

APPENDIX 2: GROUNDSURE REPORT

IMPERIAL WHARF, CLIFTON MARINE PARADE, GRAVESEND, DA11 0DY

Order Details

Date: 08/11/2021
Your ref: J21-044
Our Ref: GS-8320691
Client: Ground Condition Consultants Ltd

Site Details

Location: 563903 174474
Area: 0.67 ha
Authority: [Gravesham Borough Council](#)



Summary of findings

p. 2 **Aerial image**

p. 8

OS MasterMap site plan

p.13 groundsure.com/insightuserguide

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	Historical industrial land uses	40	11	85	151	-
25	1.2	Historical tanks	6	13	23	33	-
28	1.3	Historical energy features	2	1	6	12	-
29	1.4	Historical petrol stations	0	0	0	0	-
29	1.5	Historical garages	0	0	4	2	-
30	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
31	2.1	Historical industrial land uses	45	14	115	191	-
45	2.2	Historical tanks	9	27	35	64	-
50	2.3	Historical energy features	2	4	9	18	-
51	2.4	Historical petrol stations	0	0	0	0	-
51	2.5	Historical garages	0	0	11	5	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
53	3.1	Active or recent landfill	0	0	0	0	-
53	3.2	Historical landfill (BGS records)	0	0	0	0	-
54	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
54	3.4	Historical landfill (EA/NRW records)	0	0	1	1	-
54	3.5	Historical waste sites	0	0	0	1	-
55	3.6	Licensed waste sites	0	0	0	0	-
55	3.7	Waste exemptions	0	0	5	0	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
56	4.1	Recent industrial land uses	2	14	30	-	-
59	4.2	Current or recent petrol stations	0	0	1	1	-
60	4.3	Electricity cables	0	0	0	0	-
60	4.4	Gas pipelines	0	0	0	0	-
60	4.5	Sites determined as Contaminated Land	0	0	0	0	-



60	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
60	4.7	Regulated explosive sites	0	0	0	0	-
61	4.8	Hazardous substance storage/usage	0	0	0	0	-
61	4.9	<u>Historical licensed industrial activities (IPC)</u>	0	0	12	0	-
63	4.10	<u>Licensed industrial activities (Part A(1))</u>	0	0	6	6	-
65	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	6	2	-
66	4.12	Radioactive Substance Authorisations	0	0	0	0	-
66	4.13	<u>Licensed Discharges to controlled waters</u>	0	4	1	6	-
68	4.14	<u>Pollutant release to surface waters (Red List)</u>	0	0	0	2	-
68	4.15	Pollutant release to public sewer	0	0	0	0	-
69	4.16	List 1 Dangerous Substances	0	0	0	0	-
69	4.17	List 2 Dangerous Substances	0	0	0	0	-
69	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	1	7	-
70	4.19	Pollution inventory substances	0	0	0	0	-
70	4.20	Pollution inventory waste transfers	0	0	0	0	-
71	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
72	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
74	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
76	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
78	5.4	<u>Groundwater vulnerability- soluble rock risk</u>	Identified (within 0m)				
78	5.5	<u>Groundwater vulnerability- local information</u>	Identified (within 0m)				
79	5.6	<u>Groundwater abstractions</u>	0	0	0	0	19
84	5.7	Surface water abstractions	0	0	0	0	0
84	5.8	<u>Potable abstractions</u>	0	0	0	0	1
85	5.9	<u>Source Protection Zones</u>	0	1	1	0	-
85	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
86	6.1	Water Network (OS MasterMap)	0	0	0	-	-

86	6.2	Surface water features	0	0	0	-	-
87	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
87	6.4	<u>WFD Surface water bodies</u>	0	1	0	-	-
88	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
89	7.1	<u>Risk of flooding from rivers and the sea</u>	High (within 50m)				
90	7.2	Historical Flood Events	0	0	0	-	-
90	7.3	<u>Flood Defences</u>	0	0	2	-	-
90	7.4	<u>Areas Benefiting from Flood Defences</u>	1	0	1	-	-
91	7.5	Flood Storage Areas	0	0	0	-	-
92	7.6	<u>Flood Zone 2</u>	Identified (within 50m)				
93	7.7	<u>Flood Zone 3</u>	Identified (within 50m)				
Page	Section	Surface water flooding					
94	8.1	Surface water flooding	Negligible (within 50m)				
Page	Section	Groundwater flooding					
95	9.1	<u>Groundwater flooding</u>	High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
96	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
96	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
96	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
96	10.4	Special Protection Areas (SPA)	0	0	0	0	0
97	10.5	National Nature Reserves (NNR)	0	0	0	0	0
97	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
97	10.7	Designated Ancient Woodland	0	0	0	0	0
97	10.8	Biosphere Reserves	0	0	0	0	0
98	10.9	Forest Parks	0	0	0	0	0
98	10.10	Marine Conservation Zones	0	0	0	0	0
98	10.11	Green Belt	0	0	0	0	0
98	10.12	Proposed Ramsar sites	0	0	0	0	0



98	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
99	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
99	10.15	Nitrate Sensitive Areas	0	0	0	0	0
99	10.16	<u>Nitrate Vulnerable Zones</u>	0	0	0	0	3
100	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
101	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
102	11.1	World Heritage Sites	0	0	0	-	-
103	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
103	11.3	National Parks	0	0	0	-	-
103	11.4	<u>Listed Buildings</u>	0	0	1	-	-
104	11.5	<u>Conservation Areas</u>	0	1	1	-	-
104	11.6	Scheduled Ancient Monuments	0	0	0	-	-
104	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
105	12.1	<u>Agricultural Land Classification</u>	Urban (within 250m)				
106	12.2	Open Access Land	0	0	0	-	-
106	12.3	Tree Felling Licences	0	0	0	-	-
106	12.4	Environmental Stewardship Schemes	0	0	0	-	-
106	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
107	13.1	<u>Priority Habitat Inventory</u>	1	0	0	-	-
108	13.2	Habitat Networks	0	0	0	-	-
108	13.3	Open Mosaic Habitat	0	0	0	-	-
108	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
109	14.1	<u>10k Availability</u>	Identified (within 500m)				
110	14.2	<u>Artificial and made ground (10k)</u>	2	0	3	0	-
112	14.3	<u>Superficial geology (10k)</u>	1	3	2	2	-

113	14.4	Landslip (10k)	0	0	0	0	-
114	14.5	<u>Bedrock geology (10k)</u>	1	0	1	2	-
115	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
116	15.1	<u>50k Availability</u>	Identified (within 500m)				
117	15.2	<u>Artificial and made ground (50k)</u>	2	0	2	0	-
118	15.3	<u>Artificial ground permeability (50k)</u>	1	0	-	-	-
119	15.4	<u>Superficial geology (50k)</u>	1	3	2	0	-
120	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
120	15.6	Landslip (50k)	0	0	0	0	-
120	15.7	Landslip permeability (50k)	None (within 50m)				
121	15.8	<u>Bedrock geology (50k)</u>	1	0	1	1	-
122	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
122	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
123	16.1	<u>BGS Boreholes</u>	0	2	12	-	-
Page	Section	Natural ground subsidence					
125	17.1	<u>Shrink swell clays</u>	Low (within 50m)				
126	17.2	<u>Running sands</u>	Moderate (within 50m)				
128	17.3	<u>Compressible deposits</u>	High (within 50m)				
130	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
131	17.5	<u>Landslides</u>	Very low (within 50m)				
133	17.6	<u>Ground dissolution of soluble rocks</u>	Very low (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>	0	1	1	2	-
137	18.3	<u>Surface ground workings</u>	11	8	32	-	-
139	18.4	<u>Underground workings</u>	0	0	1	0	8
139	18.5	Historical Mineral Planning Areas	0	0	0	0	-



139	18.6	<u>Non-coal mining</u>	1	0	0	2	1
140	18.7	<u>Mining cavities</u>	0	0	1	1	3
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)				
141	18.11	Gypsum areas	None (within 0m)				
141	18.12	Tin mining	None (within 0m)				
142	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
143	19.1	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
144	20.1	<u>BGS Estimated Background Soil Chemistry</u>	4	6	-	-	-
145	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
145	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
146	21.1	Underground railways (London)	0	0	0	-	-
146	21.2	Underground railways (Non-London)	0	0	0	-	-
147	21.3	Railway tunnels	0	0	0	-	-
147	21.4	<u>Historical railway and tunnel features</u>	27	6	27	-	-
149	21.5	Royal Mail tunnels	0	0	0	-	-
149	21.6	<u>Historical railways</u>	0	0	1	-	-
150	21.7	Railways	0	0	0	-	-
150	21.8	Crossrail 1	0	0	0	0	-
150	21.9	Crossrail 2	0	0	0	0	-
150	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 01/09/2018

Site Area: 0.67ha



Recent site history - 2015 aerial photograph



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Capture Date: 30/06/2015

Site Area: 0.67ha



Recent site history - 2012 aerial photograph



Capture Date: 25/05/2012

Site Area: 0.67ha



Recent site history - 2004 aerial photograph



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Capture Date: 02/09/2004

Site Area: 0.67ha



Recent site history - 1999 aerial photograph



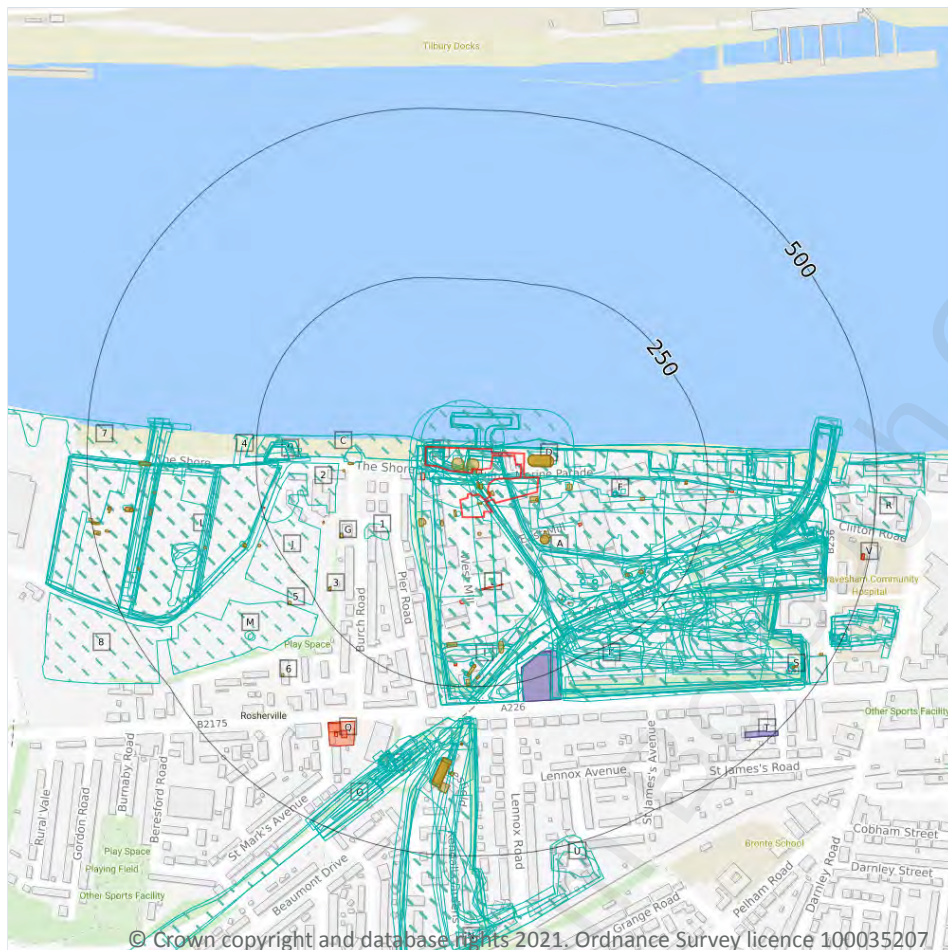
Capture Date: 03/09/1999

Site Area: 0.67ha



[illegible]

1 Past land use



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

1.1 Historical industrial land uses

Records within 500m

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

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

ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Commercial/Industrial	1955	2131135



ID	Location	Land use	Dates present	Group ID
A	On site	Railway Sidings	1971	2170456
A	On site	Paper Mills	1946	2188099
A	On site	Tramway Sidings	1895	2194212
A	On site	Railway Sidings	1916	2199787
A	On site	Railway Sidings	1907	2204714
A	On site	Tramway Sidings	1946	2217665
A	On site	Railway Sidings	1899	2217698
A	On site	Paper Mills	1977	2223374
A	On site	Tramway Sidings	1932	2226539
A	On site	Lime Works	1923	2226623
A	On site	Lime Works	1916	2229561
A	On site	Paper Mills	1932 - 1938	2233643
A	On site	Railway Sidings	1955	2236983
A	On site	Railway Sidings	1971 - 1977	2245054
A	On site	Railway Sidings	1966	2251154
A	On site	Paper Mills	1966 - 1971	2258797
A	On site	Railway Sidings	1895	2261852
A	On site	Whiting Works	1938	2265397
A	On site	Railway Sidings	1888	2265764
A	On site	Railway Sidings	1938	2266142
A	On site	Lime Works	1895 - 1907	2273835
A	On site	Railway Sidings	1916 - 1938	2282894
B	On site	Quay	1865	2139306
B	On site	Wharves	1916	2143217
B	On site	Unspecified Tanks	1977	2144353
B	On site	Railway Sidings	1938	2170257
B	On site	Unspecified Wharves	1888	2175240
B	On site	Unspecified Wharves	1923	2176764

ID	Location	Land use	Dates present	Group ID
B	On site	Unspecified Wharf	1895	2186194
B	On site	Railway Sidings	1898	2244215
B	On site	Unspecified Wharf	1899	2254221
B	On site	Railway Sidings	1865	2256889
B	On site	Railway Sidings	1895	2261414
B	On site	Unspecified Wharves	1907	2271525
B	On site	Unspecified Wharves	1888	2280762
B	On site	Unspecified Wharves	1895	2289517
B	On site	Railway Sidings	1898	2293852
C	On site	Unspecified Wharf	1971	2230706
C	On site	Unspecified Wharf	1977	2266239
B	2m W	Unspecified Tank	1932 - 1938	2224408
A	4m N	Unspecified Wharf	1966	2176693
A	4m N	Unspecified Wharf	1971	2173247
A	5m NE	Unspecified Wharf	1990	2284370
A	5m NE	Unspecified Wharf	1977	2286271
D	7m E	Unspecified Tanks	1977 - 1990	2198789
A	10m S	Unspecified Mills	1955	2139425
B	18m S	Unspecified Tank	1977	2155351
B	33m W	Unspecified Tank	1932 - 1938	2208412
D	40m E	Unspecified Tanks	1938	2144356
D	42m E	Unspecified Wharf	1955	2260451
D	52m E	Unspecified Tanks	1938	2144357
A	62m S	Unspecified Tank	1990	2155354
A	84m S	Lime Works	1888	2264907
C	94m W	Unspecified Wharf	1895	2211912
1	109m SW	Unspecified Pit	1865	2126204
F	111m E	Unspecified Tanks	1946	2205075



ID	Location	Land use	Dates present	Group ID
F	111m E	Unspecified Tank	1938	2155350
F	112m E	Unspecified Tanks	1932	2175117
F	123m E	Unspecified Tanks	1932	2144354
2	128m W	Unspecified Commercial/Industrial	1916	2131134
A	135m SE	Tank	1916	2140330
A	145m SE	Unspecified Tank	1888 - 1895	2262638
A	145m SE	Unspecified Tank	1907	2224020
A	150m SE	Unspecified Tanks	1923	2144387
A	153m S	Lime Kilns	1865	2137926
A	154m SE	Unspecified Tank	1888	2220758
A	155m SE	Unspecified Tank	1895	2230495
A	155m SE	Unspecified Tank	1907	2238242
A	160m S	Unspecified Tank	1888 - 1895	2206916
A	165m SE	Railway Sidings	1865 - 1895	2256890
H	170m W	Unspecified Wharf	1888	2207886
A	170m S	Unspecified Tank	1888 - 1895	2169956
I	171m S	Railway Sidings	1865	2273641
A	173m SE	Railway Building	1895	2150381
H	174m W	Unspecified Wharf	1898	2169298
H	174m W	Unspecified Wharf	1898	2257908
A	174m SE	Tank	1916	2140333
A	176m SE	Railway Sidings	1938	2295100
J	177m W	Unspecified Works	1955 - 1990	2265000
A	177m SE	Whiting Works	1938	2183851
A	181m SE	Unspecified Tank	1888	2265060
A	182m SE	Unspecified Tank	1907	2187046
A	182m SE	Unspecified Tank	1895	2281926
H	184m W	Unspecified Wharf	1895	2263176

ID	Location	Land use	Dates present	Group ID
I	186m S	Old Chalk Pit	1888 - 1895	2189669
A	189m SE	Unspecified Tanks	1923	2144386
I	189m S	Unspecified Ground Workings	1907	2134365
H	191m W	Quays	1865	2139538
A	191m SE	Unspecified Tank	1907	2155349
I	194m S	Unspecified Quarry	1923	2145151
A	197m E	Unspecified Commercial/Industrial	1938	2131136
H	200m W	Unspecified Wharf	1946	2239767
I	200m S	Unspecified Pit	1946	2126203
H	201m W	Unspecified Wharf	1938	2232313
H	201m W	Unspecified Wharf	1938	2264190
A	201m SE	Unspecified Mills	1955	2139424
A	201m SE	Paper Mills	1966 - 1971	2265625
H	201m W	Unspecified Wharf	1932	2266777
A	203m SE	Whiting Works	1916	2214023
A	206m S	Whiting Works	1888 - 1895	2193898
A	207m SE	Railway Sidings	1899	2197175
A	208m SE	Rifle Range	1865	2164819
A	210m SE	Chalk Pit	1899	2260153
K	210m S	Railway Sidings	1955	2181876
K	210m S	Railway Sidings	1966	2249023
A	211m SE	Lime Works	1895	2221215
A	211m SE	Unspecified Ground Workings	1916 - 1923	2281094
L	212m W	Unspecified Works	1990	2237219
A	212m SE	Chalk Pit	1888	2170770
A	212m SE	Railway Sidings	1899	2283283
L	213m W	Unspecified Works	1955	2191249
I	214m S	Unspecified Tanks	1946	2202762



ID	Location	Land use	Dates present	Group ID
I	214m S	Unspecified Tanks	1932	2226229
J	214m W	Printing Works	1907 - 1946	2205686
J	215m W	Unspecified Works	1966 - 1977	2284906
I	215m S	Unspecified Tank	1938	2155356
L	217m W	Printing Works	1938	2221904
L	217m W	Printing Works	1938	2185394
A	221m SE	Railway Sidings	1923	2190612
A	223m SE	Lime Kiln	1865	2166931
A	223m S	Whiting Works	1907	2185896
A	223m S	Whiting Works	1895	2201596
I	228m S	Unspecified Tanks	1932	2199633
I	228m S	Unspecified Tanks	1946	2269075
I	229m S	Unspecified Tank	1938	2155357
A	230m E	Unspecified Wharf	1955	2157342
A	231m SE	Chalk Pit	1895	2181037
I	232m S	Unspecified Pit	1955 - 1966	2170646
A	234m SE	Chalk Pit	1895	2234119
I	235m S	Unspecified Pit	1977	2259964
I	236m S	Unspecified Tanks	1938	2256775
I	239m S	Unspecified Pit	1971	2277443
K	240m SE	Unspecified Heap	1895	2137201
A	244m SE	Tunnel	1977	2151568
K	248m S	Railway Building	1932 - 1938	2261675
A	252m SE	Railway Building	1932 - 1938	2283364
A	253m SE	Whiting Works	1899	2271515
A	256m SE	Tank	1916	2140332
M	258m SW	Unspecified Works	1977 - 1990	2255620
4	264m W	Railway Sidings	1932 - 1938	2246369

ID	Location	Land use	Dates present	Group ID
A	265m SE	Unspecified Pit	1966	2259236
A	273m SE	Lime Kiln	1865	2166932
A	276m E	Wharf	1916	2160654
A	277m SE	Whiting Works	1923	2172925
A	283m E	Unspecified Wharf	1923	2278225
A	287m SE	Unspecified Pit	1971 - 1977	2267865
A	289m SE	Unspecified Pit	1865	2221096
J	290m SW	Unspecified Tank	1932	2155353
A	294m E	Railway Building	1932 - 1938	2208455
N	294m S	Tramway Sidings	1916 - 1923	2180544
N	296m S	Tramway Sidings	1938	2209401
O	296m S	Cuttings	1938	2219636
A	296m E	Railway Station	1899	2200374
A	296m E	Railway Station	1899	2209289
N	297m S	Unspecified Disused Pit	1977	2182734
N	297m S	Unspecified Pit	1955	2237861
N	297m S	Tramway Sidings	1938	2199044
P	297m S	Cuttings	1946	2292363
A	298m E	Railway Station	1888	2233597
L	301m W	Electric Cable Works	1923	2195494
L	303m W	Electric Cable Works	1907	2241347
N	304m S	Old Chalk Pit	1888 - 1895	2231741
N	305m S	Unspecified Ground Workings	1899	2248333
P	306m S	Railway Sidings	1865	2128780
P	306m S	Unspecified Quarry	1865	2145148
L	306m W	Electric Cable Works	1938	2176153
L	306m W	Electric Cable Works	1916	2233623
A	308m E	Unspecified Wharf	1938	2177156

ID	Location	Land use	Dates present	Group ID
A	308m E	Unspecified Wharf	1938	2221905
A	308m E	Unspecified Wharf	1932	2249467
L	309m W	Cable Works	1946	2139548
A	309m E	Unspecified Wharf	1938	2234867
A	309m E	Unspecified Wharf	1938	2288128
L	310m W	Unspecified Works	1977	2277617
N	310m S	Old Chalk Pit	1898	2260866
A	310m E	Unspecified Wharf	1907	2245514
P	311m S	Cuttings	1990	2248787
N	311m S	Chalk Pit	1923	2203122
L	313m W	Unspecified Works	1966 - 1971	2219320
A	314m SE	Rifle Range	1916 - 1923	2293931
N	315m S	Cuttings	1907	2214558
A	315m E	Unspecified Wharf	1938	2264972
A	316m SE	Unspecified Ground Workings	1932 - 1938	2288663
A	317m SE	Unspecified Heap	1946	2137202
L	318m W	Electric Cable Works	1932	2237745
O	318m S	Cuttings	1938	2175427
A	322m SE	Rifle Range	1907	2290769
P	325m S	Cuttings	1938	2180180
A	328m SE	Unspecified Tank	1888 - 1895	2294865
P	331m S	Cuttings	1907	2194648
P	332m S	Cuttings	1895	2248236
P	333m S	Unspecified Tanks	1966 - 1971	2175727
P	333m S	Unspecified Tanks	1932	2227861
A	334m E	Railway Station	1916	2280087
P	335m S	Unspecified Tanks	1946	2216563
P	336m S	Cuttings	1923	2239404

ID	Location	Land use	Dates present	Group ID
P	336m S	Cuttings	1895	2251312
P	337m S	Cuttings	1932	2288101
P	339m S	Railway Station	1898	2175292
P	342m S	Railway Station	1888	2233861
A	343m SE	Unspecified Ground Workings	1865	2223982
A	345m E	Railway Buildings	1932 - 1938	2274608
A	347m E	Goods Shed	1932	2290151
A	347m E	Goods Shed	1938 - 1946	2172962
A	348m E	Railway Building	1895	2150384
L	348m W	Tramway Sidings	1946	2151164
P	351m S	Railway Station	1907 - 1916	2267149
A	352m E	Railway Station	1938	2242113
M	353m SW	Unspecified Tank	1895	2211428
A	353m E	Railway Station	1895	2289168
A	354m E	Railway Station	1938	2233975
P	354m S	Railway Station	1895	2238524
A	354m E	Railway Station	1932	2276482
M	354m SW	Unspecified Tank	1898	2172670
P	354m S	Railway Station	1938	2287894
A	354m E	Terminus	1946	2165394
A	354m E	Railway Station	1895	2208478
A	355m E	Railway Station	1938	2177074
L	355m W	Unspecified Heap	1907	2218971
A	356m E	Railway Building	1923	2150383
L	356m W	Unspecified Ground Workings	1916	2134369
L	356m W	Unspecified Heap	1923	2192947
L	357m W	Unspecified Heap	1865	2283274
A	357m E	Railway Station	1966	2193720

ID	Location	Land use	Dates present	Group ID
A	358m SE	Unspecified Ground Workings	1946	2229479
A	358m E	Railway Station	1907	2233422
P	359m S	Railway Building	1946	2150375
P	359m S	Railway Station	1932 - 1938	2213690
P	359m S	Railway Station	1895	2255239
P	359m S	Unspecified Tanks	1938	2218046
N	360m S	Old Chalk Pit	1895	2179024
A	361m E	Railway Station	1923	2256712
P	366m S	Railway Station	1923	2192590
A	371m E	Unspecified Wharf	1946	2245771
L	374m W	Railway Sidings	1923	2181803
L	375m W	Railway Sidings	1932	2204029
L	375m W	Railway Sidings	1907	2267410
A	375m SE	Unspecified Pit	1946	2270631
A	377m E	Railway Sidings	1895	2265110
A	377m SE	Railway Building	1895	2150382
A	378m E	Tank	1916	2140331
L	381m W	Railway Sidings	1938	2269925
L	389m W	Railway Sidings	1938	2225587
L	390m W	Railway Sidings	1916	2255089
A	399m E	Unspecified Wharf	1888	2248472
7	401m W	Unspecified Wharves	1938	2267802
L	406m W	Unspecified Works	1955	2160150
N	407m S	Unspecified Disused Pit	1990	2249559
P	408m S	Cuttings	1907	2221716
P	408m S	Cuttings	1932	2237027
N	411m S	Refuse Heap	1946	2158983
P	411m S	Railway Building	1895	2150376

