>Tree Felling Licences</u>	0	0	1	-	-
94	12.4	Environmental Stewardship Schemes	0	0	0	-	-
94	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
95	13.1	<u>Priority Habitat Inventory</u>	6	1	9	-	-
96	13.2	Habitat Networks	0	0	0	-	-
96	13.3	<u>Open Mosaic Habitat</u>	1	0	2	-	-
97	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
98	14.1	<u>10k Availability</u>	Identified (within 500m)				
99	14.2	<u>Artificial and made ground (10k)</u>	5	5	2	2	-
101	14.3	<u>Superficial geology (10k)</u>	7	0	4	4	-

102	14.4	Landslip (10k)	0	0	0	0	-
103	14.5	<u>Bedrock geology (10k)</u>	2	0	0	0	-
104	14.6	<u>Bedrock faults and other linear features (10k)</u>	2	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
105	15.1	<u>50k Availability</u>	Identified (within 500m)				
106	15.2	<u>Artificial and made ground (50k)</u>	2	2	2	0	-
107	15.3	<u>Artificial ground permeability (50k)</u>	4	0	-	-	-
108	15.4	<u>Superficial geology (50k)</u>	7	0	1	1	-
109	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
110	15.6	Landslip (50k)	0	0	0	0	-
110	15.7	Landslip permeability (50k)	None (within 50m)				
111	15.8	<u>Bedrock geology (50k)</u>	1	0	0	0	-
112	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
112	15.10	<u>Bedrock faults and other linear features (50k)</u>	1	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
113	16.1	<u>BGS Boreholes</u>	24	16	28	-	-
Page	Section	Natural ground subsidence					
117	17.1	<u>Shrink swell clays</u>	Moderate (within 50m)				
119	17.2	<u>Running sands</u>	Low (within 50m)				
121	17.3	<u>Compressible deposits</u>	Moderate (within 50m)				
123	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
124	17.5	<u>Landslides</u>	Low (within 50m)				
126	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
128	18.1	Natural cavities	0	0	0	0	-
129	18.2	<u>BritPits</u>	2	0	5	3	-
130	18.3	<u>Surface ground workings</u>	39	13	55	-	-
135	18.4	Underground workings	0	0	0	0	0
135	18.5	<u>Historical Mineral Planning Areas</u>	2	2	2	2	-



135	18.6	Non-coal mining	0	0	0	0	0
136	18.7	Mining cavities	0	0	0	0	0
136	18.8	JPB mining areas	None (within 0m)				
136	18.9	Coal mining	None (within 0m)				
136	18.10	Brine areas	None (within 0m)				
136	18.11	Gypsum areas	None (within 0m)				
137	18.12	Tin mining	None (within 0m)				
137	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
<u>138</u>	<u>19.1</u>	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
<u>139</u>	<u>20.1</u>	<u>BGS Estimated Background Soil Chemistry</u>	31	3	-	-	-
141	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
141	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
142	21.1	Underground railways (London)	0	0	0	-	-
142	21.2	Underground railways (Non-London)	0	0	0	-	-
143	21.3	Railway tunnels	0	0	0	-	-
<u>143</u>	<u>21.4</u>	<u>Historical railway and tunnel features</u>	4	0	20	-	-
144	21.5	Royal Mail tunnels	0	0	0	-	-
144	21.6	Historical railways	0	0	0	-	-
<u>144</u>	<u>21.7</u>	<u>Railways</u>	0	12	23	-	-
146	21.8	Crossrail 1	0	0	0	0	-
146	21.9	Crossrail 2	0	0	0	0	-
146	21.10	HS2	0	0	0	0	-

Recent aerial photograph

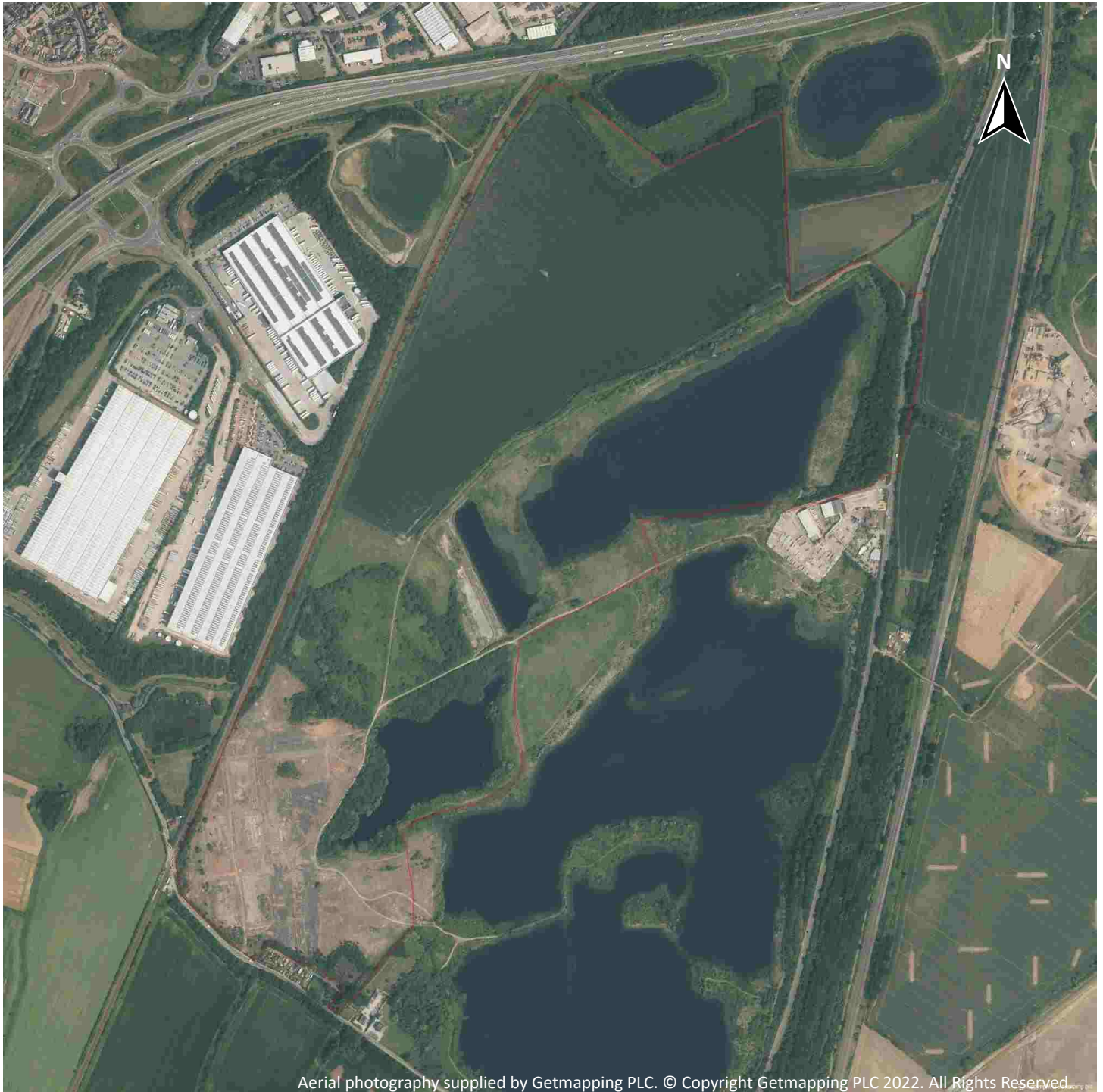


Capture Date: 07/04/2020

Site Area: 97.27ha



Recent site history - 2017 aerial photograph



Capture Date: 21/06/2017

Site Area: 97.27ha



Recent site history - 2006 aerial photograph



Capture Date: 01/07/2006

Site Area: 97.27ha



Recent site history - 2000 aerial photograph



Capture Date: 10/06/2000

Site Area: 97.27ha



Recent site history - 1999 aerial photograph



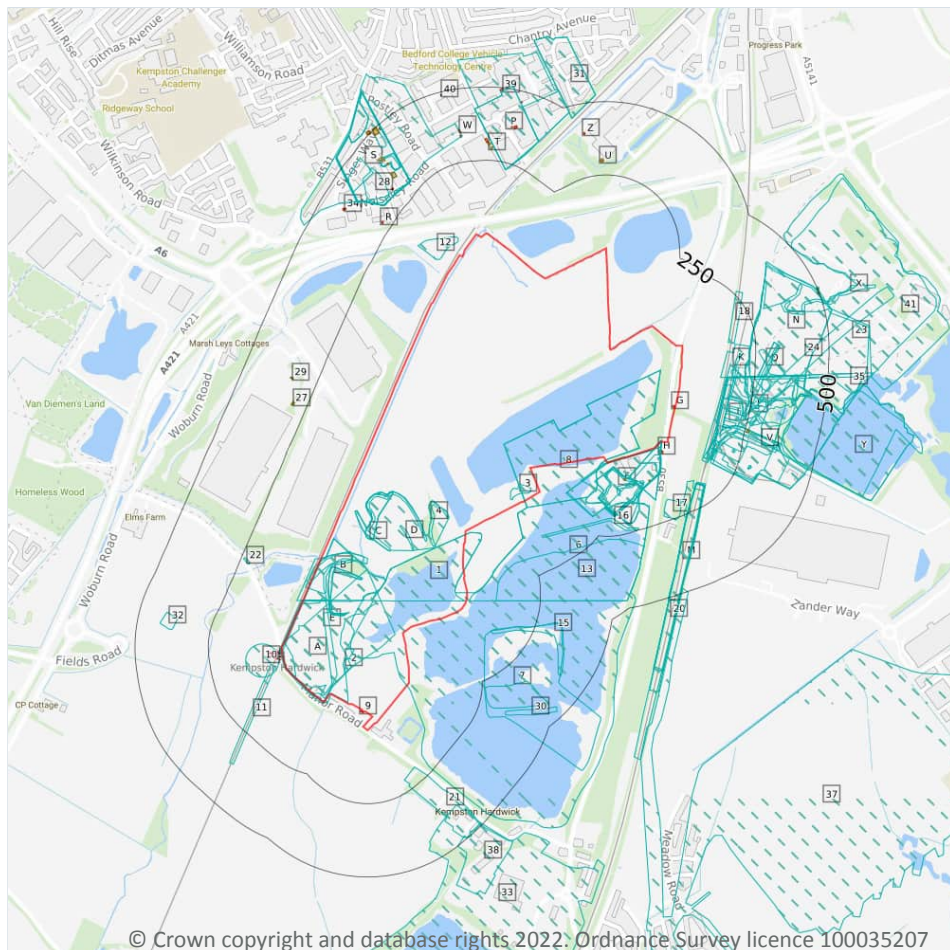
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Capture Date: 01/05/1999

Site Area: 97.27ha



1 Past land use



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

1.1 Historical industrial land uses

Records within 500m

127

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 13**

ID	Location	Land use	Dates present	Group ID
1	On site	Clay Pit	1978	2048209



ID	Location	Land use	Dates present	Group ID
2	On site	Unspecified Heap	1948	2053933
3	On site	Unspecified Heap	1971	2053935
4	On site	Unspecified Ground Workings	1948	2060261
5	On site	Bricks Works	1938	2094376
6	On site	Clay Pit	1978	2102834
7	On site	Unspecified Disused Pit	1980 - 1989	2114565
8	On site	Clay Pit	1987	2114637
A	On site	Unspecified Works	1959	2046254
A	On site	Railway Sidings	1959	2087313
A	On site	Brick Works	1948	2121667
B	On site	Unspecified Heap	1959	2053934
B	On site	Railway Sidings	1948	2065517
B	On site	Unspecified Ground Workings	1948	2076602
B	On site	Railway Sidings	1971	2086766
B	On site	Railway Sidings	1959	2092166
B	On site	Brick Works	1971	2107269
C	On site	Unspecified Ground Workings	1948	2060260
C	On site	Unspecified Heap	1978	2075768
C	On site	Unspecified Heap	1971	2108128
C	On site	Unspecified Heap	1987	2109310
D	On site	Unspecified Ground Workings	1948	2060269
D	On site	Unspecified Heap	1959	2121811
E	On site	Brick Works	1978 - 1989	2064290
E	On site	Unspecified Ground Workings	1959	2096069
F	On site	Unspecified Works	1971	2068043
F	On site	Brick Works	1924	2072027
F	On site	Brick Works	1948	2080190
F	On site	Bricks Works	1938	2082047



ID	Location	Land use	Dates present	Group ID
F	On site	Unspecified Works	1959	2103920
10	15m SW	Railway Station	1980 - 1989	2083773
F	19m E	Unspecified Pit	1938	2077132
F	22m E	Brick Works	1900	2082454
F	25m E	Unspecified Ground Workings	1924	2060263
11	34m SW	Cuttings	1882	2061444
F	35m E	Unspecified Works	1987	2115196
F	35m E	Unspecified Works	1978	2120101
12	36m N	Unspecified Pit	1987	2041044
F	87m E	Unspecified Heap	1948	2053936
F	88m E	Railway Sidings	1924	2062189
13	99m S	Clay Pit	1971	2106481
14	122m S	Clay Pit	1959	2048205
15	125m S	Unspecified Pit	1948	2041043
I	130m E	Railway Sidings	1959	2080451
16	133m SE	Unspecified Ground Workings	1971	2060262
J	134m E	Railway Sidings	1971	2082587
K	136m E	Railway Sidings	1938	2072099
J	138m E	Railway Sidings	1948	2074335
J	141m E	Railway Sidings	1938	2119917
J	145m E	Railway Sidings	1900 - 1924	2073062
L	145m E	Brick Works	1900 - 1924	2096976
J	145m E	Unspecified Works	1959	2046268
L	149m E	Brick Works	1948	2067822
17	151m E	Old Clay Pits	1882	2042509
L	151m E	Bricks Works	1938	2104510
J	154m E	Brick Works	1971	2122200
J	156m E	Unspecified Disused Works	1978	2053703



ID	Location	Land use	Dates present	Group ID
18	157m NE	Cuttings	1882	2061441
I	168m E	Unspecified Heap	1900	2110403
M	170m E	Cuttings	1938 - 1948	2074736
M	170m E	Cuttings	1924	2067323
M	170m E	Cuttings	1900	2075652
19	173m E	Cuttings	1959 - 1971	2094316
M	173m E	Cuttings	1978 - 1989	2107952
K	175m E	Railway Sidings	1924	2092438
20	184m E	Cuttings	1882	2095329
21	199m S	Unspecified Works	1980 - 1989	2086450
N	215m E	Clay Pit	1924 - 1938	2103361
22	216m SW	Smithy	1920	2059241
N	217m E	Clay Pit	1938	2116530
I	218m E	Unspecified Ground Workings	1938	2101524
I	221m E	Unspecified Ground Workings	1924	2103858
J	221m E	Chimneys	1971	2055369
J	221m E	Chimney	1978	2058681
23	225m E	Unspecified Ground Workings	1948	2084382
24	226m E	Unspecified Ground Workings	1959	2114018
O	227m N	Industrial Estate	1987	2051261
P	227m N	Unspecified Warehouses	1971	2072338
P	227m N	Unspecified Warehouses	1978	2123353
L	232m E	Unspecified Pit	1900	2041042
I	234m E	Tramway Sidings	1924	2052184
I	237m E	Unspecified Heaps	1948	2049731
I	246m E	Unspecified Ground Workings	1924	2067018
25	251m E	Wind Pump	1924	2059025
Q	258m E	Tramway Sidings	1938 - 1948	2113935

ID	Location	Land use	Dates present	Group ID
Q	260m E	Unspecified Pit	1971	2041041
26	261m S	Unspecified Pit	1948	2041046
Q	263m E	Tramway Sidings	1938	2101872
Q	271m E	Tramway Sidings	1924	2064424
I	277m E	Unspecified Heap	1948	2053941
S	287m N	Sewage Works	1938 - 1948	2115997
S	287m N	Unspecified Works	1959	2046255
S	287m N	Sewage Works	1978	2077974
S	287m N	Sewage Works	1971	2118893
J	287m E	Chimney	1959	2123332
S	288m N	Sewage Works	1924	2095398
J	289m E	Chimneys	1971	2055370
J	289m E	Chimney	1978	2071047
S	291m N	Industrial Estate	1987	2099571
I	304m E	Unspecified Heap	1971	2053942
28	314m N	Refuse Heap	1971	2063107
V	320m E	Chimney	1959	2114823
V	322m E	Chimney	1978	2116315
S	335m N	Filter Beds	1978	2050536
30	344m S	Unspecified Heap	1948	2053932
S	345m N	Filter Beds	1978	2050537
S	345m N	Unspecified Tanks	1959 - 1971	2074529
S	346m N	Unspecified Tanks	1948	2085539
31	359m N	Unspecified Works	1978	2111805
X	365m NE	Unspecified Ground Workings	1971	2067019
32	368m SW	Cemetery	1920	2047446
Y	380m E	Unspecified Disused Pit	1987	2097301
Y	380m E	Unspecified Disused Pit	1978	2117563

ID	Location	Land use	Dates present	Group ID
Y	380m E	Clay Pit	1971	2048213
I	385m E	Unspecified Ground Workings	1948	2079812
33	391m S	Unspecified Works	1959	2122589
AA	407m N	Industrial Estate	1987	2067243
S	431m N	Unspecified Tanks	1924	2054907
35	434m E	Unspecified Heap	1948	2053940
36	458m N	Engineering Works	1971	2059808
37	485m SE	Railway Sidings	1948	2073425
38	488m S	Bricks Works	1938	2081316
X	492m NE	Unspecified Tanks	1938 - 1948	2121122
X	494m NE	Unspecified Tanks	1938	2090192
X	495m NE	Unspecified Tanks	1924	2075677
X	496m NE	Unspecified Tanks	1924 - 1948	2076739
41	500m NE	Unspecified Pit	1959	2041039

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

22

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
F	69m E	Unspecified Tank	1997	343516
F	98m E	Unspecified Tank	1926	343513
J	256m E	Tanks	1926	348133
T	289m N	Unspecified Tank	1989 - 1994	354497



ID	Location	Land use	Dates present	Group ID
27	294m W	Unspecified Tank	1968 - 1993	353940
U	295m NE	Unspecified Tank	1997	343512
U	299m NE	Unspecified Tank	1996 - 1997	350508
T	302m N	Unspecified Tank	1994	356006
T	304m N	Unspecified Tank	1989 - 1990	351002
29	329m NW	Tanks	1968 - 1993	352680
S	336m N	Unspecified Tank	1968	349764
W	350m N	Tanks	1983 - 1990	354114
S	382m N	Unspecified Tank	1968	343519
S	399m N	Unspecified Tank	1986 - 1990	352896
S	478m N	Tanks	1968 - 1990	350226
S	479m N	Tanks	1966 - 1971	349951
X	495m NE	Tanks	1926	348131
S	497m N	Tanks	1968	355663
X	497m NE	Tanks	1926	348132
S	497m N	Tanks	1966 - 1971	349835
S	498m N	Tanks	1986 - 1990	353793
S	499m N	Tanks	1926	356320

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

21

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

Features are displayed on the Past land use map on **page 13**



ID	Location	Land use	Dates present	Group ID
G	On site	Electricity Substation	1997	225225
G	On site	Electricity Substation	1991	230609
9	0m SW	Electricity Substation	1968 - 1993	234047
H	17m E	Electricity Substation	1968 - 1997	233414
H	23m E	Electricity Substation	1991	225224
R	279m N	Electricity Substation	1990	228752
R	280m N	Electricity Substation	1993	227886
T	310m N	Electricity Substation	1989 - 1994	235694
S	318m N	Electricity Substation	1990 - 1993	229696
W	335m N	Electricity Substation	1990 - 1994	231288
P	371m N	Electricity Substation	1976	236847
P	371m N	Electricity Substation	1983 - 1990	238681
P	371m N	Electricity Substation	1994	225273
Z	395m N	Electricity Substation	1997	228579
Z	397m N	Electricity Substation	1996	228450
34	411m NW	Electricity Substation	1990 - 1993	238099
AA	459m NW	Electricity Substation	1986 - 1993	231736
O	460m N	Electricity Substation	1994	225272
S	483m N	Electricity Substation	1984 - 1991	233924
39	488m N	Electricity Substation	1976 - 1994	232307
40	488m N	Electricity Substation	1994	225274

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

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



This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

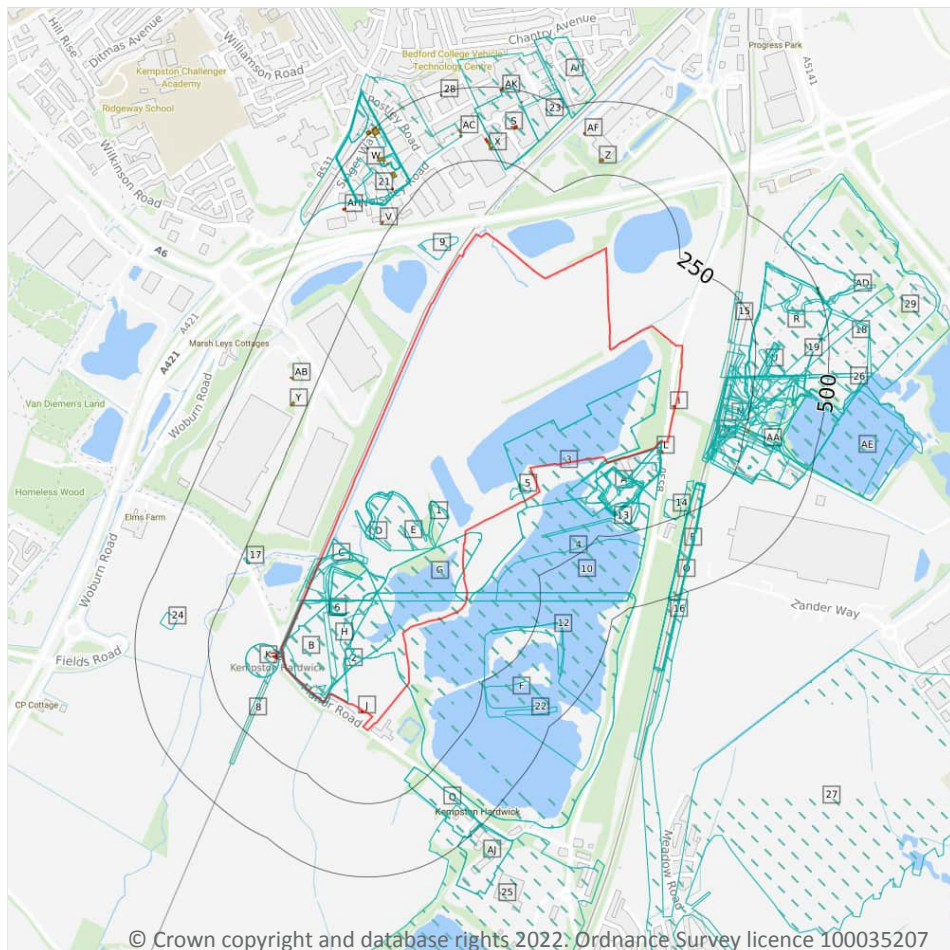
0

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

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



2 Past land use - un-grouped



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

2.1 Historical industrial land uses

Records within 500m

158

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 22**

ID	Location	Land Use	Date	Group ID
1	On site	Unspecified Ground Workings	1948	2060261
2	On site	Unspecified Heap	1948	2053933
3	On site	Clay Pit	1987	2114637



ID	Location	Land Use	Date	Group ID
4	On site	Clay Pit	1978	2102834
5	On site	Unspecified Heap	1971	2053935
6	On site	Unspecified Ground Workings	1959	2096069
A	On site	Brick Works	1948	2080190
A	On site	Brick Works	1924	2072027
A	On site	Unspecified Works	1971	2068043
A	On site	Unspecified Works	1959	2103920
A	On site	Bricks Works	1938	2082047
A	On site	Bricks Works	1938	2082047
B	On site	Brick Works	1948	2121667
B	On site	Brick Works	1989	2064290
B	On site	Railway Sidings	1959	2087313
B	On site	Unspecified Works	1959	2046254
B	On site	Brick Works	1980	2064290
C	On site	Railway Sidings	1948	2065517
C	On site	Unspecified Ground Workings	1948	2076602
C	On site	Railway Sidings	1971	2086766
C	On site	Brick Works	1971	2107269
C	On site	Brick Works	1987	2064290
C	On site	Brick Works	1978	2064290
C	On site	Railway Sidings	1959	2092166
C	On site	Unspecified Heap	1959	2053934
D	On site	Unspecified Ground Workings	1948	2060260
D	On site	Unspecified Heap	1971	2108128
D	On site	Unspecified Heap	1987	2109310
D	On site	Unspecified Heap	1978	2075768
E	On site	Unspecified Ground Workings	1948	2060269
E	On site	Unspecified Heap	1959	2121811



ID	Location	Land Use	Date	Group ID
F	On site	Unspecified Disused Pit	1989	2114565
F	On site	Unspecified Disused Pit	1980	2114565
G	On site	Clay Pit	1978	2048209
G	On site	Unspecified Disused Pit	1987	2114565
H	On site	Bricks Works	1938	2094376
H	On site	Bricks Works	1938	2094376
7	10m S	Unspecified Disused Pit	1987	2114565
K	15m SW	Railway Station	1989	2083773
K	15m SW	Railway Station	1980	2083773
A	19m E	Unspecified Pit	1938	2077132
A	19m E	Unspecified Pit	1938	2077132
A	22m E	Brick Works	1900	2082454
A	25m E	Unspecified Ground Workings	1924	2060263
8	34m SW	Cuttings	1882	2061444
A	35m E	Unspecified Works	1987	2115196
A	35m E	Unspecified Works	1978	2120101
9	36m N	Unspecified Pit	1987	2041044
A	87m E	Unspecified Heap	1948	2053936
A	88m E	Railway Sidings	1924	2062189
10	99m S	Clay Pit	1971	2106481
11	122m S	Clay Pit	1959	2048205
12	125m S	Unspecified Pit	1948	2041043
M	130m E	Railway Sidings	1959	2080451
13	133m SE	Unspecified Ground Workings	1971	2060262
N	134m E	Railway Sidings	1971	2082587
M	136m E	Railway Sidings	1938	2072099
N	138m E	Railway Sidings	1948	2074335
N	141m E	Railway Sidings	1938	2119917



