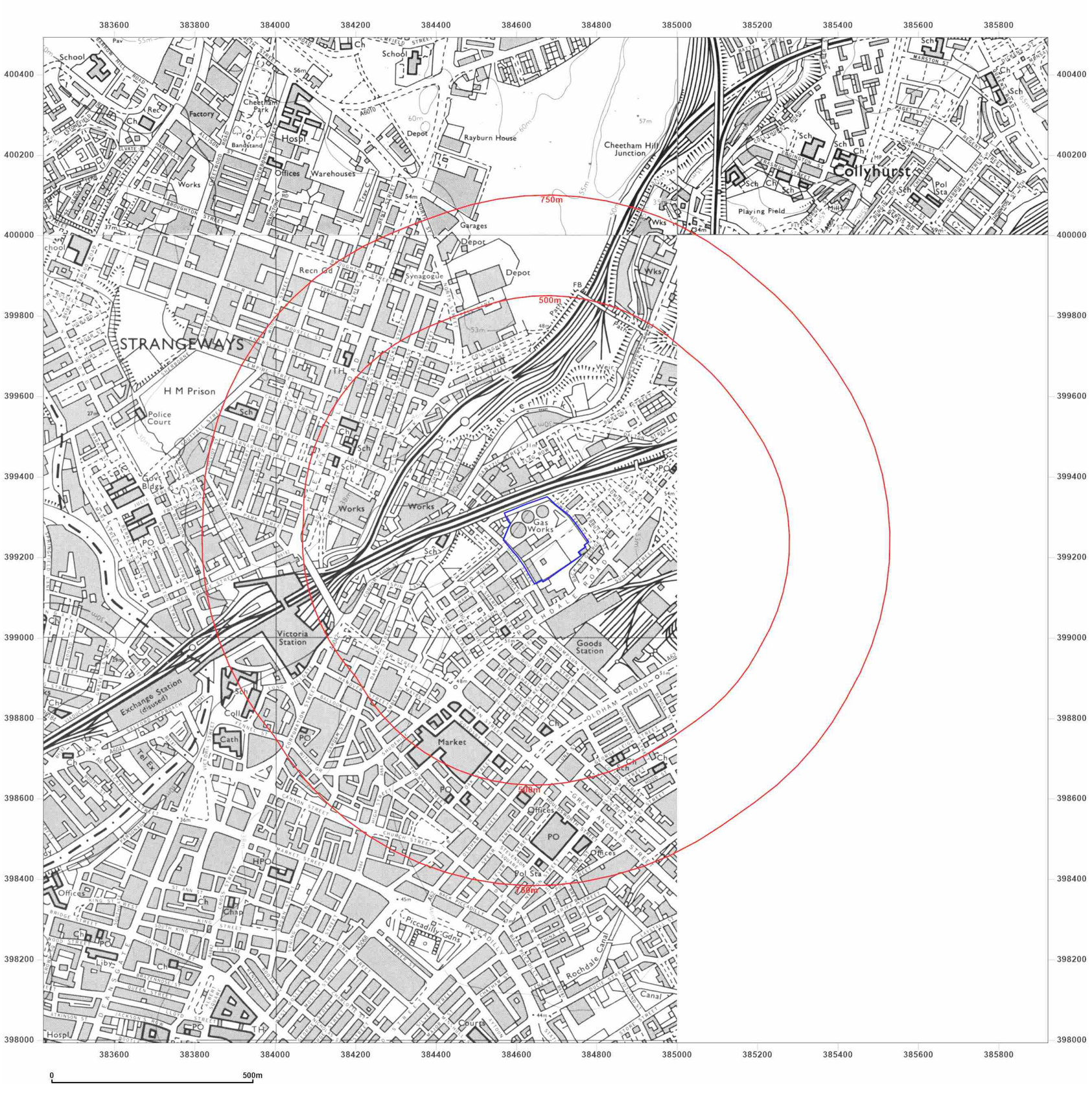


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GEO-ENVIRONMENTAL ENGINEERING EXCELLENCE

Site Details:

GOULD STREET, MANCHESTER,
M4 4HY

Client Ref: C5692-5441-SD
Report Ref: BRO-UVT-7X3-GYI-N9I
Grid Ref: 384672, 399242

Map Name: National Grid

Map date: **1972-1977**

Scale: 1:10,000

Printed at: 1:10,000

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Surveyed 1975
Revised 1977
Edition N/A
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Surveyed 1975
Revised 1975
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Grid Ref: 384672, 399242

Map Name: National Grid

Map date: **1980-1985**

Scale: 1:10,000

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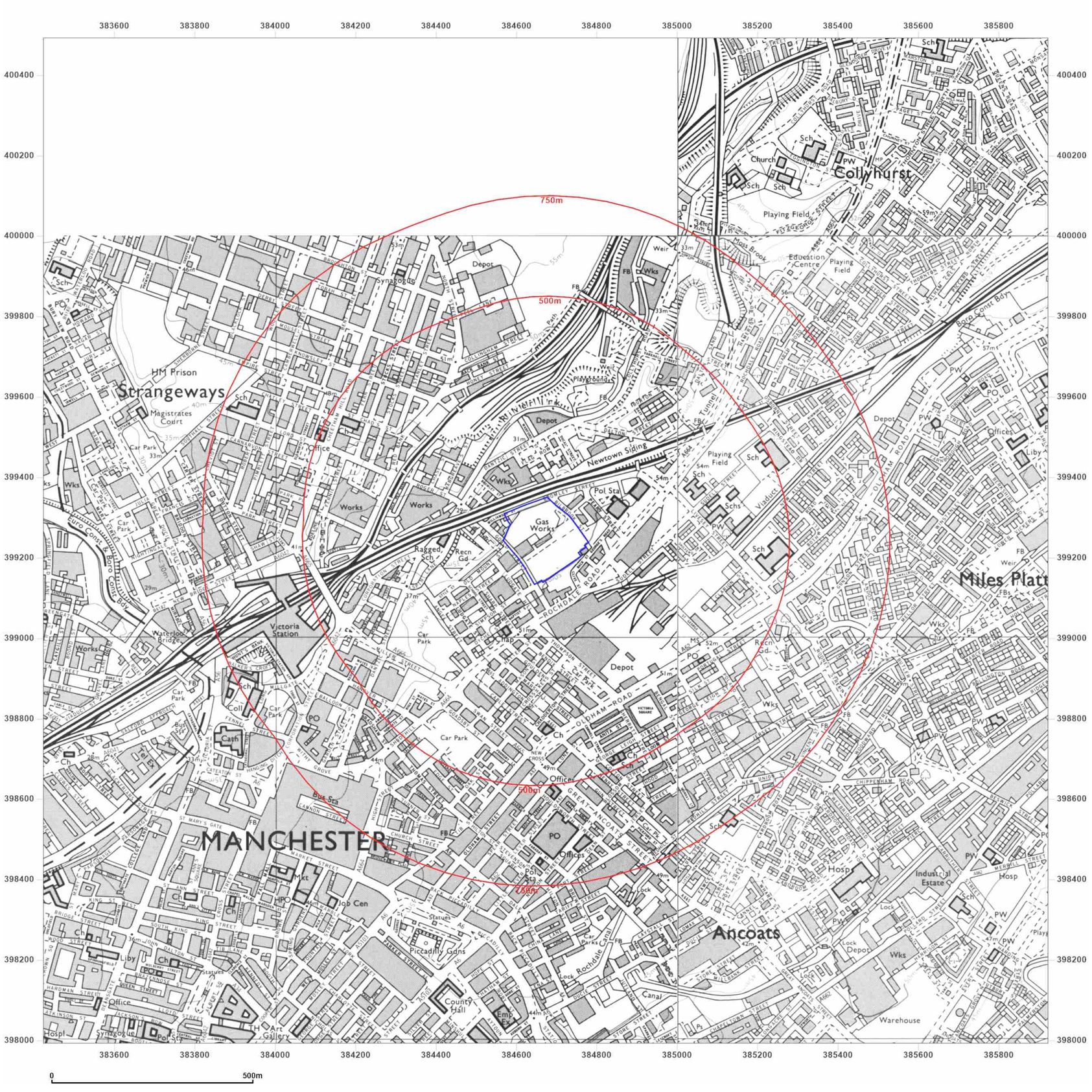
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Client Ref: C5692-5441-SD
Report Ref: BRO-UVT-7X3-GYI-N9I
Grid Ref: 384672, 399242

Map Name: National Grid

Map date: **1985-1988**

Scale: 1:10,000

Printed at: 1:10,000

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Revised 1985
Edition N/A
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Surveyed 1985
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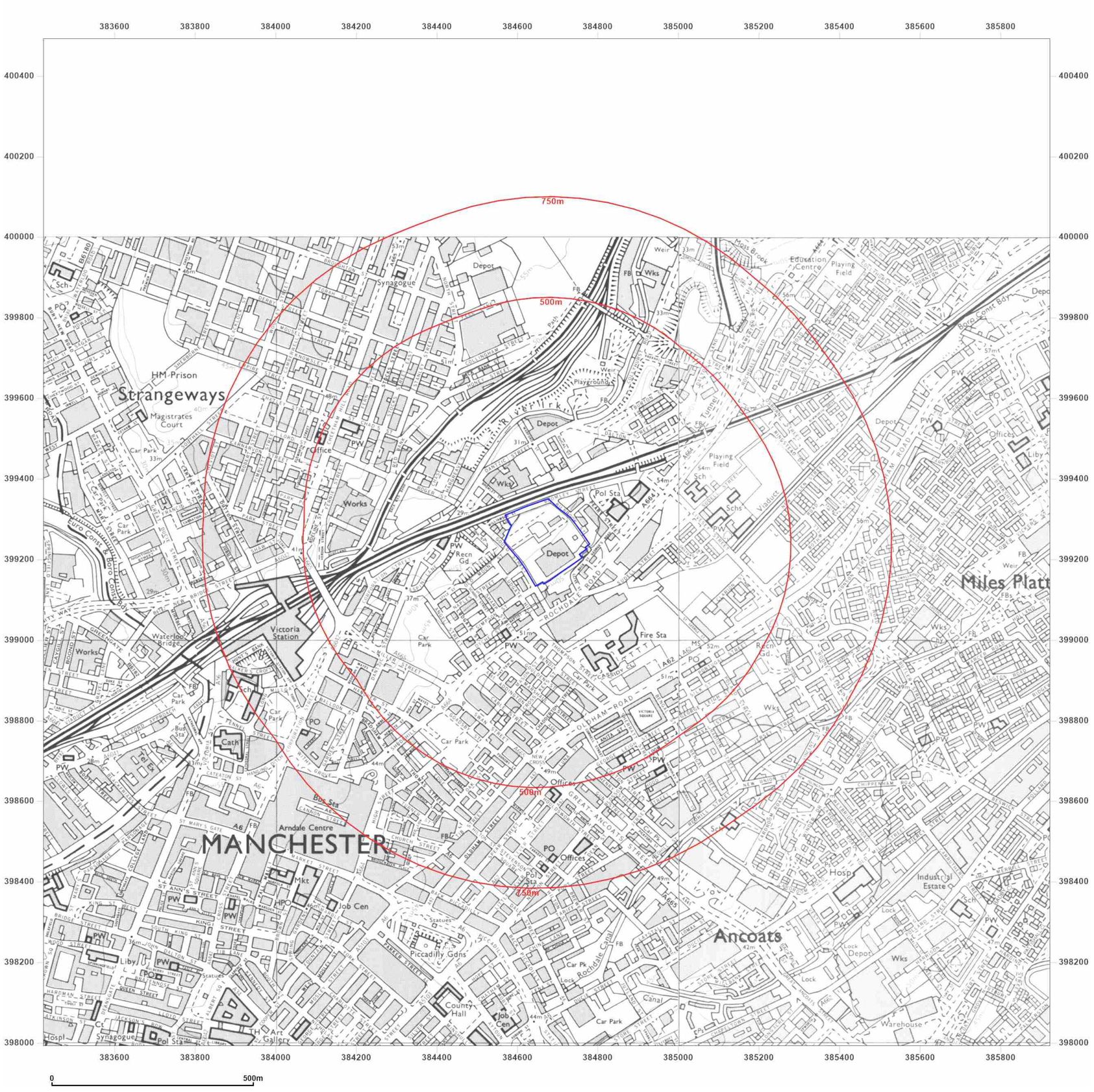
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Client Ref: C5692-5441-SD
Report Ref: BRO-UVT-7X3-GYI-N9I
Grid Ref: 384672, 399242

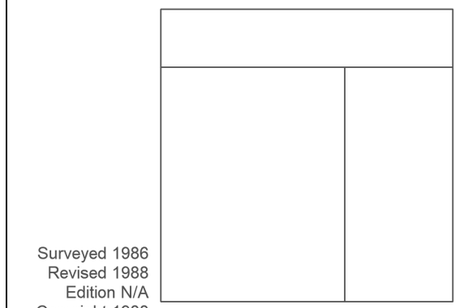
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Map date: **1988-1991**

Scale: 1:10,000

Printed at: 1:10,000

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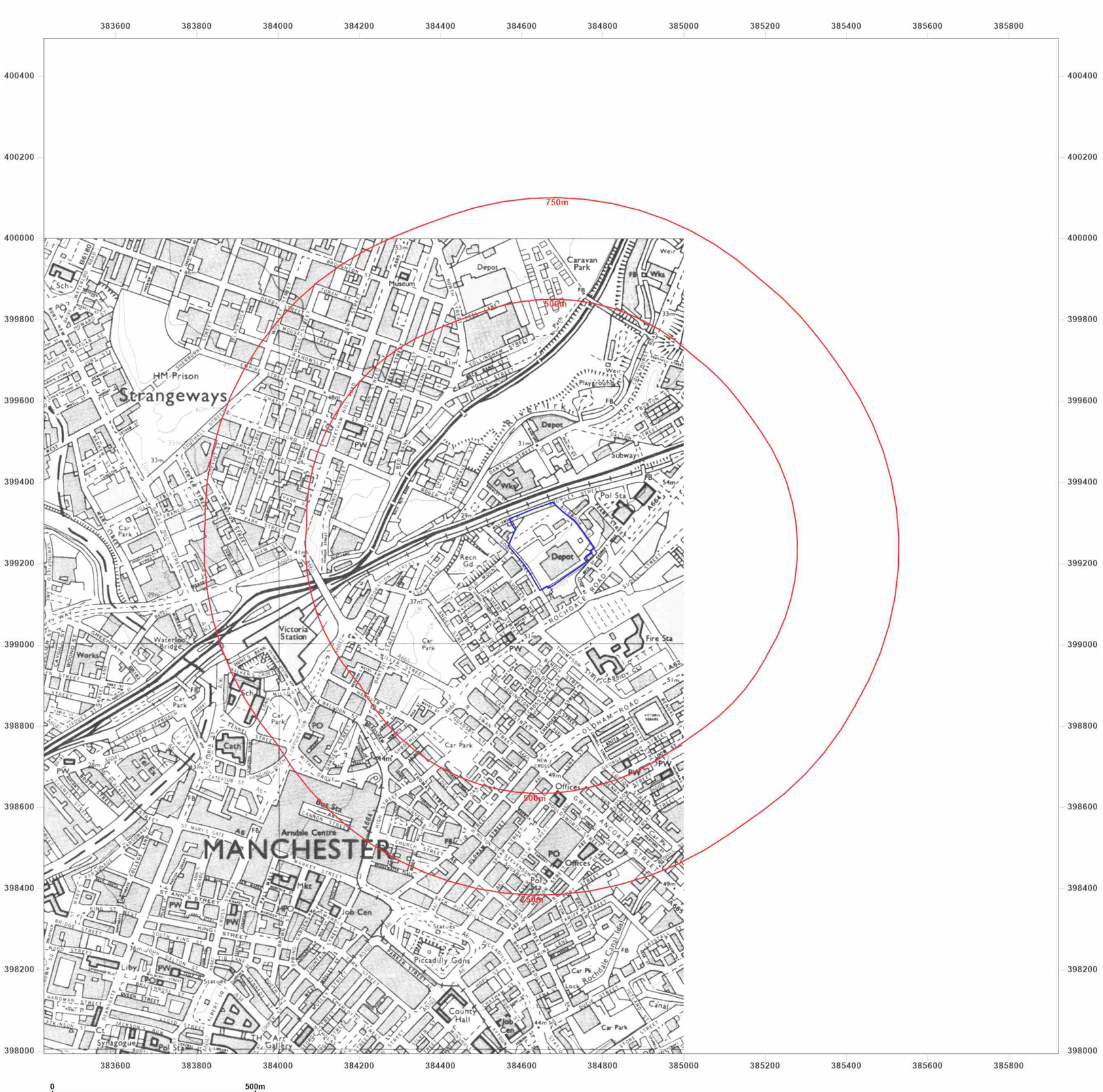
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Grid Ref: 384672, 399242

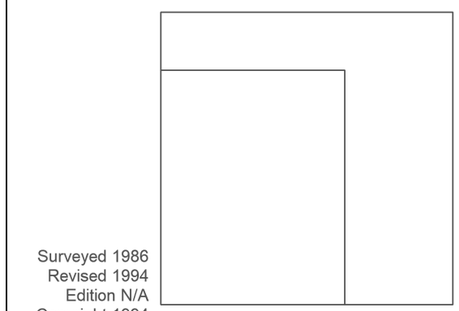
Map Name: National Grid

Map date: **1994**

Scale: 1:10,000

Printed at: 1:10,000

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Client Ref: C5692-5441-SD
Report Ref: BRO-UVT-7X3-GYI-N9I
Grid Ref: 384672, 399242

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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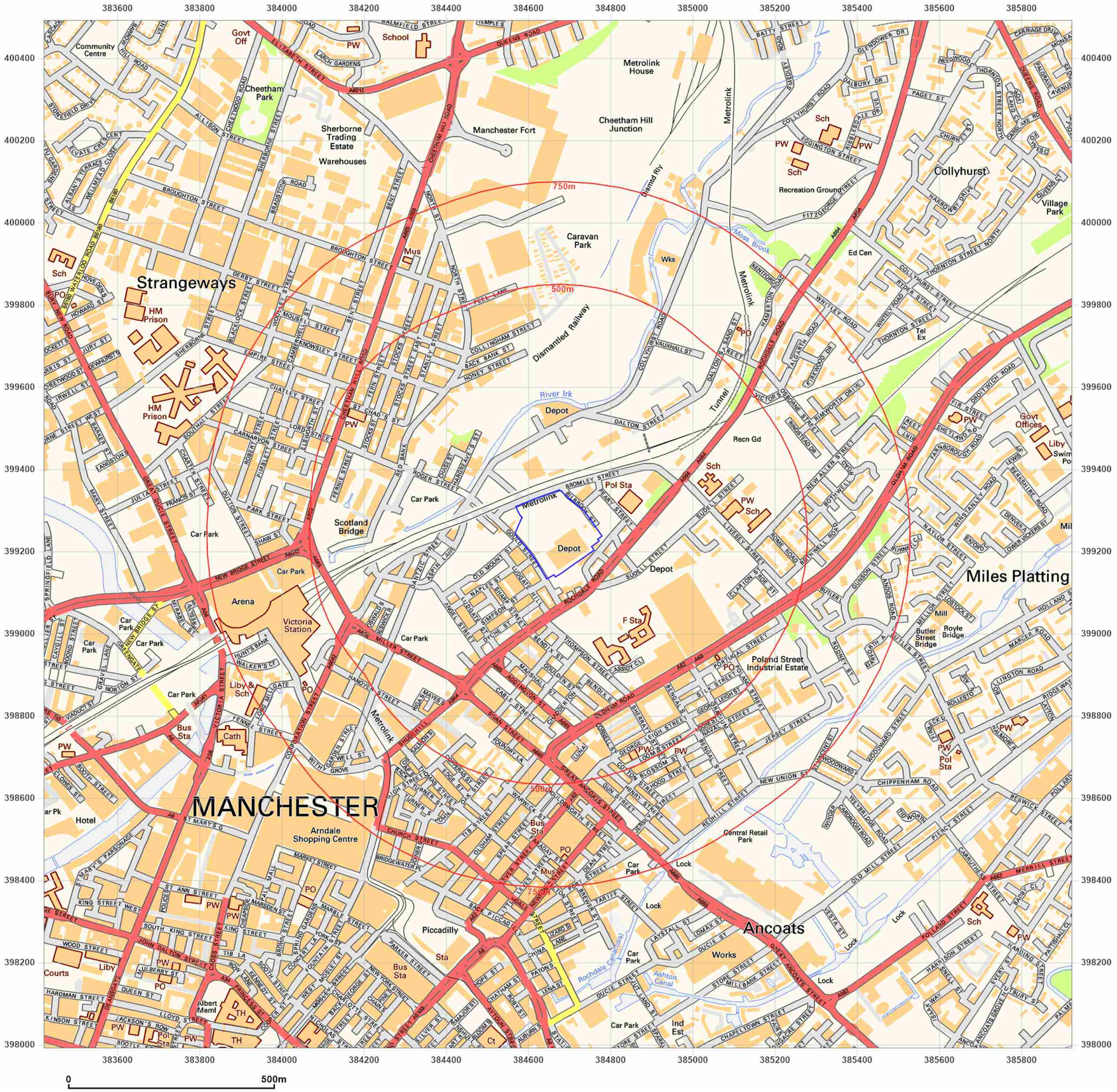
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Client Ref: C5692-5441-SD
Report Ref: BRO-UVT-7X3-GYI-N9I
Grid Ref: 384672, 399242

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

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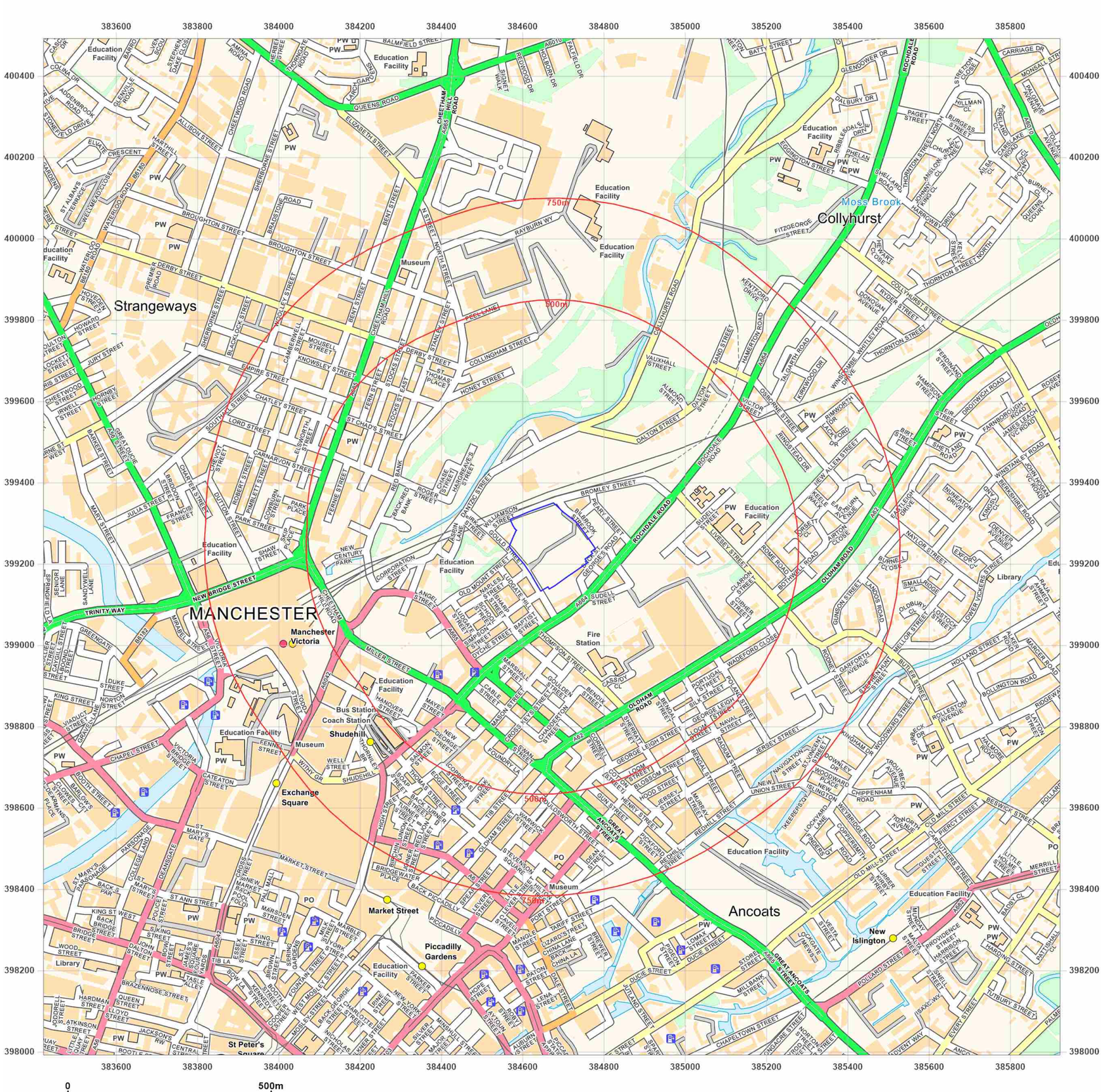
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Client Ref: C5692-5441-SD
Report Ref: BRO-UVT-7X3-GYI-N9I
Grid Ref: 384672, 399242

Map Name: National Grid

Map date: **2024**

Scale: 1:10,000

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APPENDIX C

Geo-Environmental Data Report

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

GOULD STREET, MANCHESTER, M4 4HY

Order Details

Date: 27/06/2024

Your ref: C5692-5441-SD

Our Ref: BRO-P8A-HQO-XUE-ZJ7

Site Details

Location: 384666 399247

Area: 2.81 ha

Authority: Manchester City Council ↗



Summary of findings p. 2 >

Aerial image p. 9 >

OS MasterMap site plan p.14 >

Insight User Guide ↗

Contact us with any questions at:
info@groundsure.com ↗
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Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	33	11	86	135	-
25 >	1.2 >	Historical tanks >	43	1	34	20	-
29 >	1.3 >	Historical energy features >	17	3	17	33	-
32	1.4	Historical petrol stations	0	0	0	0	-
32 >	1.5 >	Historical garages >	0	10	9	23	-
34	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
35 >	2.1 >	Historical industrial land uses >	49	15	133	190	-
49 >	2.2 >	Historical tanks >	82	2	54	34	-
56 >	2.3 >	Historical energy features >	41	5	32	69	-
61	2.4	Historical petrol stations	0	0	0	0	-
62 >	2.5 >	Historical garages >	0	16	19	39	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
65	3.1	Active or recent landfill	0	0	0	0	-
65	3.2	Historical landfill (BGS records)	0	0	0	0	-
66	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
66 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	0	2	-
66 >	3.5 >	Historical waste sites >	0	3	8	2	-
69 >	3.6 >	Licensed waste sites >	0	0	10	5	-
73 >	3.7 >	Waste exemptions >	0	0	5	22	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
76 >	4.1 >	Recent industrial land uses >	3	8	18	-	-
78 >	4.2 >	Current or recent petrol stations >	0	0	1	3	-
79	4.3	Electricity cables	0	0	0	0	-
79	4.4	Gas pipelines	0	0	0	0	-
79	4.5	Sites determined as Contaminated Land	0	0	0	0	-

79	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
80	4.7	Regulated explosive sites	0	0	0	0	-
80	4.8	Hazardous substance storage/usage	0	0	0	0	-
80	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
80	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
80 >	**4.11 >**	**Licensed pollutant release (Part A(2)/B) >**	1	0	5	2	-
81 >	**4.12 >**	**Radioactive Substance Authorisations >**	0	0	1	0	-
82 >	**4.13 >**	**Licensed Discharges to controlled waters >**	0	0	25	19	-
88	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
89	4.15	Pollutant release to public sewer	0	0	0	0	-
89	4.16	List 1 Dangerous Substances	0	0	0	0	-
89	4.17	List 2 Dangerous Substances	0	0	0	0	-
89 >	**4.18 >**	**Pollution Incidents (EA/NRW) >**	0	0	5	25	-
93	4.19	Pollution inventory substances	0	0	0	0	-
93	4.20	Pollution inventory waste transfers	0	0	0	0	-
93	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Hydrogeology >**	On site	0-50m	50-250m	250-500m	500-2000m
94 >	**5.1 >**	**Superficial aquifer >**	Identified (within 500m)				
96 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
98 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
99	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
99	5.5	Groundwater vulnerability- local information	None (within 0m)				
100 >	**5.6 >**	**Groundwater abstractions >**	0	0	0	0	42
111	5.7	Surface water abstractions	0	0	0	0	0
111 >	**5.8 >**	**Potable abstractions >**	0	0	0	0	10
114	5.9	Source Protection Zones	0	0	0	0	-
114	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
115 >	**6.1 >**	**Water Network (OS MasterMap) >**	0	0	3	-	-

116 >	6.2 >	Surface water features >	0	0	1	-	-
116 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
117 >	6.4 >	WFD Surface water bodies >	0	0	1	-	-
117 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
118 >	7.1 >	Risk of flooding from rivers and the sea >	Medium (within 50m)				
119 >	7.2 >	Historical Flood Events >	0	0	2	-	-
119	7.3	Flood Defences	0	0	0	-	-
119	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
120	7.5	Flood Storage Areas	0	0	0	-	-
121 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
122	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
123 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
125 >	9.1 >	Groundwater flooding >	Moderate (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
126	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
126	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
126	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
126	10.4	Special Protection Areas (SPA)	0	0	0	0	0
127	10.5	National Nature Reserves (NNR)	0	0	0	0	0
127	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
127	10.7	Designated Ancient Woodland	0	0	0	0	0
127	10.8	Biosphere Reserves	0	0	0	0	0
128	10.9	Forest Parks	0	0	0	0	0
128	10.10	Marine Conservation Zones	0	0	0	0	0
128	10.11	Green Belt	0	0	0	0	0
128	10.12	Proposed Ramsar sites	0	0	0	0	0

128	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
129	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
129	10.15	Nitrate Sensitive Areas	0	0	0	0	0
129 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	1	2
130 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
131	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
132	11.1	World Heritage Sites	0	0	0	-	-
133	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
133	11.3	National Parks	0	0	0	-	-
133 >	11.4 >	Listed Buildings >	0	0	6	-	-
134	11.5	Conservation Areas	0	0	0	-	-
134	11.6	Scheduled Ancient Monuments	0	0	0	-	-
134	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
135 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
136	12.2	Open Access Land	0	0	0	-	-
136	12.3	Tree Felling Licences	0	0	0	-	-
136	12.4	Environmental Stewardship Schemes	0	0	0	-	-
136	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
137 >	13.1 >	Priority Habitat Inventory >	0	0	6	-	-
138	13.2	Habitat Networks	0	0	0	-	-
138 >	13.3 >	Open Mosaic Habitat >	0	1	1	-	-
138	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
140 >	14.1 >	10k Availability >	Identified (within 500m)				
141 >	14.2 >	Artificial and made ground (10k) >	1	0	1	2	-
143 >	14.3 >	Superficial geology (10k) >	1	0	2	0	-

144	14.4	Landslip (10k)	0	0	0	0	-
145 >	14.5 >	Bedrock geology (10k) >	1	0	2	3	-
146 >	14.6 >	Bedrock faults and other linear features (10k) >	0	0	3	1	-
Page	Section	**Geology 1:50,000 scale >**	On site	0-50m	50-250m	250-500m	500-2000m
147 >	15.1 >	50k Availability >	Identified (within 500m)				
148 >	15.2 >	Artificial and made ground (50k) >	1	0	0	0	-
149 >	15.3 >	Artificial ground permeability (50k) >	1	0	-	-	-
150 >	15.4 >	Superficial geology (50k) >	1	0	1	0	-
151 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
151	15.6	Landslip (50k)	0	0	0	0	-
151	15.7	Landslip permeability (50k)	None (within 50m)				
152 >	15.8 >	Bedrock geology (50k) >	1	0	1	1	-
153 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
153 >	15.10 >	Bedrock faults and other linear features (50k) >	0	0	2	1	-
Page	Section	**Boreholes >**	On site	0-50m	50-250m	250-500m	500-2000m
154 >	16.1 >	BGS Boreholes >	0	0	52	-	-
Page	Section	**Natural ground subsidence >**					
158 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
159 >	17.2 >	Running sands >	Very low (within 50m)				
160 >	17.3 >	Compressible deposits >	Very low (within 50m)				
162 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
163 >	17.5 >	Landslides >	Low (within 50m)				
165 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
167	18.1	BritPits	0	0	0	0	-
168 >	18.2 >	Surface ground workings >	0	1	19	-	-
169 >	18.3 >	Underground workings >	0	0	0	10	0
169	18.4	Underground mining extents	0	0	0	0	-
169 >	18.5 >	Historical Mineral Planning Areas >	0	0	0	1	-

170 >	18.6 >	Non-coal mining >	0	0	0	0	1
170 >	18.7 >	JPB mining areas >	Identified (within 0m)				
171	18.8	The Coal Authority non-coal mining	0	0	0	0	-
171	18.9	Researched mining	0	0	0	0	-
171	18.10	Mining record office plans	0	0	0	0	-
171	18.11	BGS mine plans	0	0	0	0	-
172 >	18.12 >	Coal mining >	Identified (within 0m)				
172	18.13	Brine areas	None (within 0m)				
172	18.14	Gypsum areas	None (within 0m)				
172	18.15	Tin mining	None (within 0m)				
172	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
173	19.1	Natural cavities	0	0	0	0	-
173	19.2	Mining cavities	0	0	0	0	0
173	19.3	Reported recent incidents	0	0	0	0	-
173	19.4	Historical incidents	0	0	0	0	-
174	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
175 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
177 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	0	-	-	-
177 >	21.2 >	BGS Estimated Urban Soil Chemistry >	8	5	-	-	-
178	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
179	22.1	Underground railways (London)	0	0	0	-	-
179	22.2	Underground railways (Non-London)	0	0	0	-	-
180	22.3	Railway tunnels	0	0	0	-	-
180 >	22.4 >	Historical railway and tunnel features >	19	19	102	-	-
185	22.5	Royal Mail tunnels	0	0	0	-	-

185 >	22.6 >	Historical railways >	0	0	1	-	-
186 >	22.7 >	Railways >	0	14	18	-	-
187	22.8	Crossrail 1	0	0	0	0	-
187	22.9	Crossrail 2	0	0	0	0	-
187	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 18/10/2022

Site Area: 2.81ha

Recent site history - 2019 aerial photograph



Capture Date: 22/04/2019

Site Area: 2.81ha

Recent site history - 2015 aerial photograph



Capture Date: 11/06/2015

Site Area: 2.81ha

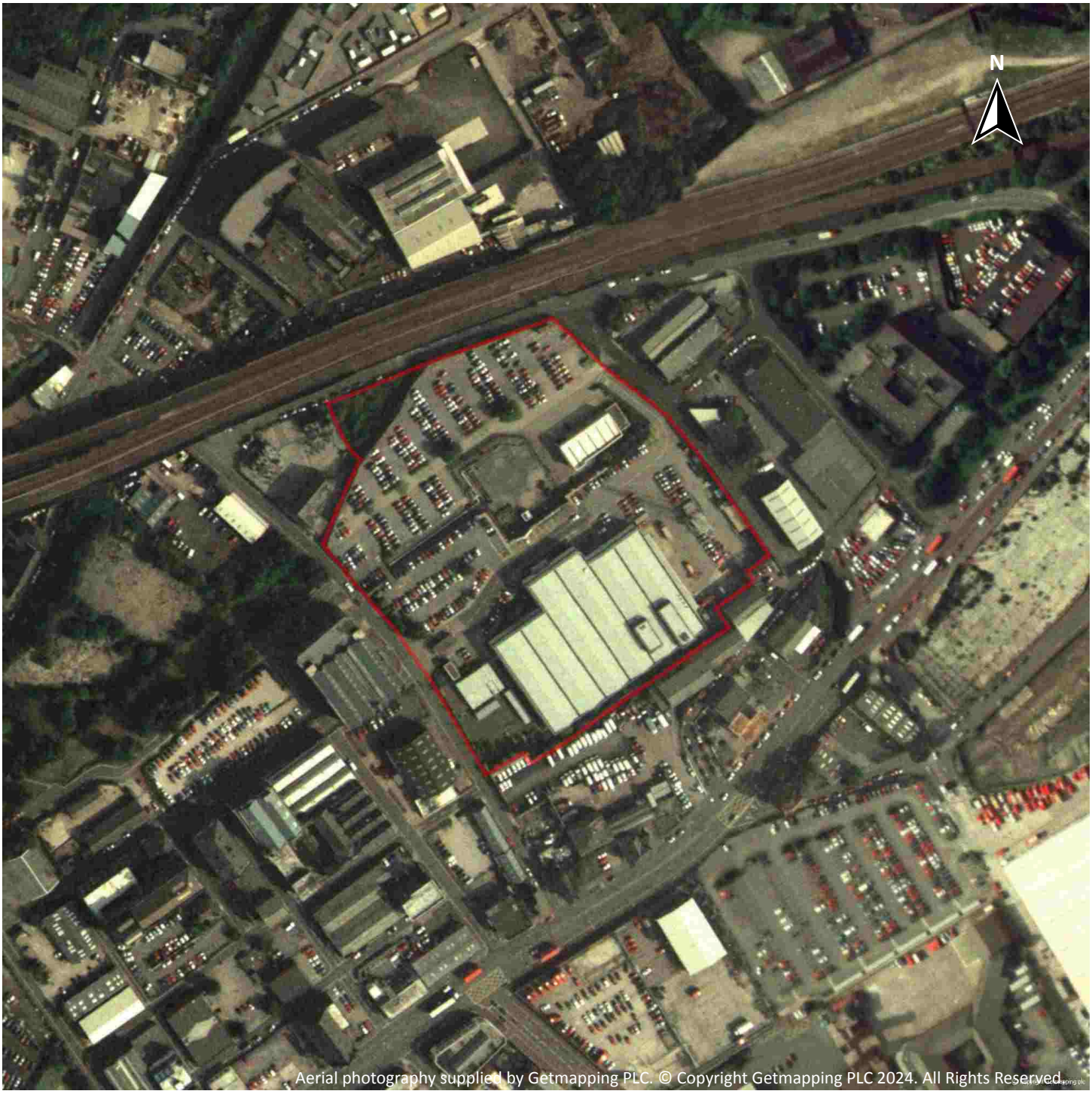
Recent site history - 2009 aerial photograph



Capture Date: 02/06/2009

Site Area: 2.81ha

Recent site history - 2000 aerial photograph



Capture Date: 27/06/2000

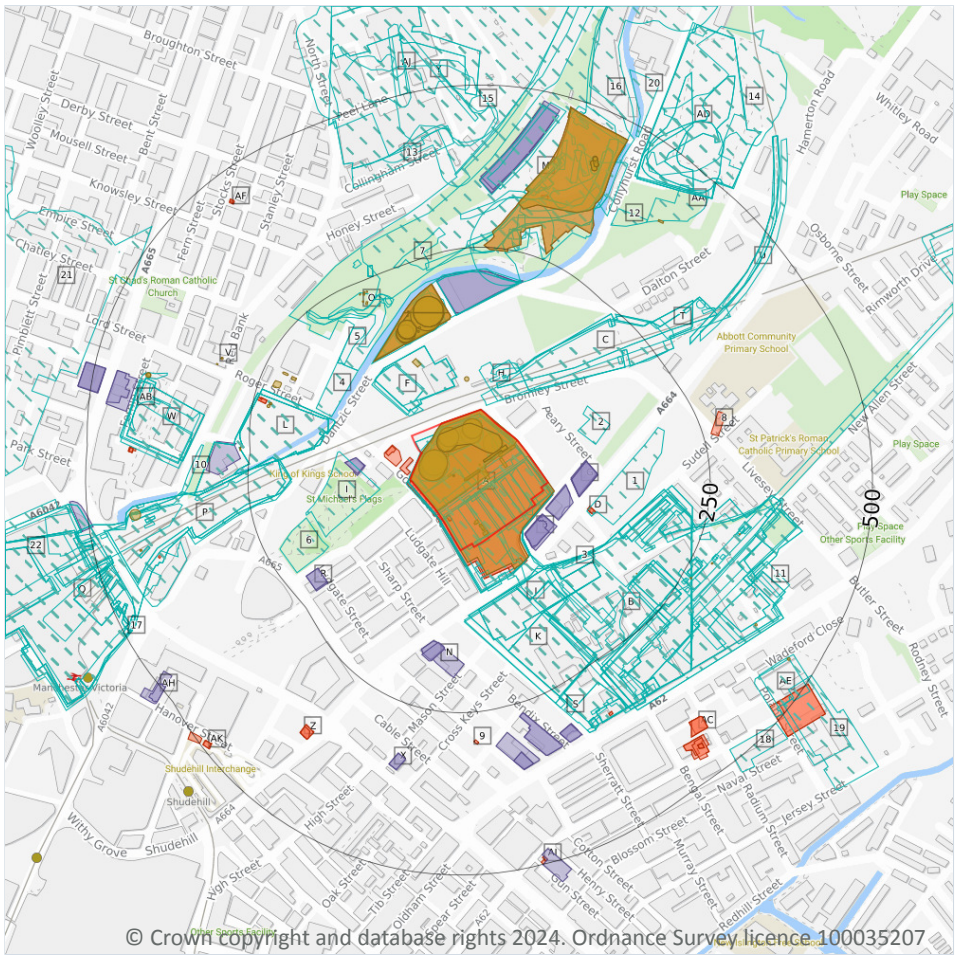
Site Area: 2.81ha

OS MasterMap site plan



Site Area: 2.81ha

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	265

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

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Unspecified Commercial/Industrial**	**1933 - 1938**	**855454**

ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Tank	1933	825275
A	On site	Unspecified Tank	1891	825281
A	On site	Unspecified Commercial/Industrial	1923	852600
A	On site	Gasometer	1978	855772
A	On site	Gasometer	1906 - 1923	857096
A	On site	Unspecified Tank	1891	868883
A	On site	Gas Works	1906	871049
A	On site	Gasometer	1851	873568
A	On site	Gasometer	1971	882554
A	On site	Gasometer	1906 - 1923	885946
A	On site	Unspecified Commercial/Industrial	1956	888742
A	On site	Unspecified Commercial/Industrial	1956	893063
A	On site	Gas Works	1921 - 1923	898774
A	On site	Unspecified Commercial/Industrial	1921	899114
A	On site	Unspecified Tanks	1971	920274
A	On site	Unspecified Commercial/Industrial	1891	900580
A	On site	Unspecified Tanks	1978	901396
A	On site	Gasometer	1906 - 1923	904595
A	On site	Unspecified Tank	1891	924769
A	On site	Gas Works	1971	933471
A	On site	Unspecified Tank	1933 - 1938	936967
A	On site	Unspecified Depot	1988 - 1994	943169
A	On site	Unspecified Tanks	1956	951765
A	On site	Unspecified Tank	1933 - 1938	965032
A	On site	Unspecified Tanks	1938	967707
A	On site	Gas Works	1978 - 1985	979009
A	On site	Unspecified Tanks	1891	983548
A	On site	Gas Works	1851	985416

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Railway Sidings**	**1956**	**990431**
B	**On site**	**Unspecified Commercial/Industrial**	**1906 - 1921**	**945036**
B	**On site**	**Railway Sidings**	**1891**	**952502**
B	**On site**	**Railway Sidings**	**1906 - 1938**	**960473**
C	10m N	Railway Sidings	1891	966175
C	27m N	Railway Sidings	1923	938097
F	30m NW	Rubber Works	1933 - 1938	970692
F	31m NW	Rubber Works	1923	963246
F	37m NW	Unspecified Works	1978	866997
F	37m NW	Unspecified Works	1985	890872
C	42m N	Railway Sidings	1933 - 1938	899799
C	42m N	Railway Sidings	1906 - 1921	984232
H	45m N	Railway Building	1923	820409
F	47m NW	Unspecified Works	1988 - 1994	885381
I	49m W	Grave Yard	1851	817297
H	58m N	Unspecified Ground Workings	1956	800626
H	59m N	Railway Building	1923	820408
C	71m NE	Railway Sidings	1971 - 1988	891110
C	71m NE	Railway Sidings	1956	915512
1	74m E	Bus Depot	1978	832317
B	80m SE	Unspecified Depot	1985	818411
B	81m SE	Railway Sidings	1956	988070
2	84m NE	Police Station	1985 - 1994	944528
J	85m S	Railway Building	1978	863970
J	85m S	Railway Building	1971	893090
J	85m S	Railway Building	1985	964524
K	88m S	Goods Shed	1921 - 1923	856754
K	90m S	Goods Station	1933 - 1938	948848

ID	Location	Land use	Dates present	Group ID
B	91m SE	Railway Sidings	1971	893733
B	91m SE	Railway Sidings	1978 - 1985	962506
B	94m SE	Railway Sidings	1851	929380
3	99m SE	Railway Building	1938	820396
B	112m SE	Unspecified Commercial/Industrial	1891	848669
L	120m W	Unspecified Works	1971	849948
L	120m W	Unspecified Works	1978	919630
L	120m W	Iron Works	1956	936332
L	120m W	Unspecified Works	1985	988311
B	120m SE	Railway Building	1851	936143
4	122m NW	Unspecified Commercial/Industrial	1923	796751
F	127m NW	Unspecified Commercial/Industrial	1923	877652
L	129m W	Iron Works	1906	851941
L	129m W	Iron Works	1938	876520
L	129m W	Iron Works	1923 - 1931	933061
L	129m W	Iron Works	1916	930264
M	130m NW	Railway Sidings	1906 - 1994	2367776
F	130m NW	Unspecified Commercial/Industrial	1956	849656
B	132m E	Railway Building	1956	820415
F	132m NW	Unspecified Tank	1891 - 1938	940246
B	133m E	Railway Buildings	1971	890026
B	133m E	Railway Buildings	1978	904671
B	133m E	Railway Buildings	1985	976778
F	139m N	Unspecified Tank	1923	877926
F	139m N	Unspecified Tank	1938	883812
F	139m N	Unspecified Tanks	1921	889282
F	139m N	Unspecified Tank	1891 - 1906	901711
F	139m N	Unspecified Tanks	1933	911005

ID	Location	Land use	Dates present	Group ID
F	140m NW	Unspecified Tanks	1956	952176
K	142m SE	Railway Building	1985	820394
K	142m SE	Goods Station	1956 - 1971	907126
K	142m SE	Goods Station	1978	910356
F	150m N	Unspecified Depot	1985 - 1994	951202
F	150m N	Unspecified Depot	1978	887857
5	152m NW	Refuse Heap	1933 - 1938	944667
O	153m NW	Unspecified Ground Workings	1921	905219
B	162m E	Railway Building	1923	925478
6	163m SW	Disused Grave Yard	1978	831119
B	164m E	Railway Building	1956	952415
B	179m SE	Fire Station	1988 - 1994	925390
B	180m SE	Railway Building	1923	820428
P	183m W	Railway Sidings	1923	940408
Q	183m W	Railway Sidings	1956 - 1971	858586
Q	183m W	Railway Sidings	1985 - 1994	894545
Q	183m W	Railway Sidings	1978	975236
B	185m E	Railway Building	1978	856971
B	185m E	Railway Building	1971	978761
B	189m SE	Goods Shed	1921	912383
B	190m SE	Goods Station	1906	821663
B	190m SE	Goods Shed	1923 - 1938	923020
B	191m SE	Railway Building	1985	851516
B	191m SE	Railway Building	1978	886595
B	191m SE	Railway Building	1956 - 1971	991623
P	192m W	Railway Sidings	1931 - 1938	856860
P	192m W	Railway Sidings	1906 - 1916	866321
B	192m E	Railway Building	1923	844951

ID	Location	Land use	Dates present	Group ID
M	194m N	Unspecified Mill	1938	977776
O	196m NW	Unspecified Ground Workings	1988 - 1994	878030
C	197m NE	Railway Building	1923	820416
O	197m NW	Unspecified Ground Workings	1956	952523
M	208m NW	Railway Sidings	1891	847105
M	230m N	Unspecified Ground Workings	1985 - 1994	991693
B	231m E	Railway Sidings	1968	844444
7	233m N	Unspecified Ground Workings	1891	860688
M	243m N	Unspecified Ground Workings	1956 - 1971	951665
M	243m N	Unspecified Ground Workings	1978	959962
B	244m SE	Railway Buildings	1891	833665
M	244m N	Unspecified Mill	1906 - 1933	939053
B	244m SE	Railway Station	1851	822944
B	248m SE	Railway Building	1978	873626
B	248m SE	Railway Building	1956 - 1971	887537
B	248m E	Railway Building	1956	820427
B	248m SE	Railway Building	1985	987455
B	251m SE	Unspecified Commercial/Industrial	1923	911009
M	251m N	Unspecified Mill	1891	946883
O	251m NW	Railway Building	1906	858516
O	251m NW	Railway Building	1938	925849
O	251m NW	Railway Building	1923	968107
B	251m E	Good Station	1921	797870
B	251m E	Railway Building	1933 - 1968	894084
B	252m E	Goods Station	1923	821664
B	254m SE	Railway Building	1938	991355
B	254m SE	Railway Building	1923	862543
B	256m SE	Railway Building	1938	946193

ID	Location	Land use	Dates present	Group ID
B	261m SE	Railway Building	1985	966505
B	265m SE	Railway Building	1923	820429
M	267m N	Corn Mill	1851	823147
O	272m NW	Railway Building	1923	820407
T	277m NE	Railway Sidings	1994	895163
B	278m E	Railway Building	1923	990168
B	279m E	Railway Building	1938	969824
S	284m S	Railway Building	1938	820395
B	289m SE	Unspecified Commercial/Industrial	1956	939440
B	289m E	Railway Building	1891	820426
M	295m N	Unspecified Ground Workings	1891	985276
B	301m E	Railway Building	1923	965489
B	302m E	Railway Building	1938	927513
U	302m NE	Tunnel	1978	863724
U	302m NE	Tunnel	1956 - 1968	987748
B	302m E	Railway Building	1956	879339
B	303m SE	Police Station	1851	832595
M	305m N	Unspecified Ground Workings	1891	986355
S	310m SE	Railway Building	1956 - 1971	924812
B	310m E	Railway Building	1891	853512
S	310m SE	Railway Building	1956	937629
S	314m SE	Railway Building	1978	952803
S	314m SE	Railway Building	1985	967480
U	317m NE	Tunnel	1985 - 1991	904090
B	317m SE	Potato Shed	1968	802280
B	319m E	Unspecified Works	1968	830453
S	320m SE	Railway Building	1978	962352
S	320m SE	Railway Building	1985	985358

ID	Location	Land use	Dates present	Group ID
S	320m SE	Railway Building	1971	992000
B	321m SE	Railway Building	1971	847949
B	321m SE	Railway Building	1978	862044
B	321m SE	Railway Building	1985	948508
10	321m W	Railway Building	1894	820406
W	321m W	Unspecified Works	1985 - 1988	870906
W	321m W	Unspecified Works	1978	932157
W	321m W	Unspecified Works	1971	978140
S	325m SE	Railway Building	1938 - 1956	940179
T	325m NE	Railway Building	1923	820417
W	328m W	Unspecified Commercial/Industrial	1938	905224
B	329m SE	Railway Building	1956	965368
M	331m N	Carriage Shed	1906 - 1938	986353
M	332m N	Unspecified Heap	1938	804005
M	332m N	Unspecified Ground Workings	1933	947322
B	337m E	Railway Building	1956	820414
M	337m N	Railway Buildings	1906 - 1938	925159
W	337m W	Unspecified Commercial/Industrial	1923 - 1931	845927
W	339m W	Unspecified Commercial/Industrial	1916	973762
M	341m N	Railway Building	1891	820410
M	342m N	Railway Building	1971	893985
M	342m N	Railway Building	1978	928950
M	345m N	Railway Buildings	1891	931725
T	345m NE	Unspecified Tank	1956	825280
Y	346m N	Brick Works	1906 - 1956	2365649
T	346m NE	Railway Buildings	1923	833664
M	346m N	Railway Buildings	1956	955921
11	346m E	Glass Works	1851	797985

ID	Location	Land use	Dates present	Group ID
12	348m NE	Sawmill	1851	808369
Q	353m W	Railway Sidings	1894	918058
M	356m NE	Dye Works	1851	833968
Y	364m N	Unspecified Ground Workings	1906 - 1956	2365844
Q	366m W	Unspecified Commercial/Industrial	1923	796753
U	376m NE	Tunnel	1906 - 1938	876866
M	376m N	Railway Building	1985	937114
AA	385m NE	Dye Works	1851	833969
Q	387m W	Railway Building	1985	925125
13	388m NW	Brewery	1891	822709
AB	388m W	Unspecified Ground Workings	1851	800622
M	389m N	Railway Buildings	1933 - 1938	861217
Q	390m W	Railway Building	1971	962973
M	392m N	Railway Building	1906 - 1938	936709
Q	398m W	Railway Building	1931	871716
Q	398m W	Railway Building	1916	928990
Q	399m W	Railway Building	1923	820404
M	402m N	Unspecified Tank	1923	825279
M	402m N	Unspecified Tanks	1906 - 1921	877752
M	402m N	Unspecified Tanks	1933 - 1938	966392
M	404m N	Railway Building	1923	820413
Y	407m N	Clay Pit	1921 - 1923	884437
M	412m N	Unspecified Tanks	1906 - 1938	890116
Y	412m N	Unspecified Pit	1933	840530
Q	412m W	Railway Building	1931	820405
Q	415m W	Railway Building	1916	876678
Q	415m W	Railway Building	1931	990567
Q	415m W	Railway Building	1923	989904

ID	Location	Land use	Dates present	Group ID
AD	430m NE	Finishing Works	1938	848722
AD	430m NE	Unspecified Ground Workings	1921	869797
AD	430m NE	Unspecified Ground Workings	1933 - 1938	961317
AD	431m NE	Finishing Works	1933	931261
AD	431m NE	Finishing Works	1906 - 1921	977342
AE	432m SE	Unspecified Mill	1923	810299
M	432m N	Railway Building	1923	820412
AE	433m SE	Unspecified Works	1968	848216
AD	443m NE	Unspecified Heap	1906	904688
AD	443m NE	Unspecified Heap	1923	966573
Y	444m N	Railway Sidings	1906	970573
14	450m NE	Unspecified Ground Workings	1891	847768
AD	454m NE	Unspecified Ground Workings	1971 - 1994	852458
AD	454m NE	Unspecified Ground Workings	1956	856376
15	455m N	Unspecified Heap	1956	804009
M	462m N	Railway Building	1923	916238
16	465m NE	Unspecified Commercial/Industrial	1921 - 1923	2367045
Q	466m W	Railway Sidings	1906 - 1916	869948
Q	466m W	Railway Sidings	1931 - 1938	965979
Q	468m W	Railway Sidings	1923	896600
AG	472m W	Gravel Yard	1851	834691
AG	472m W	Railway Station	1906 - 1916	850180
AG	472m W	Railway Station	1931 - 1938	955531
AG	473m W	Railway Station	1923	982510
Q	474m W	Railway Building	1894	820403
AG	475m W	Railway Station	1978	848398
AG	475m W	Railway Station	1971	933110
AG	475m W	Railway Station	1985 - 1988	946558