ID	Location	Land use	Dates present	Group ID
L	413m W	Tyre Works	1932	2182901
R	428m E	Unspecified Commercial/Industrial	1946	2241199
R	428m E	Unspecified Commercial/Industrial	1938	2214076
R	434m E	Unspecified Wharf	1955 - 1990	2180855
L	437m W	Unspecified Tanks	1946	2144355
L	441m W	Tyre Works	1946	2291549
8	444m SW	Engineering Works	1932 - 1938	2262564
S	452m SE	Unspecified Tanks	1932	2273320
S	453m SE	Unspecified Tanks	1946	2222068
S	454m SE	Unspecified Tank	1938	2155345
R	458m E	Unspecified Wharf	1895	2221273
N	464m S	Unspecified Pit	1966 - 1971	2189009
S	470m SE	Bus Depot	1977	2162581
S	472m SE	Unspecified Commercial/Industrial	1932 - 1938	2182463
S	472m SE	Unspecified Commercial/Industrial	1946	2193952
S	473m SE	Hospital	1895 - 1899	2285413
S	476m SE	Hospital	1888	2211212
S	477m SE	Hospital	1955 - 1971	2228873
S	477m SE	Unspecified Commercial/Industrial	1907	2237987
S	479m SE	Unspecified Tanks	1938	2244682
R	480m E	Railway Sidings	1932 - 1938	2272934
R	482m E	Tramway Sidings	1946	2151163
S	482m SE	Unspecified Tank	1895	2200108
S	482m SE	Unspecified Tank	1932 - 1946	2261518
S	482m SE	Unspecified Tank	1907	2272214
S	483m SE	Unspecified Commercial/Industrial	1923	2256446
S	484m SE	Unspecified Tanks	1938	2252526
S	487m SE	Unspecified Tanks	1888	2228831



ID	Location	Land use	Dates present	Group ID
U	487m S	Unspecified Pit	1932	2126193
U	491m S	Chalk Pit	1907 - 1916	2255457
S	493m SE	Unspecified Tank	1923	2155347
S	495m SE	Unspecified Tank	1907	2224356
S	495m SE	Unspecified Tank	1895	2227868
S	495m SE	Unspecified Tank	1932 - 1946	2230496

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

75

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

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

ID	Location	Land use	Dates present	Group ID
B	On site	Unspecified Tank	1973	369187
B	On site	Tanks	1973	378144
B	On site	Tanks	1973	378145
B	On site	Unspecified Tank	1933 - 1939	386946
B	On site	Unspecified Tank	1952	395237
B	On site	Unspecified Tank	1952	402812
D	5m S	Tanks	1952	402113
D	5m E	Tanks	1986 - 1993	380857
D	5m E	Tanks	1996	383456
D	6m E	Tanks	1973	395226
B	8m W	Unspecified Tank	1952	380811
B	8m W	Unspecified Tank	1952 - 1986	400858



ID	Location	Land use	Dates present	Group ID
D	9m S	Unspecified Tank	1933 - 1939	400487
B	10m N	Unspecified Tank	1952	389419
B	22m S	Unspecified Tank	1866	369185
D	23m NE	Unspecified Tank	1985 - 1993	387768
D	24m NE	Unspecified Tank	1975	399975
B	29m W	Tanks	1933 - 1939	409350
D	42m E	Tanks	1933 - 1939	401445
B	55m W	Unspecified Tank	1939	369186
A	58m S	Tanks	1973	385808
A	64m S	Tanks	1986 - 1989	410406
C	106m W	Tanks	1865	378146
C	119m W	Unspecified Tank	1865	369188
F	153m E	Tanks	1975	378143
G	158m SW	Unspecified Tank	1993 - 1996	388257
A	162m S	Unspecified Tank	1866	369175
A	170m S	Unspecified Tank	1866	369176
G	171m SW	Unspecified Tank	1986 - 1989	385596
G	172m SW	Unspecified Tank	1993 - 1996	409760
A	179m SE	Unspecified Tank	1909	369173
I	185m S	Unspecified Tank	1933 - 1939	409965
I	185m S	Tanks	1973 - 1986	407659
A	191m SE	Unspecified Tank	1909	369172
A	217m E	Tanks	1964 - 1965	380670
A	217m E	Unspecified Tank	1953	411177
A	217m E	Unspecified Tank	1953	405802
I	218m S	Tanks	1933	383238
I	218m S	Tanks	1939	392419
3	219m SW	Unspecified Tank	1973 - 1996	401747

ID	Location	Land use	Dates present	Group ID
I	234m S	Tanks	1939	378155
I	239m S	Tanks	1933 - 1939	404282
J	270m SW	Unspecified Tank	1933 - 1939	409825
5	282m SW	Unspecified Tank	1865	369174
J	289m SW	Gasometer	1909	374081
J	289m SW	Unspecified Tank	1933 - 1939	391319
A	297m E	Unspecified Tank	1953 - 1965	390778
P	333m S	Unspecified Tank	1952	384036
P	333m S	Unspecified Tank	1964	400822
P	334m S	Unspecified Tank	1963	388697
P	334m S	Unspecified Tank	1952	403570
P	334m S	Unspecified Tank	1973	410278
L	346m W	Unspecified Tank	1897	369184
6	351m SW	Unspecified Tank	1865	369177
P	356m S	Tanks	1952 - 1964	381221
P	356m S	Tanks	1952 - 1986	408776
P	361m S	Tanks	1933 - 1939	390174
P	376m S	Unspecified Tank	1952 - 1973	395887
P	393m S	Unspecified Tank	1973 - 1981	400613
L	400m W	Unspecified Tank	1975 - 1985	399381
L	405m W	Tanks	1975 - 1995	410773
L	409m W	Tanks	1975 - 1985	398780
L	436m W	Gasometers	1933	374468
L	437m W	Gasometer	1909	374082
L	448m W	Unspecified Tank	1985 - 1995	387736
S	457m SE	Unspecified Tank	1933 - 1939	402166
S	460m SE	Unspecified Tank	1953 - 1965	390027
L	469m W	Tanks	1933	378149



ID	Location	Land use	Dates present	Group ID
L	469m W	Unspecified Tank	1939 - 1952	395606
L	477m W	Tanks	1952	397282
S	481m SE	Unspecified Tank	1953	381077
L	488m W	Tanks	1993 - 1995	386906
L	490m W	Unspecified Tank	1952	369183
L	493m W	Tanks	1952	378150
L	493m W	Tanks	1985	409715

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	21
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Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

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

ID	Location	Land use	Dates present	Group ID
B	On site	Electricity Substation	1989	248026
B	On site	Electricity Substation	1989 - 1996	259637
B	12m S	Electricity Substation	1952	286680
A	77m SE	Electricity Substation	1993	248023
E	103m S	Electricity Substation	1993 - 1996	290698
E	122m S	Electricity Substation	1989 - 1996	271887
I	215m S	Electricity Substation	1986	248019
I	216m S	Electricity Transformer	1973	250883
J	245m W	Electricity Transformer	1973	250885
A	278m E	Electricity Substation	1993	281204
A	283m E	Electricity Substation	1953	290510

ID	Location	Land use	Dates present	Group ID
A	284m E	Electricity Substation	1953	255574
J	289m SW	Gasometer	1909	251563
Q	341m SW	Electricity Transformers	1973	251669
Q	353m SW	Electricity Substation	1952	263693
Q	359m SW	Electricity Substation	1986 - 1989	289032
Q	368m SW	Electricity Substation	1993 - 1996	292105
L	436m W	Gasometers	1933	251903
L	437m W	Gasometer	1909	251564
V	489m E	Electricity Substation	1985 - 1993	272416
V	489m E	Electricity Transformer	1975	250886

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	6
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Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

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

ID	Location	Land use	Dates present	Group ID
I	216m SE	Garage	1986 - 1996	83246

ID	Location	Land use	Dates present	Group ID
I	216m SE	Garage	1963 - 1975	85039
I	218m SE	Garage	1993	79683
I	221m SE	Garage	1964 - 1985	82166
T	469m SE	Garage	1953 - 1975	85218
T	469m SE	Garage	1953 - 1964	81076

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

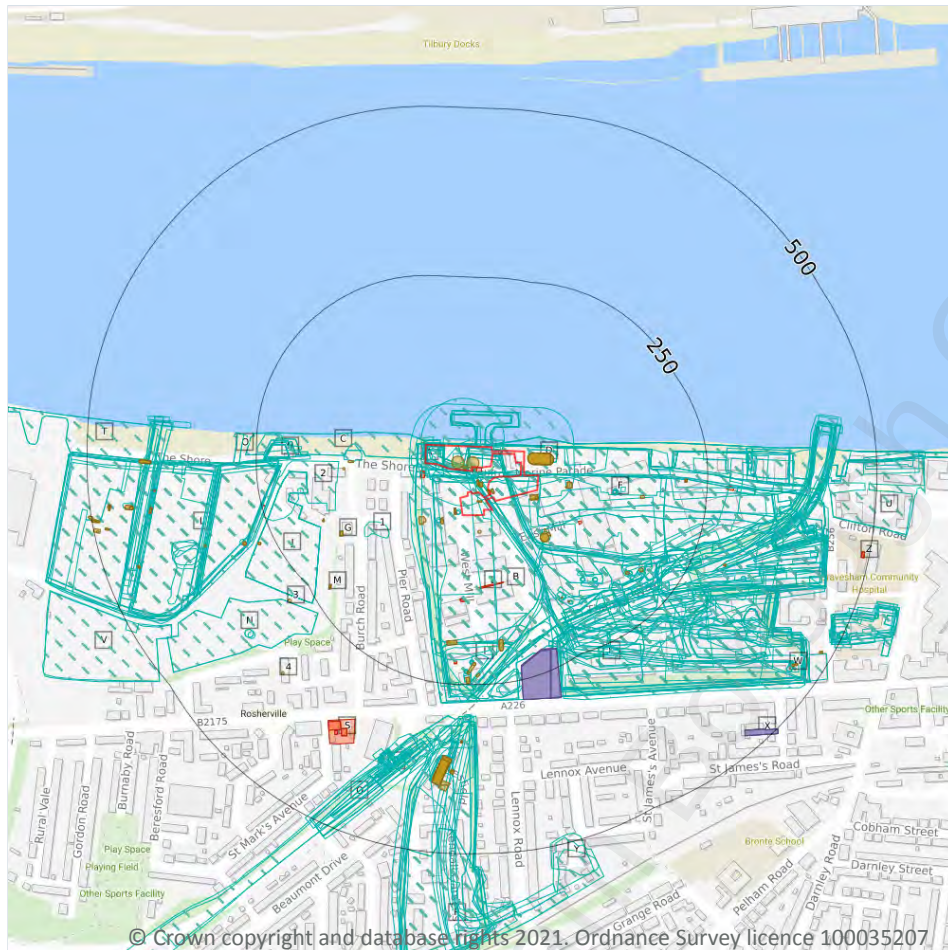
Records within 500m

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
- Historical garages

2.1 Historical industrial land uses

Records within 500m

365

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

Features are displayed on the Past land use - un-grouped map on **page 31**

ID	Location	Land Use	Date	Group ID
A	On site	Railway Sidings	1895	2261414
A	On site	Unspecified Wharves	1923	2176764
A	On site	Unspecified Wharves	1907	2271525



ID	Location	Land Use	Date	Group ID
A	On site	Railway Sidings	1865	2256889
A	On site	Quay	1865	2139306
A	On site	Unspecified Wharf	1895	2186194
A	On site	Unspecified Wharves	1895	2289517
A	On site	Wharves	1916	2143217
A	On site	Unspecified Wharves	1888	2175240
A	On site	Unspecified Wharves	1888	2280762
A	On site	Railway Sidings	1898	2244215
A	On site	Railway Sidings	1898	2293852
A	On site	Railway Sidings	1938	2170257
A	On site	Unspecified Wharf	1899	2254221
A	On site	Unspecified Wharf	1899	2254221
A	On site	Unspecified Tanks	1977	2144353
B	On site	Lime Works	1923	2226623
B	On site	Railway Sidings	1923	2282894
B	On site	Railway Sidings	1895	2261852
B	On site	Paper Mills	1946	2188099
B	On site	Tramway Sidings	1946	2217665
B	On site	Tramway Sidings	1932	2226539
B	On site	Paper Mills	1932	2233643
B	On site	Railway Sidings	1907	2204714
B	On site	Tramway Sidings	1895	2194212
B	On site	Lime Works	1916	2229561
B	On site	Railway Sidings	1916	2199787
B	On site	Railway Sidings	1888	2265764
B	On site	Railway Sidings	1899	2217698
B	On site	Lime Works	1899	2273835
B	On site	Railway Sidings	1899	2217698



ID	Location	Land Use	Date	Group ID
B	On site	Lime Works	1899	2273835
B	On site	Whiting Works	1938	2265397
B	On site	Unspecified Commercial/Industrial	1955	2131135
B	On site	Railway Sidings	1955	2236983
B	On site	Railway Sidings	1938	2266142
B	On site	Paper Mills	1938	2233643
B	On site	Railway Sidings	1977	2245054
B	On site	Paper Mills	1977	2223374
B	On site	Paper Mills	1971	2258797
B	On site	Railway Sidings	1971	2170456
B	On site	Railway Sidings	1966	2251154
B	On site	Paper Mills	1966	2258797
C	On site	Unspecified Wharf	1977	2266239
C	On site	Unspecified Wharf	1971	2230706
A	2m W	Unspecified Tank	1932	2224408
A	3m W	Unspecified Tank	1938	2224408
B	4m N	Unspecified Wharf	1971	2173247
B	4m N	Unspecified Wharf	1966	2176693
B	5m NE	Unspecified Wharf	1990	2284370
B	5m NE	Unspecified Wharf	1977	2286271
D	7m E	Unspecified Tanks	1990	2198789
D	7m E	Unspecified Tanks	1977	2198789
B	10m S	Unspecified Mills	1955	2139425
A	18m S	Unspecified Tank	1977	2155351
A	33m W	Unspecified Tank	1932	2208412
A	33m W	Unspecified Tank	1938	2208412
D	40m E	Unspecified Tanks	1938	2144356
D	42m E	Unspecified Wharf	1955	2260451



ID	Location	Land Use	Date	Group ID
D	52m E	Unspecified Tanks	1938	2144357
B	59m S	Lime Works	1907	2273835
B	59m S	Lime Works	1895	2273835
B	62m S	Unspecified Tank	1990	2155354
B	84m S	Lime Works	1888	2264907
C	94m W	Unspecified Wharf	1895	2211912
1	109m SW	Unspecified Pit	1865	2126204
F	111m E	Unspecified Tanks	1946	2205075
F	111m E	Unspecified Tank	1938	2155350
F	112m E	Unspecified Tanks	1932	2175117
F	123m E	Unspecified Tanks	1932	2144354
2	128m W	Unspecified Commercial/Industrial	1916	2131134
B	135m SE	Tank	1916	2140330
B	145m SE	Unspecified Tank	1888	2262638
B	145m SE	Unspecified Tank	1907	2224020
B	145m SE	Unspecified Tank	1895	2262638
B	150m SE	Unspecified Tanks	1923	2144387
B	153m S	Lime Kilns	1865	2137926
B	154m SE	Unspecified Tank	1888	2220758
B	155m SE	Unspecified Tank	1907	2238242
B	155m SE	Unspecified Tank	1895	2230495
B	160m S	Unspecified Tank	1895	2206916
B	160m S	Unspecified Tank	1888	2206916
B	165m SE	Railway Sidings	1865	2256890
H	170m W	Unspecified Wharf	1888	2207886
B	170m S	Unspecified Tank	1888	2169956
B	170m S	Unspecified Tank	1895	2169956
I	171m S	Railway Sidings	1865	2273641



ID	Location	Land Use	Date	Group ID
B	173m SE	Railway Building	1895	2150381
H	174m W	Unspecified Wharf	1898	2257908
H	174m W	Unspecified Wharf	1898	2169298
B	174m SE	Tank	1916	2140333
B	176m SE	Railway Sidings	1938	2295100
J	177m W	Unspecified Works	1955	2265000
J	177m W	Unspecified Works	1990	2265000
J	177m W	Unspecified Works	1977	2265000
J	177m W	Unspecified Works	1971	2265000
J	177m W	Unspecified Works	1966	2265000
B	177m SE	Railway Sidings	1938	2282894
B	177m SE	Whiting Works	1938	2183851
B	181m SE	Unspecified Tank	1888	2265060
B	182m SE	Unspecified Tank	1907	2187046
B	182m SE	Unspecified Tank	1895	2281926
H	184m W	Unspecified Wharf	1895	2263176
I	186m S	Old Chalk Pit	1888	2189669
I	188m S	Old Chalk Pit	1895	2189669
B	189m SE	Unspecified Tanks	1923	2144386
I	189m S	Unspecified Ground Workings	1907	2134365
H	191m W	Quays	1865	2139538
B	191m SE	Unspecified Tank	1907	2155349
I	194m S	Unspecified Quarry	1923	2145151
B	197m E	Unspecified Commercial/Industrial	1938	2131136
H	200m W	Unspecified Wharf	1946	2239767
I	200m S	Unspecified Pit	1946	2126203
H	201m W	Unspecified Wharf	1938	2264190
H	201m W	Unspecified Wharf	1938	2232313



ID	Location	Land Use	Date	Group ID
B	201m SE	Unspecified Mills	1955	2139424
B	201m SE	Paper Mills	1971	2265625
B	201m SE	Paper Mills	1966	2265625
H	201m W	Unspecified Wharf	1932	2266777
B	203m SE	Whiting Works	1916	2214023
B	203m SE	Railway Sidings	1916	2282894
B	205m SE	Railway Sidings	1923	2282894
B	206m S	Whiting Works	1895	2193898
B	207m SE	Railway Sidings	1899	2197175
B	207m SE	Railway Sidings	1899	2197175
B	208m SE	Rifle Range	1865	2164819
B	210m SE	Chalk Pit	1899	2260153
B	210m SE	Chalk Pit	1899	2260153
K	210m S	Railway Sidings	1955	2181876
K	210m S	Railway Sidings	1966	2249023
B	211m SE	Lime Works	1895	2221215
B	211m SE	Unspecified Ground Workings	1916	2281094
L	212m W	Unspecified Works	1990	2237219
K	212m S	Railway Sidings	1971	2245054
B	212m SE	Chalk Pit	1888	2170770
B	212m SE	Railway Sidings	1899	2283283
B	212m SE	Railway Sidings	1899	2283283
L	213m W	Unspecified Works	1955	2191249
I	214m S	Unspecified Tanks	1946	2202762
I	214m S	Unspecified Tanks	1932	2226229
B	214m SE	Whiting Works	1888	2193898
J	214m W	Printing Works	1923	2205686
J	215m W	Printing Works	1946	2205686

ID	Location	Land Use	Date	Group ID
J	215m W	Printing Works	1932	2205686
J	215m W	Printing Works	1907	2205686
J	215m W	Unspecified Works	1977	2284906
J	215m W	Unspecified Works	1971	2284906
J	215m W	Unspecified Works	1966	2284906
I	215m S	Unspecified Tank	1938	2155356
B	216m SE	Railway Sidings	1895	2256890
L	217m W	Printing Works	1938	2221904
L	217m W	Printing Works	1938	2185394
J	218m W	Printing Works	1916	2205686
J	219m W	Printing Works	1938	2205686
B	221m SE	Railway Sidings	1923	2190612
B	223m S	Whiting Works	1907	2185896
B	223m S	Whiting Works	1895	2201596
B	223m SE	Lime Kiln	1865	2166931
I	228m S	Unspecified Tanks	1932	2199633
I	228m S	Unspecified Tanks	1946	2269075
I	229m S	Unspecified Tank	1938	2155357
B	230m E	Unspecified Wharf	1955	2157342
B	231m S	Unspecified Ground Workings	1923	2281094
B	231m SE	Chalk Pit	1895	2181037
I	232m S	Unspecified Pit	1955	2170646
I	232m S	Unspecified Pit	1966	2170646
B	234m SE	Chalk Pit	1895	2234119
I	235m S	Unspecified Pit	1977	2259964
I	236m S	Unspecified Tanks	1938	2256775
I	239m S	Unspecified Pit	1971	2277443
K	240m SE	Unspecified Heap	1895	2137201



ID	Location	Land Use	Date	Group ID
B	244m SE	Tunnel	1977	2151568
K	248m S	Railway Building	1932	2261675
K	249m S	Railway Building	1938	2261675
B	252m SE	Railway Building	1932	2283364
B	252m SE	Railway Building	1938	2283364
B	253m SE	Whiting Works	1899	2271515
B	253m SE	Whiting Works	1899	2271515
B	256m SE	Tank	1916	2140332
N	258m SW	Unspecified Works	1990	2255620
N	258m SW	Unspecified Works	1977	2255620
O	264m W	Railway Sidings	1938	2246369
B	265m SE	Unspecified Pit	1966	2259236
O	269m W	Railway Sidings	1932	2246369
B	273m SE	Lime Kiln	1865	2166932
B	276m E	Wharf	1916	2160654
B	277m SE	Whiting Works	1923	2172925
B	283m E	Unspecified Wharf	1923	2278225
B	287m SE	Unspecified Pit	1971	2267865
B	289m SE	Unspecified Pit	1865	2221096
J	290m SW	Unspecified Tank	1932	2155353
B	291m SE	Unspecified Pit	1977	2267865
B	294m E	Railway Building	1938	2208455
P	294m S	Tramway Sidings	1916	2180544
B	295m E	Railway Building	1932	2208455
P	296m S	Tramway Sidings	1938	2209401
Q	296m S	Cuttings	1938	2219636
B	296m E	Railway Station	1899	2200374
B	296m E	Railway Station	1899	2209289

ID	Location	Land Use	Date	Group ID
P	297m S	Unspecified Disused Pit	1977	2182734
P	297m S	Unspecified Pit	1955	2237861
P	297m S	Tramway Sidings	1938	2199044
R	297m S	Cuttings	1946	2292363
B	298m E	Railway Station	1888	2233597
L	301m W	Electric Cable Works	1923	2195494
L	303m W	Electric Cable Works	1907	2241347
P	304m S	Old Chalk Pit	1888	2231741
P	305m S	Unspecified Ground Workings	1899	2248333
P	305m S	Unspecified Ground Workings	1899	2248333
R	306m S	Railway Sidings	1865	2128780
R	306m S	Unspecified Quarry	1865	2145148
L	306m W	Electric Cable Works	1938	2176153
L	306m W	Electric Cable Works	1916	2233623
B	308m E	Unspecified Wharf	1938	2177156
B	308m E	Unspecified Wharf	1938	2221905
P	308m S	Old Chalk Pit	1895	2231741
B	308m E	Unspecified Wharf	1932	2249467
L	309m W	Cable Works	1946	2139548
B	309m E	Unspecified Wharf	1938	2234867
B	309m E	Unspecified Wharf	1938	2288128
L	310m W	Unspecified Works	1977	2277617
P	310m S	Old Chalk Pit	1898	2260866
P	310m S	Old Chalk Pit	1898	2260866
B	310m E	Unspecified Wharf	1907	2245514
R	311m S	Cuttings	1990	2248787
P	311m S	Tramway Sidings	1923	2180544
P	311m S	Chalk Pit	1923	2203122

ID	Location	Land Use	Date	Group ID
L	313m W	Unspecified Works	1971	2219320
L	313m W	Unspecified Works	1966	2219320
B	314m SE	Rifle Range	1916	2293931
P	315m S	Cuttings	1907	2214558
B	315m E	Unspecified Wharf	1938	2264972
B	316m SE	Unspecified Ground Workings	1932	2288663
B	317m SE	Rifle Range	1923	2293931
B	317m SE	Unspecified Heap	1946	2137202
B	317m SE	Unspecified Ground Workings	1938	2288663
B	317m SE	Unspecified Ground Workings	1938	2288663
L	318m W	Electric Cable Works	1932	2237745
Q	318m S	Cuttings	1938	2175427
B	322m SE	Rifle Range	1907	2290769
R	325m S	Cuttings	1938	2180180
B	328m SE	Unspecified Tank	1888	2294865
B	329m SE	Unspecified Tank	1895	2294865
R	331m S	Cuttings	1907	2194648
R	332m S	Cuttings	1895	2248236
R	333m S	Unspecified Tanks	1971	2175727
R	333m S	Unspecified Tanks	1966	2175727
R	333m S	Unspecified Tanks	1932	2227861
B	334m E	Railway Station	1916	2280087
R	335m S	Unspecified Tanks	1946	2216563
R	336m S	Cuttings	1923	2239404
R	336m S	Cuttings	1895	2251312
R	337m S	Cuttings	1932	2288101
R	339m S	Railway Station	1898	2175292
R	339m S	Railway Station	1898	2175292

ID	Location	Land Use	Date	Group ID
R	342m S	Railway Station	1888	2233861
B	343m SE	Unspecified Ground Workings	1865	2223982
B	345m E	Railway Buildings	1932	2274608
B	346m E	Railway Buildings	1938	2274608
B	347m E	Goods Shed	1932	2290151
B	347m E	Goods Shed	1946	2172962
B	348m E	Railway Building	1895	2150384
L	348m W	Tramway Sidings	1946	2151164
B	349m E	Goods Shed	1938	2172962
R	351m S	Railway Station	1916	2267149
B	352m E	Railway Station	1938	2242113
N	353m SW	Unspecified Tank	1895	2211428
B	353m E	Railway Station	1895	2289168
B	354m E	Railway Station	1938	2233975
R	354m S	Railway Station	1895	2238524
B	354m E	Railway Station	1932	2276482
N	354m SW	Unspecified Tank	1898	2172670
N	354m SW	Unspecified Tank	1898	2172670
R	354m S	Railway Station	1938	2287894
R	354m S	Railway Station	1938	2287894
B	354m E	Terminus	1946	2165394
B	354m E	Railway Station	1895	2208478
B	355m E	Railway Station	1938	2177074
L	355m W	Unspecified Heap	1907	2218971
B	356m E	Railway Building	1923	2150383
L	356m W	Unspecified Ground Workings	1916	2134369
L	356m W	Unspecified Heap	1923	2192947
L	357m W	Unspecified Heap	1865	2283274