ID	Location	Land Use	Date	Group ID
M	145m E	Brick Works	1900	2096976
N	145m E	Railway Sidings	1900	2073062
N	145m E	Unspecified Works	1959	2046268
M	148m E	Brick Works	1924	2096976
M	149m E	Brick Works	1948	2067822
N	150m E	Railway Sidings	1924	2073062
14	151m E	Old Clay Pits	1882	2042509
M	151m E	Bricks Works	1938	2104510
M	151m E	Bricks Works	1938	2104510
N	154m E	Brick Works	1971	2122200
N	156m E	Unspecified Disused Works	1978	2053703
15	157m NE	Cuttings	1882	2061441
M	161m E	Railway Sidings	1938	2072099
M	168m E	Unspecified Heap	1900	2110403
O	170m E	Cuttings	1938	2074736
O	170m E	Cuttings	1924	2067323
O	170m E	Cuttings	1948	2074736
O	170m E	Cuttings	1900	2075652
P	173m E	Cuttings	1971	2094316
P	173m E	Cuttings	1987	2107952
P	173m E	Cuttings	1978	2107952
P	173m E	Cuttings	1959	2094316
M	175m E	Railway Sidings	1924	2092438
M	178m E	Unspecified Heap	1900	2110403
16	184m E	Cuttings	1882	2095329
Q	199m S	Unspecified Works	1989	2086450
Q	199m S	Unspecified Works	1980	2086450
R	215m E	Clay Pit	1938	2103361



ID	Location	Land Use	Date	Group ID
17	216m SW	Smithy	1920	2059241
R	217m E	Clay Pit	1938	2116530
R	217m E	Clay Pit	1924	2103361
M	218m E	Unspecified Ground Workings	1938	2101524
M	218m E	Unspecified Ground Workings	1938	2101524
M	221m E	Unspecified Ground Workings	1924	2103858
N	221m E	Chimneys	1971	2055369
N	221m E	Chimney	1978	2058681
18	225m E	Unspecified Ground Workings	1948	2084382
19	226m E	Unspecified Ground Workings	1959	2114018
S	227m N	Unspecified Warehouses	1971	2072338
S	227m N	Unspecified Warehouses	1978	2123353
T	227m N	Industrial Estate	1987	2051261
M	232m E	Unspecified Pit	1900	2041042
M	234m E	Tramway Sidings	1924	2052184
M	237m E	Unspecified Heaps	1948	2049731
M	246m E	Unspecified Ground Workings	1924	2067018
20	251m E	Wind Pump	1924	2059025
U	258m E	Tramway Sidings	1938	2113935
U	260m E	Unspecified Pit	1971	2041041
F	261m S	Unspecified Pit	1948	2041046
U	263m E	Tramway Sidings	1938	2101872
U	263m E	Tramway Sidings	1948	2113935
U	271m E	Tramway Sidings	1924	2064424
M	277m E	Unspecified Heap	1948	2053941
W	287m N	Sewage Works	1938	2115997
W	287m N	Sewage Works	1948	2115997
W	287m N	Sewage Works	1971	2118893



ID	Location	Land Use	Date	Group ID
W	287m N	Sewage Works	1978	2077974
W	287m N	Unspecified Works	1959	2046255
N	287m E	Chimney	1959	2123332
W	287m N	Sewage Works	1938	2115997
W	287m N	Sewage Works	1938	2115997
W	288m N	Sewage Works	1924	2095398
N	289m E	Chimneys	1971	2055370
N	289m E	Chimney	1978	2071047
W	291m N	Industrial Estate	1987	2099571
M	304m E	Unspecified Heap	1971	2053942
21	314m N	Refuse Heap	1971	2063107
AA	320m E	Chimney	1959	2114823
AA	322m E	Chimney	1978	2116315
W	335m N	Filter Beds	1978	2050536
22	344m S	Unspecified Heap	1948	2053932
W	345m N	Unspecified Tanks	1971	2074529
W	345m N	Filter Beds	1978	2050537
W	345m N	Unspecified Tanks	1959	2074529
W	346m N	Unspecified Tanks	1948	2085539
23	359m N	Unspecified Works	1978	2111805
AD	365m NE	Unspecified Ground Workings	1971	2067019
24	368m SW	Cemetery	1920	2047446
AE	380m E	Unspecified Disused Pit	1987	2097301
AE	380m E	Unspecified Disused Pit	1978	2117563
AE	380m E	Clay Pit	1971	2048213
M	385m E	Unspecified Ground Workings	1948	2079812
25	391m S	Unspecified Works	1959	2122589
AG	407m N	Industrial Estate	1987	2067243



ID	Location	Land Use	Date	Group ID
W	431m N	Unspecified Tanks	1924	2054907
26	434m E	Unspecified Heap	1948	2053940
AI	458m N	Engineering Works	1971	2059808
AI	458m N	Unspecified Works	1978	2111805
27	485m SE	Railway Sidings	1948	2073425
AJ	488m S	Bricks Works	1938	2081316
AJ	488m S	Bricks Works	1938	2081316
AD	492m NE	Unspecified Tanks	1938	2121122
AD	492m NE	Unspecified Tanks	1948	2121122
AD	494m NE	Unspecified Tanks	1938	2090192
AD	495m NE	Unspecified Tanks	1924	2075677
AD	496m NE	Unspecified Tanks	1938	2076739
AD	496m NE	Unspecified Tanks	1948	2076739
AD	496m NE	Unspecified Tanks	1924	2076739
29	500m NE	Unspecified Pit	1959	2041039

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

38

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

Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
A	69m E	Unspecified Tank	1997	343516
A	98m E	Unspecified Tank	1926	343513
N	256m E	Tanks	1926	348133
X	289m N	Unspecified Tank	1994	354497
X	291m N	Unspecified Tank	1990	354497



ID	Location	Land Use	Date	Group ID
X	291m N	Unspecified Tank	1989	354497
Y	294m W	Unspecified Tank	1968	353940
Y	294m W	Unspecified Tank	1993	353940
Z	295m NE	Unspecified Tank	1997	343512
Z	299m NE	Unspecified Tank	1996	350508
Z	299m NE	Unspecified Tank	1997	350508
X	302m N	Unspecified Tank	1994	356006
X	304m N	Unspecified Tank	1990	351002
X	304m N	Unspecified Tank	1989	351002
AB	329m NW	Tanks	1968	352680
AB	329m NW	Tanks	1993	352680
W	336m N	Unspecified Tank	1968	349764
W	339m N	Unspecified Tank	1968	349764
AC	350m N	Tanks	1983	354114
AC	350m N	Tanks	1988	354114
AC	350m N	Tanks	1990	354114
AC	350m N	Tanks	1989	354114
W	382m N	Unspecified Tank	1968	343519
W	399m N	Unspecified Tank	1986	352896
W	399m N	Unspecified Tank	1990	352896
W	478m N	Tanks	1968	350226
W	479m N	Tanks	1971	349951
W	479m N	Tanks	1966	349951
W	479m N	Tanks	1986	350226
W	479m N	Tanks	1990	350226
AD	495m NE	Tanks	1926	348131
W	497m N	Tanks	1968	355663
AD	497m NE	Tanks	1926	348132

ID	Location	Land Use	Date	Group ID
W	497m N	Tanks	1971	349835
W	497m N	Tanks	1966	349835
W	498m N	Tanks	1986	353793
W	498m N	Tanks	1990	353793
W	499m N	Tanks	1926	356320

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

44

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 22**

ID	Location	Land Use	Date	Group ID
I	On site	Electricity Substation	1991	230609
I	On site	Electricity Substation	1991	230609
I	On site	Electricity Substation	1997	225225
J	0m SW	Electricity Substation	1968	234047
J	1m SW	Electricity Substation	1993	234047
L	17m E	Electricity Substation	1997	233414
L	19m E	Electricity Substation	1991	233414
L	19m E	Electricity Substation	1968	233414
L	23m E	Electricity Substation	1991	225224
V	279m N	Electricity Substation	1990	228752
V	280m N	Electricity Substation	1993	227886
X	310m N	Electricity Substation	1994	235694
X	311m N	Electricity Substation	1990	235694
X	311m N	Electricity Substation	1989	235694
W	318m N	Electricity Substation	1990	229696



ID	Location	Land Use	Date	Group ID
W	319m N	Electricity Substation	1993	229696
AC	335m N	Electricity Substation	1994	231288
AC	336m N	Electricity Substation	1990	231288
S	371m N	Electricity Substation	1976	236847
S	371m N	Electricity Substation	1983	238681
S	371m N	Electricity Substation	1988	238681
S	371m N	Electricity Substation	1990	238681
S	371m N	Electricity Substation	1989	238681
S	371m N	Electricity Substation	1994	225273
AF	395m N	Electricity Substation	1997	228579
AF	397m N	Electricity Substation	1996	228450
AH	411m NW	Electricity Substation	1993	238099
AH	411m NW	Electricity Substation	1990	238099
AG	459m NW	Electricity Substation	1993	231736
AG	460m NW	Electricity Substation	1986	231736
AG	460m NW	Electricity Substation	1990	231736
T	460m N	Electricity Substation	1994	225272
W	483m N	Electricity Substation	1991	233924
W	484m N	Electricity Substation	1984	233924
W	484m N	Electricity Substation	1988	233924
W	484m N	Electricity Substation	1988	233924
W	484m N	Electricity Substation	1990	233924
AK	488m N	Electricity Substation	1976	232307
28	488m N	Electricity Substation	1994	225274
AK	488m N	Electricity Substation	1994	232307
AK	488m N	Electricity Substation	1983	232307
AK	488m N	Electricity Substation	1988	232307
AK	488m N	Electricity Substation	1990	232307

ID	Location	Land Use	Date	Group ID
AK	488m N	Electricity Substation	1989	232307

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m

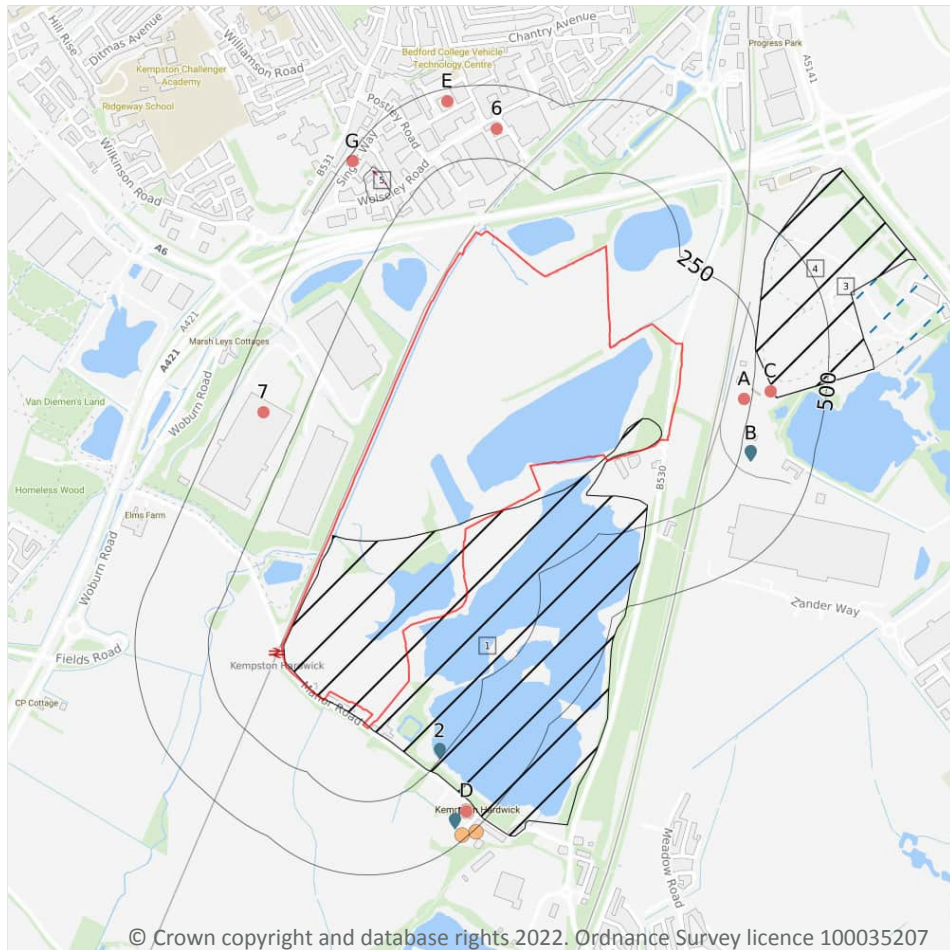
0

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

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline**
- Search buffers in metres (m)**
- Active or recent landfill
 - Historical landfill (EA/NRW)
 - Historical landfill (LA/OS)
 - Historical waste sites
 - Licensed waste sites
 - Waste exemptions

3.1 Active or recent landfill

Records within 500m

1

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation. Features are displayed on the Waste and landfill map on **page 33**

ID	Location	Details	
3	247m E	Operator: Bedfordshire County Council Site Address: Elstow Landfill Site A6, Wilstead Road, Elstow, Bedfordshire, MK42 9YU	WML Number: 70037 EPR Reference: BED005 Landfill type: A04: Household, Commercial & Industrial Waste Landfill Status: Closure IPPC Reference: - EPR Number: EA/EPR/UP3590NT/A001



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

1

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

Features are displayed on the Waste and landfill map on **page 33**

ID	Location	Site address	Source	Data type
5	310m N	Refuse Tip	1968 mapping	Polygon

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

3.4 Historical landfill (EA/NRW records)

Records within 500m

2

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

Features are displayed on the Waste and landfill map on **page 33**

ID	Location	Details		
1	On site	Site Address: Clay Pit, Adjacent Kempston Hardwick Works, Kempston Hardwick, Bedfordshire Licence Holder Address: Property Department, Stewartby, Bedford	Waste Licence: Yes Site Reference: 18/1977, PIT 63 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 05/12/1977 Licence Surrender: 28/04/1994	Operator: - Licence Holder: London Brick Landfill Limited First Recorded 31/12/1977 Last Recorded: 31/12/1993



ID	Location	Details		
4	248m E	Site Address: Elstow Brickworks, Elstow, Bedfordshire Licence Holder Address: Department of Technical Services, Town Hall, St Pauls Square, Bedford	Waste Licence: - Site Reference: 5/1976, PIT 55 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: London Brickworks Company First Recorded 01/09/1964 Last Recorded: 01/12/1996

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

3.5 Historical waste sites

Records within 500m	3
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Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 33**

ID	Location	Address	Further Details	Date
D	409m S	Site Address: Manor Road, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9NT	Type of Site: Waste Transfer Station Planning application reference: 96/0293 Description: Erection of new building for use with Class C1 waste. An application (ref: 96/0293) for Detailed Planning permission was submitted to Bedford B.C. on 7th March 1996. Data source: Historic Planning Application Data Type: Point	-
F	460m S	Site Address: Kempston Court, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9PQ	Type of Site: Waste Transfer Station (Extension) Planning application reference: 97/00999 Description: Project comprises the erection of an extension of 146 sqm. An application (ref: 97/00999) for Detailed Planning permission was submitted to Bedford B.C. on 3rd July 1997. Data source: Historic Planning Application Data Type: Point	-



ID	Location	Address	Further Details	Date
F	483m S	Site Address: Kempston Court (Land Off, Manor Road, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9PQ	Type of Site: Waste Transfer Station Planning application reference: 96/0977 Description: Formation of new waste transfer station for Categories A, B and C(1) waste involving the erection of a new building with associated car parking and landscaping works. Construction - roller shutter x 2 doors. An application (ref: 96/0977) for Detailed Planning permission was submitted to Bedford B.C. on 12th August 1996. Data source: Historic Planning Application Data Type: Point	-

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

3.6 Licensed waste sites

Records within 500m	6
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Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 33**

ID	Location	Details		
2	232m S	Site Name: Kempston Court Site Address: Kempston Court, Manor Road, Kempston, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste Transfer Station Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: EA/EPR/LP3796NV/A001 Operator: Paul Riches Skips Limited Waste Management licence No: 75120 Annual Tonnage: 75000	Issue Date: 25/10/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
B	284m E	Site Name: Elstow Recycling Site Address: Elstow Recycling, Wilstead Road, Elstow, Bedford, Bedfordshire, MK42 9YU Correspondence Address: -	Type of Site: Inert & excavation Waste TS + treatment Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TTL003 EPR reference: EA/EPR/EB3000HC/A001 Operator: Tarmac Trading Ltd Waste Management licence No: 403156 Annual Tonnage: 74999	Issue Date: 04/03/2016 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
B	284m E	Site Name: Elstow Recycling Site Address: Elstow Recycling, Wilstead Road, Elstow, Bedford, Bedfordshire, MK42 9YU Correspondence Address: -	Type of Site: Inert & excavation Waste TS + treatment Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TTL003 EPR reference: EA/EPR/EB3000HC/A001 Operator: Tarmac Trading Limited Waste Management licence No: 403156 Annual Tonnage: 74999	Issue Date: 04/03/2016 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
B	284m E	Site Name: Elstow Recycling Site Address: Elstow Recycling, Wilstead Road, Elstow, Bedford, Bedfordshire, MK42 9YU Correspondence Address: -	Type of Site: Inert & excavation Waste TS + treatment Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TTL003 EPR reference: EA/EPR/EB3000HC/A001 Operator: Tarmac Trading Ltd Waste Management licence No: 403156 Annual Tonnage: 74999	Issue Date: 04/03/2016 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
B	284m E	Site Name: Elstow Recycling Site Address: Elstow Recycling, Wilstead Road, Elstow, Bedford, Bedfordshire, MK42 9YU Correspondence Address: -	Type of Site: Inert & excavation Waste TS + treatment Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TTL003 EPR reference: EA/EPR/EB3000HC/S002 Operator: Tarmac Trading Limited Waste Management licence No: 403156 Annual Tonnage: 0	Issue Date: 04/03/2016 Effective Date: - Modified: - Surrendered Date: Jul 21 2021 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered
D	433m S	Site Name: G Moore (Haulage) Ltd - Kempston Hardwick Site Address: Coronation Bungalow, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMO001 EPR reference: EA/EPR/FP3598NH/V002 Operator: G Moore Haulage Ltd Waste Management licence No: 71053 Annual Tonnage: 15000	Issue Date: 20/10/1997 Effective Date: - Modified: 01/06/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified

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

3.7 Waste exemptions

Records within 500m

13

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 33**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	225m E	The Old Brickworks Wilstead Road BEDFORD MK42 9YU	EPR/WE5580 WQ/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in a secure place
A	225m E	The Old Brickworks Wilstead Road BEDFORD MK42 9YU	EPR/WE5580 WQ/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Screening and blending of waste

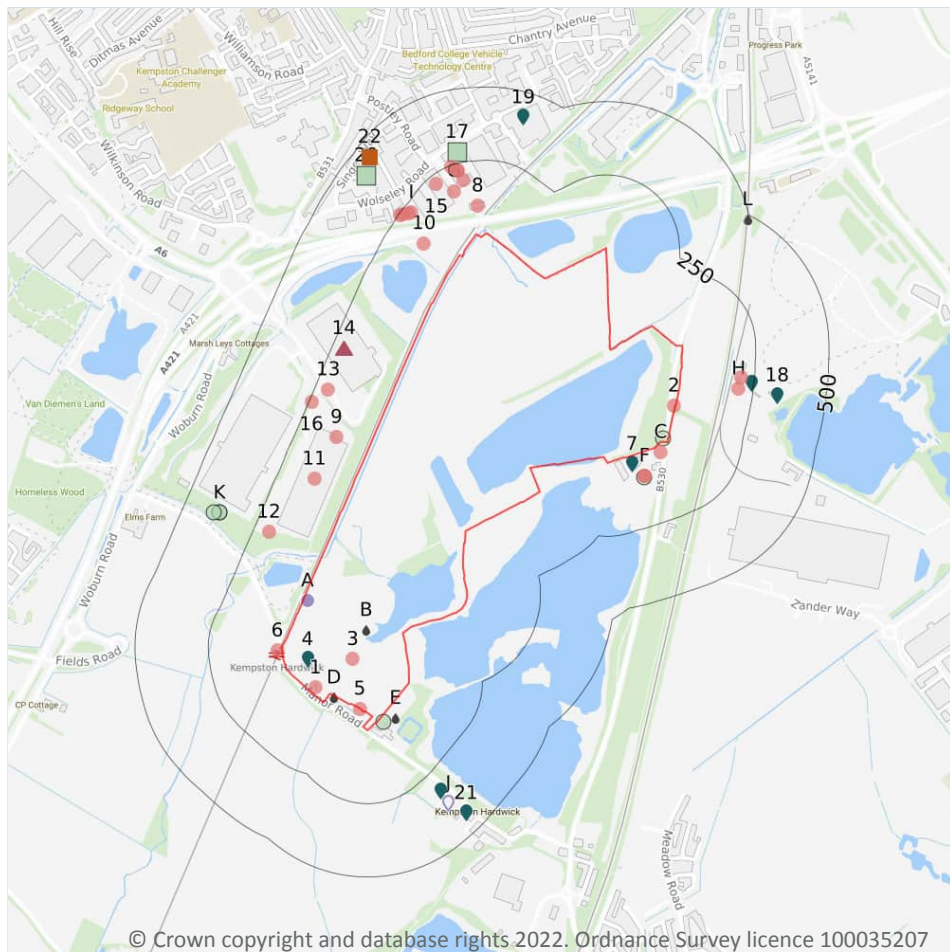


ID	Location	Site	Reference	Category	Sub-Category	Description
C	309m E	THE OLD BRICKWORKS, WILSTEAD ROAD, ELSTOW, BEDFORD, MK42 9YU	WEX004194	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	309m E	THE OLD BRICKWORKS, WILSTEAD ROAD, ELSTOW, BEDFORD, MK42 9YU	WEX004194	Treating waste exemption	Not on a farm	Screening and blending of waste
6	352m N	Flitwick frames ltd t/a yeomanupholstery, Unit 22 a chantry road, Woburn road ind estate, Kempston, Mk42 7su	WEX081966	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
7	377m W	Sainsburys Marsh Leys Industrial Estate Bedford Beds MK43 9AA	EPR/JF0606ST/ A001	Treating waste exemption	Non-Agricultural Waste Only	Crushing waste fluorescent tubes
D	435m S	MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, MK43 9NT	WEX254567	Using waste exemption	Not on a farm	Use of waste in construction
D	435m S	Kempston Court, Manor Road, Kempston Hardwock, Bedford, MK43 9NT	WEX012998	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	457m N	-	WEX262164	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	457m N	19, TRIUMPH WAY, WOBURN ROAD INDUSTRIAL ESTATE, KEMPSTON, BEDFORD, MK42 7QB	WEX121040	Storing waste exemption	Not on a farm	Storage of waste in a secure place
G	481m N	34 Singer Way BEDFORD MK42 7AF	EPR/CE5580A U/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
G	482m N	-	WEX261154	Storing waste exemption	Not on a farm	Storage of waste in secure containers
G	482m N	34, SINGER WAY, WOBURN ROAD INDUSTRIAL ESTATE, KEMPSTON, BEDFORD, MK42 7AF	WEX118850	Storing waste exemption	Not on a farm	Storage of waste in secure containers

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- ▲ Hazardous substance storage/usage
- Historical licensed industrial activities
- Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- ◆ Licensed Discharges to controlled waters
- Pollutant release to public sewer
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

27

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 40**

ID	Location	Company	Address	Activity	Category
1	On site	Cemex UK	Hanson Brick, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Concrete Products	Industrial Products
2	On site	Electricity Sub Station	Bedfordshire, MK45	Electrical Features	Infrastructure and Facilities
3	On site	Tanks	Bedfordshire, MK43	Tanks (Generic)	Industrial Features



ID	Location	Company	Address	Activity	Category
5	1m SW	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
6	16m SW	Kempston Hardwick Rail Station	Bedfordshire, MK43	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure
C	24m E	Electricity Sub Station	Bedfordshire, MK45	Electrical Features	Infrastructure and Facilities
F	79m E	Unique Used Cars	Stanley Works 3, Ampthill Road, Kempston Hardwick, Bedfordshire, MK45 3JE	New Vehicles	Motoring
F	79m E	A R Used Cars Ltd	Stanley Works 3, Ampthill Road, Kempston Hardwick, Bedfordshire, MK45 3JE	Secondhand Vehicles	Motoring
8	98m N	Apollo Sheetters Ltd	5, Adams Close, Kempston, Bedfordshire, MK42 7JE	General Purpose Machinery	Industrial Products
9	117m W	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
10	125m N	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
11	130m W	Sainsburys D H L	Unit 3 Marsh Leys Farm, Woburn Road, Kempston, Bedfordshire, MK43 9AA	Distribution and Haulage	Transport, Storage and Delivery
G	166m N	Electricity Sub Station	Bedfordshire, MK42	Electrical Features	Infrastructure and Facilities
G	189m N	Cranfield Precision	Woburn House 3, Adams Close, Kempston, Bedfordshire, MK42 7JE	Precision Engineers	Engineering Services
12	200m W	Sludge Tanks	Bedfordshire, MK43	Waste Storage, Processing and Disposal	Infrastructure and Facilities
H	201m E	Hoppers	Bedfordshire, MK42	Hoppers and Silos	Farming
H	205m E	Hoppers	Bedfordshire, MK42	Hoppers and Silos	Farming
13	206m NW	Pumping Station	Bedfordshire, MK43	Water Pumping Stations	Industrial Features
15	219m N	Atlas Converting	Wolseley Road, Kempston, Bedfordshire, MK42 7XT	General Purpose Machinery	Industrial Products
I	220m N	E R S	11-13 Wolseley Business Park, Kempston, Bedford, Bedfordshire, MK42 7PW	Office and Shop Equipment	Industrial Products
I	225m N	M & M International UK Ltd	12, Railton Road, Kempston, Bedfordshire, MK42 7PW	Seals, Tapes, Taps and Valves	Industrial Products



ID	Location	Company	Address	Activity	Category
G	227m N	Franco's Ices	2, Adams Close, Kempston, Bedfordshire, MK42 7JE	Dairy Products	Foodstuffs
G	227m N	Kartt Europe	2, Adams Close, Kempston, Bedfordshire, MK42 7JE	Lifting and Handling Equipment	Industrial Products
I	238m N	Instinctive Ltd	8, Railton Road, Kempston, Bedfordshire, MK42 7PN	Industrial Repairs and Servicing	Repair and Servicing
16	242m W	Wind Generator	Bedfordshire, MK43	Energy Production	Industrial Features
G	246m N	Electricity Sub Station	Bedfordshire, MK42	Electrical Features	Infrastructure and Facilities
I	246m N	Excelsior Medical Group Ltd	6, Railton Road, Kempston, Bedfordshire, MK42 7PW	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products

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

1

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.