ID	Location	Land use	Dates present	Group ID
AG	475m W	Railway Station	1956	944542
17	478m SW	Railway Building	1923	820398
AJ	480m N	Railway Sidings	1923	943576
18	482m SE	Unspecified Depot	1968	818420
19	483m SE	Unspecified Works	1985	849231
AJ	484m N	Railway Sidings	1938	845026
AJ	484m N	Railway Sidings	1933	941732
20	485m NE	Finishing Works	1923	795010
21	490m NW	Brick Field	1851	857249
Y	493m N	Unspecified Heap	1956	804008
22	495m W	Workhouse	1851	794985
AJ	500m N	Railway Sidings	1921	898792

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**98**

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

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Tanks**	**1952**	**146176**
A	**On site**	**Tanks**	**1931**	**106838**
A	**On site**	**Gasometer**	**1891**	**108528**
A	**On site**	**Unspecified Tank**	**1931**	**116015**
A	**On site**	**Unspecified Tank**	**1891**	**116041**
A	**On site**	**Unspecified Tank**	**1891**	**116042**

ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Tank	1891	116043
A	On site	Unspecified Tank	1891	116044
A	On site	Unspecified Tank	1891	116045
A	On site	Unspecified Tank	1891	116046
A	On site	Tanks	1949 - 1952	122334
A	On site	Gasometer	1891	124649
A	On site	Tanks	1949 - 1952	124911
A	On site	Gas Works	1970	125307
A	On site	Tanks	1949 - 1952	125888
A	On site	Tanks	1891	126147
A	On site	Tanks	1949 - 1952	126610
A	On site	Tanks	1949 - 1952	127628
A	On site	Tanks	1952	128060
A	On site	Tanks	1893	128327
A	On site	Unspecified Tank	1958 - 1964	128516
A	On site	Gasometer	1949 - 1952	129138
A	On site	Unspecified Tank	1958	129249
A	On site	Gasometer	1891	130378
A	On site	Gasometer	1949 - 1970	131636
A	On site	Gasometers	1908 - 1922	135222
A	On site	Unspecified Tank	1958 - 1964	135314
A	On site	Unspecified Tank	1891 - 1931	135459
A	On site	Gasometer	1893 - 1970	137091
A	On site	Gasometer	1891 - 1970	138173
A	On site	Unspecified Tank	1958	138197
A	On site	Unspecified Tank	1958 - 1964	138368
A	On site	Tanks	1949 - 1952	139306
A	On site	Unspecified Tank	1958	139650

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Gasometer**	**1949 - 1952**	**140097**
A	**On site**	**Unspecified Tank**	**1964**	**140647**
A	**On site**	**Tanks**	**1949 - 1952**	**141887**
A	**On site**	**Tanks**	**1891 - 1893**	**143344**
A	**On site**	**Unspecified Tank**	**1931 - 1964**	**144572**
A	**On site**	**Unspecified Tank**	**1958 - 1964**	**145904**
A	**On site**	**Gas Works**	**1949 - 1952**	**147458**
A	**On site**	**Tanks**	**1949**	**149212**
A	**On site**	**Gasometers**	**1893**	**149293**
H	48m N	Unspecified Tank	1958	129894
F	95m NW	Tanks	1949 - 1952	136817
F	128m NW	Gas Works	1949 - 1952	147827
F	129m NW	Gas Works	1949 - 1952	145203
F	134m NW	Tanks	1931 - 1958	134997
F	134m NW	Gasometers	1908 - 1922	147538
F	135m NW	Gasometer	1891 - 1952	146675
F	136m NW	Gasometer	1893	146069
F	139m NW	Unspecified Tank	1958 - 1964	128286
F	141m NW	Gasometer	1949 - 1952	139782
F	141m N	Gasometer	1891 - 1893	142311
F	144m N	Unspecified Tank	1891	116028
F	146m N	Unspecified Tank	1964	129536
F	146m N	Gasometer	1949 - 1952	137884
F	146m N	Unspecified Tank	1958	141682
F	146m N	Gasometer	1949 - 1952	146935
F	149m N	Unspecified Tank	1958 - 1964	141504
F	158m N	Gas Works	1952	145819
F	160m N	Unspecified Tank	1958	123707

ID	Location	Land use	Dates present	Group ID
F	160m N	Gasometer	1952	122698
F	173m NW	Unspecified Tank	1891	116027
F	178m N	Unspecified Tank	1958	135369
F	178m N	Unspecified Tank	1964	140262
B	188m SE	Unspecified Tank	1891	116004
L	198m NW	Tanks	1952	122840
L	212m NW	Tanks	1990	106862
O	213m NW	Unspecified Tank	1891	116023
L	216m NW	Tanks	1963 - 1990	135076
O	219m NW	Unspecified Tank	1891	116024
L	221m W	Unspecified Tank	1958	116016
L	223m W	Unspecified Tank	1908 - 1922	145358
O	228m NW	Tanks	1891	106863
O	231m NW	Unspecified Tank	1891	116026
O	231m NW	Unspecified Tank	1891	116025
M	247m N	Gas Works	1949 - 1952	134935
B	263m SE	Unspecified Tank	1908	116003
L	264m W	Unspecified Tank	1891	116014
B	281m E	Unspecified Tank	1891	116001
B	305m E	Unspecified Tank	1891	116002
V	314m NW	Unspecified Tank	1963 - 1964	141033
M	316m N	Gas Works	1952	141447
V	318m NW	Unspecified Tank	1952	139714
V	319m NW	Unspecified Tank	1952	135439
B	385m SE	Unspecified Tank	1993 - 1996	124477
AA	398m NE	Tanks	1891	106865
M	407m N	Tanks	1931	123501
M	407m N	Gasometers	1908 - 1952	124913

ID	Location	Land use	Dates present	Group ID
AB	412m W	Unspecified Tank	1952 - 1958	127833
AB	413m W	Unspecified Tank	1952	135035
M	413m N	Gasometer	1952	108527
M	414m N	Tanks	1958 - 1964	130064
Q	419m W	Unspecified Tank	1949	116005
M	421m N	Gasometer	1952	108525
Q	427m W	Unspecified Tank	1949 - 1964	133849
AE	455m SE	Unspecified Tank	1908	115994

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**70**

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

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Gasometer**	**1891**	**59721**
A	**On site**	**Electricity Substation**	**1970**	**62196**
A	**On site**	**Gas Work**	**1893 - 1922**	**64181**
A	**On site**	**Electricity Substation**	**1984**	**67824**
A	**On site**	**Gasometer**	**1893 - 1970**	**67831**
A	**On site**	**Gasometer**	**1891 - 1970**	**68352**
A	**On site**	**Gasometer**	**1949 - 1952**	**71892**
A	**On site**	**Gas Works**	**1970**	**74802**
A	**On site**	**Gasometers**	**1908 - 1922**	**76658**
A	**On site**	**Gasometer**	**1949 - 1952**	**76759**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Gasometer**	**1891**	**78215**
A	**On site**	**Gas Works**	**1949 - 1952**	**78529**
A	**On site**	**Gasometer**	**1949 - 1970**	**80243**
A	**On site**	**Corporation Gas Works**	**1891**	**81629**
A	**On site**	**Gasometers**	**1893**	**83216**
A	**On site**	**Gasometer**	**1891**	**83973**
A	**On site**	**Electricity Substation**	**1989 - 1994**	**84672**
A	4m W	Electricity Substation	1970 - 1989	80781
A	23m W	Electricity Substation	1984	76742
A	31m W	Electricity Substation	1993 - 1994	65101
D	73m E	Electricity Substation	1952 - 1994	64598
D	74m E	Electricity Substation	1952	78153
F	128m NW	Gas Works	1949 - 1952	65382
F	129m NW	Gas Works	1949 - 1952	76664
F	134m NW	Gasometers	1908 - 1922	72342
F	135m NW	Gasometer	1891 - 1952	79302
F	136m NW	Gasometer	1893	67441
F	141m N	Gasometer	1891	75716
F	143m N	Gasometer	1893	66162
F	146m N	Gasometer	1949 - 1952	64144
F	146m N	Gasometer	1949 - 1952	65786
F	158m N	Gas Works	1952	64023
F	160m N	Gasometer	1952	73746
L	229m W	Electricity Substation	1949 - 1952	69035
L	230m W	Electricity Substation	1949	64848
L	237m W	Electricity Substation	1952	66277
M	247m N	Gas Works	1949 - 1952	68681
8	262m E	Electricity Substation	1996	62195

ID	Location	Land use	Dates present	Group ID
9	293m S	Electricity Substation	1984 - 1995	79779
M	316m N	Gas Works	1952	71956
S	328m SE	Electricity Substation	1988 - 1995	66419
M	339m N	Electricity Substation	1990 - 1993	71347
Z	358m SW	Electricity Substation	1953	72139
Z	359m SW	Electricity Substation	1948 - 1980	65345
Z	362m SW	Electricity Substation	1986 - 1992	70345
Q	399m W	Electricity Substation	1990 - 1995	72645
M	407m N	Gasometers	1908 - 1952	78233
AC	410m SE	Electricity Substation	1951 - 1953	68562
AC	410m SE	Electricity Substation	1967	85080
AC	411m SE	Electricity Substation	1948	82960
M	413m N	Gasometer	1952	59720
M	421m N	Gasometer	1952	59718
W	425m W	Electricity Substation	1990	82431
W	429m W	Electricity Substation	1949 - 1952	71824
W	429m W	Electricity Substation	1949 - 1995	74729
AC	435m SE	Electricity Substation	1948 - 1988	69737
AC	435m SE	Electricity Substation	1994 - 1995	77530
AC	439m SE	Electricity Substation	1908 - 1951	64523
AC	447m SE	Electricity Substation	1983	68145
AC	447m SE	Electricity Substation	1978	81137
AC	447m SE	Electricity Substation	1991	84212
AF	450m NW	Electricity Substation	1992 - 1993	64762
AF	452m NW	Electricity Substation	1968 - 1989	84374
AE	476m SE	Gas Maintenance Department	1908 - 1922	75842
AE	480m SE	Gas Maintenance Department	1893	71565
AK	485m SW	Electricity Substation	1948 - 1992	68894

ID	Location	Land use	Dates present	Group ID
AK	486m SW	Electricity Substation	1980	74220
AI	488m S	Electricity Substation	1988	62189
AK	493m SW	Electricity Substation	1953	62197
AI	493m S	Electricity Substation	1995	62190

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	**0**

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	**42**

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

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
D	17m SE	Garage	1993 - 1994	25631
D	17m SE	Garage	1989	23881
E	17m SE	Garage	1989	21025
E	18m SE	Garage	1993 - 1994	27751
E	18m SE	Garage	1984	22671
E	20m SE	Garage	1970	21146
G	36m E	Garage	1958	25337

ID	Location	Land use	Dates present	Group ID
G	36m E	Garage	1964 - 1989	26144
G	36m E	Garage	1993 - 1994	24556
G	37m E	Garage	1984	23898
I	72m W	Garage	1990 - 1995	25034
I	74m W	Garage	1990	20982
N	145m S	Garage	1995	22760
N	146m S	Garage	1953 - 1988	24669
N	146m S	Garage	1984	23099
F	151m N	Garage	1952 - 1964	26541
F	152m N	Garage	1952 - 1958	26069
R	197m SW	Garage	1952 - 1958	25678
R	197m SW	Garage	1952	21174
L	263m W	Garage	1990	24926
S	266m S	Garage	1953 - 1967	26994
S	267m S	Garage	1953 - 1963	27557
S	289m S	Garage	1965 - 1967	25022
S	310m S	Garage	1953 - 1967	26523
S	311m S	Garage	1984	21085
S	311m S	Garage	1953 - 1963	25431
S	324m S	Garage	1953	20729
S	324m S	Garage	1953 - 1963	25549
X	326m S	Garage	1963 - 1988	26869
X	327m S	Garage	1995	23135
M	334m N	Carriage Shed	1893 - 1931	26079
M	334m N	Carriage Shed	1891	21654
M	339m N	Carriage Shed	1949	23594
AB	432m W	Garage	1990 - 1995	25612
AB	440m W	Garage	1990	21627

ID	Location	Land use	Dates present	Group ID
AH	476m SW	Garage	1953	23565
AI	478m S	Garage	1995	22436
AB	482m W	Garage	1990	20708
AB	483m W	Garage	1995	23859
AB	483m W	Garage	1990	21257
Q	494m W	Garage	1963 - 1964	27831
AH	494m SW	Garage	1948 - 1951	26197

This data is sourced from Ordnance Survey / Groundsure.

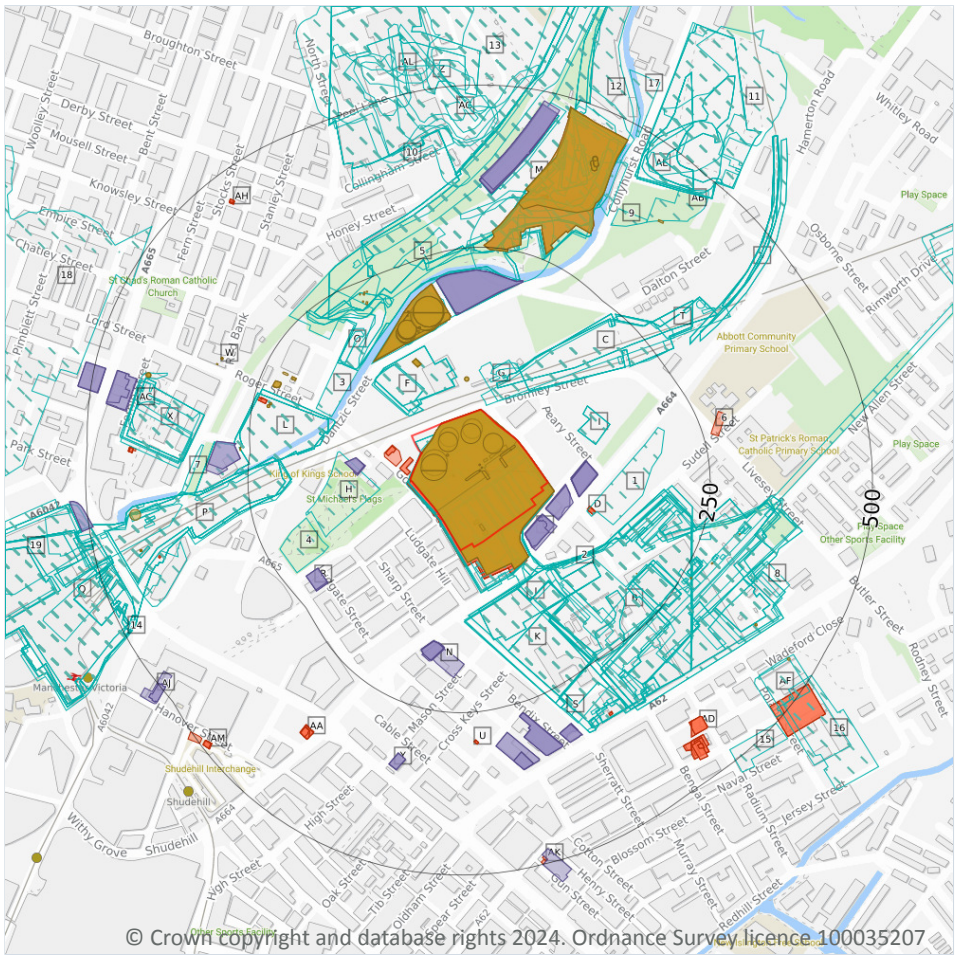
1.6 Historical military land

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	387

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 35 >**

ID	Location	Land Use	Date	Group ID
A	On site	Gasometer	1921	857096
A	On site	Gasometer	1921	885946
A	On site	Gasometer	1921	904595

ID	Location	Land Use	Date	Group ID
A	On site	Gasometer	1906	857096
A	On site	Gasometer	1906	885946
A	On site	Gasometer	1906	904595
A	On site	Gas Works	1921	898774
A	On site	Unspecified Commercial/Industrial	1921	899114
A	On site	Gas Works	1906	871049
A	On site	Unspecified Commercial/Industrial	1891	900580
A	On site	Unspecified Tank	1891	868883
A	On site	Unspecified Tank	1891	924769
A	On site	Unspecified Tanks	1891	983548
A	On site	Unspecified Tank	1891	825281
A	On site	Unspecified Tanks	1938	967707
A	On site	Unspecified Tank	1938	936967
A	On site	Unspecified Tank	1938	965032
A	On site	Unspecified Commercial/Industrial	1938	855454
A	On site	Unspecified Tank	1933	936967
A	On site	Unspecified Tank	1933	965032
A	On site	Unspecified Tank	1933	825275
A	On site	Unspecified Commercial/Industrial	1933	855454
A	On site	Gasometer	1851	873568
A	On site	Gas Works	1851	985416
A	On site	Unspecified Tanks	1971	920274
A	On site	Gas Works	1971	933471
A	On site	Gasometer	1971	882554
A	On site	Unspecified Tanks	1956	951765
A	On site	Railway Sidings	1956	990431
A	On site	Unspecified Commercial/Industrial	1956	893063
A	On site	Unspecified Commercial/Industrial	1956	888742

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Depot**	**1988**	**943169**
A	**On site**	**Unspecified Tanks**	**1978**	**901396**
A	**On site**	**Gas Works**	**1978**	**979009**
A	**On site**	**Gasometer**	**1978**	**855772**
A	**On site**	**Gas Works**	**1985**	**979009**
A	**On site**	**Unspecified Depot**	**1994**	**943169**
A	**On site**	**Gas Works**	**1923**	**898774**
A	**On site**	**Unspecified Commercial/Industrial**	**1923**	**852600**
A	**On site**	**Gasometer**	**1923**	**904595**
A	**On site**	**Gasometer**	**1923**	**885946**
A	**On site**	**Gasometer**	**1923**	**857096**
B	**On site**	**Railway Sidings**	**1921**	**960473**
B	**On site**	**Unspecified Commercial/Industrial**	**1921**	**945036**
B	**On site**	**Railway Sidings**	**1906**	**960473**
B	**On site**	**Railway Sidings**	**1891**	**952502**
B	**On site**	**Railway Sidings**	**1938**	**960473**
B	**On site**	**Railway Sidings**	**1933**	**960473**
B	**On site**	**Railway Sidings**	**1923**	**960473**
C	10m N	Railway Sidings	1891	966175
C	27m N	Railway Sidings	1923	938097
F	30m NW	Rubber Works	1938	970692
F	30m NW	Rubber Works	1933	970692
F	31m NW	Rubber Works	1923	963246
F	37m NW	Unspecified Works	1978	866997
F	37m NW	Unspecified Works	1985	890872
C	42m N	Railway Sidings	1906	984232
C	42m N	Railway Sidings	1938	899799
C	42m N	Railway Sidings	1933	899799

ID	Location	Land Use	Date	Group ID
C	42m N	Railway Sidings	1921	984232
G	45m N	Railway Building	1923	820409
F	47m NW	Unspecified Works	1988	885381
F	47m NW	Unspecified Works	1994	885381
H	49m W	Grave Yard	1851	817297
G	58m N	Unspecified Ground Workings	1956	800626
G	59m N	Railway Building	1923	820408
C	71m NE	Railway Sidings	1971	891110
C	71m NE	Railway Sidings	1956	915512
C	71m NE	Railway Sidings	1978	891110
C	71m NE	Railway Sidings	1985	891110
1	74m E	Bus Depot	1978	832317
B	80m SE	Unspecified Depot	1985	818411
B	81m SE	Railway Sidings	1956	988070
I	84m NE	Police Station	1988	944528
I	84m NE	Police Station	1985	944528
I	84m NE	Police Station	1994	944528
J	85m S	Railway Building	1971	893090
J	85m S	Railway Building	1978	863970
J	85m S	Railway Building	1985	964524
B	87m SE	Unspecified Commercial/Industrial	1906	945036
K	88m S	Goods Shed	1923	856754
K	88m S	Goods Shed	1921	856754
K	90m S	Goods Station	1938	948848
K	90m S	Goods Station	1933	948848
B	91m SE	Railway Sidings	1971	893733
B	91m SE	Railway Sidings	1978	962506
B	91m SE	Railway Sidings	1985	962506

ID	Location	Land Use	Date	Group ID
B	94m SE	Railway Sidings	1851	929380
2	99m SE	Railway Building	1938	820396
B	112m SE	Unspecified Commercial/Industrial	1891	848669
L	120m W	Unspecified Works	1971	849948
L	120m W	Iron Works	1956	936332
L	120m W	Unspecified Works	1978	919630
L	120m W	Unspecified Works	1985	988311
B	120m SE	Railway Building	1851	936143
3	122m NW	Unspecified Commercial/Industrial	1923	796751
F	127m NW	Unspecified Commercial/Industrial	1923	877652
L	129m W	Iron Works	1938	876520
L	129m W	Iron Works	1931	933061
L	129m W	Iron Works	1916	930264
L	129m W	Iron Works	1906	851941
L	129m W	Iron Works	1923	933061
M	130m NW	Railway Sidings	1923	2367776
F	130m NW	Unspecified Commercial/Industrial	1956	849656
B	132m E	Railway Building	1956	820415
F	132m NW	Unspecified Tank	1906	940246
F	132m NW	Unspecified Tank	1891	940246
F	132m NW	Unspecified Tank	1938	940246
F	132m NW	Unspecified Tank	1933	940246
F	132m NW	Unspecified Tank	1921	940246
F	132m NW	Unspecified Tank	1923	940246
B	133m E	Railway Buildings	1971	890026
B	133m E	Railway Buildings	1978	904671
B	133m E	Railway Buildings	1985	976778
M	134m NW	Railway Sidings	1938	2367776

ID	Location	Land Use	Date	Group ID
M	134m NW	Railway Sidings	1933	2367776
M	134m NW	Railway Sidings	1921	2367776
M	134m NW	Railway Sidings	1906	2367776
F	139m N	Unspecified Tank	1906	901711
F	139m N	Unspecified Tank	1891	901711
F	139m N	Unspecified Tank	1938	883812
F	139m N	Unspecified Tanks	1933	911005
F	139m N	Unspecified Tanks	1921	889282
F	139m N	Unspecified Tank	1923	877926
F	140m NW	Unspecified Tanks	1956	952176
K	142m SE	Goods Station	1971	907126
K	142m SE	Goods Station	1956	907126
K	142m SE	Goods Station	1978	910356
K	142m SE	Railway Building	1985	820394
F	150m N	Unspecified Depot	1988	951202
F	150m N	Unspecified Depot	1978	887857
F	150m N	Unspecified Depot	1985	951202
F	150m N	Unspecified Depot	1994	951202
O	152m NW	Refuse Heap	1938	944667
O	152m NW	Refuse Heap	1933	944667
O	153m NW	Unspecified Ground Workings	1921	905219
B	162m E	Railway Building	1923	925478
4	163m SW	Disused Grave Yard	1978	831119
B	164m E	Railway Building	1956	952415
B	179m SE	Fire Station	1988	925390
B	179m SE	Fire Station	1994	925390
B	180m SE	Railway Building	1923	820428
P	183m W	Railway Sidings	1923	940408

ID	Location	Land Use	Date	Group ID
Q	183m W	Railway Sidings	1971	858586
Q	183m W	Railway Sidings	1956	858586
Q	183m W	Railway Sidings	1988	894545
Q	183m W	Railway Sidings	1978	975236
Q	183m W	Railway Sidings	1985	894545
Q	183m W	Railway Sidings	1994	894545
B	185m E	Railway Building	1971	978761
B	185m E	Railway Building	1978	856971
B	189m SE	Goods Shed	1921	912383
B	190m SE	Goods Station	1906	821663
B	190m SE	Goods Shed	1938	923020
B	190m SE	Goods Shed	1933	923020
B	190m SE	Goods Shed	1923	923020
B	191m SE	Railway Building	1971	991623
B	191m SE	Railway Building	1956	991623
B	191m SE	Railway Building	1978	886595
B	191m SE	Railway Building	1985	851516
P	192m W	Railway Sidings	1938	856860
P	192m W	Railway Sidings	1931	856860
P	192m W	Railway Sidings	1916	866321
P	192m W	Railway Sidings	1906	866321
B	192m E	Railway Building	1923	844951
M	194m N	Unspecified Mill	1938	977776
O	196m NW	Unspecified Ground Workings	1988	878030
O	196m NW	Unspecified Ground Workings	1994	878030
C	197m NE	Railway Building	1923	820416
O	197m NW	Unspecified Ground Workings	1956	952523
M	207m NW	Railway Sidings	1971	2367776

ID	Location	Land Use	Date	Group ID
M	207m NW	Railway Sidings	1956	2367776
M	207m NW	Railway Sidings	1988	2367776
M	207m NW	Railway Sidings	1978	2367776
M	207m NW	Railway Sidings	1985	2367776
M	208m NW	Railway Sidings	1891	847105
M	230m N	Unspecified Ground Workings	1988	991693
M	230m N	Unspecified Ground Workings	1994	991693
B	231m E	Railway Sidings	1956	988070
B	231m E	Railway Sidings	1968	844444
B	232m E	Railway Sidings	1978	962506
5	233m N	Unspecified Ground Workings	1891	860688
M	243m N	Unspecified Ground Workings	1971	951665
M	243m N	Unspecified Ground Workings	1956	951665
M	243m N	Unspecified Ground Workings	1978	959962
M	243m N	Unspecified Ground Workings	1985	991693
B	244m SE	Railway Buildings	1891	833665
M	244m N	Unspecified Mill	1921	939053
M	244m N	Unspecified Mill	1906	939053
M	244m N	Unspecified Mill	1933	939053
M	244m N	Unspecified Mill	1923	939053
B	244m SE	Railway Station	1851	822944
B	248m SE	Railway Building	1971	887537
B	248m SE	Railway Building	1956	887537
B	248m SE	Railway Building	1978	873626
B	248m E	Railway Building	1956	820427
B	248m SE	Railway Building	1985	987455
B	251m SE	Unspecified Commercial/Industrial	1923	911009
M	251m N	Unspecified Mill	1891	946883

ID	Location	Land Use	Date	Group ID
O	251m NW	Railway Building	1906	858516
O	251m NW	Railway Building	1938	925849
O	251m NW	Railway Building	1923	968107
B	251m E	Good Station	1921	797870
B	251m E	Railway Building	1938	894084
B	251m E	Railway Building	1933	894084
B	252m E	Goods Station	1923	821664
B	254m SE	Railway Building	1938	991355
B	254m SE	Railway Building	1923	862543
B	254m E	Railway Building	1956	894084
B	254m E	Railway Building	1968	894084
B	256m SE	Railway Building	1938	946193
B	261m SE	Railway Building	1985	966505
B	265m SE	Railway Building	1923	820429
M	267m N	Corn Mill	1851	823147
O	272m NW	Railway Building	1923	820407
T	277m NE	Railway Sidings	1988	891110
T	277m NE	Railway Sidings	1994	895163
B	278m E	Railway Building	1923	990168
B	279m E	Railway Building	1938	969824
M	279m NW	Railway Sidings	1994	2367776
S	284m S	Railway Building	1938	820395
B	289m SE	Unspecified Commercial/Industrial	1956	939440
B	289m E	Railway Building	1891	820426
M	295m N	Unspecified Ground Workings	1891	985276
B	301m E	Railway Building	1923	965489
B	302m E	Railway Building	1938	927513
V	302m NE	Tunnel	1956	987748

ID	Location	Land Use	Date	Group ID
V	302m NE	Tunnel	1978	863724
V	302m NE	Tunnel	1968	987748
B	302m E	Railway Building	1956	879339
B	303m SE	Police Station	1851	832595
M	305m N	Unspecified Ground Workings	1891	986355
S	310m SE	Railway Building	1956	924812
B	310m E	Railway Building	1891	853512
S	310m SE	Railway Building	1956	937629
S	314m SE	Railway Building	1971	924812
S	314m SE	Railway Building	1978	952803
S	314m SE	Railway Building	1985	967480
V	317m NE	Tunnel	1985	904090
V	317m NE	Tunnel	1991	904090
B	317m SE	Potato Shed	1968	802280
B	319m E	Unspecified Works	1968	830453
S	320m SE	Railway Building	1971	992000
S	320m SE	Railway Building	1978	962352
S	320m SE	Railway Building	1985	985358
B	321m SE	Railway Building	1971	847949
B	321m SE	Railway Building	1978	862044
B	321m SE	Railway Building	1985	948508
7	321m W	Railway Building	1894	820406
X	321m W	Unspecified Works	1971	978140
X	321m W	Unspecified Works	1988	870906
X	321m W	Unspecified Works	1978	932157
X	321m W	Unspecified Works	1985	870906
S	325m SE	Railway Building	1956	940179
T	325m NE	Railway Building	1923	820417

ID	Location	Land Use	Date	Group ID
X	328m W	Unspecified Commercial/Industrial	1938	905224
B	329m SE	Railway Building	1956	965368
M	331m N	Carriage Shed	1906	986353
M	331m N	Carriage Shed	1938	986353
M	331m N	Carriage Shed	1933	986353
M	331m N	Carriage Shed	1921	986353
M	331m N	Carriage Shed	1923	986353
S	332m SE	Railway Building	1938	940179
M	332m N	Unspecified Ground Workings	1933	947322
M	332m N	Unspecified Heap	1938	804005
B	337m E	Railway Building	1956	820414
M	337m N	Railway Buildings	1921	925159
M	337m N	Railway Buildings	1906	925159
M	337m N	Railway Buildings	1938	925159
M	337m N	Railway Buildings	1933	925159
M	337m N	Railway Buildings	1923	925159
X	337m W	Unspecified Commercial/Industrial	1931	845927
X	339m W	Unspecified Commercial/Industrial	1916	973762
X	339m W	Unspecified Commercial/Industrial	1923	845927
M	341m N	Railway Building	1891	820410
M	342m N	Railway Building	1971	893985
M	342m N	Railway Building	1978	928950
M	345m N	Railway Buildings	1891	931725
T	345m NE	Unspecified Tank	1956	825280
Z	346m N	Brick Works	1956	2365649
T	346m NE	Railway Buildings	1923	833664
M	346m N	Railway Buildings	1956	955921
8	346m E	Glass Works	1851	797985

ID	Location	Land Use	Date	Group ID
9	348m NE	Sawmill	1851	808369
Q	353m W	Railway Sidings	1894	918058
M	356m NE	Dye Works	1851	833968
Z	364m N	Unspecified Ground Workings	1933	2365844
Z	364m N	Unspecified Ground Workings	1921	2365844
Z	364m N	Unspecified Ground Workings	1906	2365844
Z	364m N	Brick Works	1938	2365649
Z	364m N	Brick Works	1933	2365649
Z	364m N	Brick Works	1921	2365649
Z	364m N	Brick Works	1906	2365649
Q	366m W	Unspecified Commercial/Industrial	1923	796753
V	376m NE	Tunnel	1923	876866
V	376m NE	Tunnel	1938	876866
V	376m NE	Tunnel	1933	876866
V	376m NE	Tunnel	1921	876866
V	376m NE	Tunnel	1906	876866
M	376m N	Railway Building	1985	937114
AB	385m NE	Dye Works	1851	833969
Q	387m W	Railway Building	1985	925125
10	388m NW	Brewery	1891	822709
AC	388m W	Unspecified Ground Workings	1851	800622
M	389m N	Railway Buildings	1938	861217
M	389m N	Railway Buildings	1933	861217
Q	390m W	Railway Building	1971	962973
M	392m N	Railway Building	1921	936709
M	392m N	Railway Building	1906	936709
M	392m N	Railway Building	1938	936709
M	392m N	Railway Building	1933	936709

ID	Location	Land Use	Date	Group ID
M	392m N	Railway Building	1923	936709
Q	398m W	Railway Building	1931	871716
Q	398m W	Railway Building	1916	928990
Q	399m W	Railway Building	1923	820404
M	402m N	Unspecified Tanks	1921	877752
M	402m N	Unspecified Tanks	1906	877752
M	402m N	Unspecified Tanks	1938	966392
M	402m N	Unspecified Tanks	1933	966392
M	402m N	Unspecified Tank	1923	825279
M	404m N	Railway Building	1923	820413
Z	407m N	Clay Pit	1923	884437
M	412m N	Unspecified Tanks	1921	890116
M	412m N	Unspecified Tanks	1906	890116
M	412m N	Unspecified Tanks	1938	890116
M	412m N	Unspecified Tanks	1933	890116
M	412m N	Unspecified Tanks	1923	890116
Z	412m N	Unspecified Pit	1933	840530
Q	412m W	Railway Building	1931	820405
Q	415m W	Railway Building	1931	990567
Q	415m W	Railway Building	1916	876678
Q	415m W	Railway Building	1923	989904
Z	416m N	Unspecified Ground Workings	1956	2365844
AE	430m NE	Unspecified Ground Workings	1938	961317
AE	430m NE	Unspecified Ground Workings	1933	961317
AE	430m NE	Unspecified Ground Workings	1921	869797
AE	430m NE	Finishing Works	1938	848722
AE	431m NE	Finishing Works	1921	977342
AE	431m NE	Finishing Works	1906	977342

ID	Location	Land Use	Date	Group ID
AE	431m NE	Finishing Works	1933	931261
AF	432m SE	Unspecified Mill	1923	810299
M	432m N	Railway Building	1923	820412
AF	433m SE	Unspecified Works	1968	848216
AE	443m NE	Unspecified Heap	1906	904688
AE	443m NE	Unspecified Heap	1923	966573
Z	444m N	Railway Sidings	1906	970573
AG	447m N	Clay Pit	1921	884437
11	450m NE	Unspecified Ground Workings	1891	847768
AE	454m NE	Unspecified Ground Workings	1971	852458
AE	454m NE	Unspecified Ground Workings	1956	856376
AE	454m NE	Unspecified Ground Workings	1988	852458
AE	454m NE	Unspecified Ground Workings	1978	852458
AE	454m NE	Unspecified Ground Workings	1985	852458
AE	454m NE	Unspecified Ground Workings	1994	852458
AG	455m N	Unspecified Heap	1956	804009
M	462m N	Railway Building	1923	916238
12	465m NE	Unspecified Commercial/Industrial	1923	2367045
13	465m N	Unspecified Ground Workings	1938	2365844
M	466m N	Railway Building	1923	916238
Q	466m W	Railway Sidings	1938	965979
Q	466m W	Railway Sidings	1931	965979
Q	466m W	Railway Sidings	1916	869948
Q	466m W	Railway Sidings	1906	869948
Q	468m W	Railway Sidings	1923	896600
AI	472m W	Gravel Yard	1851	834691
AI	472m W	Railway Station	1938	955531
AI	472m W	Railway Station	1931	955531

ID	Location	Land Use	Date	Group ID
AI	472m W	Railway Station	1916	850180
AI	472m W	Railway Station	1906	850180
AI	473m W	Railway Station	1923	982510
Q	474m W	Railway Building	1894	820403
AI	475m W	Railway Station	1971	933110
AI	475m W	Railway Station	1988	946558
AI	475m W	Railway Station	1978	848398
AI	475m W	Railway Station	1985	946558
AI	475m W	Railway Station	1956	944542
14	478m SW	Railway Building	1923	820398
AL	480m N	Railway Sidings	1923	943576
15	482m SE	Unspecified Depot	1968	818420
16	483m SE	Unspecified Works	1985	849231
AL	484m N	Railway Sidings	1938	845026
AL	484m N	Railway Sidings	1933	941732
17	485m NE	Finishing Works	1923	795010
18	490m NW	Brick Field	1851	857249
Z	493m N	Unspecified Heap	1956	804008
19	495m W	Workhouse	1851	794985
AL	500m N	Railway Sidings	1921	898792

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**172**

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 35 >**

ID	Location	Land Use	Date	Group ID
A	On site	Gasometer	1893	137091
A	On site	Tanks	1893	143344
A	On site	Tanks	1893	128327
A	On site	Gasometers	1893	149293
A	On site	Gasometer	1908	137091
A	On site	Gasometers	1908	135222
A	On site	Unspecified Tank	1908	135459
A	On site	Gasometers	1922	135222
A	On site	Gasometer	1922	137091
A	On site	Unspecified Tank	1931	116015
A	On site	Unspecified Tank	1931	135459
A	On site	Tanks	1931	106838
A	On site	Unspecified Tank	1931	144572
A	On site	Gas Works	1952	147458
A	On site	Gasometer	1952	140097
A	On site	Gasometer	1952	138173
A	On site	Gasometer	1952	129138
A	On site	Tanks	1952	128060
A	On site	Tanks	1952	146176
A	On site	Tanks	1952	139306
A	On site	Tanks	1952	127628
A	On site	Tanks	1952	124911
A	On site	Tanks	1952	125888
A	On site	Gasometer	1949	140097
A	On site	Gasometer	1949	138173
A	On site	Gasometer	1949	129138
A	On site	Tanks	1949	149212
A	On site	Tanks	1949	127628

ID	Location	Land Use	Date	Group ID
A	On site	Tanks	1949	124911
A	On site	Tanks	1949	139306
A	On site	Tanks	1949	125888
A	On site	Gas Works	1949	147458
A	On site	Unspecified Tank	1964	144572
A	On site	Unspecified Tank	1964	145904
A	On site	Unspecified Tank	1964	135314
A	On site	Unspecified Tank	1964	138368
A	On site	Unspecified Tank	1964	128516
A	On site	Unspecified Tank	1964	140647
A	On site	Unspecified Tank	1958	129249
A	On site	Unspecified Tank	1958	144572
A	On site	Unspecified Tank	1958	145904
A	On site	Unspecified Tank	1958	135314
A	On site	Unspecified Tank	1958	128516
A	On site	Unspecified Tank	1958	138368
A	On site	Unspecified Tank	1958	144572
A	On site	Unspecified Tank	1958	145904
A	On site	Unspecified Tank	1958	138197
A	On site	Unspecified Tank	1958	139650
A	On site	Unspecified Tank	1958	128516
A	On site	Unspecified Tank	1958	138368
A	On site	Gas Works	1952	147458
A	On site	Gasometer	1952	137091
A	On site	Gasometer	1952	138173
A	On site	Gasometer	1952	131636
A	On site	Tanks	1952	122334
A	On site	Tanks	1952	126610

ID	Location	Land Use	Date	Group ID
A	**On site**	**Tanks**	**1952**	**141887**
A	**On site**	**Gas Works**	**1970**	**125307**
A	**On site**	**Gasometer**	**1970**	**131636**
A	**On site**	**Gasometer**	**1970**	**138173**
A	**On site**	**Gasometer**	**1970**	**137091**
A	**On site**	**Tanks**	**1949**	**141887**
A	**On site**	**Tanks**	**1949**	**122334**
A	**On site**	**Gasometer**	**1949**	**137091**
A	**On site**	**Gasometer**	**1949**	**138173**
A	**On site**	**Gasometer**	**1949**	**131636**
A	**On site**	**Tanks**	**1949**	**126610**
A	**On site**	**Gas Works**	**1949**	**147458**
A	**On site**	**Gasometer**	**1891**	**138173**
A	**On site**	**Gasometer**	**1891**	**130378**
A	**On site**	**Gasometer**	**1891**	**108528**
A	**On site**	**Tanks**	**1891**	**143344**
A	**On site**	**Unspecified Tank**	**1891**	**116046**
A	**On site**	**Unspecified Tank**	**1891**	**116045**
A	**On site**	**Unspecified Tank**	**1891**	**116043**
A	**On site**	**Unspecified Tank**	**1891**	**116041**
A	**On site**	**Unspecified Tank**	**1891**	**116042**
A	**On site**	**Gasometer**	**1891**	**124649**
A	**On site**	**Unspecified Tank**	**1891**	**135459**
A	**On site**	**Gasometer**	**1891**	**124649**
A	**On site**	**Tanks**	**1891**	**126147**
A	**On site**	**Unspecified Tank**	**1891**	**116044**
G	48m N	Unspecified Tank	1958	129894
G	49m N	Unspecified Tank	1958	129894

ID	Location	Land Use	Date	Group ID
F	95m NW	Tanks	1952	136817
F	95m NW	Tanks	1949	136817
F	95m NW	Tanks	1952	136817
F	95m NW	Tanks	1949	136817
F	128m NW	Gas Works	1952	147827
F	128m NW	Gas Works	1949	147827
F	129m NW	Gas Works	1952	145203
F	129m NW	Gas Works	1949	145203
F	134m NW	Gasometers	1908	147538
F	134m NW	Gasometers	1922	147538
F	134m NW	Tanks	1931	134997
F	135m NW	Gasometer	1891	146675
F	136m NW	Gasometer	1893	146069
F	139m NW	Unspecified Tank	1958	128286
F	139m NW	Gasometer	1952	146675
F	139m NW	Gasometer	1949	146675
F	140m NW	Tanks	1958	134997
F	141m NW	Gasometer	1952	139782
F	141m NW	Gasometer	1949	139782
F	141m NW	Unspecified Tank	1964	128286
F	141m N	Gasometer	1891	142311
F	143m N	Gasometer	1893	142311
F	144m N	Unspecified Tank	1891	116028
F	146m N	Gasometer	1952	137884
F	146m N	Gasometer	1949	137884
F	146m N	Unspecified Tank	1964	129536
F	146m N	Unspecified Tank	1958	141682
F	146m N	Gasometer	1952	146935

ID	Location	Land Use	Date	Group ID
F	146m N	Gasometer	1949	146935
F	149m N	Unspecified Tank	1958	141504
F	149m N	Unspecified Tank	1964	141504
F	158m N	Gas Works	1952	145819
F	160m N	Unspecified Tank	1958	123707
F	160m N	Gasometer	1952	122698
F	173m NW	Unspecified Tank	1891	116027
F	178m N	Unspecified Tank	1958	135369
F	178m N	Unspecified Tank	1964	140262
B	188m SE	Unspecified Tank	1891	116004
L	198m NW	Tanks	1952	122840
L	199m NW	Tanks	1952	122840
L	212m NW	Tanks	1990	106862
O	213m NW	Unspecified Tank	1891	116023
L	216m NW	Tanks	1990	135076
L	217m NW	Tanks	1963	135076
L	217m NW	Tanks	1964	135076
O	219m NW	Unspecified Tank	1891	116024
L	221m W	Unspecified Tank	1958	116016
L	223m W	Unspecified Tank	1908	145358
L	223m W	Unspecified Tank	1922	145358
O	228m NW	Tanks	1891	106863
O	231m NW	Unspecified Tank	1891	116026
O	231m NW	Unspecified Tank	1891	116025
M	247m N	Gas Works	1952	134935
M	247m N	Gas Works	1949	134935
B	263m SE	Unspecified Tank	1908	116003
L	264m W	Unspecified Tank	1891	116014

ID	Location	Land Use	Date	Group ID
B	281m E	Unspecified Tank	1891	116001
B	305m E	Unspecified Tank	1891	116002
W	314m NW	Unspecified Tank	1963	141033
W	314m NW	Unspecified Tank	1964	141033
M	316m N	Gas Works	1952	141447
W	318m NW	Unspecified Tank	1952	139714
W	319m NW	Unspecified Tank	1952	135439
B	385m SE	Unspecified Tank	1996	124477
B	385m SE	Unspecified Tank	1993	124477
AB	398m NE	Tanks	1891	106865
M	407m N	Gasometers	1908	124913
M	407m N	Gasometers	1922	124913
M	407m N	Tanks	1931	123501
AC	412m W	Unspecified Tank	1952	127833
AC	412m W	Unspecified Tank	1958	127833
AC	413m W	Unspecified Tank	1952	135035
M	413m N	Gasometer	1952	108527
M	414m N	Gasometers	1952	124913
M	414m N	Gasometers	1949	124913
M	414m N	Tanks	1964	130064
M	414m N	Tanks	1958	130064
M	414m N	Tanks	1958	130064
Q	419m W	Unspecified Tank	1949	116005
M	421m N	Gasometer	1952	108525
Q	427m W	Unspecified Tank	1949	133849
Q	427m W	Unspecified Tank	1963	133849
Q	427m W	Unspecified Tank	1952	133849
Q	428m W	Unspecified Tank	1952	133849

ID	Location	Land Use	Date	Group ID
Q	428m W	Unspecified Tank	1949	133849
Q	428m W	Unspecified Tank	1964	133849
Q	428m W	Unspecified Tank	1958	133849
AF	455m SE	Unspecified Tank	1908	115994

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m **147**

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 35 >**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Gasometer**	**1893**	**67831**
A	**On site**	**Gas Work**	**1893**	**64181**
A	**On site**	**Gasometers**	**1893**	**83216**
A	**On site**	**Gas Work**	**1908**	**64181**
A	**On site**	**Gasometer**	**1908**	**67831**
A	**On site**	**Gasometers**	**1908**	**76658**
A	**On site**	**Gas Work**	**1922**	**64181**
A	**On site**	**Gasometers**	**1922**	**76658**
A	**On site**	**Gasometer**	**1922**	**67831**
A	**On site**	**Gas Works**	**1952**	**78529**
A	**On site**	**Gasometer**	**1952**	**71892**
A	**On site**	**Gasometer**	**1952**	**68352**
A	**On site**	**Gasometer**	**1952**	**76759**
A	**On site**	**Gasometer**	**1949**	**71892**
A	**On site**	**Gasometer**	**1949**	**68352**
A	**On site**	**Gasometer**	**1949**	**76759**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Gas Works**	**1949**	**78529**
A	**On site**	**Electricity Substation**	**1994**	**84672**
A	**On site**	**Electricity Substation**	**1993**	**84672**
A	**On site**	**Electricity Substation**	**1989**	**84672**
A	**On site**	**Gas Works**	**1952**	**78529**
A	**On site**	**Gasometer**	**1952**	**67831**
A	**On site**	**Gasometer**	**1952**	**68352**
A	**On site**	**Gasometer**	**1952**	**80243**
A	**On site**	**Gas Works**	**1970**	**74802**
A	**On site**	**Gasometer**	**1970**	**80243**
A	**On site**	**Gasometer**	**1970**	**68352**
A	**On site**	**Gasometer**	**1970**	**67831**
A	**On site**	**Electricity Substation**	**1970**	**62196**
A	**On site**	**Gasometer**	**1949**	**67831**
A	**On site**	**Gasometer**	**1949**	**68352**
A	**On site**	**Gasometer**	**1949**	**80243**
A	**On site**	**Gas Works**	**1949**	**78529**
A	**On site**	**Electricity Substation**	**1984**	**67824**
A	**On site**	**Gasometer**	**1891**	**68352**
A	**On site**	**Gasometer**	**1891**	**78215**
A	**On site**	**Gasometer**	**1891**	**59721**
A	**On site**	**Gasometer**	**1891**	**83973**
A	**On site**	**Corporation Gas Works**	**1891**	**81629**
A	**On site**	**Corporation Gas Works**	**1891**	**81629**
A	**On site**	**Gasometer**	**1891**	**83973**
A	4m W	Electricity Substation	1989	80781
A	4m W	Electricity Substation	1970	80781
A	23m W	Electricity Substation	1984	76742

ID	Location	Land Use	Date	Group ID
A	31m W	Electricity Substation	1994	65101
A	31m W	Electricity Substation	1993	65101
D	73m E	Electricity Substation	1994	64598
D	73m E	Electricity Substation	1993	64598
D	74m E	Electricity Substation	1952	78153
D	74m E	Electricity Substation	1984	64598
D	75m E	Electricity Substation	1989	64598
D	75m E	Electricity Substation	1952	64598
F	128m NW	Gas Works	1952	65382
F	128m NW	Gas Works	1949	65382
F	129m NW	Gas Works	1952	76664
F	129m NW	Gas Works	1949	76664
F	134m NW	Gasometers	1908	72342
F	134m NW	Gasometers	1922	72342
F	135m NW	Gasometer	1891	79302
F	136m NW	Gasometer	1893	67441
F	139m NW	Gasometer	1952	79302
F	139m NW	Gasometer	1949	79302
F	141m NW	Gasometer	1952	79302
F	141m NW	Gasometer	1949	79302
F	141m N	Gasometer	1891	75716
F	143m N	Gasometer	1893	66162
F	146m N	Gasometer	1952	64144
F	146m N	Gasometer	1949	64144
F	146m N	Gasometer	1952	65786
F	146m N	Gasometer	1949	65786
F	158m N	Gas Works	1952	64023
F	160m N	Gasometer	1952	73746

ID	Location	Land Use	Date	Group ID
L	229m W	Electricity Substation	1949	69035
L	229m W	Electricity Substation	1952	69035
L	230m W	Electricity Substation	1949	64848
L	237m W	Electricity Substation	1952	66277
M	247m N	Gas Works	1952	68681
M	247m N	Gas Works	1949	68681
6	262m E	Electricity Substation	1996	62195
U	293m S	Electricity Substation	1984	79779
U	293m S	Electricity Substation	1988	79779
U	294m S	Electricity Substation	1995	79779
M	316m N	Gas Works	1952	71956
S	328m SE	Electricity Substation	1988	66419
S	328m SE	Electricity Substation	1995	66419
M	339m N	Electricity Substation	1993	71347
M	340m N	Electricity Substation	1990	71347
AA	358m SW	Electricity Substation	1953	72139
AA	359m SW	Electricity Substation	1980	65345
AA	359m SW	Electricity Substation	1951	65345
AA	359m SW	Electricity Substation	1948	65345
AA	362m SW	Electricity Substation	1992	70345
AA	362m SW	Electricity Substation	1986	70345
AA	363m SW	Electricity Substation	1953	72139
Q	399m W	Electricity Substation	1990	72645
Q	400m W	Electricity Substation	1990	72645
Q	400m W	Electricity Substation	1995	72645
M	407m N	Gasometers	1908	78233
M	407m N	Gasometers	1922	78233
AD	410m SE	Electricity Substation	1967	85080

ID	Location	Land Use	Date	Group ID
AD	410m SE	Electricity Substation	1953	68562
AD	411m SE	Electricity Substation	1951	68562
AD	411m SE	Electricity Substation	1948	82960
AD	411m SE	Electricity Substation	1948	82960
AD	411m SE	Electricity Substation	1951	68562
M	413m N	Gasometer	1952	59720
M	414m N	Gasometers	1952	78233
M	414m N	Gasometers	1949	78233
M	421m N	Gasometer	1952	59718
X	425m W	Electricity Substation	1990	82431
X	429m W	Electricity Substation	1952	71824
X	429m W	Electricity Substation	1949	71824
X	429m W	Electricity Substation	1995	74729
X	429m W	Electricity Substation	1949	74729
X	429m W	Electricity Substation	1990	74729
X	429m W	Electricity Substation	1952	74729
AD	435m SE	Electricity Substation	1988	69737
AD	435m SE	Electricity Substation	1984	69737
AD	435m SE	Electricity Substation	1995	77530
AD	436m SE	Electricity Substation	1951	69737
AD	436m SE	Electricity Substation	1948	69737
AD	436m SE	Electricity Substation	1994	77530
AD	437m SE	Electricity Substation	1987	69737
AD	439m SE	Electricity Substation	1948	64523
AD	439m SE	Electricity Substation	1951	64523
AD	442m SE	Electricity Substation	1908	64523
AD	442m SE	Electricity Substation	1922	64523
AD	447m SE	Electricity Substation	1978	81137

ID	Location	Land Use	Date	Group ID
AD	447m SE	Electricity Substation	1983	68145
AD	447m SE	Electricity Substation	1991	84212
AH	450m NW	Electricity Substation	1993	64762
AH	450m NW	Electricity Substation	1992	64762
AH	450m NW	Electricity Substation	1993	64762
AH	452m NW	Electricity Substation	1968	84374
AH	452m NW	Electricity Substation	1989	84374
AF	476m SE	Gas Maintenance Department	1908	75842
AF	476m SE	Gas Maintenance Department	1922	75842
AF	480m SE	Gas Maintenance Department	1893	71565
AM	485m SW	Electricity Substation	1953	68894
AM	485m SW	Electricity Substation	1951	68894
AM	485m SW	Electricity Substation	1948	68894
AM	485m SW	Electricity Substation	1986	68894
AM	486m SW	Electricity Substation	1992	68894
AM	486m SW	Electricity Substation	1980	74220
AK	488m S	Electricity Substation	1988	62189
AM	493m SW	Electricity Substation	1953	62197
AK	493m S	Electricity Substation	1995	62190

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	74

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 35 >**

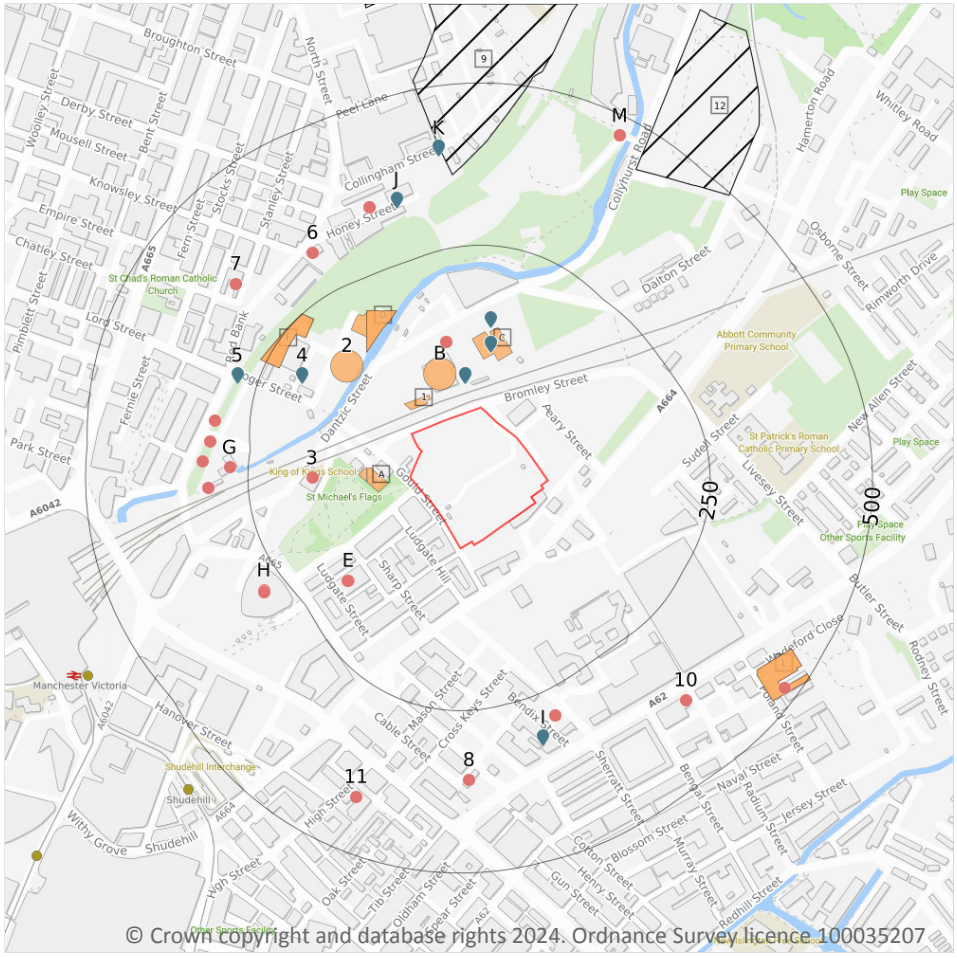
ID	Location	Land Use	Date	Group ID
D	17m SE	Garage	1994	25631
D	17m SE	Garage	1993	25631
D	17m SE	Garage	1989	23881
E	17m SE	Garage	1989	21025
E	18m SE	Garage	1994	27751
E	18m SE	Garage	1993	27751
E	18m SE	Garage	1984	22671
E	20m SE	Garage	1970	21146
D	36m E	Garage	1958	25337
D	36m E	Garage	1989	26144
D	36m E	Garage	1970	26144
D	36m E	Garage	1994	24556
D	36m E	Garage	1993	24556
D	36m E	Garage	1964	26144
D	36m E	Garage	1958	25337
D	37m E	Garage	1984	23898
H	72m W	Garage	1995	25034
H	72m W	Garage	1990	25034
H	74m W	Garage	1990	20982
N	145m S	Garage	1995	22760
N	146m S	Garage	1953	24669
N	146m S	Garage	1965	24669
N	146m S	Garage	1967	24669