ID	Location	Land Use	Date	Group ID
B	357m E	Railway Station	1966	2193720
B	358m SE	Unspecified Ground Workings	1946	2229479
B	358m E	Railway Station	1907	2233422
R	359m S	Railway Building	1946	2150375
R	359m S	Railway Station	1932	2213690
R	359m S	Railway Station	1907	2267149
R	359m S	Railway Station	1895	2255239
R	359m S	Unspecified Tanks	1938	2218046
P	360m S	Old Chalk Pit	1895	2179024
R	360m S	Railway Station	1938	2213690
B	361m E	Railway Station	1923	2256712
R	366m S	Railway Station	1923	2192590
B	371m E	Unspecified Wharf	1946	2245771
L	374m W	Railway Sidings	1923	2181803
L	375m W	Railway Sidings	1932	2204029
L	375m W	Railway Sidings	1907	2267410
B	375m SE	Unspecified Pit	1946	2270631
B	377m E	Railway Sidings	1895	2265110
B	377m SE	Railway Building	1895	2150382
B	378m E	Tank	1916	2140331
L	381m W	Railway Sidings	1938	2269925
L	389m W	Railway Sidings	1938	2225587
L	390m W	Railway Sidings	1916	2255089
L	390m W	Railway Sidings	1938	2225587
B	399m E	Unspecified Wharf	1888	2248472
T	401m W	Unspecified Wharves	1938	2267802
T	401m W	Unspecified Wharves	1938	2267802
L	406m W	Unspecified Works	1955	2160150

ID	Location	Land Use	Date	Group ID
P	407m S	Unspecified Disused Pit	1990	2249559
R	408m S	Cuttings	1932	2237027
R	408m S	Cuttings	1907	2221716
R	408m S	Cuttings	1895	2248236
P	411m S	Refuse Heap	1946	2158983
R	411m S	Railway Building	1895	2150376
L	413m W	Tyre Works	1932	2182901
U	428m E	Unspecified Commercial/Industrial	1946	2241199
U	428m E	Unspecified Commercial/Industrial	1938	2214076
U	434m E	Unspecified Wharf	1955	2180855
U	434m E	Unspecified Wharf	1990	2180855
U	434m E	Unspecified Wharf	1977	2180855
U	434m E	Unspecified Wharf	1971	2180855
U	434m E	Unspecified Wharf	1966	2180855
L	437m W	Unspecified Tanks	1946	2144355
L	441m W	Tyre Works	1946	2291549
V	444m SW	Engineering Works	1932	2262564
V	445m SW	Engineering Works	1938	2262564
W	452m SE	Unspecified Tanks	1932	2273320
W	453m SE	Unspecified Tanks	1946	2222068
W	454m SE	Unspecified Tank	1938	2155345
U	458m E	Unspecified Wharf	1895	2221273
P	464m S	Unspecified Pit	1971	2189009
P	464m S	Unspecified Pit	1966	2189009
W	470m SE	Bus Depot	1977	2162581
W	472m SE	Unspecified Commercial/Industrial	1938	2182463
W	472m SE	Unspecified Commercial/Industrial	1946	2193952
W	473m SE	Hospital	1895	2285413

ID	Location	Land Use	Date	Group ID
W	475m SE	Hospital	1899	2285413
W	475m SE	Hospital	1899	2285413
W	476m SE	Hospital	1888	2211212
W	477m SE	Hospital	1955	2228873
W	477m SE	Hospital	1971	2228873
W	477m SE	Hospital	1966	2228873
W	477m SE	Unspecified Commercial/Industrial	1932	2182463
W	477m SE	Unspecified Commercial/Industrial	1907	2237987
W	479m SE	Unspecified Tanks	1938	2244682
U	480m E	Railway Sidings	1932	2272934
U	482m E	Tramway Sidings	1946	2151163
W	482m SE	Unspecified Tank	1946	2261518
W	482m SE	Unspecified Tank	1932	2261518
W	482m SE	Unspecified Tank	1907	2272214
W	482m SE	Unspecified Tank	1895	2200108
W	483m SE	Unspecified Commercial/Industrial	1923	2256446
W	484m SE	Unspecified Tanks	1938	2252526
U	485m E	Railway Sidings	1938	2272934
W	487m SE	Unspecified Tanks	1888	2228831
Y	487m S	Unspecified Pit	1932	2126193
Y	491m S	Chalk Pit	1916	2255457
W	493m SE	Unspecified Tank	1923	2155347
W	495m SE	Unspecified Tank	1946	2230496
W	495m SE	Unspecified Tank	1932	2230496
W	495m SE	Unspecified Tank	1907	2224356
W	495m SE	Unspecified Tank	1895	2227868

This data is sourced from Ordnance Survey / Groundsure.



2.2 Historical tanks

Records within 500m

135

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

Features are displayed on the Past land use - un-grouped map on **page 31**

ID	Location	Land Use	Date	Group ID
A	On site	Tanks	1973	378144
A	On site	Tanks	1973	378145
A	On site	Unspecified Tank	1973	369187
A	On site	Unspecified Tank	1952	402812
A	On site	Unspecified Tank	1952	395237
A	On site	Unspecified Tank	1952	402812
A	On site	Unspecified Tank	1952	395237
A	On site	Unspecified Tank	1933	386946
A	On site	Unspecified Tank	1939	386946
D	5m S	Tanks	1952	402113
D	5m S	Tanks	1952	402113
D	5m E	Tanks	1993	380857
D	5m E	Tanks	1996	383456
D	6m E	Tanks	1986	380857
D	6m E	Tanks	1989	380857
D	6m E	Tanks	1973	395226
A	8m W	Unspecified Tank	1952	380811
A	8m W	Unspecified Tank	1952	380811
A	8m W	Unspecified Tank	1973	400858
A	9m W	Unspecified Tank	1986	400858
A	9m W	Unspecified Tank	1952	400858
A	9m W	Unspecified Tank	1952	400858
D	9m S	Unspecified Tank	1933	400487



ID	Location	Land Use	Date	Group ID
D	9m S	Unspecified Tank	1939	400487
A	10m N	Unspecified Tank	1952	389419
A	10m N	Unspecified Tank	1952	389419
A	22m S	Unspecified Tank	1866	369185
D	23m NE	Unspecified Tank	1993	387768
D	24m NE	Unspecified Tank	1975	399975
D	25m NE	Unspecified Tank	1985	387768
D	25m NE	Unspecified Tank	1989	387768
D	25m NE	Unspecified Tank	1991	387768
A	29m W	Tanks	1933	409350
A	29m W	Tanks	1939	409350
D	42m E	Tanks	1933	401445
D	42m E	Tanks	1939	401445
A	55m W	Unspecified Tank	1939	369186
B	58m S	Tanks	1973	385808
B	64m S	Tanks	1986	410406
B	64m S	Tanks	1989	410406
C	106m W	Tanks	1865	378146
C	119m W	Unspecified Tank	1865	369188
F	153m E	Tanks	1975	378143
G	158m SW	Unspecified Tank	1993	388257
G	158m SW	Unspecified Tank	1996	388257
B	162m S	Unspecified Tank	1866	369175
B	170m S	Unspecified Tank	1866	369176
G	171m SW	Unspecified Tank	1986	385596
G	171m SW	Unspecified Tank	1989	385596
G	172m SW	Unspecified Tank	1993	409760
G	172m SW	Unspecified Tank	1996	409760

ID	Location	Land Use	Date	Group ID
B	179m SE	Unspecified Tank	1909	369173
I	185m S	Unspecified Tank	1933	409965
I	185m S	Unspecified Tank	1939	409965
I	185m S	Tanks	1986	407659
I	186m S	Tanks	1973	407659
B	191m SE	Unspecified Tank	1909	369172
B	217m E	Tanks	1964	380670
B	217m E	Tanks	1965	380670
B	217m E	Unspecified Tank	1953	411177
B	217m E	Unspecified Tank	1953	405802
I	218m S	Tanks	1933	383238
I	218m S	Tanks	1939	392419
M	219m SW	Unspecified Tank	1986	401747
M	219m SW	Unspecified Tank	1989	401747
M	220m SW	Unspecified Tank	1973	401747
M	221m SW	Unspecified Tank	1993	401747
M	221m SW	Unspecified Tank	1996	401747
I	234m S	Tanks	1939	378155
I	239m S	Tanks	1933	404282
I	239m S	Tanks	1939	404282
J	270m SW	Unspecified Tank	1933	409825
J	270m SW	Unspecified Tank	1939	409825
3	282m SW	Unspecified Tank	1865	369174
J	289m SW	Gasometer	1909	374081
J	289m SW	Unspecified Tank	1933	391319
J	289m SW	Unspecified Tank	1939	391319
B	297m E	Unspecified Tank	1965	390778
B	297m E	Unspecified Tank	1953	390778

ID	Location	Land Use	Date	Group ID
B	297m E	Unspecified Tank	1953	390778
B	297m E	Unspecified Tank	1964	390778
R	333m S	Unspecified Tank	1952	384036
R	333m S	Unspecified Tank	1964	400822
R	334m S	Unspecified Tank	1973	410278
R	334m S	Unspecified Tank	1963	388697
R	334m S	Unspecified Tank	1952	403570
L	346m W	Unspecified Tank	1897	369184
4	351m SW	Unspecified Tank	1865	369177
R	356m S	Tanks	1952	381221
R	356m S	Tanks	1964	381221
R	356m S	Tanks	1986	408776
R	356m S	Tanks	1973	408776
R	356m S	Tanks	1963	408776
R	356m S	Tanks	1952	408776
R	361m S	Tanks	1933	390174
R	361m S	Tanks	1939	390174
R	376m S	Unspecified Tank	1952	395887
R	376m S	Unspecified Tank	1964	395887
R	376m S	Unspecified Tank	1973	395887
R	376m S	Unspecified Tank	1963	395887
R	376m S	Unspecified Tank	1952	395887
R	393m S	Unspecified Tank	1973	400613
R	399m S	Unspecified Tank	1981	400613
L	400m W	Unspecified Tank	1975	399381
L	401m W	Unspecified Tank	1985	399381
L	405m W	Tanks	1975	410773
L	406m W	Tanks	1995	410773

ID	Location	Land Use	Date	Group ID
L	406m W	Tanks	1993	410773
L	406m W	Tanks	1985	410773
L	409m W	Tanks	1975	398780
L	409m W	Tanks	1985	398780
L	436m W	Gasometers	1933	374468
L	437m W	Gasometer	1909	374082
L	448m W	Unspecified Tank	1995	387736
L	448m W	Unspecified Tank	1993	387736
L	449m W	Unspecified Tank	1985	387736
W	457m SE	Unspecified Tank	1933	402166
W	457m SE	Unspecified Tank	1939	402166
W	460m SE	Unspecified Tank	1965	390027
W	460m SE	Unspecified Tank	1953	390027
W	460m SE	Unspecified Tank	1953	390027
W	460m SE	Unspecified Tank	1964	390027
L	469m W	Tanks	1933	378149
L	469m W	Unspecified Tank	1939	395606
L	469m W	Unspecified Tank	1952	395606
L	469m W	Unspecified Tank	1952	395606
L	477m W	Tanks	1952	397282
L	478m W	Tanks	1952	397282
W	481m SE	Unspecified Tank	1953	381077
W	481m SE	Unspecified Tank	1953	381077
L	488m W	Tanks	1995	386906
L	488m W	Tanks	1993	386906
L	490m W	Unspecified Tank	1952	369183
L	493m W	Tanks	1952	378150
L	493m W	Tanks	1985	409715

This data is sourced from Ordnance Survey / Groundsure.



2.3 Historical energy features

Records within 500m

33

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 31**

ID	Location	Land Use	Date	Group ID
A	On site	Electricity Substation	1989	259637
A	On site	Electricity Substation	1989	248026
A	1m E	Electricity Substation	1993	259637
A	1m E	Electricity Substation	1996	259637
A	12m S	Electricity Substation	1952	286680
A	13m S	Electricity Substation	1952	286680
B	77m SE	Electricity Substation	1993	248023
E	103m S	Electricity Substation	1993	290698
E	103m S	Electricity Substation	1996	290698
E	122m S	Electricity Substation	1989	271887
E	123m S	Electricity Substation	1993	271887
E	123m S	Electricity Substation	1996	271887
I	215m S	Electricity Substation	1986	248019
I	216m S	Electricity Transformer	1973	250883
J	245m W	Electricity Transformer	1973	250885
B	278m E	Electricity Substation	1993	281204
B	283m E	Electricity Substation	1953	290510
B	284m E	Electricity Substation	1953	255574
J	289m SW	Gasometer	1909	251563
S	341m SW	Electricity Transformers	1973	251669
S	353m SW	Electricity Substation	1952	263693
S	354m SW	Electricity Substation	1952	263693
S	359m SW	Electricity Substation	1986	289032



ID	Location	Land Use	Date	Group ID
S	359m SW	Electricity Substation	1989	289032
S	368m SW	Electricity Substation	1993	292105
S	368m SW	Electricity Substation	1996	292105
L	436m W	Gasometers	1933	251903
L	437m W	Gasometer	1909	251564
Z	489m E	Electricity Substation	1993	272416
Z	489m E	Electricity Substation	1985	272416
Z	489m E	Electricity Substation	1989	272416
Z	489m E	Electricity Substation	1991	272416
Z	489m E	Electricity Transformer	1975	250886

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0
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Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. 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	16
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Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

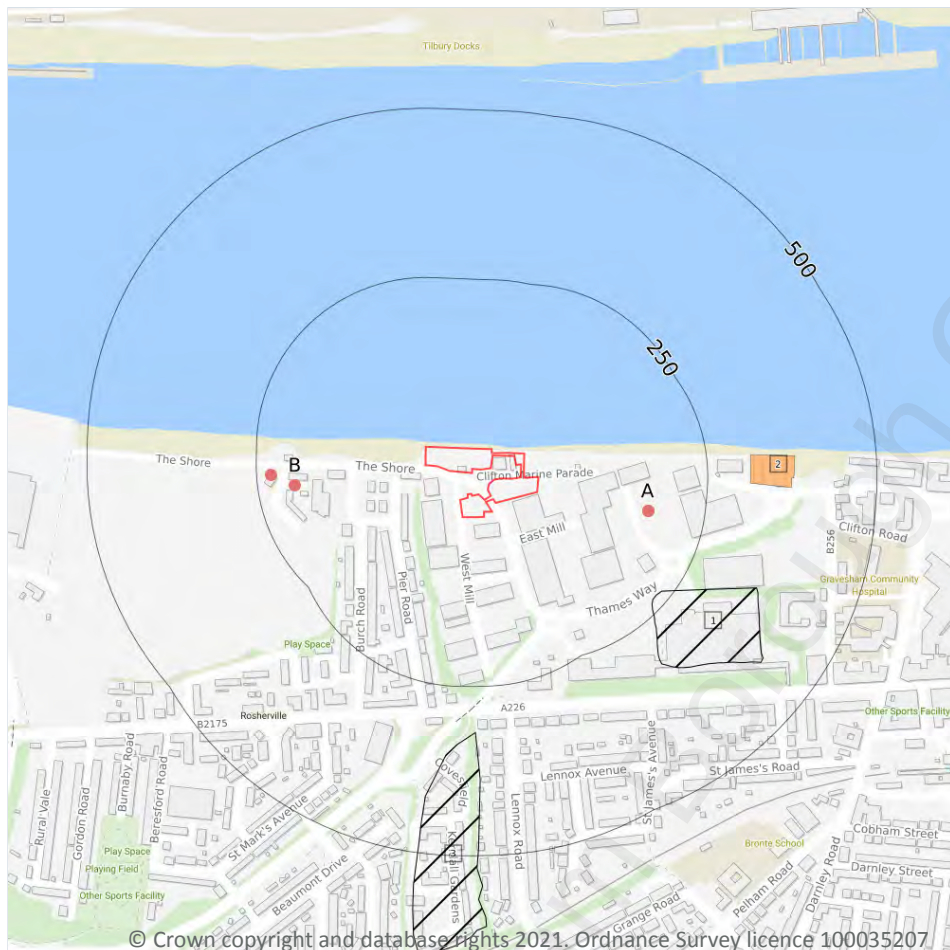
Features are displayed on the Past land use - un-grouped map on **page 31**

ID	Location	Land Use	Date	Group ID
I	216m SE	Garage	1986	83246
I	216m SE	Garage	1989	83246
I	216m SE	Garage	1973	85039

ID	Location	Land Use	Date	Group ID
I	216m SE	Garage	1963	85039
I	216m SE	Garage	1964	85039
I	218m SE	Garage	1996	83246
I	218m SE	Garage	1993	79683
I	221m SE	Garage	1965	85039
I	221m SE	Garage	1975	85039
I	221m SE	Garage	1964	82166
I	222m SE	Garage	1985	82166
X	469m SE	Garage	1953	85218
X	469m SE	Garage	1953	81076
X	469m SE	Garage	1964	81076
X	469m SE	Garage	1965	85218
X	469m SE	Garage	1975	85218

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



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

3.1 Active or recent landfill

Records within 500m

0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

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

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 53**

ID	Location	Details		
1	232m SE	Site Address: Asda Site, Gravesend, Kent Licence Holder Address: -	Waste Licence: Yes Site Reference: GR15 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01/01/1976 Licence Surrender: -	Operator: - Licence Holder: - First Recorded: - Last Recorded: -
3	318m S	Site Address: Lennox Road, Gravesend, Kent Licence Holder Address: -	Waste Licence: Yes Site Reference: P/02/03, 21EK Waste Type: Inert, Commercial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 08/03/1977 Licence Surrender: 29/10/1992	Operator: Reed Paper and Board Licence Holder: Reed Paper and Board First Recorded 31/12/1977 Last Recorded: 31/12/1988

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

3.5 Historical waste sites

Records within 500m

1

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 53**

ID	Location	Address	Further Details	Date
2	312m E	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1985

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

3.6 Licensed waste sites

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

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

3.7 Waste exemptions

Records within 500m	5
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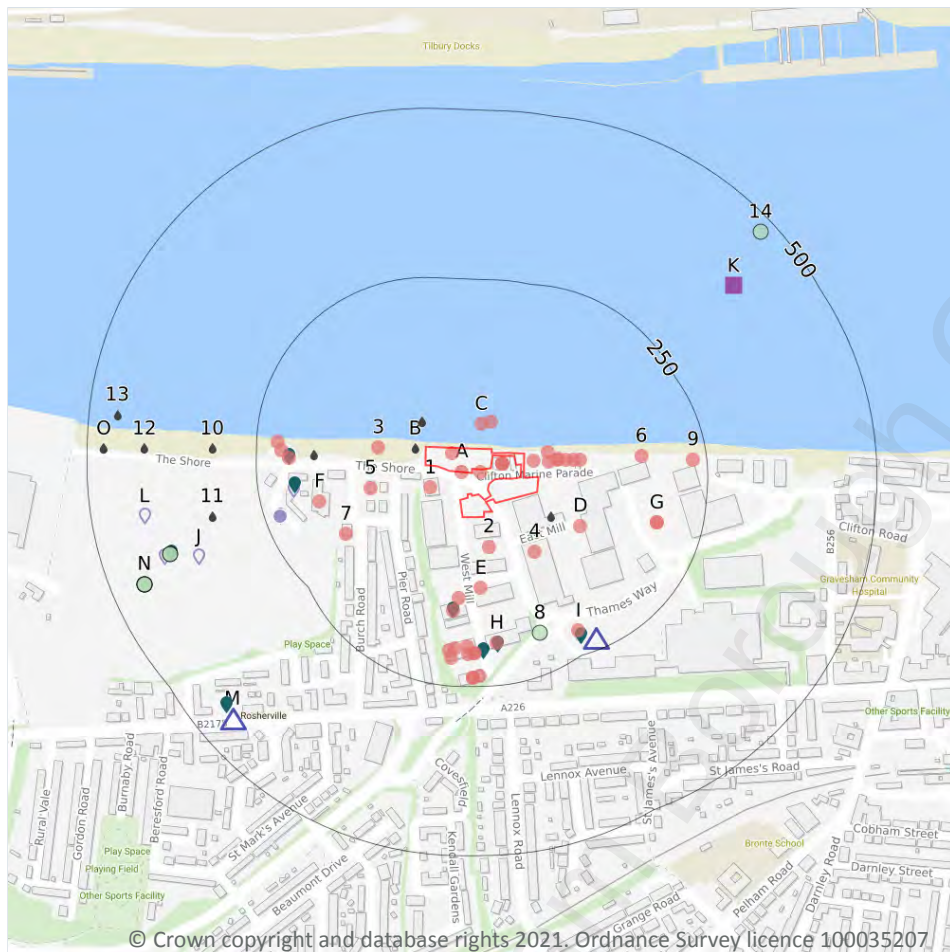
Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 53**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	166m E	Lidl UK GmbH Crete Hall Road Gravesend DA11 9BU	EPR/CE5743LJ /A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
A	166m E	Lidl UK GmbH Crete Hall Road Gravesend DA11 9BU	EPR/CE5743LJ /A001	Treating waste exemption	Non-Agricultural Waste Only	Treatment of waste food
A	166m E	Lidl UK GmbH Crete Hall Road Gravesend DA11 9BU	EPR/CE5743LJ /A001	Treating waste exemption	Non-Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
B	196m W	Tarmac Cement and Lime Ltd, The Shore, Northfleet, Gravesend, DA11 9AN	WEX118775	Using waste exemption	Not on a farm	Use of waste in construction
B	230m W	Former WT Henley Site, Crete Hall Road, Northfleet, DA11 9AA	WEX184253	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
- △ Current or recent petrol stations
- 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
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

46

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 56**

ID	Location	Company	Address	Activity	Category
A	On site	Electricity Sub Station	Kent, DA11	Electrical Features	Infrastructure and Facilities
A	On site	Wharf	Kent, DA11	Moorings and Unloading Facilities	Water
A	3m S	Gas Valve Compound	Kent, DA11	Gas Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
A	11m S	S S E Enterprise Energy Solutions	The White House, Clifton Marine Parade, Gravesend, Kent, DA11 0DY	Electronic Equipment	Industrial Products
A	11m S	Postage Discount Ltd	The White House, Clifton Marine Parade, Gravesend, Kent, DA11 0DY	Office and Shop Equipment	Industrial Products
A	11m S	L G S A Marine	The White House, Clifton Marine Parade, Gravesend, Kent, DA11 0DY	Marine Engineers and Services	Engineering Services
A	14m E	Tank	Kent, DA11	Tanks (Generic)	Industrial Features
A	27m NE	Tank	Kent, DA11	Tanks (Generic)	Industrial Features
1	33m S	Sprint Engineering & Lubricants Ltd	Unit G3 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Lubricants and Lubricating Equipment	Industrial Products
A	34m E	Jetty	Kent, DA11	Moorings and Unloading Facilities	Water
C	37m N	Jetty	Kent, DA11	Moorings and Unloading Facilities	Water
A	38m NE	Tank	Kent, DA11	Tanks (Generic)	Industrial Features
A	40m NE	Tank	Kent, DA11	Tanks (Generic)	Industrial Features
C	40m N	Travelling Cranes	Kent, DA11	Travelling Cranes and Gantries	Industrial Features
2	45m S	Imperial Business Park	Kent, DA11	Business Parks and Industrial Estates	Industrial Features
A	47m NE	Tank	Kent, DA11	Tanks (Generic)	Industrial Features
A	57m NE	Tank	Kent, DA11	Tanks (Generic)	Industrial Features
A	66m NE	Tank	Kent, DA11	Tanks (Generic)	Industrial Features
3	70m W	Mooring Post	Kent, DA11	Moorings and Unloading Facilities	Water
D	81m SE	Electricity Sub Station	Kent, DA11	Electrical Features	Infrastructure and Facilities
4	84m S	Leading Edge Labels & Packaging	Unit H1-H4 Imperial Business Estate, East Mill, Gravesend, Kent, DA11 0DP	Office and Shop Equipment	Industrial Products
5	88m SW	The Dent Co	Flat H 1-3, Lansdowne Square, Northfleet, Gravesend, Kent, DA11 9LX	Vehicle Repair, Testing and Servicing	Repair and Servicing



ID	Location	Company	Address	Activity	Category
E	105m S	Electricity Sub Station	Kent, DA11	Electrical Features	Infrastructure and Facilities
E	120m S	Electricity Sub Station	Kent, DA11	Electrical Features	Infrastructure and Facilities
E	138m S	Euro Car Parts	Unit D1 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Vehicle Parts and Accessories	Motoring
6	155m E	Wharf	Kent, DA11	Moorings and Unloading Facilities	Water
7	155m SW	Tank	Kent, DA11	Tanks (Generic)	Industrial Features
F	165m W	Farm2Doors	45-49 Burch Road, Northfleet, Gravesend, Kent, DA11 9NE	Dairy Products	Foodstuffs
G	183m E	Bensons for Beds	C, Imperial Retail Park, Thames Way, Gravesend, Kent, DA11 0DQ	Beds and Bedding	Consumer Products
G	183m E	Dreams Plc	Unit G Imperial Retail Park, Thames Way, Gravesend, Kent, DA11 0DQ	Beds and Bedding	Consumer Products
H	187m S	Coachwork Renovations	Unit C1-C2 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Vehicle Repair, Testing and Servicing	Repair and Servicing
H	190m S	Captivair Pneumatics Ltd	Unit B2 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Pumps and Compressors	Industrial Products
H	195m S	A 2 Domestic Appliance Services Ltd	Unit B4 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Electrical Equipment Repair and Servicing	Repair and Servicing
H	198m S	Medway Security Wholesale Ltd	Unit B5 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Electronic Equipment	Industrial Products
H	201m S	Charlton Printing Works Ltd	Unit A9 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Published Goods	Industrial Products
H	201m S	Kent Diving Services	Unit A9 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Hobby, Sports and Pastime Products	Consumer Products
H	202m S	Star Refrigeration Ltd	Unit A8 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Cooling and Refrigeration	Industrial Products
F	202m W	Fleetmix Ltd	Old Sun Wharf, Crete Hall Road, Gravesend, Kent, DA11 9AA	Concrete Products	Industrial Products



ID	Location	Company	Address	Activity	Category
H	208m S	Harbert Floor Screeding Contractors	Unit A5 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Construction Completion Services	Construction Services
F	213m W	Old Sun Wharf	Kent, DA11	Moorings and Unloading Facilities	Water
I	214m S	Asda Gravesend Automat	Thames Way, Gravesend, Kent, DA11 0DQ	Petrol and Fuel Stations	Road and Rail
F	219m W	Old Sun Wharf	Kent, DA11	Moorings and Unloading Facilities	Water
9	230m E	Fletchers Wharf	Kent, DA11	Moorings and Unloading Facilities	Water
H	234m S	Prostitch Embroidery	Unit A1 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Textiles, Fabrics, Silk and Machinery	Industrial Products
H	238m S	K N P Print	Unit A2 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Published Goods	Industrial Products
H	238m S	Artisan Print Services Ltd	Unit A2 Imperial Business Estate, West Mill, Gravesend, Kent, DA11 0DL	Plate Makers, Print Finishers and Type Setters	IT, Advertising, Marketing and Media Services

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	2
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Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 56**

ID	Location	Company	Address	LPG	Status
I	233m S	ASDA	Thames Way, Gravesend, Kent, DA11 0DQ	No	Open
M	452m SW	TOTAL	128, London Road, Northfleet, Gravesend, Kent, DA11 9LE	Not Applicable	Obsolete

This data is sourced from Experian.