Features are displayed on the Current industrial land use map on **page 40**

ID	Location	Details	
14	211m NW	Application reference number: No Details Application status: Approved Application date: No Details Address: Asda Stores Ltd/Distribution Centre, Marsh Leys Farm, Woburn Road, Kempston, Bedford, Bedford Borough Council, England, MK43 9AB	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

4

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

Features are displayed on the Current industrial land use map on **page 40**

ID	Location	Details	
A	On site	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: AI0012	Original Permit Number: IPCAIRAPP Date Approved: 30-6-1993 Effective Date: 30-6-1993 Status: Superseded By Variation
A	On site	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: AJ3476	Original Permit Number: IPCMINVAR Date Approved: 12-7-1993 Effective Date: 12-7-1993 Status: Superseded By Variation
A	On site	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: AL9513	Original Permit Number: IPCMINVAR Date Approved: 1-2-1994 Effective Date: 1-2-1994 Status: Superseded By Variation
A	On site	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: BC8031	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

3

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

Features are displayed on the Current industrial land use map on **page 40**



ID	Location	Details	
J	367m S	Operator: C JACKSON & SONS (BEDFORD) LTD Installation Name: MANOR ROAD HAZARDOUS WASTE TRANSFER STATION EPR/SP3932KH Process: TEMPORARY STORAGE OF HAZ WASTE NOT UNDER S 5.2 PENDING ACTIVITIES LISTED IN S 5.1, 5.2, 5.3 AND PARAGRAPH (B) OF THIS SECTION WITH A TOTAL CAPACITY > 50 TONNES, EXCL TEMP STORAGE WHERE GENERATED Permit Number: NP3034ET Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 10/01/2014 Effective Date: 10/01/2014 Last date noted as effective: 02/11/2022 Status: EFFECTIVE
J	367m S	Operator: C JACKSON & SONS (BEDFORD) LTD Installation Name: MANOR ROAD HAZARDOUS WASTE TRANSFER STATION Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: SP3932KH Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 10/06/2010 Effective Date: 10/06/2010 Last date noted as effective: 02/11/2022 Status: SUPERCEDED
J	367m S	Operator: C JACKSON & SONS (BEDFORD) LTD Installation Name: MANOR ROAD HAZARDOUS WASTE TRANSFER STATION Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: YP3331TF Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 28/06/2010 Effective Date: 28/06/2010 Last date noted as effective: 02/11/2022 Status: SUPERCEDED

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

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

Records within 500m	8
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Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 40**

ID	Location	Address	Details	
4	On site	Hanson Bricks	Process: Manufacture of Clay Status: Historical Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
7	27m E	Supreme Concrete Ltd, Hardwick Hill Works, Ampthill Road, Kempston Hardwick, Bedford, MK45 3JE	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified



ID	Location	Address	Details	
H	241m E	IKO Plc, The Old Brickworks, Wilstead Road (A6), Elstow, Nr. Bedford, MK42 9YU	Process: Bitumen and Tar Processes Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
H	243m E	LaFarge Aggregates Ltd, The Old Brickworks, Wilstead Road (A6), Elstow, Bedfordshire MK42 9YU	Process: Roadstone Coating Processes Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
J	318m S	Cemex Bedford Concrete Plant (RMC), Manor Road, Kempston Hardwick, Bedford, MK43 9NT	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
18	333m E	Redland Aggregates, Elstow Depot, Wilstead Rd	Process: Other Mineral Processes Status: Historical Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
19	414m N	Interfoam Ltd, 15-17 Ronald Close, Woburn Road Industrial Estate, Kempston, Bedford, MK42 7SH	Process: Chemical & Acid Processes Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
21	433m S	G Moore Haulage Ltd, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Process: Waste Oil Burner 0.4 MW Status: Surrendered 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
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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	32
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Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 40**



ID	Location	Address	Details	
B	On site	LONDON BRICK COMPANT LTD, MANOR ROAD, KEMPSTON, HARDWICK, BEDS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2614 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 18/02/1992 Effective Date: 18/02/1992 Revocation Date: 20/10/2005
B	On site	LONDON BRICK COMPANT LTD, MANOR ROAD, KEMPSTON, HARDWICK, BEDS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2614 Permit Version: 1 Receiving Water: trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 06/04/1987 Effective Date: 06/04/1987 Revocation Date: 17/02/1992
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012



ID	Location	Address	Details	
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012



ID	Location	Address	Details	
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -



ID	Location	Address	Details	
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
D	6m SW	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
E	40m S	ASKERN HOUSE, MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, BEDFORDSHIRE, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1780 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 30/01/1985 Effective Date: 30/01/1985 Revocation Date: 25/02/1992
E	40m S	ASKERN HOUSE, MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, BEDFORDSHIRE, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1780 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/02/1992 Effective Date: 26/02/1992 Revocation Date: 30/10/1996
L	484m NE	WASTE SITE ELSTOW, AREA 3, BEDFORDSHIRE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: PR1NF1329 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 21/01/1982 Effective Date: 21/01/1982 Revocation Date: 05/03/1992



ID	Location	Address	Details	
L	484m NE	WASTE SITE ELSTOW, AREA 3, BEDFORDSHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1329 Permit Version: 2 Receiving Water: Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 06/03/1992 Effective Date: 06/03/1992 Revocation Date: 01/10/1993
L	485m NE	ELSTOW LANDFILL (NW), WILSTEAD ROAD, ELSTOW, BEDFORD, BEDS, MK42 9YU	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: PRCNF17442 Permit Version: 2 Receiving Water: TRIBUTARY OF THE ELSTOW BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 07/09/2006 Effective Date: 07/09/2006 Revocation Date: 22/04/2013
L	485m NE	ELSTOW LANDFILL (NW), WILSTEAD ROAD, ELSTOW, BEDFORD, BEDS, MK42 9YU	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: PRCNF17442 Permit Version: 3 Receiving Water: TRIBUTARY OF THE ELSTOW BROOK	Status: VARIED UNDER EPR 2010 Issue date: 23/04/2013 Effective Date: 23/04/2013 Revocation Date: -
L	485m NE	ELSTOW LANDFILL (NW), WILSTEAD ROAD, ELSTOW, BEDFORD, BEDS, MK42 9YU	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: PRCNF17442 Permit Version: 1 Receiving Water: TRIBUTARY OF THE ELSTOW BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 22/04/2005 Effective Date: 22/04/2005 Revocation Date: 06/09/2006

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

1

Discharges of Special Category Effluents to the public sewer.

Features are displayed on the Current industrial land use map on **page 40**



ID	Location	Address	Details	
22	448m N	CGI Creative Graphics International Limited, UNITS 6 - 8 SINGER WAY, WOBURN ROAD INDUSTRIAL ESTATE, KEMPSTON, BEDFORDSHIRE, MK42 7AN	Permission reference: SCE0148C1 Local Authority: BEDFORD BOROUGH COUNCIL First received date: 10/01/2014	Last received date: 01/01/2018 Status: EFFECTIVE

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

4.16 List 1 Dangerous Substances

Records within 500m	0
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Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

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

4.17 List 2 Dangerous Substances

Records within 500m	2
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Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

Features are displayed on the Current industrial land use map on **page 40**

ID	Location	Name	Status	Receiving Water	Authorised Substances
17	288m N	Franco Ices Limited	Not Active	Na	pH
20	419m N	Floor Protection Services Ltd	Not Active	Na	pH

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	6
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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 40**

ID	Location	Details	
C	On site	Incident Date: 07/02/2002 Incident Identification: 56978 Pollutant: Oils and Fuel Pollutant Description: Kerosene and Aviation Fuel	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
E	16m S	Incident Date: 19/08/2003 Incident Identification: 183354 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
F	83m E	Incident Date: 09/06/2002 Incident Identification: 83760 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
K	379m W	Incident Date: 04/10/2001 Incident Identification: 34551 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	379m W	Incident Date: 04/10/2001 Incident Identification: 34551 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	397m W	Incident Date: 13/06/2003 Incident Identification: 165545 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0
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The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

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



4.20 Pollution inventory waste transfers

Records within 500m

0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m

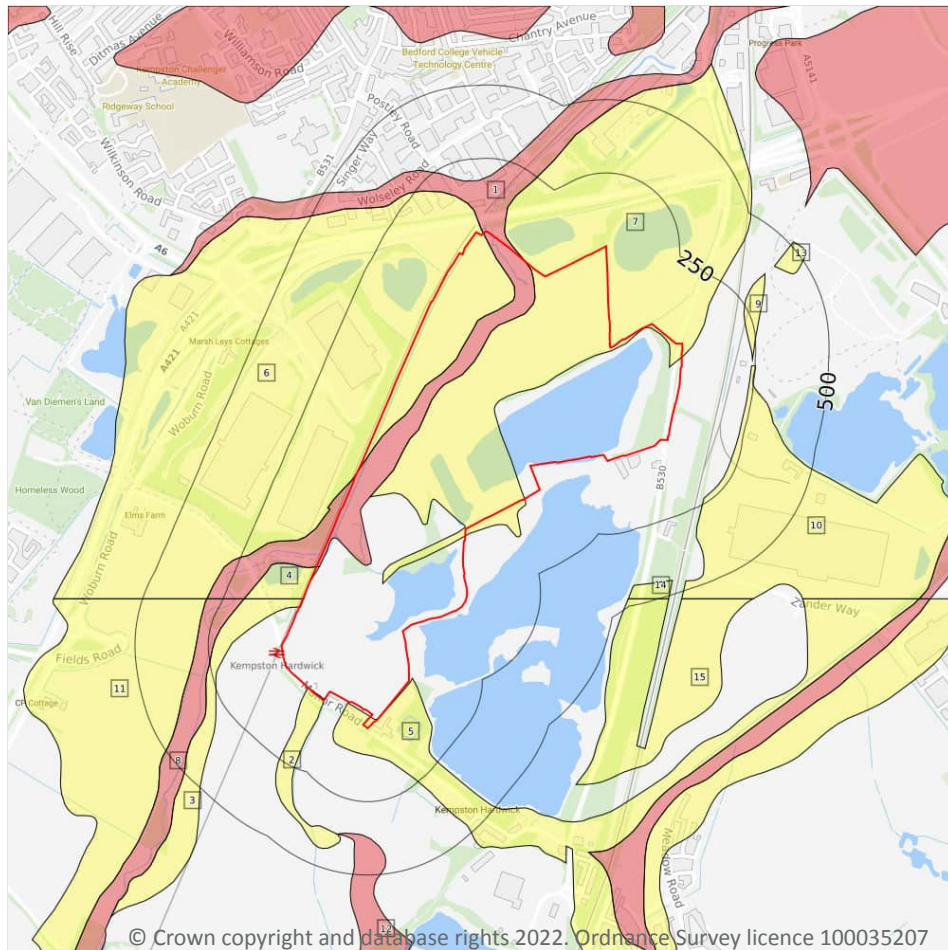
0

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

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



5 Hydrogeology - Superficial aquifer



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

5.1 Superficial aquifer

Records within 500m

15

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 55**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

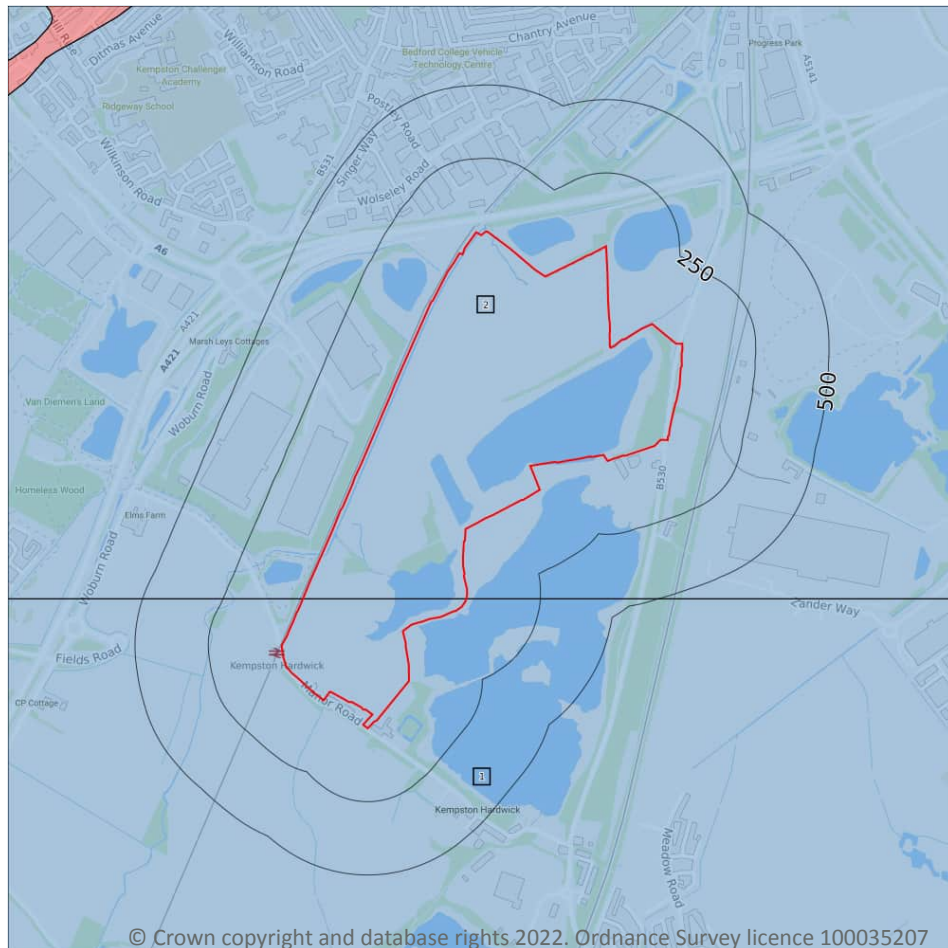


ID	Location	Designation	Description
3	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
7	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
8	184m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
9	223m NE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
10	226m E	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
11	287m 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
12	362m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
13	411m NE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
14	433m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
15	475m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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



Bedrock aquifer



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

5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

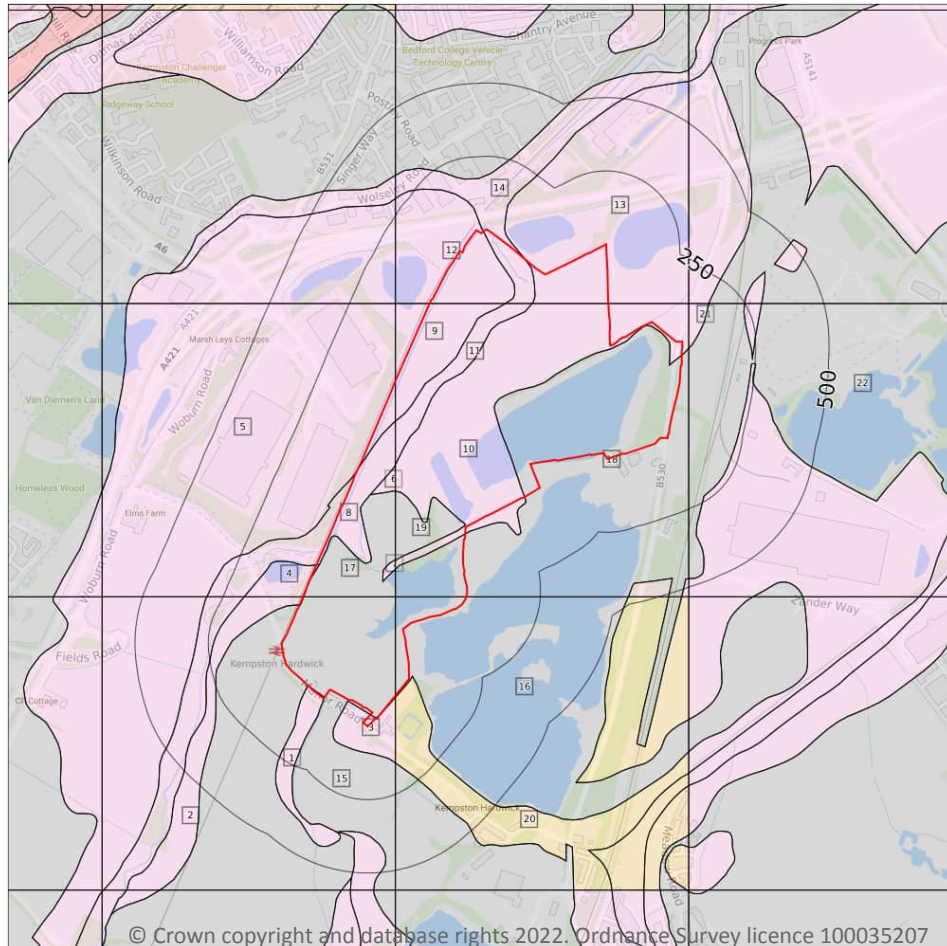
Features are displayed on the Bedrock aquifer map on **page 57**

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
2	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



Site Outline

Search buffers in metres (m)

Superficial vulnerability

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

Bedrock vulnerability

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

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m

22

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 58**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
6	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
7	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
8	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
11	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
12	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
13	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
14	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
15	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
16	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
17	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
18	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
19	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
20	3m S	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
21	21m NE	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
22	21m NE	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
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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.

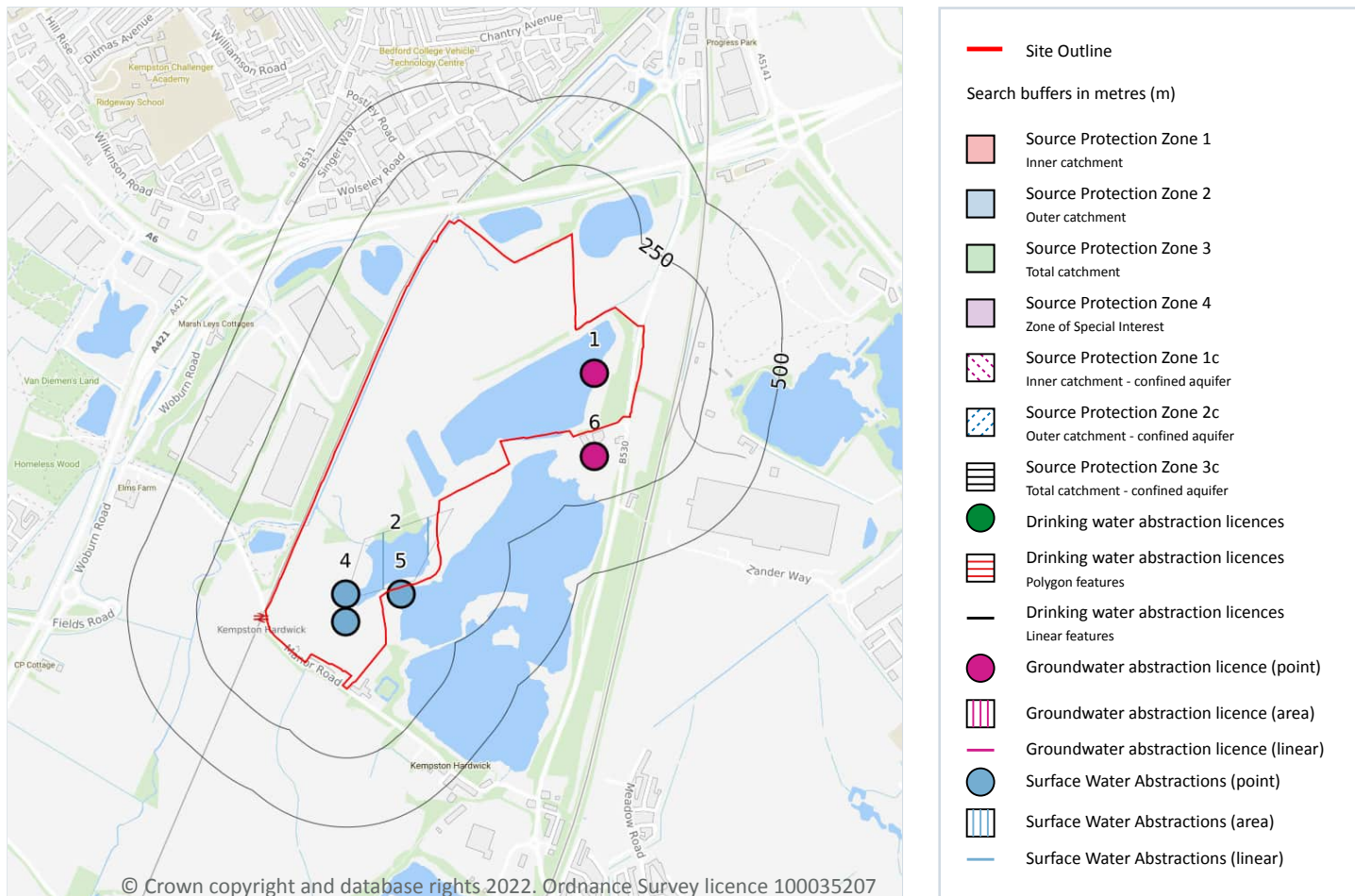
5.5 Groundwater vulnerability- local information

Records on site	0
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This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

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

Abstractions and Source Protection Zones



5.6 Groundwater abstractions

Records within 2000m

2

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 64**

ID	Location	Details	
1	On site	Status: Historical Licence No: 6/33/12/*G/0031 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL-RACEMEADOW FARM Data Type: Point Name: LONDON BRICK CO LTD Easting: 503800 Northing: 245700	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 01/06/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/06/1967 Version End Date: -
6	89m E	Status: Historical Licence No: 6/33/12/*G/0139 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE AT KEMPSTON HARDWICK Data Type: Point Name: SUPREME CONCRETE LTD Easting: 503800 Northing: 245400	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 30/11/1996 Expiry Date: - Issue No: 102 Version Start Date: 13/07/2004 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	10
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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 64**

ID	Location	Details	
2	On site	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: FLOODED KNOTHOLE-KEMPSTON HARD Data Type: Poly4 Name: HANSON BRICK LTD Easting: 503290 Northing: 245210	Annual Volume (m³): 30000 Max Daily Volume (m³): 150 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 20/10/2003 Version End Date: -



ID	Location	Details	
3	On site	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 502900 Northing: 244800	Annual Volume (m³): 5164 Max Daily Volume (m³): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
4	On site	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 502900 Northing: 244900	Annual Volume (m³): 5164 Max Daily Volume (m³): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
5	23m S	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 503100 Northing: 244900	Annual Volume (m³): 5164 Max Daily Volume (m³): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
-	1213m E	Status: Active Licence No: AN/033/0012/009 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: WATERCOURSE AT ELSTOW Data Type: Line Name: M K H Farming Easting: 506018 Northing: 246926	Annual Volume (m³): 7,863 Max Daily Volume (m³): 491 Original Application No: NPS/WR/034975 Original Start Date: 04/09/2017 Expiry Date: 31/03/2024 Issue No: 3 Version Start Date: 11/03/2021 Version End Date: -
-	1252m E	Status: Historical Licence No: 6/33/12/*S/0062 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: WATERCOURSE AT ELSTOW Data Type: Line Name: CLARK Easting: 505200 Northing: 245500	Annual Volume (m³): 7864.6 Max Daily Volume (m³): 490.9 Original Application No: - Original Start Date: 01/10/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1967 Version End Date: -



ID	Location	Details	
-	1694m N	Status: Historical Licence No: 6/33/11/*S/0028 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER OUSE AT KEMPSTON Data Type: Line Name: JOHN CLOVER ESTATES Easting: 501600 Northing: 248180	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1996 Version End Date: -
-	1694m N	Status: Historical Licence No: 6/33/11/*S/0028 Details: General use relating to Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER OUSE AT KEMPSTON Data Type: Line Name: JOHN CLOVER ESTATES Easting: 501600 Northing: 248180	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1996 Version End Date: -
-	1751m E	Status: Historical Licence No: 6/33/12/*S/0012 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STREAM AT WILSTEAD Data Type: Point Name: H MASKELL & SON Easting: 505430 Northing: 244640	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1970 Version End Date: -
-	1751m E	Status: Historical Licence No: 6/33/12/*S/0012 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STREAM AT WILSTEAD Data Type: Point Name: H MASKELL & SON Easting: 505430 Northing: 244640	Annual Volume (m ³): 4545 Max Daily Volume (m ³): 654.54 Original Application No: - Original Start Date: 01/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1970 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m

0

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



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

5.9 Source Protection Zones

Records within 500m

0

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

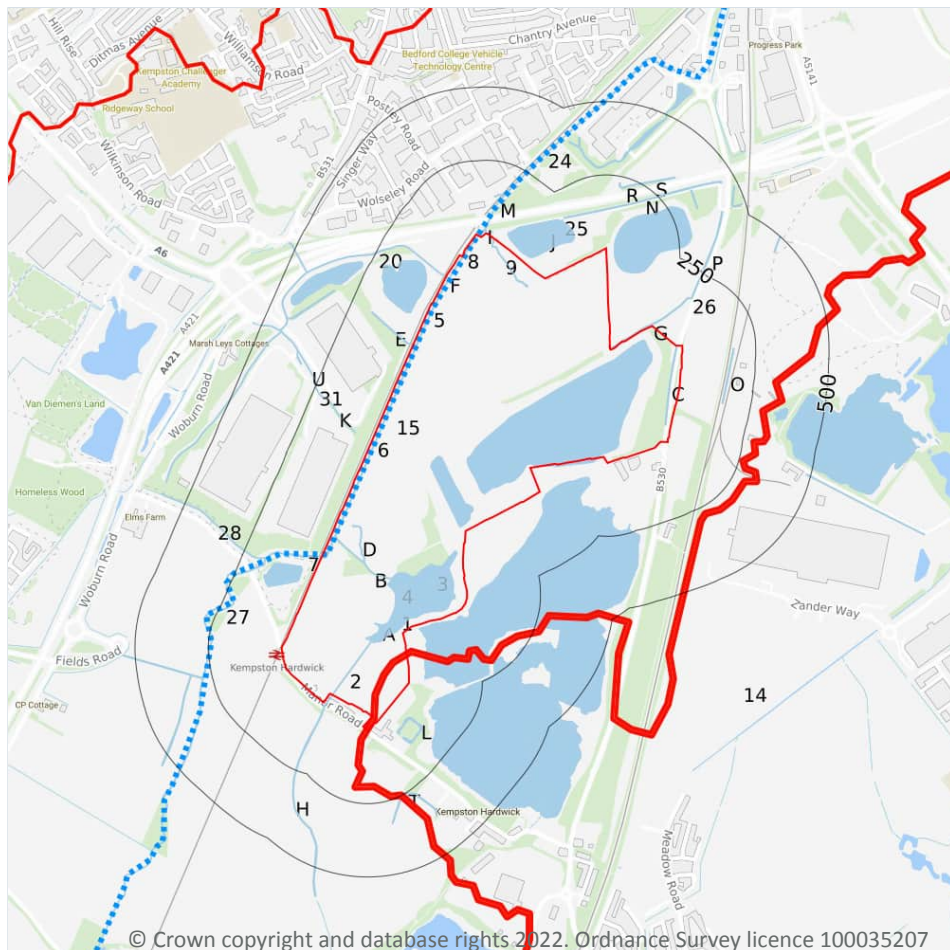
0

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

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



6 Hydrology



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

6.1 Water Network (OS MasterMap)

Records within 250m

45

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 69**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
3	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
8	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
9	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	10m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	11m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	18m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
20	25m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	62m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	73m S	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	82m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
J	88m N	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	127m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	129m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
24	139m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	139m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	139m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
25	149m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
26	153m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
O	154m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	159m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
27	170m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
28	172m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	213m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
31	229m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
R	229m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	232m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	244m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	248m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

