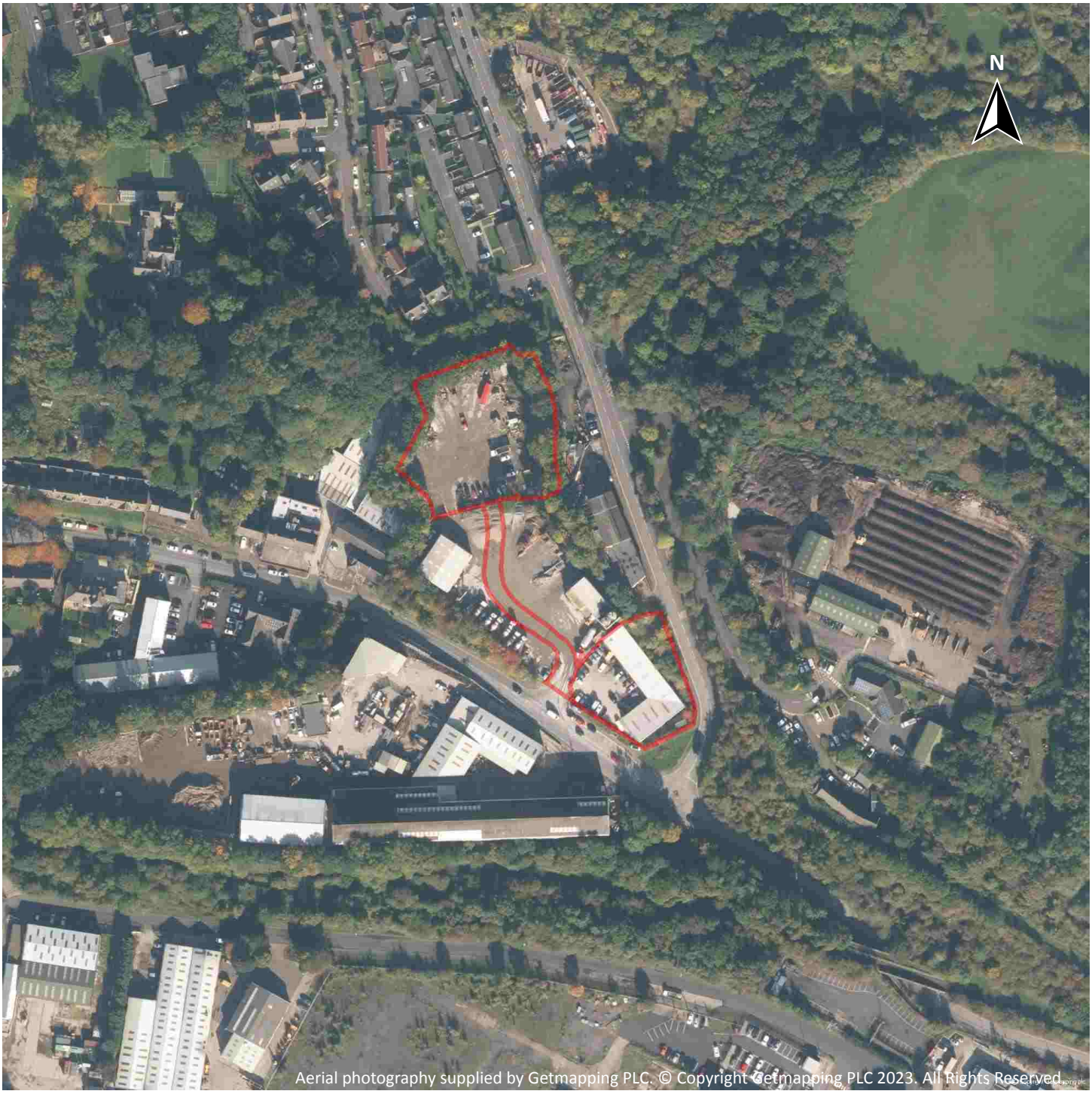