4.3 Electricity cables

Records within 500m	0
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High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0
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High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0
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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
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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
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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

12

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 56**

ID	Location	Details	
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: AH9499	Original Permit Number: IPCAIRAPP Date Approved: 18-6-1993 Effective Date: 18-6-1993 Status: Superseded By Variation
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: AJ6513	Original Permit Number: IPCMINVAR Date Approved: 20-9-1993 Effective Date: 20-9-1993 Status: Superseded By Variation
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: AM6579	Original Permit Number: IPCMINVAR Date Approved: 16-3-1994 Effective Date: 16-3-1994 Status: Superseded By Variation
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: AW3597	Original Permit Number: IPCMINVAR Date Approved: 23-8-1996 Effective Date: 23-8-1996 Status: Superseded By Variation
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: AW6839	Original Permit Number: IPCMINVAR Date Approved: 12-9-1996 Effective Date: 12-9-1996 Status: Superseded By Variation

ID	Location	Details	
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: BA0153	Original Permit Number: IPCMINVAR Date Approved: 19-1-1998 Effective Date: 1-2-1998 Status: Superseded By Variation
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: BB6459	Original Permit Number: IPCMINVAR Date Approved: 27-7-1998 Effective Date: 10-8-1998 Status: Superseded By Variation
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: BE5556	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: BE8954	Original Permit Number: IPCMINVAR Date Approved: 14-4-1999 Effective Date: 26-4-1999 Status: Superseded By Variation
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: BG6472	Original Permit Number: IPCMINVAR Date Approved: 5-8-1999 Effective Date: 11-8-1999 Status: Superseded By Variation
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: BH4726	Original Permit Number: IPCMINVAR Date Approved: 6-12-1999 Effective Date: 16-12-1999 Status: Superseded By Variation
F	228m W	Operator: Blue Circle Industries Plc Address: Lafarge Cement Uk, Northfleet Works, The Shore, Northfleet, Gravesend, Kent, DA11 9AN Process: Cement/lime Manuf. And Assoc. Processes Permit Number: BH8829	Original Permit Number: IPCMINVAR Date Approved: 10-3-2000 Effective Date: 17-3-2000 Status: Revoked - Now Ippc

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

12

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 56**

ID	Location	Details	
F	198m W	Operator: LAFARGE CEMENT UK PLC Installation Name: NORTHFLEET WORKS, BLUE CIRCLE INDUSTRIES PLC Process: CEMENT AND LIME; PRODUCING ETC CEMENT CLINKER Permit Number: GP3433HF Original Permit Number: BM0176IS	EPR Reference: - Issue Date: - Effective Date: 12/10/2010 Last date noted as effective: 01/07/2021 Status: SURRENDER EFFECTIVE
F	198m W	Operator: LAFARGE CEMENT UK PLC Installation Name: NORTHFLEET WORKS, BLUE CIRCLE INDUSTRIES PLC Process: CEMENT AND LIME; PRODUCING ETC CEMENT CLINKER Permit Number: QP3931UV Original Permit Number: BM0176IS	EPR Reference: - Issue Date: 31/03/2008 Effective Date: 01/04/2008 Last date noted as effective: 01/07/2021 Status: SUPERCEDED
F	198m W	Operator: LAFARGE CEMENT UK PLC Installation Name: NORTHFLEET WORKS, BLUE CIRCLE INDUSTRIES PLC Process: CEMENT AND LIME; LOADING ETC CEMENT AND CLINKER, BULK IN AND OUT Permit Number: QP3931UV Original Permit Number: BM0176IS	EPR Reference: - Issue Date: 31/03/2008 Effective Date: 01/04/2008 Last date noted as effective: 01/07/2021 Status: SUPERCEDED
F	198m W	Operator: LAFARGE CEMENT UK PLC Installation Name: NORTHFLEET CEMENT WORKS Process: CEMENT AND LIME; PRODUCING ETC CEMENT CLINKER Permit Number: JP3731UU Original Permit Number: BM0176IS	EPR Reference: - Issue Date: 17/12/2007 Effective Date: 17/12/2007 Last date noted as effective: 01/07/2021 Status: SUPERCEDED
F	198m W	Operator: LAFARGE CEMENT UK PLC Installation Name: NORTHFLEET WORKS, BLUE CIRCLE INDUSTRIES PLC Process: CEMENT AND LIME; LOADING ETC CEMENT AND CLINKER, BULK IN AND OUT Permit Number: GP3433HF Original Permit Number: BM0176IS	EPR Reference: - Issue Date: - Effective Date: 12/10/2010 Last date noted as effective: 01/07/2021 Status: SURRENDER EFFECTIVE



ID	Location	Details	
F	228m W	Operator: BLUE CIRCLE INDUSTRIES PLC Installation Name: - Process: CEMENT & LIME; PRODUCING ETC CEMENT CLINKER Permit Number: BM0176 Original Permit Number: BM0176	EPR Reference: - Issue Date: 26/03/2004 Effective Date: 26/03/2004 Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
J	361m W	Operator: AEI CABLES LTD Installation Name: CRETE HALL RD, GRAVESEND Process: NON-FERROUS METALS; MELTING WITH CAPACITY >4T/D LEAD/CADMIUM OR 20T/D OTHERS Permit Number: EP3431SV Original Permit Number: BM7570IU	EPR Reference: - Issue Date: - Effective Date: 01/09/2006 Last date noted as effective: 01/07/2021 Status: SURRENDER EFFECTIVE
J	361m W	Operator: AEI CABLES LTD Installation Name: CRETE HALL RD, GRAVESEND Process: NON-FERROUS METALS; MELTING WITH CAPACITY => 5T Permit Number: EP3431SV Original Permit Number: BM7570IU	EPR Reference: - Issue Date: - Effective Date: 01/09/2006 Last date noted as effective: 01/07/2021 Status: SURRENDER EFFECTIVE
J	408m W	Operator: AEI CABLES LTD Installation Name: CRETE HALL RD, GRAVESEND Process: NON-FERROUS METALS; MELTING WITH CAPACITY >4T/D LEAD/CADMIUM OR 20T/D OTHERS Permit Number: BM7570IU Original Permit Number: BM7570IU	EPR Reference: - Issue Date: 27/01/2003 Effective Date: 27/01/2003 Last date noted as effective: 01/07/2021 Status: SUPERCEDED
J	408m W	Operator: AEI CABLES LTD Installation Name: CRETE HALL RD, GRAVESEND Process: NON-FERROUS METALS; MELTING WITH CAPACITY => 5T Permit Number: BM7570IU Original Permit Number: BM7570IU	EPR Reference: - Issue Date: 27/01/2003 Effective Date: 27/01/2003 Last date noted as effective: 01/07/2021 Status: SUPERCEDED
L	422m W	Operator: AEI CABLES LTD Installation Name: - Process: NON-FERROUS METALS; MELTING WITH CAPACITY => 5T Permit Number: BM7570 Original Permit Number: BM7570	EPR Reference: - Issue Date: 27/01/2003 Effective Date: 27/01/2003 Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
L	422m W	Operator: AEI CABLES LTD Installation Name: - Process: NON-FERROUS METALS; MELTING WITH CAPACITY >4T/D LEAD/CADMIUM OR 20T/D OTHERS Permit Number: BM7570 Original Permit Number: BM7570	EPR Reference: - Issue Date: 27/01/2003 Effective Date: 27/01/2003 Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS

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

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 56**

ID	Location	Address	Details	
E	138m S	Nationwide Crash Repairs, Unit D1, Imperial Business Park, West Mill, Gravesend, Kent, DA11 0DL	Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
H	189m S	Coachwork Renovation, Unit C1, Imperial Business Park, West Mill, Gravesend, Kent, DA11 0DL	Process: Respraying of Road Vehicles Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
F	196m W	Deritend Electro-Mechanical Services, The Shore, Northfleet, Kent, DA11 9AN	Process: Operation Of Burnout Oven, Confirmed To Be Less Than 0.2mw Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
H	197m S	Tbf Thompson (Properties) Ltd, Imperial Business Estate, Thamesway Park, Gravesend, Kent, DA11 0DQ	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
F	202m W	Fleetmix, Old Sun Wharf, Crete Hall Road, Gravesend, Kent, DA11 9AA	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
I	221m S	ASDA Petrol, Thames Way, Gravesend, DA11 0DQ	Process: Unloading of Petrol into Storage at Service Stations 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	
J	397m W	Aei Cables, Crete Hall Road, Gravesend, Kent, DA11 9DA	Process: Timber Manufacture Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
M	445m SW	Chilton House Service Station, 128 London Road, Northfleet, Kent, DA11 9LE	Process: Unloading of Petrol into Storage at Terminals Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m

11

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

Features are displayed on the Current industrial land use map on **page 56**

ID	Location	Address	Details	
B	15m W	GRAVESEND, IMPERIAL PAPER MILLS, GRAVESEND IMPERIAL PAPER MILLS	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: CTMR.0325 Permit Version: 1 Receiving Water: TIDAL THAMES	Status: REVOKED - UNSPECIFIED Issue date: 09/11/1976 Effective Date: 09/11/1976 Revocation Date: 07/04/1988
B	37m N	IMPERIAL BUSINESS ESTATE, IMPERIAL BUSINESS ESTATE, GRAVESEND KENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: T01900 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 01/04/1991 Effective Date: 01/04/1991 Revocation Date: -



ID	Location	Address	Details	
B	37m N	IMPERIAL BUSINESS ESTATE, GRAVESEND, IMPERIAL BUSINESS ESTATE GRAVES, END KENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: CTWC.1596 Permit Version: 1 Receiving Water: RIVER THAMES	Status: REVOKED - UNSPECIFIED Issue date: 05/05/1987 Effective Date: 05/05/1987 Revocation Date: 24/06/1991
D	41m SE	GRAVESEND, IMPERIAL PAPER MILLS, GRAVESEND IMPERIAL PAPER MILLS	Effluent Type: UNSPECIFIED Permit Number: CTMR.0184 Permit Version: 1 Receiving Water: TIDAL THAMES	Status: REVOKED - UNSPECIFIED Issue date: 01/09/1979 Effective Date: 01/09/1979 Revocation Date: 07/04/1988
F	165m W	CRETE HALL ROAD, GRAVESEND, KENT, CRETE HALL ROAD GRAVESEND KENT	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: CTMR.0120 Permit Version: 1 Receiving Water: THAMES TIDAL	Status: REVOKED (WRA 91, S88 & SCHD 10 AS AMENDED BY ENV ACT 1995) Issue date: 28/01/1980 Effective Date: 28/01/1980 Revocation Date: 29/07/2008
10	315m W	LOWER DISCHARGE AEI CABLES LIMITED, CRETE HALL ROAD, GRAVESEND, KENT, DA11 9AF	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: CASM.0316 Permit Version: 1 Receiving Water: THE TIDAL RIVER THAMES	Status: REVOKED (WRA 91, S88 & SCHD 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/01/2001 Effective Date: 04/12/2000 Revocation Date: 15/01/2008
11	324m W	CRETE HALL ROAD, GRAVESEND, KENT, CRETE HALL ROAD GRAVESEND KENT	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: CTMR.0082 Permit Version: 1 Receiving Water: THAMES	Status: REVOKED - UNSPECIFIED Issue date: 25/03/1981 Effective Date: 25/03/1981 Revocation Date: 14/01/1988
12	415m W	PREMISES, LOWER DISCHARGE, GRAVESEN, PREMISES LOWER DISCHARGE GRAVE, SEND KENT	Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: CTMR.0119 Permit Version: 1 Receiving Water: THAMES	Status: REVOKED (WRA 91, S88 & SCHD 10 AS AMENDED BY ENV ACT 1995) Issue date: 29/10/1979 Effective Date: 29/10/1979 Revocation Date: 04/12/2000
13	458m W	AGGREGATES WHARF, CRETE HALL ROAD, NORTHFLEET, GRAVESEND, KENT, DA11 9AA	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: CASM.0712 Permit Version: 1 Receiving Water: THE TIDAL RIVER THAMES	Status: NEW CONSENT (WRA 91, S88 & SCHD 10 AS AMENDED BY ENV ACT 1995) Issue date: 24/12/2002 Effective Date: 06/11/2002 Revocation Date: -
O	475m W	UPPER DISCHARGE, AEI CABLES LTD, GR, UPPER DISCHARGE AEI CABLES LTD, GRAVESEND KENT	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CNTM.0127 Permit Version: 1 Receiving Water: RIVER THAMES	Status: REVOKED (WRA 91, S88 & SCHD 10 AS AMENDED BY ENV ACT 1995) Issue date: 10/03/1992 Effective Date: 10/03/1992 Revocation Date: 04/12/2000



ID	Location	Address	Details	
O	475m W	UPPER DISCHARGE, AEI CABLES LTD, GR, UPPER DISCHARGE AEI CABLES LTD, GRAVESEND KENT	Effluent Type: SEWAGE & TRADE COMBINED - UNSPECIFIED Permit Number: CASM.0315 Permit Version: 1 Receiving Water: THE TIDAL RIVER THAMES	Status: SURRENDERED UNDER EPR 2010 Issue date: 23/01/2001 Effective Date: 04/12/2000 Revocation Date: 10/12/2014

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
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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 56**

ID	Location	Address	Details	
K	395m NE	BLUE CIRCLE INDUSTRIES PLC, OUTLET A, BLUE CIRCLE, NORTHFLEET, OUTLET A, BLUE CIRCLE, NORTHFLEE, T, THE SHORE, NORTHFLEET, GRAVSE, ND, KENT	Permit Number: CNTM.1265 Permit Version: 1 Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Discharge Type: Extraction of Other Minerals	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Catchment: - Approval Date: 1994-01-24T00:00:00.000Z
K	395m NE	LAFARGE AGGREGATES LIMITED, OUTLET A, BLUE CIRCLE, NORTHFLEET, OUTLET A, BLUE CIRCLE, NORTHFLEE, T, THE SHORE, NORTHFLEET, GRAVSE, ND, KENT	Permit Number: CNTM.1265 Permit Version: 1 Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Discharge Type: Extraction of Other Minerals	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Catchment: - Approval Date: 1994-01-24T00:00:00.000Z

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

4.15 Pollutant release to public sewer

Records within 500m	0
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Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m

0

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

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

4.17 List 2 Dangerous Substances

Records within 500m

0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m

8

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

Features are displayed on the Current industrial land use map on **page 56**

ID	Location	Details	
8	189m SE	Incident Date: 16/05/2002 Incident Identification: 79193 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
J	399m W	Incident Date: 06/11/2002 Incident Identification: 119304 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
J	399m W	Incident Date: 06/11/2002 Incident Identification: 119305 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
N	450m SW	Incident Date: 11/05/2001 Incident Identification: 11034 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Location	Details	
N	450m SW	Incident Date: 11/05/2001 Incident Identification: 11031 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
N	450m SW	Incident Date: 11/05/2001 Incident Identification: 11031 Pollutant: Atmospheric Pollutants and Effects: Contaminated Water Pollutant Description: Other Atmospheric Pollutant or Effect: Firefighting Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
N	450m SW	Incident Date: 11/05/2001 Incident Identification: 11031 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
14	478m NE	Incident Date: 26/02/2003 Incident Identification: 139427 Pollutant: Oils and Fuel Pollutant Description: Gas and Fuel Oils	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m

0

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

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

4.20 Pollution inventory waste transfers

Records within 500m

0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m

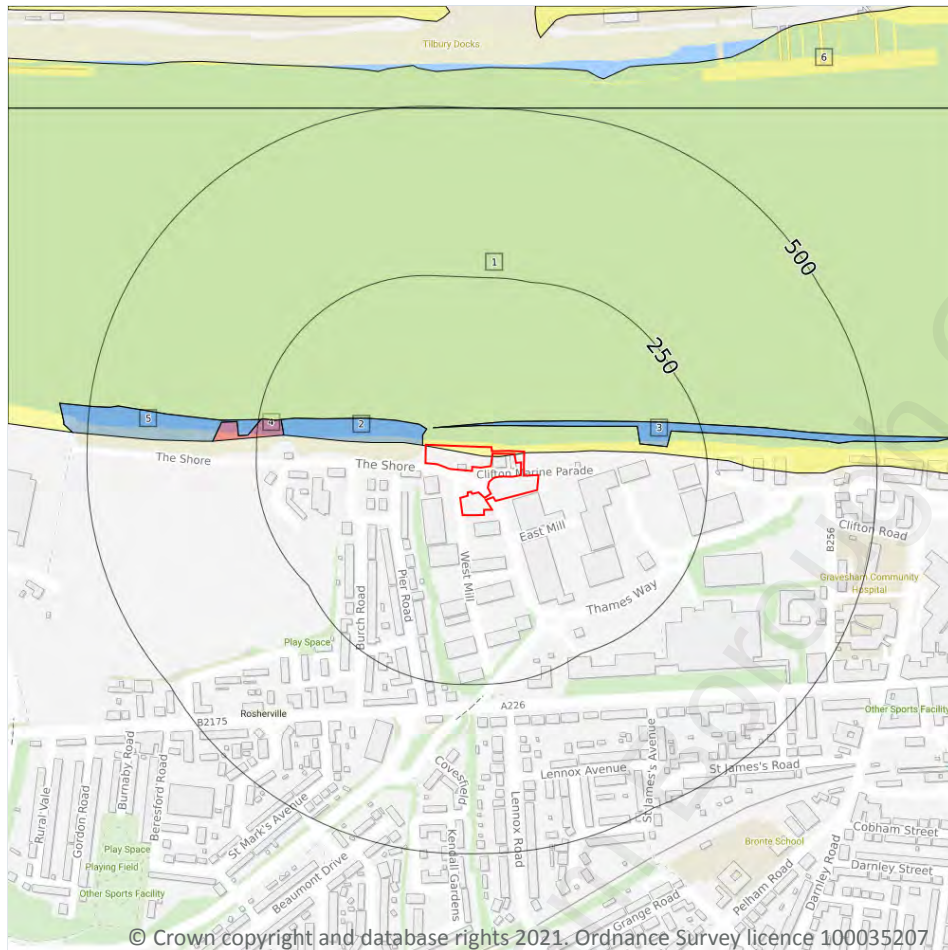
0

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

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

Gravesham Borough Council

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

6

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 72**

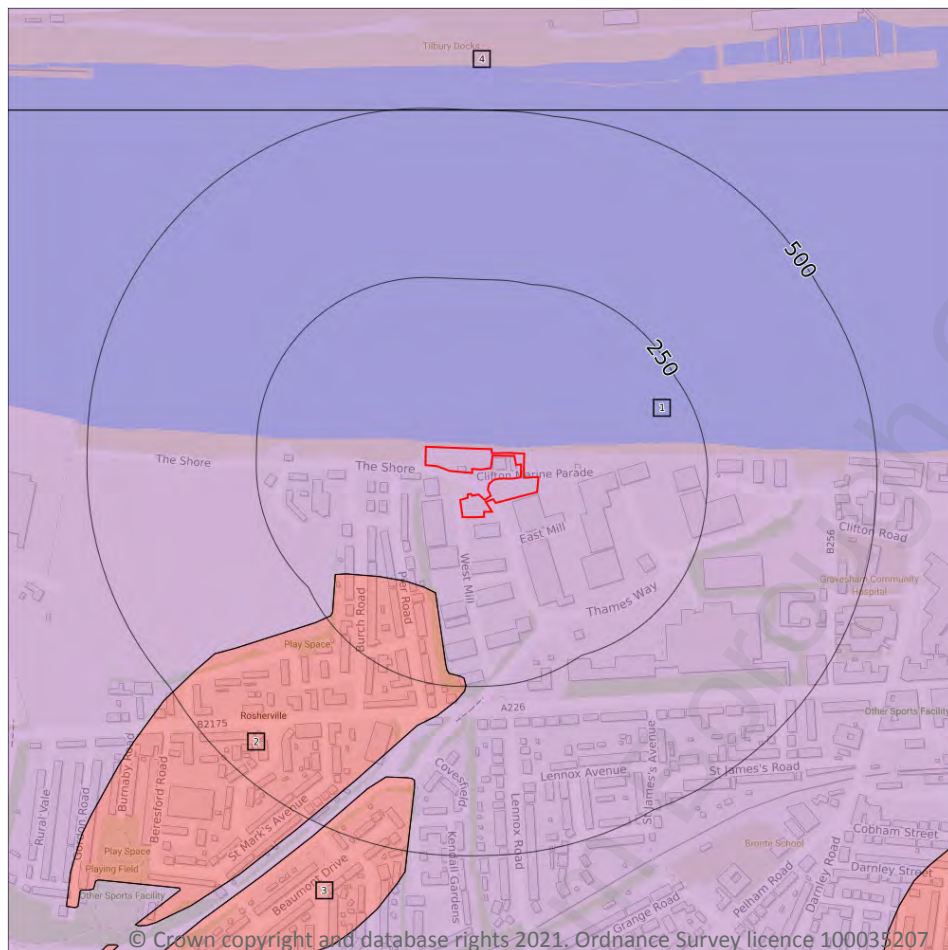
ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	5m W	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow



ID	Location	Designation	Description
3	26m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
4	210m W	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
5	247m W	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
6	497m 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

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

4

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 74**

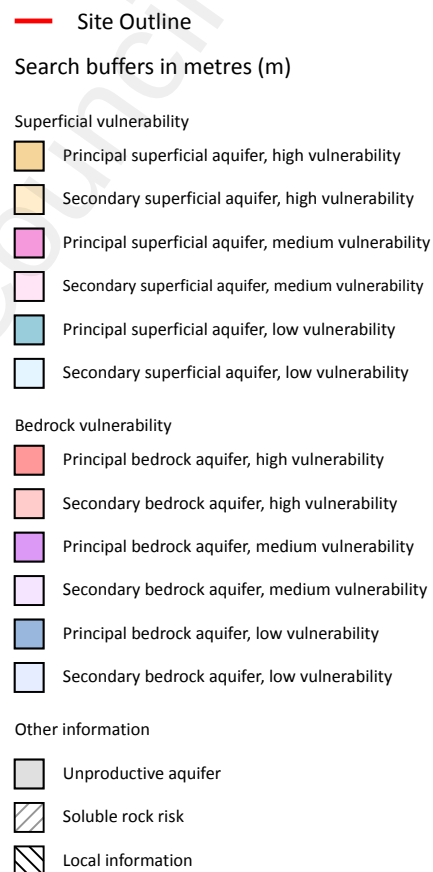
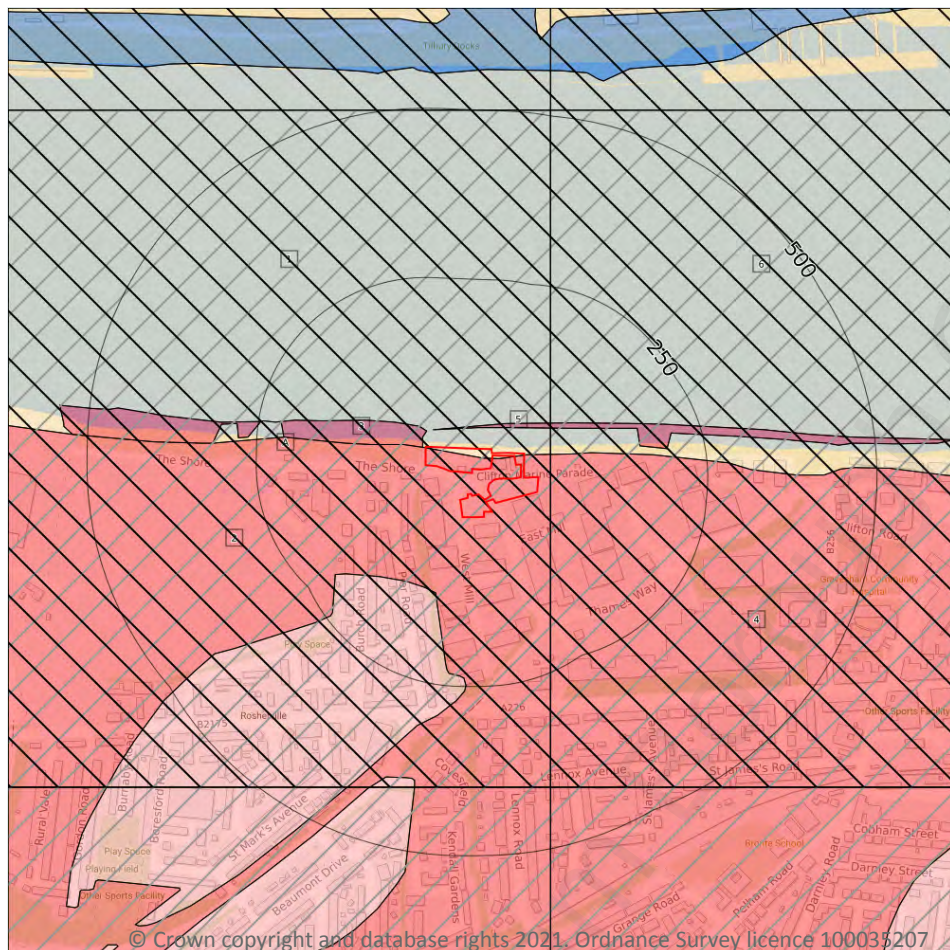
ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	118m SW	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