ID	Location	Land Use	Date	Group ID
N	146m S	Garage	1984	23099
N	146m S	Garage	1988	24669
N	146m S	Garage	1963	24669
N	146m S	Garage	1953	24669
F	151m N	Garage	1952	26541
F	151m N	Garage	1964	26541
F	151m N	Garage	1958	26541
F	152m N	Garage	1958	26069
F	152m N	Garage	1952	26069
R	197m SW	Garage	1952	25678
R	197m SW	Garage	1958	25678
R	197m SW	Garage	1952	21174
L	263m W	Garage	1990	24926
L	264m W	Garage	1990	24926
S	266m S	Garage	1953	26994
S	266m S	Garage	1965	26994
S	266m S	Garage	1967	26994
S	267m S	Garage	1963	27557
S	267m S	Garage	1953	27557
S	289m S	Garage	1965	25022
S	289m S	Garage	1967	25022
S	310m S	Garage	1953	26523
S	310m S	Garage	1965	26523
S	310m S	Garage	1967	26523
S	311m S	Garage	1984	21085
S	311m S	Garage	1963	25431
S	311m S	Garage	1953	25431
S	324m S	Garage	1953	20729

ID	Location	Land Use	Date	Group ID
S	324m S	Garage	1963	25549
S	324m S	Garage	1953	25549
Y	326m S	Garage	1988	26869
Y	326m S	Garage	1963	26869
Y	327m S	Garage	1995	23135
M	334m N	Carriage Shed	1893	26079
M	334m N	Carriage Shed	1908	26079
M	334m N	Carriage Shed	1922	26079
M	334m N	Carriage Shed	1931	26079
M	334m N	Carriage Shed	1891	21654
M	339m N	Carriage Shed	1949	23594
AC	432m W	Garage	1990	25612
AC	433m W	Garage	1995	25612
AC	440m W	Garage	1990	21627
AJ	476m SW	Garage	1953	23565
AK	478m S	Garage	1995	22436
AC	482m W	Garage	1990	20708
AC	483m W	Garage	1995	23859
AC	483m W	Garage	1990	21257
Q	494m W	Garage	1964	27831
Q	494m W	Garage	1963	27831
AJ	494m SW	Garage	1951	26197
AJ	494m SW	Garage	1948	26197

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	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 65 >**

ID	Location	Details		
9	361m N	Site Address: Queens Road Tip - Land to South of Queens Road and North of Collingham Street, Cheetham, Manchester, Greater Manchester Licence Holder Address: -	Waste Licence: Yes Site Reference: F005,RD/LIC/241/82 Waste Type: Inert, Industrial, Commercial, Household, Special, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01/01/1974 Licence Surrender: -	Operator: H Evers Limited Licence Holder: Manchester City Council First Recorded 31/12/1955 Last Recorded: 31/12/1970
12	437m NE	Site Address: Sand Street, Collyhurst, Greater Manchester Licence Holder Address: -	Waste Licence: - Site Reference: F027 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded - Last Recorded: -

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

3.5 Historical waste sites

Records within 500m	13

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 65 >**

ID	Location	Address	Further Details	Date
1	34m NW	Site Address: N/A	Type of Site: Scrap Metal Works Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1969
A	34m W	Site Address: N/A	Type of Site: Breakers Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1984
B	45m N	Site Address: 204 Dantzic Street, MANCHESTER, Greater Manchester, M4 4DD	Type of Site: Waste Recycling Shed (Conversion) Planning application reference: 077598/FO/2005/N1 Description: Scheme comprises change of use of shed from warehouse to sorting shed for skip waste recycling. An application (ref: 077598/FO/2005/N1) for detailed planning permission was granted by Manchester C.C. Planning decision obtained Data source: Historic Planning Application Data Type: Point	-
A	67m W	Site Address: N/A	Type of Site: Breakers Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1990
C	74m N	Site Address: N/A	Type of Site: Scrap Metal Works Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1969
2	119m NW	Site Address: Hargreaves Street, Hargreaves Street, MANCHESTER, Greater Manchester, M4 4EJ	Type of Site: Waste Transfer Station Planning application reference: 54626 Description: Building to be used as a waste transfer station. Use of the land for storage of re-cycled materials for existing concrete business. Garage/workshop buildings and portable buildings relocated. An application (ref: 54626) for Detailed Planning permissn was submitted to Manchester C.C. on 12th June 1998. Data source: Historic Planning Application Data Type: Point	-

ID	Location	Address	Further Details	Date
D	143m NW	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1993
D	143m NW	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1994
D	164m NW	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1995
F	220m NW	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1989
F	220m NW	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1995
L	427m SE	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1967
L	427m SE	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1967

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

3.6 Licensed waste sites

Records within 500m **15**

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

Features are displayed on the Waste and landfill map on **page 65 >**

ID	Location	Details		
B	54m N	Site Name: Farlam Waste Management Ltd Site Address: Warford Street, Collyhurst, Manchester, M4 4DD Correspondence Address: Warford Street, Off Dantzic Street, Collyhurst, Manchester, M4 4DD	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FAR008 EPR reference: - Operator: Farlam Waste Management Ltd Waste Management licence No: 50461 Annual Tonnage: 0	Issue Date: 20/02/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
B	54m N	Site Name: Farlam Properties Ltd Site Address: Warford Street, Collyhurst, Manchester, Manchester, M4 4JJ Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 643891 EPR reference: EA/EPR/DP3098CF Operator: Farlam Properties Limited Waste Management licence No: 50118 Annual Tonnage: 24999	Issue Date: 27/08/2002 Effective Date: 27/08/2002 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
B	54m N	Site Name: Farlam Waste Management Ltd Site Address: Land/premises At, Warford Street, Collyhurst, Manchester, Manchester, M4 4DD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 651795 EPR reference: EA/EPR/YP3594CH Operator: Farlam Waste Management Limited Waste Management licence No: 50461 Annual Tonnage: 74999	Issue Date: 20/02/2007 Effective Date: 20/02/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired

ID	Location	Details		
C	99m N	Site Name: J Ryan & Co Ltd Site Address: Dulwich Street, Collyhurst, Manchester, M4 4JJ Correspondence Address: Pearl Environmental Services, 13, Middleton Road, Reddish, Stockport, Cheshire, SK5 6SG	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JR001 EPR reference: - Operator: J Ryan & Co Ltd Waste Management licence No: 50084 Annual Tonnage: 0	Issue Date: 15/03/2002 Effective Date: - Modified: 26/07/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
C	99m N	Site Name: J Ryan & Co Ltd Site Address: Dulwich Street, Collyhurst, Manchester, M4 4JJ Correspondence Address: Pearl Environmental Services, 13, Middleton Road, Reddish, Stockport, Cheshire, SK5 6SG	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JR001 EPR reference: - Operator: J Ryan & Co Ltd Waste Management licence No: 50084 Annual Tonnage: 0	Issue Date: 15/03/2002 Effective Date: - Modified: 26/07/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
C	99m N	Site Name: J Ryan & Co Ltd Site Address: Dulwich Street, Collyhurst, Manchester, M4 4JJ Correspondence Address: Brian Cook, Pearl Environmental Services, 13, Middleton Road, Reddish, Stockport, Cheshire, SK5 6SG	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JR001 EPR reference: - Operator: J Ryan & Co Ltd Waste Management licence No: 50084 Annual Tonnage: 0	Issue Date: 15/03/2002 Effective Date: - Modified: 26/07/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified

ID	Location	Details		
C	99m N	Site Name: J Ryan Site Address: Land/premises At, Dulwich Street, Collyhurst, Manchester, M4 4JJ Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JRC001 EPR reference: EA/EPR/WP3898CJ/T003 Operator: Ryan John Waste Management licence No: 50084 Annual Tonnage: 75000	Issue Date: 15/03/2002 Effective Date: 04/07/2007 Modified: 26/07/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
C	99m N	Site Name: J Ryan Site Address: Land/premises At, Dulwich Street, Collyhurst, Manchester, Manchester, M4 4JJ Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 640268 EPR reference: EA/EPR/WP3898CJ Operator: John Ryan Waste Management licence No: 50084 Annual Tonnage: 75000	Issue Date: 15/03/2002 Effective Date: 15/03/2002 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
C	136m N	Site Name: J Ryan & Co Site Address: Dulwich Street, Collyhurst, Manchester, M4 4JJ Correspondence Address: Pearl Environmental Services, 13, Middleton Road, Reddish, Stockport, Cheshire, SK5 6SG	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JR001 EPR reference: - Operator: J Ryan & Co Ltd Waste Management licence No: 50084 Annual Tonnage: 25000	Issue Date: 15/03/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
4	191m NW	Site Name: Placemix Ltd Transfer Station Site Address: Hargreaves Street, Manchester, Manchester, M4 4EJ Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 630063 EPR reference: EA/EPR/CP3998CM Operator: Placemix Limited Waste Management licence No: 50017 Annual Tonnage: 24900	Issue Date: 31/03/2000 Effective Date: 31/03/2000 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
5	283m NW	Site Name: Mobile Plant Site Address: Red Bank, Cheetham Hill, Manchester, M8 Correspondence Address: -	Type of Site: Mobile Plant Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MEL002 EPR reference: EA/EPR/LP3292ZH/S002 Operator: Mel Ltd Waste Management licence No: 65243 Annual Tonnage: 75000	Issue Date: 17/04/2002 Effective Date: - Modified: - Surrendered Date: Feb 6 2007 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered
I	315m S	Site Name: French Parts Uk Site Address: 35 - 39, Oldham Road, Manchester, Manchester, M4 5FG Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 643035 EPR reference: EA/EPR/TP3494CL Operator: Brendan J Kershaw & Winston Brown Waste Management licence No: 50328 Annual Tonnage: 0	Issue Date: 10/08/2004 Effective Date: 10/08/2004 Modified: - Surrendered Date: 10/08/2004 Expiry Date: - Cancelled Date: - Status: Surrendered
J	345m N	Site Name: Honey Street Transfer Station Site Address: 21-23, Honey Street, Collyhurst, Manchester, Manchester, M8 8RG Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 651225 EPR reference: EA/EPR/YP3498CV Operator: U K Skip Hire Limited Waste Management licence No: 50136 Annual Tonnage: 24999	Issue Date: 02/01/2003 Effective Date: 02/01/2003 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked

ID	Location	Details		
K	404m N	Site Name: Honey Street Transfer Station Site Address: 23, Honey Street, Collyhurst, Manchester, M8 8RG Correspondence Address: 28, Alnwick Drive, Bury, Lancashire, BL9 8BZ	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MBS001 EPR reference: - Operator: Manchester And Bury Skip Hire Ltd Waste Management licence No: 50136 Annual Tonnage: 0	Issue Date: 02/01/2003 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
K	404m N	Site Name: Honey Street Transfer Station Site Address: 23, Honey Street, Collyhurst, Manchester, M8 8RG Correspondence Address: 23, Honey Street, Collyhurst, Manchester, M8 8RG	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: UKS001 EPR reference: - Operator: Uk Skip Hire Ltd Waste Management licence No: 50136 Annual Tonnage: 0	Issue Date: 02/01/2003 Effective Date: 14/05/2005 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred

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

3.7 Waste exemptions

Records within 500m **27**

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 65 >**

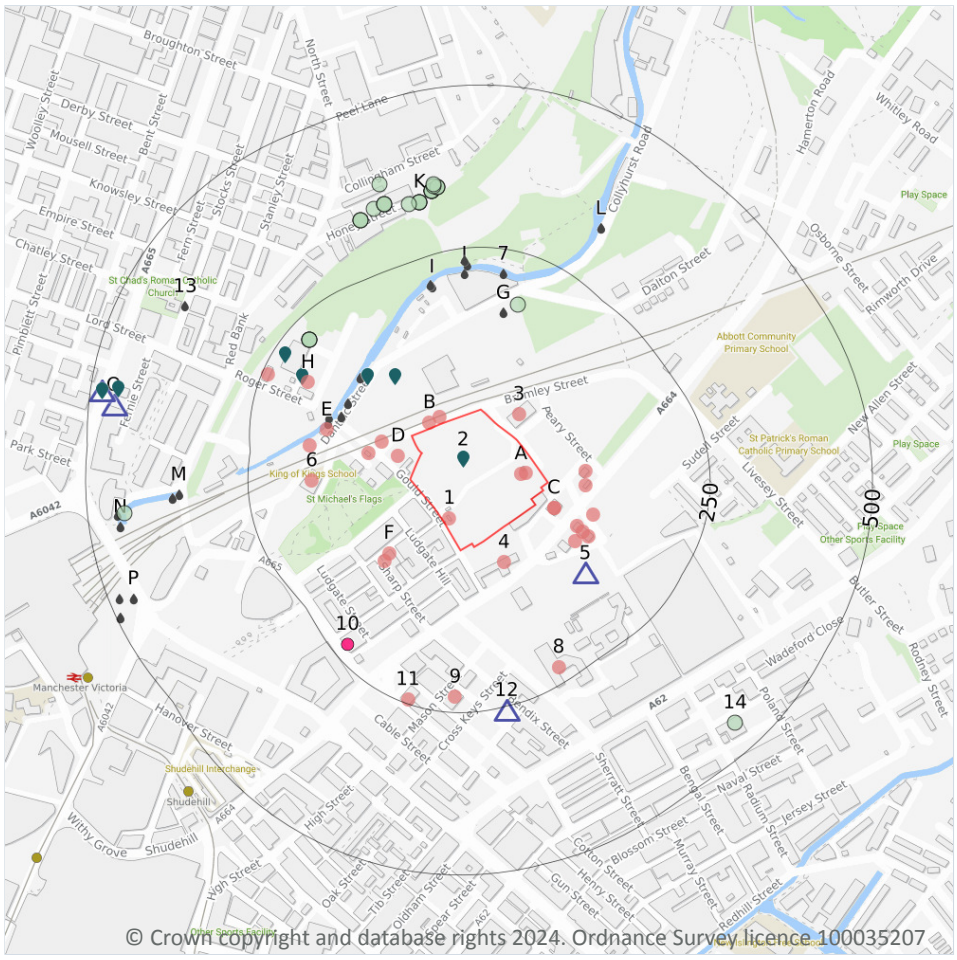
ID	Location	Site	Reference	Category	Sub-Category	Description
B	112m N	204 Dantzic Street Manchester M4 4dd	EPR/MF0901GD/A001	Treating waste exemption	Non-agricultural waste only	Recovery of scrap metal
B	112m N	204 Dantzic Street Manchester M4 4dd	EPR/MF0901GD/A001	Treating waste exemption	Non-agricultural waste only	Sorting mixed waste
3	152m W	204, M4 4dd	WEX167615	Storing waste exemption	Not on a farm	Storage of waste in a secure place

ID	Location	Site	Reference	Category	Sub-Category	Description
E	175m SW	New Century Hall, Corporation Street, Manchester, M4 4de	WEX086704	Using waste exemption	Not on a farm	Use of waste in construction
E	176m SW	23, New Mount Street, Manchester, M4 4de	WEX135218	Storing waste exemption	Not on a farm	Storage of waste in a secure place
G	279m W	Unit 11, 11 Red Bank Court, Manchester, M4 4hf	WEX107443	Storing waste exemption	Not on a farm	Storage of waste in a secure place
H	285m SW	-	EPR/RE5043GA/A001	Treating waste exemption	Non-agricultural waste only	Sorting and de-naturing of controlled drugs for disposal
H	287m SW	Bestway Panacea Healthcare Limited Details Available Upon Request	EPR/RE5643GX/A001	Treating waste exemption	Non-agricultural waste only	Sorting and de-naturing of controlled drugs for disposal
I	292m S	-	WEX280563	Using waste exemption	Not on a farm	Use of waste in construction
I	292m S	-	WEX280563	Treating waste exemption	Not on a farm	Screening and blending of waste
G	304m W	Ce Asset Management Ltd Arch 11 Red Bank Court Manchester M4 4hf	EPR/JF0703BC/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in a secure place
G	311m W	Ritter Manchester Unit 17 Red Bank Court Manchester M4 4hf	EPR/LE5149HL/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in a secure place
G	312m W	Arch 11 Red Bank Court Manchester M4 4hf	EA/EPR/VP3759YE/A001	Treating waste exemption	Non-agricultural waste only	Repair or refurbishment of WEEE
6	318m NW	2, Honey Street, Manchester, M8 8rg	WEX349623	Storing waste exemption	Not on a farm	Storage of waste in a secure place
G	321m W	Unit 11, Red Bank Court, Manchester, M4 4hf	EA/EPR/VP3883PQ/A001	Treating waste exemption	Not on a farm	Repair or refurbishment of WEEE
J	348m N	-	WEX267582	Treating waste exemption	Not on a farm	Recovery of scrap metal
J	348m N	-	WEX267582	Using waste exemption	Not on a farm	Use of waste in construction
J	348m N	-	WEX261894	Using waste exemption	Not on a farm	Use of waste in construction
J	348m N	21-23, Honey Street, Manchester, M8 8rg	WEX230137	Treating waste exemption	Not on a farm	Screening and blending of waste

ID	Location	Site	Reference	Category	Sub-Category	Description
7	356m NW	Samuel House St. Chads Street Manchester Manchester M8 8qa	EPR/NF0800CZ/A001	Treating waste exemption	Non-agricultural waste only	Sorting and de-naturing of controlled drugs for disposal
8	357m S	-	WEX263516	Using waste exemption	Not on a farm	Use of waste in construction
10	382m SE	110 Oldham Road Manchester M4 6ag	EPR/WH0178GE/A001	Treating waste exemption	Non-agricultural waste only	Manual treatment of waste
11	416m S	Smithfield Ph 6 Goadsby Street Manchester M4 1eh	EPR/EE5250VR/A001	Using waste exemption	Non-agricultural waste only	Use of waste in construction
M	470m NE	-	WEX311064	Using waste exemption	Not on a farm	Use of waste in construction
M	470m NE	-	WEX311064	Treating waste exemption	Not on a farm	Sorting mixed waste
M	470m NE	-	WEX311064	Treating waste exemption	Not on a farm	Screening and blending of waste
L	479m SE	30a Poland Street Ancoats Manchester M4 6bh	EA/EPR/VP3740VW/A001	Treating waste exemption	Non-agricultural waste only	Repair or refurbishment of WEEE

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

4 Current industrial land use



4.1 Recent industrial land uses

Records within 250m	29

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 76 >**

ID	Location	Company	Address	Activity	Category
1	**On site**	**Electricity Sub Station**	**Greater Manchester, M4**	**Electrical Features**	**Infrastructure and Facilities**
A	**On site**	**Mast**	**Greater Manchester, M4**	**Telecommunications Features**	**Infrastructure and Facilities**
A	**On site**	**Pylon**	**Greater Manchester, M4**	**Electrical Features**	**Infrastructure and Facilities**

ID	Location	Company	Address	Activity	Category
B	9m NW	Elshaddai Motors Bodyshop & Garage	Arch 44, Bromley Street, Manchester, Greater Manchester, M4 4JS	Vehicle Repair, Testing and Servicing	Repair and Servicing
B	10m NW	El Shaddai	44, Bromley Street, Manchester, Greater Manchester, M4 4JS	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	29m E	Northern Auto Ltd	117-119, Rochdale Road, Manchester, Greater Manchester, M4 4HZ	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	29m E	Nothern Auto Electrical Services	117-119, Rochdale Road, Manchester, Greater Manchester, M4 4HZ	Vehicle Repair, Testing and Servicing	Repair and Servicing
D	31m W	Electricity Sub Station	Greater Manchester, M4	Electrical Features	Infrastructure and Facilities
3	33m NE	Works	Greater Manchester, M4	Unspecified Works Or Factories	Industrial Features
4	44m S	Perfect Auto Repairs	87, Rochdale Road, Manchester, Greater Manchester, M4 4HY	Vehicle Repair, Testing and Servicing	Repair and Servicing
D	47m W	Tamini Motors	39, Gould Street, Manchester, Greater Manchester, M4 4JS	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	58m E	Great American Car Wash	-, Back St Georges Road, Manchester, Greater Manchester, M4 4JD	Vehicle Cleaning Services	Personal, Consumer and Other Services
C	60m E	A 1 Tyres M C R Ltd	125-133, Rochdale Road, Manchester, Greater Manchester, M4 4HZ	Vehicle Parts and Accessories	Motoring
D	72m W	Blackjack Beers Ltd	36, Gould Street, Manchester, Greater Manchester, M4	Alcoholic Drinks	Foodstuffs
C	73m SE	Smart Remaps	Unit 2 Sudell Street Industrial Estate, Sudell Street, Manchester, Greater Manchester, M4 4JQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	83m SE	Sudell Street Industrial Estate	Greater Manchester, M4	Business Parks and Industrial Estates	Industrial Features
C	84m SE	City Centre Storage	Trading Estate, Sudell Street, Manchester, Greater Manchester, M4 4JQ	Container and Storage	Transport, Storage and Delivery
C	85m E	Electricity Sub Station	Greater Manchester, M4	Electrical Features	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
C	95m SE	Manchester Mobility	Unit 4 Sudell Street Industrial Estate, Sudell Street, Manchester, Greater Manchester, M4 4JQ	Disability and Mobility Equipment	Consumer Products
F	97m SW	Electricity Sub Station	Greater Manchester, M4	Electrical Features	Infrastructure and Facilities
F	109m SW	Works	Greater Manchester, M4	Unspecified Works Or Factories	Industrial Features
E	131m W	North West Auto Services	121, Dantzic Street, Manchester, Greater Manchester, M4 4DW	Vehicle Repair, Testing and Servicing	Repair and Servicing
6	152m W	Westfields Lifting	142, Dantzic Street, Manchester, Greater Manchester, M4 4DN	Construction Completion Services	Construction Services
E	159m W	The Runaway Brewery	Unit 4 Millgate, Dantzic Street, Manchester, Greater Manchester, M4 4JW	Alcoholic Drinks	Foodstuffs
H	180m NW	Works	Greater Manchester, M4	Unspecified Works Or Factories	Industrial Features
8	225m SE	Manchester Central Fire Station	G M C Fire Service Fire Station, Thompson Street, Manchester, Greater Manchester, M4 5FP	Fire Brigade Stations	Central and Local Government
9	226m S	Customised Clothing Co	32, Mason Street, Manchester, Greater Manchester, M4 5EY	Textiles, Fabrics, Silk and Machinery	Industrial Products
H	242m NW	B S C Manchester	5, Roger Street, Manchester, Greater Manchester, M4 4EN	Paints, Varnishes and Lacquers	Industrial Products
11	243m S	International Trimmings	44, Addington Street, Manchester, Greater Manchester, M4 5EU	Ropes, Nets and Cordage	Industrial Products

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m **4**

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 76 >**

ID	Location	Company	Address	LPG	Status
5	130m SE	OBSOLETE	95-109, Rochdale Road, Manchester, Greater Manchester, M4 4HZ	Not Applicable	Obsolete

ID	Location	Company	Address	LPG	Status
12	256m S	UNBRANDED	12, Rochdale Road, Bendix Street, Collyhurst, Manchester, Greater Manchester, M24 6DP	Not Applicable	Obsolete
O	462m W	TEXACO	58-76, Cheetham Hill Road, Manchester, Greater Manchester, M4 4EX	No	Open
O	483m W	OBSOLETE	37-41, Cheetham Hill Road, Manchester, Greater Manchester, M4 4FT	Not Applicable	Obsolete

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	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 76 >**

ID	Location	Address	Details	
2	**On site**	**Manchester Tabacco Ltd, Ludgate Hill, Manchester, M4 4DA**	**Process: Vegetable Matter Drying Processes Status: Historical Permit Permit Type: Part B**	**Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified**
E	94m NW	Concret Barrowing Company Ltd, Hargreaves Street, Cheetham, M4 4EJ	Process: Use of Bulk Cement Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
E	113m NW	Place Mix Ltd, Hargreave St, M4 4EJ	Process: Use of Bulk Cement Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
E	113m NW	Tan Yard Metal Ltd, Hargreaves St, M4 4EJ	Process: Non-ferrous Metal Foundry Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
H	191m NW	New Mix Concrete, Roger St, M4 4EN	Process: Use of Bulk Cement Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
H	231m NW	Avis Rent A Car Ltd, Avis Bodyshop, Chase Street, Redbank, Cheetham, Hill, M4 4FL	Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
O	458m W	Redbank Service Station, 58 Cheetham Hill Road, Cheetham Hill, M4 4EX	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
O	482m W	Cheetham Hill Serv Stn, Cheetham Hill Rd, M4 4FT	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	**1**

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

Features are displayed on the Current industrial land use map on **page 76 >**

ID	Location	Address	Details	
10	226m SW	Brooke Edgley Specialist Technical Services Ltd, Unit 4, Angel Industrial Estate, Angel Street, Manchester, M4 4BQ	Operator: Brooke Edgley Specialist Technical Services Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BI9880 Date of approval: 07/08/2000	Effective from: 07/08/2000 Last date of update: 01/01/2015 Status: Revoked/cancelled

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

4.13 Licensed Discharges to controlled waters

Records within 500m **44**

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 76 >**

ID	Location	Address	Details	
E	110m NW	PARLANE ST/DANTZIC ST, MANCHESTER, GREATER MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0061 Permit Version: 1 Receiving Water: RIVER IRK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1995 Revocation Date: 25/10/1995
E	110m NW	BROMLEY STREET/DANTZIC STREET CSO, BROMLEY STREET, MANCHESTER, GREATER MANCHESTER, M4 4JS	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0046 Permit Version: 2 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 14/04/2009 Effective Date: 14/04/2009 Revocation Date: 10/01/2017
E	110m NW	BROMLEY STREET/DANTZIC STREET CSO, BROMLEY STREET, MANCHESTER, GREATER MANCHESTER, M4 4JS	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0046 Permit Version: 1 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/01/1995 Revocation Date: 13/04/2009
E	110m NW	BROMLEY STREET/DANTZIC STREET CSO, BROMLEY STREET, MANCHESTER, GREATER MANCHESTER, M4 4JS	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0046 Permit Version: 3 Receiving Water: RIVER IRK	Status: SURRENDERED UNDER EPR 2010 Issue date: 11/01/2017 Effective Date: 11/01/2017 Revocation Date: 27/04/2018

ID	Location	Address	Details	
E	113m NW	GOULD ST/JASON ST, MANCHESTER, GREATER MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0047 Permit Version: 3 Receiving Water: RIVER IRK	Status: SURRENDERED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 03/12/2014
E	113m NW	GOULD ST/JASON ST, MANCHESTER, GREATER MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0047 Permit Version: 1 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/01/1995 Revocation Date: 13/04/2009
E	113m NW	GOULD ST/JASON ST, MANCHESTER, GREATER MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0047 Permit Version: 2 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 14/04/2009 Effective Date: 14/04/2009 Revocation Date: 02/09/2010
E	118m NW	BROMLEY STREET CSO 281MT, 41 WILIAMSON STREET, NEAR RAILWAY ARCH, MANCHESTER, GREATER MANCHESTER, M4 4JS	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982627 Permit Version: 2 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 21/03/2018 Effective Date: 01/04/2018 Revocation Date: -
E	119m NW	BROMLEY STREET CSO 281MT, 41 WILIAMSON STREET, NEAR RAILWAY ARCH, MANCHESTER, GREATER MANCHESTER, M4 4JS	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0310 Permit Version: 1 Receiving Water: RIVER IRK	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: - Effective Date: 01/01/1995 Revocation Date: 01/01/1995
E	119m NW	BROMLEY STREET CSO 281MT, 41 WILIAMSON STREET, NEAR RAILWAY ARCH, MANCHESTER, GREATER MANCHESTER, M4 4JS	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982627 Permit Version: 1 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 30/09/1994 Revocation Date: 31/03/2018
E	130m W	LORD ST & RED BANK, MANCHESTER, GREATER MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0062 Permit Version: 1 Receiving Water: RIVER IRK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1995 Revocation Date: 25/10/1995

ID	Location	Address	Details	
E	130m W	ROGER STREET/HARGREAVES STREET CSO, ROGER STREET, MANCHESTER, GREATER MANCHESTER, M4 4EN	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0059 Permit Version: 3 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 21/03/2016
E	130m W	ROGER STREET/HARGREAVES STREET CSO, ROGER STREET, MANCHESTER, GREATER MANCHESTER, M4 4EN	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0059 Permit Version: 2 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 14/04/2009 Effective Date: 14/04/2009 Revocation Date: 02/09/2010
E	130m W	ROGER STREET/HARGREAVES STREET CSO, ROGER STREET, MANCHESTER, GREATER MANCHESTER, M4 4EN	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0059 Permit Version: 1 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/01/1995 Revocation Date: 13/04/2009
E	131m W	ROGER STREET/HARGREAVES STREET CSO, ROGER STREET, MANCHESTER, GREATER MANCHESTER, M4 4EN	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0059 Permit Version: 4 Receiving Water: RIVER IRK	Status: SURRENDERED UNDER EPR 2010 Issue date: 22/03/2016 Effective Date: 22/03/2016 Revocation Date: 09/03/2018
G	153m N	DALTON ST/DANTZIC STREET SSO, DALTON ST/DANTZIC STREET, GREATER MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0264 Permit Version: 1 Receiving Water: RIVER IRK	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: - Effective Date: 01/01/1995 Revocation Date: 01/01/1995
G	153m N	DALTON ST/DANTZIC STREET SSO, DALTON ST/DANTZIC STREET, GREATER MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982623 Permit Version: 1 Receiving Water: RIVER IRK	Status: SURRENDERED UNDER EPR 2010 Issue date: - Effective Date: 30/09/1994 Revocation Date: 03/12/2014
I	203m N	DANTZIC ST WARFORD ST CSO 288A7, 151 DANTZIC STREET, MANCHESTER, GREATER MANCHESTER, M4 4NL	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0039 Permit Version: 1 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/01/1995 Revocation Date: 02/09/2010

ID	Location	Address	Details	
I	203m N	DANTZIC ST WARFORD ST CSO 288A7, 151 DANTZIC STREET, MANCHESTER, GREATER MANCHESTER, M4 4NL	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0039 Permit Version: 2 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 21/03/2016
I	206m N	DANTZIC ST WARFORD ST CSO 288A7, 151 DANTZIC STREET, MANCHESTER, GREATER MANCHESTER, M4 4NL	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0039 Permit Version: 3 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 22/03/2016 Effective Date: 22/03/2016 Revocation Date: 01/08/2018
I	206m N	DANTZIC ST WARFORD ST CSO 288A7, 151 DANTZIC STREET, MANCHESTER, GREATER MANCHESTER, M4 4NL	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0039 Permit Version: 4 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 02/08/2018 Effective Date: 02/08/2018 Revocation Date: -
J	210m N	DANTZIC STREET CSO, 77 WARFORD STREET, MANCHESTER, M4 4DD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982951 Permit Version: 2 Receiving Water: RIVER IRK	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: - Effective Date: 07/12/2004 Revocation Date: 31/03/2018
7	211m N	DUCAL ST/DANTZIC ST, MANCHESTER, GREATER MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0057 Permit Version: 1 Receiving Water: RIVER IRK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1995 Revocation Date: 25/10/1995
J	223m N	DANTZIC STREET CSO, 77 WARFORD STREET, MANCHESTER, M4 4DD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982951 Permit Version: 3 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 12/03/2018 Effective Date: 01/04/2018 Revocation Date: -
J	230m N	DANTZIC STREET CSO, 77 WARFORD STREET, MANCHESTER, M4 4DD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982951 Permit Version: 1 Receiving Water: RIVER IRK	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: - Effective Date: 23/06/1995 Revocation Date: 06/12/2004

ID	Location	Address	Details	
L	334m NE	BURTON ST NR DALTON ST CSO 281HX, 133 COLLYHURST ROAD, MANCHESTER, GREATER MANCHESTER, M40 7GX	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0263 Permit Version: 1 Receiving Water: RIVER IRK	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: - Effective Date: 01/01/1995 Revocation Date: 01/01/1995
L	334m NE	BURTON ST NR DALTON ST CSO 281HX, 133 COLLYHURST ROAD, MANCHESTER, GREATER MANCHESTER, M40 7GX	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982622 Permit Version: 1 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 30/09/1994 Revocation Date: 10/04/2018
L	334m NE	BURTON ST NR DALTON ST CSO 281HX, 133 COLLYHURST ROAD, MANCHESTER, GREATER MANCHESTER, M40 7GX	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982622 Permit Version: 2 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 11/04/2018 Effective Date: 11/04/2018 Revocation Date: -
M	357m W	ASPIN LANE CSO 281CJ, VALLEA COURT, 1 RED BANK, MANCHESTER, M4 4FE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0031 Permit Version: 1 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/01/1995 Revocation Date: 02/09/2010
M	357m W	ASPIN LANE CSO 281CJ, VALLEA COURT, 1 RED BANK, MANCHESTER, M4 4FE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0031 Permit Version: 2 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 04/02/2016
M	366m W	ASPIN LANE CSO 281CJ, VALLEA COURT, 1 RED BANK, MANCHESTER, M4 4FE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0031 Permit Version: 3 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 05/02/2016 Effective Date: 05/02/2016 Revocation Date: 24/06/2018
M	366m W	ASPIN LANE CSO 281CJ, VALLEA COURT, 1 RED BANK, MANCHESTER, M4 4FE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0031 Permit Version: 4 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 25/06/2018 Effective Date: 25/06/2018 Revocation Date: -

ID	Location	Address	Details	
13	402m NW	CHEETHAM HILL RD, MANCHESTER, GREATER MANCHESTER	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0369 Permit Version: 1 Receiving Water: S/W	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1995 Revocation Date: 01/01/2017
N	452m W	VERDON STREET/SCOTLAND CSO, SCOTLAND VIA RED BANK, MANCHESTER, GREATER MANCHESTER, M4 4EW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982715 Permit Version: 1 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 30/09/1994 Revocation Date: 03/12/2019
N	452m W	VERDON STREET/SCOTLAND CSO, SCOTLAND VIA RED BANK, MANCHESTER, GREATER MANCHESTER, M4 4EW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0265 Permit Version: 1 Receiving Water: RIVER IRK	Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: - Effective Date: 01/01/1995 Revocation Date: 01/01/1995
N	454m W	VERDON STREET/SCOTLAND CSO, SCOTLAND VIA RED BANK, MANCHESTER, GREATER MANCHESTER, M4 4EW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 016982715 Permit Version: 2 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 04/12/2019 Effective Date: 04/12/2019 Revocation Date: -
P	464m W	MILLER STREET/CORPORATION ST CSO, MILLER STREET, MANCHESTER, GREATER MANCHESTER, M4 4DY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0161 Permit Version: 2 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 10/01/2017
P	464m W	MILLER STREET/CORPORATION ST CSO, MILLER STREET, MANCHESTER, GREATER MANCHESTER, M4 4DY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0161 Permit Version: 1 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/01/1995 Revocation Date: 02/09/2010
P	464m W	MILLER STREET/CORPORATION ST CSO, MILLER STREET, MANCHESTER, GREATER MANCHESTER, M4 4DY	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0161 Permit Version: 3 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 11/01/2017 Effective Date: 11/01/2017 Revocation Date: -

ID	Location	Address	Details	
P	484m W	NEW VICTORIA DEVELOPMENT (VINCI, CONSTRUCTION), LONG MILLGATE, MANCHESTER, M3 1NX	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRUB3890AJ Permit Version: 1 Receiving Water: RIVER IRK	Status: SURRENDERED UNDER EPR 2010 Issue date: 25/01/2022 Effective Date: 25/01/2022 Revocation Date: 21/11/2023
P	495m W	CORPORATION STREET CSO, CORPORATION STREET, NEAR JUNCTION WITH MILLER STREET, MANCHESTER, GREATER MANCHESTER, M60 0AB	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0159 Permit Version: 1 Receiving Water: RIVER IRK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: - Effective Date: 01/01/1995 Revocation Date: 02/09/2010
P	495m W	CORPORATION STREET CSO, CORPORATION STREET, NEAR JUNCTION WITH MILLER STREET, MANCHESTER, GREATER MANCHESTER, M60 0AB	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0159 Permit Version: 4 Receiving Water: CULVERTED SEC OF RIVER IRK	Status: SURRENDERED UNDER EPR 2010 Issue date: 11/04/2018 Effective Date: 11/04/2018 Revocation Date: 15/11/2021
P	495m W	CORPORATION STREET CSO, CORPORATION STREET, NEAR JUNCTION WITH MILLER STREET, MANCHESTER, GREATER MANCHESTER, M60 0AB	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0159 Permit Version: 2 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 21/03/2016
P	495m W	CORPORATION STREET CSO, CORPORATION STREET, NEAR JUNCTION WITH MILLER STREET, MANCHESTER, GREATER MANCHESTER, M60 0AB	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01MAN0159 Permit Version: 3 Receiving Water: RIVER IRK	Status: VARIED UNDER EPR 2010 Issue date: 22/03/2016 Effective Date: 22/03/2016 Revocation Date: 10/04/2018

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	30

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 76 >**

ID	Location	Details	
G	171m N	Incident Date: 04/09/2001 Incident Identification: 28889 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
H	216m NW	Incident Date: 10/12/2012 Incident Identification: 1066931 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)

ID	Location	Details	
H	216m NW	Incident Date: 10/12/2012 Incident Identification: 1066931 Pollutant: Specific Waste Materials Pollutant Description: Tyres	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)
H	216m NW	Incident Date: 10/12/2012 Incident Identification: 1066931 Pollutant: Specific Waste Materials Pollutant Description: Asbestos	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)
H	216m NW	Incident Date: 10/12/2012 Incident Identification: 1066931 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)
K	333m N	Incident Date: 13/05/2012 Incident Identification: 990313 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)
K	333m N	Incident Date: 13/05/2012 Incident Identification: 990313 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)
K	333m N	Incident Date: 13/05/2012 Incident Identification: 990313 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)
K	333m N	Incident Date: 13/05/2012 Incident Identification: 990313 Pollutant: Specific Waste Materials Pollutant Description: Tyres	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)
K	335m N	Incident Date: 24/04/2002 Incident Identification: 74406 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	337m NW	Incident Date: 12/09/2008 Incident Identification: 620850 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)
K	337m NW	Incident Date: 12/09/2008 Incident Identification: 620850 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Effects on Humans	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)

ID	Location	Details	
K	337m NW	Incident Date: 12/09/2008 Incident Identification: 620850 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)
K	345m N	Incident Date: 10/04/2002 Incident Identification: 70537 Pollutant: Inert Materials and Wastes:Specific Waste Materials Pollutant Description: Construction and Demolition Materials and Wastes:Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
K	345m N	Incident Date: 10/04/2002 Incident Identification: 70537 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
K	345m N	Incident Date: 10/04/2002 Incident Identification: 70537 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
K	345m N	Incident Date: 04/10/2002 Incident Identification: 70537 Pollutant: Inert Materials and Wastes : Specific Waste Materials Pollutant Description: Construction and Demolition Materials and Wastes :Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
K	345m N	Incident Date: 04/10/2002 Incident Identification: 70537 Pollutant: Specific Waste Materials Pollutant Description: Construction and Demolition Materials and Wastes Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
K	346m N	Incident Date: 24/06/2002 Incident Identification: 86928 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
K	348m N	Incident Date: 15/04/2002 Incident Identification: 71723 Pollutant: Inert Materials and Wastes:Specific Waste Materials Pollutant Description: Construction and Demolition Materials and Wastes:Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	348m N	Incident Date: 15/04/2002 Incident Identification: 71723 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

ID	Location	Details	
K	348m N	Incident Date: 15/04/2002 Incident Identification: 71723 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	349m N	Incident Date: 18/02/2002 Incident Identification: 59103 Pollutant: Inert Materials and Wastes:Specific Waste Materials Pollutant Description: Construction and Demolition Materials and Wastes:Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	349m N	Incident Date: 18/02/2002 Incident Identification: 59103 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	349m N	Incident Date: 18/02/2002 Incident Identification: 59103 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	351m N	Incident Date: 22/03/2002 Incident Identification: 65939 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	354m N	Incident Date: 05/02/2002 Incident Identification: 57584 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	379m N	Incident Date: 27/09/2001 Incident Identification: 33323 Pollutant: Organic Chemicals/Products Pollutant Description: Solvents	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
N	443m W	Incident Date: 10/01/2002 Incident Identification: 51724 Pollutant: Oils and Fuel Pollutant Description: Mixed/Waste Oils	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
14	454m SE	Incident Date: 12/07/2001 Incident Identification: 15967 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

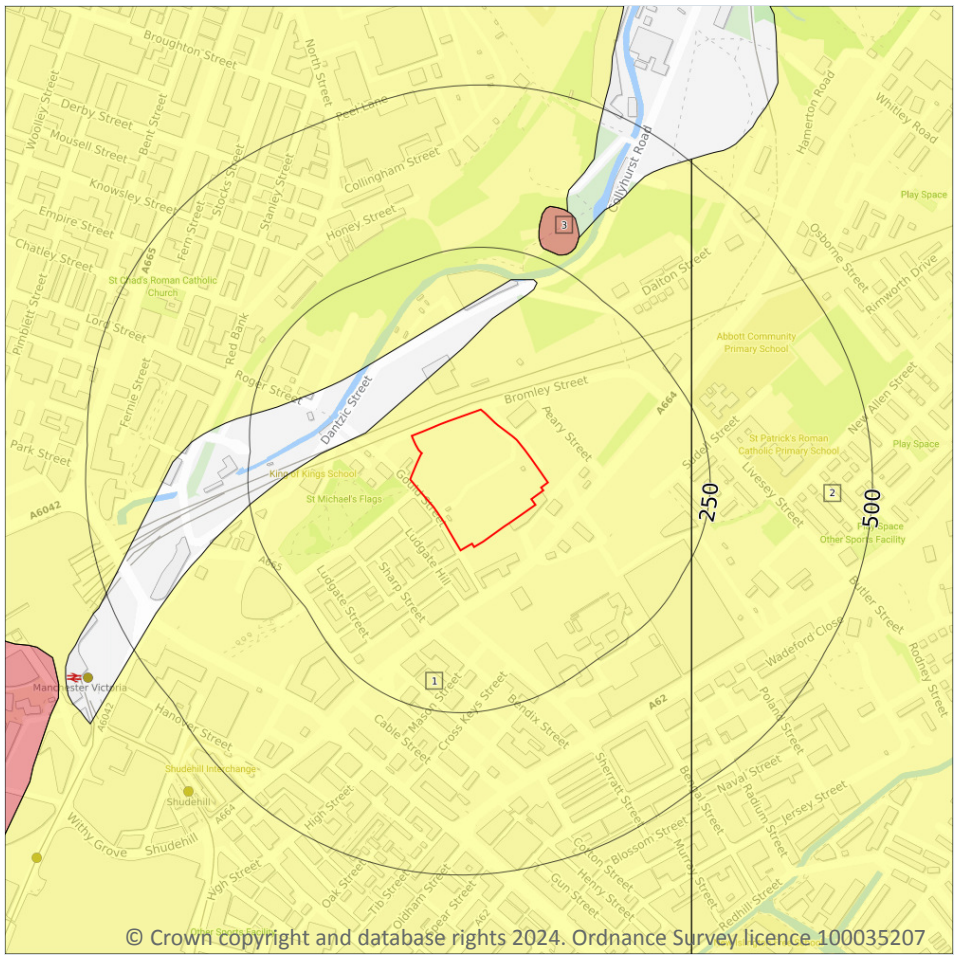
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	3

Aquifer status of groundwater held within superficial geology.

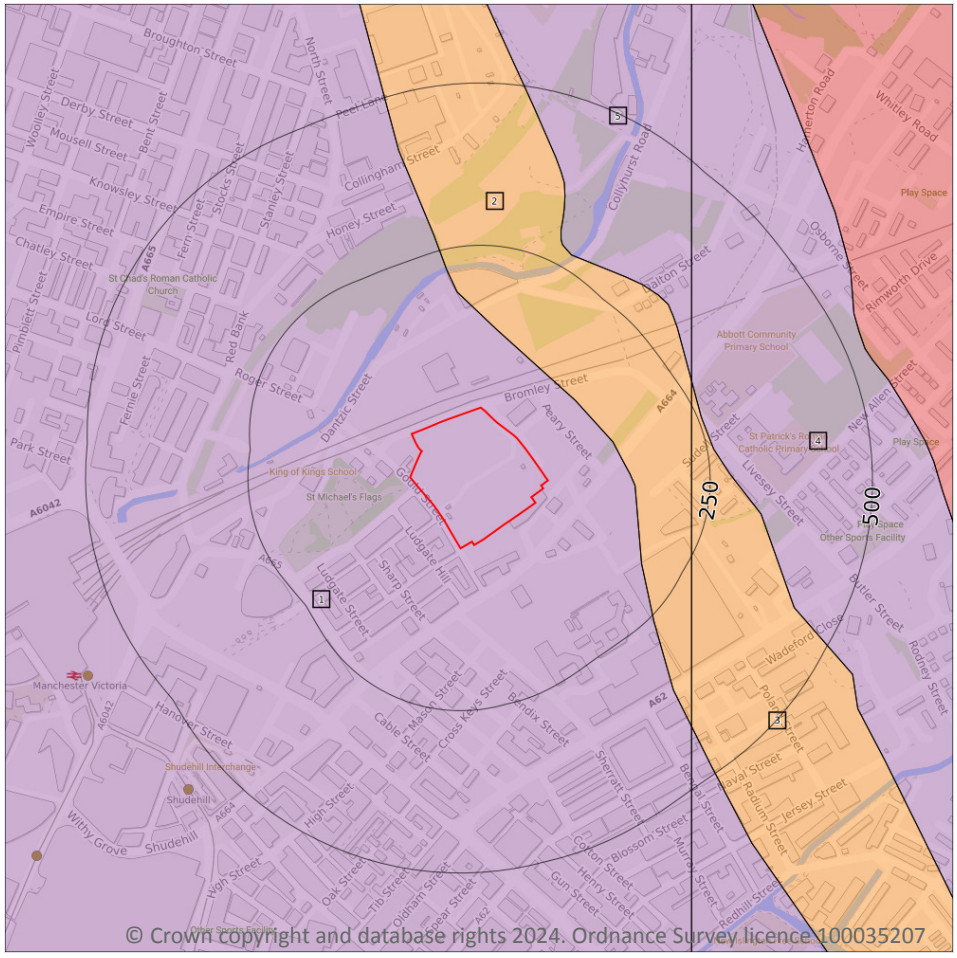
Features are displayed on the Hydrogeology map on **page 94 >**

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	221m E	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

ID	Location	Designation	Description
3	266m N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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	5

Aquifer status of groundwater held within bedrock geology.

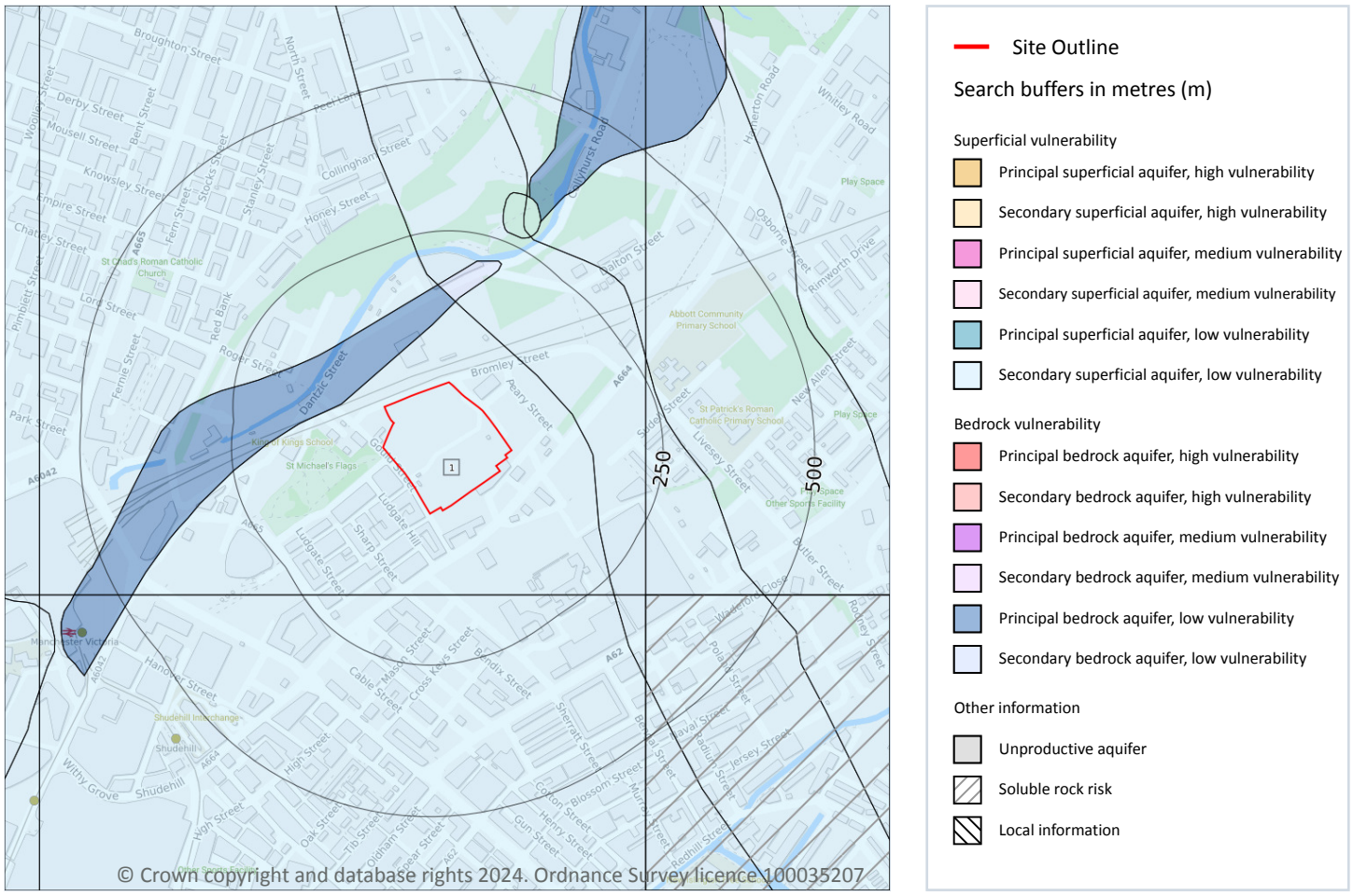
Features are displayed on the Bedrock aquifer map on **page 96 >**

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	103m NE	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

ID	Location	Designation	Description
3	221m E	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers
4	256m E	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
5	269m NE	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

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

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m	1

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

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

Features are displayed on the Groundwater vulnerability map on **page 98 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	**Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year**	**Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low**	**Vulnerability: Low Aquifer type: 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	0

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

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

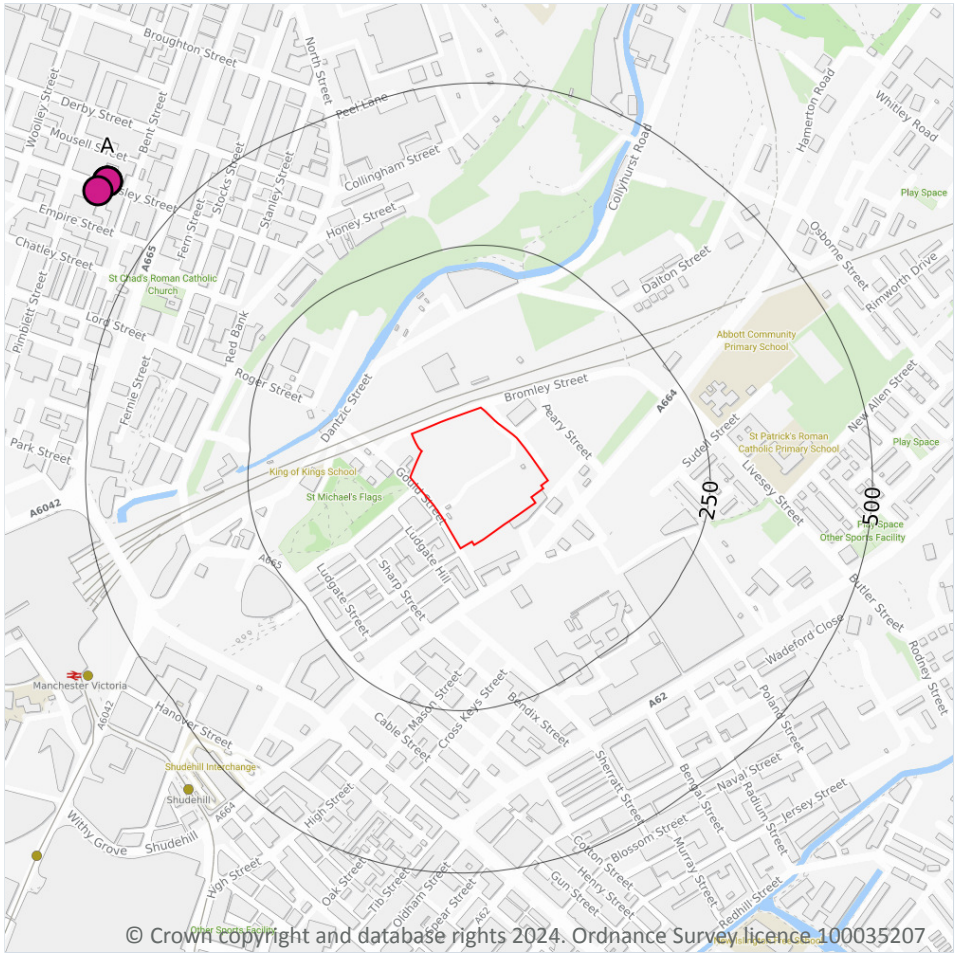
5.5 Groundwater vulnerability- local information

Records on site	0

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

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

Abstractions and Source Protection Zones



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- 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
- 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	42

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 100 >**

ID	Location	Details	
A	609m NW	Status: Historical Licence No: 2569004011 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT DERBY BREWERY, CHEETHAM, MANCHESTER 3 Data Type: Point Name: JOSEPH HOLT LTD Easting: 384100 Northing: 399700	Annual Volume (m^3): 45460 Max Daily Volume (m^3): 181.84 Original Application No: 0423 Original Start Date: 17/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/02/1966 Version End Date: -
A	609m NW	Status: Historical Licence No: 2569004011 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT DERBY BREWERY, CHEETHAM, MANCHESTER 3 Data Type: Point Name: JOSEPH HOLT LTD Easting: 384100 Northing: 399700	Annual Volume (m^3): 45460 Max Daily Volume (m^3): 181.84 Original Application No: 0423 Original Start Date: 17/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/02/1966 Version End Date: -
A	609m NW	Status: Historical Licence No: 2569004011 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT DERBY BREWERY, CHEETHAM, MANCHESTER 3" Data Type: Point Name: JOSEPH HOLT LTD Easting: 384100 Northing: 399700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 17/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/02/1966 Version End Date: -
A	609m NW	Status: Historical Licence No: 2569004011 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT DERBY BREWERY, CHEETHAM, MANCHESTER 3" Data Type: Point Name: JOSEPH HOLT LTD Easting: 384100 Northing: 399700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 17/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/02/1966 Version End Date: -