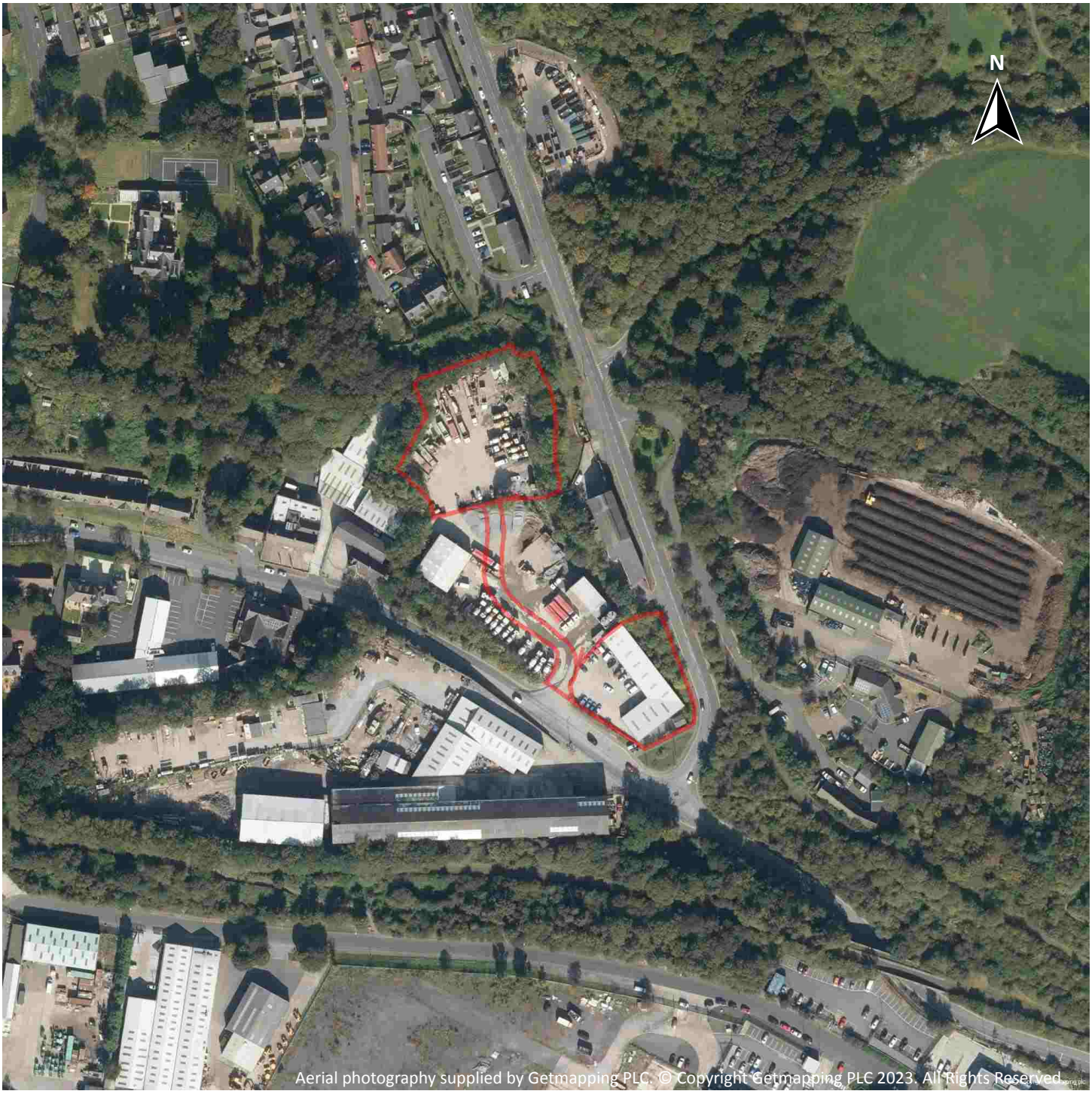
Recent aerial photograph