ID	Location	Designation	Description
3	393m 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
4	497m N	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

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

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

6

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 76**



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
2	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: >10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
3	4m W	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Unproductive Aquifer type: Unproductive Thickness: >10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
4	17m E	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: >10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
5	25m N	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Unproductive Aquifer type: Unproductive Thickness: >10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
6	38m NE	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal 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

1

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
A	Very significant soluble rocks are likely to be present with a moderate possibility of localised natural subsidence or dissolution-related degradation of bedrock, especially in adverse conditions such as concentrated surface or subsurface water flow.	3.0%

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

5.5 Groundwater vulnerability- local information

Records on site

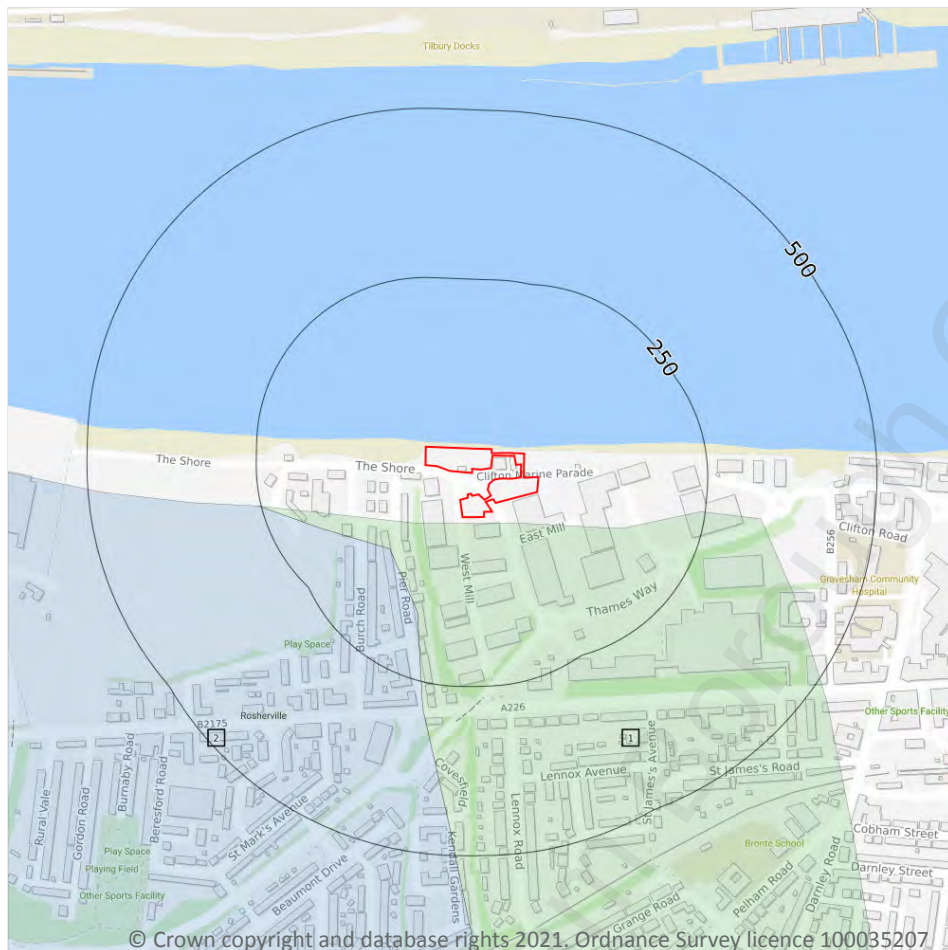
1

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

ID	Summary	Additional information
A	Potentially increased vulnerability of the bedrock aquifer due to limited cover by superficial deposits	Removal of, or limited cover of, superficial deposits within the River Thames

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

19

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 79**

ID	Location	Details	
-	862m W	Status: Active Licence No: 9/40/01/0092/B/GR Details: Process Water Direct Source: Southern Region Groundwater Point: BOREHOLE 4, CRETE HALL ROAD, NORTHFLEET. Data Type: Point Name: Kimberly-Clark Limited Easting: 562980 Northing: 174260	Annual Volume (m ³): 4,710,000 Max Daily Volume (m ³): 19,656 Original Application No: - Original Start Date: 27/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
-	957m W	Status: Historical Licence No: 9/40/01/0092/A/GR Details: Boiler Feed Direct Source: Southern Region Groundwater Point: POINT 1, GREENSAND BOREHOLE, NORTHFLEET. Data Type: Point Name: Kimberly-Clark Limited Easting: 562860 Northing: 174560	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 27/05/1966 Version End Date: -
-	1047m W	Status: Historical Licence No: 9/40/01/0092/A/GR Details: Boiler Feed Direct Source: Southern Region Groundwater Point: POINT 2, GREENSAND BOREHOLE, NORTHFLEET. Data Type: Point Name: Kimberly-Clark Limited Easting: 562830 Northing: 174120	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 27/05/1966 Version End Date: -
-	1059m W	Status: Historical Licence No: 9/40/01/0092/A/GR Details: Boiler Feed Direct Source: Southern Region Groundwater Point: POINT A, BOREHOLE AT KIMBERLY CLARK, NORTHFLEET Data Type: Point Name: Kimberly-Clark Limited Easting: 562760 Northing: 174590	Annual Volume (m ³): 400000 Max Daily Volume (m ³): 1309 Original Application No: - Original Start Date: 27/05/1966 Expiry Date: 31/03/2018 Issue No: 101 Version Start Date: 24/04/2002 Version End Date: -
-	1061m W	Status: Active Licence No: 9/40/01/0092/A/GR/R1 Details: Boiler Feed Direct Source: Southern Region Groundwater Point: POINT A, BOREHOLE AT KIMBERLY CLARK, NORTHFLEET Data Type: Point Name: Kimberly-Clark Limited Easting: 562759 Northing: 174599	Annual Volume (m ³): 320,000 Max Daily Volume (m ³): 1,309 Original Application No: - Original Start Date: 01/04/2018 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 01/04/2018 Version End Date: -

ID	Location	Details	
-	1104m W	Status: Historical Licence No: 9/40/01/0092/A/GR Details: Boiler Feed Direct Source: Southern Region Groundwater Point: POINT B, BOREHOLE AT KIMBERLY CLARK, NORTHFLEET Data Type: Point Name: Kimberly-Clark Limited Easting: 562770 Northing: 174120	Annual Volume (m ³): 400000 Max Daily Volume (m ³): 1309 Original Application No: - Original Start Date: 27/05/1966 Expiry Date: 31/03/2018 Issue No: 101 Version Start Date: 24/04/2002 Version End Date: -
-	1104m W	Status: Active Licence No: 9/40/01/0092/A/GR/R1 Details: Boiler Feed Direct Source: Southern Region Groundwater Point: POINT B, BOREHOLE AT KIMBERLY CLARK, NORTHFLEET Data Type: Point Name: Kimberly-Clark Limited Easting: 562772 Northing: 174114	Annual Volume (m ³): 320,000 Max Daily Volume (m ³): 1,309 Original Application No: - Original Start Date: 01/04/2018 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 01/04/2018 Version End Date: -
-	1589m SE	Status: Active Licence No: 9/40/01/0511/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BOREHOLES, ADITS AND CATCHPITS AT WINDMILL HILL PS Data Type: Poly4 Name: Southern Water Services Ltd Easting: 565060 Northing: 173270	Annual Volume (m ³): 17,700,000 Max Daily Volume (m ³): 92,000 Original Application No: - Original Start Date: 24/03/1986 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -
-	1590m SW	Status: Active Licence No: 9/40/01/0092/B/GR Details: Process Water Direct Source: Southern Region Groundwater Point: BOREHOLE 2, H5 CHALK, NORTHFLEET. Data Type: Point Name: Kimberly-Clark Limited Easting: 562450 Northing: 173660	Annual Volume (m ³): 4,710,000 Max Daily Volume (m ³): 19,656 Original Application No: - Original Start Date: 27/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
-	1624m SW	Status: Active Licence No: 9/40/01/0092/B/GR Details: Process Water Direct Source: Southern Region Groundwater Point: BOREHOLE 1, H5 CHALK, NORTHFLEET. Data Type: Point Name: Kimberly-Clark Limited Easting: 562410 Northing: 173660	Annual Volume (m ³): 4,710,000 Max Daily Volume (m ³): 19,656 Original Application No: - Original Start Date: 27/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -

ID	Location	Details	
-	1716m SW	Status: Active Licence No: 9/40/01/0092/B/GR Details: Process Water Direct Source: Southern Region Groundwater Point: BOREHOLE 3, SPRINGHEAD LAKE, NORTHFLEET. Data Type: Point Name: Kimberly-Clark Limited Easting: 562260 Northing: 173750	Annual Volume (m ³): 4,710,000 Max Daily Volume (m ³): 19,656 Original Application No: - Original Start Date: 27/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
-	1761m SW	Status: Historical Licence No: 9/40/01/0051/GR Details: Evaporative Cooling Direct Source: Southern Region Groundwater Point: POINT A AT BLUE LAKE NORTHFLEET CEMENT WORKS Data Type: Point Name: LaFarge Cement UK PLC Easting: 562210 Northing: 173750	Annual Volume (m ³): 1,235,375 Max Daily Volume (m ³): 10060 Original Application No: - Original Start Date: 10/04/1967 Expiry Date: - Issue No: 103 Version Start Date: 27/11/2007 Version End Date: -
-	1761m SW	Status: Active Licence No: 9/40/01/0051/GR Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: POINT A AT BLUE LAKE NORTHFLEET CEMENT WORKS Data Type: Point Name: Tarmac Cement and Lime Limited Easting: 562210 Northing: 173750	Annual Volume (m ³): 1,186,000 Max Daily Volume (m ³): 3,382 Original Application No: - Original Start Date: 10/04/1967 Expiry Date: - Issue No: 105 Version Start Date: 26/02/2021 Version End Date: -
-	1761m SW	Status: Active Licence No: 9/40/01/0051/GR Details: Non-Evaporative Cooling Direct Source: Southern Region Groundwater Point: POINT A AT BLUE LAKE NORTHFLEET CEMENT WORKS Data Type: Point Name: Tarmac Cement and Lime Limited Easting: 562210 Northing: 173750	Annual Volume (m ³): 1,186,000 Max Daily Volume (m ³): 3,382 Original Application No: - Original Start Date: 10/04/1967 Expiry Date: - Issue No: 105 Version Start Date: 26/02/2021 Version End Date: -

ID	Location	Details	
-	1761m SW	Status: Active Licence No: 9/40/01/0051/GR Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Southern Region Groundwater Point: POINT A AT BLUE LAKE NORTHFLEET CEMENT WORKS Data Type: Point Name: Tarmac Cement and Lime Limited Easting: 562210 Northing: 173750	Annual Volume (m ³): 1,186,000 Max Daily Volume (m ³): 3,382 Original Application No: - Original Start Date: 10/04/1967 Expiry Date: - Issue No: 105 Version Start Date: 26/02/2021 Version End Date: -
-	1761m SW	Status: Active Licence No: 9/40/01/0051/GR Details: Process Water Direct Source: Southern Region Groundwater Point: POINT A AT BLUE LAKE NORTHFLEET CEMENT WORKS Data Type: Point Name: Tarmac Cement and Lime Limited Easting: 562210 Northing: 173750	Annual Volume (m ³): 1,186,000 Max Daily Volume (m ³): 3,382 Original Application No: - Original Start Date: 10/04/1967 Expiry Date: - Issue No: 105 Version Start Date: 26/02/2021 Version End Date: -
-	1888m SW	Status: Historical Licence No: 01/144 Details: Laundry Use Direct Source: Southern Region Groundwater Point: POINT A, BOREHOLE AT SPRINGHEAD ENTERPRISE PARK Data Type: Point Name: Shaws Laundries Ltd Easting: 562230 Northing: 173450	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 28/07/2000 Expiry Date: 05/06/2003 Issue No: 1 Version Start Date: 28/07/2000 Version End Date: -
-	1888m SW	Status: Historical Licence No: 01/154 Details: Laundry Use Direct Source: Southern Region Groundwater Point: POINT A, BOREHOLE AT SPRINGHEAD ENTERPRISE PARK Data Type: Point Name: Berendsen UK Limited Easting: 562230 Northing: 173450	Annual Volume (m ³): 120000 Max Daily Volume (m ³): 400 Original Application No: - Original Start Date: 03/05/2004 Expiry Date: 31/03/2018 Issue No: 5 Version Start Date: 05/12/2014 Version End Date: -

ID	Location	Details	
-	1888m SW	Status: Active Licence No: 01/154/R01 Details: Laundry Use Direct Source: Southern Region Groundwater Point: POINT A, BOREHOLE AT SPRINGHEAD ENTERPRISE PARK Data Type: Point Name: Berendsen UK Limited Easting: 562230 Northing: 173450	Annual Volume (m ³): 120,000 Max Daily Volume (m ³): 400 Original Application No: - Original Start Date: 01/04/2018 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 01/04/2018 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	0
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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.

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

5.8 Potable abstractions

Records within 2000m	1
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Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 79**

ID	Location	Details	
-	1589m SE	Status: Active Licence No: 9/40/01/0511/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BOREHOLES, ADITS AND CATCHPITS AT WINDMILL HILL PS Data Type: Poly4 Name: Southern Water Services Ltd Easting: 565060 Northing: 173270	Annual Volume (m ³): 17,700,000 Max Daily Volume (m ³): 92,000 Original Application No: - Original Start Date: 24/03/1986 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -

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

5.9 Source Protection Zones

Records within 500m**2**

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on **page 79**

ID	Location	Type	Description
1	9m S	3	Total catchment
2	117m SW	2	Outer catchment

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

5.10 Source Protection Zones (confined aquifer)

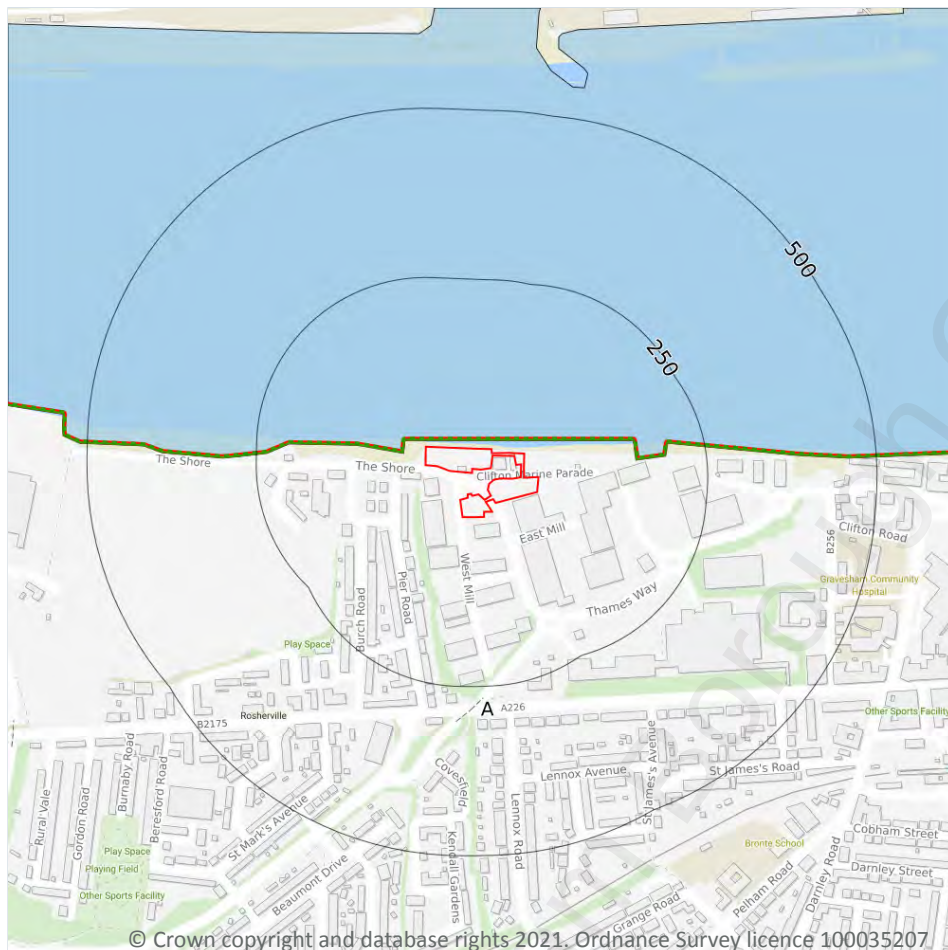
Records within 500m**0**

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

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



6 Hydrology



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

6.1 Water Network (OS MasterMap)

Records within 250m

0

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

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

0

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

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

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

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 86**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	Coastal Catchment	Not part of a river WB catchment	130	Lower Medway	Medway

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

6.4 WFD Surface water bodies

Records identified	1
---------------------------	----------

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

Features are displayed on the Hydrology map on **page 86**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
1	9m N	Transitional	Thames Middle	GB530603911402	Moderate	Fail	Moderate	2016

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

6.5 WFD Groundwater bodies

Records on site

1

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

Features are displayed on the Hydrology map on **page 86**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	North Kent Medway Chalk	<u>GB40601G500300</u>	Poor	Poor	Poor	2015

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

6

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 89**

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	2
----------------------------	----------

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.

Features are displayed on the River and coastal flooding map on **page 89**

ID	Location	Update
4	96m W	01/09/2021
6	201m E	01/09/2021

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

7.4 Areas Benefiting from Flood Defences

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

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.

Features are displayed on the River and coastal flooding map on **page 89**

ID	Location	
B	On site	Area benefiting from flood defences
D	194m W	Area benefiting from flood defences

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

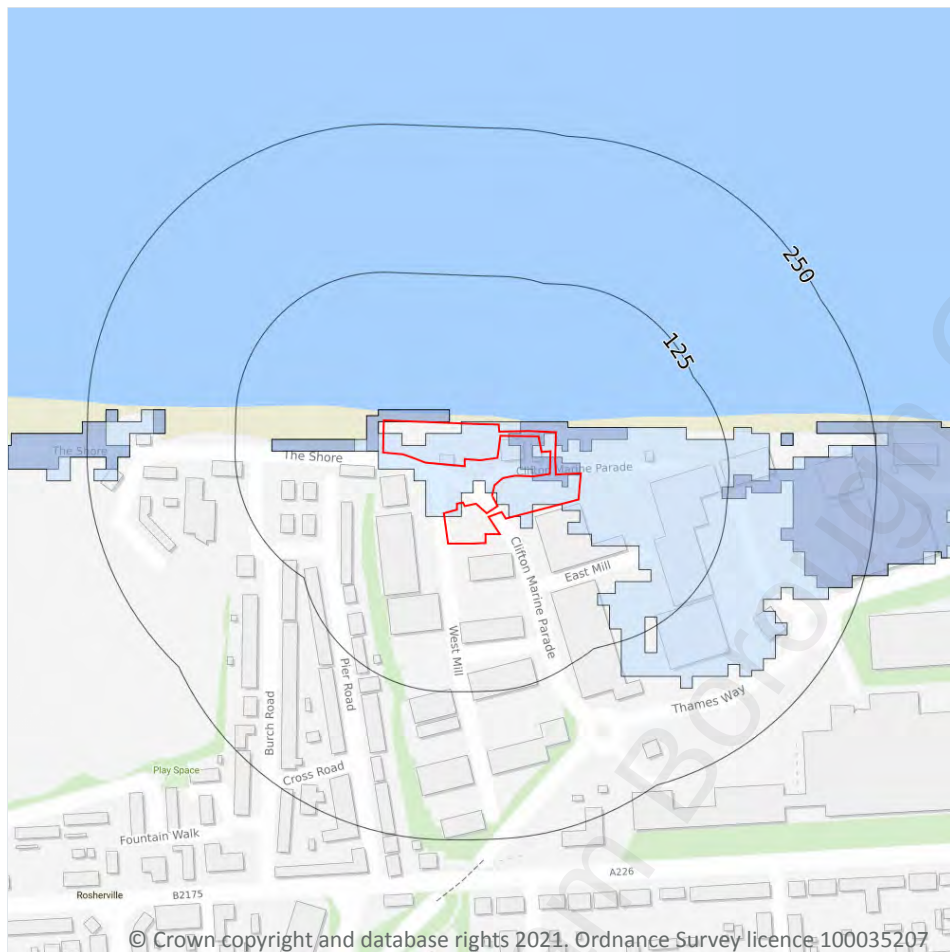
7.5 Flood Storage Areas

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 89**

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 89**

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

Negligible

Highest risk within 50m

Negligible

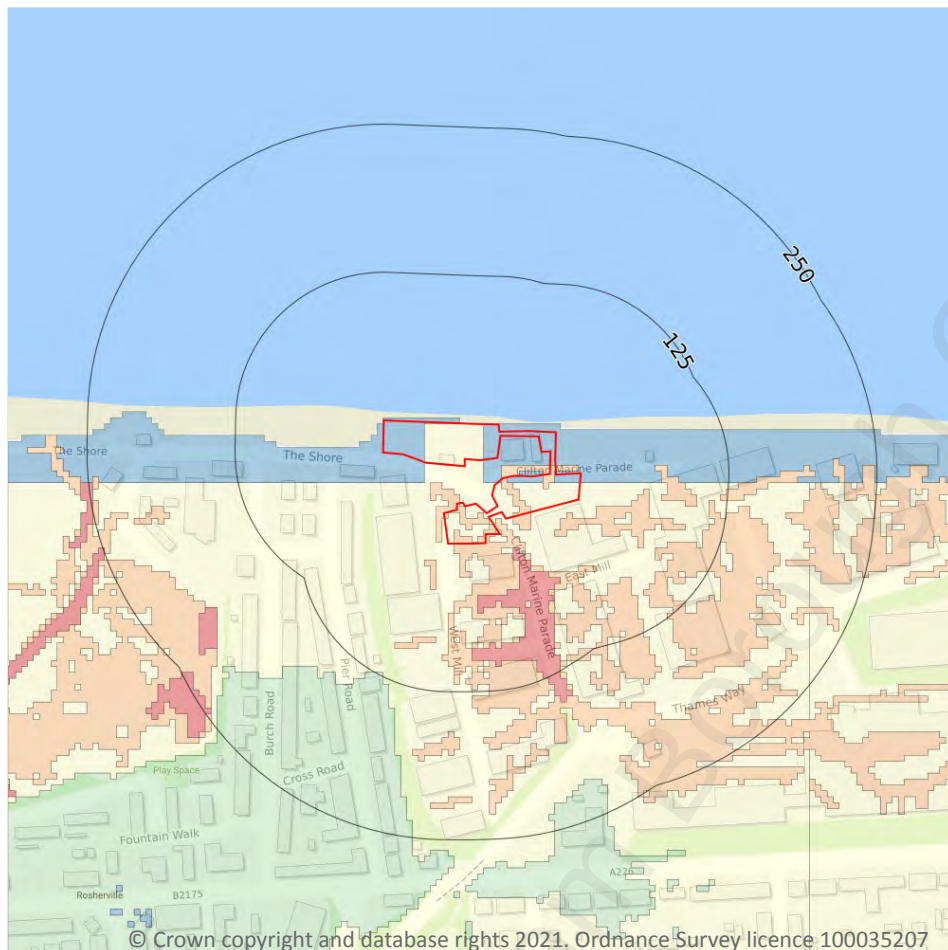
Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year 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.