ID	Location	Details	
A	612m NW	Status: Active Licence No: 2569004011 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT DERBY BREWERY, CHEETHAM, MANCHESTER 3 Data Type: Point Name: JOSEPH HOLT LTD Easting: 384085 Northing: 399685	Annual Volume (m^3): 75000 Max Daily Volume (m^3): 300 Original Application No: NPS/WR/037017 Original Start Date: 17/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 29/06/2023 Version End Date: -
-	716m W	Status: Historical Licence No: 2569004023 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "BOREHOLE (NO 1) AT PREMISES, STRANGEWAYS, MANCHESTER" Data Type: Point Name: INTERBREW UK LTD Easting: 383850 Northing: 399250	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/08/2000 Version End Date: -
-	716m W	Status: Historical Licence No: 2569004023 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE (NO 1) AT PREMISES, STRANGEWAYS, MANCHESTER" Data Type: Point Name: INTERBREW UK LTD Easting: 383850 Northing: 399250	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/08/2000 Version End Date: -
-	716m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE (NO 1) AT PREMISES, STRANGEWAYS, MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383850 Northing: 399250	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -

ID	Location	Details	
-	716m W	Status: Historical Licence No: 2569004023 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE (NO 1) AT PREMISES, STRANGEWAYS, MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383850 Northing: 399250	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	716m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE NUMBER 1 AT PREMISES STRANGEWAYS MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383850 Northing: 399250	Annual Volume (m^3): 500000 Max Daily Volume (m^3): 2500 Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	716m W	Status: Historical Licence No: 2569004023 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE NUMBER 1 AT PREMISES STRANGEWAYS MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383850 Northing: 399250	Annual Volume (m^3): 500000 Max Daily Volume (m^3): 2500 Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	737m W	Status: Historical Licence No: 2569004023 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "BOREHOLE (NO 3) AT PREMISES, STRANGEWAYS, MANCHESTER" Data Type: Point Name: INTERBREW UK LTD Easting: 383830 Northing: 399220	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/08/2000 Version End Date: -

ID	Location	Details	
-	737m W	Status: Historical Licence No: 2569004023 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE (NO 3) AT PREMISES, STRANGEWAYS, MANCHESTER" Data Type: Point Name: INTERBREW UK LTD Easting: 383830 Northing: 399220	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/08/2000 Version End Date: -
-	737m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE (NO 3) AT PREMISES, STRANGEWAYS, MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383830 Northing: 399220	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	737m W	Status: Historical Licence No: 2569004023 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE (NO 3) AT PREMISES, STRANGEWAYS, MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383830 Northing: 399220	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	737m W	Status: Historical Licence No: 2569004023 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE NUMBER 3 AT PREMISES STRANGEWAYS MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383830 Northing: 399220	Annual Volume (m^3): 500000 Max Daily Volume (m^3): 2500 Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -

ID	Location	Details	
-	737m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE NUMBER 3 AT PREMISES STRANGEWAYS MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383830 Northing: 399220	Annual Volume (m^3): 500000 Max Daily Volume (m^3): 2500 Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	748m W	Status: Historical Licence No: 2569004023 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "BOREHOLE (NO 2) AT PREMISES, STRANGEWAYS, MANCHESTER" Data Type: Point Name: INTERBREW UK LTD Easting: 383820 Northing: 399190	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/08/2000 Version End Date: -
-	748m W	Status: Historical Licence No: 2569004023 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE (NO 2) AT PREMISES, STRANGEWAYS, MANCHESTER" Data Type: Point Name: INTERBREW UK LTD Easting: 383820 Northing: 399190	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/08/2000 Version End Date: -
-	748m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE (NO 2) AT PREMISES, STRANGEWAYS, MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383820 Northing: 399190	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -

ID	Location	Details	
-	748m W	Status: Historical Licence No: 2569004023 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE (NO 2) AT PREMISES, STRANGEWAYS, MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383820 Northing: 399190	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	748m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE NUMBER 2 AT PREMISES STRANGEWAYS MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383820 Northing: 399190	Annual Volume (m^3): 500000 Max Daily Volume (m^3): 2500 Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	748m W	Status: Historical Licence No: 2569004023 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE NUMBER 2 AT PREMISES STRANGEWAYS MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383820 Northing: 399190	Annual Volume (m^3): 500000 Max Daily Volume (m^3): 2500 Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	816m N	Status: Active Licence No: 2569005015 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: B/HOLE, LITTLE GREEN WORKS, COLLYHURST RD, MANCHESTER 10 Data Type: Point Name: Packaging Products (Coatings) Ltd Easting: 385000 Northing: 400100	Annual Volume (m^3): 438689 Max Daily Volume (m^3): 1636.56 Original Application No: NPS/WR/006003 Original Start Date: 16/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/02/2011 Version End Date: -

ID	Location	Details	
-	816m N	Status: Historical Licence No: 2569005015 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "B/HOLE, LITTLE GREEN WORKS, COLLYHURST RD, MANCHESTER 10" Data Type: Point Name: PACKAGING PRODUCTS LTD Easting: 385000 Northing: 400100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/02/1995 Version End Date: -
-	829m NW	Status: Historical Licence No: 2569004021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, DERBY STREET, CHEETHAM, MANCHESTER Data Type: Point Name: LANCASHIRE DAIRIES LTD Easting: 383900 Northing: 399800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 17/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1993 Version End Date: -
-	829m NW	Status: Historical Licence No: 2569004021 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, DERBY STREET, CHEETHAM, MANCHESTER Data Type: Point Name: LANCASHIRE DAIRIES LTD Easting: 383900 Northing: 399800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 17/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1993 Version End Date: -
-	1022m SW	Status: Active Licence No: 2569007070 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT DIAL HOUSE CHAPEL STREET SALFORD Data Type: Point Name: BRITISH TELECOMMUNICATIONS PLC Easting: 383700 Northing: 398700	Annual Volume (m^3): 45 Max Daily Volume (m^3): 30 Original Application No: 2333 Original Start Date: 27/01/1971 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2007 Version End Date: -

ID	Location	Details	
-	1022m SW	Status: Historical Licence No: 2569007070 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT DIAL HOUSE, CHAPEL ST, SALFORD" Data Type: Point Name: BRITISH TELECOM Easting: 383700 Northing: 398700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 27/01/1971 Expiry Date: - Issue No: 100 Version Start Date: 27/01/1971 Version End Date: -
-	1022m SW	Status: Historical Licence No: 2569007070 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT DIAL HOUSE, CHAPEL ST, SALFORD Data Type: Point Name: BRITISH TELECOMMUNICATIONS PLC Easting: 383700 Northing: 398700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 27/01/1971 Expiry Date: - Issue No: 101 Version Start Date: 01/04/1984 Version End Date: -
-	1258m SW	Status: Historical Licence No: 2569007069 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT GEORGE ST, MANCHESTER" Data Type: Point Name: BRITISH TELECOM Easting: 384100 Northing: 398000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 27/01/1971 Expiry Date: - Issue No: 100 Version Start Date: 27/01/1971 Version End Date: -
-	1258m SW	Status: Historical Licence No: 2569007069 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT GEORGE ST, MANCHESTER Data Type: Point Name: BRITISH TELECOMMUNICATIONS PLC Easting: 384100 Northing: 398000	Annual Volume (m^3): 1100 Max Daily Volume (m^3): 860 Original Application No: - Original Start Date: 01/04/1984 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2007 Version End Date: -

ID	Location	Details	
-	1426m S	Status: Historical Licence No: NW0690006001 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLES AT ORIGIN DEVELOPMENTS, MANCHESTER Data Type: Point Name: West Contracting Easting: 384378 Northing: 397733	Annual Volume (m^3): 139128 Max Daily Volume (m^3): 1010 Original Application No: - Original Start Date: 19/01/2009 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 19/01/2009 Version End Date: -
-	1426m S	Status: Historical Licence No: NW/069/0006/001 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLES AT ORIGIN DEVELOPMENTS, MANCHESTER Data Type: Point Name: West Contracting Easting: 384378 Northing: 397733	Annual Volume (m^3): 139128 Max Daily Volume (m^3): 1010 Original Application No: - Original Start Date: 19/01/2009 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 19/01/2009 Version End Date: -
-	1545m SW	Status: Historical Licence No: 2569007089 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: 2 BOREHOLES AT GARTSIDE STREET MANCHESTER Data Type: Line Name: HER MAJESTY'S COURT SERVICE Easting: 383335 Northing: 398310	Annual Volume (m^3): 200000 Max Daily Volume (m^3): 1179 Original Application No: - Original Start Date: 26/01/2005 Expiry Date: 31/03/2011 Issue No: 2 Version Start Date: 10/07/2008 Version End Date: -
-	1699m S	Status: Historical Licence No: 2569006001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, BROADIE ST, ARDWICK, MANCHESTER" Data Type: Point Name: MOSELEY RUBBER CO LTD Easting: 385240 Northing: 397540	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 08/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 08/02/1966 Version End Date: -

ID	Location	Details	
-	1699m S	Status: Historical Licence No: 2569006001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, BROADIE ST, ARDWICK, MANCHESTER Data Type: Point Name: MOSELEY RUBBER CO LTD Easting: 385240 Northing: 397540	Annual Volume (m^3): 331858 Max Daily Volume (m^3): 909.2 Original Application No: - Original Start Date: 08/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 08/02/1966 Version End Date: -
-	1825m SW	Status: Historical Licence No: NW/069/0004/019 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: Ground Water - North West Region Point: ST JOHNS MANCHESTER Data Type: Poly4 Name: Manchester Quays Development (MGY) Ltd Easting: 383094 Northing: 398099	Annual Volume (m^3): 543120 Max Daily Volume (m^3): 1488 Original Application No: - Original Start Date: 13/09/2019 Expiry Date: 31/12/2020 Issue No: 1 Version Start Date: 13/09/2019 Version End Date: -
-	1855m E	Status: Active Licence No: 2569005061 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT NORTON STREET, MILES PLATTING, MANCHESTER Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LIMITED Easting: 386550 Northing: 399790	Annual Volume (m^3): 33000 Max Daily Volume (m^3): 125 Original Application No: NPS/WR/011609 Original Start Date: 08/02/2000 Expiry Date: - Issue No: 3 Version Start Date: 13/08/2012 Version End Date: -
-	1855m E	Status: Historical Licence No: 2569005061 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT NORTON STREET, MILES PLATTING, MANCHESTER" Data Type: Point Name: HANSON QUARRY PRODUCTS EUROPE LTD Easting: 386550 Northing: 399790	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 08/02/2000 Expiry Date: - Issue No: 2 Version Start Date: 01/07/2000 Version End Date: -

ID	Location	Details	
-	1948m SW	Status: Historical Licence No: NW/069/0004/021 Details: Heat Pump Direct Source: Ground Water - North West Region Point: CHESTER FORMATION AT SCIENCE MUSEUM (A) Data Type: Point Name: Science Museum Group Easting: 383198 Northing: 397829	Annual Volume (m^3): 346000 Max Daily Volume (m^3): 1728 Original Application No: NPS/WR/035329 Original Start Date: 31/03/2023 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 31/03/2023 Version End Date: -
-	1978m SW	Status: Historical Licence No: NW/069/0004/021 Details: Heat Pump Direct Source: Ground Water - North West Region Point: CHESTER FORMATION AT SCIENCE MUSEUM (B) Data Type: Point Name: Science Museum Group Easting: 383143 Northing: 397845	Annual Volume (m^3): 346000 Max Daily Volume (m^3): 1728 Original Application No: NPS/WR/035329 Original Start Date: 31/03/2023 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 31/03/2023 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	0

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	10

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 100 >**

ID	Location	Details	
-	716m W	Status: Historical Licence No: 2569004023 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "BOREHOLE (NO 1) AT PREMISES, STRANGEWAYS, MANCHESTER" Data Type: Point Name: INTERBREW UK LTD Easting: 383850 Northing: 399250	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/08/2000 Version End Date: -
-	716m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE (NO 1) AT PREMISES, STRANGEWAYS, MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383850 Northing: 399250	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	716m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE NUMBER 1 AT PREMISES STRANGEWAYS MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383850 Northing: 399250	Annual Volume (m^3): 500000 Max Daily Volume (m^3): 2500 Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	737m W	Status: Historical Licence No: 2569004023 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "BOREHOLE (NO 3) AT PREMISES, STRANGEWAYS, MANCHESTER" Data Type: Point Name: INTERBREW UK LTD Easting: 383830 Northing: 399220	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/08/2000 Version End Date: -

ID	Location	Details	
-	737m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE (NO 3) AT PREMISES, STRANGEWAYS, MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383830 Northing: 399220	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	737m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE NUMBER 3 AT PREMISES STRANGEWAYS MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383830 Northing: 399220	Annual Volume (m^3): 500000 Max Daily Volume (m^3): 2500 Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	748m W	Status: Historical Licence No: 2569004023 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "BOREHOLE (NO 2) AT PREMISES, STRANGEWAYS, MANCHESTER" Data Type: Point Name: INTERBREW UK LTD Easting: 383820 Northing: 399190	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 09/08/2000 Version End Date: -
-	748m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE (NO 2) AT PREMISES, STRANGEWAYS, MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383820 Northing: 399190	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -

ID	Location	Details	
-	748m W	Status: Historical Licence No: 2569004023 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE NUMBER 2 AT PREMISES STRANGEWAYS MANCHESTER Data Type: Point Name: INTERBREW UK LTD Easting: 383820 Northing: 399190	Annual Volume (m^3): 500000 Max Daily Volume (m^3): 2500 Original Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2004 Version End Date: -
-	829m NW	Status: Historical Licence No: 2569004021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, DERBY STREET, CHEETHAM, MANCHESTER Data Type: Point Name: LANCASHIRE DAIRIES LTD Easting: 383900 Northing: 399800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 17/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1993 Version End Date: -

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

5.9 Source Protection Zones

Records within 500m	0

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

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

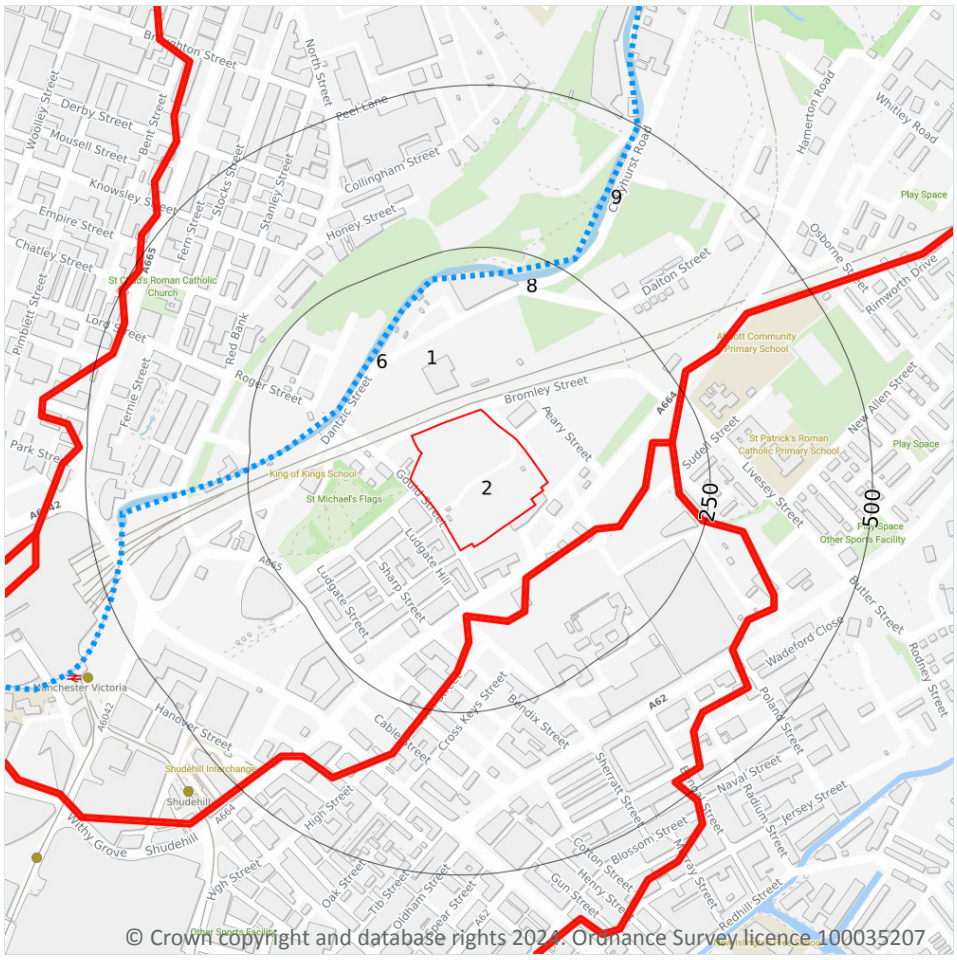
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



6.1 Water Network (OS MasterMap)

Records within 250m	3

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

Features are displayed on the Hydrology map on **page 115 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
6	117m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Irk

ID	Location	Type of water feature	Ground level	Permanence	Name
8	213m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Irk
9	216m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Irk

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**1**

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

Features are displayed on the Hydrology map on **page 115 >**

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 115 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Irk (Wince to Irwell)**	**GB112069061131**	**Roch Irk Medlock**	**Irwell**

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 115 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
5	117m NW	River	Irk (Wince to Irwell)	GB112069061131 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site	1

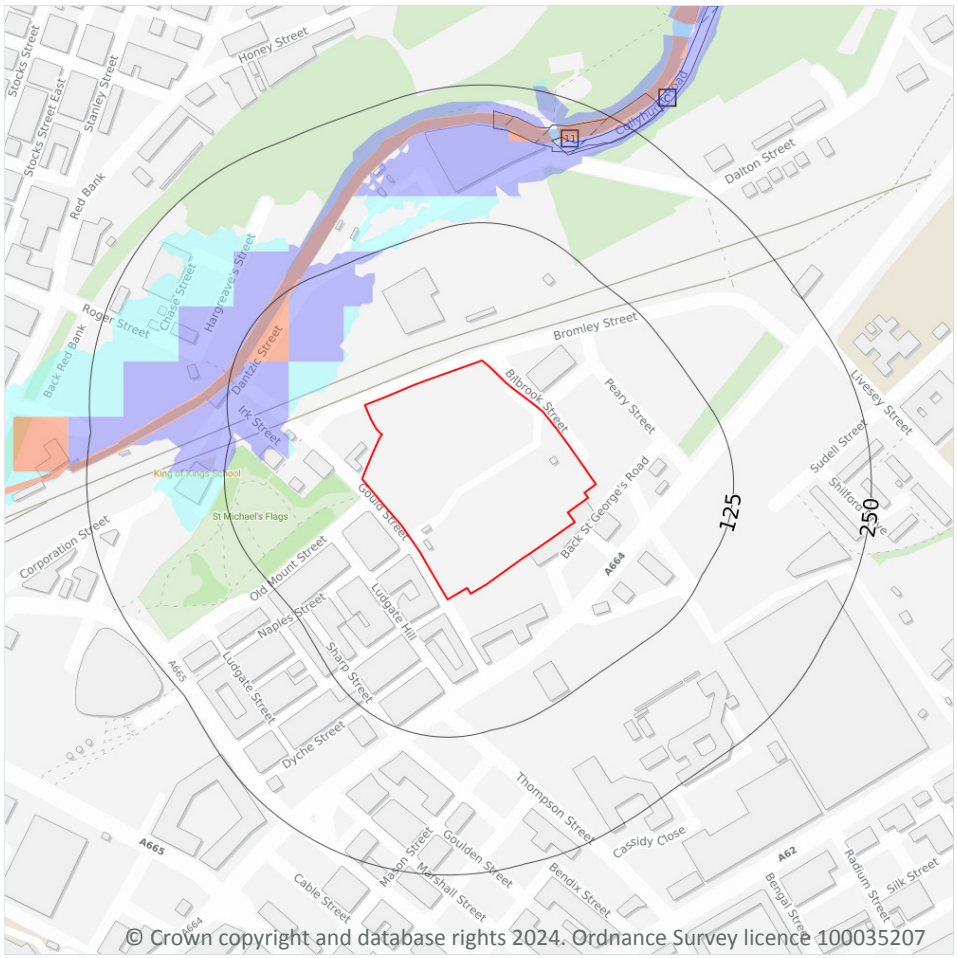
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 115 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	**On site**	**Manchester and East Cheshire Permo-Triassic Sandstone Aquifers**	GB41201G101100 ↗	**Poor**	**Poor**	**Poor**	**2019**

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	3

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 118 >**

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

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

7.2 Historical Flood Events

Records within 250m	**2**

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

Features are displayed on the River and coastal flooding map on **page 118 >**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
11	200m N	Cheetham Hill	2015-12-26 2015-12-26	Main river	Overtopping of defences	No data
C	202m N	Collyhurst Road	2019-03-16 2019-03-16	Main river	Channel capacity exceeded (no raised defences)	Fluvial

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

7.3 Flood Defences

Records within 250m	**0**

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	**0**

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

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

7.5 Flood Storage Areas

Records within 250m	0

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

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

River and coastal flooding - Flood Zones



7.6 Flood Zone 2

Records within 50m	1

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

Features are displayed on the River and coastal flooding map on **page 118 >**

Location	Type
36m NW	Zone 2 - (Fluvial /Tidal Models)

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

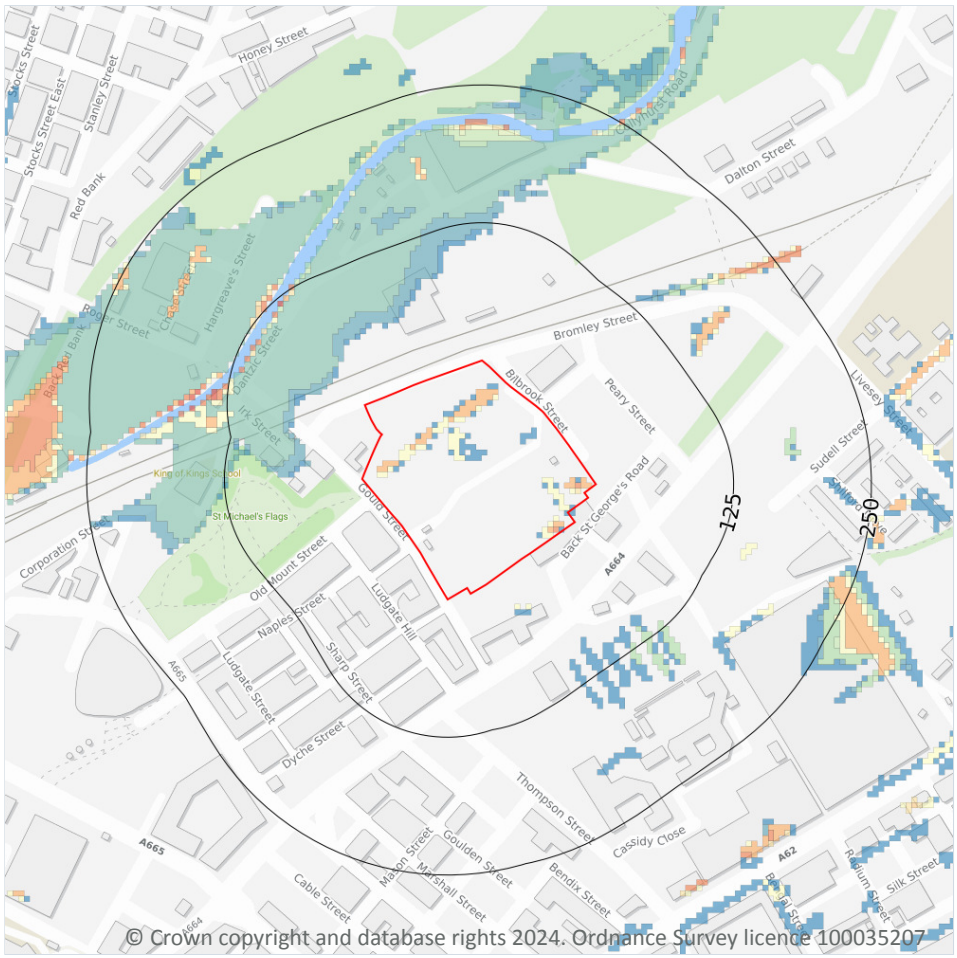
7.7 Flood Zone 3

Records within 50m	0

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

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

8 Surface water flooding



Site Outline

Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
Highest risk within 50m	**1 in 30 year, 0.3m - 1.0m**

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

Features are displayed on the Surface water flooding map on **page 123 >**

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

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

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

This data is sourced from 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**
Highest risk within 50m	**Moderate**

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 125 >**

This data is sourced from Ambiental 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

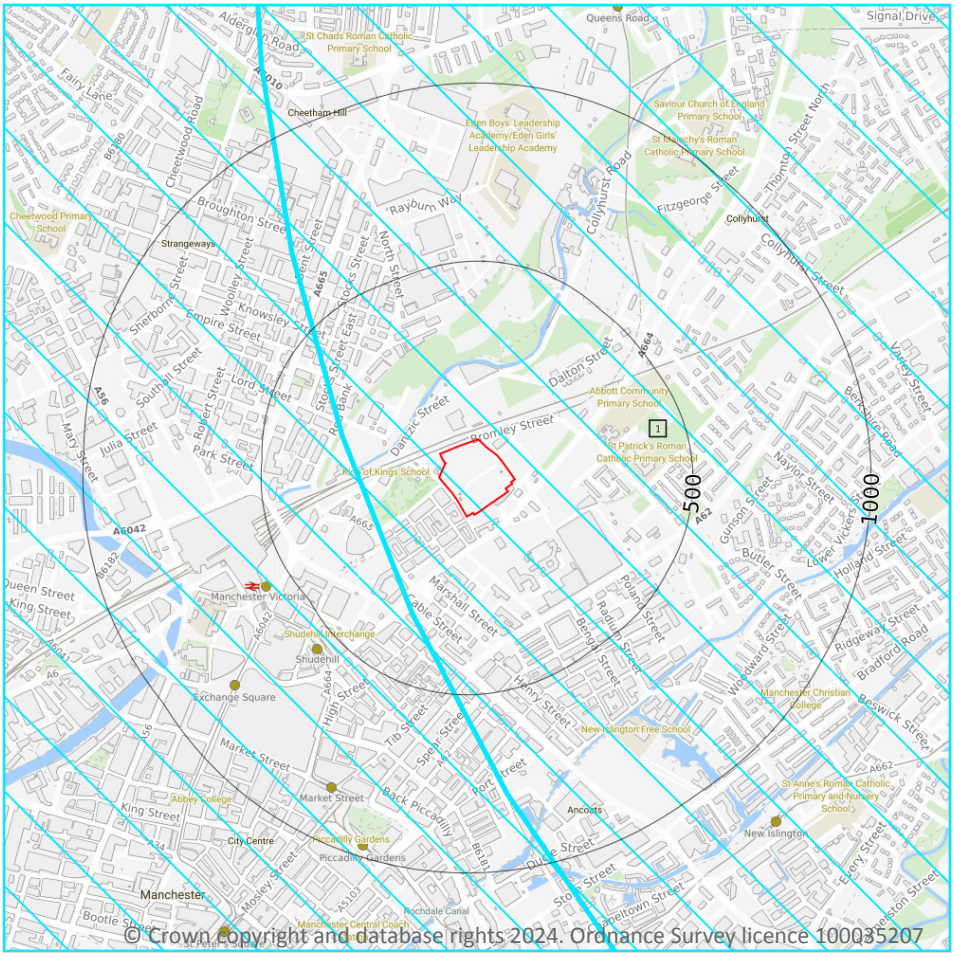
Records within 2000m	4

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

Location	Name	Type	NVZ ID	Status
On site	**River Irk (Moston Brook to River Irwell) NVZ**	**Surface Water**	**638**	**Existing**
475m W	River Irk (Moston Brook to River Irwell) NVZ	Surface Water	638	Existing
539m NW	Irwell / Man. Ship Canal (Kearsley to Irlam Locks) NVZ	Surface Water	643	Existing
558m NW	Irwell / Man. Ship Canal (Kearsley to Irlam Locks) NVZ	Surface Water	643	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 130 >**

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

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

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	6

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 132 >**

ID	Location	Name	Grade	Reference Number	Listed date
1	57m S	Marble Arch Inn	II	1247604	20/06/1988
2	123m SW	Warehouse On West Corner Of Junction With Simpson Street	II	1270681	06/06/1994
3	123m NW	Union Bridge	II	1255163	06/06/1994
4	129m SW	Sharp Street Ragged School	II	1254650	06/06/1994
5	152m W	Charter Street Mission (Formerly Charter Street Ragged School And Working Girls' Home)	II	1461979	22/07/2019

ID	Location	Name	Grade	Reference Number	Listed date
6	179m SW	Cooperative Press	II	1291013	06/06/1994

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

11.5 Conservation Areas

Records within 250m	0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

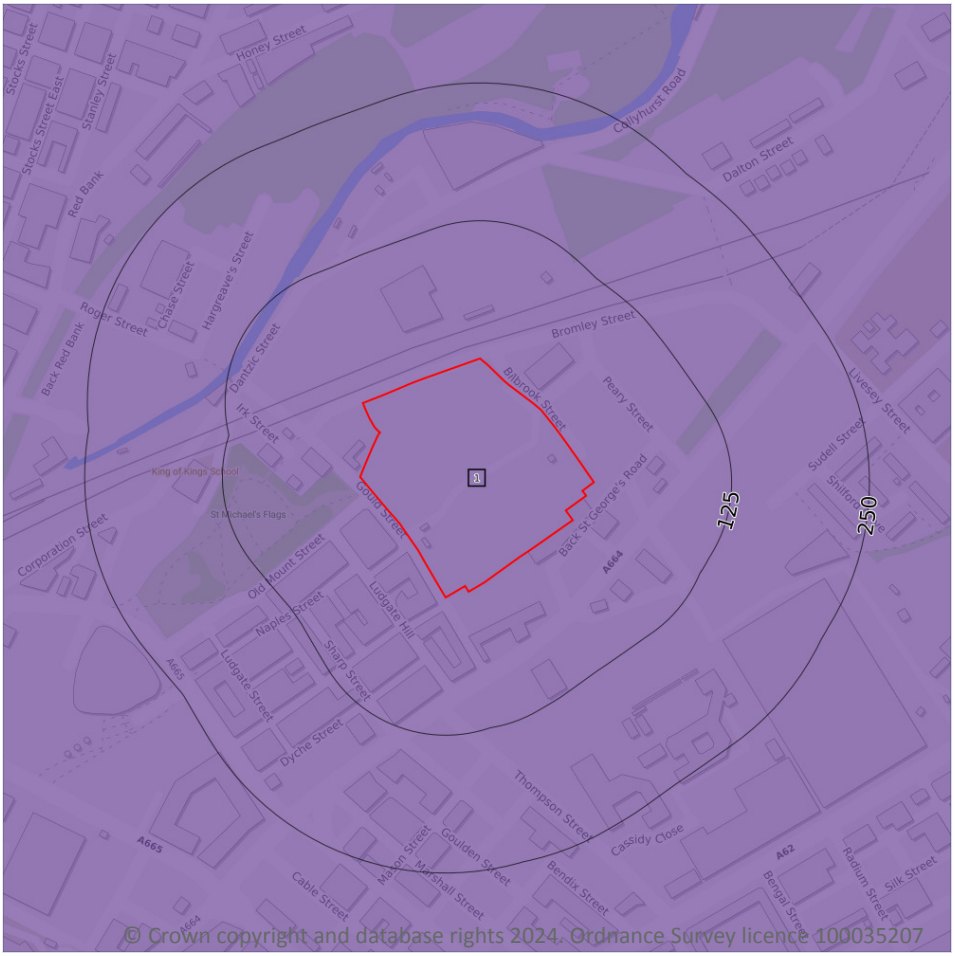
11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 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 135 >**

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	6

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 137 >**

ID	Location	Main Habitat	Other habitats
2	191m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	203m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	214m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
5	219m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
6	221m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	228m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	**0**

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	**2**

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

Features are displayed on the Habitat designations map on **page 137 >**

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
1	0m E	NLUD Ref: 421501025	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
7	223m N	NLUD Ref: 421500115	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

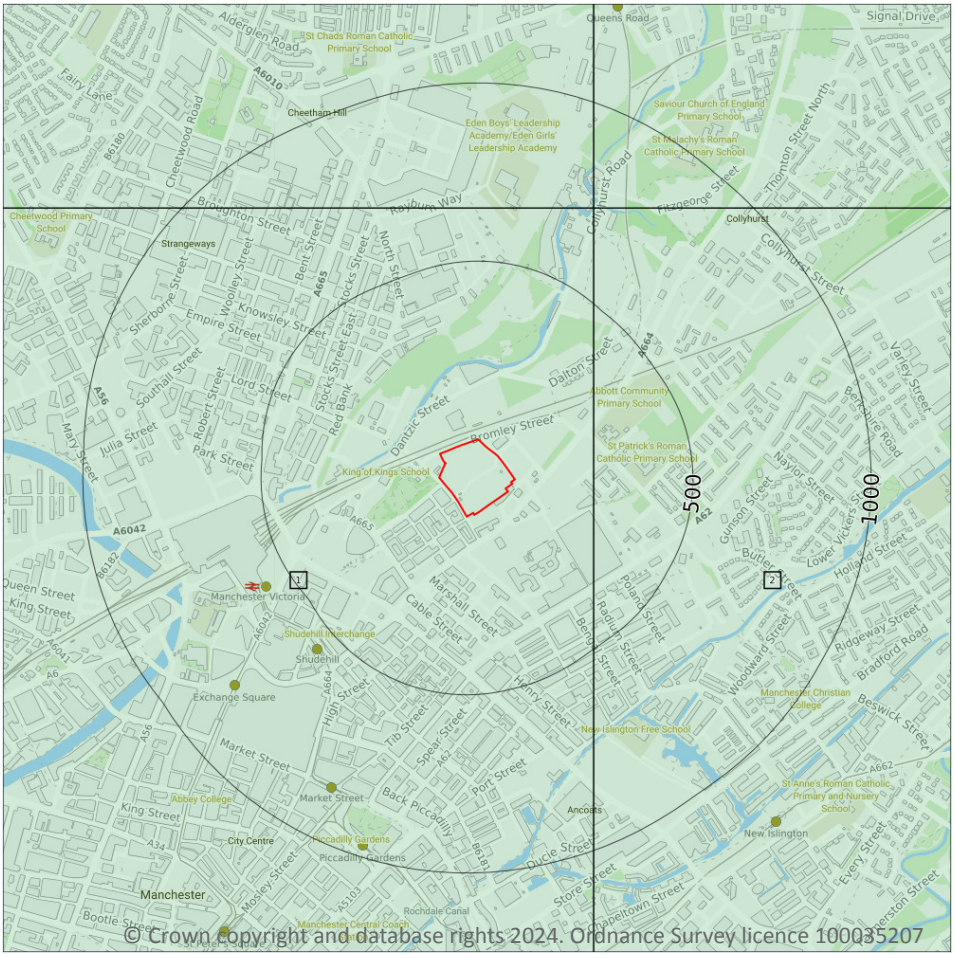
Records within 250m	**0**

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



14.1 10k Availability

Records within 500m	2

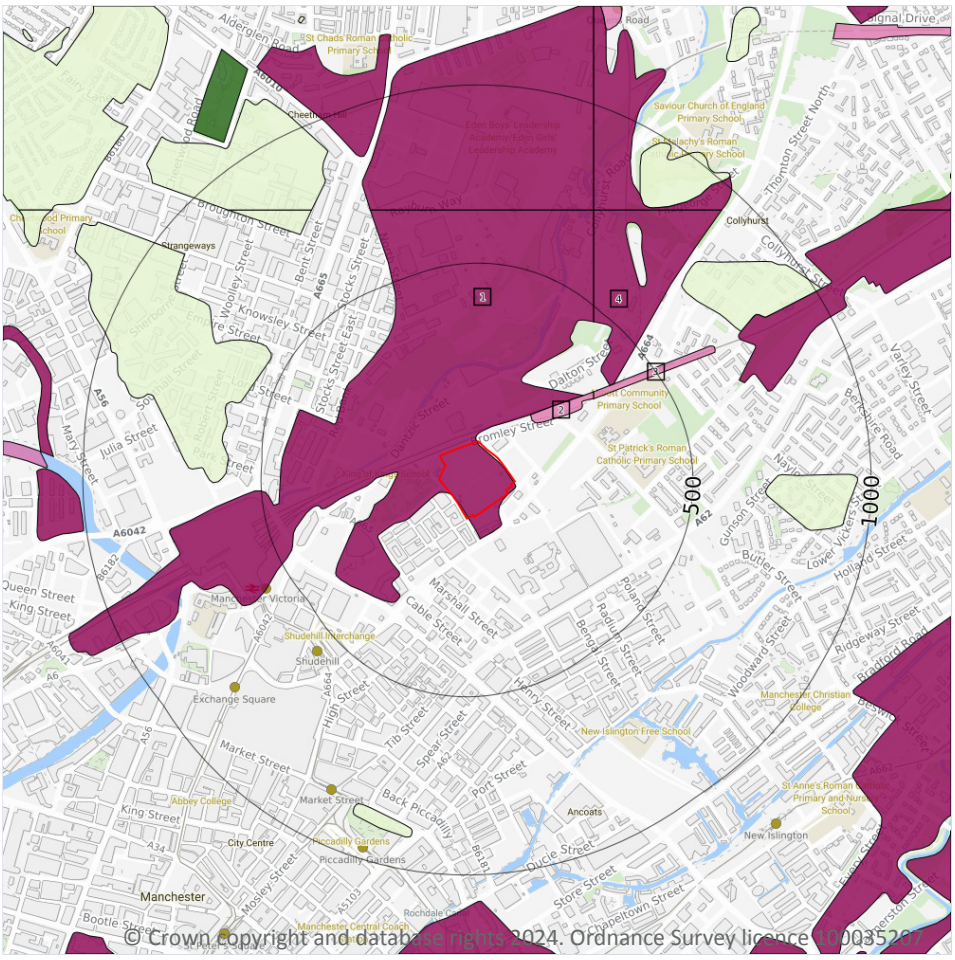
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 140 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**SJ89NW**
2	221m E	Full	Full	Full	Full	SJ89NE

This data is sourced from the British Geological Survey.

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



14.2 Artificial and made ground (10k)

Records within 500m	4

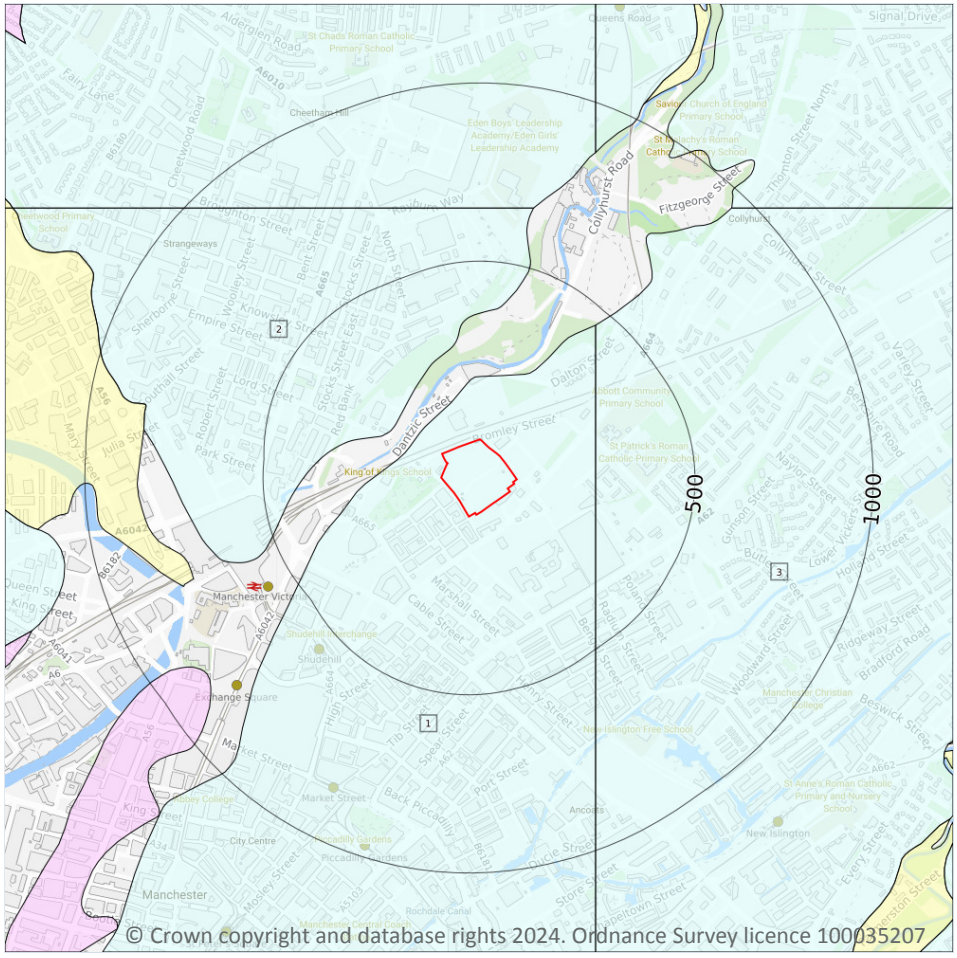
Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 141 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**Made Ground (Undivided)**	**Artificial Deposit**
2	143m NE	WGR-VOID	Worked Ground (Undivided)	Void
3	315m NE	WGR-VOID	Worked Ground (Undivided)	Void
4	373m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m **3**

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 143 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**TILLD-DMTN**	**Till, Devensian - Diamicton**	**Diamicton**
2	154m NW	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton
3	221m E	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton

This data is sourced from the British Geological Survey.

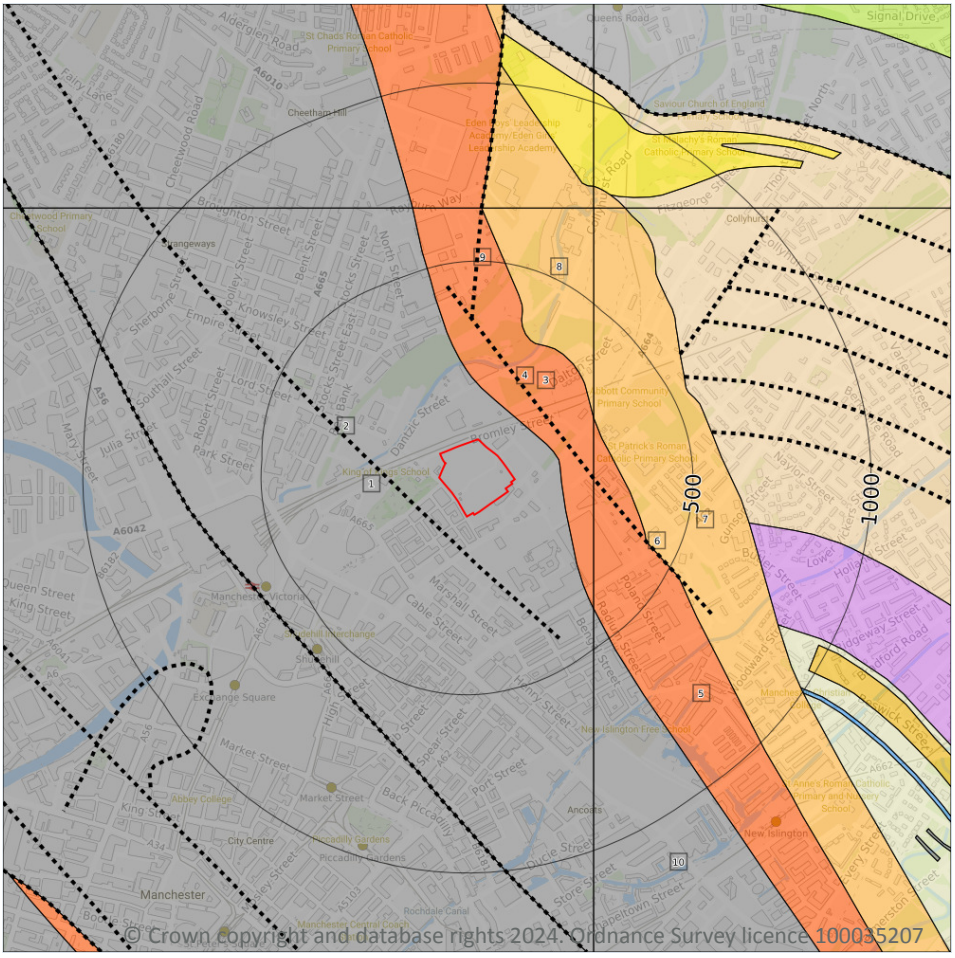
14.4 Landslip (10k)

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



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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 **6**

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 145 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**CPB-SDST**	**Chester Pebble Beds Formation - Sandstone**	**Early Triassic Epoch**
3	115m NE	MM-MDST	Manchester Marls Formation - Mudstone	Late Permian Epoch [Obsolete name]
5	221m E	MM-MDST	Manchester Marls Formation - Mudstone	Late Permian Epoch [Obsolete name]

ID	Location	LEX Code	Description	Rock age
7	270m E	CS-SDST	Collyhurst Sandstone Formation - Sandstone	Cisuralian Epoch
8	280m NE	CS-SDST	Collyhurst Sandstone Formation - Sandstone	Cisuralian Epoch
10	407m SE	CPB-SDST	Chester Pebble Beds Formation - Sandstone	Early Triassic Epoch

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	**4**

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 145 >**

ID	Location	Category	Description
2	77m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
4	175m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
6	221m E	FAULT	Normal fault, inferred; crossmarks on downthrow side
9	338m N	FAULT	Normal fault, inferred; crossmarks on downthrow side

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



15.1 50k Availability

Records within 500m	1

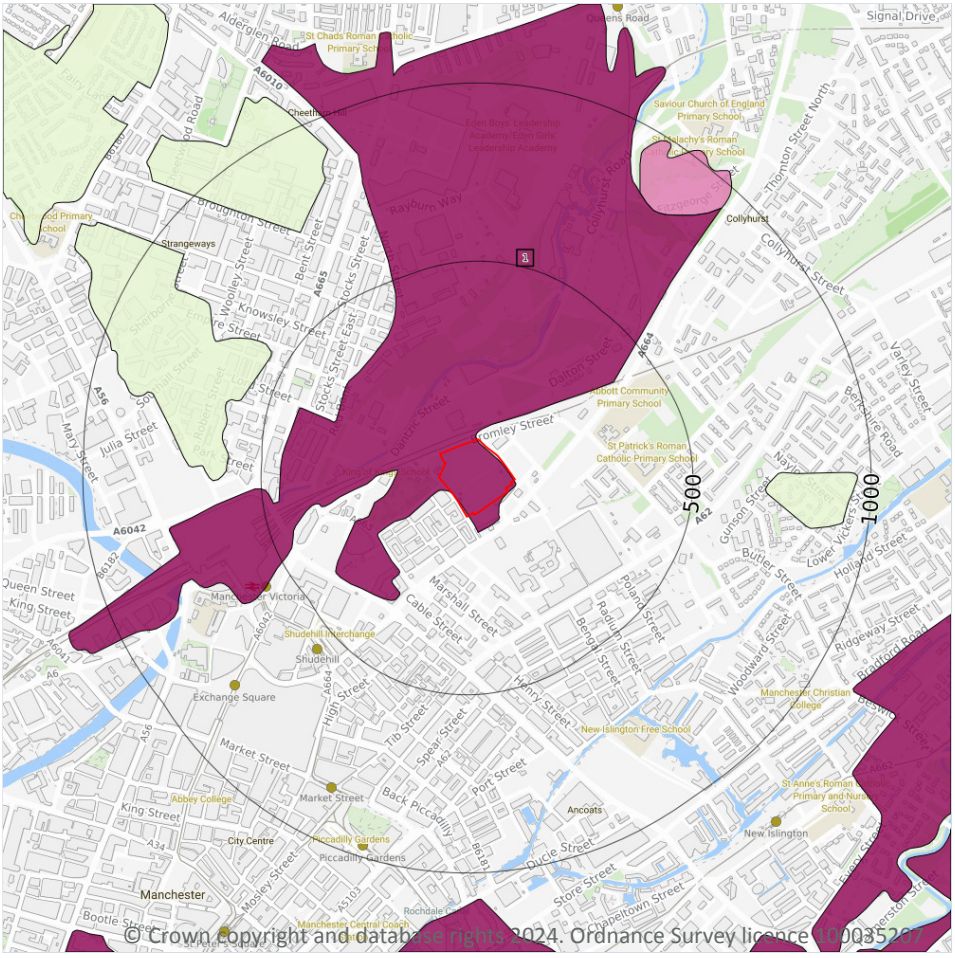
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 147 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW085_manchester_v4

This data is sourced from the British Geological Survey.