24

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 69**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

2

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

Features are displayed on the Hydrology map on **page 69**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
14	On site	River	Harrowden Brook	GB105033038010	Great Ouse Bedford	Ouse Upper and Bedford
15	On site	River	Elstow Brook (US Shortstown)	GB105033038050	Great Ouse Bedford	Ouse Upper and Bedford

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

6.4 WFD Surface water bodies

Records identified	2
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Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. 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 69**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
16	On site	River	Elstow Brook (US Shortstown)	GB105033038050	Moderate	Fail	Moderate	2019
-	930m SE	River	Harrowden Brook	GB105033038010	Bad	Fail	Bad	2019

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

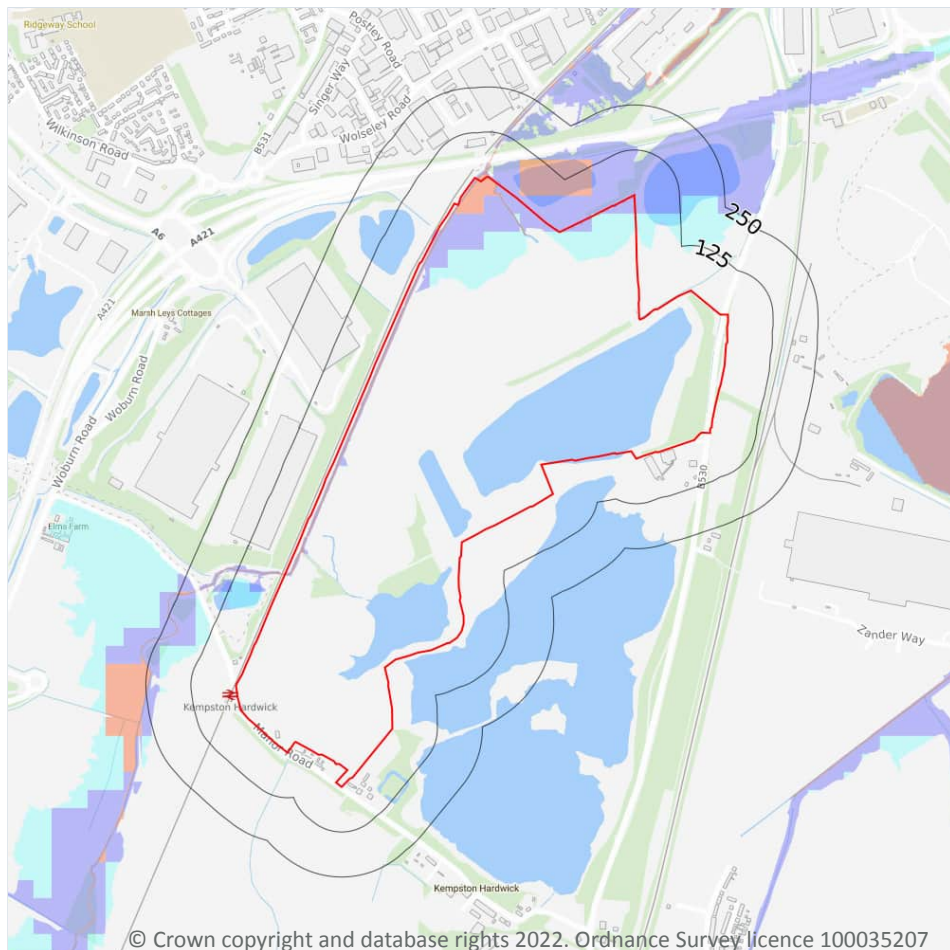
6.5 WFD Groundwater bodies

Records on site	0
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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.

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

7 River and coastal flooding



- Site Outline
- Search buffers in metres (m)
- River and coastal flooding:
- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m

31

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 75**

Distance	Flood risk category
On site	High
0 - 50m	High

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

7.2 Historical Flood Events

Records within 250m	0
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Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

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

7.3 Flood Defences

Records within 250m	0
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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
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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

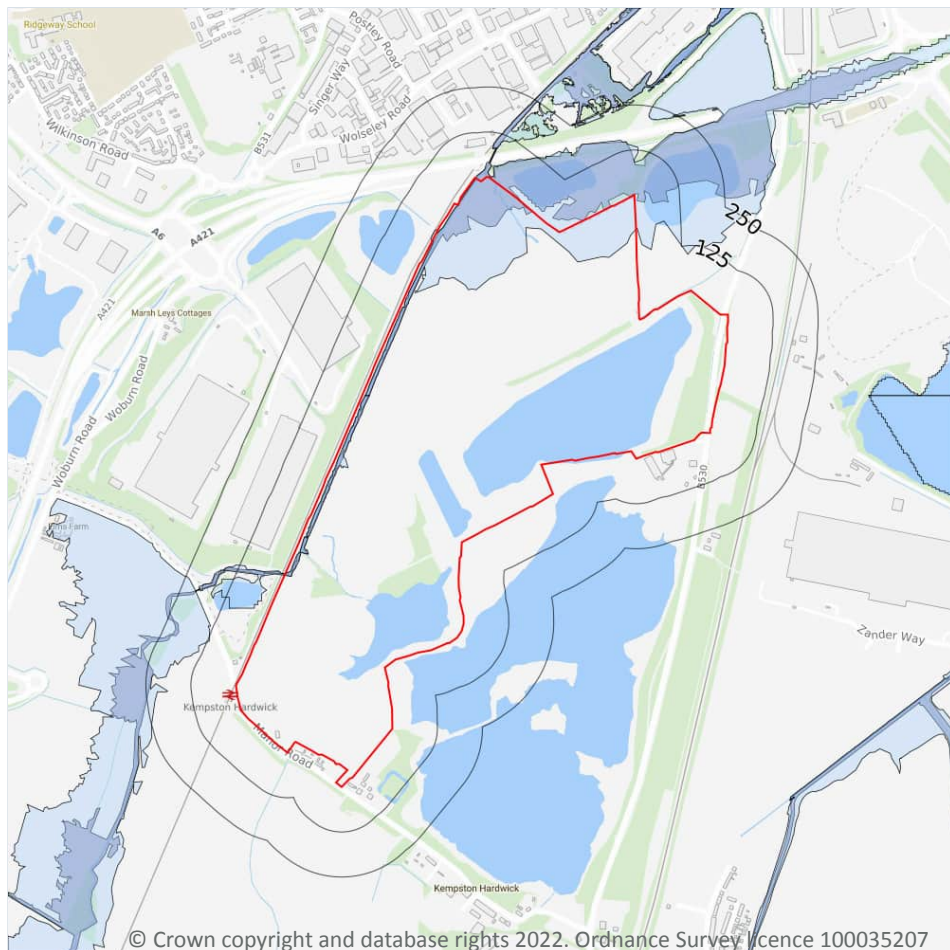
Records within 250m	0
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Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

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



River and coastal flooding - Flood Zones



- Site Outline
- Search buffers in metres (m)
- Flood zone 2
- Flood zone 3

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 75**

Location	Type
On site	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.

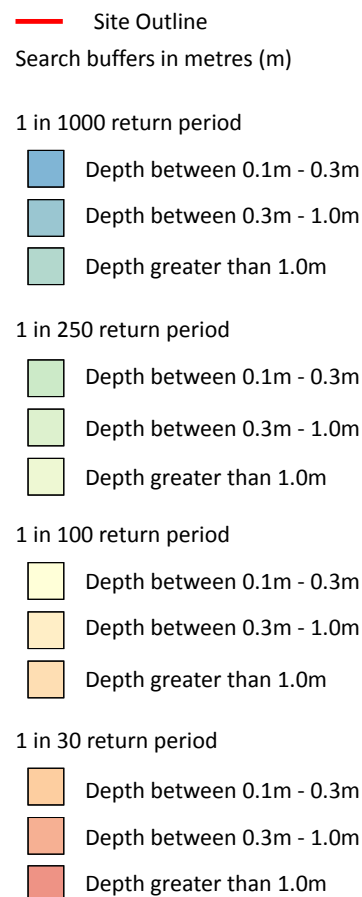
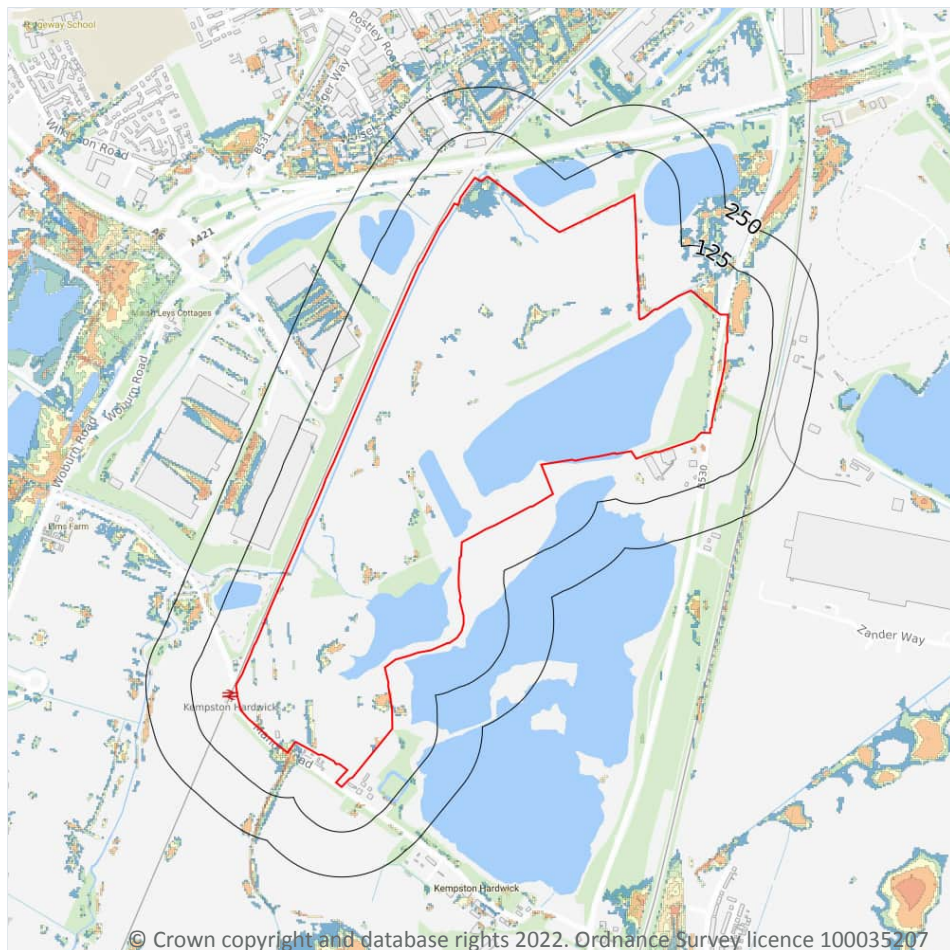
Features are displayed on the River and coastal flooding map on **page 75**

Location	Type
On site	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 30 year, 0.3m - 1.0m

Highest risk within 50m

1 in 30 year, Greater than 1.0m

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

Features are displayed on the Surface water flooding map on **page 79**

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

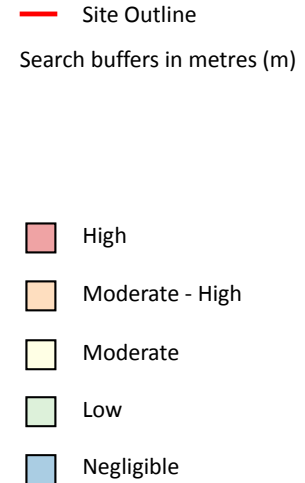
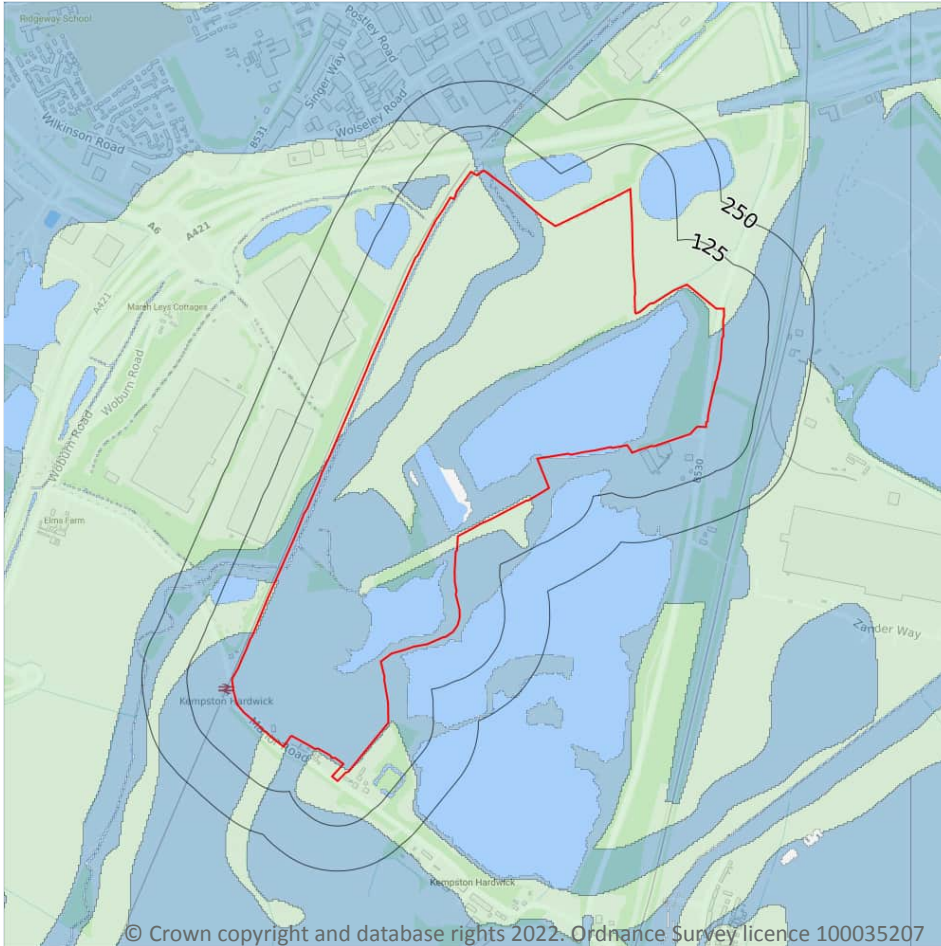
a site. The table below shows the maximum flood depths for a range of return periods for the site.

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

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

Low

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

Features are displayed on the Groundwater flooding map on **page 81**

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m

0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m

0

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

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



10.5 National Nature Reserves (NNR)

Records within 2000m

0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m

0

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

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

10.7 Designated Ancient Woodland

Records within 2000m

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

0

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

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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



10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

11

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

Location	Name	Type	NVZ ID	Status
On site	Great Ouse NVZ	Surface Water	391	Existing
On site	Great Ouse NVZ	Surface Water	391	Existing
On site	Huntingdon River Gravels	Groundwater	144	Existing
On site	Huntingdon River Gravels	Groundwater	144	Existing
114m NE	Great Ouse NVZ	Surface Water	391	Existing
114m NE	Huntingdon River Gravels	Groundwater	144	Existing
160m NE	Great Ouse NVZ	Surface Water	391	Existing
160m NE	Huntingdon River Gravels	Groundwater	144	Existing

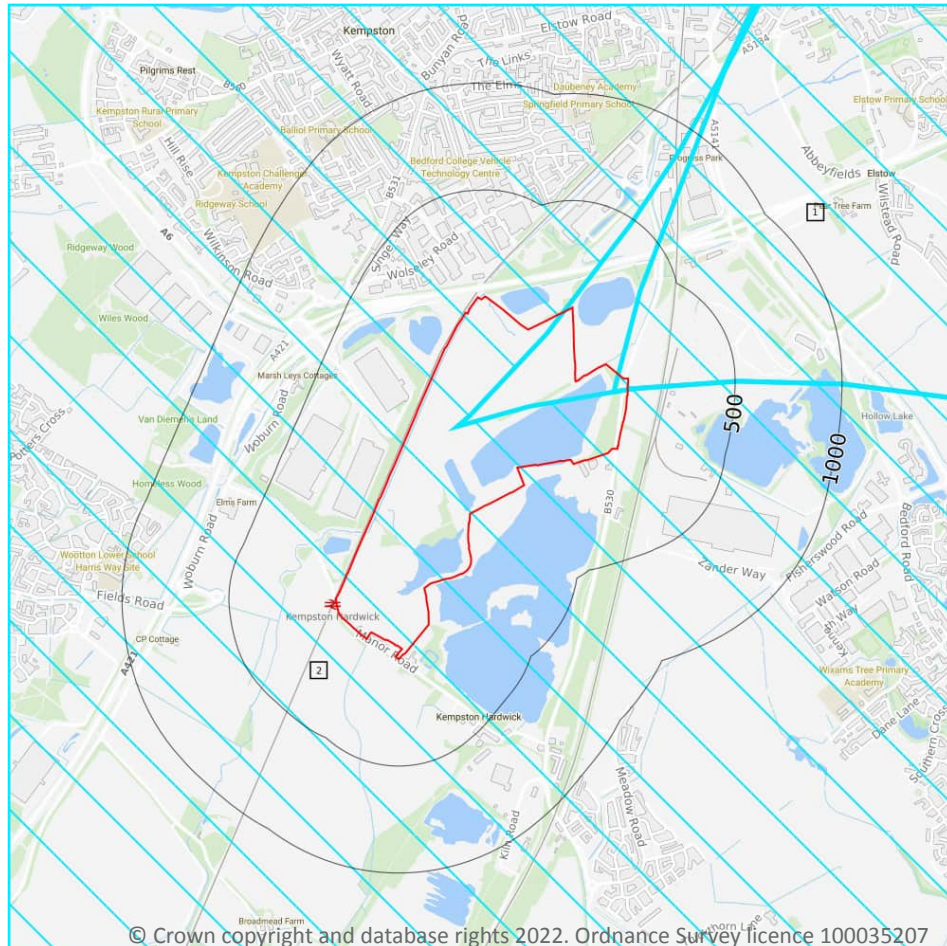


Location	Name	Type	NVZ ID	Status
818m N	Bedford Great Oolite	Groundwater	74	Existing
1788m N	Bedford Great Oolite	Groundwater	74	Existing
1847m W	Bedford Great Oolite	Groundwater	74	Existing

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



SSSI Impact Zones and Units



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

10.17 SSSI Impact Risk Zones

Records on site

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 87**

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals.
2	On site	Infrastructure - Airports, helipads and other aviation proposals. Air pollution - Livestock & poultry units with floorspace > 500m ² , slurry lagoons & digestate stores > 750m ² , manure stores > 3500t.



This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m

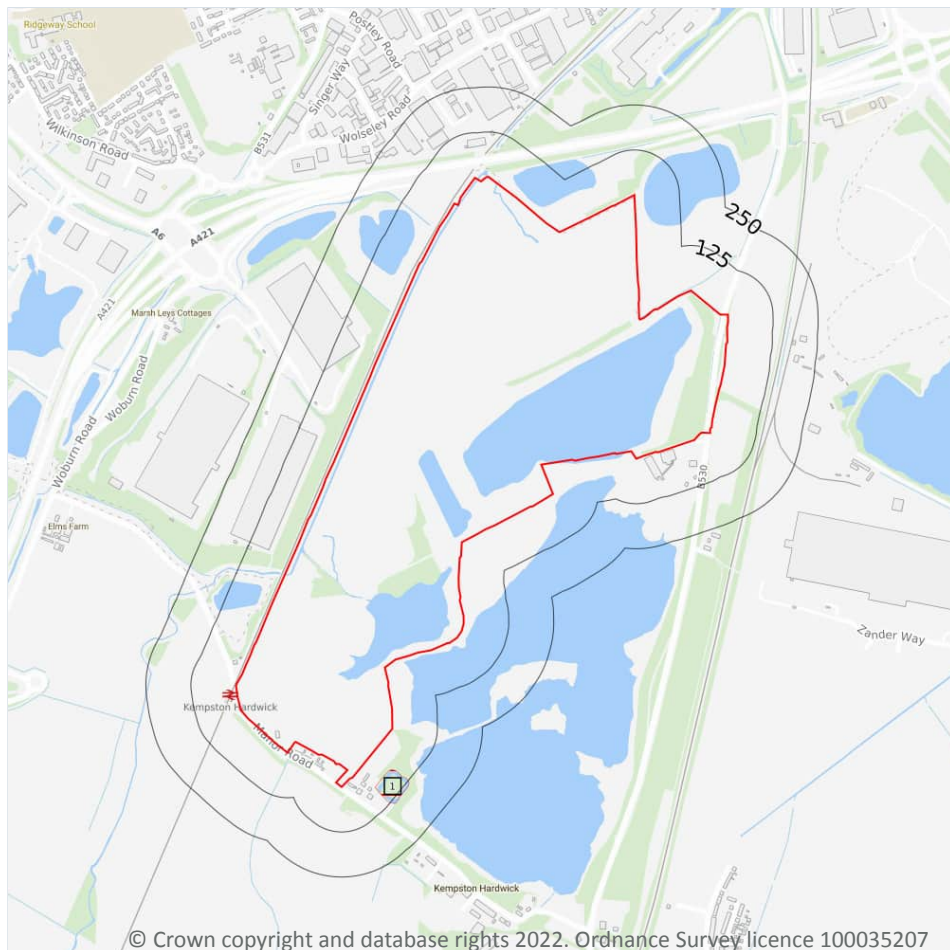
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Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation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

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



11 Visual and cultural designations



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

11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m**0**

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

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

11.3 National Parks

Records within 250m**0**

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

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

11.4 Listed Buildings

Records within 250m**0**

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

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

11.5 Conservation Areas

Records within 250m**0**

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



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

11.6 Scheduled Ancient Monuments

Records within 250m

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 89**

ID	Location	Ancient monument name	Reference number
1	65m S	Kempston Hardwick moated site	1012312

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

11.7 Registered Parks and Gardens

Records within 250m

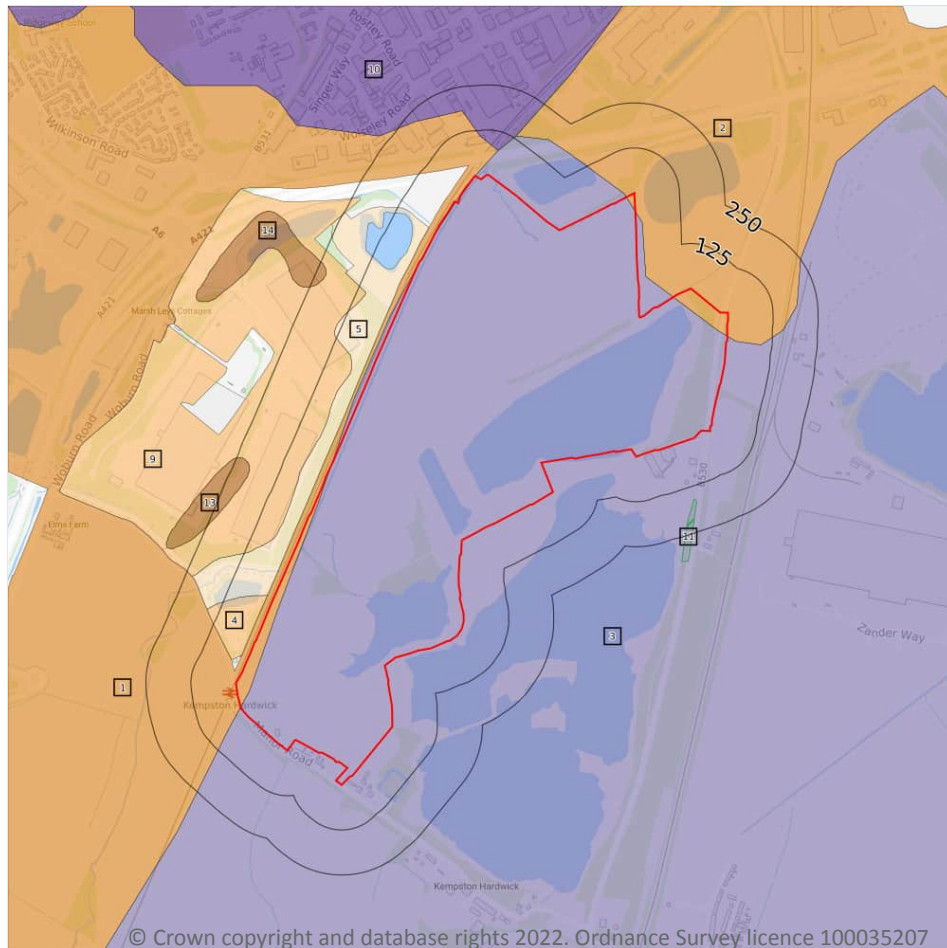
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Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process,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

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



12 Agricultural designations



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

12.1 Agricultural Land Classification

Records within 250m

9

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 92**

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

ID	Location	Classification	Description
2	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
3	On site	Non Agricultural	-
4	19m SW	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
5	19m SW	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
9	52m NW	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
10	73m N	Urban	-
13	202m W	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.
14	222m NW	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m

0

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

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



12.3 Tree Felling Licences

Records within 250m**1**

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.