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	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental 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

Moderate-High

Highest risk within 50m

High

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

Features are displayed on the Groundwater flooding map on **page 95**

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

3

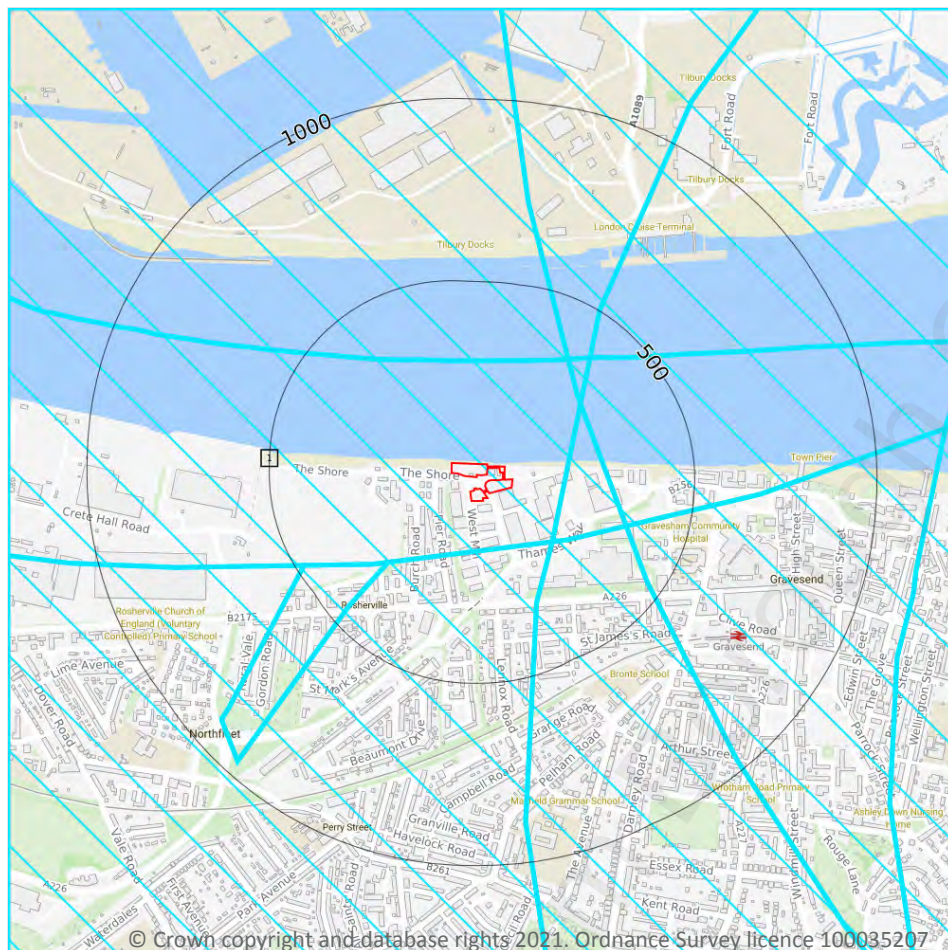
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
1321m SW	North Kent	Groundwater	G65	Existing
1807m E	COASTAL STREAMS TO LOWER THAMES NVZ	Surface Water	S665	Existing
1880m SE	North Kent	Groundwater	G65	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 100**

ID	Location	Type of developments requiring consultation
1	On site	All applications - All Planning Applications (Except Householder) Outside Or Extending Outside Existing Settlements/urban Areas Affecting Greenspace, Farmland, Semi Natural Habitats Or Landscape Features Such As Trees, Hedges, Streams, Rural Buildings/structures Infrastructure - Airports, helipads and other aviation proposals. Residential - Residential development of 500 units or more. Rural residential - Any residential development of 500 or more houses outside existing settlements/urban areas. Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t. Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream (NB This does not include discharges to mains sewer which are unlikely to pose a risk at this location) Notes: For new residential development in this area financial contributions are required to mitigate increased recreational disturbance on coastal SPAs and Ramsar Sites. Check with Local Planning Authority.

This data is sourced from Natural England.

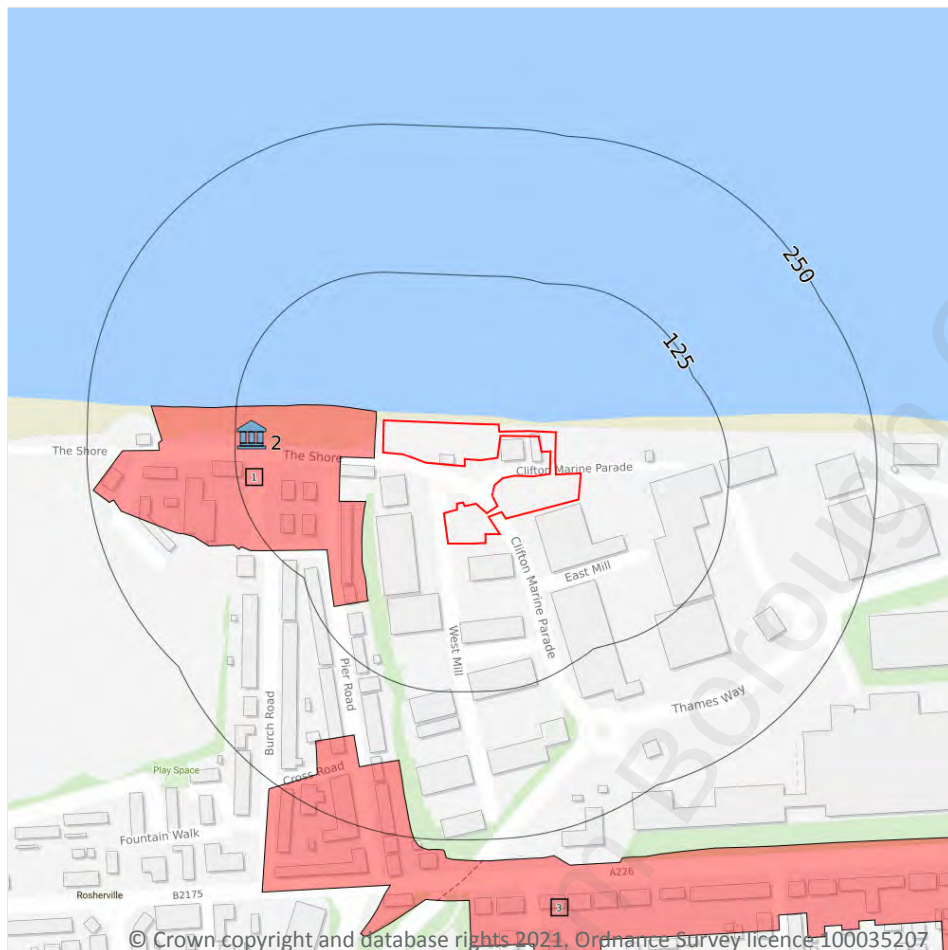
10.18 SSSI Units

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

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

11 Visual and cultural designations



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

11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

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

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

11.3 National Parks

Records within 250m

0

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

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

11.4 Listed Buildings

Records within 250m

1

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

Features are displayed on the Visual and cultural designations map on **page 102**

ID	Location	Name	Grade	Reference Number	Listed date
2	112m W	Rosherville Quay Walls, Steps, Drawdock And Wwii Mine Watching Post, Northfleet, Gravesham, Kent, DA11	II	1396396	06/01/2011

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

11.5 Conservation Areas

Records within 250m

2

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

Features are displayed on the Visual and cultural designations map on **page 102**

ID	Location	Name	District	Date of designation
1	6m W	Lansdowne Square, Northfleet	Gravesham	27/07/1995
3	180m SW	Overcliffe, Gravesend	Gravesham	01/02/1990

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

11.6 Scheduled Ancient Monuments

Records within 250m

0

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

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

11.7 Registered Parks and Gardens

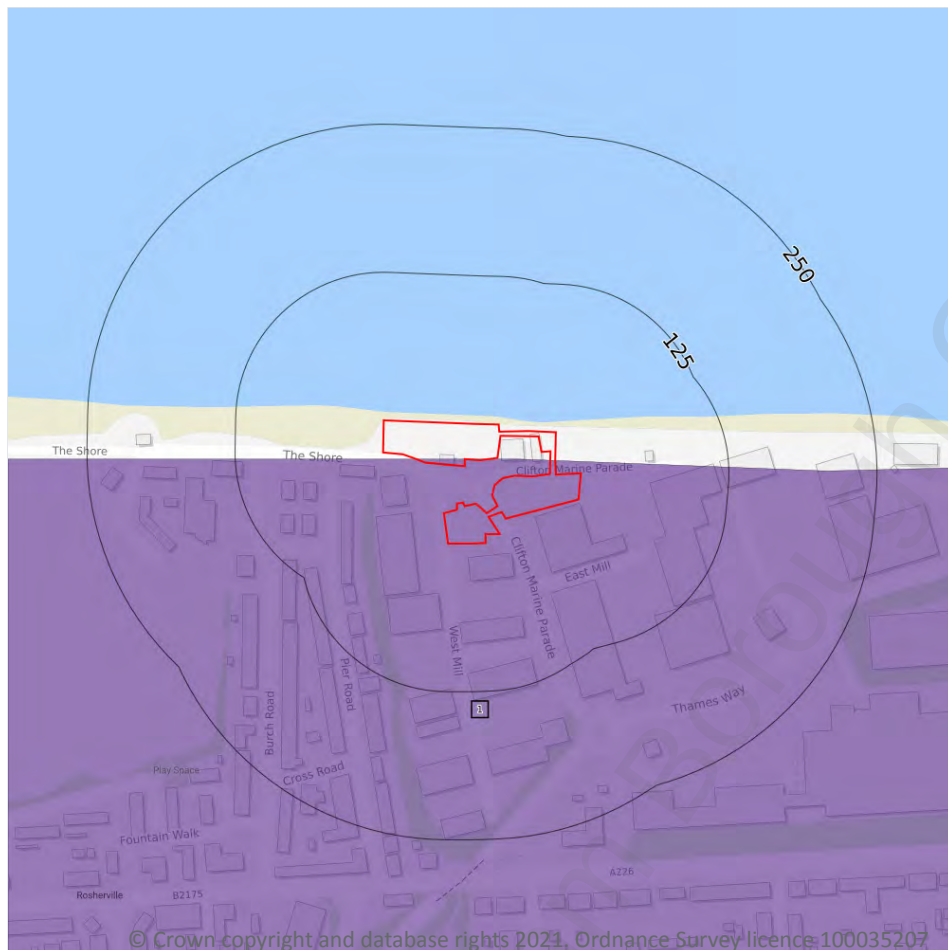
Records within 250m

0

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

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

12 Agricultural designations



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

1

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 105**

ID	Location	Classification	Description
1	On site	Urban	-

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

1

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 107**

ID	Location	Main Habitat	Other habitats
1	On site	Mudflats	Main habitat: MUDDL (INV > 50%)

This data is sourced from Natural England.



13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

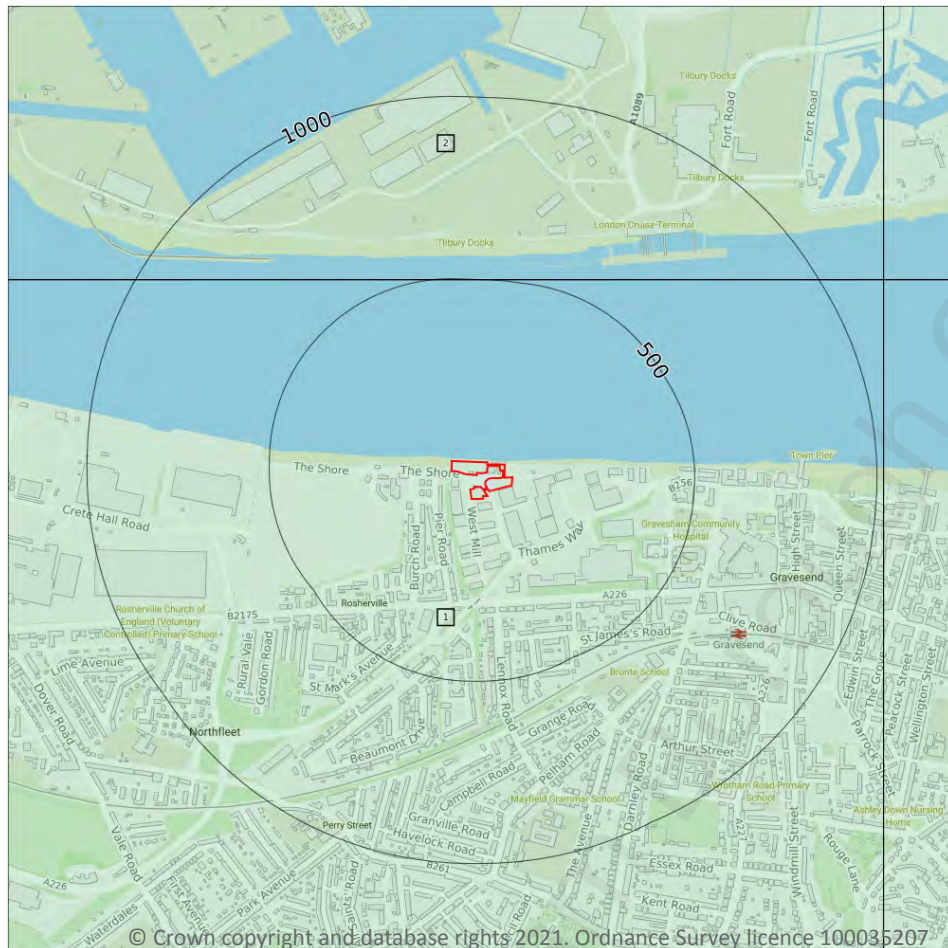
Records within 250m

0

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

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



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

14.1 10k Availability

Records within 500m

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.

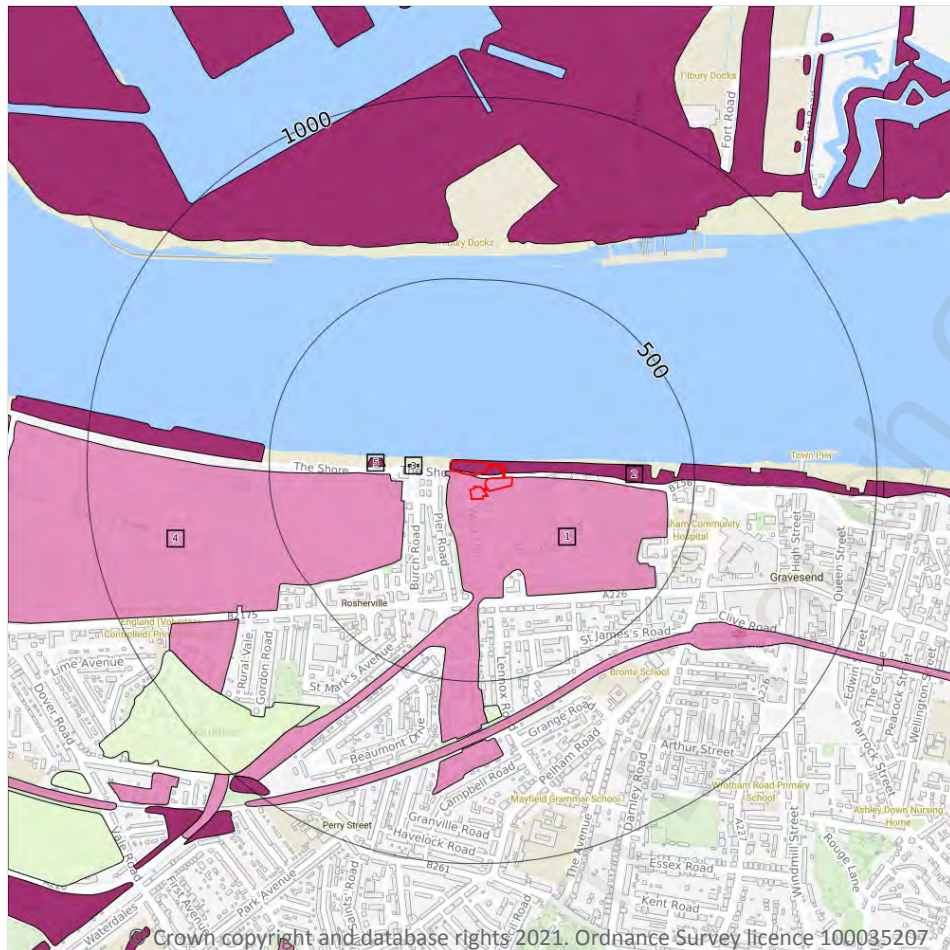
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 109**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	TQ67SW
2	497m N	Full	Full	Full	No coverage	TQ67NW

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

5

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 110**

ID	Location	LEX Code	Description	Rock description
1	On site	WGR-VOID	Worked Ground (Undivided)	Void
2	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	90m W	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	137m W	WGR-VOID	Worked Ground (Undivided)	Void



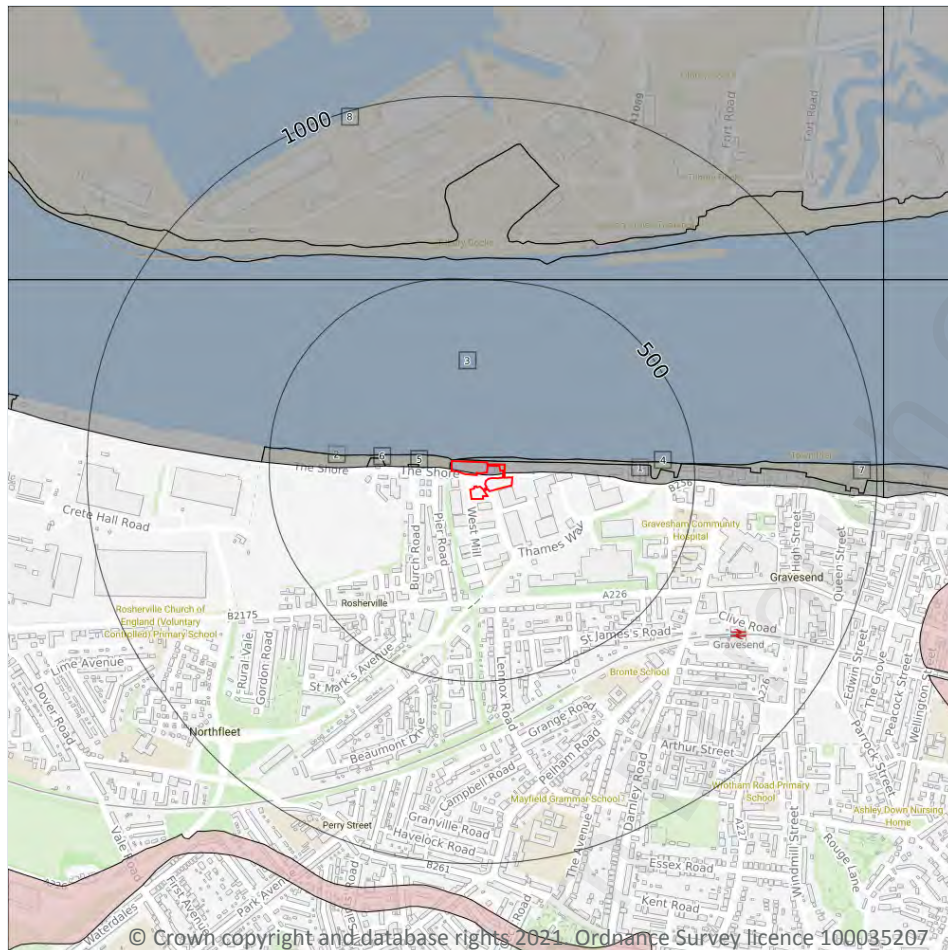
ID	Location	LEX Code	Description	Rock description
5	182m W	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.

Gravesham Borough Council



Geology 1:10,000 scale - Superficial



14.3 Superficial geology (10k)

Records within 500m

8

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 112**

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-Z	Alluvium - Silt (unlithified Deposits Coding Scheme)	Silt
2	1m NW	TRD-Z	Tidal River Or Creek Deposits - Silt	Silt
3	3m N	ALV-Z	Alluvium - Silt (unlithified Deposits Coding Scheme)	Silt
4	4m N	TRD-Z	Tidal River Or Creek Deposits - Silt	Silt



ID	Location	LEX Code	Description	Rock description
5	90m W	ALV-Z	Alluvium - Silt (unlithified Deposits Coding Scheme)	Silt
6	182m W	ALV-Z	Alluvium - Silt (unlithified Deposits Coding Scheme)	Silt
7	466m E	TRD-Z	Tidal River Or Creek Deposits - Silt	Silt
8	497m N	ALV-Z	Alluvium - Silt (unlithified Deposits Coding Scheme)	Silt

This data is sourced from the British Geological Survey.

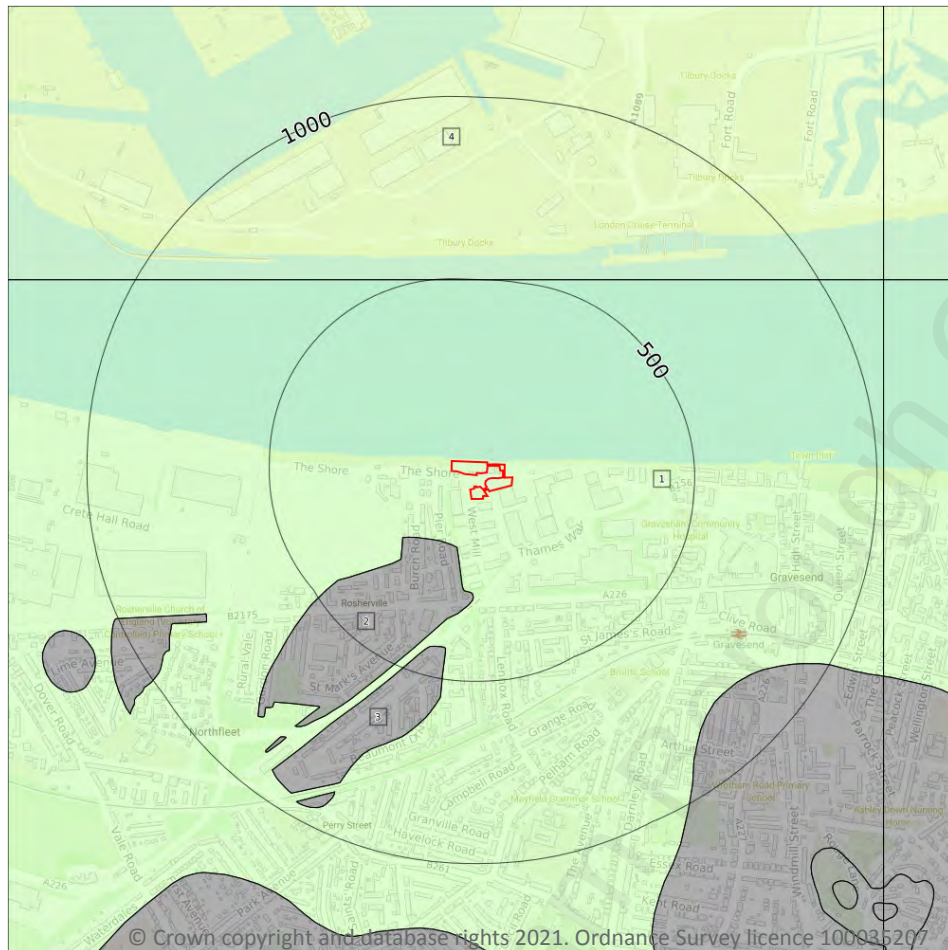
14.4 Landslip (10k)

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

4

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 114**

ID	Location	LEX Code	Description	Rock age
1	On site	SECK-CHLK	Seaford Chalk Formation - Chalk	Santonian Age - Coniacian Age
2	137m SW	TAB-SANDU	Thanet Sand Formation - Sand	Thanetian Age
3	414m S	TAB-SANDU	Thanet Sand Formation - Sand	Thanetian Age

ID	Location	LEX Code	Description	Rock age
4	497m N	CK-CHLK	Chalk Group - Chalk	Maastrichtian Age - Cenomanian Age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

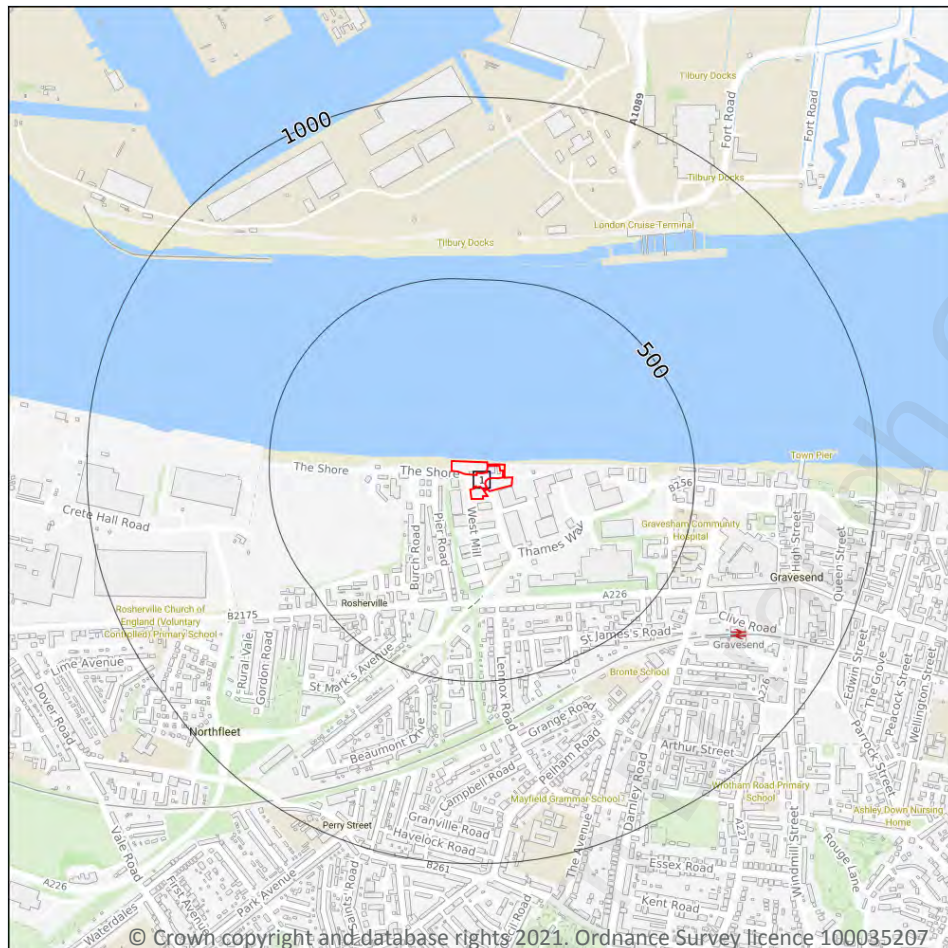
0

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

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

1

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

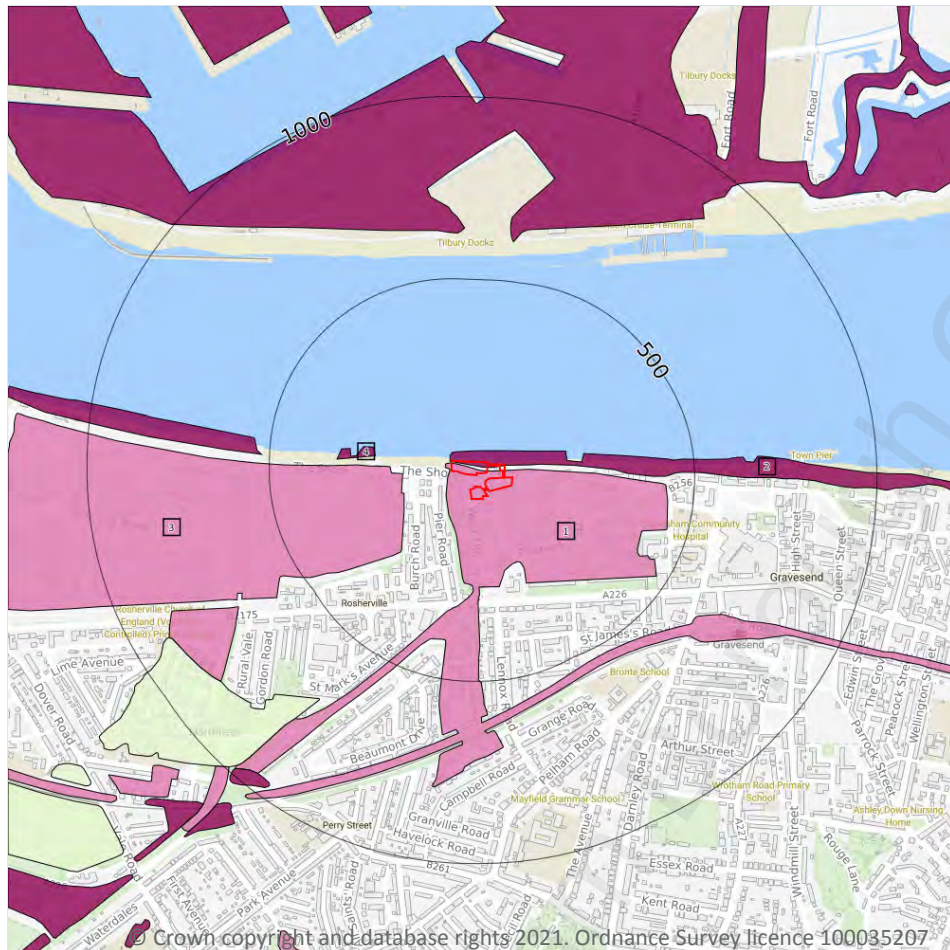
Features are displayed on the Geology 1:50,000 scale - Availability map on **page 116**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW271_dartford_v4

This data is sourced from the British Geological Survey.