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



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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	1

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 148 >**

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

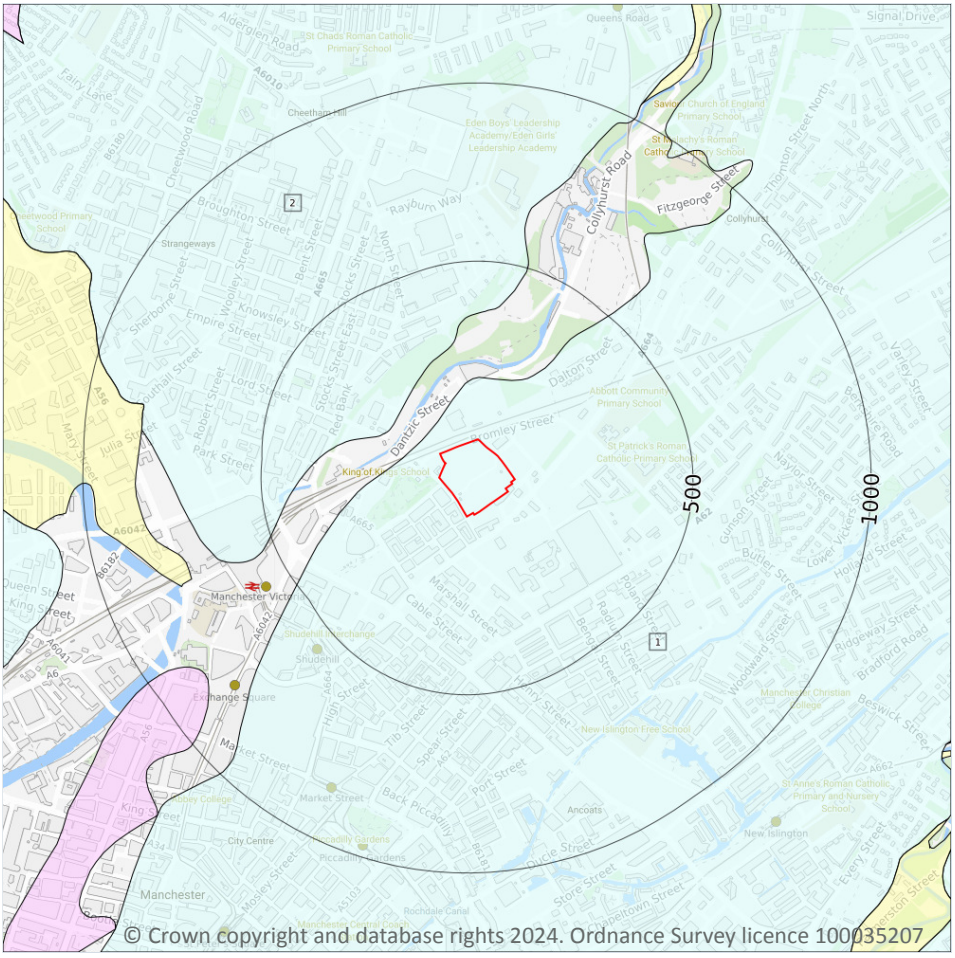
Records within 50m	1

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

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m **2**

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 150 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**TILLD-DMTN**	**TILL, DEVENSIAN**	**DIAMICTON**
2	154m NW	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1

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

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

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

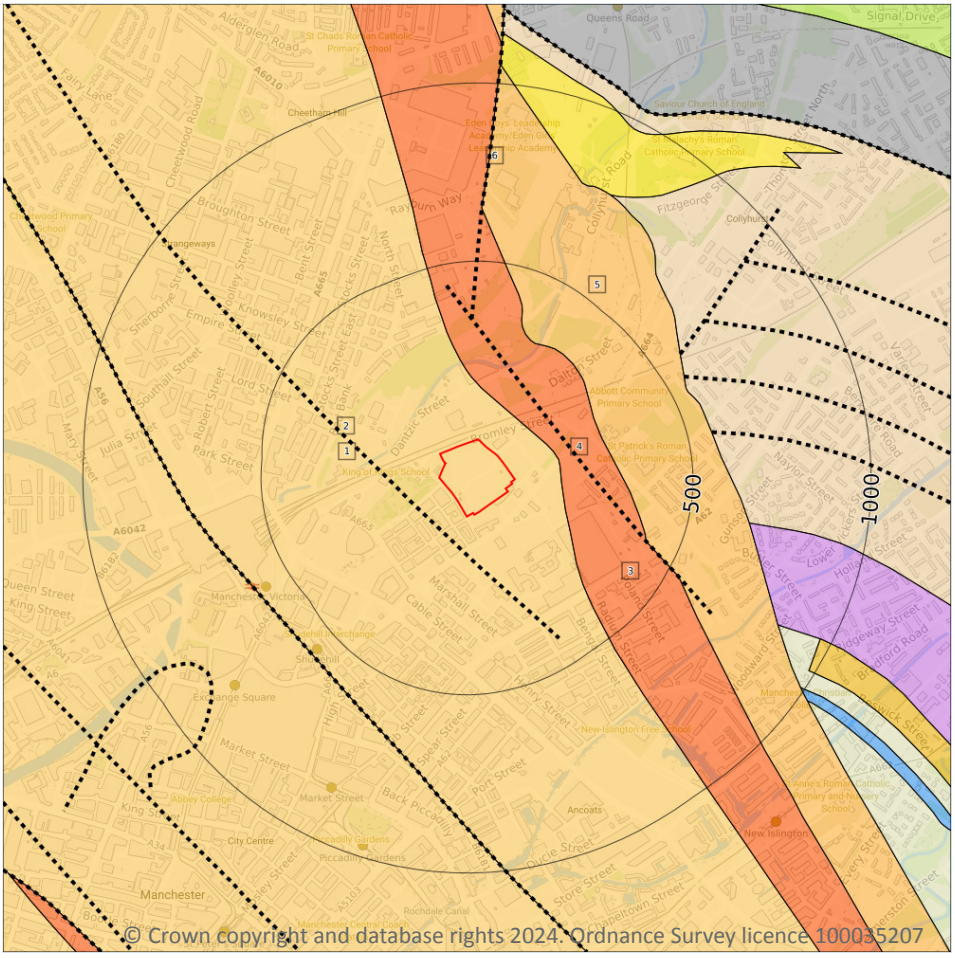
15.7 Landslip permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m **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 152 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**CHES-SDST**	**CHESTER FORMATION - SANDSTONE**	**OLENEKIAN**
3	115m NE	MM-MDST	MANCHESTER MARLS FORMATION - MUDSTONE	-
5	270m E	CS-SDST	COLLYHURST SANDSTONE FORMATION - SANDSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**High**	**Moderate**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	3

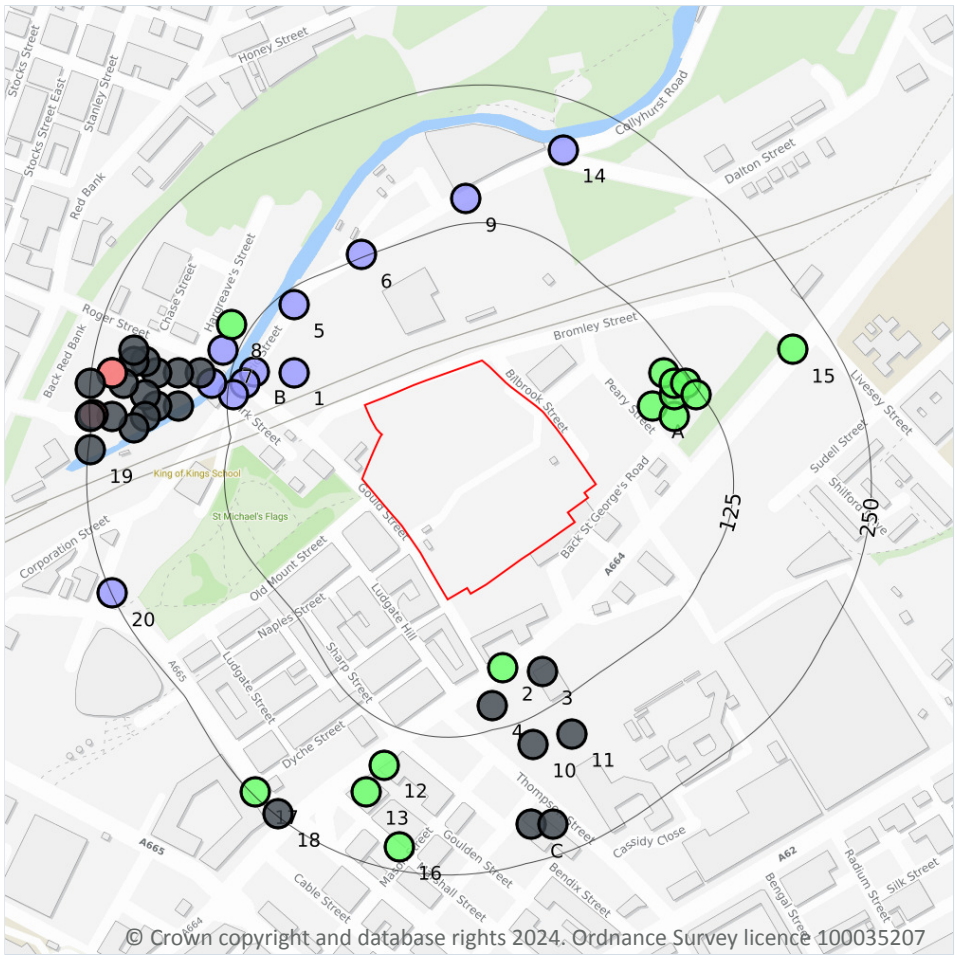
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 152 >**

ID	Location	Category	Description
2	78m SW	FAULT	Fault, inferred
4	175m NE	FAULT	Fault, inferred
6	339m N	FAULT	Fault, inferred

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	52

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 154 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	71m NW	384505 399340	MANCHESTER CORP. NEWTOWN	5.03	N	1042174 ↗
2	73m S	384694 399072	MANCHESTER CORP. ROCHDALE ROAD SEWER	21.95	N	1042168 ↗

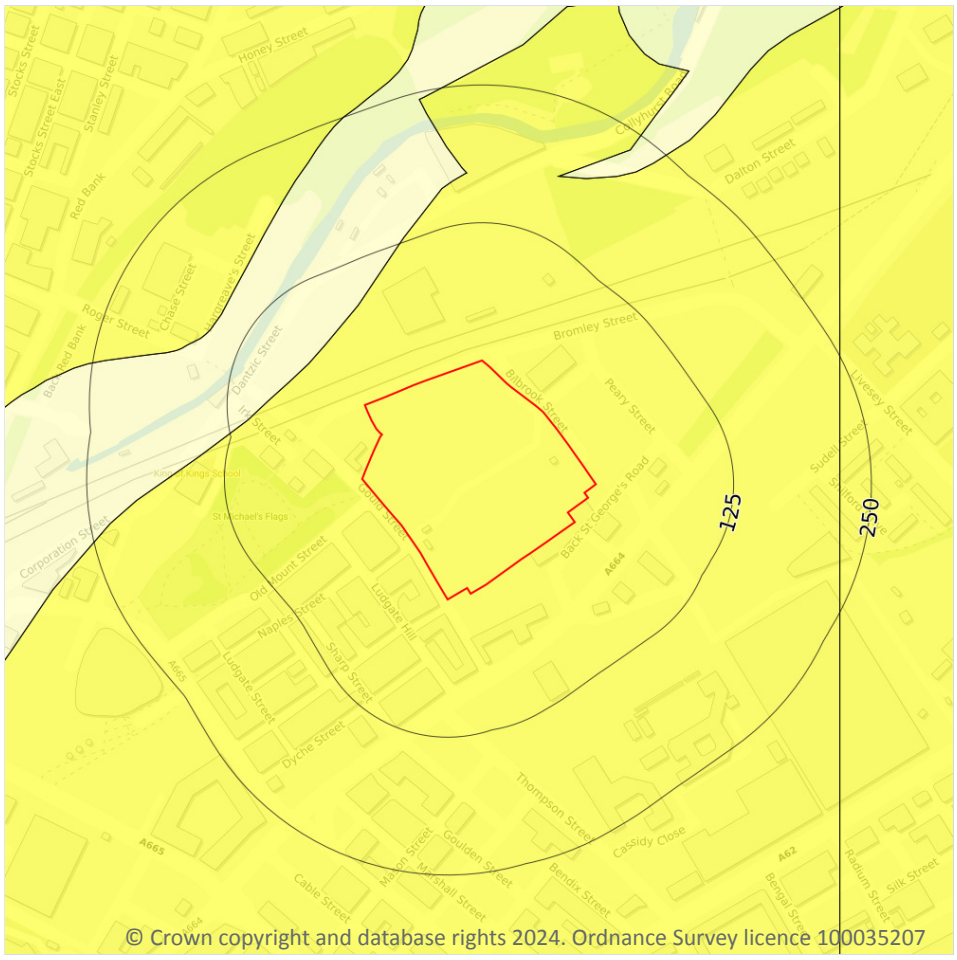
ID	Location	Grid reference	Name	Length	Confidential	Web link
A	83m E	384830 399310	MANCHESTER - LIMER STREET 1	15.01	N	12826232 ↗
A	94m E	384850 399300	MANCHESTER - LIMER STREET 2	14.93	N	12826233 ↗
3	94m S	384730 399069	THOMPSON ST MANCHESTER 2	-	Y	N/A
4	103m S	384685 399038	THOMPSON ST MANCHESTER 1	-	Y	N/A
B	105m NW	384469 399341	MANCHESTER CORP. B.SEWER	5.18	N	1042175 ↗
A	105m E	384850 399320	MANCHESTER - LIMER STREET 3	14.86	N	12826234 ↗
A	108m NE	384840 399340	MANCHESTER - LIMER STREET 4	14.25	N	12826235 ↗
A	111m NE	384850 399330	MANCHESTER - LIMER STREET 5	14.86	N	12826236 ↗
B	111m W	384460 399330	NEW ROGER STREET BRIDGE 3	6.55	N	1045096 ↗
5	112m NW	384505 399402	MANCHESTER CORP. B.SEWER	4.88	N	1042176 ↗
A	119m NE	384860 399330	MANCHESTER - LIMER STREET 6	15.24	N	12826237 ↗
B	120m W	384450 399320	NEW ROGER STREET BRIDGE 4	7.75	N	1045097 ↗
A	121m E	384870 399320	MANCHESTER - LIMER STREET 7	13.56	N	12826238 ↗
6	128m NW	384566 399447	MANCHESTER CORP. B.SEWER	6.1	N	1042177 ↗
7	138m NW	384440 399360	NEW ROGER STREET BRIDGE 1	7.54	N	1045094 ↗
B	140m W	384430 399330	NEW ROGER STREET BRIDGE 2	6.3	N	1045095 ↗
8	142m NW	384448 399384	CLARLES SMITH RED BANK	28.35	N	1042346 ↗
9	148m N	384661 399498	MANCHESTER CORP. B.SEWER	6.1	N	1042178 ↗
10	148m S	384722 399003	THOMPSON ST MANCHESTER 3	-	Y	N/A
B	152m W	384420 399340	ROGER STREET MANCHESTER 7	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
11	156m S	384757 399012	THOMPSON ST MANCHESTER 4	-	Y	N/A
12	161m S	384587 398984	MANCHESTER CORP. NEWTOWN	23.16	N	1042169 ↗
B	169m W	384400 399310	ROGER STREET MANCHESTER TP 9	-	Y	N/A
B	172m W	384400 399340	ROGER STREET MANCHESTER TP 2	-	Y	N/A
B	189m W	384380 399310	ROGER STREET MANCHESTER TP 1	-	Y	N/A
13	189m S	384570 398960	INNER RING ROAD SECTION 2 PHASE 1 MANCHESTER 20	11.12	N	1043548 ↗
B	191m W	384380 399340	ROGER STREET MANCHESTER 5	-	Y	N/A
B	199m W	384370 399320	ROGER STREET MANCHESTER TP 16	-	Y	N/A
B	199m W	384370 399300	ROGER STREET MANCHESTER 6	-	Y	N/A
B	203m W	384370 399350	ROGER STREET MANCHESTER TP 10	-	Y	N/A
14	205m N	384749 399542	MANCHESTER CORP. B.SEWER	5.18	N	1042179 ↗
B	210m W	384360 399290	ROGER STREET MANCHESTER TP 17	-	Y	N/A
B	213m W	384360 399350	ROGER STREET MANCHESTER TP 11	-	Y	N/A
B	215m W	384360 399360	ROGER STREET MANCHESTER TP 7	-	Y	N/A
15	216m E	384957 399361	MANCHESTER CORP. ROCHDALE ROAD SEWER	23.01	N	1042167 ↗
C	217m S	384720 398930	THOMPSON STREET MANCHESTER BH1	-	Y	N/A
B	220m W	384350 399330	ROGER STREET MANCHESTER TP 12	-	Y	N/A
C	222m S	384740 398930	THOMPSON STREET MANCHESTER BH2	-	Y	N/A
16	229m S	384600 398910	INNER RING ROAD SECTION 2 PHASE 1 MANCHESTER 19	11.12	N	1043547 ↗
B	229m W	384340 399300	ROGER STREET MANCHESTER TP 8	-	Y	N/A
B	231m W	384340 399340	ROGER STREET MANCHESTER 3	-	Y	N/A
B	231m W	384340 399340	W CLEMSON & CO RED BANK HORROCKS	115.37	N	1045461 ↗
B	231m W	384340 399340	W CLEMSON & CO RED BANK HORROCKS	82.3	N	1045462 ↗
B	246m W	384323 399302	CLEMSON & CO. BACK FOUNDRY STREET RED BANK	106.68	N	1042345 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
17	246m SW	384470 398960	INNER RING ROAD SECTION 2 PHASE 1 MANCHESTER 21	25.55	N	1043549 ↗
18	248m SW	384490 398940	ADDINGTON STREET IMPROVEMENT 2	-	Y	N/A
19	248m W	384320 399270	ROGER STREET MANCHESTER TP 3	-	Y	N/A
20	249m W	384340 399140	CITY CENTRE - PHASE 2 35	4.11	N	1043533 ↗
B	249m W	384320 399300	ROGER STREET MANCHESTER 4	-	Y	N/A
B	250m W	384320 399330	ROGER STREET MANCHESTER TP 13	-	Y	N/A

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	1

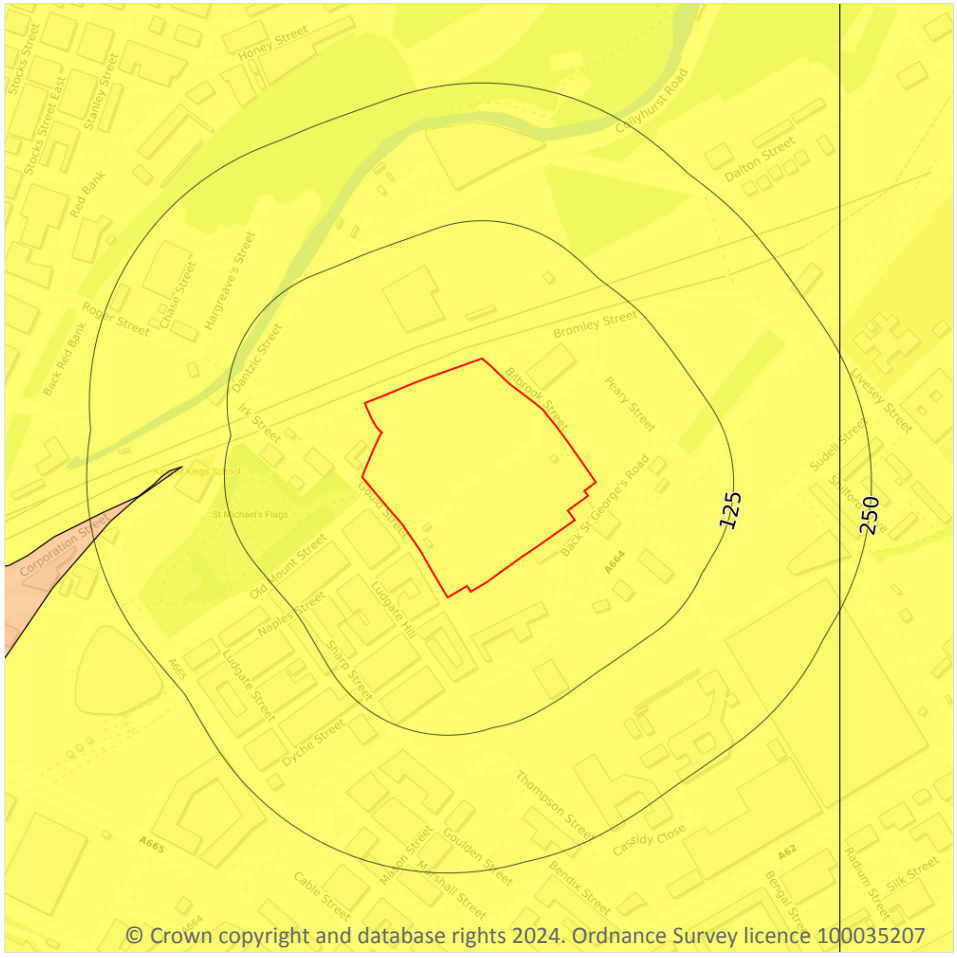
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 158 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	1

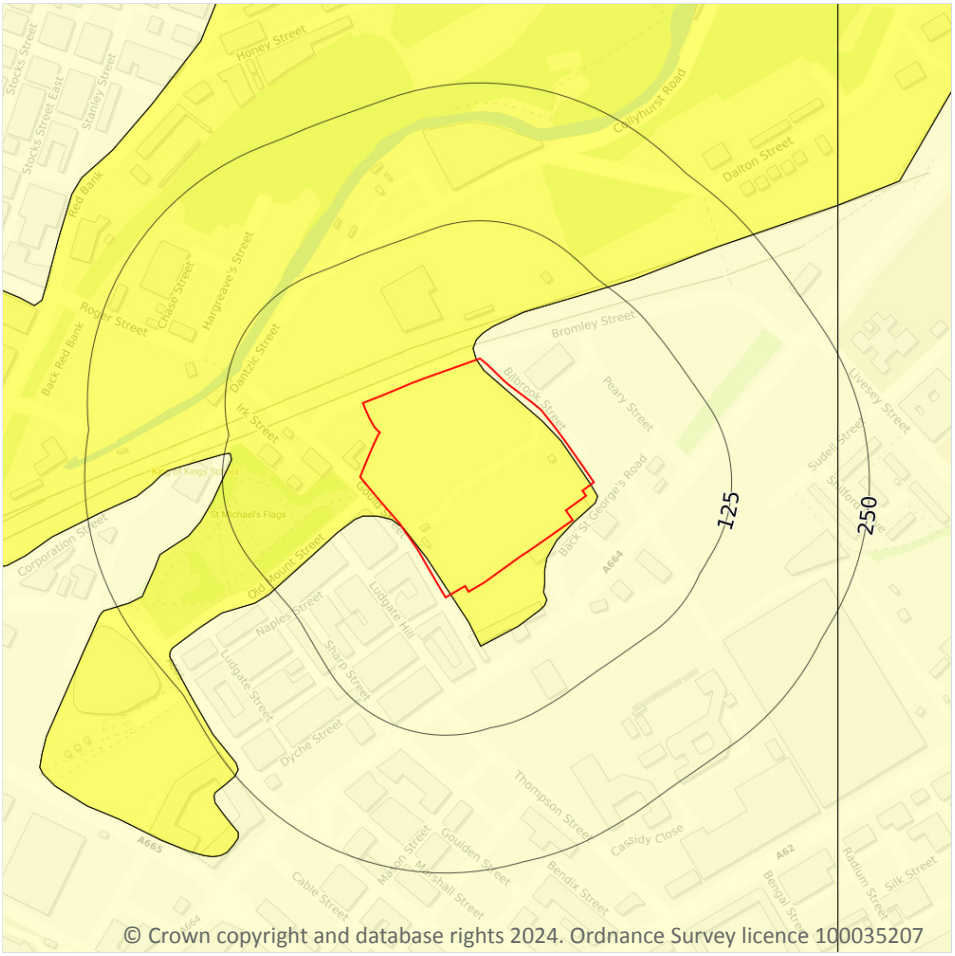
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 159 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	2

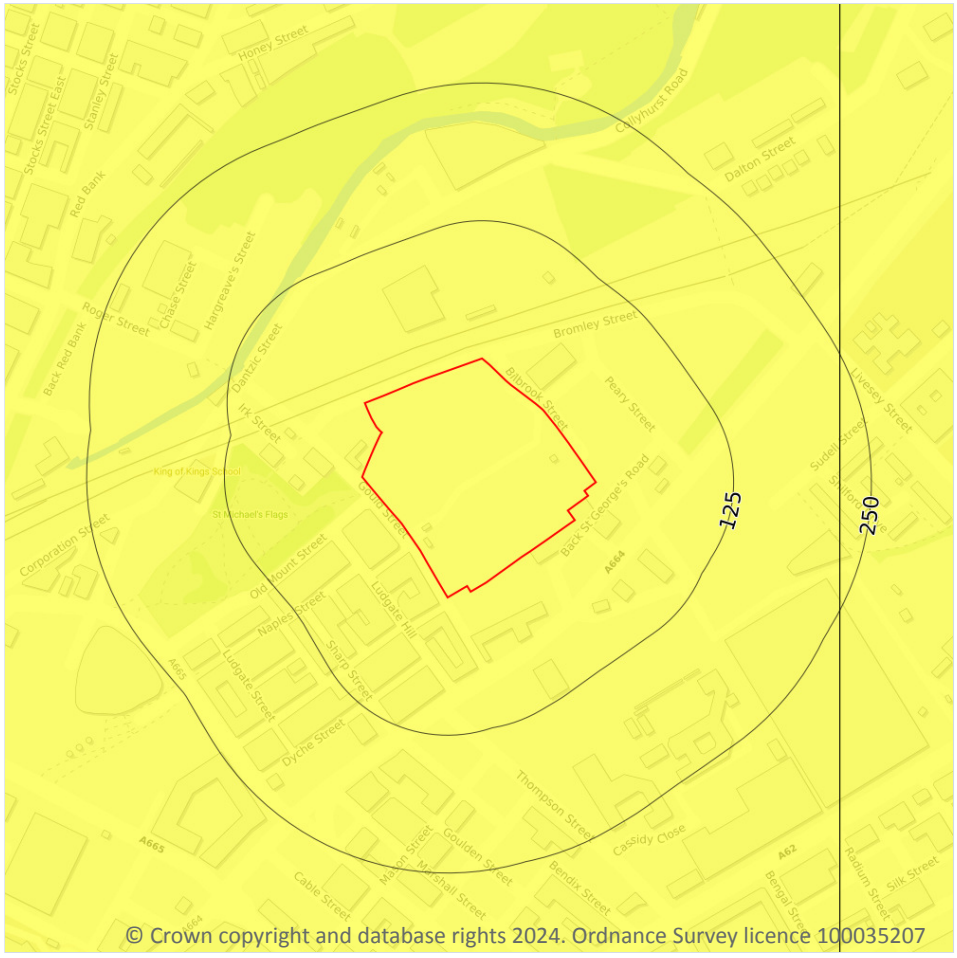
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 160 >**

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.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	1

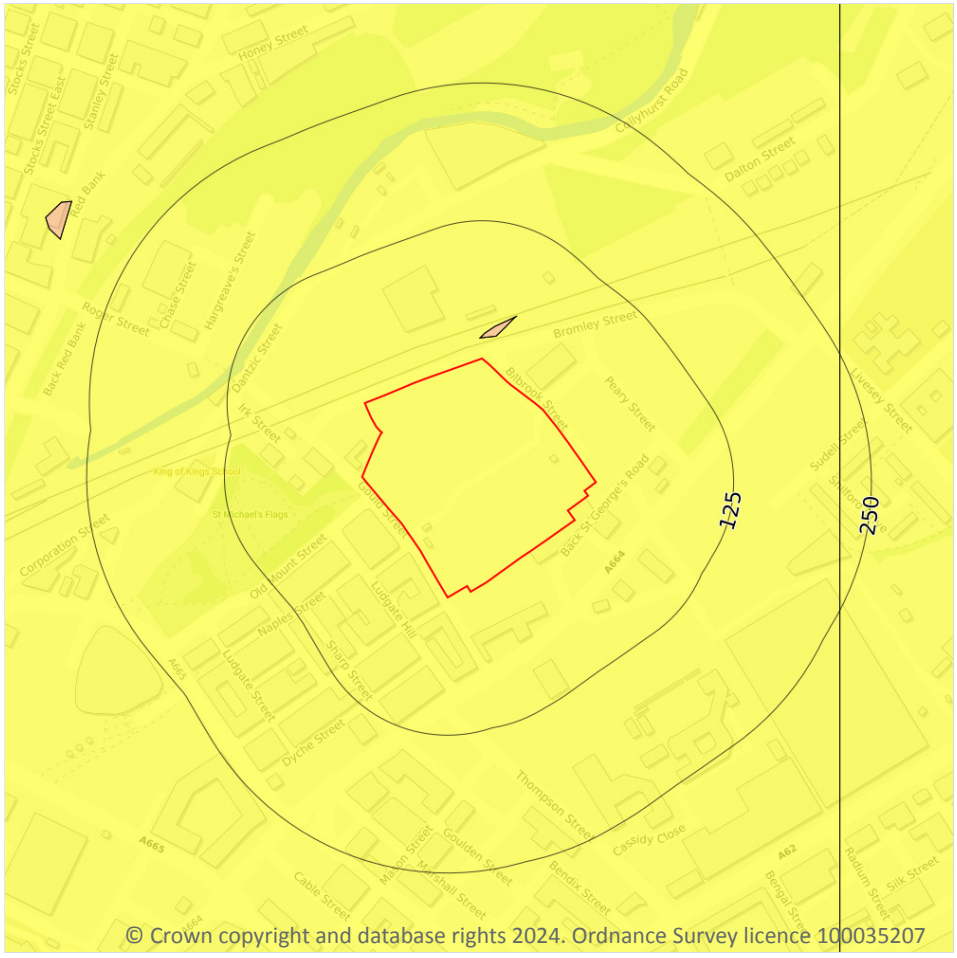
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 162 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	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.

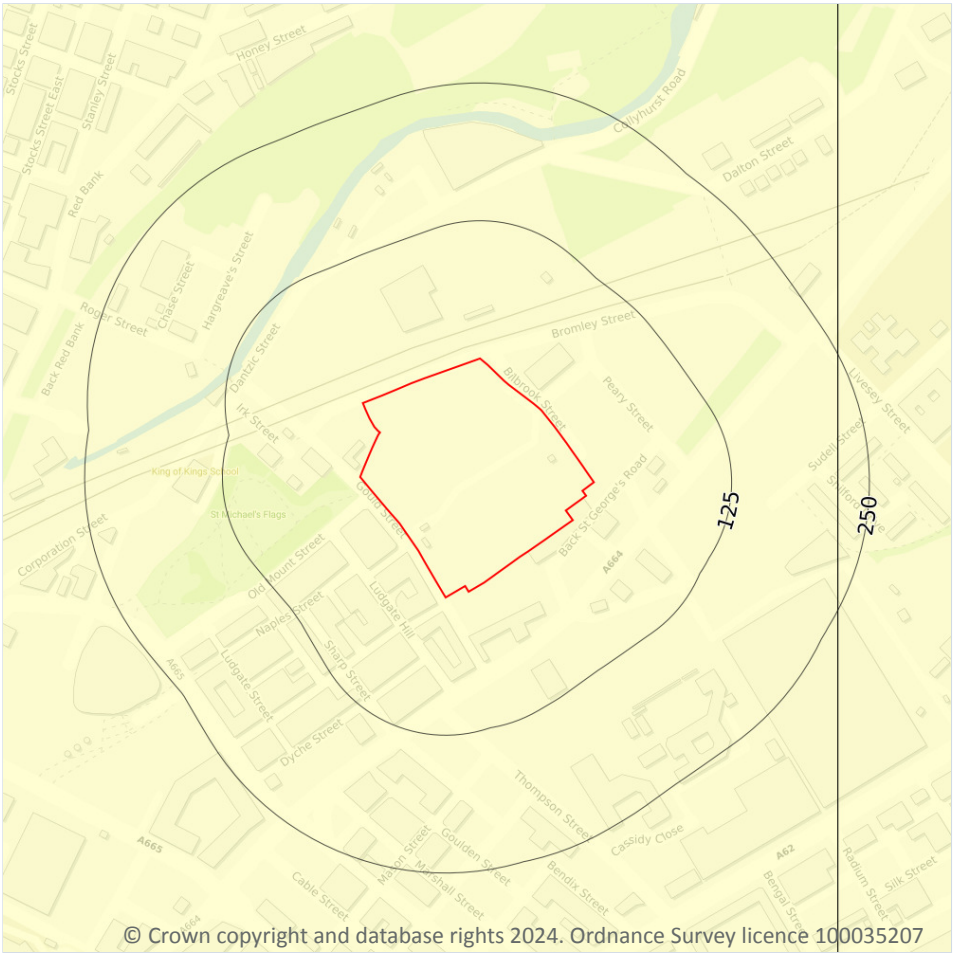
Features are displayed on the Natural ground subsidence - Landslides map on **page 163 >**

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

Location	Hazard rating	Details
19m N	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	1

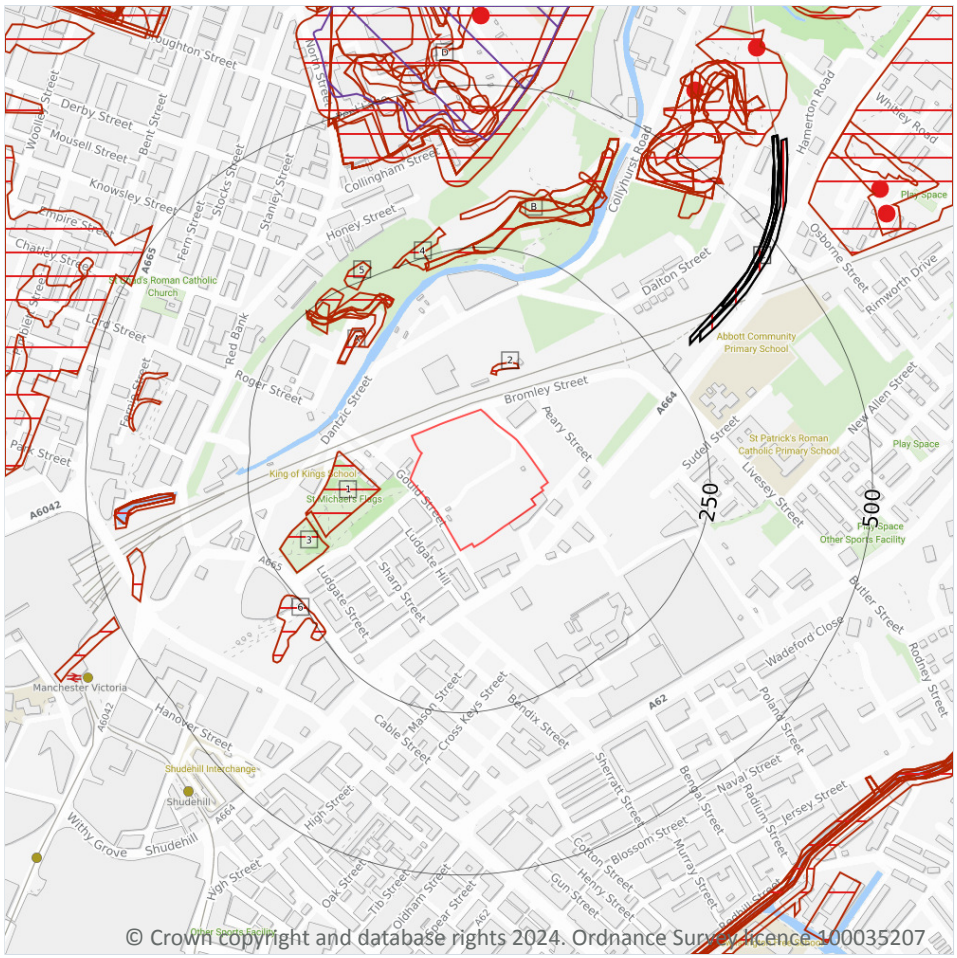
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 165 >**

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

This data is sourced from the British Geological Survey.

18 Mining and ground workings



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Site Outline

Search buffers in metres (m)

- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	0

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

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	20

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

Features are displayed on the Mining and ground workings map on **page 167 >**

ID	Location	Land Use	Year of mapping	Mapping scale
1	49m W	Grave Yard	1851	1:10560
2	58m N	Unspecified Ground Workings	1956	1:10560
A	152m NW	Refuse Heap	1938	1:10560
A	152m NW	Refuse Heap	1933	1:10560
A	153m NW	Unspecified Ground Workings	1921	1:10560
3	163m SW	Disused Grave Yard	1978	1:10000
A	196m NW	Unspecified Ground Workings	1988	1:10000
A	196m NW	Unspecified Ground Workings	1994	1:10000
A	197m NW	Unspecified Ground Workings	1956	1:10560
A	205m NW	Pond	1894	1:10560
A	218m NW	Pond	1851	1:10560
B	230m N	Unspecified Ground Workings	1988	1:10000
B	230m N	Unspecified Ground Workings	1994	1:10000
4	233m N	Unspecified Ground Workings	1891	1:10560
5	240m NW	Pond	1891	1:10560
6	242m SW	Pond	1851	1:10560
B	243m N	Unspecified Ground Workings	1971	1:10000
B	243m N	Unspecified Ground Workings	1956	1:10560
B	243m N	Unspecified Ground Workings	1978	1:10000
B	243m N	Unspecified Ground Workings	1985	1:10000

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	10

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

Features are displayed on the Mining and ground workings map on **page 167 >**

ID	Location	Land Use	Year of mapping	Mapping scale
C	302m NE	Tunnel	1956	1:10560
C	302m NE	Tunnel	1978	1:10000
C	302m NE	Tunnel	1968	1:10560
C	317m NE	Tunnel	1985	1:10000
C	317m NE	Tunnel	1991	1:10000
C	376m NE	Tunnel	1938	1:10560
C	376m NE	Tunnel	1933	1:10560
C	376m NE	Tunnel	1921	1:10560
C	376m NE	Tunnel	1906	1:10560
C	376m NE	Tunnel	1923	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m	0

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

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	1

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

Features are displayed on the Mining and ground workings map on **page 167 >**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
D	416m N	North Street	Clay, bricks	Surface mineral working	Valid	14/10/47

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	**1**

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

Features are displayed on the Mining and ground workings map on **page 167 >**

ID	Location	Name	Commodity	Class	Likelihood
-	670m E	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	**1**

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

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

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

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

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

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	1

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

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

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

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

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

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

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

19 Ground cavities and sinkholes

19.1 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.

19.2 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

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

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

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

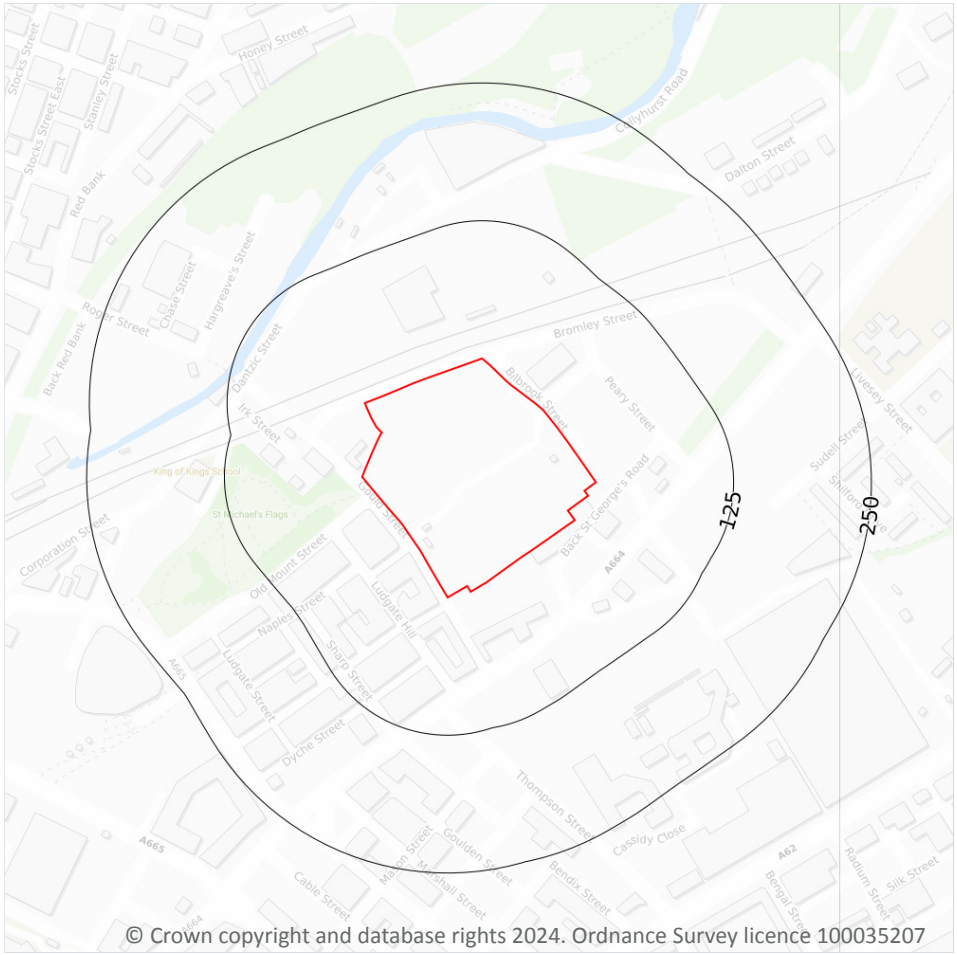
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

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

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

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

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

20.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 175 >**

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

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

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	1

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 km^2. 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 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

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

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	13

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 km^2).

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	**19**	**3.3**	**98**	**67**	**1.7**	**66**	**41**	**23**	**5**
On site	**20**	**3.5**	**66**	**45**	**0.4**	**65**	**29**	**25**	**8**
On site	**20**	**3.5**	**85**	**58**	**1.4**	**71**	**32**	**24**	**4**
On site	**21**	**3.7**	**114**	**78**	**2**	**69**	**48**	**27**	**5**
On site	**22**	**3.8**	**100**	**69**	**1.7**	**71**	**41**	**26**	**5**
On site	**23**	**4**	**106**	**73**	**1.8**	**74**	**43**	**28**	**5**
On site	**23**	**4**	**80**	**55**	**1.4**	**77**	**31**	**26**	**4**

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	**25**	**4.4**	**73**	**50**	**1.3**	**81**	**31**	**30**	**4**
3m SW	19	3.3	65	45	0.4	63	29	23	8
21m E	24	4.2	63	43	1.1	79	24	26	3
34m S	18	3.2	61	42	0.4	64	29	22	7
39m E	22	3.8	73	50	1.2	78	27	27	3
49m N	26	4.6	122	84	2	82	47	35	5

This data is sourced from the British Geological Survey.

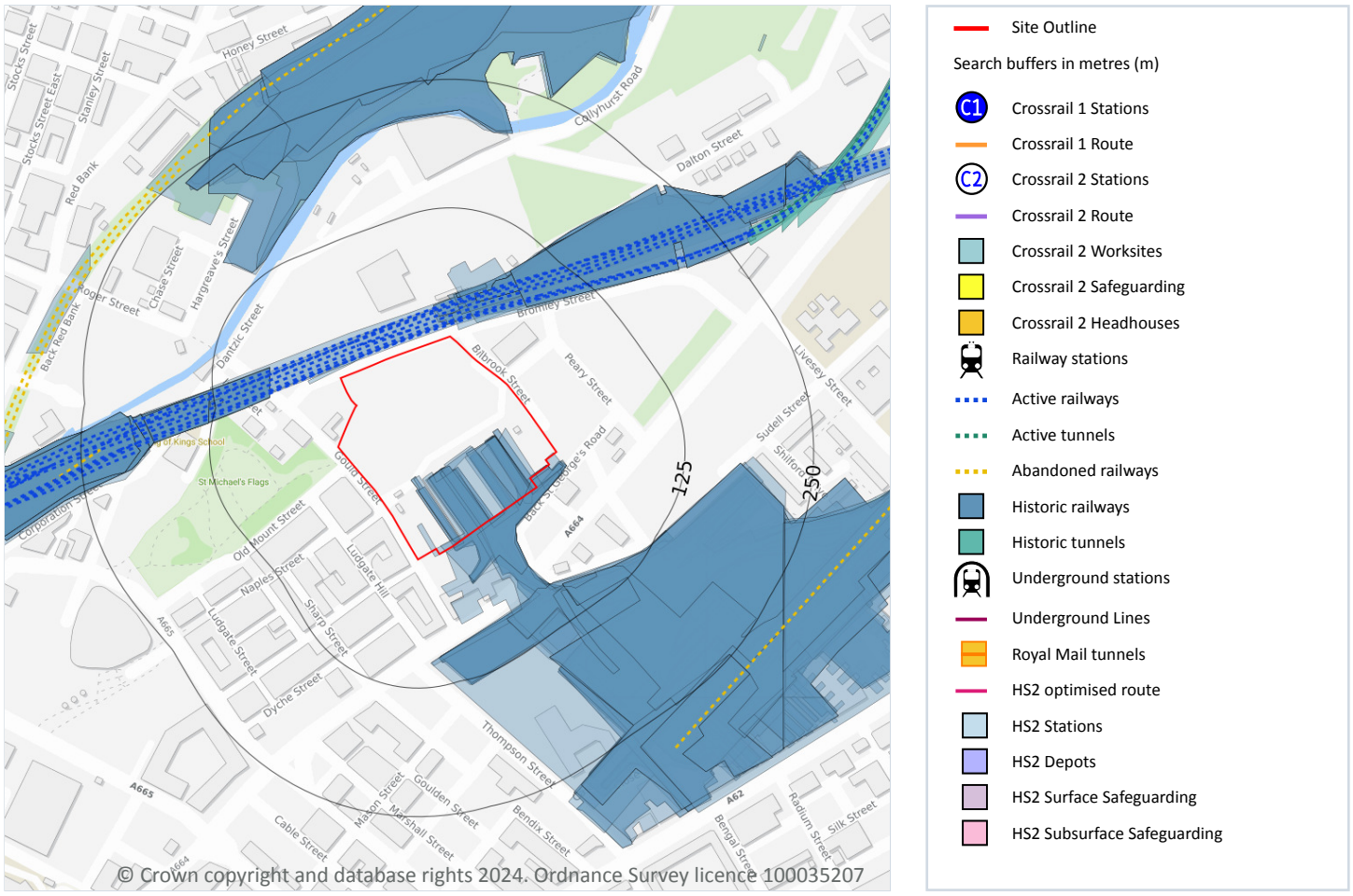
21.3 BGS Measured Urban Soil Chemistry

Records within 50m	**0**

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects



22.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	140

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 179 >**

Location	Land Use	Year of mapping	Mapping scale
On site	**Railway Sidings**	**1893**	**2500**
On site	**Railway Sidings**	**1908**	**2500**
On site	**Railway Sidings**	**1922**	**2500**
On site	**Railway Sidings**	**1931**	**2500**
On site	**Railway Sidings**	**1949**	**2500**
On site	**Railway Sidings**	**1952**	**2500**
On site	**Railway Sidings**	**1964**	**2500**
On site	**Railway Sidings**	**1958**	**2500**
On site	**Railway Sidings**	**1958**	**1250**
On site	**Railway Sidings**	**1952**	**1250**
On site	**Railway Sidings**	**1949**	**1250**
On site	**Railway Sidings**	**1891**	**500**
On site	**Railway Sidings**	**1938**	**10560**
On site	**Railway Sidings**	**1933**	**10560**
On site	**Railway Sidings**	**1921**	**10560**
On site	**Railway Sidings**	**1906**	**10560**
On site	**Railway Sidings**	**1891**	**10560**

Location	Land Use	Year of mapping	Mapping scale
On site	**Railway Sidings**	**1923**	**10560**
On site	**Railway Sidings**	**1956**	**10560**
9m NW	Railway	1922	-
10m N	Railway Sidings	1891	10560
12m N	Railway Sidings	1893	2500
12m N	Railway Sidings	1891	500
21m N	Railway Sidings	1931	2500
22m N	Railway Sidings	1922	2500
25m N	Railway Sidings	1949	2500
25m N	Railway Sidings	1952	2500
25m N	Railway Sidings	1958	2500
27m N	Railway Sidings	1923	10560
31m N	Railway Sidings	1964	2500
38m N	Railway Sidings	1958	1250
38m N	Railway Sidings	1952	1250
38m N	Railway Sidings	1970	1250
38m N	Railway Sidings	1949	1250
42m N	Railway Sidings	1938	10560
42m N	Railway Sidings	1933	10560
42m N	Railway Sidings	1921	10560
42m N	Railway Sidings	1906	10560
69m W	Railway Sidings	1990	1250
69m W	Railway Sidings	1995	1250
69m W	Railway Sidings	1949	1250
69m W	Railway Sidings	1963	1250
69m W	Railway Sidings	1952	1250
71m NE	Railway Sidings	1971	10000
71m NE	Railway Sidings	1956	10560

Location	Land Use	Year of mapping	Mapping scale
71m NE	Railway Sidings	1978	10000
71m NE	Railway Sidings	1985	10000
81m SE	Railway Sidings	1956	10560
82m SE	Railway Sidings	1964	2500
87m S	Railway Sidings	1970	1250
89m SE	Railway Sidings	1891	500
91m SE	Railway Sidings	1971	10000
91m SE	Railway Sidings	1978	10000
91m SE	Railway Sidings	1985	10000
94m SE	Railway Sidings	1851	10560
106m NE	Railway Sidings	1970	1250
116m W	Railway Sidings	1931	2500
128m W	Railway Sidings	1908	2500
128m W	Railway Sidings	1922	2500
128m W	Railway Sidings	1933	2500
130m NW	Railway Sidings	1923	10560
134m NW	Railway Sidings	1938	10560
134m NW	Railway Sidings	1933	10560
134m NW	Railway Sidings	1921	10560
134m NW	Railway Sidings	1906	10560
134m SE	Railway Sidings	1984	1250
158m E	Railway Sidings	1891	500
164m E	Railway Sidings	1891	500
173m E	Railway Sidings	1891	500
179m W	Railway Sidings	1964	2500
179m W	Railway Sidings	1949	2500
179m W	Railway Sidings	1952	2500
179m W	Railway Sidings	1958	2500

Location	Land Use	Year of mapping	Mapping scale
183m W	Railway Sidings	1923	10560
183m W	Railway Sidings	1971	10000
183m W	Railway Sidings	1956	10560
183m W	Railway Sidings	1988	10000
183m W	Railway Sidings	1978	10000
183m W	Railway Sidings	1985	10000
183m W	Railway Sidings	1994	10000
189m NE	Railway Sidings	1958	1250
189m NE	Railway Sidings	1952	1250
189m NE	Railway Sidings	1949	1250
191m SE	Railway Sidings	1891	500
192m W	Railway Sidings	1938	10560
192m W	Railway Sidings	1931	10560
192m W	Railway Sidings	1916	10560
192m W	Railway Sidings	1906	10560
202m SE	Railway Sidings	1953	2500
202m SE	Railway Sidings	1953	2500
203m SE	Railway Sidings	1891	500
203m SE	Railway Sidings	1963	1250
203m SE	Railway Sidings	1953	1250
207m NW	Railway Sidings	1971	10000
207m NW	Railway Sidings	1956	10560
207m NW	Railway Sidings	1988	10000
207m NW	Railway Sidings	1978	10000
207m NW	Railway Sidings	1985	10000
207m SE	Railway Sidings	1967	2500
208m NW	Railway Sidings	1891	10560
208m SE	Railway Sidings	1965	2500

Location	Land Use	Year of mapping	Mapping scale
208m W	Railway Sidings	1891	500
209m NW	Railway Sidings	1949	2500
209m NW	Railway Sidings	1952	2500
209m NW	Railway Sidings	1964	2500
209m NW	Railway Sidings	1958	2500
209m NW	Railway Sidings	1949	1250
209m NW	Railway Sidings	1968	1250
209m NW	Railway Sidings	1989	1250
209m NW	Railway Sidings	1952	1250
209m NW	Railway Sidings	1958	1250
212m NW	Railway Sidings	1978	-
212m NW	Railway Sidings	1931	2500
213m NW	Railway Sidings	1990	1250
214m NW	Railway Sidings	1970	1250
214m NW	Railway Sidings	1952	1250
214m NW	Railway Sidings	1958	1250
217m NW	Railway Sidings	1908	2500
217m NW	Railway Sidings	1922	2500
221m NW	Railway	1922	-
229m NW	Railway Sidings	1922	2500
229m NW	Railway Sidings	1933	2500
231m E	Railway Sidings	1956	10560
231m E	Railway Sidings	1968	10560
232m E	Railway Sidings	1952	2500
232m E	Railway Sidings	1949	2500
232m NW	Railway Sidings	1968	1250
232m NW	Railway Sidings	1952	1250
232m NW	Railway Sidings	1958	1250

Location	Land Use	Year of mapping	Mapping scale
232m E	Railway Sidings	1978	10000
233m NW	Railway Sidings	1893	2500
233m NW	Railway Sidings	1949	1250
233m NW	Railway Sidings	1978	-
234m NW	Railway Sidings	1891	500
235m E	Railway Sidings	1960	1250
235m E	Railway Sidings	1949	1250
235m E	Railway Sidings	1951	1250
237m E	Railway Sidings	1970	1250
240m E	Railway Sidings	1960	1250
250m NE	Railway Sidings	1891	500

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	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 179 >**

Location	Description
231m W	Abandoned

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	32

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

Features are displayed on the Railway infrastructure and projects map on page 179 >

Location	Name	Type
11m N	Metrolink	light_rail
12m NW	Not given	Multi Track
14m N	Not given	Multi Track
14m NW	Metrolink	light_rail
19m NW	Manchester Victoria and Miles Platting Line	rail
19m N	Manchester Victoria and Miles Platting Line	rail
22m NW	Manchester Victoria and Miles Platting Line	rail
27m NW	Caldervale Line	rail
27m NW	Not given	Multi Track
28m NW	Manchester Victoria and Miles Platting Line	rail
28m NW	Caldervale Line	rail
29m N	Not given	Multi Track
31m NW	Caldervale Line	rail
31m NW	Caldervale Line	rail
85m NE	Metrolink	light_rail
87m NE	Metrolink	light_rail
134m NE	Manchester Victoria and Miles Platting Line	rail
136m NE	Manchester Victoria and Miles Platting Line	rail
138m NE	Caldervale Line	rail
141m NE	Caldervale Line	rail
149m NE	Metrolink	light_rail
151m NE	Metrolink	light_rail
165m W	Manchester Victoria and Miles Platting Line	rail
170m W	Caldervale Line	rail

Location	Name	Type
170m W	Manchester Victoria and Miles Platting Line	rail
195m W	Not given	Multi Track
197m W	Not given	Multi Track
198m W		light_rail
208m NE	Not given	Multi Track
212m W		light_rail
216m W	Metrolink	light_rail
225m W	Manchester Victoria and Miles Platting Line	rail

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

Terms and conditions

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

APPENDIX D

Mining Search Report

Groundsure
LOCATION INTELLIGENCE

CON29M
OFFICIAL COAL MINING SEARCH

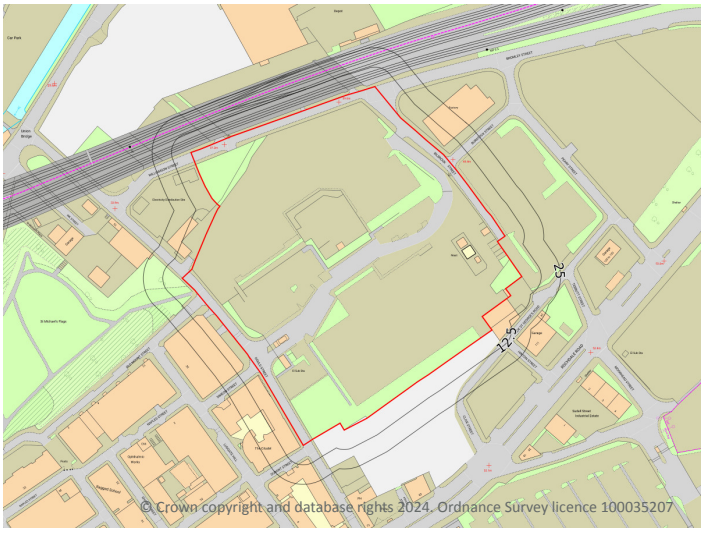
ROCHDALE ROAD, MANCHESTER, M4 4HY

Professional opinion

Inc. integrated mine entry interpretive assessment

PASS

Site plan



Search results

1. **Past underground coal mining**
Identified page 4 >

2. **Present underground coal mining**
Not identified

3. **Future underground coal mining**
Not identified

4. **Mine entries**
Not identified

5. **Coal mining geology**
Not identified

6. **Past opencast coal mining**
Not identified

7. **Present opencast coal mining**
Not identified

8. **Future opencast coal mining**
Not identified

9. **Coal mining subsidence claims**
Not identified

10. **Mine gas emissions**
Not identified

11. **Emergency Call Out incidents**
Not identified

12. **Withdrawal of support**
Identified page 7 >

13. **Working facilities orders**
Not identified

14. **Payments to copyhold owners**
Not identified

Cheshire Brine
Not identified

Contact us with any questions at:
info@groundsure.com
01273 257 755

Ref: BRO-U15-LAL-T5S-P34
Your ref: C5692-5641-SD
Grid ref: 384665 399250
Date: 11 September 2024

Certified B Corporation

Coal mining (CON29M) assessment

We consider the property to be acceptably free from coal mining related risk. No further action is required with regards to past coal mining.

Coal mining

Coal Mining Subsidence Act 1991

If any coal mining subsidence damage has occurred, as determined by the appropriate persons/bodies, the property will benefit from the protection of the Coal Mining Subsidence Acts of 1991 and as amended 1994.

This Act, however, does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester. In this instance it would be prudent to have the property visually inspected for signs of mining related settlement or subsidence by a suitably qualified and experienced person, who could be sought through www.ricsfirms.com ↗.

The Coal Authority provide a call out service on 01623 646 333 to take remedial action concerning the movement or collapse of any coal entries or coal mining surface hazards. Further details can be found on www.groundstability.com ↗.

CON29M reports are a requirement for conveyancing and are recommended throughout the official Coal Mining Reporting Area. This is the area within which it is deemed prudent to clarify the risk presented by coal mining, using the questions laid out in the Law Society's CON29M form. The need for a CON29M does not always translate to an identification of risk, and reports will often be assessed as free from risk or 'Passed' even though they are within the official Coal Mining Reporting Area.

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Coal mining (CON29M)



Site Outline

Search buffers in metres (m)

Mine entries

- Adits
- Shafts
- Calculated 'zone of influence'

Subsidence claims

- Awaiting decision
- Rejected
- Admitted
- Deferred
- Settled
- Withdrawn

- Probable shallow coal mine workings
- Coal outcrops
- Past shallow coal mine workings

Coal mining (CON29M)

The map above shows relevant, mappable hazards identified that could constitute a risk to the property. It does not necessarily show all features or potential issues identified in this report. Further details of any features shown indicating the location of Mine Entries or Subsidence Claims can be found in the relevant sections of this report (4 and 9 respectively).

Responses to the Law Society CON29M Coal Mining search enquiries are produced using official Coal Authority data and the expert interpretation of Groundsure. This report is prepared in accordance with The Law Society CON29M (2018) Guidance Notes. Additional interpretation and calculation of mine entry zones of influence has also been carried out by Groundsure using Coal Authority and British Geological Survey data.

Please read this report carefully, and in particular any sections flagged with an amber 'i'.

Contact us with any questions at:
info@groundsure.com
01273 257 755

The Law Society

These enquiries are The Law Society CON29M (2018) Coal Mining search enquiries and are used with permission of The Law Society. The Law Society CON29M Coal Mining search enquiries are protected by copyright owned by The Law Society of 113 Chancery Lane, London WC2A 1PL. The Law Society has no responsibility for information provided in response to CON29M (2018) Coal Mining search enquiries within this report or otherwise.

1. Past underground coal mining

Is the property within the zone of likely physical influence on the surface of past underground coal workings?

- **The property lies within the potential zone of influence of recorded workings in 2 seam(s) of coal. The most recent underground working in the area was in 1965. These workings lie between 395 metres and 760 metres. Any ground movement due to this coal mining activity should have stopped.**

2. Present underground coal mining

Is the property within the zone of likely physical influence on the surface of present underground coal workings?

- **The property does not lie within the boundary of an underground site from which coal is being removed by underground methods.**

3. Future underground coal mining

(a) Is the property within any geographical area for which the Coal Authority is determining whether to grant a licence to remove coal by underground methods?

- **The property does not lie within the boundary of an underground site for which the Coal Authority is determining whether to grant a licence to remove coal by underground methods.**

(b) Is the property within any geographical area for which a licence to remove coal by underground methods has been granted?

- **The property does not lie within the boundary of an underground site for which a licence to remove coal by underground methods has been granted.**

(c) Is the property within the zone of likely physical influence on the surface of planned future underground coal workings?

- **The property does not lie within the zone of likely physical influence on the surface of planned future underground workings.**

(d) Has any notice of proposals relating to underground coal mining operations been given under section 46 of the Coal Mining Subsidence Act 1991?

- **No notices have been given under Section 46 of the Coal Mining Subsidence Act 1991 stating that the land is at risk of subsidence.**

4. Mine entries

Are there any shafts and adits or other entries to underground coal mine workings within the property or within 20 metres of the boundary of the property?

- **No coal mine entries are recorded to lie within 20 metres of the property.**

5. Coal mining geology

Is there any record of any fault or other line of weakness due to coal mining at the surface within the boundary of the property that has made the property unstable?

- **No damage arising from geological faults or other lines of weakness activated by coal mining are recorded within the property.**

6. Past opencast coal mining

Is the property situated within the geographical boundary of an opencast site from which coal has been removed in the past by opencast methods?

- **The property does not lie within the boundary of an opencast site from which coal was removed by opencast methods.**

7. Present opencast coal mining

Is the property within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods?