Features are displayed on the Agricultural designations map on **page 92**

ID	Location	Description	Reference	Application date
11	160m E	Selective Fell/Thin (Conditional)	017/63/11-12	18/08/2011

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m**0**

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

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

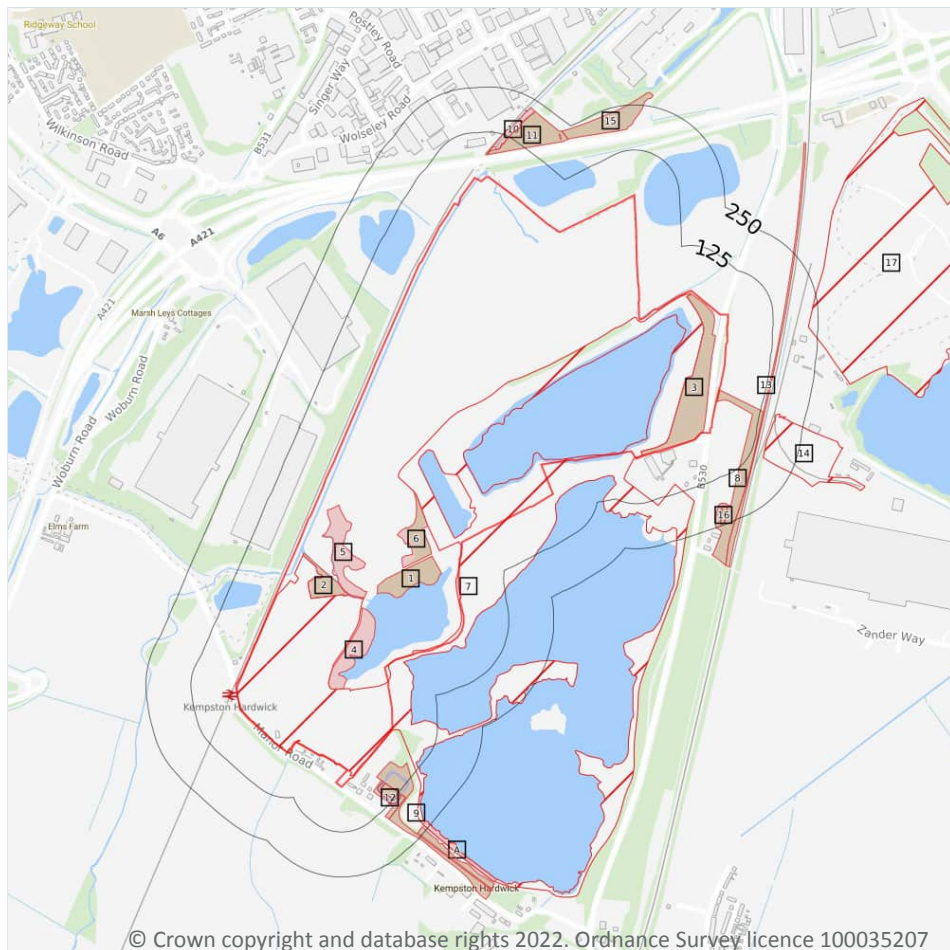
Records within 250m**0**

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

This data is sourced from Natural England.



13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

16

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

Features are displayed on the Habitat designations map on **page 95**

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
5	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	3m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	51m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	62m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	62m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	67m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
13	131m E	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)
15	183m NE	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)
16	200m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	232m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	236m S	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

3

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.

Features are displayed on the Habitat designations map on **page 95**



ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
7	On site	BRITPITS ref: 35270	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography
14	157m E	BRITPITS ref: 35277	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography
17	224m E	BRITPITS ref: 35277	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography

This data is sourced from Natural England.

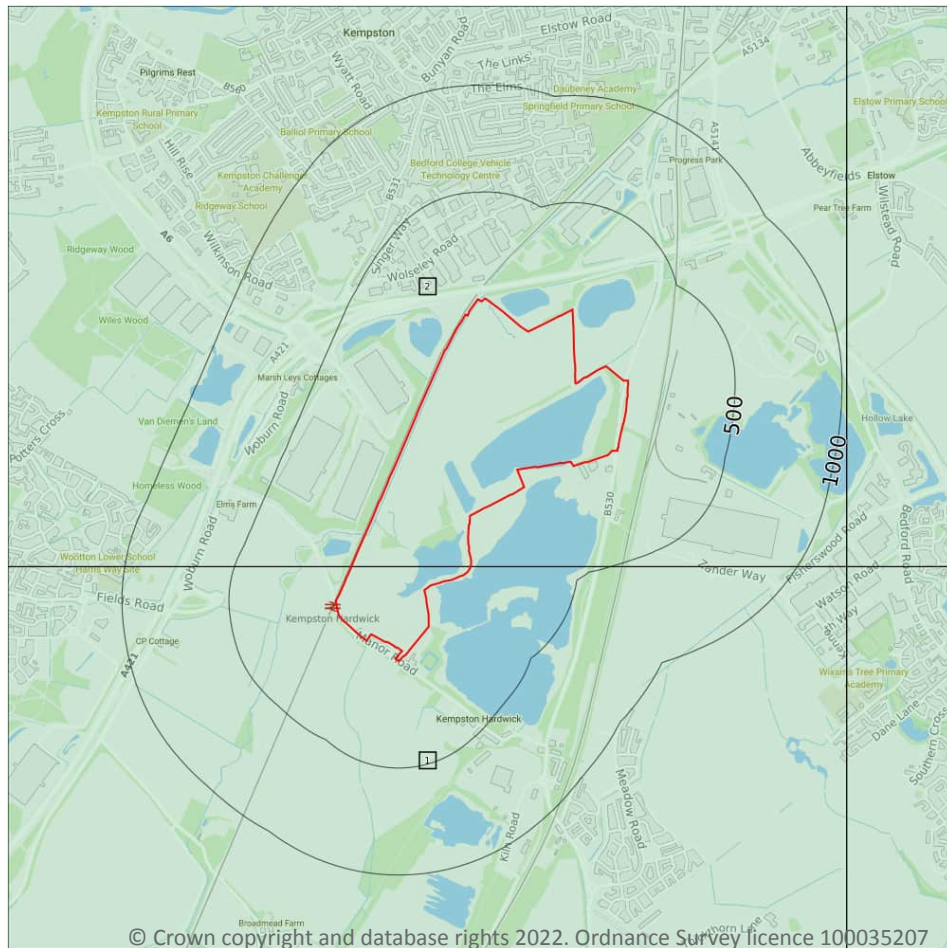
13.4 Limestone Pavement Orders

Records within 250m	0
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Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

2

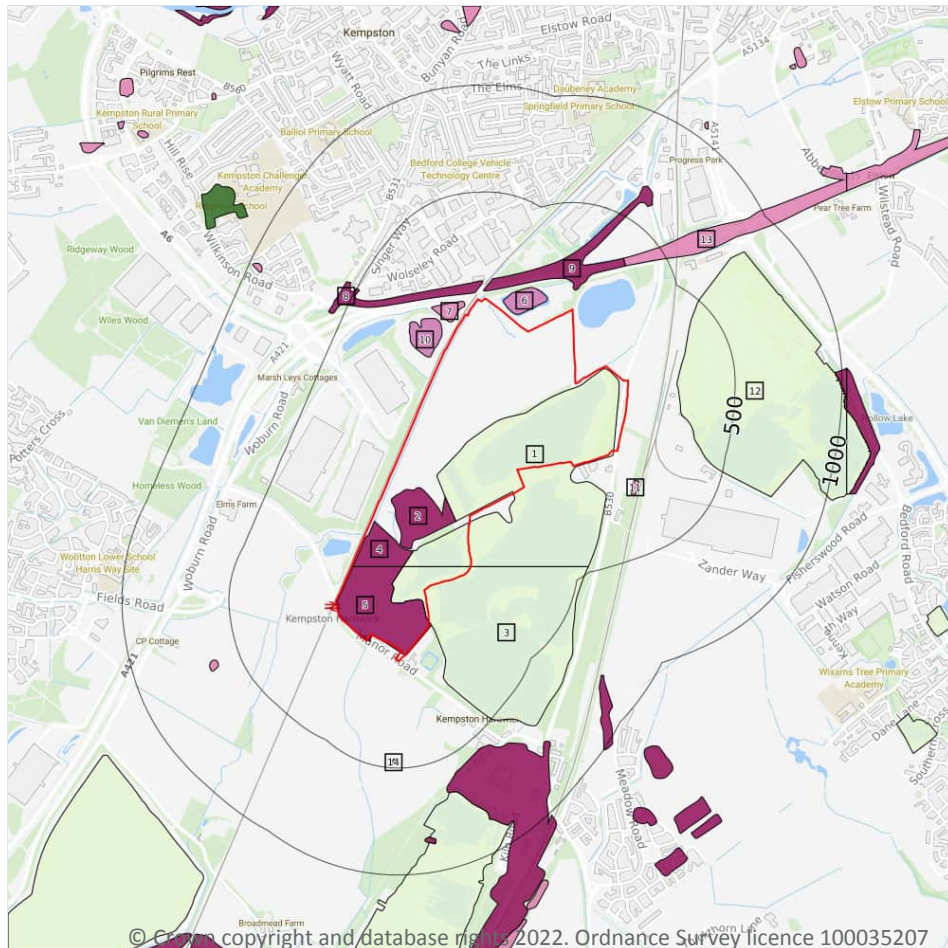
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme. Features are displayed on the Geology 1:10,000 scale - Availability map on **page 98**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	TL04SW
2	On site	Full	Full	Full	No coverage	TL04NW

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

14

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 99**

ID	Location	LEX Code	Description	Rock description
1	On site	WMGR-ARTDP	Infilled Ground	Artificial Deposit
2	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	On site	WMGR-ARTDP	Infilled Ground	Artificial Deposit
4	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

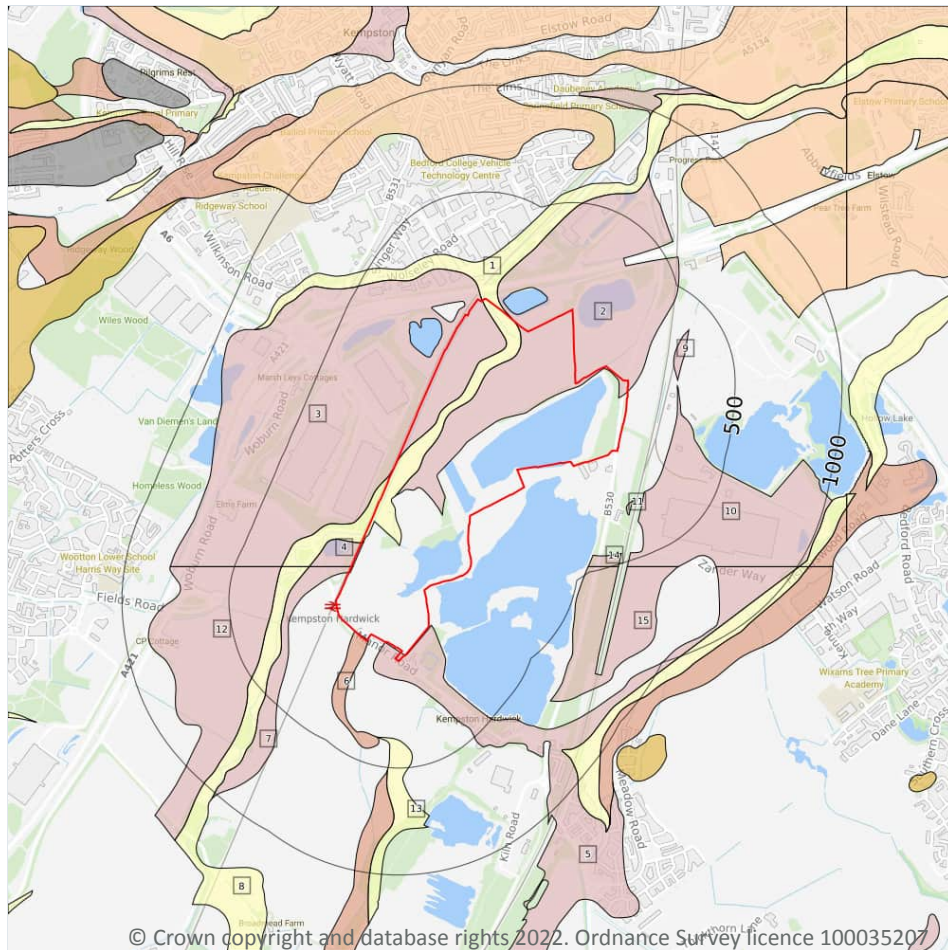


ID	Location	LEX Code	Description	Rock description
5	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	26m N	WGR-VOID	Worked Ground (Undivided)	Void
7	31m N	WGR-VOID	Worked Ground (Undivided)	Void
8	35m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
9	37m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
10	43m N	WGR-VOID	Worked Ground (Undivided)	Void
11	158m E	WGR-VOID	Worked Ground (Undivided)	Void
12	228m E	WMGR-ARTDP	Infilled Ground	Artificial Deposit
13	322m NE	WGR-VOID	Worked Ground (Undivided)	Void
14	457m S	WGR-VOID	Worked Ground (Undivided)	Void

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

15

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 101**

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
2	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
3	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel



ID	Location	LEX Code	Description	Rock description
4	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
5	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
6	On site	HEAD1-XCZSV	Head, 1 - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
7	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
8	181m SW	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
9	224m NE	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
10	227m E	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
11	242m E	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
12	287m SW	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
13	362m S	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
14	426m SE	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
15	475m SE	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

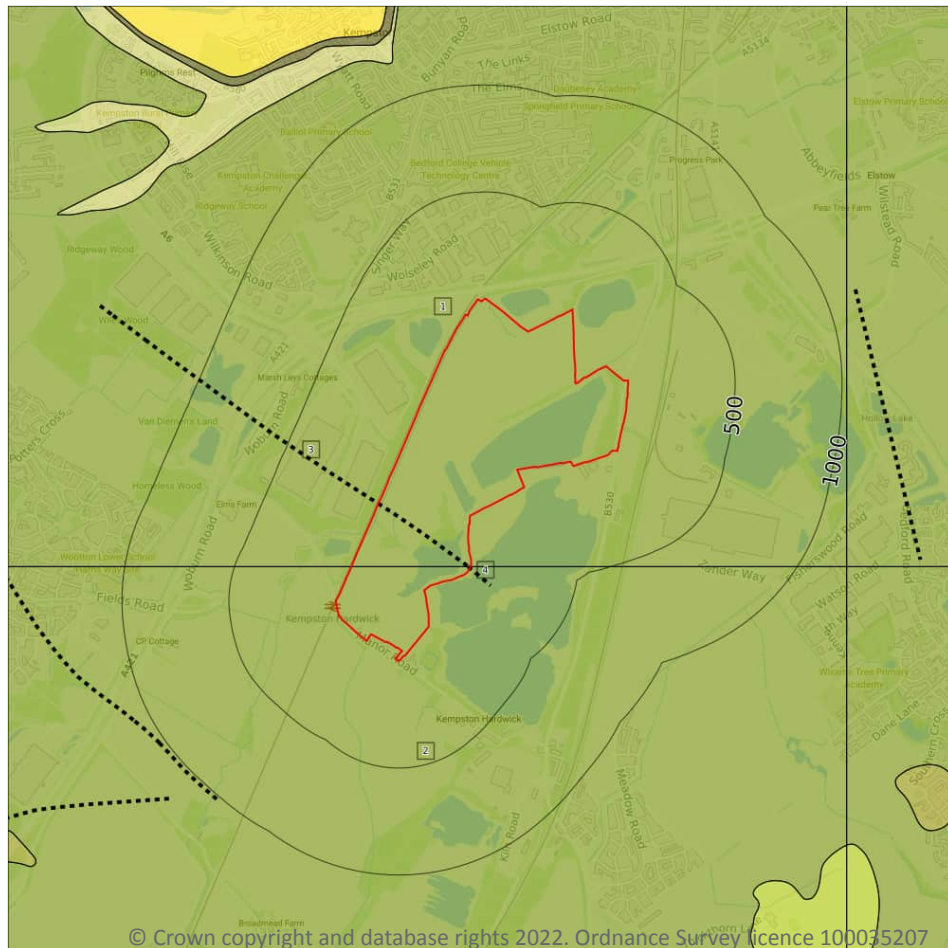
0

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

2

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 103**

ID	Location	LEX Code	Description	Rock age
1	On site	PET-MDST	Peterborough Member - Mudstone	Callovian Age
2	On site	PET-MDST	Peterborough Member - Mudstone	Callovian Age

This data is sourced from the British Geological Survey.



14.6 Bedrock faults and other linear features (10k)

Records within 500m

2

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

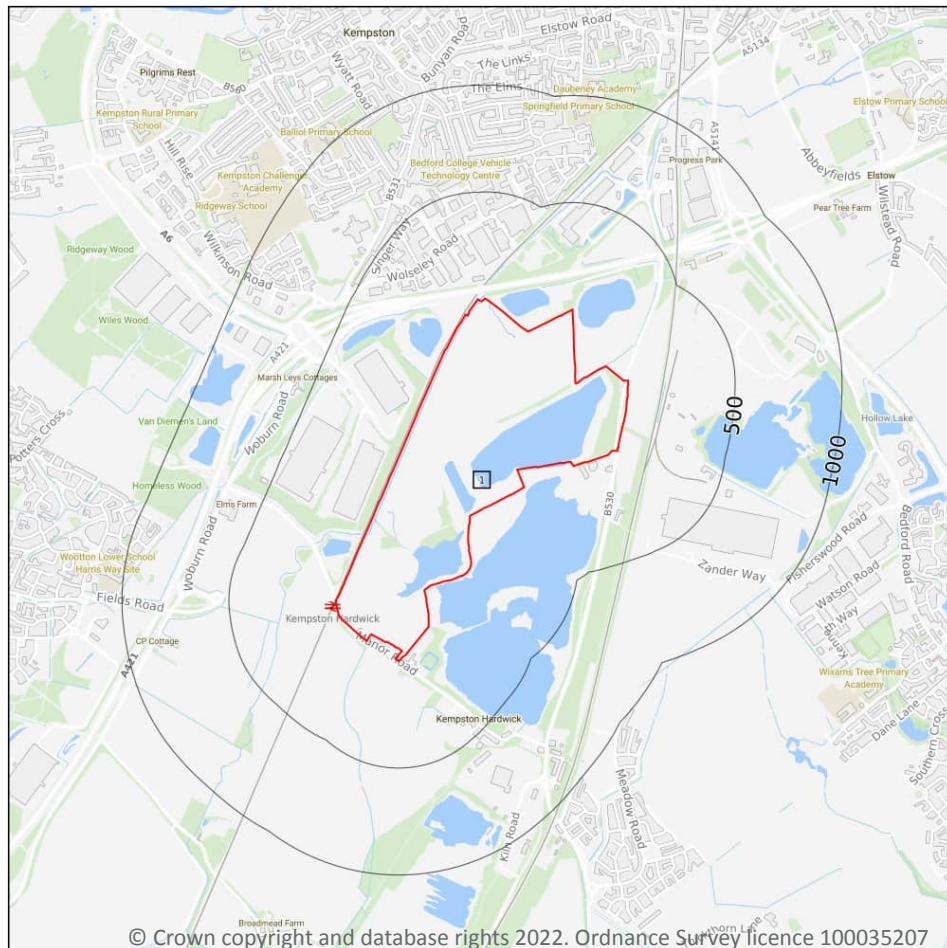
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 103**

ID	Location	Category	Description
3	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side
4	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side

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.

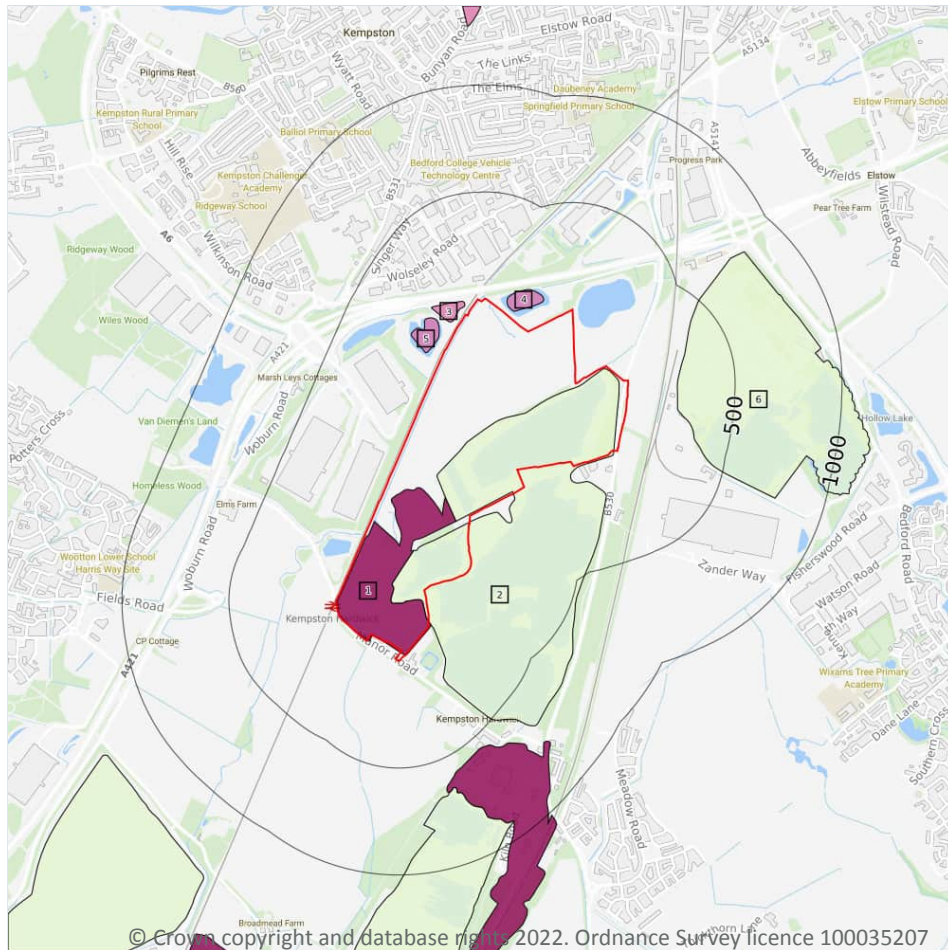
Features are displayed on the Geology 1:50,000 scale - Availability map on **page 105**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW203_bedford_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 106**

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	On site	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
3	31m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
4	33m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID



ID	Location	LEX Code	Description	Rock description
5	56m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
6	230m E	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

4

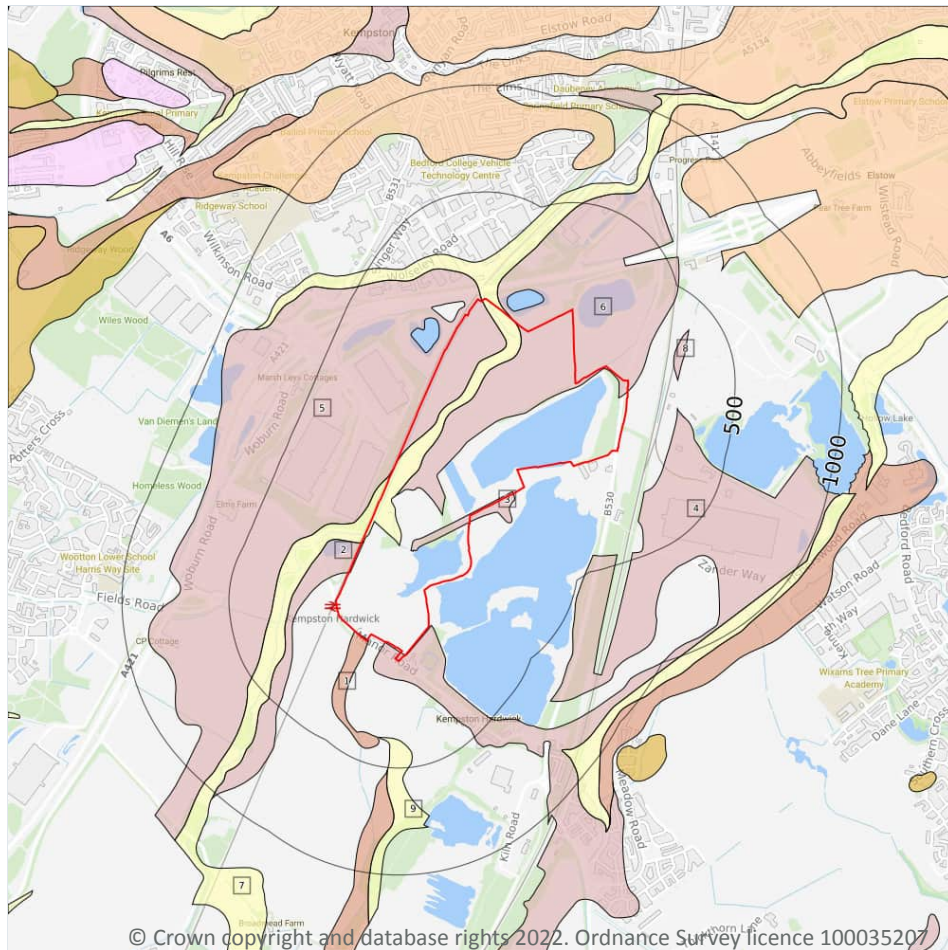
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m

9

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 108**

ID	Location	LEX Code	Description	Rock description
1	On site	HEAD1-XCZSV	HEAD, 1	CLAY, SILT, SAND AND GRAVEL
2	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL



ID	Location	LEX Code	Description	Rock description
3	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
4	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
5	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
6	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
7	On site	ALV-XCZ	ALLUVIUM	CLAY AND SILT
8	224m NE	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
9	362m S	ALV-XCZ	ALLUVIUM	CLAY AND SILT

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

8

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

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

This data is sourced from the British Geological Survey.