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



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

15.2 Artificial and made ground (50k)

Records within 500m

4

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 117**

ID	Location	LEX Code	Description	Rock description
1	On site	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
2	On site	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
3	134m W	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
4	210m W	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT



This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

1

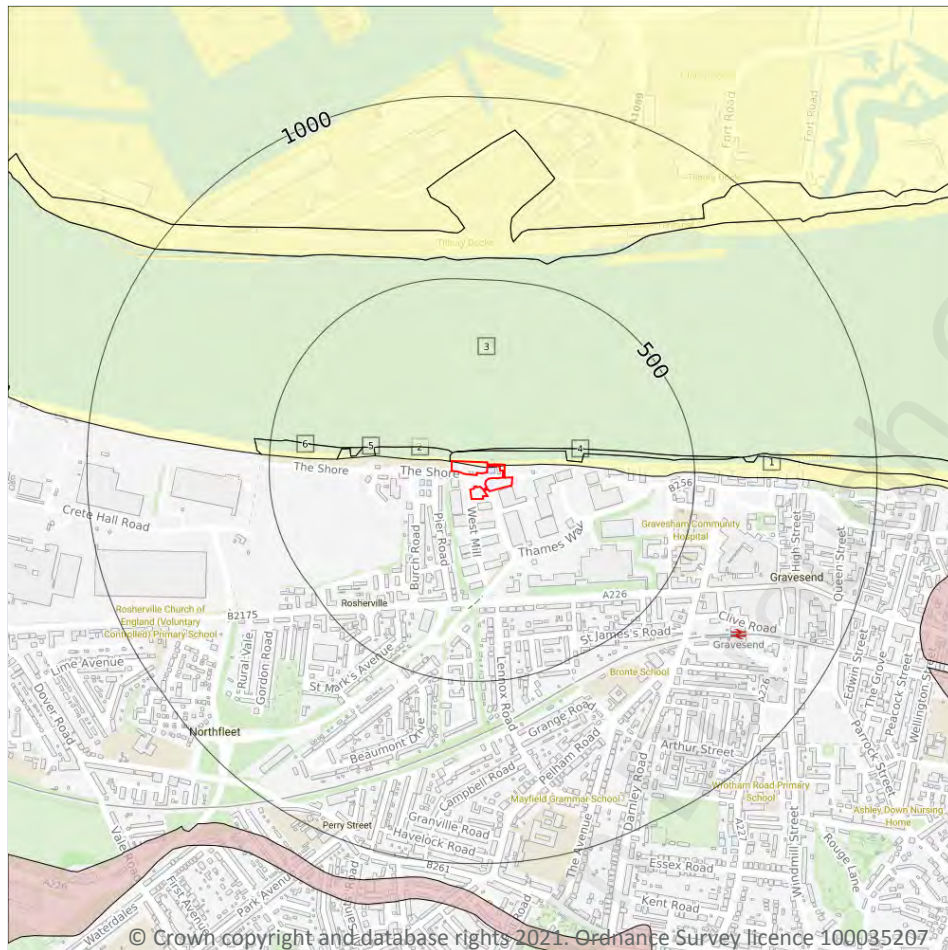
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



15.4 Superficial geology (50k)

Records within 500m

6

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 119**

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZSP	ALLUVIUM	CLAY, SILT, SAND AND PEAT
2	5m W	TRD-XCZ	TIDAL RIVER OR CREEK DEPOSITS	CLAY AND SILT
3	23m N	ALV-XCZSP	ALLUVIUM	CLAY, SILT, SAND AND PEAT
4	26m N	TRD-XCZ	TIDAL RIVER OR CREEK DEPOSITS	CLAY AND SILT



ID	Location	LEX Code	Description	Rock description
5	210m W	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
6	247m W	TRD-XCZ	TIDAL RIVER OR CREEK DEPOSITS	CLAY AND SILT

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

3

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	Moderate	Very Low
5m W	Intergranular	Low	Very Low
26m E	Intergranular	Low	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)

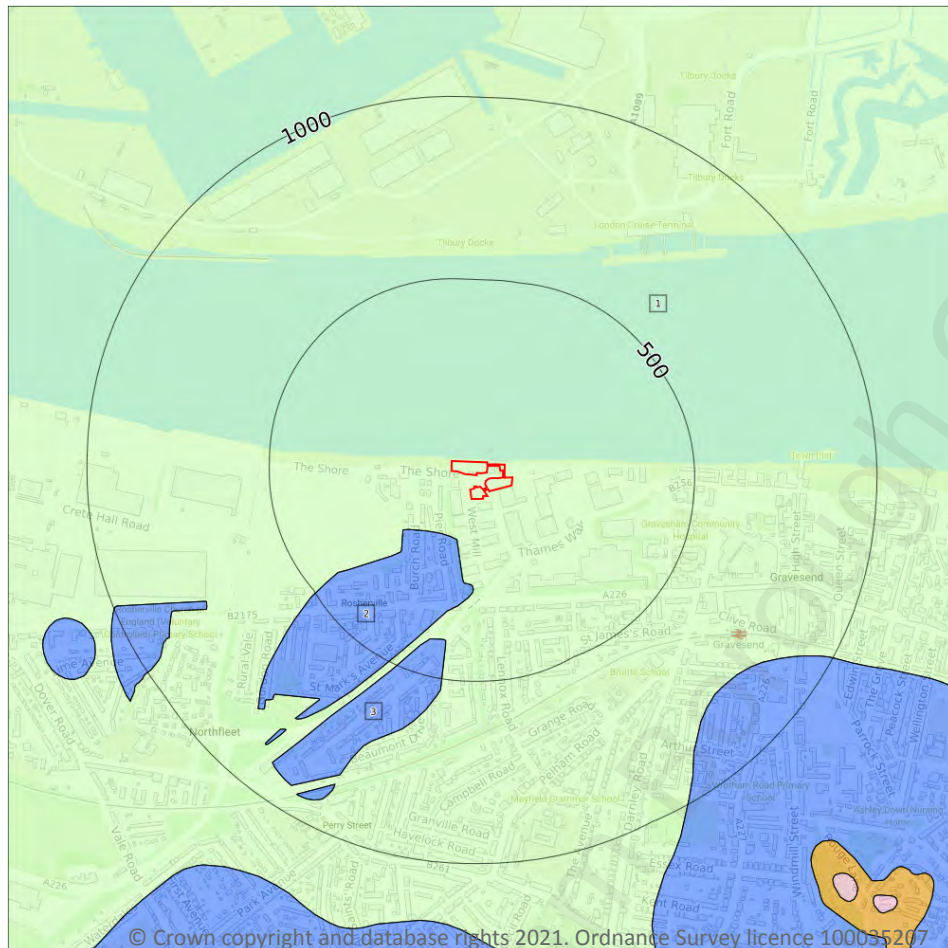
Records within 50m

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

3

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 121**

ID	Location	LEX Code	Description	Rock age
1	On site	LSNCK-CHLK	LEWES NODULAR CHALK FORMATION, SEAFORD CHALK FORMATION AND NEWHAVEN CHALK FORMATION (UNDIFFERENTIATED) - CHALK	TURONIAN
2	118m SW	TAB-S	THANET FORMATION - SAND	THANETIAN
3	393m S	TAB-S	THANET FORMATION - SAND	THANETIAN

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	Very High	Very High

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

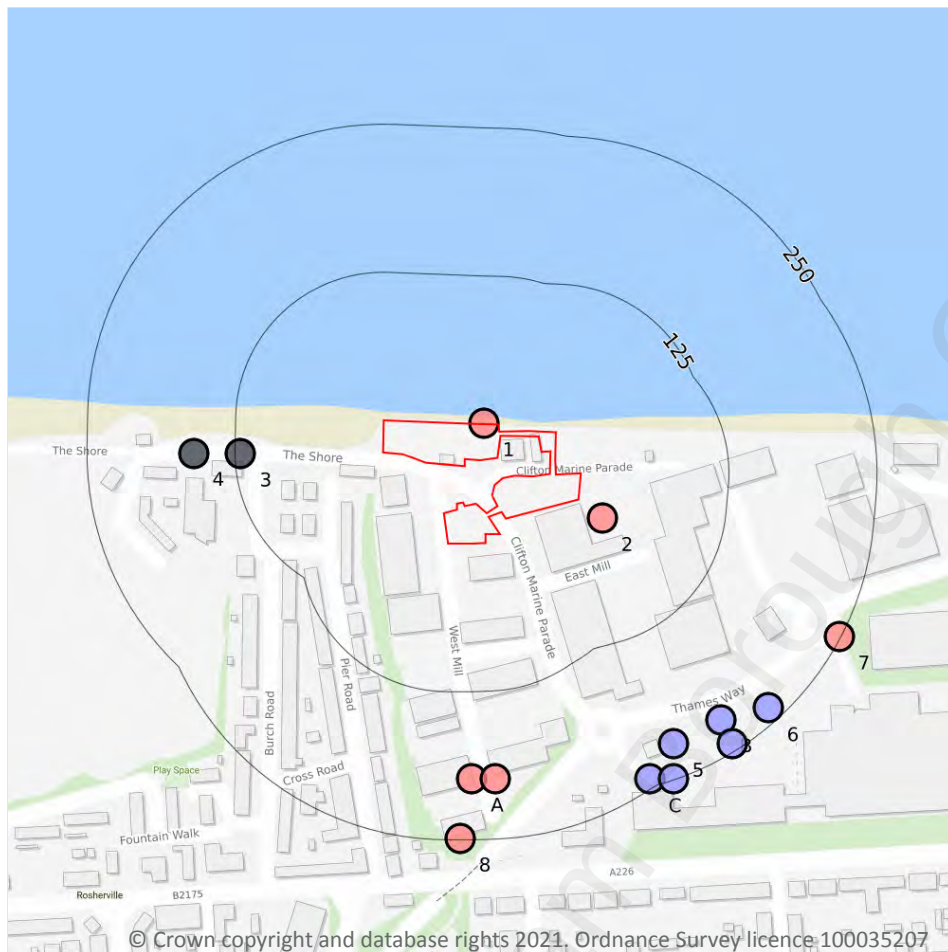
0

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

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

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

16.1 BGS Boreholes

Records within 250m

14

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 123**

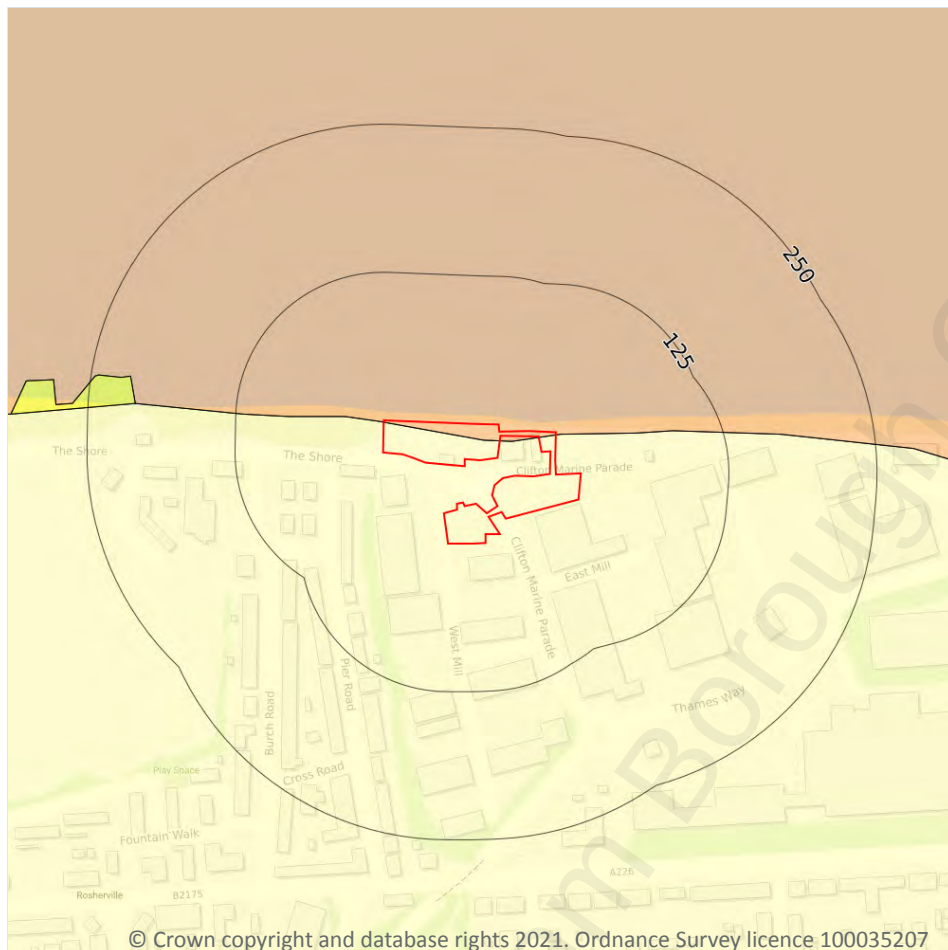
ID	Location	Grid reference	Name	Length	Confidential	Web link
1	1m N	563900 174500	IMPERIAL CEMENT CO NORTHFLEET	67.97	N	838362
2	26m SE	564000 174420	GRAVESEND 1	279.5	N	838285
3	120m W	563695 174475	THE SHORE GRAVESEND SG1	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
4	160m W	563655 174475	THE SHORE GRAVESEND SG2	-	Y	N/A
A	199m S	563890 174200	IMPERIAL PAPER MILLS GRAVESEND	87.47	N	838286
A	199m S	563910 174200	IMPERIAL PAPER MILLS GRAVESEND	91.44	N	838287
5	221m S	564060 174230	ASDA GRAVESEND TP 3	3.0	N	838758
B	221m SE	564100 174250	ASDA GRAVESEND TP 6	2.0	N	838761
6	238m SE	564140 174260	ASDA GRAVESEND TP 9	0.0	N	838764
C	242m SE	564040 174200	ASDA GRAVESEND TP 1	3.0	N	838756
B	243m SE	564110 174230	ASDA GRAVESEND 9	7.0	N	838755
7	249m SE	564200 174320	B R GRAVESEND	30.78	N	838336
8	249m S	563880 174150	PAPER MILLS, GRAVESEND	91.44	N	838822
C	249m S	564060 174200	ASDA GRAVESEND TP 4	3.0	N	838759

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

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17.1 Shrink swell clays

Records within 50m

2

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

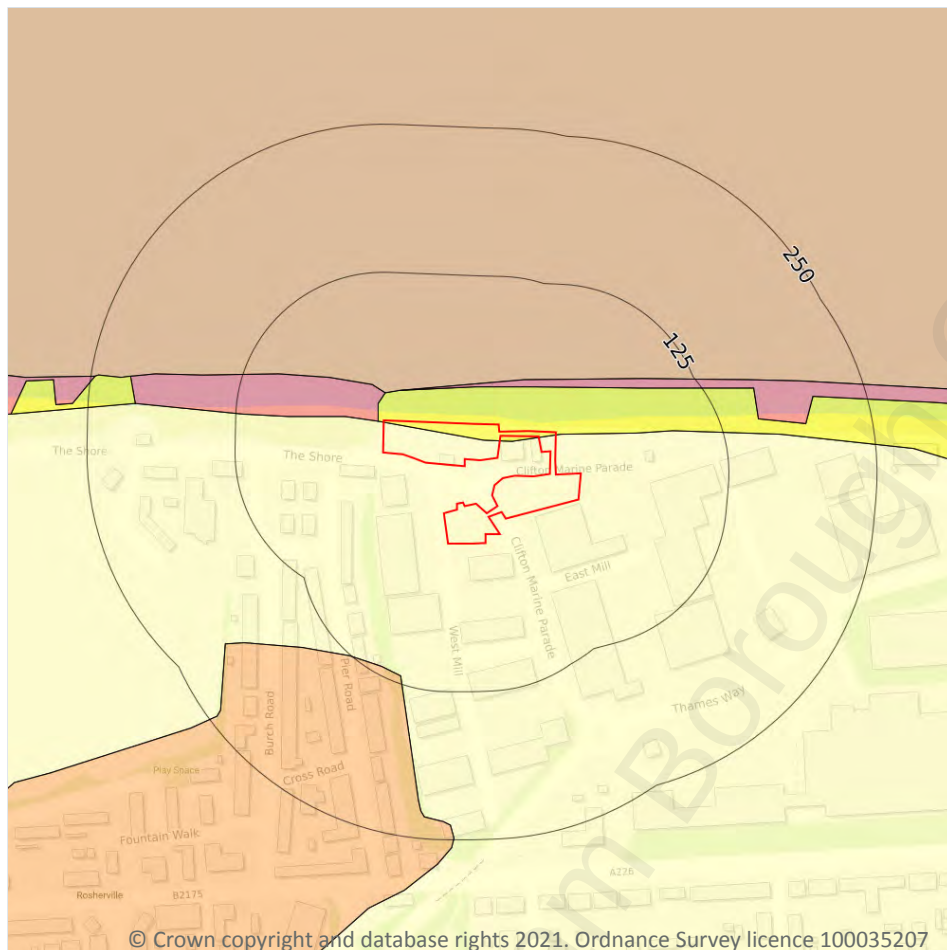
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 125**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



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

17.2 Running sands

Records within 50m

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 126**

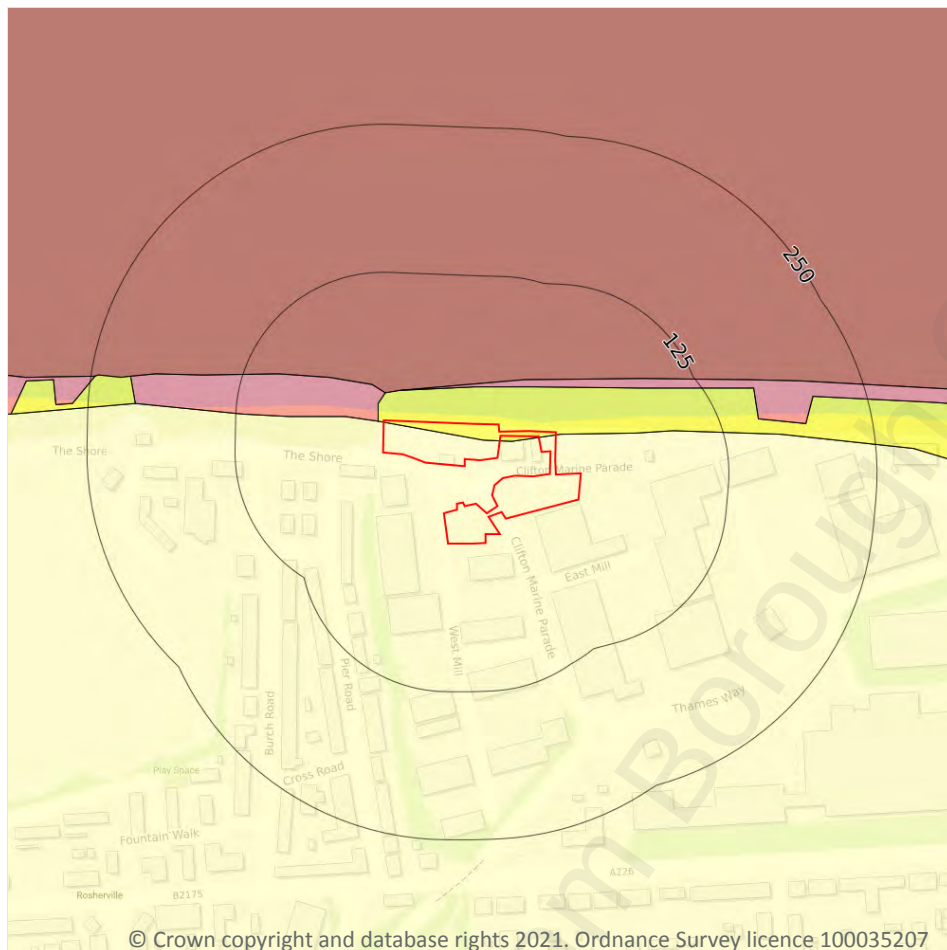
Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

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.
5m W	Moderate	Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.
23m N	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.
26m N	Moderate	Running sand conditions are probably 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



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

17.3 Compressible deposits

Records within 50m

5

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	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

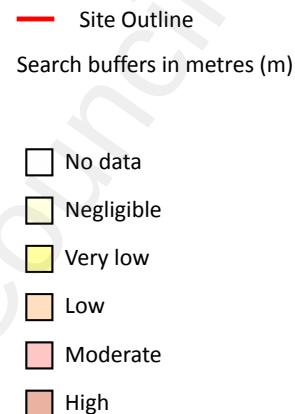
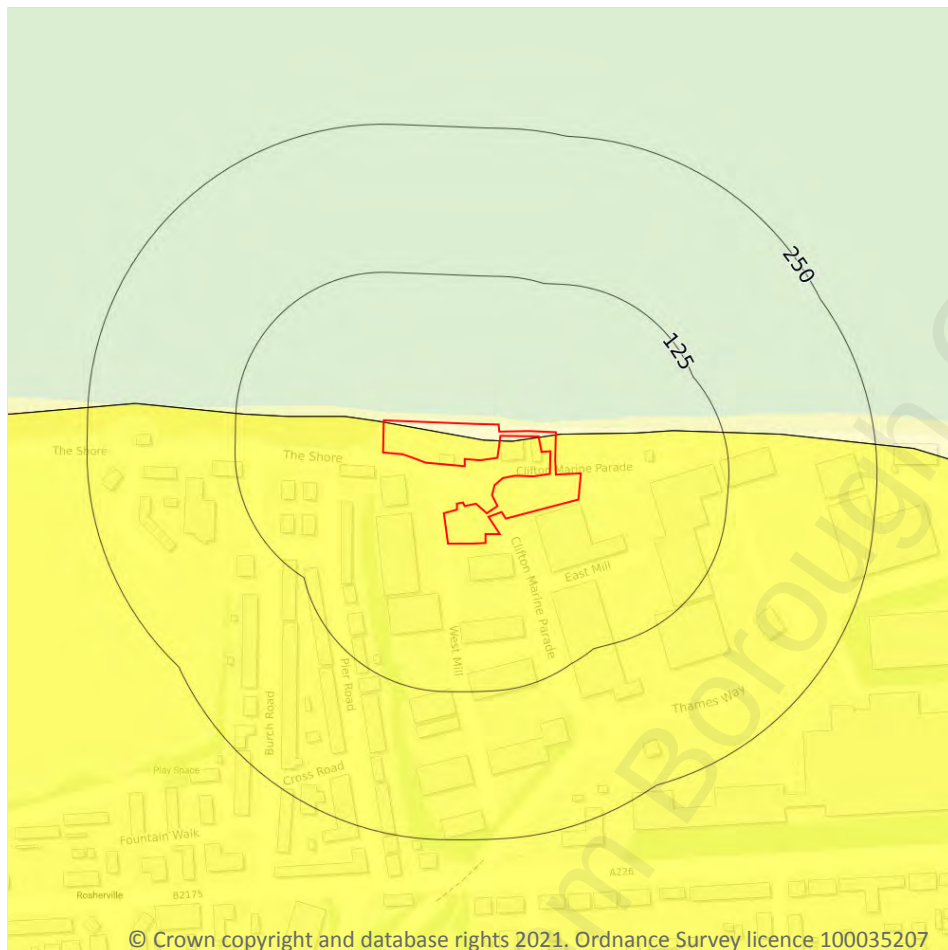