- **The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.**

8. Future opencast coal mining

(a) Is the property within 800 metres of the boundary of an opencast site for which the Coal Authority are determining whether to grant a licence to remove coal by opencast methods?

- **The property does not lie within 800 metres of the boundary of an opencast site for which the Coal Authority are determining whether to grant a licence to remove coal by opencast methods.**

(b) Is the property within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted?

- **The property does not lie within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.**

9. Coal mining subsidence claims

(a) Has any damage notice or claim for alleged coal mining subsidence damage to the property been given, made or pursued since 31st October 1994?

- **We have no evidence of a damage notice or subsidence claim for the property or within 50m of the property since 31st October 1994.**

(b) In respect of any such notice or claim has the responsible person given notice agreeing that there is a remedial obligation or otherwise accepted that a claim would lie against them?

- **Not applicable.**

(c) In respect of any such notice or acceptance has the remedial obligation or claim been discharged?

- **Not applicable.**

(d) Does any current "Stop Notice" delaying the start of remedial works or repairs affect the property?

- **There are no current Stop Notices delaying the start of remedial works or repairs to the property.**

(e) Has any request been made under Section 33 of the 1991 Act to execute preventive works before coal is worked, which would prevent the occurrence or reduce the extent of subsidence damage to any buildings, structures or works and, if yes, has any person withheld consent or failed to comply with any such request to execute preventive works?

- **There is no record of a request that has been made to carry out preventive works before coal is worked under Section 33 of the Coal Mining Subsidence Act 1991.**

NB. Records of damage notices or subsidence claims before 31st October 1994 are excluded from The Coal Authority data from which this search is compiled.

10. Mine gas emissions

Does the Coal Authority have record of any mine gas emission within the boundary of the property being reported that subsequently required action by the Authority to mitigate the effects of the mine gas emission?

- **No mine gas emissions are recorded within the boundary of the property.**

11. Emergency Surface Hazard Call Out incidents

Have the Coal Authority carried out any work on or within the boundaries of the property following a report of an alleged hazard related to coal mining under the Authority's Emergency Surface Hazard Call Out procedures?

- **No Emergency Surface Hazard Call Out procedures are recorded against the property.**

12. Withdrawal of support

(a) Does the land lie within a geographical area in respect of which a notice of entitlement to withdraw support has been published?

- **The property lies within an area where a notice of entitlement to withdraw support has been published. Notices were issued in: 1955, 1963.**

(b) Does the land lie within a geographical area in respect of which a revocation notice has been given under section 41 of the Coal Industry Act 1994?

- **The property does not lie within a geographical area in which a revocation notice has been given under section 41 of the Coal Industry Act 1994.**

13. Working facilities orders

Is the property within a geographical area subject to an order in respect of the working of coal under the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof?

- **The property is not in an area where a court order has been issued.**

14. Payments to owners of former copyhold land

(a) Has any relevant notice, which may affect the property, been given?

- **The property does not lie within former copyholder land.**

(b) If yes, has any notice of retained interests in coal and coal mines been given?

- **No notices of retained interests in coal and coal mines been given.**

(c) If yes, has any acceptance notice or rejection notice been served?

- **No acceptance or rejection notices have been served.**

(d) If any such acceptance notice has been served, has any compensation been paid to a claimant?

- **No compensation has been paid to a claimant.**

Methodologies and limitations

Groundsure's methodologies and limitations are available here: knowledge.groundsure.com/methodologies-and-limitations ↗.

Data providers

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

Conveyancing Information Executive and our terms & conditions

IMPORTANT CONSUMER PROTECTION INFORMATION

This search has been produced by Groundsure Ltd. Groundsure adheres to the Conveyancing Information Executive Standards.

In addition to The Property Ombudsman (TPO) redress scheme covering consumers, TPO will also provide redress to small businesses (including Charities and Trusts) and where the customer meets the following criteria:

- a small business (or group of companies) with an annual turnover of less than £3 million;
- a charity with an annual income of less than £3 million;
- a Trust with a net asset value of less than £3 million.

Complaints Advice

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure.

If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the Standards.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs.

COMPLAINTS PROCEDURE: If you want to make a complaint, we will:

- acknowledge it within 5 working days of receipt
- normally deal with it fully and provide a final response, in writing, within 20 working days of receipt
- liaise, at your request, with anyone acting formally on your behalf

Complaints should be sent to:
Operations Director, Groundsure Ltd, Nile House, Nile Street, Brighton, BN1 1HW. Tel: 01273 257 755. Email: info@groundsure.com ↗ If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman scheme (TPOs): Tel: 01722 333306, E-mail: admin@tpos.co.uk ↗ We will co-operate fully with the Ombudsman during an investigation and comply with their final decision.

Groundsure's Terms and Conditions can be viewed here: www.groundsure.com/terms-and-conditions-april-2023/ ↗

All of the advice and reports that Groundsure produces are covered by a comprehensive Remediation Contribution policy to ensure customers are protected, see www.groundsure.com/remediation ↗ for full details.

Coal Mining Report Insurance Policy

ZURICH

Coal Mining Report Insurance Policy

The Schedule

Policy Number: The Reference contained in the **Coal Mining Search Report**

Premium: £1.20 inclusive of Insurance Premium Tax at 12%

Property: The property which is the subject of the **Coal Mining Search Report**

Limit of Indemnity: £100,000 increasing by 10% compound per annum on each anniversary of and for the first 10 years following the **Commencement Date**

Commencement Date: The date of the **Coal Mining Search Report**

You/Your:
1. A purchaser of the **Property**
2. A lender providing a **Mortgage** in connection with a purchase of the **Property**
3. A lender providing a **Mortgage** by way of a re-mortgage of the **Property**

Definitions

Where a word is defined below or in the schedule it shall carry the same meaning wherever it appears in bold text in this policy

Insured Use: The continued use of the **Property** as a single house or flat or a single commercial premises

Market Value: The value as determined by a surveyor appointed by agreement between **You** and **Us** or (in default of agreement) the President for the time being of the Royal Institution of Chartered Surveyors

Mortgage: A mortgage or charge secured on the **Property** by an institutional mortgage lender

Coal Mining Search Report: The coal mining search report attached to this policy

Search: An official search comprising a search in form CON29M (2018) being mining searches relating to coal and brine in the area in which the **Property** is situated

We/Our/Us:
Zurich Insurance plc. A public limited company incorporated in Ireland. Registration No. 13460. Registered Office: Zurich House, Ballsbridge Park, Dublin 4, Ireland. UK Branch registered in England and Wales Registration No. BR7985. UK Branch Head Office: The Zurich Centre, 3000 Parkway, Whiteley, Fareham, Hampshire PO15 7JZ.

Zurich Insurance plc is authorised by the Central Bank of Ireland and authorised and subject to limited regulation by the Financial Conduct Authority. Details about the extent of our authorisation by the Financial Conduct Authority are available from us on request. Our FCA Firm Reference Number is 203093.

Communications may be monitored or recorded to improve our service and for security and regulatory purposes.

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Your Policy

This is a legal document and should be kept in a safe place.

This policy is an agreement between **You** and **Us** and cover is provided subject to the payment of the **Premium**.

You must read this policy and its conditions, exclusions, schedule and any endorsements as one contract. Please read all of them to make sure that they provide the cover **You** require. If they do not, please contact **Us** or **Your** insurance adviser who arranged the policy for **You**.

When **You** take out and make changes to the cover provided by this policy, **You** must take reasonable care to ensure that **You** accurately answer any questions which **We** ask of **You** and that any information **You** give **Us** is accurate. If **You** are taking out this policy for purposes which are mainly related to **Your** trade, business or profession, **You** must also let **Us** know about all facts which are material to **Our** decision to provide **You** with insurance. Failure to meet these obligations could result in this policy being invalidated, a claim not being paid, or an additional premium being charged.

Fair presentation of the risk

a) At inception of this policy and also whenever changes are made to it at **Your** request You must:

i) where **You** have taken out this policy for purposes which are wholly or mainly related to **Your** trade, business or profession, disclose to **Us** all material facts in a clear and accessible manner and not misrepresent any material facts, and
ii) where **You** have taken out this policy for purposes which are wholly or mainly unrelated to **Your** trade, business or profession, take reasonable care not to misrepresent any material facts.

b) If **You** do not comply with clause a) of this condition **We** may:

i) avoid this policy which means that **We** will treat it as if it had never existed and refuse all claims where any non-disclosure or misrepresentation by **You** is proven by **Us** to be deliberate or reckless in which case **We** will not return the premium paid by **You**; and
ii) recover from **You** any amount **We** have already paid for any claims including costs or expenses **We** have incurred.

c) If You do not comply with clause a) of this condition and the non-disclosure or misrepresentation is not deliberate or reckless this policy may be affected in one or more of the following ways depending on what **We** would have done if **We** had known about the facts which **You** failed to disclose or misrepresented:

i) if **We** would not have provided **You** with any cover **We** will have the option to:
1. avoid the policy which means that **We** will treat it as if it had never existed and repay the premium paid; and
2. recover from **You** any amount **We** have already paid for any claims including costs or expenses **We** have incurred
ii) if **We** would have applied different terms to the cover **We** will have the option to treat this policy as if those different terms apply. **We** may recover any payments made by **Us** on claims which have already been paid to the extent that such claims would not have been payable had such additional terms been applied
iii) if **We** would have charged **You** a higher premium for providing the cover **We** will charge **You** the additional premium which **You** must pay in full.

d) If any insured person, other than **You**, is responsible for a misrepresentation or failure to make a fair presentation of the risk, **We** will invoke the remedies available to **Us** under this condition as against that particular person as if a separate insurance contract had been issued to them leaving the remainder of the policy unaffected.

NB: For the purposes of the duty of disclosure stated in paragraphs a) i) and ii) above the content of the **Coal Mining Search Report** will be deemed to satisfy **Your** disclosure obligations.

Cover

1. **You** are in the process of purchasing the **Property** relying on the **Coal Mining Search Report** and/or
2. **You** (being a lender) have agreed to provide a **Mortgage** in connection with **Your** borrower's purchase or re-mortgage of the **Property** relying on the **Coal Mining Search Report**.

We will pay the following losses sustained by **You** arising out of the **Property** being affected by any matter which would have been revealed by a **Search** had one been carried out on the date of the **Coal Mining Search Report** but which was not revealed by the **Coal Mining Search Report**:

1. any reduction in **Market Value** of the **Property** calculated at the date **You** become aware of the matter(s) and/or loss in connection with a **Mortgage** as a result of such reduction.
2. all other costs and expenses including out of court settlement costs incurred by **Us** or by **You** with **Our** prior written agreement.

Waiver of Breach of Policy Condition

We will not exercise **Our** right to avoid **Our** liability to **You** in respect of loss where **You** have inadvertently breached any term or condition of the policy provided that such breach does not prejudice **Our** rights and remedies under the policy or otherwise directly or indirectly result in or increase the amount of any loss.

Protection for Mortgagees and Successors in Title

We will not avoid **Our** liability to make a payment to **You** solely because another person breaches the terms and conditions of this policy, provided such breach was not committed on **Your** behalf or with **Your** agreement, and **We** will invoke the remedies available to **Us** under the Policy as against that other person as if a separate insurance contract had been issued to them leaving the remainder of the policy unaffected.

Joint Insured

Any party insured under this policy standing in the relation of parent company, subsidiary company, associated company, branch office or joint venture partner to each other will be deemed to be joint insured for the purposes of this policy and jointly liable and responsible for any breach of any terms and conditions of this policy. If there is any inconsistency between this clause and any other term of this policy, this clause shall prevail.

Exclusions

We will not pay for any:

1. amount in excess of the **Limit of Indemnity**.
2. loss which would be recoverable under a household buildings insurance policy.
3. loss arising from any matter that **You** were aware of at the **Commencement Date**.
4. loss if the **Property** is used for any purpose other than the **Insured Use**.

Claims Conditions and How to Claim

1. **You** must:

i) give **Us** written notice as soon as possible of any potential or actual claim or any circumstances likely to result in a claim. Please provide the policy number, **Your** name, the full address of the **Property** and a brief description of the incident that has occurred. Notifications should be sent to: Speciality Lines Claims Team, Zurich Insurance, 8th Floor, 70 Mark Lane, London, EC3R 7NQ. Email: claims@uk.zurich.com ↗, Enquiry line: telephone 0207 648 3523
ii) pass all court documents and/or other communications to **Us** as soon as possible after receipt
iii) not deal with, make any admission of liability or attempt to settle a claim without **Our** prior written agreement.
iv) agree to and carry out at **Our** expense all things necessary to minimise any loss.
v) provide all information and assistance that **We** may require to help defend and settle the claim.

2. **We** are entitled to:

i) decide how to settle or defend a claim and may carry out proceedings in the name of any person insured under this policy, including proceedings for recovering any claim.
ii) pay to **You** at any time, an amount equal to the **Limit of Indemnity** or any lower amount for which the claim can be settled, after deduction of any sum already paid. **We** may then give up control of and have no further liability in connection with the claim.

3. If **We** admit liability for a claim but there is a dispute as to the amount to be paid the dispute will be referred to an arbitrator. The arbitrator will be appointed jointly by **You** and **Us** in accordance with the law at the time. **You** may not take any legal action against **Us** over the dispute before the arbitrator has reached a decision.

4. If **You** or anyone acting on Your behalf:

a) makes a fraudulent or exaggerated claim under this policy; or
b) uses fraudulent means or devices including the submission of false or forged documents in support of a claim whether or not the claim is itself genuine; or
c) makes a false statement in support of a claim whether or not the claim is itself genuine; or
d) submits a claim under this policy for loss or damage which **You** or anyone acting on **Your** behalf or in connivance with **You** deliberately caused; or
e) realises after submitting what **You** reasonably believed was a genuine claim under this policy and then fails to tell **Us** that **You** have not suffered any loss or damage; or
f) suppresses information which **You** know would otherwise enable **Us** to refuse to pay a claim under this policy

We will be entitled to refuse to pay the whole of the claim and recover any sums that **We** have already paid in respect of the claim.

If any fraud is perpetrated by or on behalf of an insured person and not on behalf of **You** this condition should be read as if it applies only to that insured person's claim and references to this policy should be read as if they were references to the cover effected for that person alone and not to the policy as a whole.

5. If any claim is covered by any other insurance, **We** will not pay for more than **Our** share of that claim.

6. The most **We** will pay for any loss (or all losses in the aggregate), including costs and expenses agreed by **Us** is the **Limit of Indemnity**. Once **We** have paid a loss or losses equal to the amount of the **Limit of Indemnity, We** will have no further liability under this policy.

General Conditions

1. Neither **You** (nor anyone acting on **Your** behalf) must disclose the existence of this policy to any other party except **Your** legal and other professional advisers, prospective purchasers, lessees and tenants of the **Property**, their respective mortgagees, legal and other professional advisers.

2. In the UK the law allows both **You** and **Us** to choose the law applicable to the contract. This contract will be subject to the relevant law of England and Wales, Scotland, Northern Ireland, the Isle of Man or the Channel Islands depending upon the Property address stated in the Schedule. If there is any dispute as to which law applies it will be English law. The parties agree to submit to the exclusive jurisdiction of the English courts.

3. Notwithstanding any other terms of this policy **We** will be deemed not to provide cover nor will **We** make any payment or provide any service or benefit to **You** or any other party to the extent that such cover, payment, service, benefit and/or any business or activity of **Yours** would violate any applicable trade or economic sanctions law or regulation.

Cancellation Clause

If **You** have taken out this policy for purposes which are wholly or mainly unrelated to **Your** trade, business or profession, **You** may cancel this policy within 14 days of receiving the policy by writing to **Us** and in such event **We** may, at **Our** discretion, charge **You** for the time that **You** have been on cover. Any refund will be made to the party who paid the premium. If **You** do cancel, **You** may be in breach of the terms of **Your** mortgage or the terms of the contract for the sale of **Your** property. If **You** are in doubt, **You** may wish to seek legal advice prior to cancellation.

Fair Processing and Complaints Procedure
Our Complaints Procedure

Our commitment to customer service

We are committed to providing a high level of customer service. If you feel we have not delivered this, we would welcome the opportunity to put things right for you.

Who to contact in the first instance

Many concerns can be resolved straight away. Therefore in the first instance, please get in touch with your usual contact at Zurich or your broker or insurance intermediary, as they will generally be able to provide you with a prompt response to your satisfaction.

Contact details will be provided on correspondence that we or our representatives have sent you.

Many complaints can be resolved within a few days of receipt

If we can resolve your complaint to your satisfaction within the first few days of receipt, we will do so. Otherwise, we will keep you

updated with progress and will provide you with our decision as quickly as possible.

Next steps if you are still unhappy

If you are not happy with the outcome of your complaint, you may be able to ask the Financial Ombudsman Service to review your case.

We will let you know if we believe the ombudsman service can consider your complaint when we provide you with our decision. The service they provide is free and impartial, but you would need to contact them within 6 months of the date of our decision.

More information about the ombudsman and the type of complaints they can review is available via their website www.financial-ombudsman.org.uk ↗.

You can also contact them as follows:

Post: Financial Ombudsman Service, Exchange Tower, London, E14 9SR
Telephone: 08000 234567 (free on mobile phones and landlines)
Email: complaint.info@financial-ombudsman.org.uk ↗

If the Financial Ombudsman Service is unable to consider your complaint, you may wish to obtain advice from the Citizens Advice Bureau or seek legal advice.

The Financial Services Compensation Scheme (FSCS)

We are covered by the Financial Services Compensation Scheme (FSCS) which means that you may be entitled to compensation if we are unable to meet our obligations to you. Further information is available on www.fscs.org.uk ↗ or by contacting the FSCS directly on 0800 678 1100.

How we use your information

Who controls your personal information

This notice tells you how Zurich Insurance plc ('Zurich'), as data controller, will deal with your personal information. Where Zurich introduces you to a company outside the group, that company will tell you how your personal information will be used.

You can ask for further information about our use of your personal information or complain about its use in the first instance, by contacting our Data Protection Officer at: Zurich Insurance Group, Tri-centre 1, Newbridge Square, Swindon, SN1 1HN or by emailing the Data Protection Officer at GBZ.General.Data.Protection@uk.zurich.com ↗.

If you have any concerns regarding our processing of your personal information, or are not satisfied with our handling of any request by you in relation to your rights, you also have the right to make a complaint to the Information Commissioner's Office. Their address is: First Contact Team, Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, SK9 5AF.

What personal information we collect about you

We will collect and process the personal information that you give us by phone, e-mail, filling in forms, including on our website, and when you report a problem with our website. We also collect personal information from your appointed agent such as your trustee, broker, intermediary or financial adviser in order to provide you with the services you have requested and from other sources, such as credit reference agencies and other insurance companies, for verification purposes. We will also collect information you have volunteered to be in the public domain and other industry-wide sources. We will only collect personal information that we require to fulfil our contractual or legal requirements unless you consent to provide additional information. The type of personal information we will collect includes; basic personal information (i.e. name, address and date of birth), occupation and financial details, health and family information, claims and convictions information and where you have requested other individuals be included in the arrangement, personal information about those individuals.

If you give us personal information on other individuals, this will be used to provide you with a quotation and/or contract of insurance and/or provision of financial services. You agree you have their permission to do so. Except where you are managing the contract on another's behalf, please ensure that the individual knows how their personal information will be used by Zurich. More information about this can be found in the 'How we use your personal information' section.

How we use your personal information

We and our selected third parties will only collect and use your personal information (i) where the processing is necessary in connection with providing you with a quotation and/or contract of insurance and/or provision of financial services that you have requested; (ii) to meet our legal or regulatory obligations; or (iii) for our 'legitimate interests'. It is in our legitimate interests to collect

your personal information as it provides us with the information that we need to provide our services to you more effectively including providing you with information about our products and services. We will always ensure that we keep the amount of information collected and the extent of any processing to the absolute minimum to meet this legitimate interest. Examples of the purposes for which we will collect and use your personal information are:

1. to provide you with a quotation and/or contract of insurance;
2. to identify you when you contact us;
3. to deal with administration and assess claims;
4. to make and receive payments;
5. to obtain feedback on the service we provide to you;
6. to administer our site and for internal operations including troubleshooting, data analysis, testing, research, statistical and survey purposes;
7. for fraud prevention and detection purposes.

We will contact you to obtain consent prior to processing your personal information for any other purpose, including for the purposes of targeted marketing unless we already have consent to do so.

Who we share your personal information with

Where necessary, we will share the personal information you gave us for the purposes of providing you with the goods and services you requested with the types of organisations described below:

associated companies including reinsurers, suppliers and service providers;
introducers and professional advisers;
regulatory and legal bodies;
survey and research organisations;
credit reference agencies;
healthcare professionals, social and welfare organisations; and
other insurance companies

Or, in order to meet our legal or regulatory requirements, with the types of organisations described below:

regulatory and legal bodies;
central government or local councils;
law enforcement bodies, including investigators;
credit reference agencies; and
other insurance companies

How we use your personal information for websites and email communications

When you visit one of our websites we may collect information from you such as your email address or IP address. This helps us to track unique visits and monitor patterns of customer website traffic, such as who visits and why they visit.

We use cookies and/or pixel tags on some pages of our website. A cookie is a small text file sent to your computer. A pixel tag is an invisible tag placed on certain pages of our website but not on your computer. Pixel tags usually work together with cookies to assist us to provide you with a more tailored service. This allows us to monitor and improve our email communications and website. Useful information about cookies, including how to remove them, can be found on our websites.

How we transfer your personal information to other countries

Where we transfer your personal information to countries that are outside of the UK and the European Union (EU) we will ensure that it is protected and that the transfer is lawful. We will do this by ensuring that the personal information is given adequate safeguards by using 'standard contractual clauses' which have been adopted or approved by the UK and the EU, or other solutions that are in line with the requirements of European data protection laws.

A copy of our security measures for personal information transfers can be obtained from our Data Protection Officer at: Zurich Insurance Group, Tri-centre 1, Newbridge Square, Swindon, SN1 1HN, or by emailing the Data Protection Officer at GBZ.General.Data.Protection@uk.zurich.com ↗.

How long we keep your personal information for

We will retain and process your personal information for as long as necessary to meet the purposes for which it was originally

collected. These periods of time are subject to legal, tax and regulatory requirements or to enable us to manage our business.

Your data protection rights

You have a number of rights under the data protection laws, namely:

to access your data (by way of a subject access request);
to have your data rectified if it is inaccurate or incomplete;
in certain circumstances, to have your data deleted or removed;
in certain circumstances, to restrict the processing of your data;
a right of data portability, namely to obtain and reuse your data for your own purposes across different services;
to object to direct marketing;
not to be subject to automated decision making (including profiling), where it produces a legal effect or a similarly significant effect on you;
to claim compensation for damages caused by a breach of the data protection legislation.
if we are processing your personal information with your consent, you have the right to withdraw your consent at any time.

We will, for the purposes of providing you with a contract of insurance, processing claims, reinsurance and targeted marketing, process your personal information by means of automated decision making and profiling where we have a legitimate interest or you have consented to this.

What happens if you fail to provide your personal information to us

If you do not provide us with your personal information, we will not be able to provide you with a contract or assess future claims for the service you have requested.

Fraud prevention and detection

In order to prevent and detect fraud we may at any time:

check your personal data against counter fraud systems
use your information to search against various publicly available and third party resources
use industry fraud tools including undertaking credit searches and to review your claims history
share information about you with other organisations including but not limited to the police, the Insurance Fraud Bureau (IFB), other insurers and other interested parties.

If you provide false or inaccurate information and fraud is identified, the matter will be investigated and appropriate action taken. This may result in your case being referred to the Insurance Fraud Enforcement Department (IFED) or other police forces and fraud prevention agencies. You may face fines or criminal prosecution. In addition, Zurich may register your name on the Insurance Fraud Register, an industry-wide fraud database.

Claims history

We may pass information relating to claims or potential claims to any relevant database. We and other insurers may search these databases when you apply for insurance, when claims or potential claims are notified to us or at time of renewal to validate your claims history or that of any other person or property likely to be involved in the policy or claim.

This helps to check information provided and prevent fraudulent claims.

APPENDIX E

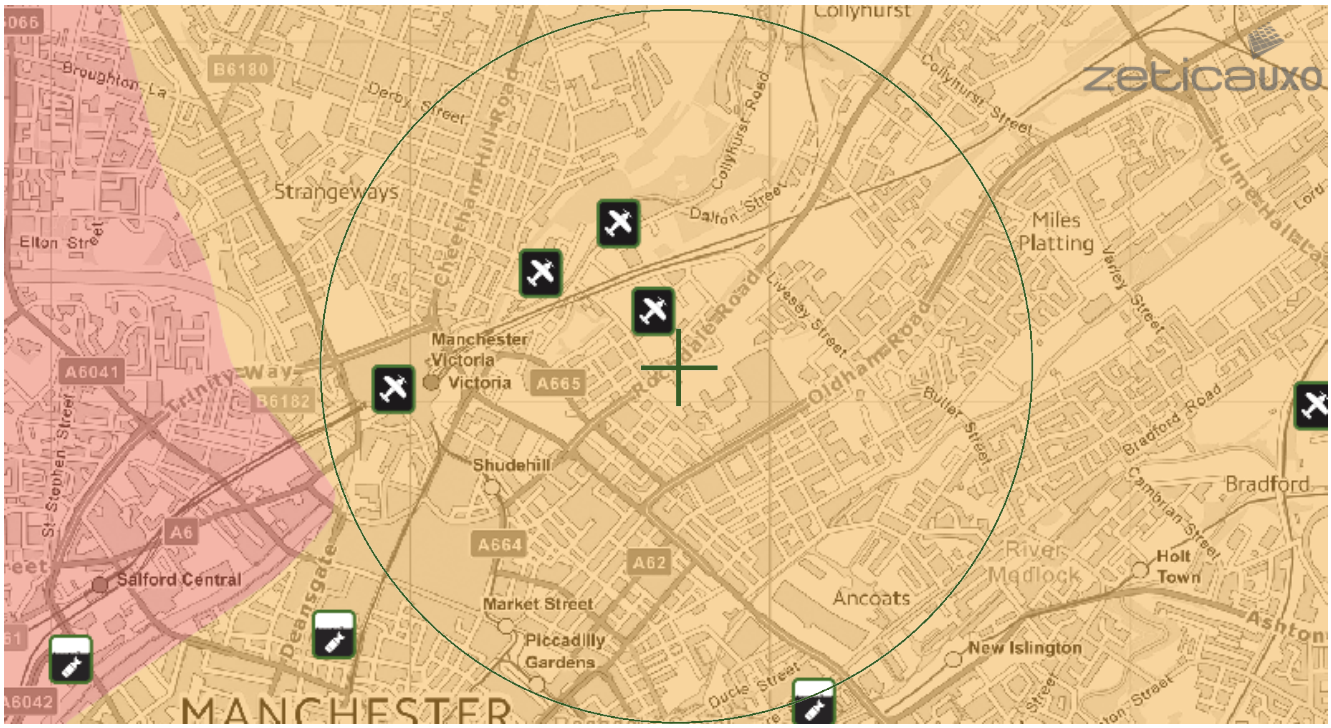
UXO Screening Map

UNEXPLODED BOMB RISK MAP

zeticauxo

SITE LOCATION

Location: M4 4HY,
Map Centre: 384710,399103



This map principally indicates a hazard from Unexploded Bombs (UXB) due to WWII bombardment. Other sources of Unexploded Ordnance (UXO) may be present. It should be noted that this map does not represent UXO risk and should not be reported as such when reproduced.

LEGEND

- **High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- **Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- **Low:** Areas indicated as having 15 bombs per 1000acre or less.

Miltary | **Industry** | **UXO find** | **Other**
Transport | **Docks** | **Luftwaffe targets**
Utilities | **Bombing decoy** | **Airfields**

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

This map indicates the potential for UXBs to be present because of World War Two (WWII) bombing. It can be incorporated into a technical report, such as a Phase 1 Desk Study, or similar document as an indication of the potential for UXO encounter on a Site. Other sources of UXO may also be indicated, although note that these are not comprehensive and more detailed research is required to confirm their presence.

What if my Site is in a moderate or high density area?

We typically recommend that a detailed UXO desk study and risk assessment is undertaken for sites in an area with a moderate or high bombing density.
Additionally, if your site is in close proximity to a strategic target, military establishment, airfield or bombing decoy, then additional detailed research is recommended.

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

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

If you are unsure whether other sources of UXO may be present, you can request one of our pre-desk study assessments (PDSA) by emailing a site boundary and location to pdsa@zetica.com.

You should never plan site work or undertake a risk assessment using these maps alone. More detail is required, to include an assessment of the likelihood of a source of UXO hazard from other military activity not reflected on these maps.

If I have any questions, who do I contact?

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

The information in this UXB risk map is derived from a range of sources and should be used with the accompanying notes on our website.

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgement. The copyright remains with Zetica Ltd.

EOD CONTRACTS LTD

Unexploded Ordnance Risk Mitigation

Explosive Ordnance Desk Top Study for:

GOULD STREET, MANCHESTER, M4 4BH

PROJECT 24210

On behalf of

BROWNFIELD SOLUTIONS



www.eodcontractsltd.com

Tel: 01386 578 405

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Company Registration Number 4483560

ISOQAR REGISTERED

UKAS MANAGEMENT SYSTEMS 0026

Institute of Explosives Engineers
VOICE OF THE EXPLOSIVES INDUSTRIES

EXPLOSIVE ORDNANCE DESKTOP STUDY

For

GOULD STREET, MANCHESTER, M4 4BH

Conducted by **EOD Contracts Limited**

On behalf of **BROWNFIELD SOLUTIONS**

Document Control & Enquiries

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AUTHORISED RELEASE	Shane Meaker	12/06/2024
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TERMS AND DEFINITIONS

Anti-Aircraft Shells (AA)
Small High Explosive Shells (HE) shells ranging up to 100mm in diameter.

Air Raid Precautions (ARP)
An organisation in the United Kingdom set up in 1937 dedicated to the protection of civilians from the danger of air raids. It included the Raid Wardens' Service that was to report on bombing incidents.

Battlefield Area Clearance (BAC)
The systematic clearance of munitions from military property or old battle sites e.g., ranges, airfields etc.

Borehole Search
The placing of boreholes in a set pattern, then using a magnetometer to take readings at specific depths along each borehole. When used with a geophysical survey system this will give a magnetic signature of the area. The depth of the borehole and the pattern will depend upon the type of Unexploded Bombs (UXB) and the geology of the ground.

Doodle Bug (See Pilotless Aircraft)

Explosive Ordnance (EO)
All munitions containing explosives, nuclear fission/fusion materials and or biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket, and Small Arms Ammunition (SAA); all mines, torpedoes, and depth charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices (IED); and all similar or related items or components explosive in nature.

Explosive Ordnance Clearance (EOC)
See BAC.

Explosive Ordnance Disposal (EOD)
The detection, identification, field evaluation, render safe, recovery and disposal of **UXO**.

Geophysical Survey
The survey of an area using a Magnetometer and geophysical gathering device, after interpretation, this will produce a geophysical map and an object list for any metallic anomalies.

High Explosive (HE)
High explosives burn/detonate at rates of up to 9,000 m/per second.

Incendiary Bomb (IB)
Incendiary bombs ranged from 1kg in size to 500kg the larger sizes were sometimes called Oil Bombs. Fills range from thermite mixtures, phosphorus to kerosene.

Intrusive Survey
The use of a cone penetrometer (MagCone) or drilled boreholes (MagDrill) to take magnetometer test in a set pattern (see borehole search), or to prove pile positions.

Land Service Ammunition (LSA)

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LSA is defined as “All items containing explosives or pyrotechnic compounds which are placed, thrown, or projected so as to cause damage to men and equipment during land warfare.

Long Range Rocket (LRR)
The long-range rocket sometimes codenamed Big Ben is the V2 rocket designed to deliver an approximate payload of 1000 kg.

Oil Bomb (OB)
A bomb containing a flammable liquid, normally the KC 250 Flam or the C 500 flam.

Pilot less Aircraft (PAC)
A flying bomb (Fly) or doodlebug is the V1 rocket, or predecessors designed to deliver an explosive payload of approximately 500kg - 800kg.

Parachute Mine (PM)
Air dropped mine may have been used as a blast effect bomb maximum explosive content 1600lb always fitted with anti-handling and anti-stripping equipment.

Unexploded Bomb (UXB)
Any air dropped bomb that has failed to operate.

Unexploded Ordnance (UXO)
Explosive ordnance that has been primed, fused, armed, or otherwise prepared for use or used. It may have been fired, dropped, launched, or projected yet remains unexploded either through malfunction or design or for any other cause.

Vengeance Weapons (V)
V1 see Pilotless Aircraft.
V2 see Long Range Rocket.

WWI
World War 1 (1914 – 1918)

WWII
World War 2 (1939 – 1945)

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EXECUTIVE SUMMARY

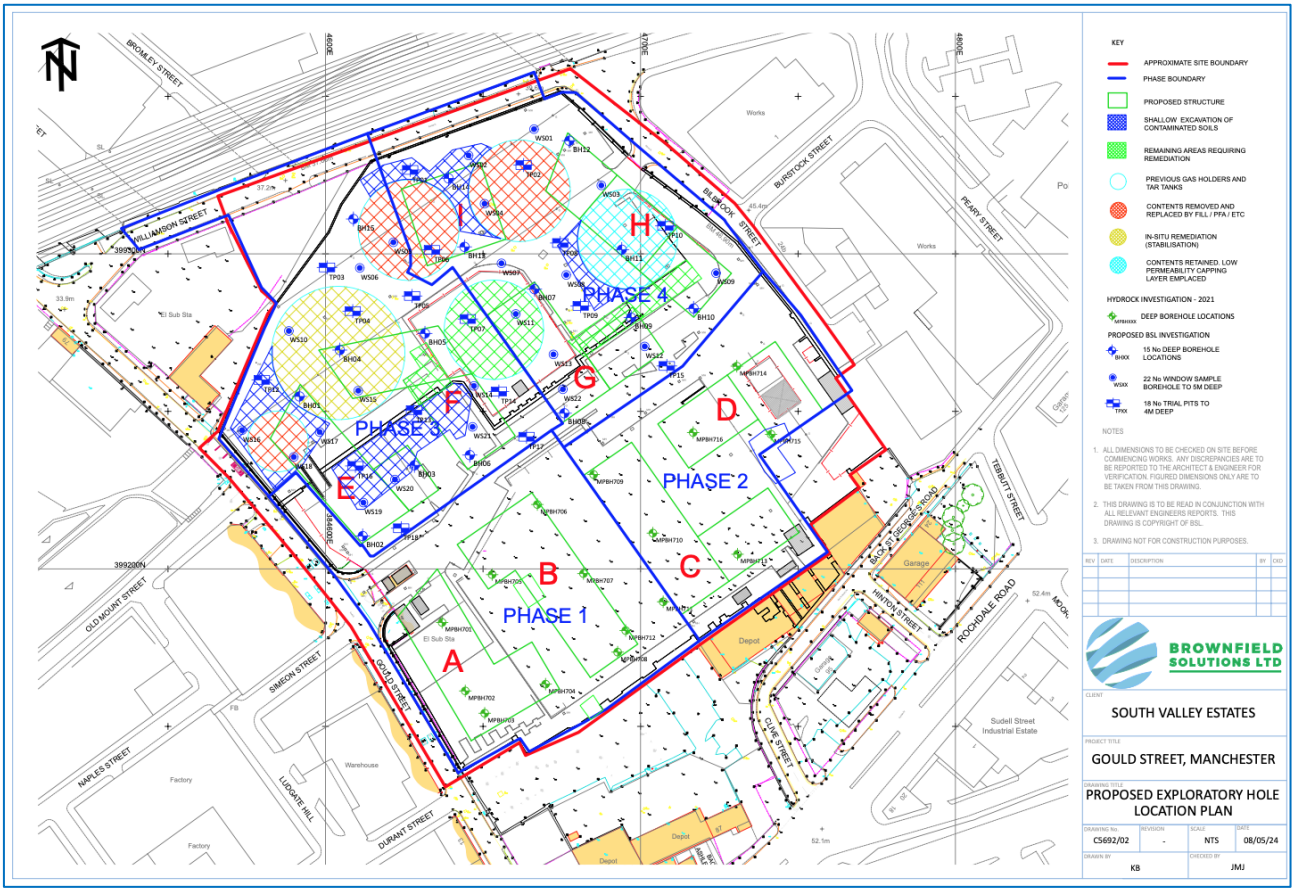
INSTRUCTION

EOD Contracts Ltd, have been commissioned by Brownfield Solutions to undertake a Provisional Desktop Study (PDTS) for potential historic Unexploded Ordnance (UXO) contamination for the future works at Gould Street, Manchester, M4 4BH, hereafter referred to as the Site.

SCOPE OF WORK

The scope of this EO Risk Assessment/Desk Study is to assess the likelihood of buried EO/UXO within the environs of The Site (See Figure 1.1), in view of further development. A further aim was to evaluate the implication from UXO contamination during any future intrusive land use.

Figure 1.1: Clients Supplied Site Diagram, This DTS will be covering the area bordered in RED.

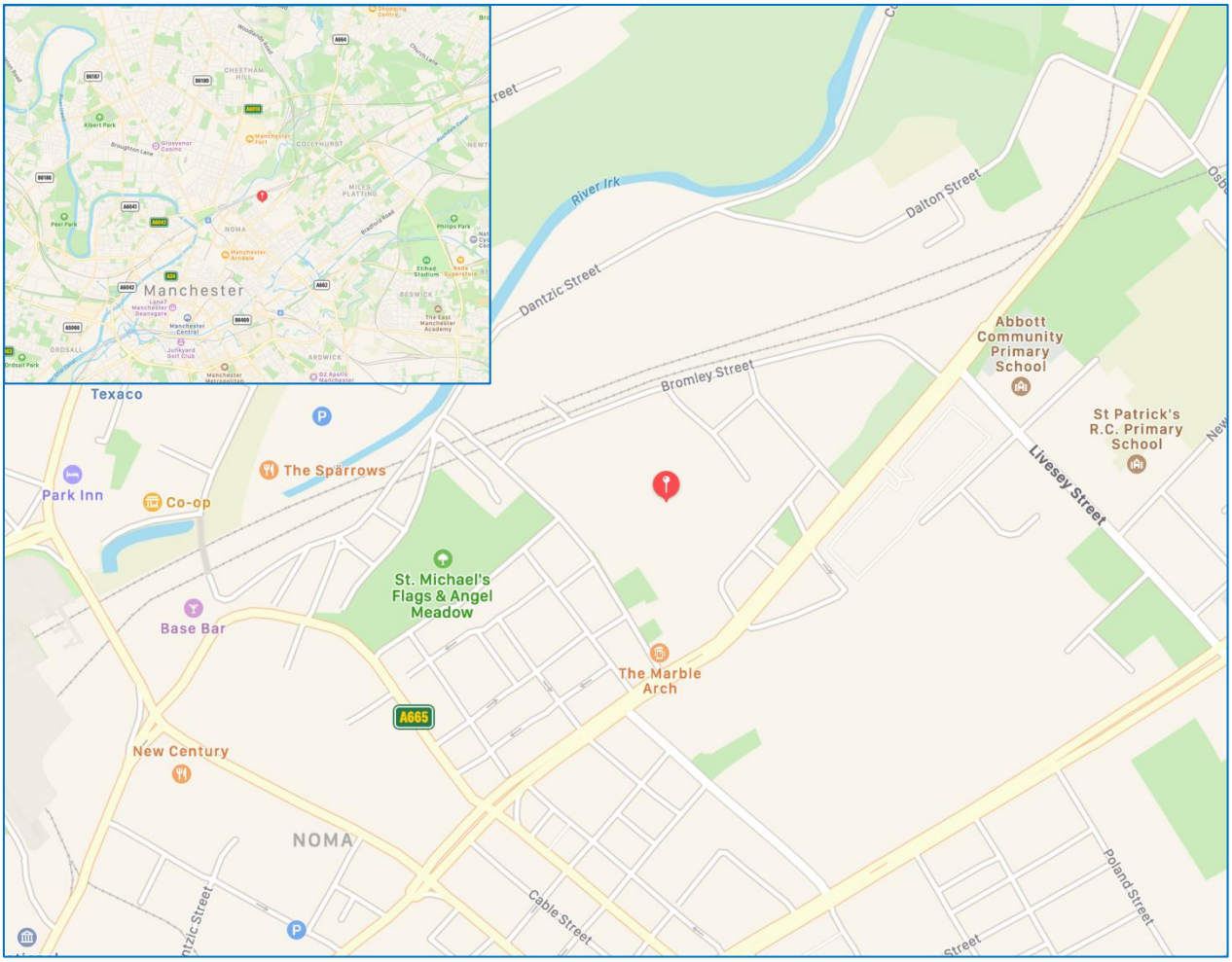


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LOCATION

Site Location (red flag). An exact meeting point will be determined by the Client should the need arise.

Table 3.1 Site Location.



Title	Description
Address	Gould Street, Manchester,
Post Code	M4 4BH
Nat Grid Reference	SJ 846992 / SJ 8468599234
what3words	mirror.cars.hotel

SOURCES OF UXO CONTAMINATION

The main sources of potential UXO contamination that have been researched for the site are:

- Buried or discarded items of ordnance.
- Air delivered ordnance bombs and sub-munitions/incendiaries.

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KEY FINDINGS

Based on the information researched by EOD Contracts Ltd for the proposed scope of works being carried out within the given Site area, the following conclusions have been reached:

- The Site area is situated within Manchester, which is off historic fact was bombed on several occasions throughout WW2, the worst of which being the Christmas raids. However, despite this it is situated away from the centre of Manchester which is where the focus of the raids took place.
- The Site was subjected to bombing throughout WW2 as can be seen in Annex D.
- The Site area was fully utilised throughout WW2.
- The Site would have been considered a viable and strategic target throughout this period.
- There have been several phases of construction and remediation works that have taken place within the Site boundary post WW2. However, it cannot be guaranteed that these remediation works went to protentional bomb penetration depth.

Risk Level

The prevailing risk level has been determined to be **LOW** for some areas within the Site boundary and **MEDIUM** for others (see risk map).

Historical UXO Contamination

The indicators for UXO contamination are:

Bomb Strikes	There are no recorded incidents of the site being the subject of bombardment throughout WW1. Manchester was targeted heavily throughout WW2. The Site would have been considered a strategic target throughout this period. Known bomb strikes within the Site boundary. There have been several phases of construction and remediation works that have taken place within the Site boundary. The Site was fully utilised throughout WW2.
Bomb Damage	Difficult to ascertain.
Reconstruction	No obvious signs
Military Usage	No obvious signs.
Explosive/Munition Factory	No obvious signs

Risk Level	Therefore, so far as reasonably practicable the risk level on Site has been deemed as both a **LOW** risk and **MEDIUM** risk for some areas. See risk map.
Risk Depth	7.062 for areas deemed a **MEDIUM** risk

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PART 8: RECOMMENDATIONS

It is recommended that the following risk mitigation strategy be executed during phases of the project indicated previously as a **LOW** risk.

UXO safety awareness training should be given at all levels of site personnel and selected individuals on the project staff with relevant responsibilities. A competent person as part of the project safety induction course should provide the awareness training. It should be reinforced with specific safety briefings and toolbox talks to individuals involved in conducting intrusive earthworks.

It is recommended that the following risk mitigation strategy be executed during phases of the project indicated previously as a **MEDIUM** risk.

Communicating the risks, all stakeholders should be made aware of the UXO situation on the site and the possible impact it may have on the project works and day to day running of the district. Clients have a legal duty under the Construction Design & Management Regulations (CDM) and Health & Safety at Work legislation to provide Designers and Contractors with project specific information needed to identify hazards and risks associated with the design and construction work. The possibility that UXO may be encountered on site falls within the category of a significant risk and as such it should be addressed as early as possible in the lifecycle of the project.

Further planning: the risks posed by UXO should be brought to the attention of the Project CDM Coordinators and other individuals with a responsibility for project safety and operations at the site. The matter of UXO should be considered critical to project safety and one requiring high priority action.

UXO safety awareness training should be given at all levels of site personnel and selected individuals on the project staff with relevant responsibilities. A competent person as part of the project safety induction course should provide the awareness training. It should be reinforced with specific safety briefings and toolbox talks to individuals involved in conducting intrusive earthworks.

Project overview and the responsibilities of those working on site with regard to duty of care and public safety.

UXO recognition and safety procedures to be followed on discovery of a suspicious object or the alarm being sounded.

Emergency procedures to be followed in the event of an explosion. Evacuation routes, muster stations and accounting for personnel.

Work permits, works methodology and specific UXO risk mitigation methods. Post-incident inspections and returning to normal works.

Prior to any intrusive piling or drilling commencing, UXO safety testing and appropriate clearance certification into the ground to sufficient depth to provide clearance from UXO. This can be done using a progressive drilling process or (where large numbers of piles are to be placed and ground permitting)

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using a vehicle borne hydraulic system to push a magnetometer into the ground to test for the presence of UXO prior to piling.

UXO safety monitoring of all "at risk" excavations, including geotechnical or archaeological trial pits to be conducted during the project. This should be provided by a UK Home Office Authorised EOD/UXO Contractor using qualified EOD Engineer with specialist locators and detectors to scan the ground ahead of the excavation wherever possible.

9.0: SPECIFICALLY

Geotechnical investigations, percussive drilling/trial pits/window/samples, require an EOD Engineer over watch.

The removal of all buildings within the site footprint can be removed down to ground level (including basements)

New foundations with piling should be mitigated by the insertion of a magnetometer to encompass the pile position, this would be carried out using a CPT rig (magcone), the expected radius of the magcone is 1.5m therefore multiple piles could be checked.

Non-Intrusive Magnetometer surveys generally prove inconclusive on "Brownfield sites", this is due to the high ferromagnetic background, therefore this methodology is not recommended for this site and shallow excavations should be overseen by a qualified EOD Engineer.

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10: RISK MAP

Due to the Site being subjected to several known bomb strikes throughout WW2, areas of the northern half of the Site has been deemed a **MEDIUM** risk. This area has been subjected to post war excavation works however, it cannot be guaranteed to at a depth below potential bomb penetration depth.





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EOD Contracts Ltd can supply a turnkey solution to your UXO requirements. Therefore, the following mitigation strategies can be supplied for land or water-based operations:

Intrusive survey using CPT *(Cone Pressure Testing)* or borehole equipment, *supplying risk mitigation to all Borehole and Pile locations, down to a maximum bomb penetration depth determined within this document.*

Non-Intrusive Survey using multiple array system with DGPS *(Differential Global Positioning System).*

Offshore, near-shore, estuarine and freshwater water environments magnetic, side scan and bathymetric supported by state-of-the-art DGPS.

The aforementioned surveys are supported with post processing of data and intrusive investigations if required.

EOD Engineer over watch using Suitably Qualified and Experienced Personnel, normally former British Army, Navy, or RAF Bomb Disposal specialists.

Explosive Ordnance Safety Presentations.

Bibliography

The significant published documents referred to during this study are listed below:

- HO 193 series from National Archives
- HO 198 series from National Archives
- The Blitz Then and Now Volumes 1 to 3
- AA Command Colin Dobinson
- German Air Raids on Britain 1914-1918
- English Heritage
- Bombing Britain Database
- https://luna.manchester.ac.uk/luna/servlet/view/search?q==%22GB127.MISC%2F1192%2F1%22
- https://www.ashremediation.co.uk/portfolio/gould-street-gasworks-2/
- https://www.manchestereveningnews.co.uk/news/greater-manchester-news/manchester-blitz-bomb-sites-map-10465447
- https://www.derelictmanchester.com/p/derelict-viaduct-near-gouldback-georges.html#gsc.tab=0
- https://www.manchestereveningnews.co.uk/news/greater-manchester-news/gould-street-gasworks-site-could-18757500
- https://manchesterhistory.net/manchester/gone/gouldgasworks.html
- https://aboutmanchester.co.uk/work-has-begun-on-site-of-former-gasworks-on-rochdale-road/
- https://www.placenorthwest.co.uk/mcr-ready-to-move-on-1200-home-manchester-resi/
- https://mcrproperty.com/2021/06/04/manchesters-400million-gasworks-new-town-scheme-gets-green-light-for-1200-homes/
- https://www.manchestereveningnews.co.uk/news/greater-manchester-news/what-happen-east-manchesters-iconic-14011886

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PART 1: INTRODUCTION

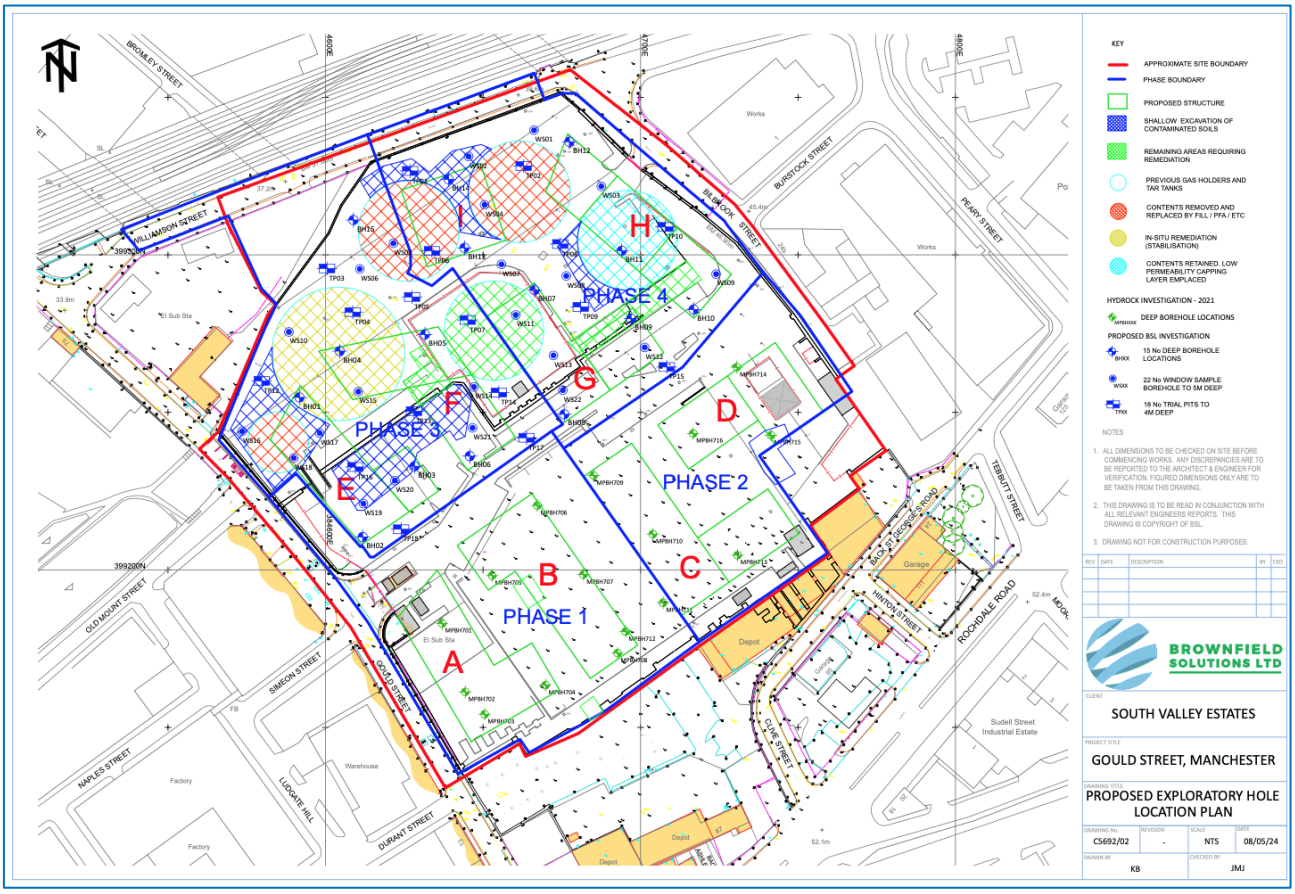
Instruction

EOD Contracts Ltd, have been commissioned by Brownfield Solutions to undertake a Provisional Desktop Study (PDTS) for potential historic Unexploded Ordnance (UXO) contamination for the future works at Gould Street, Manchester, M4 4BH, hereafter referred to as the Site.

Scope of Work

The scope of this EO Risk Assessment/Desk Study is to assess the likelihood of buried EO/UXO within the environs of The Site (See Figure 1.1), in view of further development. A further aim was to evaluate the implication from UXO contamination during any future intrusive land use.

Figure 1.1: Clients Supplied Site Diagram, This DTS will be covering the area bordered in RED.



Restrictions

It must be emphasized that a desk study can only indicate the potential for UXO to be present on the site. This study was written with the site conditions prevailing at the time of the study and no liability can be accepted for any change in the condition of the area.

Please note that our appraisal relies on the accuracy of the information contained in the documents consulted and that EOD Contacts Ltd will in no circumstances be held responsible for the accuracy of such information or data supplied.

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Sensitive Documentation

Information may be classified, restricted, or deemed to be confidential in nature to EOD Contracts Limited, where such material has been gained a summary of the documentation has been approved.

Objective

The objective of this document is to define the UXO contamination routes as defined in Unexploded ordnance (UXO) A guide for the construction industry (C681) dated July 2009 and offer remediation methodologies if required.

CIRIA Framework

The CIRIA report is intended to provide good practice guidance (code of practice) on how to identify whether a site is likely to be at significant risk of UXO encounter and, if so, to set-out a process that will allow this risk to be managed. To be effective this process must start early in the life of the project (usually before intrusive works commence) and have involved Clients, Advisors and Principal Contractors. Therefore, the ground contractor should be provided with a systematic appraisal of the UXO risk when they become involved. The CIRIA report recommends the following stages be undertaken as part of the risk management process:

- Phase 1 Preliminary Risk Assessment
- **Phase 2 Detailed Risk Assessment (Completed and updated in this document)**
- Phase 3 Risk Mitigation (The act of ameliorating the risk, the clearance methodology)
- Phase 4 The UXO Risk Management and Implementation Plan

PART 2: SOURCES OF INFORMATION

Research of the site's history, with regard to military usage, bombing raids and bomb impacts has been undertaken to establish the following:

- Frequency and intensity of enemy bombing raids for the site and immediate vicinity up to 500m.
- Bomb impacts and associated damage on the Site and in the immediate vicinity.
- The potential for UXO to remain on the Site and in the vicinity.
- Records of UXO removal activities for the Site and immediate vicinity.
- The main sources of information consulted include:
    a. EOD Contracts Ltd company records
    b. Ministry of Defence records
    c. Central and Local Government Records
    d. Public Records Office (Kew)
    e. Historic Maps and Air Photography
    f. Open-Source information (Internet)

Ministry of Defence (MOD) Records

33 Engineer Regiment (Explosive Ordnance Disposal) Royal Engineers is the unit responsible for maintaining the records concerning conventional Bomb incidents, reports, clearances and related UXO

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matters. These records are known to be incomplete and are no longer supplied. Based on in-house information released by the MOD previously, it is considered unlikely that any information released will have any significant impact on the findings of this study.

Attack Record Keeping

In general, the quality and accuracy of bombing and shelling records prior to 1942 varied greatly from one region to another. Records relating to the limited air attacks on the United Kingdom are considered to be sufficiently accurate in urban areas to provide a reasonable level of confidence in determining the likelihood that an area was or was not bombed during this period. Wartime records, maps etc held within the civil archives are considerably more comprehensive than those still in existence within the MOD, where it is acknowledged that large numbers of records have been disposed of since 1945. Records from some areas, particularly rural districts or near large bodies of water should still be regarded as an incomplete picture of the extent and effect of the bombing campaign.