15.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m

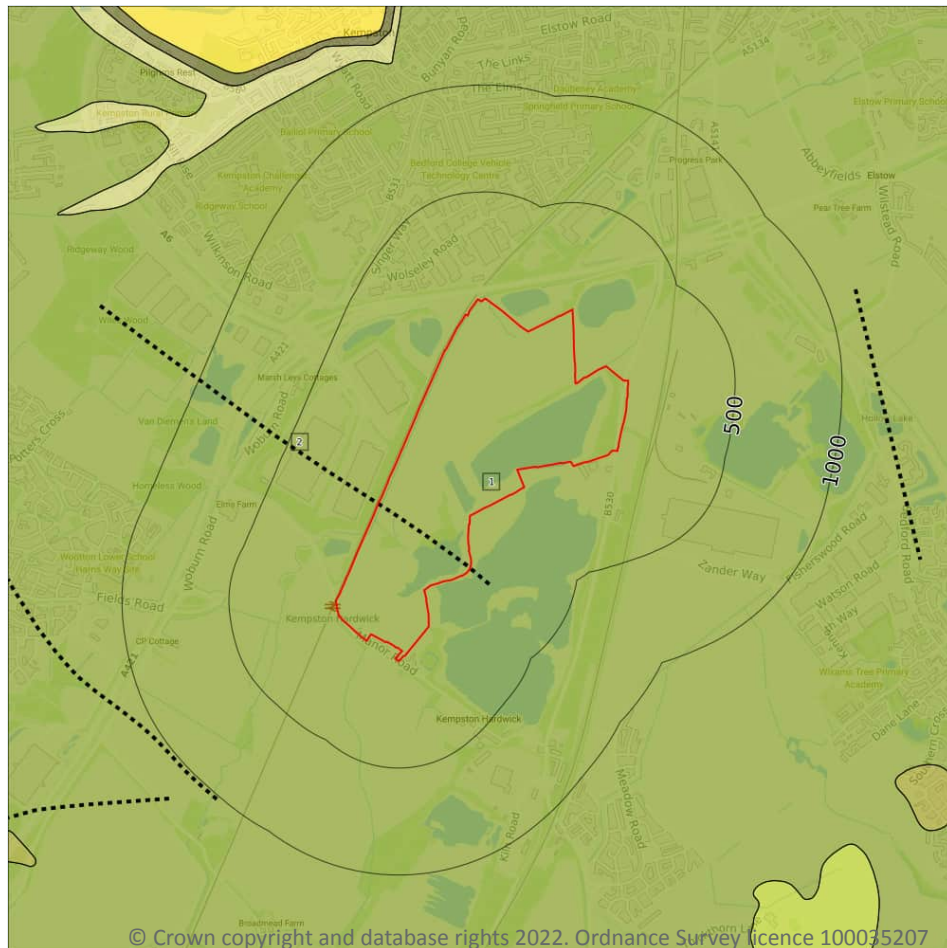
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

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

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

15.8 Bedrock geology (50k)

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 111**

ID	Location	LEX Code	Description	Rock age
1	On site	PET-MDST	PETERBOROUGH MEMBER - MUDSTONE	CALLOVIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

2

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

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

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

1

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

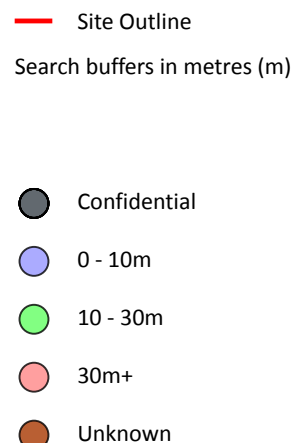
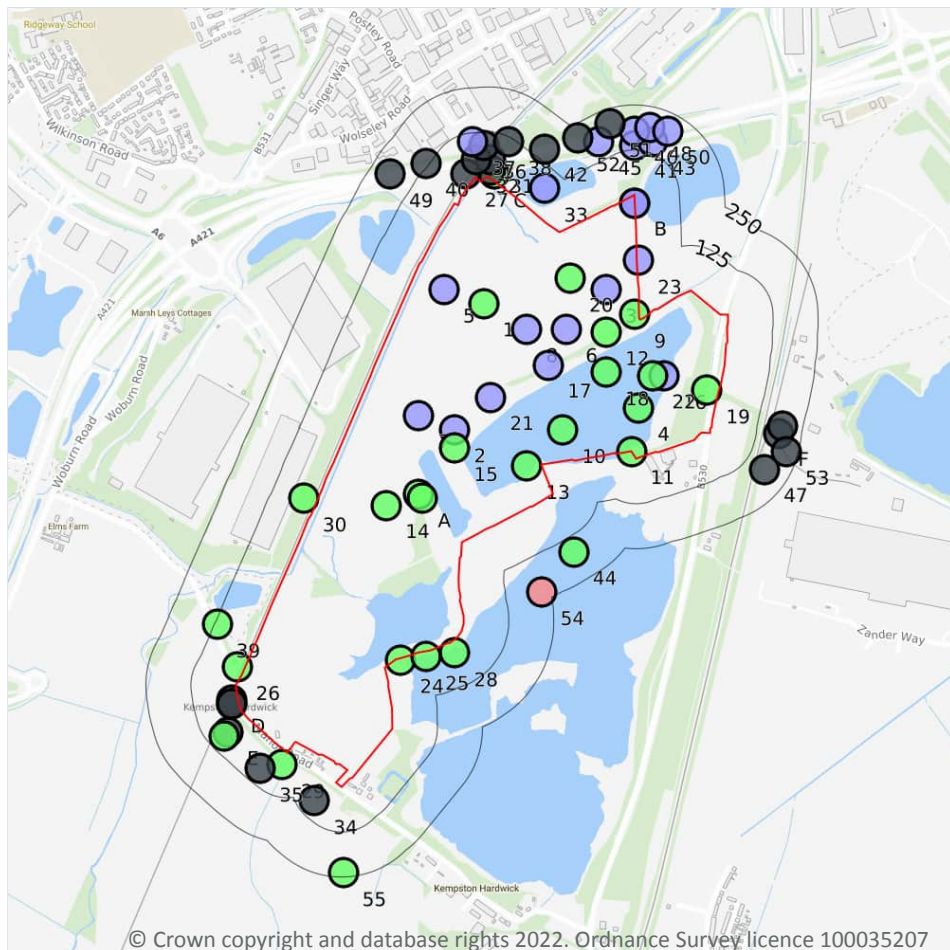
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 111**

ID	Location	Category	Description
2	On site	FAULT	Fault, inferred

This data is sourced from the British Geological Survey.



16 Boreholes



16.1 BGS Boreholes

Records within 250m

68

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

Features are displayed on the Boreholes map on **page 113**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	503300 245900	COW MEADOW KEMPSTON	24.38	N	524261
2	On site	503220 245550	L B C (REDLANDS) KEMPSTON HARDWICK 13	9.14	N	523751



ID	Location	Grid reference	Name	Length	Confidential	Web link
3	On site	503640 245940	L B C (REDLANDS) KEMPSTON HARDWICK 2	9.14	N	523741
4	On site	503730 245610	L B C (REDLANDS) KEMPSTON HARDWICK 5	15.84	N	523744
5	On site	503190 245940	L B C (REDLANDS) KEMPSTON HARDWICK 3	6.7	N	523742
6	On site	503530 245830	L B C (REDLANDS) KEMPSTON HARDWICK 16	8.99	N	523754
7	On site	503120 245590	L B C (REDLANDS) KEMPSTON HARDWICK 6	8.38	N	523745
8	On site	503420 245830	L B C (REDLANDS) KEMPSTON HARDWICK 4	8.68	N	523743
9	On site	503720 245870	L B C (REDLANDS) KEMPSTON HARDWICK 10	10.51	N	523748
10	On site	503520 245550	L B C (REDLANDS) KEMPSTON HARDWICK 14	12.8	N	523752
11	On site	503710 245490	SUSSEX & DORKING UNITED BRICK CO K/B	22.2	N	523638
12	On site	503640 245820	L B C KEMPSTON HARDWICK 5/71	10.97	N	523736
13	On site	503420 245450	L B C (REDLANDS) KEMPSTON HARDWICK 7	12.8	N	523746
14	On site	503030 245340	L B C (REDLANDS) KEMPSTON HARDWICK 9	10.97	N	523747
15	On site	503220 245500	L B C KEMPSTON HARDWICK 2/71	14.02	N	523733
16	On site	503800 245700	RACEMEADOW FARM	9.14	N	524258
17	On site	503480 245730	L B C KEMPSTON HARDWICK 4/71	9.44	N	523735
18	On site	503640 245710	L B C (REDLANDS) KEMPSTON HARDWICK 15	10.66	N	523753
19	On site	503920 245660	SUSSEX & DORKING UNITED BRICK CO K/C	19.81	N	523639
20	On site	503540 245970	L B C KEMPSTON HARDWICK 6/71	12.49	N	523737
21	On site	503320 245640	L B C KEMPSTON HARDWICK 3/71	9.44	N	523734
22	On site	503770 245700	L B C (REDLANDS) KEMPSTON HARDWICK 12	13.56	N	523750
A	On site	503120 245370	L B C KEMPSTON HARDWICK 1/71	10.97	N	523732
A	On site	503130 245360	SUSSEX & DORKING UNITED BRICK CO K/D	18.29	N	523640
B	1m NE	503720 246180	L B C (REDLANDS) KEMPSTON HARDWICK 11	7.46	N	523749
B	1m NE	503720 246180	L B C KEMPSTON HARDWICK 8/71	7.92	N	523739
23	5m NE	503730 246020	L B C KEMPSTON HARDWICK 7/71	9.44	N	523738
24	6m S	503070 244910	LBC KEMPSTON HARDWICK 9/71	14.0	N	524363
25	15m S	503140 244920	LBC KEMPSTON HARDWICK 10/71	17.0	N	524364
C	17m N	503330 246260	SUSSEX & DORKING UNITED BRICK CO K/E	13.72	N	523641



ID	Location	Grid reference	Name	Length	Confidential	Web link
D	18m SW	502600 244800	KEMPSTON HARDWICK 2/83	-	Y	N/A
C	19m N	503320 246270	KEMPSTON SOUTHERN RELIEF ROAD 10	-	Y	N/A
D	21m SW	502600 244790	KEMPSTON HARDWICK 1/83	-	Y	N/A
D	21m SW	502600 244790	KEMPSTON HARDWICK 3A	-	Y	N/A
26	21m SW	502615 244892	East West Rail Phase 2 CP2DKHOB_2D	19.86	N	20864544
27	27m N	503250 246260	KEMPSTON SOUTHERN RELIEF ROAD 9	-	Y	N/A
28	32m S	503220 244930	LBC KEMPSTON HARDWICK 11/71	17.0	N	524365
29	37m SW	502740 244620	ELSTOW 12	23.5	N	524614
30	37m W	502800 245360	SUSSEX & DORKING UNITED BRICK CO K/N	12.19	N	523647
31	49m N	503320 246300	KEMPSTON SOUTHERN RELIEF ROAD 11	-	Y	N/A
32	51m N	503280 246300	KEMPSTON SOUTHERN RELIEF ROAD 8	-	Y	N/A
E	67m SW	502590 244710	CORONATION PIT AREA 24	-	Y	N/A
33	71m N	503470 246220	L B C (REDLANDS) KEMPSTON HARDWICK 1	6.4	N	523740
34	79m SW	502830 244520	CORONATION PIT AREA 26	-	Y	N/A
35	81m SW	502680 244610	CORONATION PIT AREA 25	-	Y	N/A
E	81m SW	502580 244700	LBC STAVARTBY AND CORONATION 24	14.47	N	524408
36	89m N	503300 246340	KEMPSTON SOUTHERN RELIEF ROAD 7	-	Y	N/A
37	101m N	503270 246350	BEDFORD SOUTH ORBITAL SEWER 48	6.0	N	523991
38	113m N	503370 246350	KEMPSTON SOUTHERN RELIEF ROAD 12	-	Y	N/A
39	118m SW	502560 245010	SUSSEX & DORKING UNITED BRICK CO K/G	14.61	N	523650
40	133m N	503140 246290	KEMPSTON SOUTHERN RELIEF ROAD 6	-	Y	N/A
41	138m NE	503720 246340	BEDFORD SOUTHERN BYPASS 25	10.0	N	524281
42	156m N	503470 246330	KEMPSTON SOUTHERN RELIEF ROAD 13	-	Y	N/A
43	157m NE	503770 246350	BEDFORD SOUTHERN BYPASS TP24	1.8	N	524280
44	168m SE	503550 245210	L B C (REDLANDS) KEMPSTON HARDWICK 17	28.04	N	523755
45	177m NE	503620 246350	BEDFORD SOUTHERN BYPASS 21	8.5	N	524277
46	178m NE	503720 246380	BEDFORD SOUTHERN BYPASS TP22	4.5	N	524278
47	182m E	504080 245440	LAND ADJACENT TO ELSTOW LANDFILL SITE BEDFORD TP6	-	Y	N/A

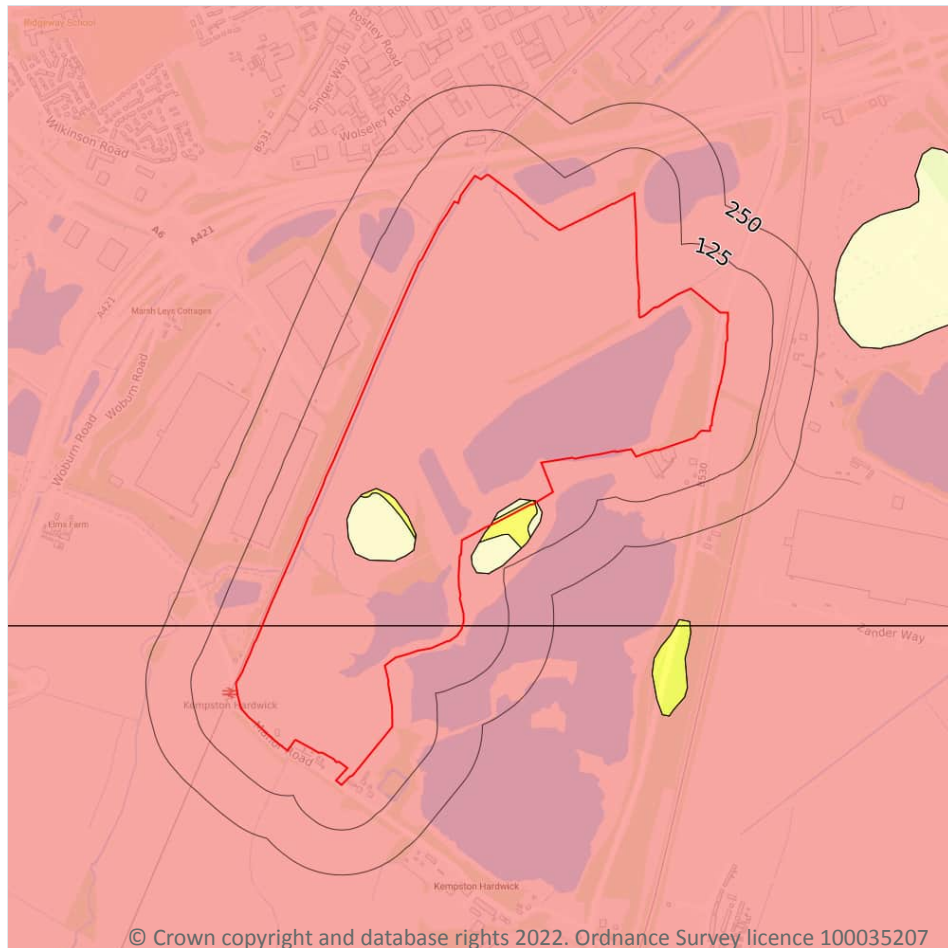


ID	Location	Grid reference	Name	Length	Confidential	Web link
F	188m E	504120 245540	LAND ADJACENT TO ELSTOW LANDFILL SITE BEDFORD 2	-	Y	N/A
48	193m NE	503760 246390	BEDFORD SOUTHERN BYPASS 23	8.6	N	524279
F	195m E	504130 245560	LAND ADJACENT TO ELSTOW LANDFILL SITE BEDFORD TP3	-	Y	N/A
49	195m N	503040 246260	KEMPSTON SOUTHERN RELIEF ROAD 5	-	Y	N/A
50	201m NE	503810 246380	BEDFORD SOUTHERN BYPASS TP26	2.0	N	524282
51	210m NE	503650 246400	KEMPSTON SOUTHERN RELIEF ROAD 15	-	Y	N/A
52	212m N	503560 246360	KEMPSTON SOUTHERN RELIEF ROAD 14	-	Y	N/A
53	218m E	504140 245490	LAND ADJACENT TO ELSTOW LANDFILL SITE BEDFORD TP4	-	Y	N/A
54	224m SE	503460 245100	SUSSEX FACTORY UNITED BRICK CO K/A	36.57	N	523637
55	238m S	502910 244320	CORONATION PIT AREA 3	18.0	N	524760

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

4

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 117**

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

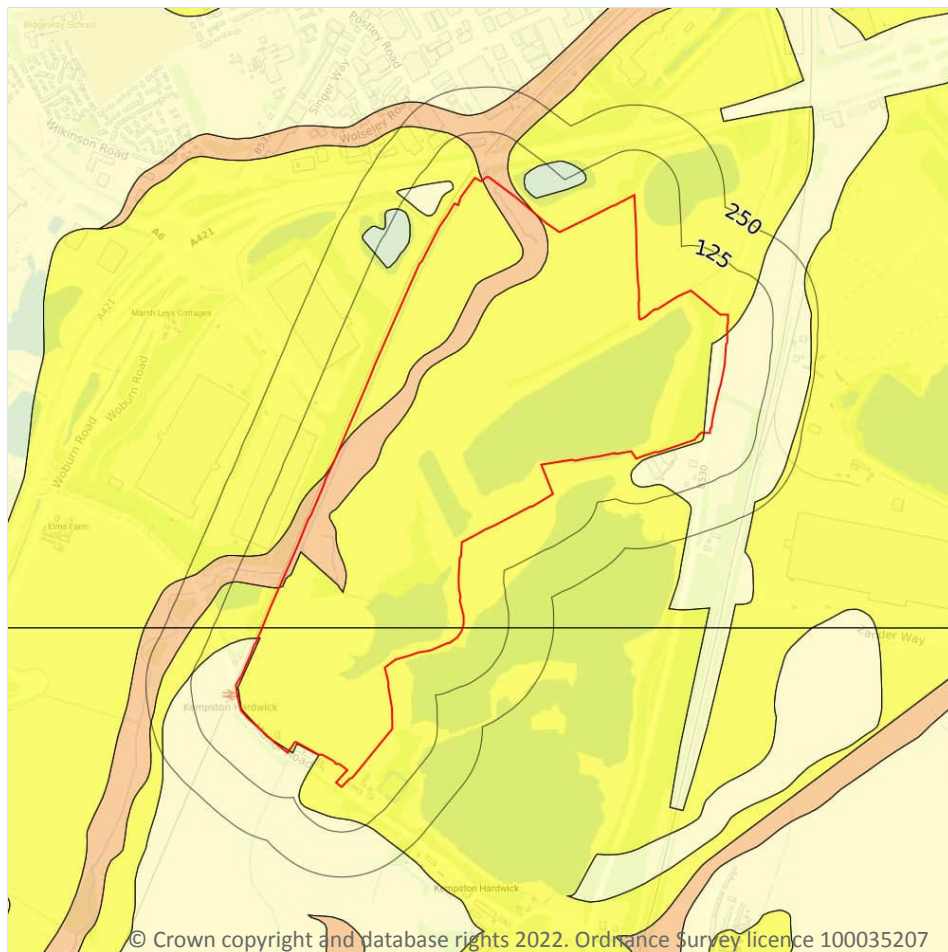


Location	Hazard rating	Details
28m S	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



— Site Outline

Search buffers in metres (m)

□ No data

 Negligible

 Very low

 Low

 Moderate

 High

17.2 Running sands

Records within 50m

5

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 119**

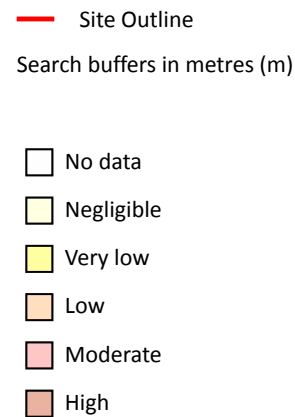
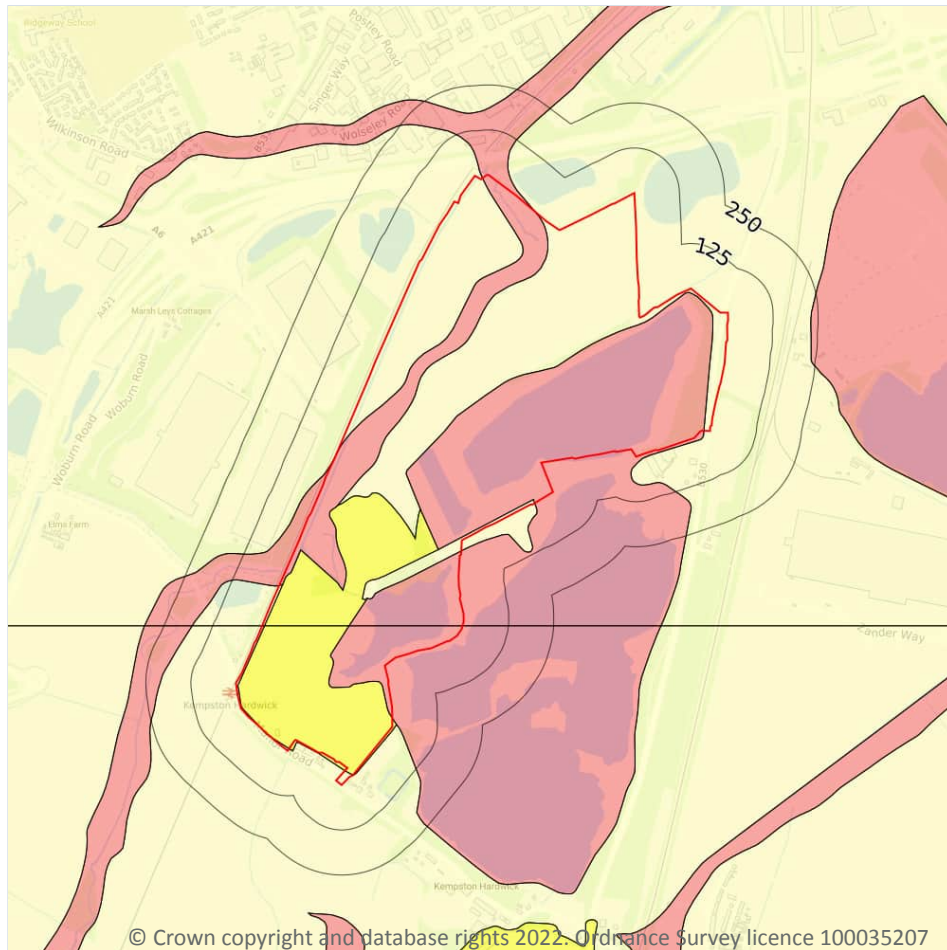
Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.
31m N	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.
33m N	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

3

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

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 121**

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

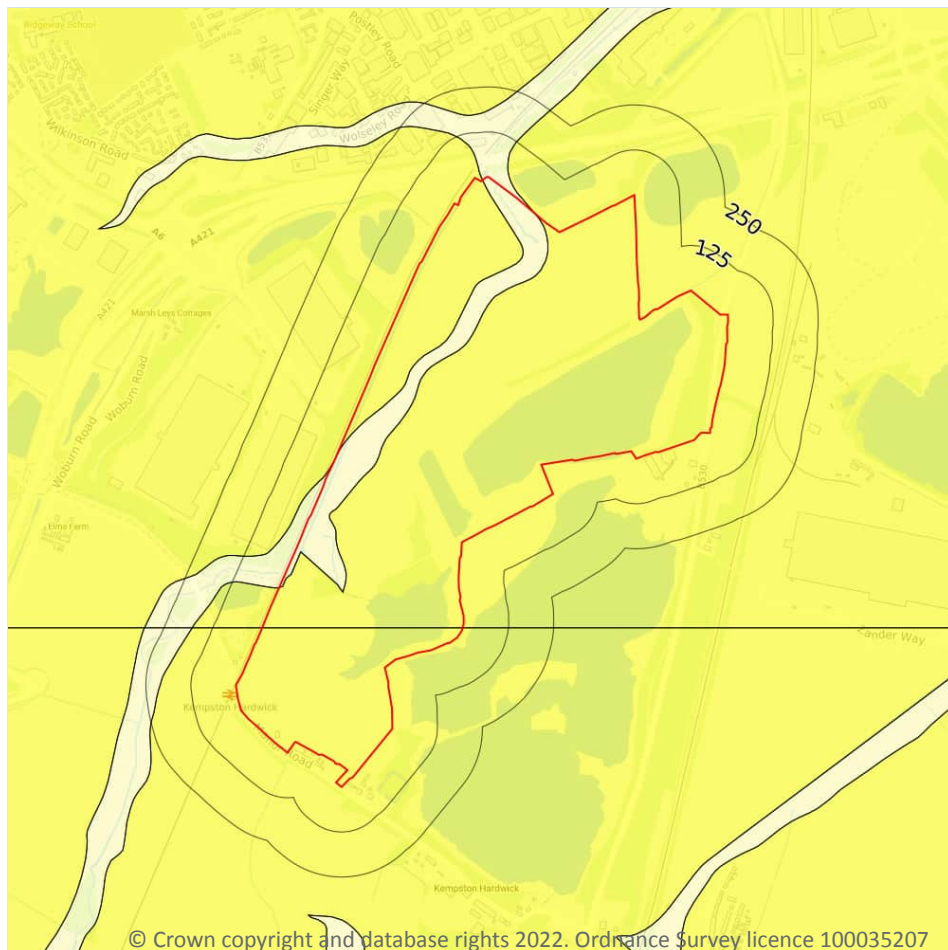


Location	Hazard rating	Details
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



— Site Outline

Search buffers in metres (m)

-  No data
 Negligible
 Very low
 Low
 Moderate
 High

17.4 Collapsible deposits

Records within 50m

2

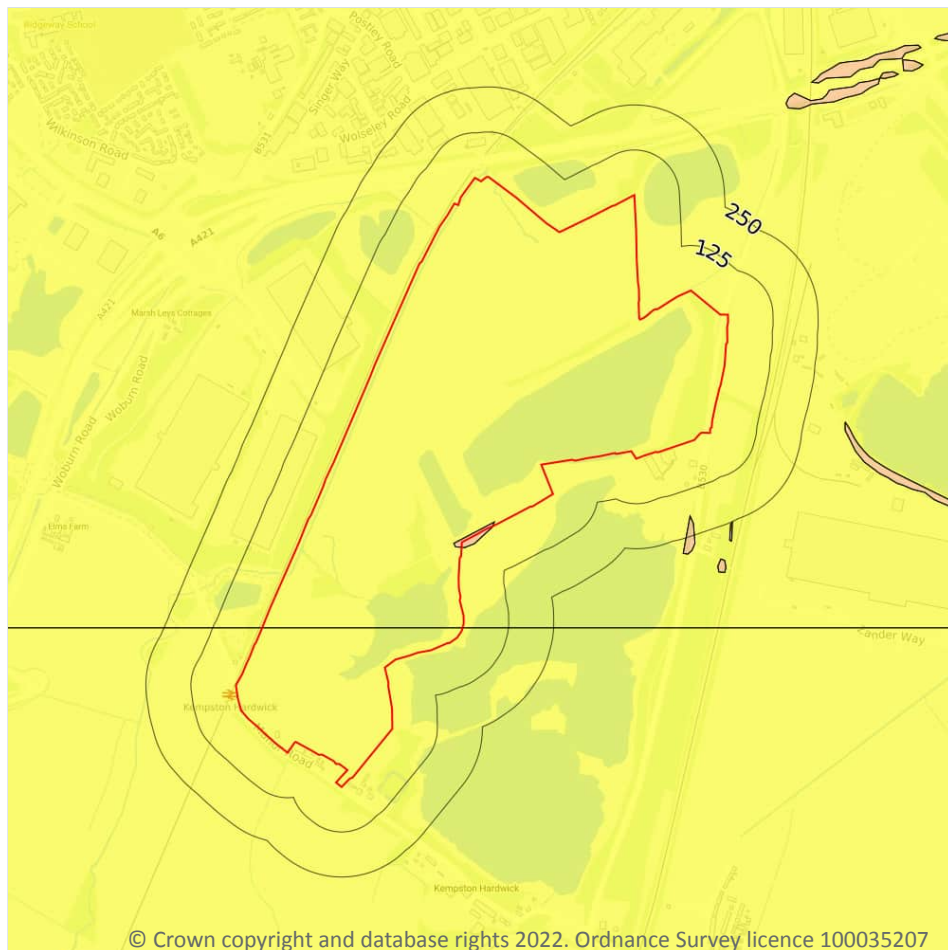
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 123**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



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

17.5 Landslides

Records within 50m

2

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 124**

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.