Location	Hazard rating	Details
5m W	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.
23m N	High	Highly compressible strata present. Significant constraint on land use depending on thickness.
26m N	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

2

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

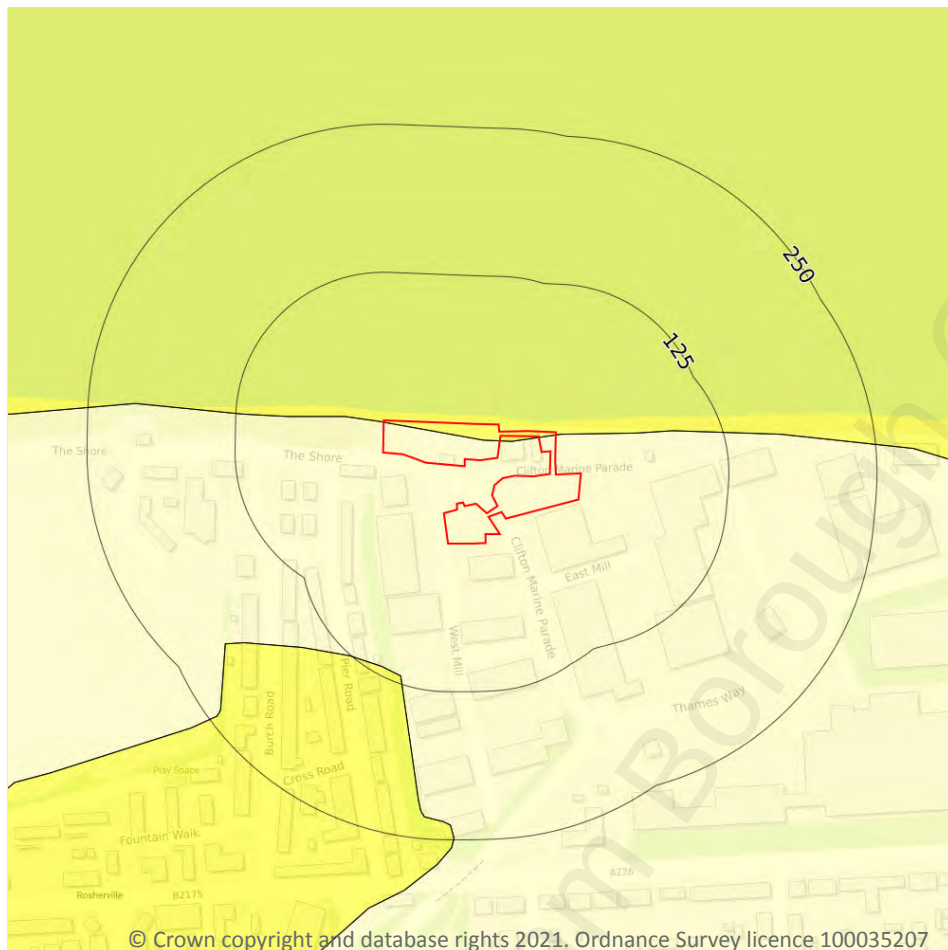
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 130**

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

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 131**

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



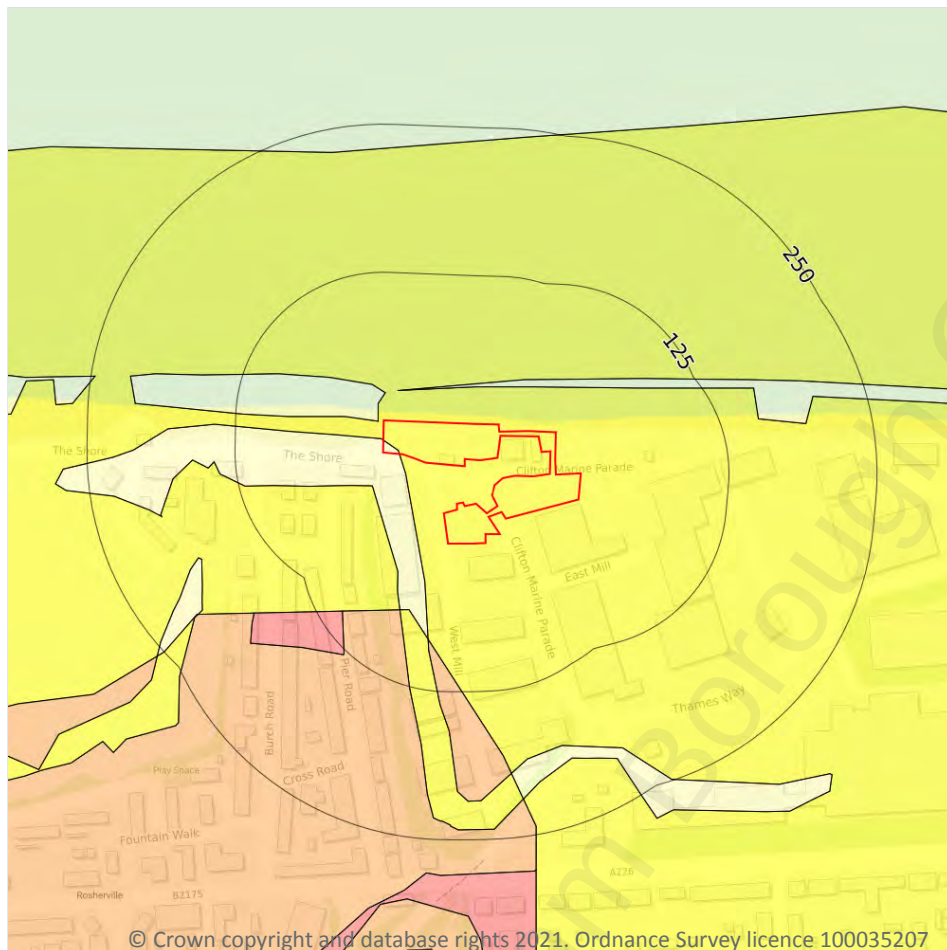
Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.

Gravesham Borough Council



Natural ground subsidence - Ground dissolution of soluble rocks



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

17.6 Ground dissolution of soluble rocks

Records within 50m

4

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**

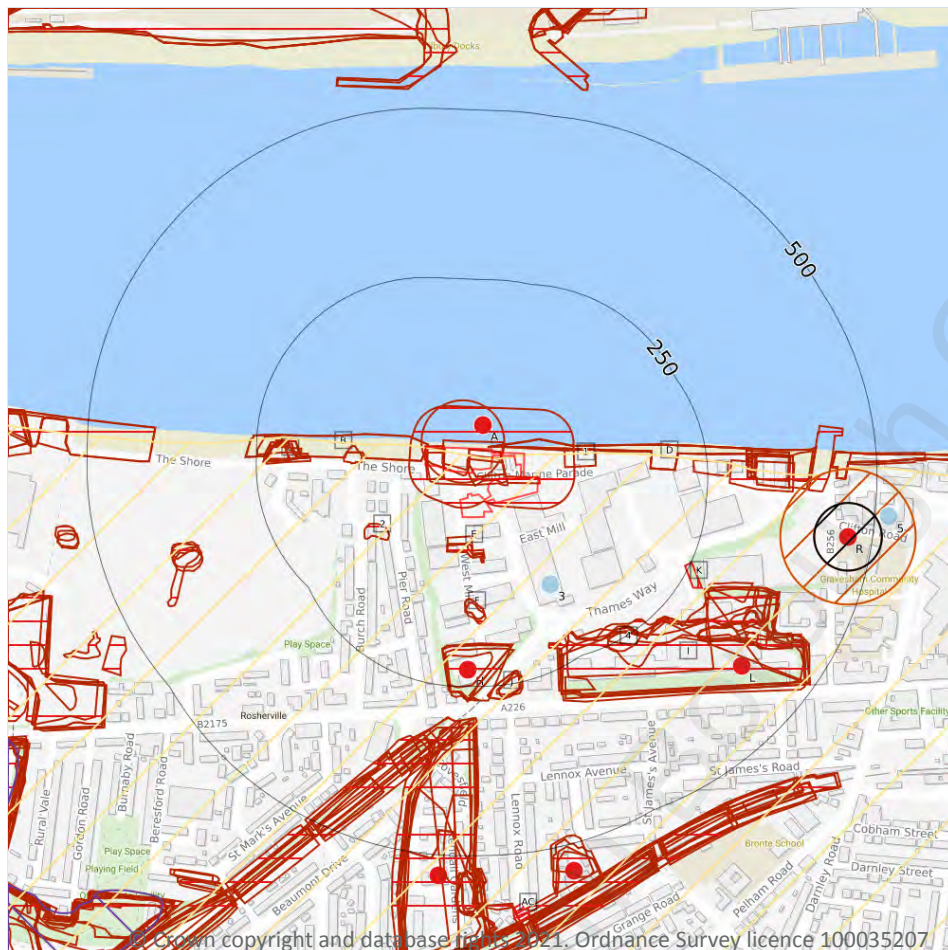
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

Location	Hazard rating	Details
On site	Very low	Soluble rocks are present within the ground. Few dissolution features are likely to be present. Potential for difficult ground conditions or localised subsidence are at a level where they need not be considered.
5m W	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.
26m N	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

4

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
A	35m N	Name: Imperial Wharf Address: GRAVESEND, Kent Commodity: Crushed Rock Status: Inactive	Type: Sea, river or canal wharf where mineral commodities are unloaded and stored Status description: Site which, at date of entry, is not extracting minerals, but which still has a valid planning permission to do so, and can restart at any time. May be considered Mothballed by operator. May be considered to have Active or Dormant planning permission
H	224m S	Name: Northfleet Chalk Pit Address: Northfleet, GRAVESEND, Kent Commodity: Chalk 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	396m SE	Name: Northfleet Chalk Pit Address: Northfleet, GRAVESEND, Kent Commodity: Chalk Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
R	463m E	Name: Clifton Road Chalk Mine Address: GRAVESEND, Kent Commodity: Chalk Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.



18.3 Surface ground workings

Records within 250m

51

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
A	On site	Unspecified Wharves	1923	1:10560
A	On site	Unspecified Wharves	1907	1:10560
A	On site	Quay	1865	1:10560
A	On site	Unspecified Wharf	1895	1:10560
A	On site	Unspecified Wharves	1895	1:10560
A	On site	Unspecified Wharves	1888	1:10560
A	On site	Unspecified Wharves	1888	1:10560
A	On site	Unspecified Wharf	1899	1:10560
A	On site	Unspecified Wharf	1899	1:10560
B	On site	Unspecified Wharf	1977	1:10000
B	On site	Unspecified Wharf	1971	1:10000
D	4m N	Unspecified Wharf	1971	1:10000
D	4m N	Unspecified Wharf	1966	1:10560
D	5m NE	Unspecified Wharf	1990	1:10000
D	5m NE	Unspecified Wharf	1977	1:10000
E	28m S	Pond	1895	1:10560
E	40m S	Pond	1907	1:10560
E	40m S	Pond	1895	1:10560
1	42m E	Unspecified Wharf	1955	1:10560
B	94m W	Unspecified Wharf	1895	1:10560
2	109m SW	Unspecified Pit	1865	1:10560
F	120m S	Pond	1907	1:10560
F	120m S	Pond	1895	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
F	126m S	Pond	1923	1:10560
G	170m W	Unspecified Wharf	1888	1:10560
G	174m W	Unspecified Wharf	1898	1:10560
G	174m W	Unspecified Wharf	1898	1:10560
G	184m W	Unspecified Wharf	1895	1:10560
H	186m S	Old Chalk Pit	1888	1:10560
H	188m S	Old Chalk Pit	1895	1:10560
H	189m S	Unspecified Ground Workings	1907	1:10560
G	191m W	Quays	1865	1:10560
H	194m S	Unspecified Quarry	1923	1:10560
G	200m W	Unspecified Wharf	1946	1:10560
H	200m S	Unspecified Pit	1946	1:10560
G	201m W	Unspecified Wharf	1938	1:10560
G	201m W	Unspecified Wharf	1938	1:10560
G	201m W	Unspecified Wharf	1932	1:10560
I	210m SE	Chalk Pit	1899	1:10560
I	210m SE	Chalk Pit	1899	1:10560
I	211m SE	Unspecified Ground Workings	1916	1:10560
I	212m SE	Chalk Pit	1888	1:10560
D	230m E	Unspecified Wharf	1955	1:10560
I	231m SE	Chalk Pit	1895	1:10560
I	231m S	Unspecified Ground Workings	1923	1:10560
J	232m S	Unspecified Pit	1966	1:10560
J	232m S	Unspecified Pit	1955	1:10560
I	234m SE	Chalk Pit	1895	1:10560
J	235m S	Unspecified Pit	1977	1:10000
J	239m S	Unspecified Pit	1971	1:10000
4	240m SE	Unspecified Heap	1895	1:10560

This is data is sourced from Ordnance Survey/Groundsure.



18.4 Underground workings

Records within 1000m

9

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

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

ID	Location	Land Use	Year of mapping	Mapping scale
K	244m SE	Tunnel	1977	1:10000
AC	574m S	Tunnel	1938	1:10560
AC	581m S	Tunnel	1907	1:10560
AC	588m S	Tunnel	1923	1:10560
C	641m S	Tunnel	1932	1:10560
C	648m S	Tunnel	1923	1:10560
-	799m SW	Tunnel	1923	1:10560
-	802m SW	Tunnel	1946	1:10560
-	803m SW	Tunnel	1932	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

4

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

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



ID	Location	Name	Commodity	Class	Likelihood
C	On site	Not available	Chalk	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
R	364m E	Not available	Chalk	D	Underground mining is known or considered likely to have occurred within or close to the area. Potential for difficult ground conditions are at a level where they should be considered
R	414m E	Not available	Chalk	E	Underground mining is known to have occurred within or very close to the area. Potential for difficult ground conditions should be investigated. Potential for localised subsidence is at a level where it should be considered
-	815m W	Not available	Chalk	C	Small scale underground mining may have occurred; mine adits, shafts and tunnels may be present. Potential for localised difficult ground conditions are at a level where they should be considered

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m

5

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

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

ID	Location	Mine Address	Mineral	Data source	Publisher
3	137m S	Gravesend, Kent	Chalk	-	-
K	259m SE	Gravesend, Kent	Chalk	-	-
5	521m E	Clifton Road Tunnel, Gravesend, Kent	Chalk	-	Chelsea Speleological Society
-	808m SW	Northfleet, Kent	Chalk	-	-
-	932m W	Northfleet, Kent	Chalk	-	-

This data is sourced from Stantec UK Ltd.



18.8 JPB mining areas

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

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

18.11 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

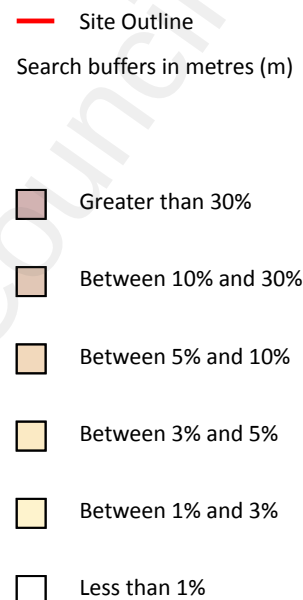
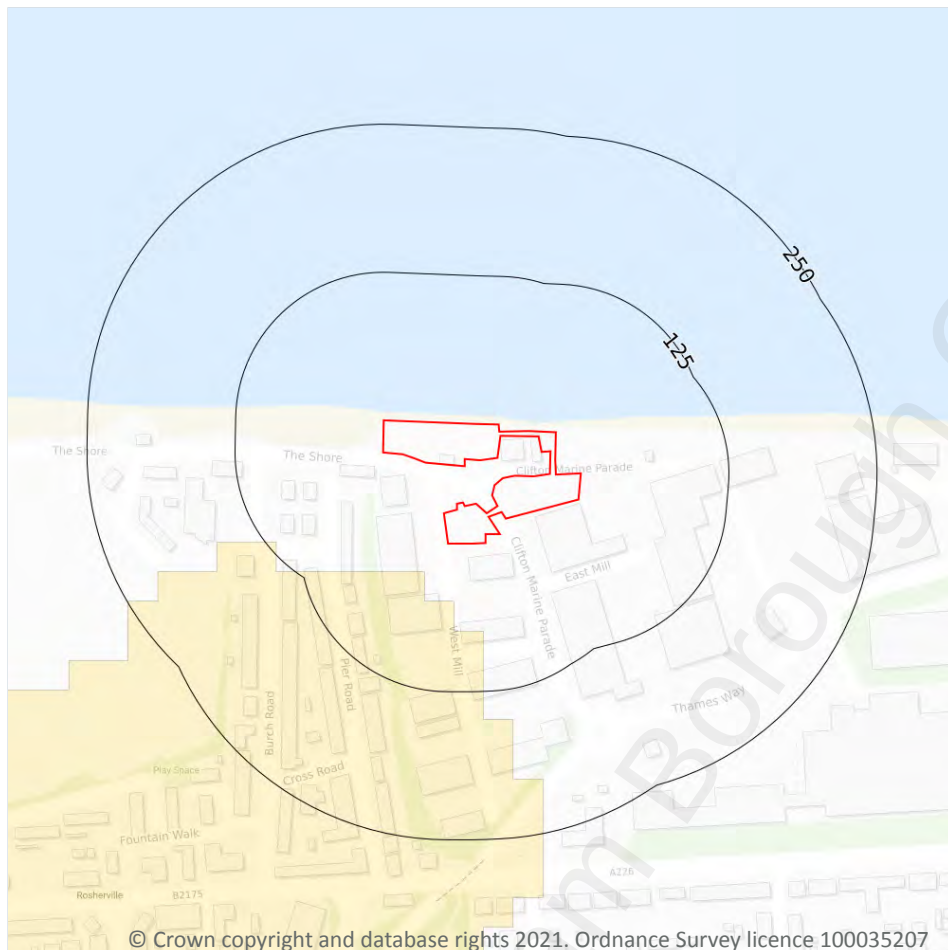
Generalised areas that may be affected by kaolin and ball clay extraction.

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

Gravesham Borough Council



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 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

10

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	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
5m W	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
18m SE	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
23m NW	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
26m NE	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
38m E	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
40m E	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 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

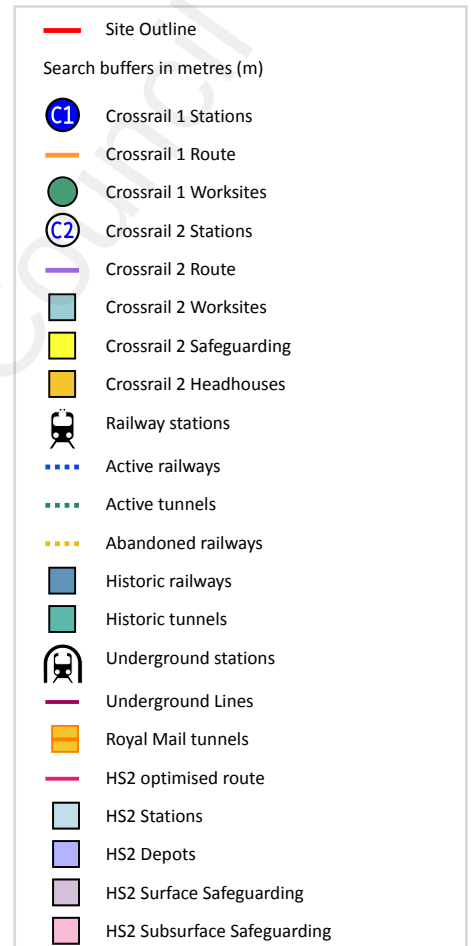
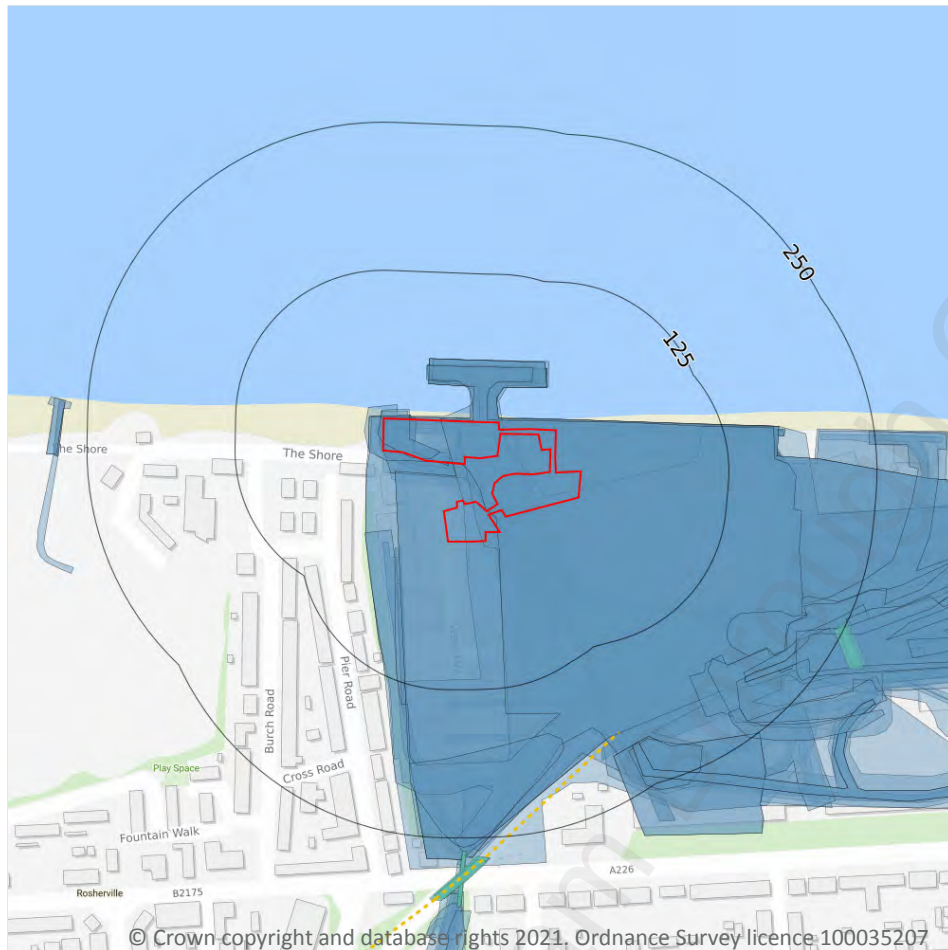
Records within 50m

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



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

60

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 146**

Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1963	1250
On site	Railway Sidings	1973	1250
On site	Railway Sidings	1933	2500
On site	Tramway Sidings	1898	2500
On site	Tramway Sidings	1897	2500
On site	Tramway Sidings	1909	2500
On site	Tramway Sidings	1939	2500
On site	Tramway Sidings	1866	2500
On site	Mineral Railway Sidings	1964	2500
On site	Mineral Railway Sidings	1952	1250
On site	Mineral Railway Sidings	1952	2500
On site	Railway Sidings	1923	10560
On site	Railway Sidings	1865	10560
On site	Railway Sidings	1907	10560
On site	Railway Sidings	1895	10560
On site	Railway Sidings	1916	10560
On site	Railway Sidings	1971	10000



Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1898	10560
On site	Railway Sidings	1888	10560
On site	Railway Sidings	1899	10560
On site	Tramway Sidings	1946	10560
On site	Tramway Sidings	1932	10560
On site	Tramway Sidings	1895	10560
On site	Railway Sidings	1955	10560
On site	Railway Sidings	1977	10000
On site	Railway Sidings	1966	10560
On site	Railway Sidings	1938	10560
0m N	Railway Sidings	1973	1250
0m N	Railway Sidings	1952	1250
20m NE	Mineral Railway Sidings	1953	2500
22m NE	Mineral Railway Sidings	1953	1250
35m NE	Railway Sidings	1964	2500
35m NE	Mineral Railway Sidings	1965	1250
100m SE	Railway	1867	-
111m E	Railway Sidings	1975	1250
165m SE	Railway Sidings	1865	10560
171m S	Railway Sidings	1865	10560
176m SE	Railway Sidings	1938	10560
177m SE	Railway Sidings	1938	10560
183m SE	Railway	1907	-
183m SE	Railway	1895	-
183m SE	Railway	1930	-
203m SE	Railway Sidings	1916	10560
204m E	Tramway Sidings	1939	2500
205m SE	Mineral Railway Sidings	1953	1250



Location	Land Use	Year of mapping	Mapping scale
205m SE	Railway Sidings	1923	10560
205m SE	Railway Sidings	1897	2500
205m SE	Railway Sidings	1909	2500
207m SE	Railway Sidings	1939	2500
207m SE	Railway Sidings	1899	10560
210m S	Railway Sidings	1955	10560
210m S	Railway Sidings	1966	10560
212m S	Railway Sidings	1971	10000
212m SE	Railway Sidings	1899	10560
216m SE	Railway Sidings	1895	10560
221m SE	Railway Sidings	1923	10560
237m SE	Railway Sidings	1965	1250
243m SE	Tunnel	1975	1250
243m SE	Tunnel	1985	1250
244m SE	Tunnel	1977	10000

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

1

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

Features are displayed on the Railway infrastructure and projects map on **page 146**



Location	Description
197m SE	Abandoned

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	0
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Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	0
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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
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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
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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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