Attack Record Accuracy

While an Air Raid was in progress it was inevitable that mistakes would be made in the transcription of rushed verbal reports into the written records. Discrepancies did occur between the total of bombs dropped against detonations witnessed. In some cases, records were made several hours after the event and mistakes were inevitable. Some reports were drafted before the full extent of the raid had been determined which has led to significant omissions in the records. Reports of raids on rural areas were often witnessed and submitted by untrained individuals and passed through third parties before being recorded. Suspect UXBs occasionally went unreported by local farmers and freeholders who saw the event as insignificant or were reluctant to report their findings for fear of valuable land or crops being destroyed by the authorities in their attempts to find the UXB. It should also be noted that bomb strikes in water were notoriously difficult to spot, particularly if the bomb had failed to detonate. As a result, bomb record accuracy in areas containing large bodies of water or marshland is considered to be questionable.

Errors and Omissions

The accuracy of bombing records has been shown to vary greatly; this may have been a result of the individual record keeper's expertise. Additionally, in some cases, errors occurred as a result of poor or incomplete transcription and copying. Some "errors and omissions" were intentional, designed to serve as dis-information to confuse German intelligence. So long after the event, official verification of such incidents has often proven to be impossible to obtain. At present, UXBs are found on construction sites and other locations where there had been no documentary evidence to suggest their presence. These events, although infrequent, do serve as confirmation that records cannot be considered definitive.

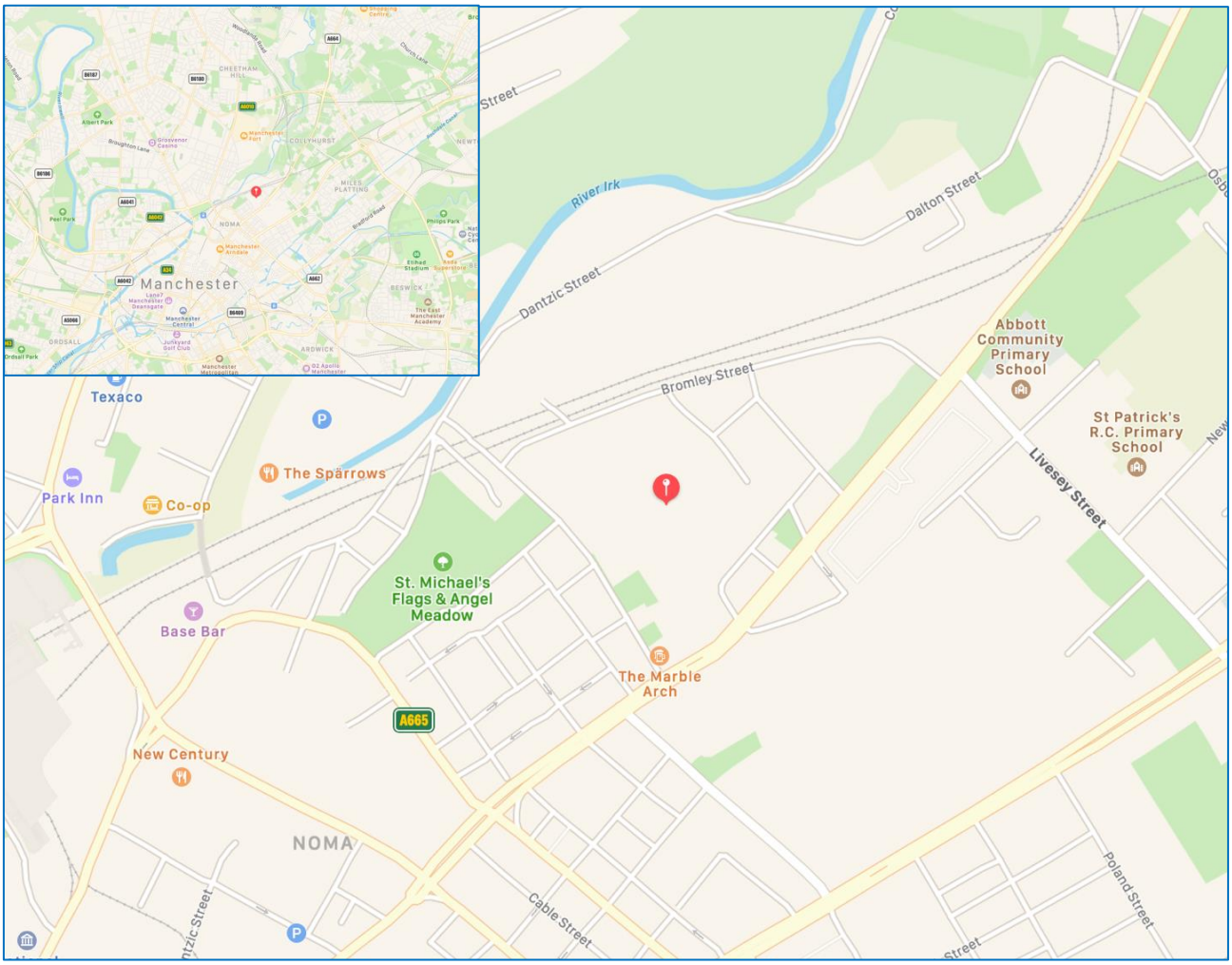
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PART 3: SITE DESCRIPTION AND DETAILS

Location

The Location (red flag). An exact meeting point will be determined by the Client should the need arise.

Table 3.1 Site Location.



Title	Description (Centre of Site)
Address	Gould Street, Manchester,
Post Code	M4 4BH
Nat Grid Reference	SJ 846992 / SJ 8468599234
what3words	mirror.cars.hotel

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Description and Current Usage

PHOTO 3.1: The Site at present is still fully utilised. However, its only use is as a "off street" carpark. All former buildings have been demolished to ground level.



Geology

BGS (British Geological Survey) indicates the following geology.

Wilmslow Sandstone Formation - Sandstone. Sedimentary bedrock formed between 252.2 and 247.1 million years ago during the Triassic period.

Future Works

At the time of writing this report it is understood that the site will be subjected to some form of redevelopment (the exact scope of works is not known at this time). The supplied requirement is usually for, geotechnical investigations, possibly percussive drilling/trial pits/window/samples.

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PART 4: HISTORICAL REVIEW

Historical Mapping

The historical maps in Annex B have been reviewed and a brief synopsis is in Table 4.1:

Table 4.1 Historical Map Synopsis

Date	Scale	Description/Remarks
1922 - 1933	1:2,500	The Site pre-WW2 lies within a well-established built-up area and is both residential and Industrial in nature. Within the Site boundary lies "Rochdale Road Gas Works" which includes three gas holders as well as four large sheds with rail lines used for loading/offloading. There are also several smaller ancillary buildings whose exact usage cannot be determined but can be assumed to form part of the infrastructure required for the Gas Holders.
1948 - 1949	1:1,250	For the most part the Site remains unchanged except for the southeast corner where one of the sheds has been removed and replaced with a conveyor.
1968 - 1990	1:1,250	There has been post war development that has taken place within the Site boundary. The three gas holders remain unchanged. However, the three sheds/conveyor and rail lines have been removed and replaced with one large building which occupies the entire southern half of the Site area.
1992	1:1,250	Further development has taken place within the Site boundary. The Site is now titled as a "depot". It appears that the entire Site has undergone change, this includes both the large building that occupied the Southern half of the Site and the removal of the three Gas Holders.
2024	1:10,000	Further changes have taken place within the Site boundary. All former buildings have been reduced to ground level. The Site at present is being utilised as an "off road" carpark.

Post War Construction/Works

There have been several stages of post WW2 construction as previously stated. Additionally, there has also been post war remediation works carried out in order to clear contaminated ground, particularly in and around the former gas holders.

SOURCE: https://www.ashremediation.co.uk/portfolio/gould-street-gasworks-2/

WWI

Although many people associate wartime bombing with The Blitz during World War II, the first airborne terror campaign in Britain took place during the First World War. Air raids in World War One caused significant damage and took many lives. German raids on Britain, for example, caused 1,413 deaths and 3,409 injuries.

Site Specific Bombing Information

There is no evidence to suggest that the Site was targeted throughout this period.

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WWII

Bombing started as early as October 1939, by the end of the WWII the Luftwaffe had dropped approximately 50,000 tonnes of high explosive bombs and 110,000 tonnes of incendiary bombs, this caused over 40,000 UXBs, killed 43,000 people and over 250,000 homes were destroyed.

Manchester (the Site) Throughout WW2

Manchester and its surrounding area were a major centre of industry during the Second World War. Many large firms were concentrated in the Trafford Park area, making it an important target for the Luftwaffe. Major producers included the aircraft manufacturers A V Roe that produced Manchester and Lancaster Bombers; Ford also employed 17,000 workers making aero engines in a huge new factory complex. During the raids on 22nd – 24th December 1940, the Metropolitan-Vickers works in Mosley Road was just one of the areas factories that was badly damaged. In a later raid 1n 1941 Manchester United's Stadium was hit by a bomb and remained out of action till 1949.

Manchester was attacked on the night of 22nd – 23rd December and again the following night of 23rd – 24th December 1940 (the Christmas raids). On the first night of the raids over 272 tons of HE Bombs was dropped, followed the next night by a further 195 tons. In cooperation to this the Luftwaffe also dropped around 2000 Incendiary bomblets across the city.

Additionally, to these raids, Manchester also suffered smaller attacks, including one in June 1941 when the Blitz was thought to be over. The city had three major raids over the Blitz period (a major raid being defined when over 100 tons of HE Bombs have been dropped) in total, more than 578 tons of explosives were aimed at the city making it the 11th most heavily raided city in Britain.

During the Christmas Raids over 600 fires were started by Incendiary bombs, unfortunately the majority of these were allowed to burn causing further damage. This was due to the cities 3,500 full and part time fire fighters had not returned from Liverpool where they had been sent several days before to help fight fires caused by previous raids. In some cases, the Army was utilised to demolish surrounding buildings to stop the fire from spreading further. Some of the fires continued to burn throughout the day on the 23rd December, providing a beacon for the German Luftwaffe upon its return that night.

So far as the city's infrastructure was concerned, following the Christmas raids both of Manchester's railway stations had been hit, as were the major bus stations. Deansgate and Oxford Road were blocked by debris from damaged buildings; bomb craters and UXBs meant that whole sections of the city had to be cordoned off. Water supplies were also affected, and electricity was rationed.

As can be seen within the Bomb Map in Annex D there does appear to have been at least four bomb strikes within the Site boundary itself, including strikes on the Gas holders themselves.

Abandoned Bombs/UXO

EOD Contracts records could find no evidence of any abandoned Bombs in or around the subject Site.

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Anti-Aircraft Artillery

There is no recorded evidence of the site being utilised for this purpose.

Explosive or Munition Factories

No explosive or munition factories were noted.

Military Usage

No records that indicate that the site has served any military purpose other than as a supply depot, as previously highlighted.

Prior Clearance Operations

EOD Contracts could find no evidence to suggest that there have been any prior UXO clearance operations in or around the site footprint.

PART 5: SOURCES OF UXO CONTAMINATION

The main sources of UXO contamination that have been researched for the site are:

Air delivered ordnance bombs and sub-munitions/incendiaries.

- Anti-Aircraft Ammunition (AA)
- Air delivered ordnance bombs and sub-munitions/incendiaries.

General

UXO contamination pathways from:

- Air delivered ordnance bombs between 100m and 200m.
- The nearest Anti-Aircraft Weapons (AA) is over 3km.
- No recorded use as an Explosive or Munition Factory
- Has had no Military Usage

UXOs are essentially dangerous; therefore, further information on UXO and Safety is detailed in Annex D.

Bomb Penetration Depths

The weapon penetration depths have been assessed as part of the tables in Annex D.

Factors Affecting Penetration

The penetration of sub-surface bombs will be affected by the following:

- Height of release
- Weight, shape, and design of bomb
- Aerodynamic qualities
- Angle of flight and impact
- Nature of impact surface
- Nature of sub soil

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The expected bomb depths for the site assuming the following criteria:

- 15,000 feet, the vast majority of bombs were dropped from height to avoid AA fire and balloons.
- General Purpose Bombs of 50kg to 1000kg
- Near Vertical impact 80 to 90 degrees
- Surface geotechnical conditions are made ground.
- Subsurface geotechnical conditions are generally clays.

Therefore, the expected depths for Air dropped UXBs on site are indicated in RED in the following table:

TABLE 5.1: Bomb Penetration Depths

	Bomb Weights			
Sub-Soil Type	50kg	250kg	500kg	1000kg
Soft Rock	2.442	5.016	6.006	7.062
Gravel	2.442	5.016	6.006	7.062
Sand	2.442	5.016	6.006	7.062
Chalk	3.7	7.6	9.1	10.7
Shingle	3.7	7.6	9.1	10.7
Dry Clay	3.7	7.6	9.1	10.7
Wet Sand	5.55	11.4	13.65	16.05
Wet Clay	5.55	11.4	13.65	16.05
Average Offset (m)	0.8-1.6	1.6-3.7	3-4.5	3.4-5.3

PART 6: RISK ASSESSMENT

Risk Assessment

Assessing both the likelihood of occurrence and the consequences of the encounter has derived the overall risk for the site from unexploded ordnance. Review of the Site's history and geographic location can provide an overall likelihood of encounter factor, which is used in the subsequent determination of a risk level when a Figure can be determined for the consequence.

Likelihood of Encounter

Given the study findings and other criteria (see Annex E Tables) it is considered that there is a **LOW**/ **MEDIUM** risk of encountering UXO within the Site footprint. This finding is based on assessment of all of the available information and taking account of the following factors:

- The Site area is situated within Manchester, which is off historic fact was bombed on several occasions throughout WW2, the worst of which being the Christmas raids. However, despite this it is situated away from the centre of Manchester which is where the focus of the raids took place.
- The Site was subjected to bombing throughout WW2 as can be seen in Annex D.
- The Site area was fully utilised throughout WW2.
- The Site would have been considered a viable and strategic target throughout this period.

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- There have been several phases of construction and remediation works that have taken place within the Site boundary post WW2. However, it cannot be guaranteed that these remediation works went to protentional bomb penetration depth.
- Encounters of UXO are not uncommon, recent UXO finds are in Annex E.

Consequence of Encounter

The consequence (see Annex D) of an uncontrolled encounter with UXO, given its lethal design and its unpredictable nature could be catastrophic and warrants a high severity factor. With regards to the consequences, the following factors were considered:

The project works may make use of a number of common ground investigation and construction techniques in its methodology during the project. Any intrusive groundwork has the potential to encounter UXO.

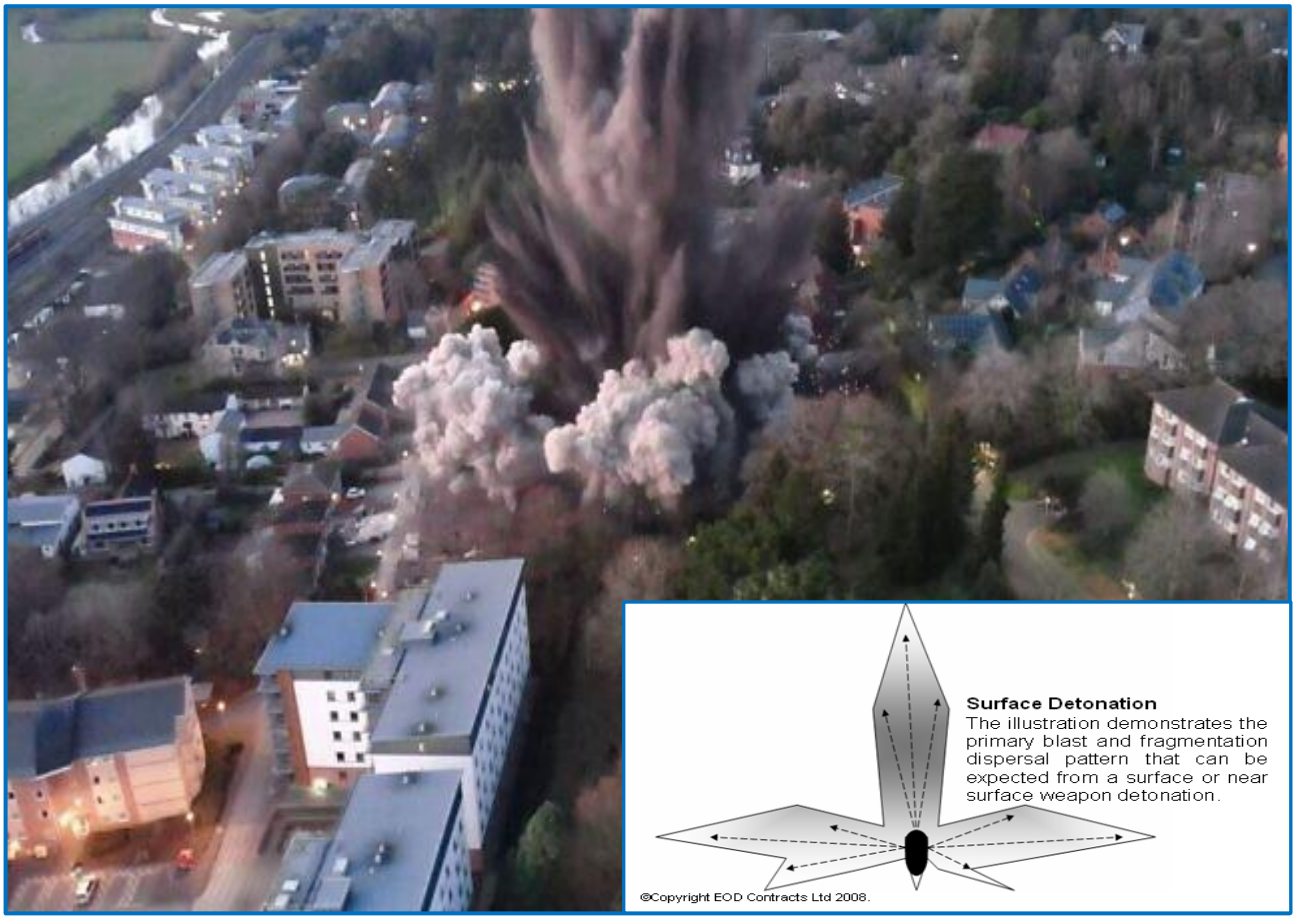
Intrusive earthwork, piling driving and dynamic ground compaction are by nature, aggressive, significant force (kN) is often required to achieve the desired results. As a precaution it is prudent to assume that any external stimulus, no matter how slight, may result in an unstable weapon detonating.

Records of encounters with UXO, particularly where plant machinery has been involved have resulted in detonations of the items with varying degrees of consequence; ranging from slight injuries sustained to piling contractors when a bomb detonated at 6.0m bgl to fatal injuries sustained to a construction worker while conducting near surface machine works on a motorway.

Detonation on land; the effects of a detonation at depth will be more localised and less destructive than one occurring on the surface. Figure 6.1 shows an illustration of the primary blast and fragmentation dispersal from explosive ordnance when it detonates on the surface. The weapon's design, and other key factors such as the ratio of explosive charge weight to total weapon weight (CWR) and the Net Explosive Quantity (NEQ) will determine the size and effects of a blast. The effects will also be enhanced or reduced by a number of factors including, the presence of other energetic materials in close proximity to the blast or if the weapon is buried or exposed on the surface. As a guide Annex E Table 1 gives an indication of the likely blast radius for common types of UXO.

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Figure 6.1: Primary Blast & Fragmentation on Land



In addition to the dangers of explosion, many common chemicals used in the manufacture of explosive ordnance fillings are in sufficient quantity, and level of exposure, toxic or poisonous. Although it is unlikely that such chemicals would be encountered in significant quantity to represent a significant risk to personnel, leakage or venting could pose a risk to the local marine environment. In addition to heavy metals, copper, lead, zinc etc used in the weapon body and fuze, hydrocarbon propellants such as Kerosene may also be present.

Risk Level

The prevailing risk level has been determined to be **LOW** within the Southern half of the Site area and a **MEDIUM** risk in the northern half. (See Risk Map)

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PART 7: CONCLUSIONS

Based on the information researched by EOD Contracts Ltd for the proposed scope of works being carried out within the given site area, the following conclusions have been reached:

Historical UXO Contamination

The indicators for UXO contamination are:

Bomb Strikes	There are no recorded incidents of the site being the subject of bombardment throughout WW1. Manchester was targeted heavily throughout WW2. The Site would have been considered a strategic target throughout this period. Known bomb strikes within the Site boundary. There have been several phases of construction and remediation works that have taken place within the Site boundary. The Site was fully utilised throughout WW2.
Bomb Damage	Difficult to ascertain.
Reconstruction	No obvious signs
Military Usage	No obvious signs.
Explosive/Munition Factory	No obvious signs

Risk Level

The overall risk has been determined to apply to all ground works within the site footprint.

Risk Level	Therefore, so far as reasonably practicable the risk level on Site has been deemed as both a **LOW** risk and **MEDIUM** risk for some areas. See risk map.
Risk Depth	7.062 for areas deemed a **MEDIUM** risk

PART 8: RECOMMENDATIONS

It is recommended that the following risk mitigation strategy be executed during phases of the project indicated previously as a **LOW** risk.

UXO safety awareness training should be given at all levels of site personnel and selected individuals on the project staff with relevant responsibilities. A competent person as part of the project safety induction course should provide the awareness training. It should be reinforced with specific safety briefings and toolbox talks to individuals involved in conducting intrusive earthworks.

It is recommended that the following risk mitigation strategy be executed during phases of the project indicated previously as a **MEDIUM** risk.

Communicating the risks, all stakeholders should be made aware of the UXO situation on the site and the possible impact it may have on the project works and day to day running of the district. Clients have a legal

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duty under the Construction Design & Management Regulations (CDM) and Health & Safety at Work legislation to provide Designers and Contractors with project specific information needed to identify hazards and risks associated with the design and construction work. The possibility that UXO may be encountered on site falls within the category of a significant risk and as such it should be addressed as early as possible in the lifecycle of the project.

Further planning: the risks posed by UXO should be brought to the attention of the Project CDM Coordinators and other individuals with a responsibility for project safety and operations at the site. The matter of UXO should be considered critical to project safety and one requiring high priority action.

UXO safety awareness training should be given at all levels of site personnel and selected individuals on the project staff with relevant responsibilities. A competent person as part of the project safety induction course should provide the awareness training. It should be reinforced with specific safety briefings and toolbox talks to individuals involved in conducting intrusive earthworks.

Project overview and the responsibilities of those working on site with regard to duty of care and public safety.

UXO recognition and safety procedures to be followed on discovery of a suspicious object or the alarm being sounded.

Emergency procedures to be followed in the event of an explosion. Evacuation routes, muster stations and accounting for personnel.

Work permits, works methodology and specific UXO risk mitigation methods. Post-incident inspections and returning to normal works.

Prior to any intrusive piling or drilling commencing, UXO safety testing and appropriate clearance certification into the ground to sufficient depth to provide clearance from UXO. This can be done using a progressive drilling process or (where large numbers of piles are to be placed and ground permitting) using a vehicle borne hydraulic system to push a magnetometer into the ground to test for the presence of UXO prior to piling.

UXO safety monitoring of all “at risk” excavations, including geotechnical or archaeological trial pits to be conducted during the project. This should be provided by a UK Home Office Authorised EOD/UXO Contractor using qualified EOD Engineer with specialist locators and detectors to scan the ground ahead of the excavation wherever possible.

9.0: SPECIFICALLY

Geotechnical investigations, percussive drilling/trial pits/window/samples, require an EOD Engineer over watch.

The removal of all buildings within the site footprint can be removed down to ground level (including basements)

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New foundations with piling should be mitigated by the insertion of a magnetometer to encompass the pile position, this would be carried out using a CPT rig (magcone), the expected radius of the magcone is 1.5m therefore multiple piles could be checked.

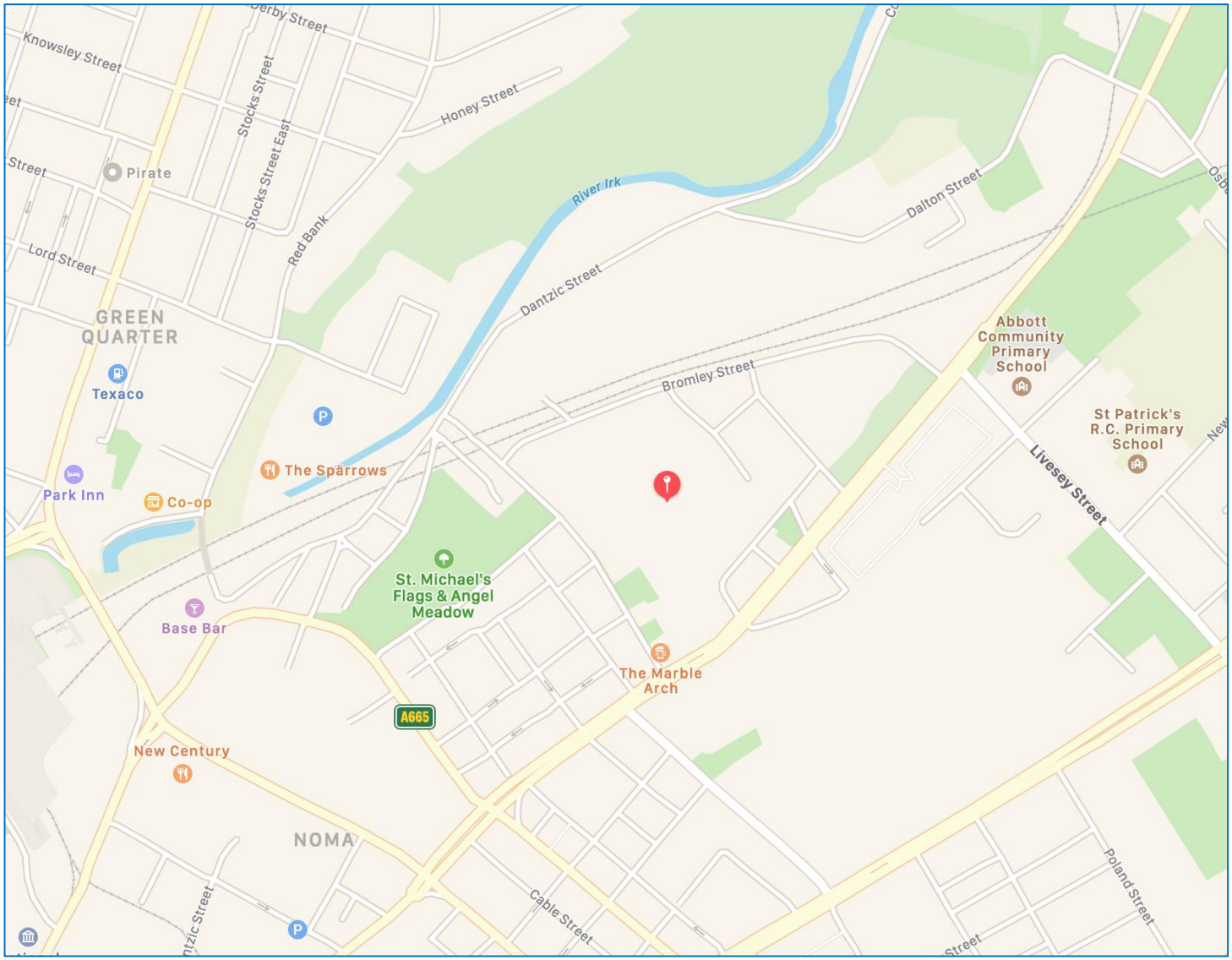
Non-Intrusive Magnetometer surveys generally prove inconclusive on "Brownfield sites", this is due to the high ferromagnetic background, therefore this methodology is not recommended for this site and shallow excavations should be overseen by a qualified EOD Engineer.

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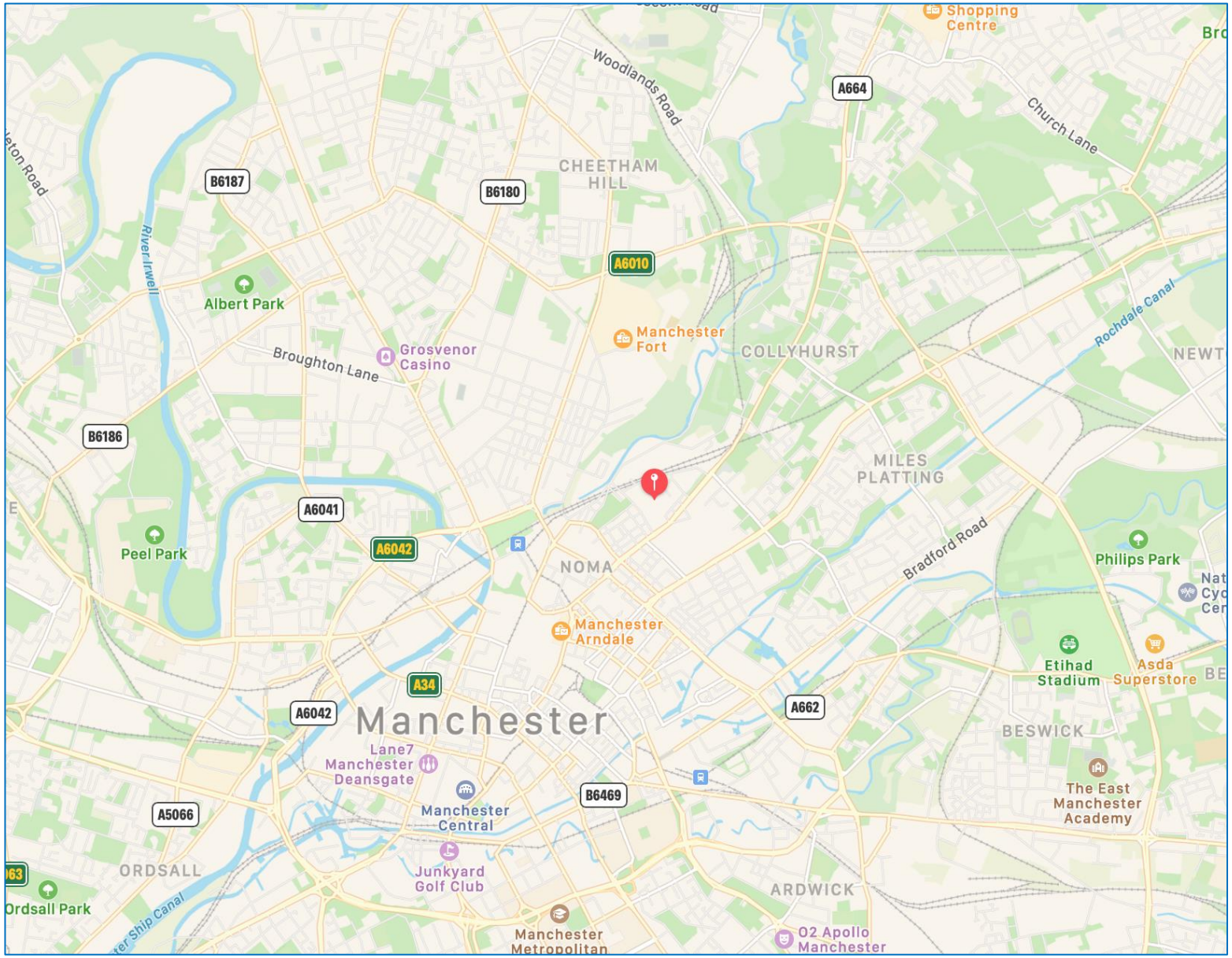
Annex A

SITE LOCATION

The Site Location (red flag). An exact meeting point will be determined by the Client should the need arise.



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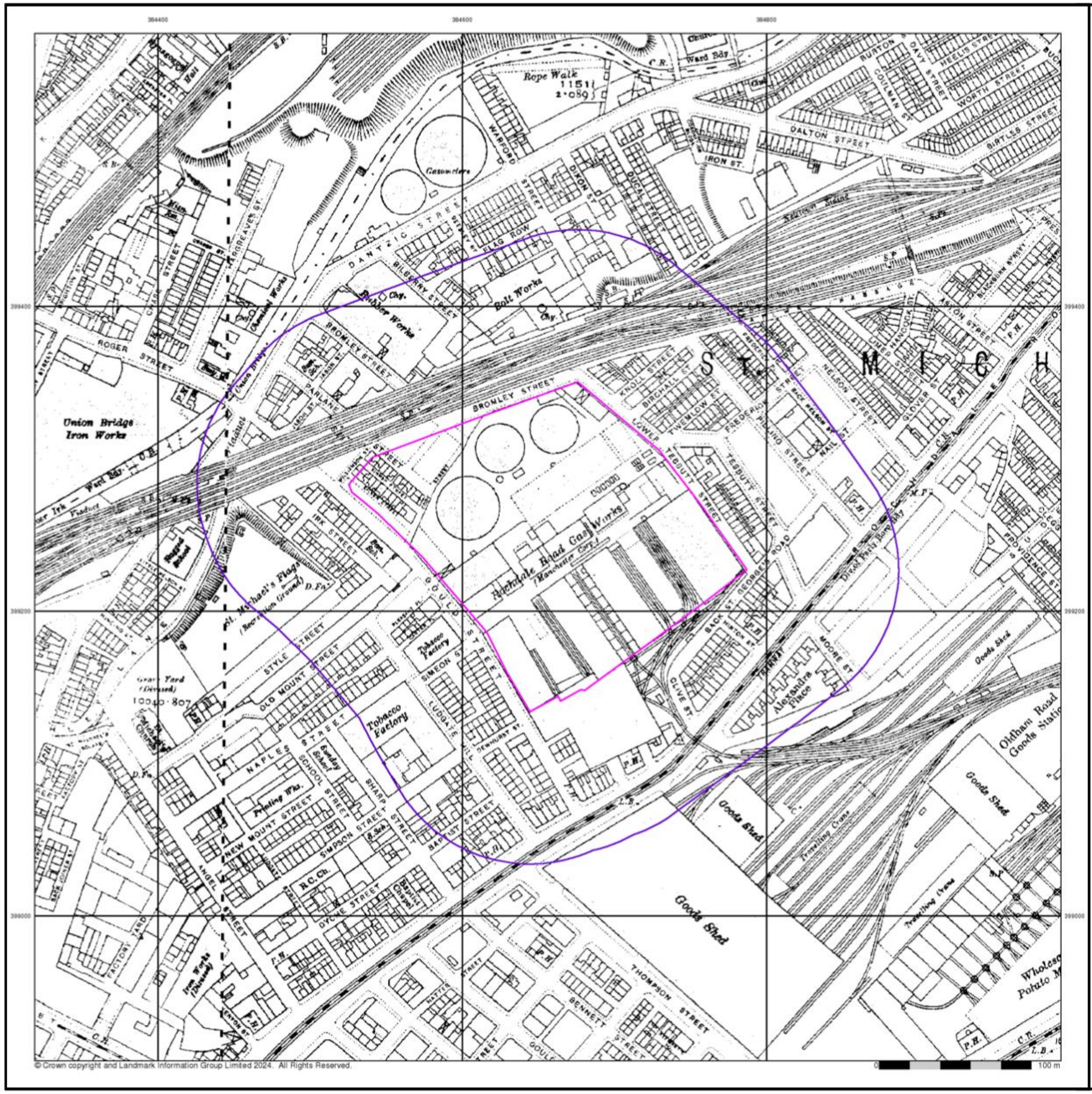
Annex B

HISTORIC MAPS

Index of Historical Maps

Page No.	Date	Scale	Description/Remarks
B-2	1922 - 1933	1:2,500	The Site pre-WW2 lies within a well-established built-up area and is both residential and Industrial in nature. Within the Site boundary lies "Rochdale Road Gas Works" which includes three gas holders as well as four large sheds with rail lines used for loading/offloading. There are also several smaller ancillary buildings whose exact usage cannot be determined but can be assumed to form part of the infrastructure required for the Gas Holders.
B-3	1948 - 1949	1:1,250	For the most part the Site remains unchanged except for the southeast corner where one of the sheds has been removed and replaced with a conveyor.
B-4	1968 - 1990	1:1,250	There has been post war development that has taken place within the Site boundary. The three gas holders remain unchanged. However, the three sheds/conveyor and rail lines have been removed and replaced with one large building which occupies the entire southern half of the Site area.
B-5	1992	1:1,250	Further development has taken place within the Site boundary. The Site is now titled as a "depot". It appears that the entire Site has undergone change, this includes both the large building that occupied the Southern half of the Site and the removal of the three Gas Holders.
B-6	2024	1:10,000	Further changes have taken place within the Site boundary. All former buildings have been reduced to ground level. The Site at present is being utilised as an "off road" carpark.

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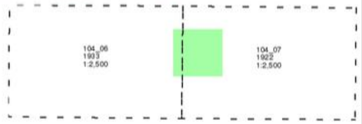
Lancashire And Furness

Published 1922 - 1933

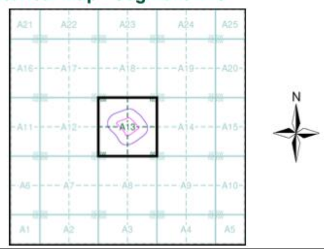
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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National Grid Reference: 384660, 399250
Slice: A
Site Area (Ha): 3.05
Search Buffer (m): 100

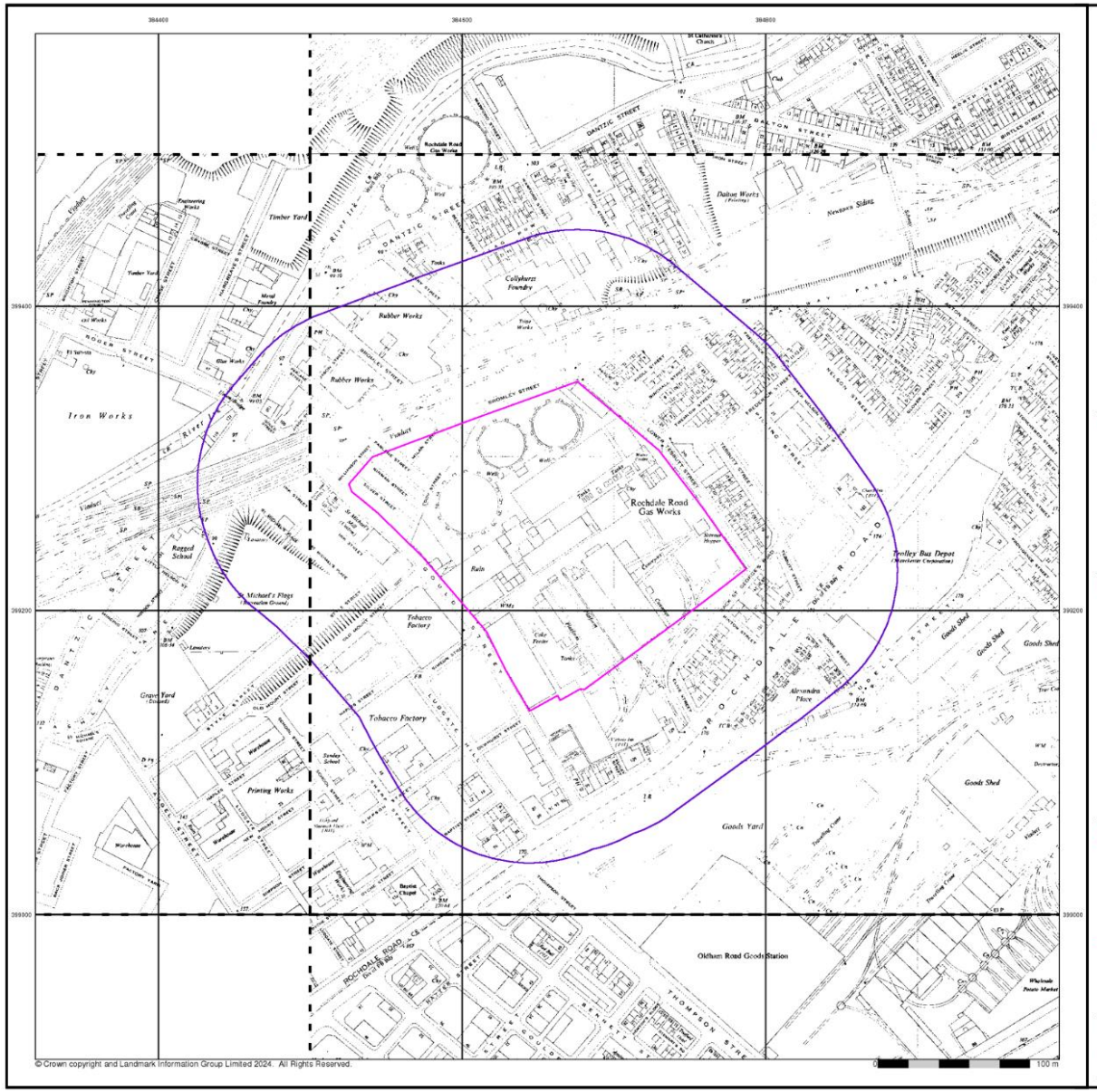
Site Details

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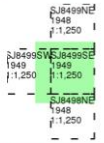
Ordnance Survey Plan

Published 1948 - 1949

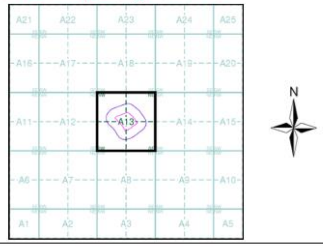
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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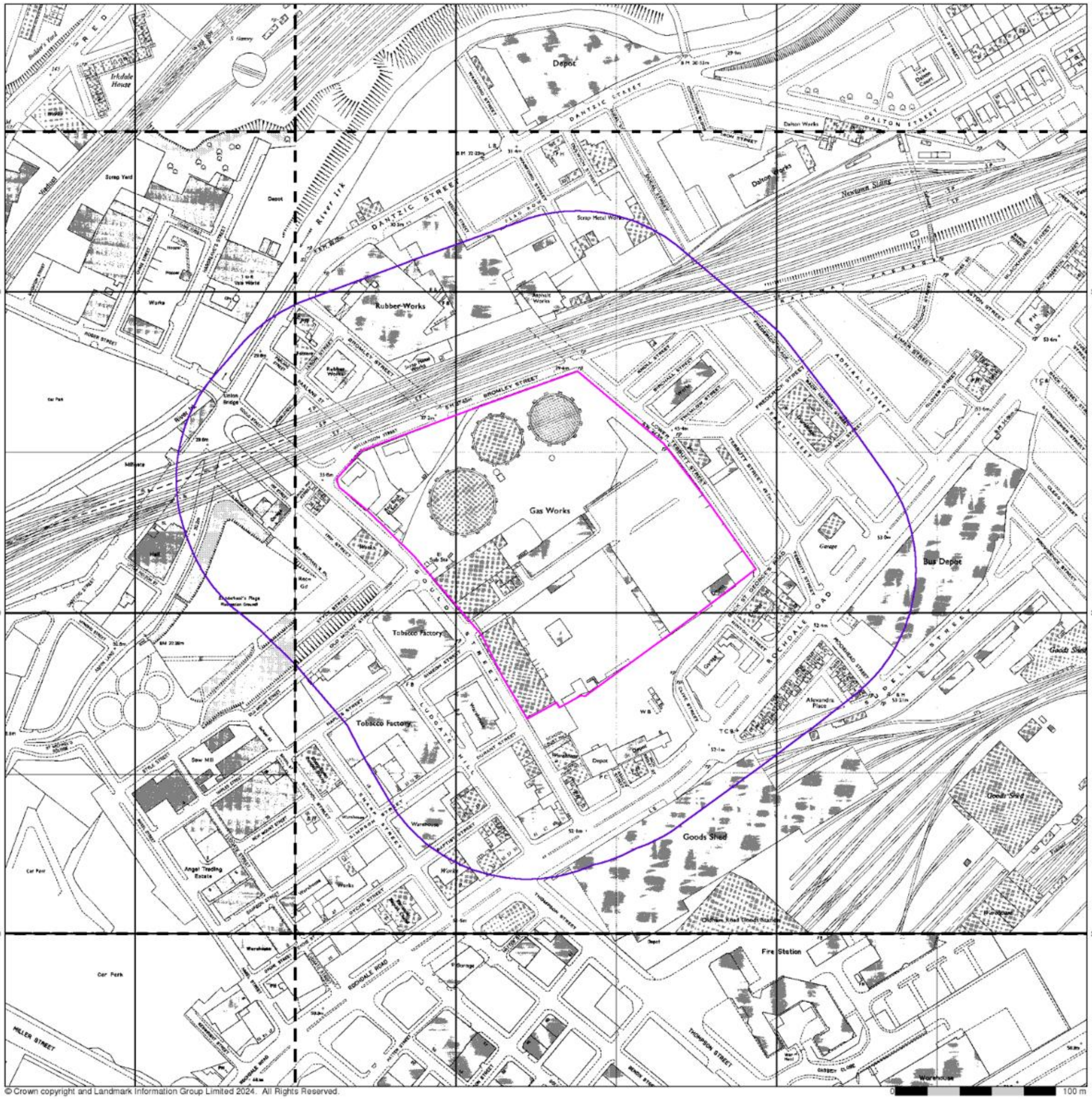
Site Details

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Ordnance Survey Plan

Published 1968 - 1990

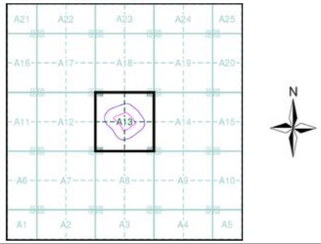
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SJ8499NW 1968 1:1,250	SJ8499NE 1970 1:1,250
SJ8499SW 1990 1:1,250	SJ8499SE 1970 1:1,250
SJ8498NW 1986 1:1,250	SJ8498NE 1986 1:1,250

Historical Map - Segment A13



Order Details

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Slice: A
Site Area (Ha): 3.05
Search Buffer (m): 100

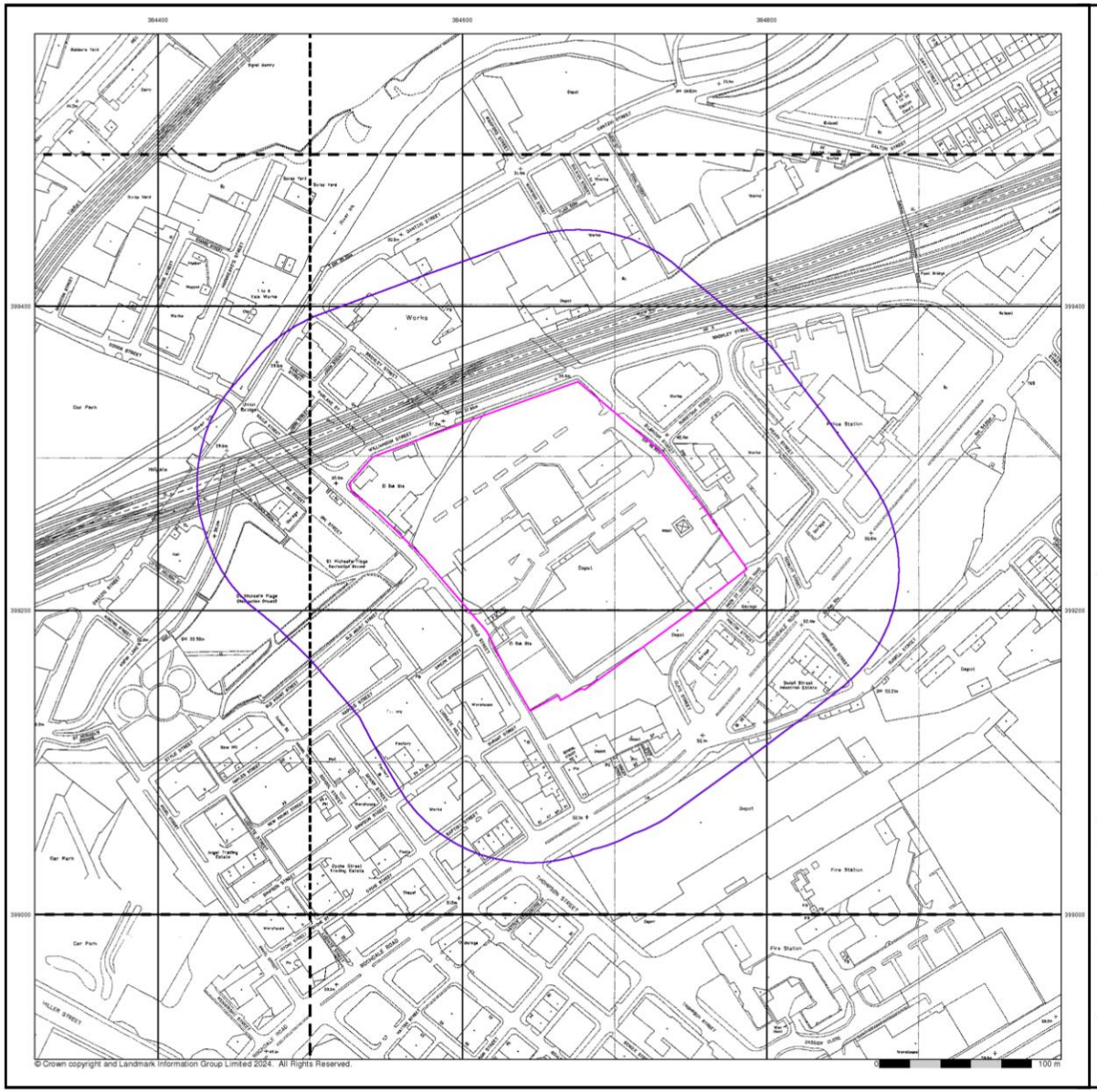
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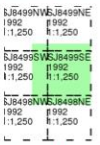
Large-Scale National Grid Data

Published 1992

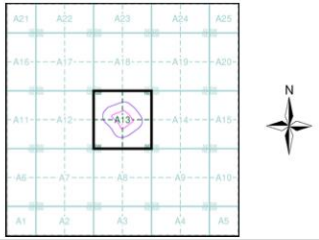
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	349249836_1_1
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National Grid Reference:	384660, 399250
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Site Area (Ha):	3.05
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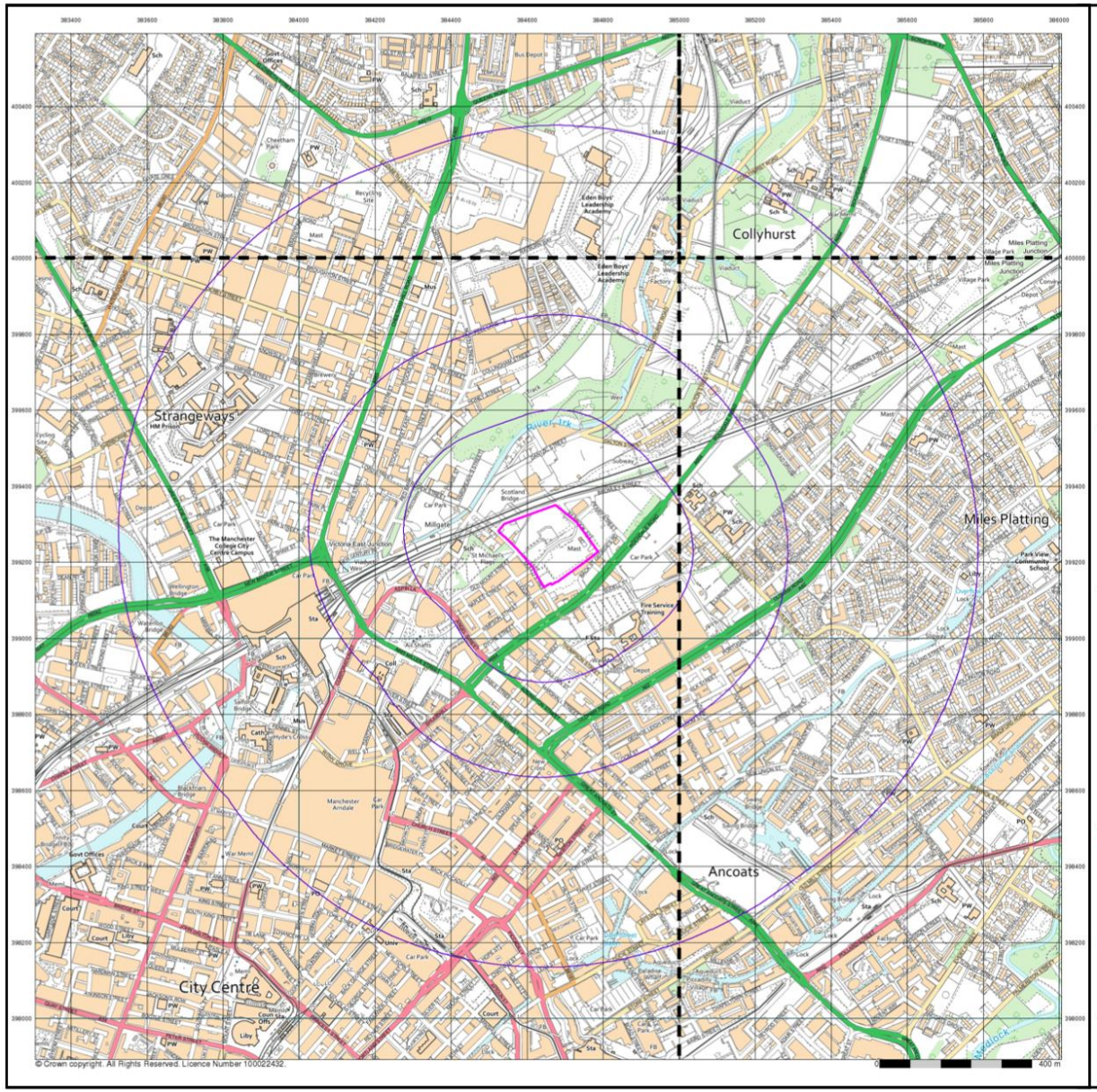
Site Details

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VectorMap Local

Published 2024

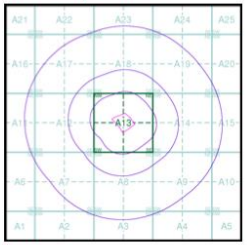
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

SD80SW 2024 Variable	SD80SE 2024 Variable
SJ89NW 2024 Variable	SJ89NE 2024 Variable

Historical Map - Slice A



Order Details

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Customer Ref:	24210 Gould Street BROWNFIELD
National Grid Reference:	384660, 399250
Slice:	A
Site Area (Ha):	3.05
Search Buffer (m):	1000

Site Details

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Annex C

BOMB RAIDS WWI

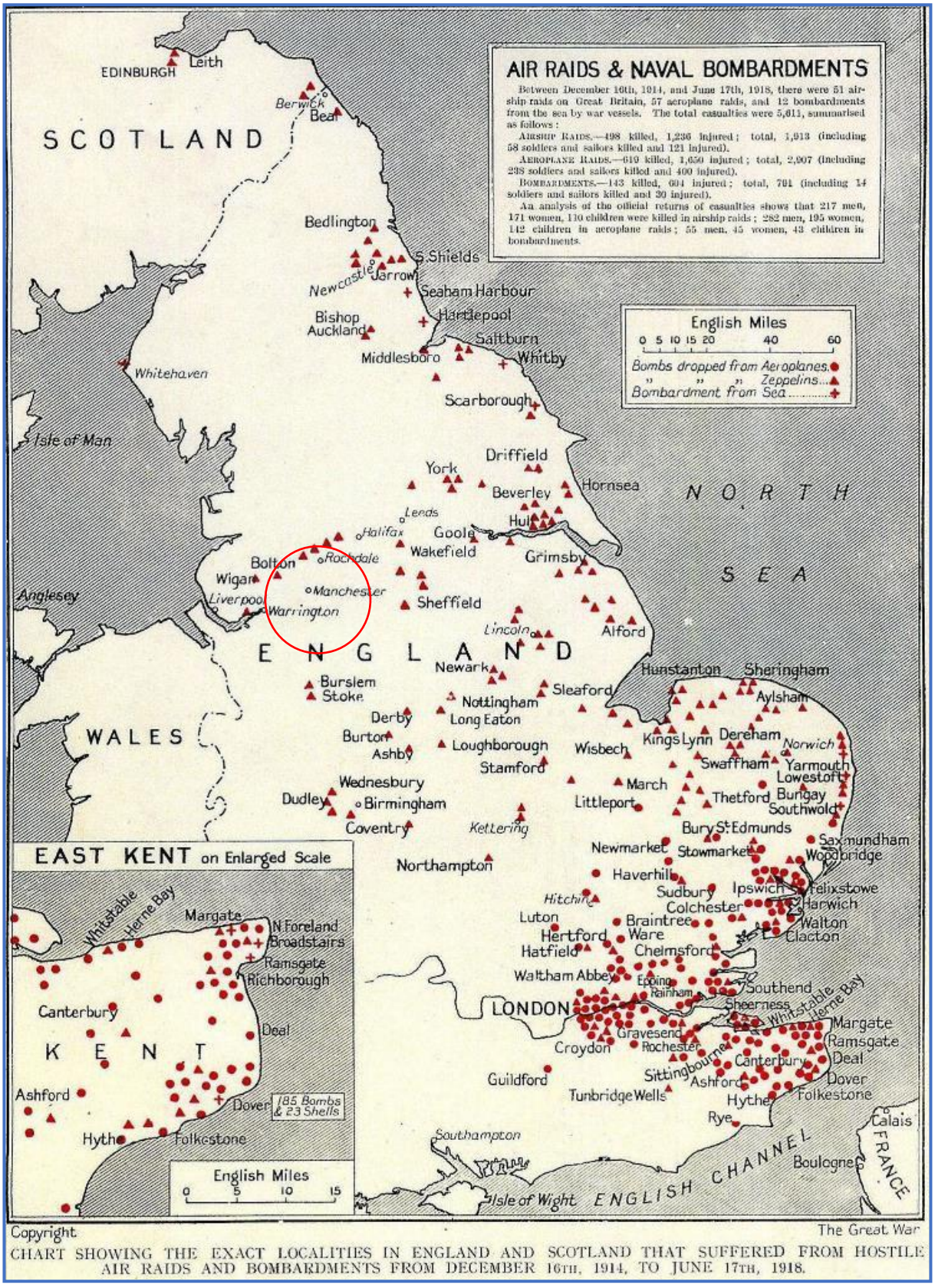


CHART SHOWING THE EXACT LOCALITIES IN ENGLAND AND SCOTLAND THAT SUFFERED FROM HOSTILE AIR RAIDS AND BOMBARDMENTS FROM DECEMBER 16TH, 1914, TO JUNE 17TH, 1918.