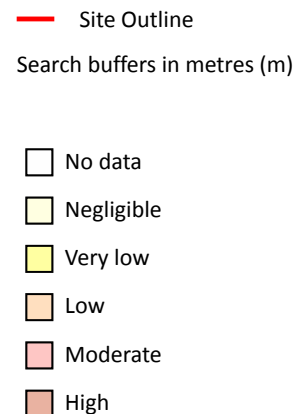
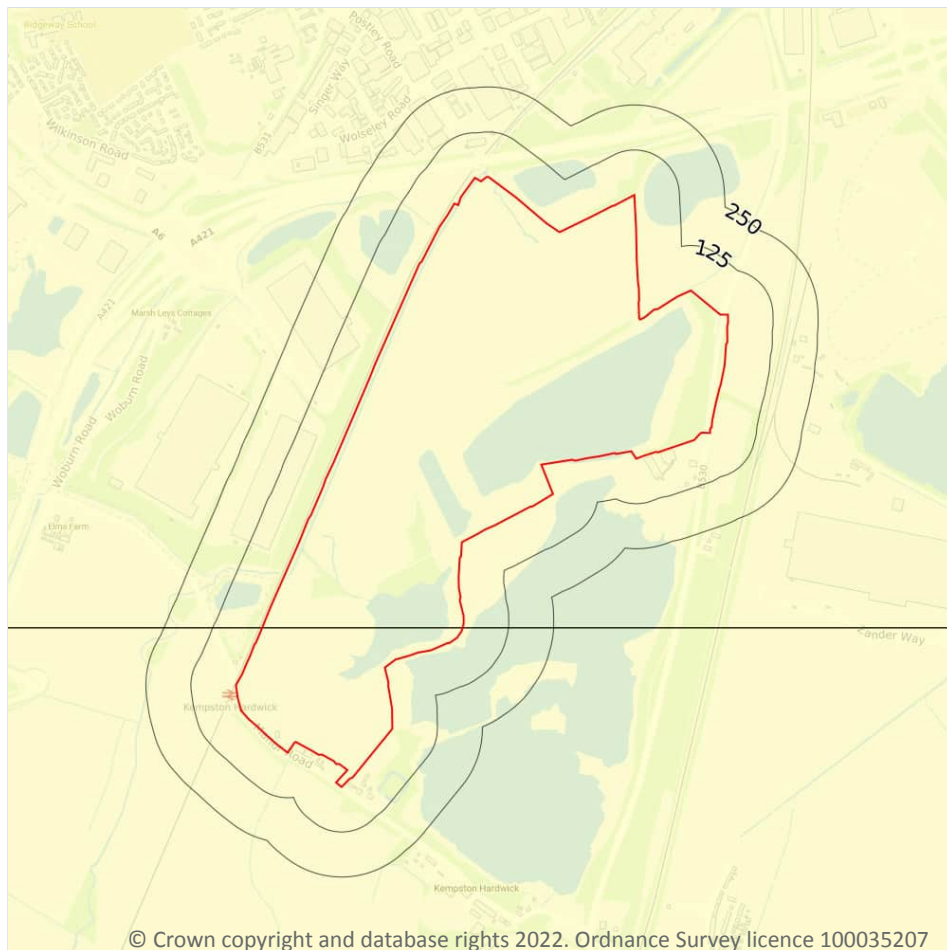


Location	Hazard rating	Details
On site	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

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

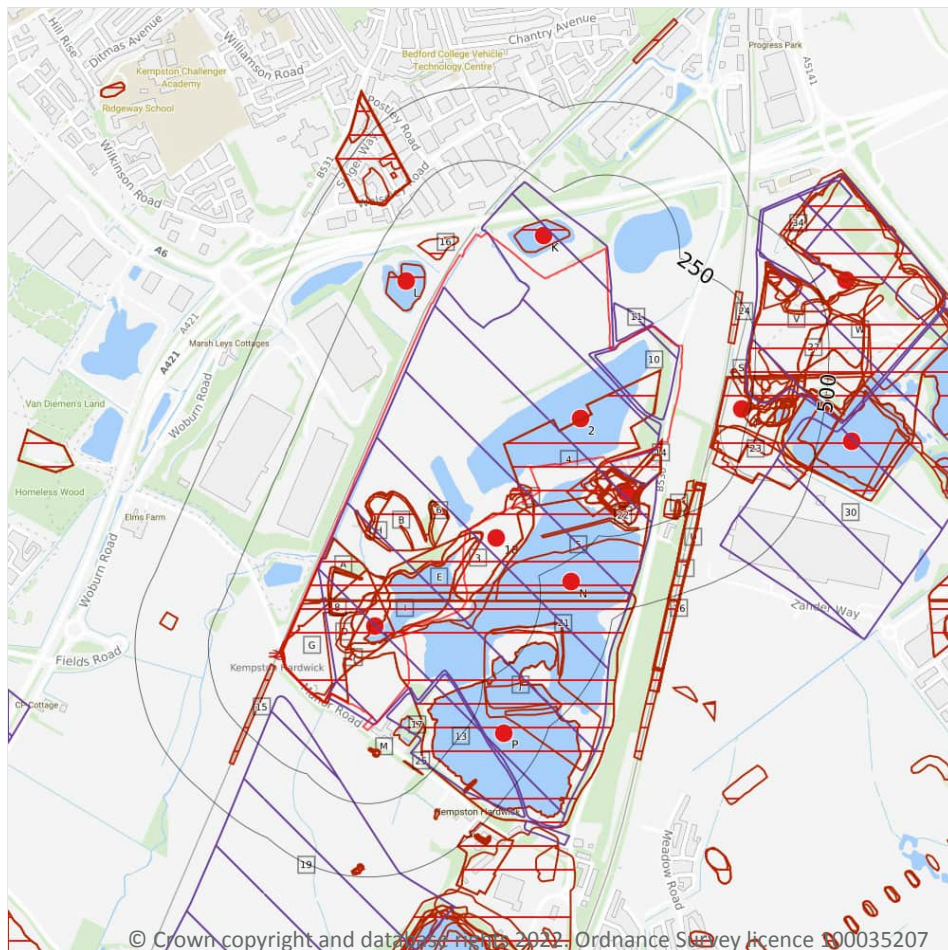
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 126**

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

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



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

18.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

10

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 128**

ID	Location	Details	Description
1	On site	Name: Kempston Hardwick (North) Address: Kempston Hardwick, BEDFORD, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
2	On site	Name: Hardwick Hill Brick Works Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
18	69m S	Name: Kempston Hardwick Brick Works Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
K	112m N	Name: Hardwick Hill Brick Works Address: KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
C	115m E	Name: Hardwick Hill Brick Works Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority



ID	Location	Details	Description
L	115m N	Name: Marshleys Farm Address: KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
Q	221m E	Name: Elstow Rail Depot Address: Elstow, BEDFORD, Bedfordshire Commodity: Crushed Rock Status: Active	Type: A site where mineral commodities are unloaded from rail trucks and stored Status description: Site which is actively extracting mineral products, or in the case of wharfs and rail depots, is actively handing minerals
Q	306m E	Name: Elstow Brick Works Address: Elstow, BEDFORD, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
N	318m SE	Name: Hardwick Hill Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
P	365m S	Name: Hardwick Hill Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

107

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 128**



ID	Location	Land Use	Year of mapping	Mapping scale
3	On site	Water Body	1959	1:10560
4	On site	Clay Pit	1987	1:10000
5	On site	Clay Pit	1978	1:10000
6	On site	Unspecified Ground Workings	1948	1:10560
7	On site	Unspecified Heap	1948	1:10560
8	On site	Unspecified Ground Workings	1959	1:10560
A	On site	Unspecified Heap	1959	1:10560
A	On site	Unspecified Ground Workings	1948	1:10560
A	On site	Brick Works	1971	1:10000
A	On site	Brick Works	1987	1:10000
A	On site	Brick Works	1978	1:10000
B	On site	Unspecified Heap	1959	1:10560
B	On site	Unspecified Ground Workings	1948	1:10560
C	On site	Bricks Works	1938	1:10560
C	On site	Brick Works	1948	1:10560
C	On site	Bricks Works	1938	1:10560
C	On site	Brick Works	1924	1:10560
D	On site	Bricks Works	1938	1:10560
D	On site	Bricks Works	1938	1:10560
E	On site	Water Body	1971	1:10000
E	On site	Water Body	1987	1:10000
E	On site	Water Body	1978	1:10000
E	On site	Clay Pit	1978	1:10000
E	On site	Pond	1948	1:10560
E	On site	Unspecified Disused Pit	1987	1:10000
F	On site	Water Body	1971	1:10000
F	On site	Unspecified Heap	1971	1:10000
G	On site	Brick Works	1948	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
G	On site	Brick Works	1989	1:10000
G	On site	Brick Works	1980	1:10000
H	On site	Unspecified Ground Workings	1948	1:10560
H	On site	Unspecified Heap	1971	1:10000
H	On site	Unspecified Heap	1987	1:10000
H	On site	Unspecified Heap	1978	1:10000
I	On site	Pond	1989	1:10000
I	On site	Pond	1959	1:10560
I	On site	Pond	1980	1:10000
J	On site	Unspecified Disused Pit	1989	1:10000
J	On site	Unspecified Disused Pit	1980	1:10000
12	10m S	Unspecified Disused Pit	1987	1:10000
C	19m E	Unspecified Pit	1938	1:10560
C	19m E	Unspecified Pit	1938	1:10560
14	20m E	Pond	1938	1:10560
C	22m E	Pond	1948	1:10560
C	22m E	Brick Works	1900	1:10560
C	25m E	Unspecified Ground Workings	1924	1:10560
C	30m E	Water Body	1971	1:10000
K	32m N	Water Body	1987	1:10000
15	34m SW	Cuttings	1882	1:10560
16	36m N	Unspecified Pit	1987	1:10000
L	44m N	Water Body	1987	1:10000
C	48m E	Pond	1959	1:10560
M	61m S	Pond	1938	1:10560
17	61m S	Pond	1959	1:10560
M	63m S	Pond	1989	1:10000
M	63m S	Pond	1959	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
M	63m S	Pond	1980	1:10000
M	63m S	Pond	1900	1:10560
M	63m S	Pond	1948	1:10560
M	65m S	Pond	1924	1:10560
C	87m E	Unspecified Heap	1948	1:10560
N	99m S	Clay Pit	1971	1:10000
O	102m E	Pond	1948	1:10560
O	102m E	Pond	1959	1:10560
P	105m S	Water Body	1989	1:10000
P	105m S	Water Body	1980	1:10000
20	122m S	Clay Pit	1959	1:10560
21	125m S	Unspecified Pit	1948	1:10560
22	133m SE	Unspecified Ground Workings	1971	1:10000
Q	145m E	Brick Works	1900	1:10560
Q	148m E	Brick Works	1924	1:10560
Q	149m E	Brick Works	1948	1:10560
R	151m E	Old Clay Pits	1882	1:10560
Q	151m E	Bricks Works	1938	1:10560
Q	151m E	Bricks Works	1938	1:10560
23	154m E	Brick Works	1971	1:10000
24	157m NE	Cuttings	1882	1:10560
25	161m S	Ponds	1882	1:10560
S	168m E	Unspecified Heap	1900	1:10560
T	170m E	Cuttings	1938	1:10560
T	170m E	Cuttings	1924	1:10560
T	170m E	Cuttings	1900	1:10560
T	170m E	Cuttings	1948	1:10560
U	173m E	Cuttings	1959	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
U	173m E	Cuttings	1971	1:10000
U	173m E	Cuttings	1987	1:10000
U	173m E	Cuttings	1978	1:10000
S	178m E	Unspecified Heap	1900	1:10560
26	184m E	Cuttings	1882	1:10560
R	196m E	Pond	1948	1:10560
R	196m E	Pond	1938	1:10560
R	197m E	Pond	1924	1:10560
R	198m E	Pond	1959	1:10560
R	198m E	Pond	1971	1:10000
R	198m E	Pond	1987	1:10000
R	198m E	Pond	1978	1:10000
V	215m E	Clay Pit	1938	1:10560
V	217m E	Clay Pit	1938	1:10560
V	217m E	Clay Pit	1924	1:10560
S	218m E	Unspecified Ground Workings	1938	1:10560
S	218m E	Unspecified Ground Workings	1938	1:10560
S	221m E	Unspecified Ground Workings	1924	1:10560
W	225m E	Unspecified Ground Workings	1948	1:10560
27	226m E	Unspecified Ground Workings	1959	1:10560
Q	232m E	Unspecified Pit	1900	1:10560
S	237m E	Unspecified Heaps	1948	1:10560
S	246m E	Unspecified Ground Workings	1924	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 data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

8

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 128**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
9	On site	Hardwick Hill	Clay	Surface mineral working	Valid	31/07/52
10	On site	Hardwick Hill	Clay	Surface mineral working	Valid	04/07/56
11	4m NE	Hardwick Hill	Clay	Surface mineral working	Valid	29/03/56
13	14m S	Hardwick Hill	Clay	Surface mineral working	Valid	10/09/53
19	74m SW	Coronation	Clay	Surface mineral working	Valid	17/7/52
W	220m E	Elstow	Clay	Surface mineral working	Valid	26/5/49
30	342m E	Elstow	Clay	Surface mineral working	Valid	26/5/49
34	406m NE	Elstow	Clay	Surface mineral working	Valid	26/5/49

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
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Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

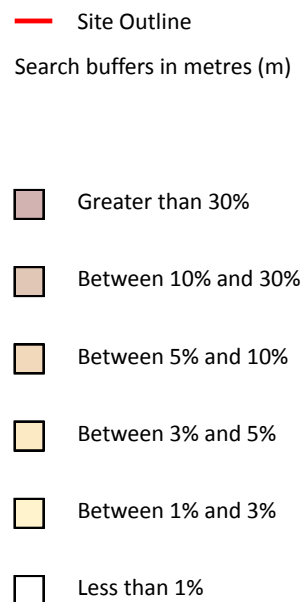
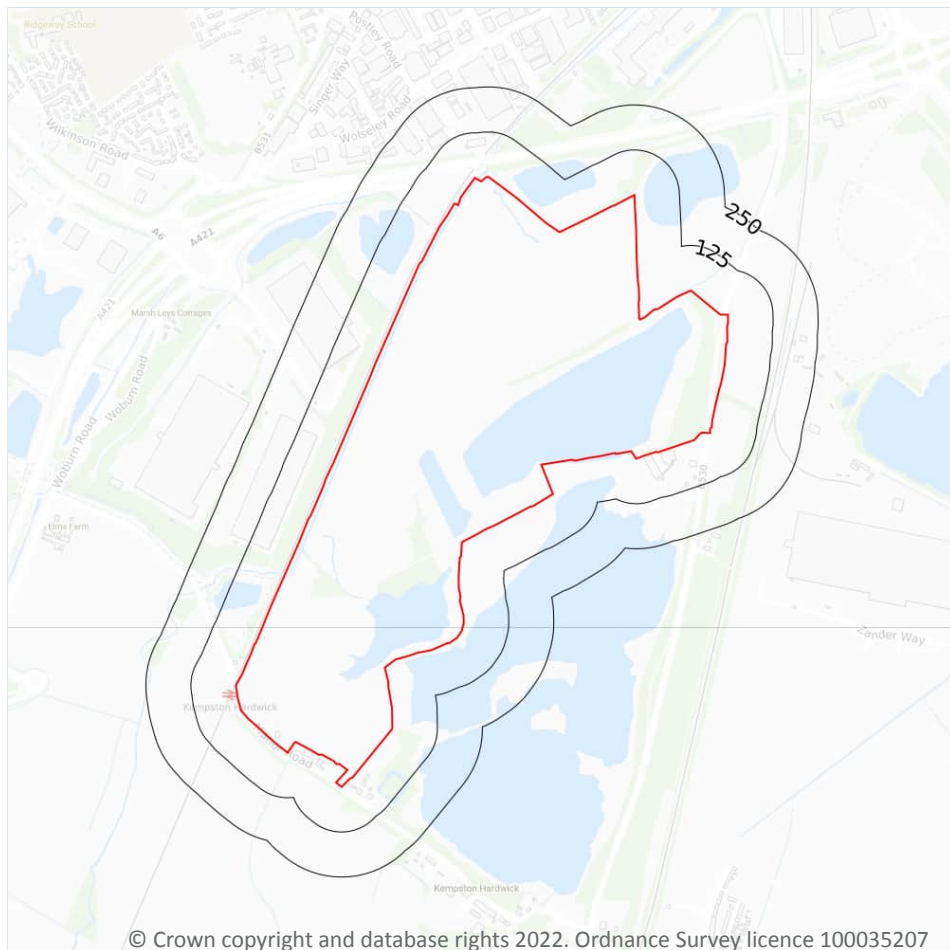
18.13 Clay mining

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 138**

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

34

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
4m S	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
22m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
22m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

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

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m

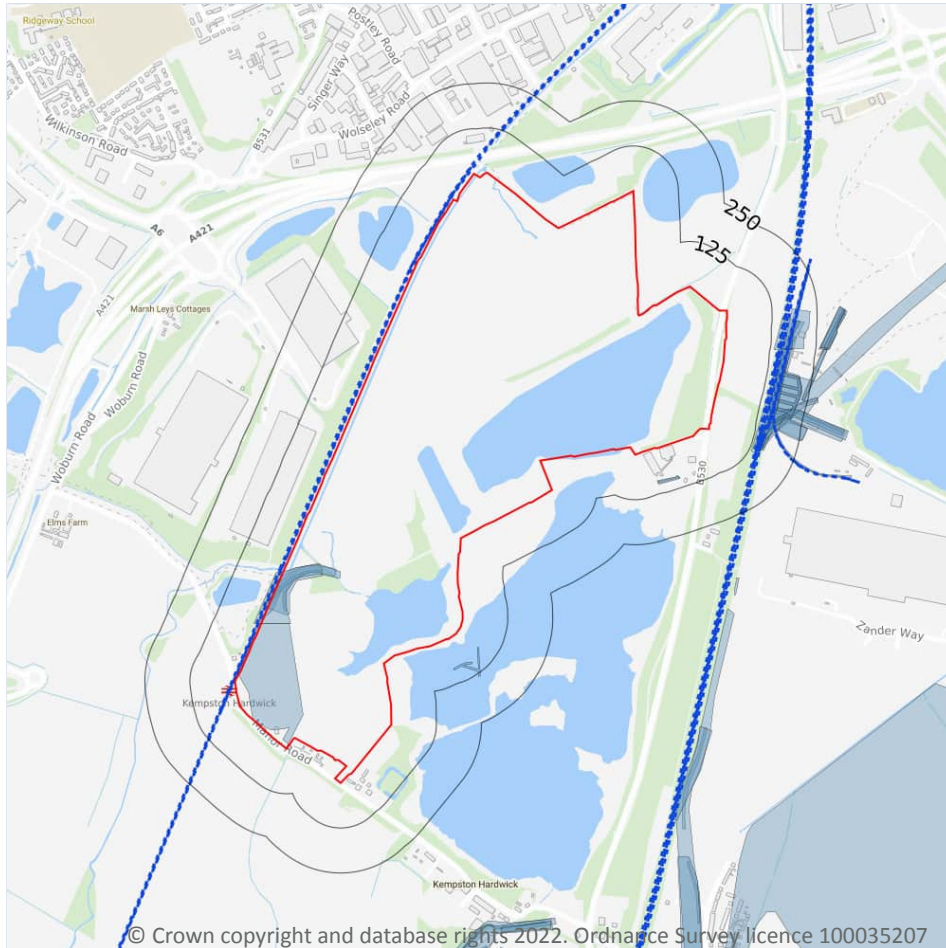
0

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

This data is sourced from the British Geological Survey.



21 Railway infrastructure and projects



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

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

24

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 142**

Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1968	2500
On site	Railway Sidings	1948	10560
On site	Railway Sidings	1971	10000
On site	Railway Sidings	1959	10560
71m S	Railway Sidings	1968	2500
88m E	Railway Sidings	1924	10560
90m E	Railway Sidings	1926	2500
130m E	Railway Sidings	1959	10560
134m E	Railway Sidings	1971	10000
136m E	Railway Sidings	1938	10560
138m E	Railway Sidings	1948	10560
141m E	Railway Sidings	1938	10560
143m E	Railway Sidings	1926	2500
144m E	Railway Sidings	1901	2500
145m E	Railway Sidings	1900	10560
147m E	Railway Sidings	1968	2500
150m E	Railway Sidings	1924	10560



Location	Land Use	Year of mapping	Mapping scale
157m E	Railway Sidings	1997	2500
161m E	Railway Sidings	1938	10560
167m E	Railway Sidings	1926	2500
175m E	Railway Sidings	1924	10560
229m E	Railway Sidings	1901	2500
234m E	Tramway Sidings	1924	10560
235m E	Tramway Sidings	1926	2500

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 35

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 142**

Location	Name	Type
3m SW	Not given	Multi Track



Location	Name	Type
4m SW	Marston Vale Line	rail
5m N	Marston Vale Line	rail
6m N	Not given	Multi Track
7m SW	Not given	Multi Track
7m SW	Not given	Multi Track
7m SW	Marston Vale Line	rail
8m SW	Marston Vale Line	rail
9m N	Marston Vale Line	rail
12m SW	Marston Vale Line	rail
13m N	Marston Vale Line	rail
14m N	Not given	Multi Track
52m SW	Not given	Multi Track
64m N	Not given	Multi Track
137m E	Midland Main Line	rail
141m E	Not given	Multi Track
141m E	Midland Main Line	rail
141m E	Not given	Multi Track
144m E	Not given	Multi Track
145m E	Midland Main Line	rail
146m E	Not given	Multi Track
149m E	Midland Main Line	rail
149m E	Not given	Multi Track
150m E	Not given	Single Track
151m E	Tarmac Elstow	rail
152m E	Not given	Single Track
152m E	Not given	Single Track
153m E	Not given	Multi Track
161m E	Tarmac Elstow	rail



Location	Name	Type
164m E	Not given	Single Track
165m E	Not given	Single Track
165m E	Tarmac Elstow	rail
168m E	Not given	Single Track
197m E	Not given	Single Track
200m E	Not given	Single 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 0

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m 0

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

This data is sourced from HS2 Ltd.

Data providers

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

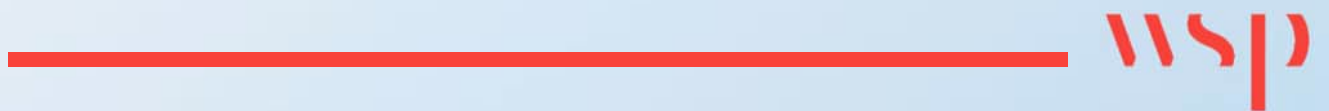
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Annex 8

STEWARTBY LAKE REPORT



Annual Statement SummaryReservoir Name – **Stewartby****Statement Type**

Statement 12(2)	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Statement 12(2A)	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

Undertaker compliant with maintenance measures recommended under section 10(3)(b)

YES

NO

N/A

Are there any compliance issues with records, monitoring and supervision by the undertaker under Section 11

YES

NO

Have you recommended that the reservoir be inspected under Section 12(3) of the Act

YES

NO

Have you made any directions under sections 12(6)

YES

NO

Date of Statement: 16th January 2024



STEWARTBY RESERVOIR

Annual Statement by Supervising Engineer under Section
12(2) of the Reservoirs Act 1975

January 2024 for 2023

Quality information

Prepared by	Checked by	Verified by	Approved by
Rob King	Rob King	Rob King	Rob King
Supervising Engineer			

Revision History

Revision	Revision date	Details	Authorized	Name	Position
001	16/01/2024	Draft	RK	Rob King	SE
002	12/02/2024	Final	RK	Rob King	SE

Prepared for:

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Summary of actions for the undertaker

Table 1. Action Check List

Section	Action	Date to be completed
2.5.4	that an inspection under section 10(2) of the Act be undertaken as soon as possible.	ASAP
2.3	the PFOR should be provided to the SE for review	ASAP
A4	the areas of the embankment that have been subject to erosion along the upstream face of the embankment be reinstated.	ongoing
A4	any large trees and shrubs that could be detrimental to the integrity of the embankment along its downstream face be removed	ongoing
A4	any large trees and shrubs that could be detrimental to the integrity of the embankment along its downstream face be removed	ongoing
A7	the vegetation be removed from the low-level screens	ongoing
A10	the level board be kept clean	ongoing
A12	the name of the current SE be updated in the flood plan	ASAP

1. General information

Any reference to right side / left side in this statement is when viewed looking downstream.

1.1 Reservoir name

Stewartby Reservoir

1.2 Reservoir location

Situated on the northern western edge of Stewartby Lake Country Park about 8 km south west of Bedford and 1.5 km north east of Marston, Moretaine at NGR TL 00823 42361. Post code MK43 9ND is the site office.