Capture Date: 10/10/2022

Site Area: 0.66ha

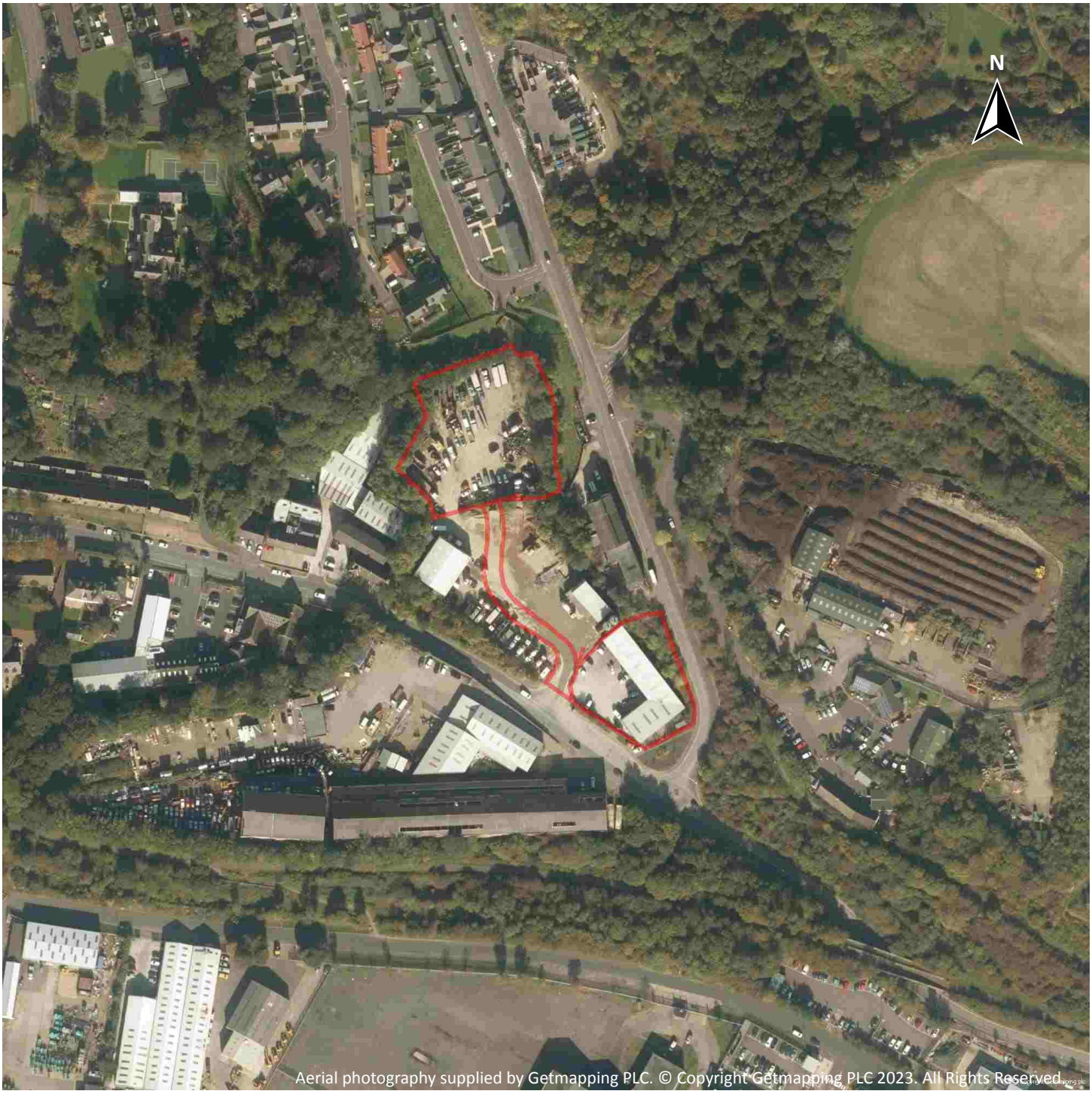
Recent site history - 2019 aerial photograph