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Annex D

BOMB IMPACT MAPS

PHOTO D-1(accumulation map): Extracted Manchester Archives. The Site (approximate, red arrow) – This map highlights both bomb strikes as well as bomb damage. As can be seen there are at least four bomb strikes within the Site boundary.



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Annex E



Source:	Kent Online
Date:	15th November 2023
Description:	**Dig uncovers V2 Nazi rocket in Halstow Marshes, Hoo – 78 years after it was fired at London from German occupied Holland.** Remains of a Nazi V2 rocket fired at Britain during the Second World War have been unearthed in a Kent field. The 12.5-tonne German missile was launched towards London from The Hague in occupied Holland 78 years ago but fell short of its target instead landing in the Halstow Marshes on Medway's Hoo Peninsula. The force also noted: "The Warwickshire Police goalkeeper won't be happy. it was blown up in the six-yard box of the pitch." Researchers have pinpointed the exact date and time of its explosion as February 17, 1945, at 2pm. Hitler used the missiles – the world's first ballistic missiles – as part of his terror weapons programme in an effort to force Britain into surrender. Around 100 of these "Vengeance Weapons" were fired towards Britain each week between 1944 and 1945, in the hopes of causing maximum destruction of the V2's weight, 8.5 tonnes was made up of fuel, three tonnes comprised the missile's body, and one tonne made up the weapon's warhead. The find is the second V2 rocket found in Kent in the past few years, with the team at Research Resource Archaeology previously digging up a missile at St Mary's Platt near Sevenoaks back in 2021.

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Source:	BBC
Date:	10th February 2023
Description:	**Army bomb disposal experts have carried out a controlled explosion after World War Two ordnance was found in the River Leam in Leamington Spa.** Warwickshire Police closed part of Willes Road around the Mill Gardens Park during Sunday's operation. A group called the Peaky Dippers, that trawls the river with magnets to hunt for metal, said on social media that it made the find. The roads and the park reopened by 19:00 GMT. A member of the Peaky Dippers group claimed on Facebook: "There wasn't just one bomb found, there [were] numerous WW1 and WW2 guns, grenades and artillery tips..." Warwickshire Police confirmed magnet fishers made the find and said the 18-pound British shell was taken back to its Leek Wootton headquarters for safe disposal. It said the 80-year-old shell "was clearly very well made" and still had the power to "produce one almighty boom and shake the ground after decades under water". The force also noted: "The Warwickshire Police goalkeeper won't be happy... it was blown up in the six-yard box of the pitch."

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Source:	BBC
Date:	10th February 2023
Description:	**A World War Two bomb found in Great Yarmouth has detonated while work was being done to defuse it, causing a huge blast that was heard for miles.** Army specialists were attempting to disarm it when there was an unplanned detonation at about 17:00 GMT. People on social media said they heard a loud bang and felt buildings shake 15 miles (24km) away. There have been no reports of injuries among the Army, emergency services or the public, Norfolk Police said. Cordons were put in place when the bomb was first discovered close to two gas pipes on Tuesday, and work began to make it safe. The cordons, at 200m (656ft) and 400m (1,312ft) from the bomb, were lifted on Friday evening. Most roads have been reopened and residents have been allowed to return to their homes.

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Source:	BBC
Date:	24 July 2021
Description:	A live World War Two bomb unearthed by builders on a housing development has been destroyed in a controlled explosion. The 500lb (227kg) device was found on the new-build estate in Goole, East Yorkshire, on Thursday. Eight homes were evacuated and the M62 was shut between junctions 35 and 37 as a safety precaution. Humberside Police said the device was successfully detonated at 16:22 BST on Saturday. All residents have been able to return to their homes and local business are no longer being asked to remain closed. The force also said a no-fly zone and the closures of the M62 and other roads nearby had since been lifted. John Sharpe, site manager of the Beal Homes development, said he received a call from workers just after midday on Thursday. "They didn't know what they'd dug up at first and a guy went down into the hole because we thought it was a metal pipe. "As he uncovered it he realised it was a bomb and got out pretty quickly," he said.

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Source:	The Sun
Date:	27 February 2021
Description:	A WORLD War II bomb which sparked a mass evacuation in Exeter has been detonated by army experts leaving a crater the "size of a double decker bus." The noise from the huge blast - which sent debris flying more than 250 metres - could be heard five miles away with some residents claiming the aftershock rattled their windows. Personnel from the Army's Royal Logistics Corps took over from Royal Navy bomb disposal experts this morning. They used 400 tonnes of sand to create an enclosing "box" before it was "made safe" at around 6.10pm. He added: "Around 400-tonnes of sand was transported to the site of the device, which is at a building site on private land, and walls were erected... to mitigate the impact of the detonation. "Trenches were also dug to prevent ground shock. Despite these mitigation measures, the impact of the blast has been significant and debris has been thrown at least 250-metres away. "The crater is around the size of a double decker bus.

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Source:	UKNIP
Date:	04 May 2020
Description:	Officers from Kent Police are working with Army Bomb Disposal officers after the discovery of two unexploded WW2 bombs were located in Kings Hill, Kent. Police were called just after 4:30pm Monday afternoon to Warwick Way after the discovery of an unexploded ordnance. The Army Bomb disposal service were called in to action to attend the scene to evaluate the discovery and make it safe. Shortly after a second ordnance was found in the adjacent road Gibson Drive. Officers have placed a cordon on the area whist the Army investigate and decide if a controlled explosion is needed.

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Source:	The Bolton News
Date:	10 February 2020
Description:	A worker who found an unexploded bomb in a back garden has spoken about the discovery. Aram Mahmoud found the item while putting fence posts in for a house on Bradford Road, and said he recognised the explosive instantly due to growing up in Iraq. Mr Mahmoud said: "We were putting up concrete posts and we were digging and we found a rocket. "We called the police immediately and they came round. The bomb disposal team told Mr Mahmoud that the device was "very very dangerous". Bradford Road was closed between Green Lane and Bishops Road, and Oakleigh Avenue was also shut off with residents evacuated. Both roads have now reopened and the police have left the scene.

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Source:	Sky News
Date:	4 February 2020
Description:	London's Soho Evacuated as World War Two Bomb Discovered A large part of central London's busy Soho area was evacuated after an unexploded Second World War bomb was found at a building site. Police were called at 1.42pm on Monday to Dean Street, connecting Oxford Street to Shaftesbury Avenue, which they cordoned off after the device was discovered near the Soho Hotel. A Royal Engineers bomb disposal unit was called in and removed the half-tonne device. The Metropolitan Police's Soho team said the cordons in Oxford Street, Charing Cross Road, Shaftesbury Avenue, Lexington Street and Poland Street had been lifted shortly after 8:30pm.

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Source:	Express and Star
Date:	May 17, 2019
Description:	Second World War Bomb Detonated in Bilston. A Second World War bomb was detonated by the army in Bilston last night following a discovery by a workman. The detonation took place on what appeared to be a building site at around 8.30pm. A West Midlands Police spokesman said: "We were called to reports of an unexploded World War 2 bomb at a building site on Coseley Road, Bilston, at 3.40pm. A controlled explosion was carried out."

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Sip Grenades



Aftermath of Demolition



Source:	The Beach https://www.thebeach.co.uk/news/local-news/bomb-squad-called-after-dozens-of-second-world-war-grenades-discovered/
Date:	28th May 2019
Description:	Army bomb disposal teams have detonated 24 grenades found in a field in East Suffolk. The 'SIP grenades' - which stands for 'self-igniting phosphorus' - were discovered in the village of Sifton, which is near Yoxford, yesterday. The bombs, which were designed during the 1940s, were glass bottles filled with phosphorus and petrol. Unlike traditional Molotov cocktails, they would ignite spontaneously when the glass shattered, and the phosphorus became exposed to air. The grenades were issued to Home Guard units in the event of a German invasion as that never happened crates of them have been left buried in unregistered hiding places.

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Source:	BBC News
Date:	19th May 2019
Description:	A suspected German wartime bomb which was caught in a fishing net off the coast of the Isle of Wight has been detonated. A fishing vessel reported picking up the 7ft-long sea mine, which was "most likely an old German wartime sea mine", about a mile from the Needles at around 8am on Saturday, the Maritime, and Coastguard Agency (MCA) said. Bomb disposal experts from the Royal Navy's Portsmouth base were called in to detonate the device, while warnings were issued to ships and public in the area. Divers placed the mine back on the seabed and blew up the bomb – found to contain 2,000lb of explosives – at 10.51am on Sunday, the Ministry of Defence said.

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Annex F

Risk Assessment Tables

Table 1: Summary of Potential Contamination Sources

Source	Applicable	Not Applicable
Enemy Attack & Counter Measures		
Bombing WW1		☒
Manned Aircraft Bombing WW2	☒	
Unmanned V1 & V2 Rocket Attack		☒
Shelling		☒
Anti-Shipping Mines & Depth Charges		☒
Anti-Aircraft Shells & Rockets		☒
Beach Mines & Coastal Defences.		☒
Airfield/Key Point Defensive Mines/Charges		☒
Abandoned Unexploded Bomb (A/UXB)		☒
Migration of UXO		
UXO Migration in Rubble & Infill		☒
UXO Migration by Tide & River Current		☒
UXO Migration by Marine Dredging		☒
Shipwrecks		☒
Dispersal by Explosion, Fire & Accident		☒
Aeroplane Crash		☒
Private Collections		☒
MOD Facilities		
Bombing Range		☒
Artillery, Mortar & Tank Range		☒
Grenade Range		☒
Small Arms Firing Range		☒
Weapon Research & Development Facilities		☒
Ammunition Burial Grounds		☒
Docks & Harbour Facilities		☒
Offshore Ammunition Dumping Grounds		☒
Ammunition Storage & Manufacture Sites		☒
Airfields & Air Stations (Close Proximity)		☒
Bombing Decoy Site		☒
Army Barracks & Camps		☒
MOD Training / Concentration Areas		☒
Home Guard & SOE Weapon Caches		☒

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Table 2: Airdropped Weapon Strike Indicators (UK)

Item	Increasing Potential level ⇨			
Site Location	Rural	Small Town	**Brown Field Large Towns**	Cities
Site Description and Use	Greenfield or Agricultural Land	**Near Strategic Target**	Adjacent to Strategic Target	Strategic Target
Site History	No history of Attack	**Near area of Attack**	Immediate Area Attacked	Direct Attack
Strategic Target: Military Installation, Industrial or Munitions Manufacturer, Power Station, Gas or Water Works, Port, Dock, Railway Yard, Decoy Site.				

Table 3: Weapon Strike Records (UK)

Source	Availability			
Archive	None	Non-specific	**Specific**	Extensive
In-house	None	Non-specific	**Specific**	Extensive
Anecdotal	None	Non-specific	**Specific**	Confirmed

Table 4: Anti-Aircraft Weapon Strike Indicators (UK)

Item	Increasing Potential level ⇨			
Site Location	Rural	Town	**City**	Military Site
Fixed Battery Location	None	General Area	**Nearby**	Onsite
Mobile Battery	Rural	Town	**City**	Military Site
Military Site: Airfield, Port, Radar, Barracks, Depots, Arsenal or Similar.				

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Table 5: Abandoned Bomb Records (UK)

Item	Increasing Potential level ⇨		
In-house	**None**	Yes	On-site
Other	**None**	Yes	On-site

Table 6: Bomb Strike Density Assessment

Bombs & Mines	Placed at less than 100 - 149 per 100 hectares.

Table 7: Opportunity to have detected Bomb or Shell Strikes (UK)

Increasing Potential level
No KNOWN recorded bombs or damage
Good ARP cover
Significant development
No significant ground cover
Light bombing or damage
Moderate ARP cover
Moderate development
Frequent public access
Little ground cover
Significant bombing or damage (Surrounding Area)
Poor ARP cover
Minimal development limited to shallow excavations (within some areas of the Site)
Infrequent public access
Moderate ground cover
Heavy bombing or damage (surrounding area)
No ARP cover
Development limited to site clearance
Controlled private access
Heavy ground cover, vegetation, ploughing or body of water

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Table 8: Post Contamination Development Indicators (UK)

	Increasing Potential level
Nature of Post Contamination Development	100% excavations of the entire site to below contamination depth.
	Significant development
	Moderate development
	Minimal development (within some areas of the Site)
	No development

Table 9: Construction Activities Encounter Indicators

	Increasing Potential level
Activities	**Borehole Drilling**
	Dynamic Sampling
	Shallow Trial Pit
	Services Trenching
	Bored (CFA) Piling
	Sheet Piling
	Shallow Excavations over extended area
	Deep Excavations over a limited area
	High Density Piles
	Deep Excavations over extended area
	Bulk Excavations

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APPENDIX F

Exploratory Hole Logs

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH801

Sheet 1 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384590E, 399245N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	42.56m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	17/07/24 - 26/07/24

Hole Type: CP+RC

Scale: 1:51

Logged: PH

Checked: TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		0.10-0.70	B		0.10	42.46		MADE GROUND: Tarmacadam.
			ES					MADE GROUND: Brown & grey sandy gravel. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone, brick, and concrete.
		0.10	PID	0.0PPM				
		0.30	D					
					0.80	41.76		
		0.90-1.20	B					MADE GROUND: Black gravelly sand with high ash content including PFA (Pulverised Fly Ash), and slight hydrocarbon odour. Sand is fine to coarse. Gravel is sub-angular fine to coarse of slag, brick, concrete, glass, and concrete.
		0.90-1.50	ES					
		0.90	PID	0.6PPM				
		1.00	D					
		1.20-1.65	D					
		1.20	SPT	N=20 (4,5/7,7,4,2)				
		2.00-2.45	D					
		2.00	SPT	N=5 (1,1/1,1,1,2)				
		2.50-3.50	ES					
		2.50	PID	0.0PPM				
		3.00-3.45	D					
		3.00	SPT	N=1 (1,0/0,0,1,0)				
		4.00-4.45	D					
		4.00-4.50	B					
		4.00	SPT	N=28 (9,10/10,10,4,4)				
		4.50-5.00	ES					
		4.50	PID	0.0PPM				
		5.00-5.45	D					
		5.00	SPT	N=6 (2,1/2,1,1,2)				
		6.00-6.45	D					
		6.00-6.50	ES					
		6.00	SPT	N=7 (1,1/2,2,2,1)				
			PID	6.5PPM				
	▼	7.50-7.95	D					*Hydrocarbon/solvent odour becoming strong at 7.70m bgl.*
		7.50-8.00	ES					
		7.50	SPT	N=7 (2,2/2,2,1,2)				
			PID	7.0PPM	8.00	34.56		
		7.70-8.00	B					Firm brown gravelly CLAY. Gravel is sub-rounded fine to coarse of sandstone and mudstone.
		8.00-8.50	B					
		8.10-8.60	ES					
		8.10	PID	0.0PPM				
		9.00-9.45	U					
		9.45-9.70	D					

1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater seepage encountered at 7.70m and 14.30m bgl.
3. Bentonite seal installed at 8.00m bgl prior to advancing the borehole.
4. Clean drilling methods used whilst undertaking this borehole location.
5. Cable percussive to 13.50m bgl with rotary follow on to 21.00m bgl.
6. Installed to 21.00m bgl: 12.00m plain and 9.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH801

Sheet 2 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384590E, 399245N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	42.56m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	17/07/24 - 26/07/24

Hole Type	Scale	Logged	Checked
CP+RC	1:51	PH	TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		10.50-10.95 10.50	D SPT	N=19 (3,4/4,4,5,6)				*Becoming stiff from 10.50m bgl.*
		12.00-12.45 12.00	D SPT	N≥50 (10,12/50 for 285mm)	12.00	30.56		Very weak distinctly weathered reddish brown fine to medium grained SANDSTONE. Recovered as a reddish brown sandy gravel. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone.
		13.30 13.50	D SPT	N≥50 (75 for 90mm/0 for 0mm)	13.50	29.06		Reddish brown SANDSTONE. *13.50-13.80: No recovery.* *13.80-13.90m bgl: Non-intact recovered as reddish brown fine to coarse gravel of sandstone.* *13.90-15.00m bgl: Very weak, distinctly weathered fine to coarse grained reddish brown sandstone.* *13.90-15.00m bgl: Discontinuities are very close to closely spaced, rough, and horizontal to sub-horizontal up to 45 degrees.*
	▼	13.50 - 15.00 14.35 - 14.50	NR NI ES 8	80 73 50 100 98 86				
		15.00 - 18.00	5 NI 9					*15.00-18.00m bgl: Very weak, partially weathered fine to medium grained reddish brown sandstone.* *15.00-18.00m bgl: Discontinuities are very close to closely spaced, rough, and horizontal to sub-horizontal up to 25 degrees.* *15.84-15.90m bgl: Non-intact recovered as reddish brown gravelly sand. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone.*
		18.00 - 21.00	12 NR	96 96 63				*18.00-21.00m bgl: Very weak, partially weathered fine to coarse grained reddish brown sandstone.* *18.00-21.00m bgl: Discontinuities are very close to closely spaced, rough, and horizontal to sub-horizontal up to 20 degrees.* *19.50-19.61m bgl: No recovery.*
				TCR SCR RQD				

11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater seepage encountered at 7.70m and 14.30m bgl.
3. Bentonite seal installed at 8.00m bgl prior to advancing the borehole.
4. Clean drilling methods used whilst undertaking this borehole location.
5. Cable percussive to 13.50m bgl with rotary follow on to 21.00m bgl.
6. Installed to 21.00m bgl: 12.00m plain and 9.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH801

Sheet 3 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384590E, 399245N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	42.56m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	17/07/2024 - 26/07/2024

Hole Type	Scale	Logged	Checked
CP+RC	1:51	PH	TM

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
			9				21.00	21.56		End of Borehole at 21.00m

21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
30.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater seepage encountered at 7.70m and 14.30m bgl.
3. Bentonite seal installed at 8.00m bgl prior to advancing the borehole.
4. Clean drilling methods used whilst undertaking this borehole location.
5. Cable percussive to 13.50m bgl with rotary follow on to 21.00m bgl.
6. Installed to 21.00m bgl: 12.00m plain and 9.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Borehole No.
BH802
Sheet 1 of 1

PROJECT NO:	C5692	**CO-ORDS:**	384612E, 399211N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	44.72m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	02/07/24

Hole Type	Scale	Logged	Checked
CP	1:50	PH	TM

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10-0.40	B		0.10	44.62		MADE GROUND: Tarmacadam.
		0.20	D					MADE GROUND: Brown gravelly fine to coarse sand. Gravel is sub-angular fine to coarse of slag, concrete, coal and brick.
		0.40-1.00	B					
		0.50	D					
		1.20-1.65	D					
		1.20	SPT	N=9 (1,2/2,2,2,3)				
					1.50	43.22		MADE GROUND: White sandy gravel. Sand is fine to coarse. Gravel is sub-angular fine to coarse of limestone.
					1.65	43.07		*Terminated at 1.65m bgl due to potential services encountered.*
								End of Borehole at 1.65m

1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. No groundwater encountered.
3. Location terminated at 1.65m bgl due to potential services encountered.
4. Backfilled with arisings.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH802A

Sheet 1 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384610E, 399214N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	44.62m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	02/07/24 - 10/07/24

Hole Type: CP+RC

Scale: 1:51

Logged: PH **Checked:** TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		0.10-0.30	B		0.10	44.52		MADE GROUND: Tarmacadam.
		0.10-0.80	D					MADE GROUND: Brown gravelly sand. Sand is fine to coarse. Gravel is sub-angular fine to coarse of brick, concrete, sandstone, coal, and slag.
			ES					
		0.10	PID	0.2PPM				
		0.20	D					
		0.20-1.20	D					
		0.30-1.20	B					
		0.50	D					
		1.20-1.65	D					
			D					
		1.20	SPT	N=46 (25 for 95mm/16,8,10,12)				
		1.50-2.20	D					
			ES					
		2.00-2.45	D					
		2.00	SPT	N=39 (7,8/9,9,9,12)				
		3.00-3.45	D					
		3.00-3.50	D					
			ES					
		3.00	SPT	N≥50 (10,12/39 for 225mm)				
		3.60	B		3.60	41.02		Firm brown slightly gravelly CLAY. Gravel is sub-rounded fine to coarse of sandstone, mudstone, and coal.
		3.70-4.00	D					
			ES					
		4.00-4.45	D					
		4.00	SPT	N=13 (2,2/3,3,3,4)				
		5.00-5.45	D					
		5.00	SPT	N=17 (3,4/4,4,4,5)				
		6.00-6.45	U					
		6.45-6.70	D					
		7.00	D					
		7.50-7.95	U					
		7.95-8.20	D		8.00	36.62		NO RECOVERY due to boulder being pushed down through clay.
		9.00-9.50	D					
		9.50	SPT	N≥50 (75 for 20mm/0 for 0mm)				*SPT refusal likely due to cobble.*

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater encountered at 18.10m bgl.
3. Cable percussive to 15.00m bgl with rotary follow on to 24.00m bgl.
4. Installed to 24.00m bgl: 15.00m plain and 9.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH802A

Sheet 2 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384610E, 399214N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	44.62m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	02/07/24 - 10/07/24

Hole Type: CP+RC

Scale: 1:51

Logged: PH **Checked:** TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	TCR	SCR	RQD	Depth (m)	Level (m OD)	Legend	Stratum Description
		10.50-10.95 10.50	D SPT	N≥50 (12,13/50 for 285mm)							*SPT refusal likely due to cobble.*
		12.00-12.45 12.00	B D SPT	N=27 (4,5/5,6,7,9)				12.00	32.62		Recovery regained. Firm brown slightly gravelly CLAY. Gravel is sub-rounded fine to coarse of sandstone, mudstone, and coal.
		13.50 13.50-13.95 13.50	D D SPT	N≥50 (75 for 70mm/0 for 0mm)				13.50	31.12		Very weak disturbed reddish brown SANDSTONE, recovered as gravelly SAND. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone.
		14.80 15.00	D SPT	N≥50 (57 for 125mm/18 for 20mm)				15.00	29.62		NO RECOVERY assumed sandstone. *Becoming stiff from 15.00m bgl.* *15.00-16.00m bgl: Open holed.*
		16.00 - 18.00	NI 5 NI	100	90	73		16.00	28.62		Reddish brown SANDSTONE. *16.00-16.16m bgl: Non-intact recovered as sub-angular fine to coarse gravel and cobbles of sandstone.* *16.16-16.49m bgl: Very weak, partially weathered reddish brown fine to medium grained sandstone.* *16.16-17.17m bgl: Discontinuities are very close to closely spaced, rough, and horizontal to sub-horizontal up to 45 degrees.* *16.49-16.52m bgl: Extremely weak, distinctly weathered fine to medium grained sandstone.* *16.52-17.00m bgl: Very weak, partially weathered reddish brown fine to medium grained sandstone.* *17.00-17.17m bgl: Extremely weak, distinctly weathered fine to medium grained sandstone.* *17.17-17.21m bgl: Non-intact recovered as a reddish brown sandy gravel. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse of sandstone and quartz.* *17.21-18.00m bgl: Very weak, partially weathered reddish brown fine to medium grained sandstone.* *17.21-18.00m bgl: Very close to closely spaced, rough and horizontal to sub-horizontal up to 10 degrees.*
		18.20 - 18.30	ES	100	98	85					
		18.00 - 21.00	15								*18.00-18.43m bgl: Very weak, partially weathered reddish brown fine to medium grained sandstone.* *18.00-21.00m bgl: Discontinuities are extremely close to closely spaced rough and horizontal to sub-horizontal (up to 15 degrees) infilled with fine to coarse sand.* *18.43-19.77m bgl: Weak, partially weathered reddish brown fine to medium grained sandstone.* *19.77-19.85m bgl: Extremely weak, partially weathered reddish brown fine to medium sandstone.* *19.85-20.05m bgl: Weak, partially weathered reddish brown fine to*

11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater encountered at 18.10m bgl.
3. Cable percussive to 15.00m bgl with rotary follow on to 24.00m bgl.
4. Installed to 24.00m bgl: 15.00m plain and 9.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH802A

Sheet 3 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384610E, 399214N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	44.62m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	02/07/2024 - 10/07/2024

Hole Type	Scale	Logged	Checked
CP+RC	1:51	PH	TM

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
			5	77	75	52				*medium sandstone.* *20.02-22.05m bgl: Non-intact recovered as reddish brown slighly clayey slightly sandy gravel. Sand is fine to coarse sub-angular sandstone.* *20.05-21.00: Weak, partially weathered reddish brown fine to medium grained sandstone.*
		21.00 - 24.00	NR							*21.00-21.70m bgl: No recovery.*
			16				24.00	20.62		*21.70-21.76m bgl: Non-intact recovered as reddish brown angular fine to coarse gravel of sandstone.* *21.76-22.46m bgl: Weak, partially weathered reddish brown fine to medium gravel of sandstone.* *21.76-24.00m bgl: Discontinuities are extremely closely spaced to closely spaced, rough and horizontal to sub-horizontal up to 30 degrees.* *22.05-22.46m bgl: Weak, partially weathered reddish brown fine to medium sandstone.* *22.46-22.62m bgl: Extremely weak, partially weathered reddish brown fine to medium gravel of sandstone.* *22.62-24.00m bgl: Weak, partially weathered reddish brown fine to medium gravel of sandstone.*
										End of Borehole at 24.00m

21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
30.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater encountered at 18.10m bgl.
3. Cable percussive to 15.00m bgl with rotary follow on to 24.00m bgl.
4. Installed to 24.00m bgl: 15.00m plain and 9.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH803

Sheet 1 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384629E, 399233N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	45.37m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	02/07/24 - 15/07/24

Hole Type	Scale	Logged	Checked
CP+RC	1:51	PH	TM

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20-1.00	B D		0.10	45.27		MADE GROUND: Tarmacadam.
		0.50-1.50	D ES					MADE GROUND: Brown and grey slightly gravelly slightly clayey sand. Sand is fine to coarse. Gravel is sub-angular fine to coarse of brick, slag, concrete, and sandstone, with moderate ash content.
		0.50	PID	0.2PPM				
		1.20	SPT	N=39 (8,9/9,9,10,11)				
		2.00	D SPT	N=23 (2,3/4,5,7,7)				
		2.50-3.20	D ES					
		2.50	PID	0.1PPM				
		3.00	D SPT	N=9 (1,2/2,2,2,3)				
		4.00	D					
		4.00-4.50	D ES					
	▼	4.00	SPT	N=19 (4,4/5,5,5,4)	4.50	40.87		MADE GROUND: Black slightly gravelly sand with moderate ash content and strong hydrocarbon odour and oily sheen. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone, slag, coal, concrete, and brick.
			PID	0.5PPM				*Strong hydrocarbon odour noted between 4.50-5.00m bgl.*
		4.50-5.00	B D		5.00	40.37		MADE GROUND: Black slightly gravelly sand with moderate ash content and strong hydrocarbon odour and oily sheen. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone, slag, coal, concrete, and brick.
			D ES					*Strong hydrocarbon odour noted between 4.50-5.00m bgl.* *Concrete obstruction encountered at 5.00m bgl and bentonite seal installed during drilling process. Cable terminated at 5.00m, rotary open holed through obstruction.* *5.00-16.50m bgl: Borehole advanced with open hole rotary drilling.*
		4.50	PID	2.0PPM				
					7.00	38.37		Firm brown slightly gravelly CLAY. Gravel is sub-rounded fine to coarse of sandstone and mudstone.

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater seepage encountered at 4.50m bgl with strong hydrocarbon odour. Deep groundwater encountered at 23.00m bgl.
3. Clean drilling methods used whilst undertaking this borehole location.
4. Bentonite installed at 5.00m bgl prior to advancing the borehole.
5. Cable percussive to 5.00m bgl, rotary open hole to 16.50m bgl, with rotary core follow on to 24.00m bgl.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH803

Sheet 2 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384629E, 399233N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	45.37m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	02/07/24 - 15/07/24

Hole Type	Scale	Logged	Checked
CP+RC	1:51	PH	TM

Well	Water Strikes	Sample and In Situ Testing Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
					15.00	30.37		Very weak destructured reddish brown SANDSTONE. Recovered as sandy GRAVEL. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone.
		16.50 - 18.00	NI 3 NI 6	100 85 74	16.50	28.87		Reddish brown SANDSTONE. *16.50-16.63m bgl: Non-intact recovered as reddish brown sandy gravel. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone.* *16.63-16.96m bgl: Weak, partially weathered fine to coarse grained reddish brown sandstone.* *16.63-16.96m bgl: Discontinuities are closely spaced, rough, and horizontal.* *16.96-17.06m bgl: Non-intact recovered as gravelly sand. Gravel is sub-angular fine to coarse of sandstone.* *17.06-18.00m bgl: Weak, partially weathered fine to coarse grained reddish brown sandstone.* *17.06-18.00m bgl: Discontinuities are closely spaced, rough, and horizontal.* *18.00-18.17m bgl: Very weak, distinctly weathered fine to coarse grained reddish brown sandstone.* *18.17-18.20m bgl: Non-intact recovered as a reddish brown gravelly sand. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone.* *18.20-19.73m bgl: Very weak, distinctly weathered fine to coarse grained reddish brown sandstone.* *18.20-19.73m bgl: Discontinuities are closely spaced, rough, and horizontal.* *19.73-19.78m bgl: Non-intact recovered as a reddish brown gravel. Gravel is sub-angular coarse of sandstone.* *19.78-21.00m bgl: Very weak, distinctly weathered fine to coarse grained reddish brown sandstone.*
		18.00 - 21.00	0 11 NI	100 97 39				
				TCR SCR RQD				

11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater seepage encountered at 4.50m bgl with strong hydrocarbon odour. Deep groundwater encountered at 23.00m bgl.
3. Clean drilling methods used whilst undertaking this borehole location.
4. Bentonite installed at 5.00m bgl prior to advancing the borehole.
5. Cable percussive to 5.00m bgl, rotary open hole to 16.50m bgl, with rotary core follow on to 24.00m bgl.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH803

Sheet 3 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384629E, 399233N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	45.37m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	02/07/2024 - 15/07/2024

Hole Type	Scale	Logged	Checked
CP+RC	1:51	PH	TM

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
			15	50	30	17				*19.78-21.00m bgl: Discontinuities are very close to closely spaced, rough, and horizontal.*
		21.00 - 24.00	NR							*21.00-21.70m bgl: No recovery.*
			3							*21.70-22.00m bgl: Very weak, distinctly weathered fine to coarse reddish brown sandstone.*
			NI							*21.70-22.00m bgl: Discontinuities are very closely spaced, rough, and horizontal.*
	▼		NR							*22.00-22.50m bgl: Non-intact recovered as slightly gravelly sand. Sand is fine to coarse. Gravel is sub-angular fine of sandstone.*
			2							*22.50-23.50m bgl: No recovery.*
			NI							
			4				24.00	21.37		*23.50-23.50m bgl: Very weak, distinctly weathered fine to coarse grained reddish brown sandstone.*
										23.50-23.50m bgl: Discontinuities are very closely spaced, rough, and horizontal.
										23.50-23.60m bgl: Non-intact recovered as a reddish brown gravel. Gravel is sub-angular fine to medium of sandstone.
										23.60-24.00m bgl: Very weak, distinctly weathered fine to medium grained reddish brown sandstone.
										23.60-24.00m bgl: Discontinuities are very closely spaced, rough, and horizontal.
										End of Borehole at 24.00m

21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
30.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater seepage encountered at 4.50m bgl with strong hydrocarbon odour. Deep groundwater encountered at 23.00m bgl.
3. Clean drilling methods used whilst undertaking this borehole location.
4. Bentonite installed at 5.00m bgl prior to advancing the borehole.
5. Cable percussive to 5.00m bgl, rotary open hole to 16.50m bgl, with rotary core follow on to 24.00m bgl.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH804

Sheet 1 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384605E, 399270N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	42.38m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	12/07/24 - 29/07/24

Hole Type: CP+RC

Scale: 1:51

Logged: PH **Checked:** TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		0.20-0.60	B		0.20	42.18		MADE GROUND: Tarmacadam.
		0.20	ES PID	1.2PPM				MADE GROUND: Brown and grey gravelly sand with mild rancid solvent odour. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone, brick, concrete, slag and metal.
		0.30 0.60-1.20	D B					
		0.60 0.80 1.20-1.65 1.20	ES PID D D SPT	4.0PPM N=5 (1,1/1,1,1,2)	1.50	40.88		MADE GROUND: Black mottled blue gravelly sand with moderate ash content and strong rancid solvent odour. Sand is fine to coarse. Gravel is sub-angular fine to coarse of suspected blue-billy, slag, glass, brick, concrete, clinker, timber and sandstone.
		2.00-2.45 2.00 2.20-2.80 2.20	D SPT ES PID	 N=2 (1,1/0,1,0,1) 11.7PPM				
		3.00-3.45 3.00	D SPT	 N=1 (1,0/0,0,0,1)				
		4.00-4.45 4.00-4.50 4.00-4.80 4.00	D B ES SPT PID	 N=1 (1,1/0,0,0,1) 19.1PPM				
		5.00-5.45 5.00	B D SPT	 N=11 (2,2/2,2,4,3)				
		5.80-6.50 6.00-6.45 6.00	ES D ES SPT	 N=10 (1,1/2,2,3,3)				
		7.00-7.50 7.00 7.50-7.95 7.50	B D ES PID D SPT	 7.1PPM N=19 (2,3/3,4,4,8)	7.00	35.38		MADE GROUND: Black and brown slightly gravelly slightly sandy clay with moderate ash content and strong rancid odour. Sand is fine to coarse. Gravel is sub-angular fine to coarse of slag, brick, clinker, suspected blue billy, glass and sandstone.
		8.50-9.00 8.50 9.00-9.45 9.00 9.50-9.95	B ES U PID D SPT D	 0.0PPM N=20 (4,4/4,4,5,7)	8.50	33.88		Firm brown slightly gravelly CLAY. Gravel is sub-rounded fine of coarse of sandstone, mudstone and coal. *Becoming stiff from 9.00m bgl.*

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater encountered at 15.10m bgl.
3. Bentonite seal installed at 8.50m bgl during drilling process.
4. Clean drilling methods used whilst undertaking this borehole location.
5. Cable percussive to 12.50m bgl with rotary follow on to 27.50m bgl.
6. Installed to 24.00m bgl: 14.00m plain and 10.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH804

Sheet 2 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384605E, 399270N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	42.38m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	12/07/24 - 29/07/24

Hole Type: CP+RC

Scale: 1:51

Logged: PH **Checked:** TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		11.00	D SPT	N≥50 (25 for 145mm/50 for 190mm)	10.90	31.48		Very weak distinctly weathered reddish brown sandstone recovered as sandy gravel. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone.
		12.00	D					
		12.40-12.50 12.50	B SPT	N≥50 (25 for 30mm/50 for 20mm)	12.55	29.82		Very weak partially weathered fine to coarse grained reddish brown SANDSTONE. *12.55-14.00m bgl: No recovery.*
		12.55 - 14.00	NR	0 0 0				
	▼	14.00 - 17.00	22	100 100 61				*14.00-17.00m bgl: Discontinuities are very close to closely spaced, rough and horizontal to sub-horizontal up to 10°.*
		17.00 - 20.00	NR 1 16 9 1	93 91 63 76 76 49 TCR SCR RQD	17.00	25.38		Weak partially weathered fine to coarse grained reddish brown SANDSTONE. *17.00-17.20m bgl: No recovery.* *17.20-19.55m bgl: Discontinuities are very close to closely spaced, rough and horizontal.* *17.34-17.39m bgl: Non-intact recovered as gravel. Gravel is sub-rounded fine to coarse of sandstone.* *19.55-19.83m bgl: Discontinuities are extremely closely spaced, rough and sub-horizontal up to 20°.* *19.83-19.86m bgl: Non-intact recovered as sandy gravel. Sand is fine to coarse. Gravel is sub-angular fine to coarse of mudstone.*

11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater encountered at 15.10m bgl.
3. Bentonite seal installed at 8.50m bgl during drilling process.
4. Clean drilling methods used whilst undertaking this borehole location.
5. Cable percussive to 12.50m bgl with rotary follow on to 27.50m bgl.
6. Installed to 24.00m bgl: 14.00m plain and 10.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH804

Sheet 3 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384605E, 399270N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	42.38m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	12/07/2024 - 29/07/2024

Hole Type	Scale	Logged	Checked
CP+RC	1:51	PH	TM

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
		20.00 - 23.00	NR	78	78	53	27.50	14.88		*20.00-20.73m bgl: No recovery.*
			22							*20.73-23.00m bgl: Discontinuities are very close to closely spaced, rough and horizontal.*
		23.00 - 26.00	NR							*23.00-23.63m bgl: No recovery.*
			23							*23.63-26.00m bgl: Discontinuities are very close to closely spaced, rough and horizontal.*
		26.00 - 27.50	NR	53	46	14				*26.00-26.70m bgl: No recovery.*
			3							*26.70-27.50m bgl: Discontinuities are very closely spaced, rough and horizontal.*
			NI 1 NI							*27.01-27.07m bgl: Non-intact recovered as reddish brown gravel. Gravel is sub-angular fine to coarse of sandstone.*
			2							*27.18-27.23m bgl: Non-intact recovered as reddish brown gravel. Gravel is sub-angular fine to coarse of sandstone.*
										End of Borehole at 27.50m

21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 30.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater encountered at 15.10m bgl.
3. Bentonite seal installed at 8.50m bgl during drilling process.
4. Clean drilling methods used whilst undertaking this borehole location.
5. Cable percussive to 12.50m bgl with rotary follow on to 27.50m bgl.
6. Installed to 24.00m bgl: 14.00m plain and 10.00m slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH806

Sheet 1 of 1

PROJECT NO:	C5692	**CO-ORDS:**	384644E, 399239N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	45.55m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	04/07/04 - 05/07/24

Hole Type	Scale	Logged	Checked
CP+RC	1:51	PH	TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		0.20-1.00	B		0.10	45.45		MADE GROUND: Tarmacadam.
		0.50	D					MADE GROUND: Light brown gravelly fine to coarse sand. Gravel is sub-angular fine to coarse of sandstone, concrete, mudstone and brick.
		1.20-1.65	D					
		1.20	SPT	N=28 (4,9/9,5,6,8)				
		2.00-2.45	D					
		2.00	SPT	N=40 (7,8/8,10,10,12)				
					2.50	43.05		*Concrete obstruction encountered at 2.00m bgl and chiselled down to 2.50m bgl.*
								End of Borehole at 2.50m

1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. No groundwater encountered.
3. Location terminated at 2.50m bgl due to concrete obstruction after chiselling.
4. Backfilled with arisings.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH806A

Sheet 1 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384642E, 399237N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	45.51m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	05/07/24 - 16/07/24

Hole Type: CP+RC

Scale: 1:51

Logged: PH **Checked:** TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		0.20-1.00	B		0.10	45.41		MADE GROUND: Tarmacadam.
		0.30-1.00	D					MADE GROUND: Brown gravelly sand. Sand is fine to coarse. Gravel is sub-angular fine to coarse of brick, concrete, timber, metal, and sandstone.
			ES					
		0.30	PID	0.1PPM				
		0.50	D					
		1.20-1.65	D					
		1.20	SPT	N=16 (2,3/3,4,4,5)				
		2.00-2.45	D					
		2.00-3.00	D					
			ES					
		2.00	SPT	N=9 (1,2/3,3,2,1)				
			PID	0.2PPM				
		3.00-3.45	D					
		3.00	SPT	N=16 (2,2/4,4,3,5)				
		4.00-4.45	D					
		4.00	SPT	N=9 (1,2/2,2,2,3)				
	▼	4.50-4.80	B		4.50	41.01		MADE GROUND: Black slightly gravelly slightly clayey sand with very strong hydrocarbon odour and moderate coal tar content. Sand is fine to coarse. Gravel is sub-angular fine to coarse of timber, concrete, brick, coal, clinker, and sandstone.
			D					*4.50m bgl: Strong hydrocarbon odour and oily sheen on groundwater.*
			ES					
		4.50	PID	281.0PPM	4.90	40.61		Firm brown slightly gravelly CLAY. Gravel is sub-rounded fine to coarse of sandstone, mudstone, and coal.
		5.00-5.45	D					
		5.00-5.50	B					
			D					
			ES					
		5.00	SPT	N=13 (2,2/3,3,3,4)				
			PID	0.2PPM				
		6.00-6.45	D					
		6.00	SPT	N=13 (1,2/3,3,3,4)				
		7.50-7.95	U					
		7.95-8.20	D					
		9.00-9.45	D					
		9.00	SPT	N=17 (2,3/4,4,4,5)				

1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater seepage encountered at 4.50m bgl with strong hydrocarbon odour. Deep groundwater encountered at 18.50m bgl.
3. Bentonite seal installed at 4.90m bgl during drilling process.
4. Clean drilling methods used whilst undertaking this borehole location.
5. Cable percussive to 15.00m bgl with rotary follow on to 27.00m bgl.
5. Backfilled with ?.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH806A

Sheet 2 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384642E, 399237N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	45.51m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	05/07/24 - 16/07/24

Hole Type: CP+RC

Scale: 1:51

Logged: PH **Checked:** TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		10.50-10.95	U					
		12.00-12.45 12.00	D SPT	N=34 (4,6,6,9,9,10)				
		13.50-13.95 13.50	D SPT	N≥50 (25 for 145mm/35 for 230mm)	13.60	31.91		Very weak destructured reddish-brown SANDSTONE. Locally recovered as a gravelly sand. Sand is fine to coarse. Gravel is sub-angular.
		15.00	SPT NR 2	100, N≥50 (25 for 30mm/50 for 30mm)	15.00	30.51		Weak partially weathered fine to coarse grained reddish brown SANDSTONE. *15.00-15.09m bgl: Non-intact recovered as reddish brown sub-angular fine to coarse gravel of sandstone.* *15.09-18.00m bgl: Discontinuities are very close to closely spaced, rough, and horizontal to sub-horizontal up to 20 degrees.* *15.29-15.36m bgl: Non-intact recovered as reddish brown sub-angular fine to coarse gravel of sandstone.*
		15.00 - 18.00	23	94 92 65	16.83 16.87	28.68 28.64		Extremely weak, distinctly weathered reddish brown MUDSTONE. Weak partially weathered fine to coarse grained reddish brown SANDSTONE. *17.58-17.62m bgl: Light yellowish brown sub-angular cobble of sandstone encountered.* *18.00-18.20m bgl: No recovery.* *18.20-21.00m bgl: Discontinuities are very close to medium spaced, rough, and horizontal to sub-horizontal up to 30 degrees.* *18.44-18.51m bgl: Non-intact recovered as sub-angular fine to coarse gravel of sandstone.*
	▼	18.00 - 21.00	NR 3 NI 18					
				TCR SCR RQD				

11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater seepage encountered at 4.50m bgl with strong hydrocarbon odour. Deep groundwater encountered at 18.50m bgl.
3. Bentonite seal installed at 4.90m bgl during drilling process.
4. Clean drilling methods used whilst undertaking this borehole location.
5. Cable percussive to 15.00m bgl with rotary follow on to 27.00m bgl.
5. Backfilled with ?.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH806A

Sheet 3 of 3

PROJECT NO:	C5692	**CO-ORDS:**	384642E, 399237N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	45.51m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	05/07/2024 - 16/07/2024

Hole Type: CP+RC

Scale: 1:51

Logged: PH

Checked: TM

Well	Water Strike	Depth (m)	Type / FI	Coring TCR (%)	Coring SCR (%)	Coring RQD (%)	Depth (m)	Level (m OD)	Legend	Stratum Description
				100	100	76				
		21.00 - 24.00	27							*21.00-24.00m bgl: Discontinuities are extremely closely to closely spaced, rough, and horizontal to sub-horizontal up to 15 degrees.*
			NR	90	79	41				*24.00-24.15m bgl: No recovery.*
			4							*24.15-27.00m bgl: Discontinuities are very close to closely spaced, rough, and horizontal to sub-horizontal up to 45 degrees.*
			NI							*24.90-25.00m bgl: Non-intact recovered as reddish brown sub-angular fine to coarse gravel of sandstone.*
		24.00 - 27.00	4							
			NR							*25.50-25.65m bgl: No recovery.*
			NI							*25.65-25.75m bgl: Non-intact recovered as reddish brown sub-angular fine to coarse gravel of sandstone.*
			0							
			NI							*25.82-25.94m bgl: Non-intact recovered as reddish brown sub-angular fine to coarse gravel of sandstone.*
			11							
							27.00	18.51		End of Borehole at 27.00m

21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 30.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Groundwater seepage encountered at 4.50m bgl with strong hydrocarbon odour. Deep groundwater encountered at 18.50m bgl.
3. Bentonite seal installed at 4.90m bgl during drilling process.
4. Clean drilling methods used whilst undertaking this borehole location.
5. Cable percussive to 15.00m bgl with rotary follow on to 27.00m bgl.
5. Backfilled with ?.

ES = Environmental Sample
D = Disturbed Sample
B = Bulk Sample
LB = Large Bulk Sample
U = Undisturbed Sample
UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
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BROWNFIELD SOLUTIONS LTD

Borehole Log

Borehole No. BH807

Sheet 1 of 2

PROJECT NO:	C5692	**CO-ORDS:**	384582E, 399230N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	42.74m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	18/07/24 - 19/07/24

Hole Type: CP
Scale: 1:50
Logged: PH
Checked: TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		0.00	PID	0.1PPM	0.10	42.64		MADE GROUND: Tarmacadam.
		0.10-0.50	B					MADE GROUND: Brown & grey sandy gravel. Sand is fine to coarse. Gravel is sub-angular fine to coarse of brick, sandstone, and concrete.
			ES					
		0.30	D		0.50	42.24		
		0.50-1.20	B					MADE GROUND: Black & brown gravelly sand with low ash content and slight hydrocarbon odour. Sand is fine to coarse. Gravel is sub-angular fine to coarse of slag, sandstone, brick, glass, and concrete.
		0.80	D					
		1.20-1.65	D					
		1.20	SPT	N=10 (1,1/2,2,3,3)				
		1.50-2.00	ES					
		1.50	PID	0.0PPM				
		2.00-2.45	D					
		2.00	SPT	N=12 (2,3/4,2,3,3)				
	▼	2.80-3.00	B		2.80	39.94		MADE GROUND: Brown gravelly clay. Gravel is sub-angular to sub-rounded fine to coarse of brick and sandstone.
		2.80-3.50	ES					
		2.80	PID	0.0PPM				
		3.00-3.45	D					
	▼	3.00	SPT	N=11 (2,2/2,3,3,3)				
		3.50-4.00	B		3.50	39.24		Firm brown slightly gravelly CLAY. Gravel is sub-rounded fine to coarse of sandstone and mudstone.
			ES					*3.50-4.00m bgl: Small lenses of grey sand encountered with slight hydrocarbon odour.*
		3.50	PID	0.7PPM				
		4.00-4.45	D					
		4.00	SPT	N=12 (2,2/2,3,3,4)				
		4.50-5.00	ES					
		5.00-5.45	U					
		6.00-6.45	D					
		6.00	SPT	N=13 (1,2/3,3,3,4)				
	▼	7.20-7.50	B		7.20	35.54		Firm brown slightly gravelly slightly sandy CLAY with lenses of black sand. Sand lenses have strong hydrocarbon and chlorinated solvent odour and moderate sheen. Sand is fine to coarse. Gravel is sub-rounded fine to coarse of sandstone.
		7.20-8.00	ES					
		7.20	PID	386.0PPM				
		7.50-7.95	D					
		7.50	SPT	N=32 (4,8/8,8,8,8)				
		8.70-8.90	B		8.70	34.04		Firm brown slightly gravelly CLAY. Gravel is sub-rounded fine to coarse of sandstone.
		8.70-9.50	ES					
		8.70	PID	0.0PPM				
		9.00-9.45	U					
		9.45-9.70	D					

1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Small groundwater seepage encountered at 2.80m, 3.50m and 7.20m bgl with hydrocarbon sheen and odour. Deep groundwater encountered at16.50m bgl.
3. Clean drilling methods used whilst undertaking this borehole location.
4. Cable percussive to 12.15m bgl with rotary follow on (open-hole) to 20.00m bgl.
5. Bentonite seal installed from 8.00-10.90m bgl prior to advancing the borehole.
6. Dual installed to 20.00m bgl: 0.00-4.00m bgl plain and 4.00-9.00m bgl slotted PVC 35mm pipe, and 0.00-15.00m bgl plain, and 15.00-20.00m bgl slotted HDPE 50mm pipe.

ES = Environmental Sample
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UT = Undisturbed Thin Wall Sample
SPT = Standard Penetration Test
PID = Photoionization Detector (ppm)
PPM = Part Per Million
HSV = Hand Shear Vane

BROWNFIELD SOLUTIONS LTD

Borehole Log

Borehole No. BH807

Sheet 2 of 2

PROJECT NO:	C5692	**CO-ORDS:**	384582E, 399230N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	42.74m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	18/07/24 - 19/07/24

Hole Type: CP

Scale: 1:50

Logged: PH **Checked:** TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
								Becoming very sandy from 10.00m bgl.
		10.50-10.95 10.50	D SPT	N=33 (4,5/8,8,8,9)				
		10.90	D		10.90	31.84		Extremely weak distinctly weathered fine to coarse grained SANDSTONE. Recovered as sandy gravel. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone.
		12.10	D		12.15	30.59		Reddish brown SANDSTONE.
					20.00	22.74		End of Borehole at 20.00m

11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. Small groundwater seepage encountered at 2.80m, 3.50m and 7.20m bgl with hydrocarbon sheen and odour. Deep groundwater encountered at16.50m bgl.
3. Clean drilling methods used whilst undertaking this borehole location.
4. Cable percussive to 12.15m bgl with rotary follow on (open-hole) to 20.00m bgl.
5. Bentonite seal installed from 8.00-10.90m bgl prior to advancing the borehole.
6. Dual installed to 20.00m bgl: 0.00-4.00m bgl plain and 4.00-9.00m bgl slotted PVC 35mm pipe, and 0.00-15.00m bgl plain, and 15.00-20.00m bgl slotted HDPE 50mm pipe.

ES = Environmental Sample
D = Disturbed Sample
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LB = Large Bulk Sample
U = Undisturbed Sample
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SPT = Standard Penetration Test
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BROWNFIELD SOLUTIONS LTD

Borehole Log

Cable Percussion with Rotary Core No.

BH808

Sheet 1 of 2

PROJECT NO:	C5692	**CO-ORDS:**	384690E, 399243N
PROJECT NAME:	GOULD STREET, MANCHESTER	**LEVEL:**	45.76m OD
CLIENT:	MCR / INTRO DEVELOPMENTS LTD	**DATES:**	19/07/24 - 22/07/24

Hole Type: CP+RC

Scale: 1:51

Logged: PH

Checked: TM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m OD)	Legend	Stratum Description
		0.20-0.90 0.20 0.30	B ES PID D	0.0PPM	0.20	45.56		MADE GROUND: Tarmacadam.
		0.90-1.20 1.00 1.20-1.65 1.20	B D D SPT	N=8 (1,2/2,3,1,2)	0.90	44.86		MADE GROUND: Light brown sandy gravel. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone.
		1.90-2.50 1.90 2.00-2.45 2.00	ES PID D SPT	0.0PPM N=4 (2,1/1,1,1,1)				MADE GROUND: Brown slightly sandy slightly gravelly clay. Sand is fine to coarse. Gravel is sub-angular fine to coarse of sandstone, brick and concrete.
		3.00-3.45 3.00 3.10-3.50 3.50-4.00	D ES SPT B B	N=10 (1,2/2,2,3,3)	3.10	42.66		Firm brown slightly gravelly CLAY. Gravel is sub-rounded fine to coarse of sandstone and mudstone.
		4.00-4.50	U	100%				
		4.45-4.70	D					
		5.00-5.45 5.00	D SPT	N=13 (2,2/3,3,3,4)				
		6.00-6.45 6.00	D SPT	N=12 (2,3/3,3,3,3)				
		7.50-7.95 7.50	D SPT	N=14 (1,2/3,3,4,4)				
		9.00-9.45	U	100%				
		9.45-9.70	D					

1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0

Remarks

1. Clearance of services using GPR techniques and CAT and Genny prior to breaking ground.
2. No groundwater encountered.
3. Cable percussive to 12.50m bgl with rotary follow on to 19.00m bgl.
4. Backfilled with bentonite between 3.10m and 12.20m bgl.

ES = Environmental Sample
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