1.3 Name and address of undertaker(s)

Bedfordshire & River Iver Internal Drainage Board
Vale House
Broadmead Road
Stewartby
Bedford
MK48 9WD

Contact: Trevor Skelding
Tel No: 01234 767995
Email: Trevor.Skelding@idbs.org.uk

1.4 Name and address of supervising engineer

Rob King
AECOM
2 City Walk
Leeds
LS11 9AR

Tel: 07827 418270
Email: rob.king@aecom.com

1.5 Alternative supervising engineer contact details

David Bell
9th Floor,
The Clarence West Building
2 Clarence St West
Belfast
BT27GP

Mob: 07741567975
Email: david.bell@aecom.com

1.6 Name of last inspecting engineer or construction engineer

Mr Chris Hoskins

2. Status and findings

2.1 Construction engineer's requirements relating to a new or re-used reservoir (section 6(2) to (4) or 9(2))

None

2.2 Statutory maintenance measures (section 10(3)(b))

None

2.3 Matters to be watched by the supervising engineer (section 7(5) or 10(4))

Description	Comment
The continuing condition and adequacy of the tilting gate and all associated structures and channels, including the footbridge over the channel:	The structures appeared to be in a fair condition at the time of the visit.
The control and maintenance of vegetation:	There are large trees and shrubs present along the embankments.
The control of debris;	No significant issue with debris was identified during the visit.
The prescribed form of record is amended as directed and adequately maintained in the future:	To be provided for review and comment.
any activities in the highway that could affect the water retention and safe functioning ability of the dam be considered and action taken as required:	None observed during the visit.
Development downstream of the reservoir be identified and noted:	No change since the last S12 report was issued.

2.4 Records, monitoring and supervision by the undertaker (section 11)

The PFor was not made available at the time of the visit. **I advise that this should be made available to the Supervising Engineer for review as soon as possible.**

2.5 Inspection under section 10(2)

2.5.1 Date of last section 10 report and section 10(5) certificate

27th January 2014

2.5.2 Measures in the interests of safety (section 10(6))

None in the interests of safety

2.5.3 Date of next scheduled inspection under section 10(2) of the Act

31st July 2023

2.5.4 Recommendation under section 12(3) for an inspection under section 10(2)

The date for the next scheduled inspection under section 10(2) of the Act has passed and I **recommend that an inspection of the reservoir be undertaken as soon as possible.**

2.6 Directions by the supervising engineer as to the visual inspection by the undertaker under section 12(6)

Staff visit the site at least monthly.

2.7 Direction and certification of directions for flood plans under section 12AA (section 12AA)

An onsite flood plan has been written following a Ministerial Directive that all reservoirs should have an onsite plan.

2.7.1 Who certified the flood plan and when (sections 12AA(3), and 12A(2)(a) and (b))

The flood plan was certified by the last Supervising Engineer, Dr Andy Hughes.

2.7.2 Details of any directions to the undertaker to test the flood plan (section 12AA(4))

The flood plan will be tested as specified in the Certificate.

2.7.3 Details of any directions to the undertaker to revise the flood plan (section 12AA(7))

The flood plan has been reviewed as specified in the Certificate and found to be satisfactory, however the name of the current SE needs to be updated.

3. Summary of the visit report(s)

This was my first visit to dam. Overall, the dam and its appurtenant structures appeared to be in a fair condition.

4. Signature of supervising engineer and date of expiry of current panel appointment



.....
Mr Rob King
Supervising Engineer

(Appointment to Supervising Engineer's Panel until
February 2027)

This Statement results from a visual inspection of the reservoir condition on the date(s) of the visit(s). No liability can be accepted in respect of any defects not visually apparent or that arise subsequent to the date(s) of the visit(s). It is important that the Undertaker reports as soon as possible any change in the condition of the reservoir to the Supervising Engineer.

5. Date of written statement

16th January 2024

Appendix A Site-visit report

A1 Visit date

9th January 2024.

A2 Water level, site conditions and scope of inspection

On the day of the inspection the weather was dry and clear with very little wind. There had been significant rainfall in the area of the dam the week prior to the visit.

The gauge board was reading approximately 35.40 m AOD.

A3 Significant events since previous inspection

None reported.

A4 Dam structure

Upstream face:

The reno mattresses laid on areas of the upstream face in 2021/22 appeared to be in a satisfactory condition with no deformation or loss of stone identified. In areas outside of this there was signs of erosion **and I advise that areas of the embankment that have been subject to erosion along the upstream face of the embankment be reinstated.** There are also a large number of large trees on the upstream face of the dam, and **I advise that any large trees and shrubs that could be detrimental to the integrity of the embankment along its upstream face be removed.**

Crest:

The crest appeared to be in a satisfactory condition, it was covered in in a layer of gravel, and there were no observable cracks or any indication of significant settlement or movement.

Downstream face:

The downstream face is difficult to decipher in the places due to the low height of the embankment and the extent of vegetation. **I advise that any large trees and shrubs that could be detrimental to the integrity of the embankment along its downstream face be removed.**

A5 Overflow/spillway

The overflow structure including main debris screen appeared to be in a satisfactory condition as did the approach walls. The approach leading to the overflow was clear from vegetation as was the channel on the downstream side of the overflow structure. Debris screens located at a lower level had vegetation stuck in their bars and **I advise that the vegetation be removed from the low-level screens.**

A6 Drawoff works

Nonapplicable.

A7 Bottom outlet

The bottom outlet could not be observed due to the high-water level in the reservoir.

A8 Seepage/drainage flows

None were observed at the time of the visit.

A9 Settlement and movement

There was no visible sign of any significant settlement or movement in the dam embankment.

A10 Surveys and instrumentation

The level board was hard to read due to its location and it was also dirty as it approached the water line. **I advise that the level board be kept clean.**

A11 Downstream conditions

There has been no changes in downstream conditions.

A12 Flood plan

A flood plan has been written and certified, however **I advise that the name of the SE be updated in the current document.**

Appendix B – Photographs



Vegetation along upstream face of embankment



View of condition of gabions on upstream face



View of embankment crest



View of erosion along upstream face



View of gauge board and low level debris screen



STEWARTBY RESERVOIR

ON-SITE EMERGENCY FLOOD PLAN

March 2022



STEWARTBY RESERVOIR

ON-SITE EMERGENCY FLOOD PLAN

Management Information

Person responsible for preparing the plan	Dr A K Hughes Dams & Reservoirs Ltd
Name of Engineer certifying the plan	As above
Date of plan	March 2022
Who to contact about the plan	John Oldfield, Director of Engineering Bedfordshire & River Ivel Internal Drainage Board Email: John.Oldfield@idbs.org.uk

Date for plan to be reviewed	Annually
Date(s) for testing the plan	Every 5 years
How the plan will be tested	Desk review of availability of plant and materials

CONTENTS

Page No.	SECTIONS
4	1. RESERVOIR INFORMATION (i) name; (ii) location and grid reference; (iii) capacity (volume of water); (iv) description of the reservoir and its structures; (v) how the flow of water into and out of the reservoir is controlled; (vi) whether the reservoir is under construction or modification and a description of the work taking place
5	2. RISK FACTORS AND TRIGGERS FOR ACTIVATING THE FLOOD PLAN
6	3. ACTION PLAN TO PREVENT AN UNCONTROLLED RELEASE OF WATER
7	4. ACTION PLAN TO CONTROL A FLOOD
8	5. INSTRUCTIONS FOR EMERGENCY DRAW DOWN
9	6. AREAS AT RISK OF FLOODING
10	7. CONTACT DETAILS FOR KEY PERSONNEL, CAT. 1 EMERGENCY RESPONDERS AND CONTRACTORS
11	8. ACCESS DETAILS (including maps or a diagram showing access routes, gates, key holders and rendezvous points).
12	9. SUPPORTING INFORMATION AND DATA (e.g. operational monitoring data, method statements, incident management documents)
13	Annex A – Incident Management Roles

1. Reservoir information

Reservoir Information

- (i) Stewartby Reservoir;
- (ii) Situated on the northern western edge of Stewartby Lake Country Park about 8 km south west of Bedford and 1.5 km north east of Marston, Moretaine at National Grid Reference TL 00823 42361;
- (iii) Capacity (escapable volume of water);
300,000 cubic metres.
- (iv) Description of the reservoir and its structures;
The reservoir is retained by a tilting gate structure, the adjacent retaining walls, the uppermost levels of the former pits sides and probable local minor raising works to low areas elsewhere alongside Green Lane where the natural ground level was too low. The remainder of the water body is formed by the below ground storage of water in the former pit below the elevation of the invert level of the watercourse beyond the tilting gate. Thus there is minimal embankment, as such, but the natural ground carrying the public highway, the verges and the strips of vegetation to both sides of the highway effectively act as a water retention structure as the ground beyond Green Lane to the southeast of the tilting gate structure has been lowered by partial excavation and limited backfilling.
- (v) How the flow of water into and out of the reservoir is controlled;
The tilting gate forms the overflow from the reservoir with the structure situated about midway along the north eastern side of the reservoir on the line of the former watercourse. Flows pass under the public highway through a culvert with a flat soffit and an internal width of 2.1m and 1.75m internal height to discharge into a watercourse through the landfill site beyond. Flows through this area are restricted by a number of Armco and other culverts further downstream that would potentially have significantly lower discharge ability than the tilting gate and highway culvert and would ultimately control the rate of outflow and the reservoir level.
There are no other inlet and outlet arrangements and water is able to flow freely into the reservoir and by means of the main watercourse which enters midway along the south western side. There is also a channel from upstream that runs around just beyond most of the north western perimeter and enters at the northern end of this side. These upstream channels and watercourses are manmade with much of the flow entering by the latter means. The tilting gate also forms the overflow control from the reservoir with the discharge into watercourse and through the other culverts further downstream beneath and beyond the landfill site.
- (vi) Whether the reservoir is under construction or modification and a description of the work taking place;
Not applicable

2. RISK FACTORS AND TRIGGERS FOR ACTIVATING THE FLOOD PLAN

- extreme floods could lead to overtopping
 - internal erosion could cause excessive leakage
 - earthquakes, sinkholes, mine works and fracking are not considered to be a risk.
-
- Trigger points – e.g.
 - severe weather warnings
 - flood alerts and warnings
 - reports of damage to embankments or reservoir structures by the public

3. ACTION PLAN TO PREVENT AN UNCONTROLLED RELEASE OF WATER

- Alert key personnel

The key personnel associated with the dam are listed below:

John Oldfield, Director of Engineering

Email: John.Oldfield@idbs.org.uk

- Risk Assessment of damage and dam failure

The risk assessment of damage to the dam and for failure of the dam is overtopping, seepage adjacent to the structure and piping could cause failure.

- Move to standby

The move to standby would be with agreement of the Supervising Engineer to:

- Increase monitoring and surveillance – and rapid analysis and interpretation of data
- Actions to prevent situation worsening – controlling/stopping inflow
- Precautionary draw down
- Measures for speeding up the draw down e.g. deploying temporary high volume pumps
- Temporary repairs, reinforcing embankment
- Escalation to major incident response – Alert Category 1
Emergency responders (Police, Local Resilience Forum and Environment Agency)
- Assign incident management roles
- Comms and media engagement

4. ACTION PLAN TO CONTROL AND MITIGATE A FLOOD

- Additional measures to Section 2
- e.g. ongoing Risk assessment and scale of dam failure
- Emergency draw down
- Actions to reduce flood, reinforce the dam
- Incident management 24 hour operations
- Ongoing incident response with Cat 1 Emergency responders

5. INSTRUCTIONS FOR AN EMERGENCY DRAW DOWN

[for someone unfamiliar with the site, who may need to initiate a draw down/oversee a draw down]

Checks and procedure

No one unfamiliar with the site would initiate drawdown.

6. AREAS AT RISK OF FLOODING

Beyond the embankment and the natural ground, effectively forming the embankment, and the tilting gate structure, much of the original ground has been excavated for brick making and refilled with landfill. The area is partially vegetated and is relatively uneven. The watercourse initially runs in an open channel and is then culverted intermittently beneath and immediately beyond much of the landfill site with a variety of culvert sizes and arrangements.

Further southeast, most of the downstream area previously formed part of a former quarry and the site of the brickworks and much of this has been demolished and the area cleared and the former excavations largely backfilled. A new large office block has been constructed in recent years immediately beyond and parallel to Green Lane with earthworks around a pre-existing lagoon area. The substantial office block curves around the landscaped pond to form a near semi-circular building with the open area pointing to the southeast and facing the reservoir. The size of the building is substantial and the shape would tend to trap any large outflow from the reservoir that crossed this part of Green Lane.

Further downstream, the river runs close to the route of the railway. This area is predominantly open land with little urban development until recently, but large commercial development has been constructed about 3 km beyond the reservoir. The watercourse runs around the southern side of Bedford and north of Elstow and on to join the River Great Ouse north of Willington about 6 m east of Bedford. It crosses the routes of the A42 southern bypass and other new roads which run on embankments across the low ground. The area adjacent to the watercourse is shown as open land on maps but recent developments to the south of the town have encroached into this and appear to be within the 100 year flood area on the Environment Agency mapping.

There appeared to be no residential properties close to the watercourse apart from the centre of Bedford, and possibly the large recent development. There are a number of road bridges and culverts over the watercourse and the watercourse is also culverted under the railway line.

[illegible]

Reservoir Flood Map

Reservoir Name:	Quantity / Use:	Map Type:
Reservoir Name	Quantity / Use	Map Type
Reservoir Details:	Scale:	Scale:
Reservoir Details	Scale	Scale
Map of the United Kingdom:	Scale:	Scale:
Map of the United Kingdom	Scale	Scale
Scale:	Scale:	Scale:
Scale	Scale	Scale

Legend:

- ★ Reservoir Location
- Yellow Flood Zone 1 (Low Probability)
- Orange Flood Zone 2 (Medium Probability)
- Blue Flood Zone 3 (High Probability)
- Blue Flood Zone Boundary
- Red Star Reservoir Location

Scale:

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000 1010 1020 1030 1040 1050 1060 1070 1080 1090 1100 1110 1120 1130 1140 1150 1160 1170 1180 1190 1200 1210 1220 1230 1240 1250 1260 1270 1280 1290 1300 1310 1320 1330 1340 1350 1360 1370 1380 1390 1400 1410 1420 1430 1440 1450 1460 1470 1480 1490 1500 1510 1520 1530 1540 1550 1560 1570 1580 1590 1600 1610 1620 1630 1640 1650 1660 1670 1680 1690 1700 1710 1720 1730 1740 1750 1760 1770 1780 1790 1800 1810 1820 1830 1840 1850 1860 1870 1880 1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020 2030 2040 2050 2060 2070 2080 2090 2100 2110 2120 2130 2140 2150 2160 2170 2180 2190 2200 2210 2220 2230 2240 2250 2260 2270 2280 2290 2300 2310 2320 2330 2340 2350 2360 2370 2380 2390 2400 2410 2420 2430 2440 2450 2460 2470 2480 2490 2500 2510 2520 2530 2540 2550 2560 2570 2580 2590 2600 2610 2620 2630 2640 2650 2660 2670 2680 2690 2700 2710 2720 2730 2740 2750 2760 2770 2780 2790 2800 2810 2820 2830 2840 2850 2860 2870 2880 2890 2900 2910 2920 2930 2940 2950 2960 2970 2980 2990 3000 3010 3020 3030 3040 3050 3060 3070 3080 3090 3100 3110 3120 3130 3140 3150 3160 3170 3180 3190 3200 3210 3220 3230 3240 3250 3260 3270 3280 3290 3300 3310 3320 3330 3340 3350 3360 3370 3380 3390 3400 3410 3420 3430 3440 3450 3460 3470 3480 3490 3500 3510 3520 3530 3540 3550 3560 3570 3580 3590 3600 3610 3620 3630 3640 3650 3660 3670 3680 3690 3700 3710 3720 3730 3740 3750 3760 3770 3780 3790 3800 3810 3820 3830 3840 3850 3860 3870 3880 3890 3900 3910 3920 3930 3940 3950 3960 3970 3980 3990 4000 4010 4020 4030 4040 4050 4060 4070 4080 4090 4100 4110 4120 4130 4140 4150 4160 4170 4180 4190 4200 4210 4220 4230 4240 4250 4260 4270 4280 4290 4300 4310 4320 4330 4340 4350 4360 4370 4380 4390 4400 4410 4420 4430 4440 4450 4460 4470 4480 4490 4500 4510 4520 4530 4540 4550 4560 4570 4580 4590 4600 4610 4620 4630 4640 4650 4660 4670 4680 4690 4700 4710 4720 4730 4740 4750 4760 4770 4780 4790 4800 4810 4820 4830 4840 4850 4860 4870 4880 4890 4900 4910 4920 4930 4940 4950 4960 4970 4980 4990 5000 5010 5020 5030 5040 5050 5060 5070 5080 5090 5100 5110 5120 5130 5140 5150 5160 5170 5180 5190 5200 5210 5220 5230 5240 5250 5260 5270 5280 5290 5300 5310 5320 5330 5340 5350 5360 5370 5380 5390 5400 5410 5420 5430 5440 5450 5460 5470 5480 5490 5500 5510 5520 5530 5540 5550 5560 5570 5580 5590 5600 5610 5620 5630 5640 5650 5660 5670 5680 5690 5700 5710 5720 5730 5740 5750 5760 5770 5780 5790 5800 5810 5820 5830 5840 5850 5860 5870 5880 5890 5900 5910 5920 5930 5940 5950 5960 5970 5980 5990 6000 6010 6020 6030 6040 6050 6060 6070 6080 6090 6100 6110 6120 6130 6140 6150 6160 6170 6180 6190 6200 6210 6220 6230 6240 6250 6260 6270 6280 6290 6300 6310 6320 6330 6340 6350 6360 6370 6380 6390 6400 6410 6420 6430 6440 6450 6460 6470 6480 6490 6500 6510 6520 6530 6540 6550 6560 6570 6580 6590 6600 6610 6620 6630 6640 6650 6660 6670 6680 6690 6700 6710 6720 6730 6740 6750 6760 6770 6780 6790 6800 6810 6820 6830 6840 6850 6860 6870 6880 6890 6900 6910 6920 6930 6940 6950 6960 6970 6980 6990 7000 7010 7020 7030 7040 7050 7060 7070 7080 7090 7100 7110 7120 7130 7140 7150 7160 7170 71

10

7. CONTACT DETAILS FOR KEY PERSONNEL, CAT. 1 EMERGENCY RESPONDERS AND CONTRACTORS

- Key personnel - Name, Phone number, email:

Name: John Oldfield, Director of Engineering
Tel No: 01234 767995
Email: John.Oldfield@idbs.org.uk

- Owner and operator – Bedfordshire & River Ivel Internal Drainage Board
- Reservoir Manager – John Oldfield
- Reservoir technical staff – IDB staff
- Senior responsible person/Director – John Oldfield
- Construction Engineer/Supervising Engineer/appointed engineer who certified the plan

Supervising Engineer Dr A K Hughes
Tel No. 01777 228644 / 07341 338092
Email: andy.hughes@damsandreservoirs.co.uk

- (Other Engineers e.g. Inspecting engineer from last S10 inspection)

Inspecting Engineer Chris Hoskins
Tel No. N/A – Retired – Dr Hughes now taken on this role
Email: N/A - Retired – Dr Hughes now taken on this role

- Cat 1 Emergency Responders:
- Police - 999
- Local Resilience Forum – Bedfordshire c/o Central Bedfordshire Council, Priory House, Monks Walk, Chicksands, Shefford, SG17 5TQ. Contact: <https://www.bedfordshireprepared.org.uk/>
- Lead Local Flood Authority – Central Bedfordshire Council – 0300 300 8304
- Environment Agency Incident hotline - Tel No: 0800 807060 and ask for Reservoir Safety Team - reservoirs@environment-agency.gov.uk

- Contractors e.g. for pumping equipment, plant and machinery, building supplies, structural surveys, temporary site buildings, generators

Pump Hire

Name: HSS Hire **Day time:** 01234 739908
Address: 66 Cauldwell Street,
Bedford
MK42 9AB

Name: Selwood Ltd **Day time:** 01234 865700
Address: Hammond Road,
Elm Farm Industrial Estate,
Bedford
MK41 0RG

Civil Contractors:

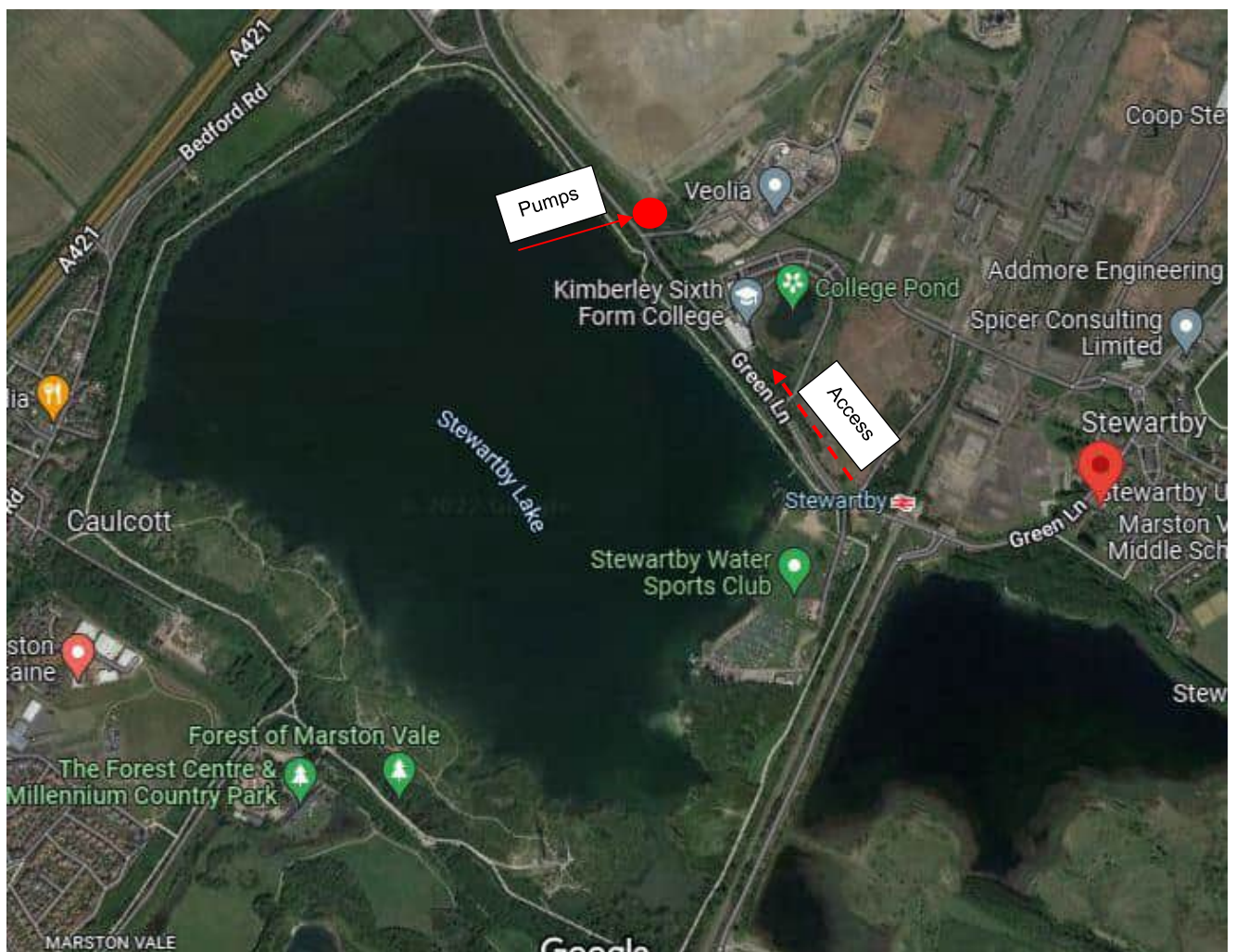
Name: ECL Civil Engineering Ltd **Day time:** 01582 579812
Address: Vanquish House,
Wolseley Road,
Kempston,
Bedford
MK42 7EF

Name: ALERON Civil Engineering & Groundworks Contractors **Day time:** 01908 538138
Address: Unit 4 Darin Ct,
Crownhill,
Milton Keynes
MK8 0AD

8. ACCESS DETAILS

- Map or a diagram showing access routes, gates, key holders and rendezvous points
- Access route(s) for heavy plant/machinery
- Locations for temporary pumps and pipes

Access to the downstream end of the reservoir and to the tilting gate structure is from Green Lane, an unclassified road, leading from the A42 towards the village of Stewartby. The southern part of the reservoir and the country park beyond can be accessed from the unclassified road leading from Marston Moretaine south to Lidlington. Pedestrian access is freely available around the reservoir and into the country park with a visitor centre just south of the reservoir.



Source: Google Maps

9. Supporting information

Report under Section 10 of the Act

Annual Statements under Section 12 of the Act

Prescribed Form of Record

Annex A – Incident Management Roles

Role	Typically Undertaken By	Responsibilities Include
Incident Controller (IC)	The Reservoir Manager or Area Manager John Oldfield	<ul style="list-style-type: none"> • Direction of ALL Bedford IDB staff in the field associated with any aspect of the incident response. • Implement a range of measures to avert failure including the on-site plan. • Agreement of overall response & recovery strategy with Incident Manager. • Providing ongoing surveillance and situation assessments. • Communication with Incident Manager. • Overall H&S of all personnel addressing incident. • Notification of and liaison with emergency service leaders on site. • Marshalling
Marshalling Officer	The IC or their appointee John Oldfield	<ul style="list-style-type: none"> • All Bedford IDB staff arriving on site must 'check in' with the marshalling officer and 'check-out' when leaving. • Checking on continuity of response i.e. that if someone is leaving site their responsibilities are either fully executed or properly handed over. • Providing of safe approach routes and details of rendezvous points (RVPs) to the emergency services. • Assists in information flows to incident team via the Information Officer. • Establishing an emergency control centre

Problem Assessment Team	Headworks Controller; Reservoir Safety Manager; Supervising and Inspecting Engineers Supervising Engineer	<ul style="list-style-type: none"> • Agree responses with IC and Incident Manager. • Monitor reservoir & assess response. • Report outputs to Information Officer. • Valve operations (Headworks Controller).
Emergency Plant Controller	Senior Manager with engineering delivery experience	<ul style="list-style-type: none"> • Agrees technical solutions with Inspecting Engineer, Bedford IDB Reservoir Safety Manager and Incident Manager. • Leads delivery on the ground of agreed solution with Partners and other suppliers
Bedford IDB Press Office	IDB Press Officer or nominee of John Oldfield	<ul style="list-style-type: none"> • To collate information for John Oldfield Comms Team, sole point of contact on site for central Comms Team.
Information Officer	Bedford IDB or nominee of John Oldfield	<ul style="list-style-type: none"> • Info flows to Operational Response Centre (ORC) / Incident Team / task teams. • Maintaining a log. Record keeping
Administration Officer	Bedford IDB or nominee of John Oldfield	<ul style="list-style-type: none"> • Staff welfare, accommodation & meals, • Rotas for local incident control personnel. • Accommodation for staff drawn in from other areas. • Working Time Directive monitoring



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