Capture Date: 21/09/2019

Site Area: 0.66ha

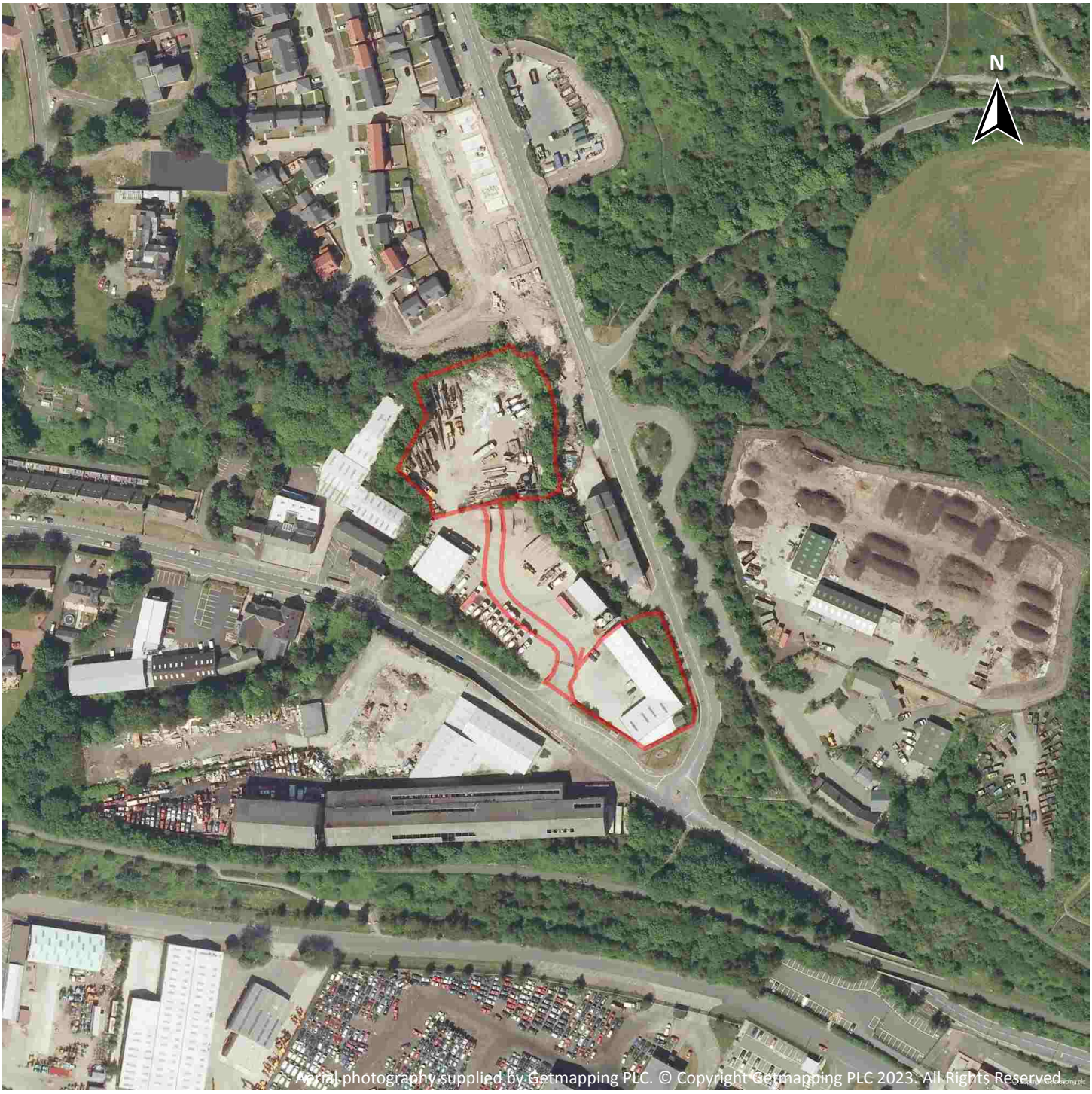
Recent site history - 2014 aerial photograph



Capture Date: 02/10/2014

Site Area: 0.66ha

Recent site history - 2009 aerial photograph



Capture Date: 31/05/2009

Site Area: 0.66ha

Recent site history - 2000 aerial photograph

Capture Date: 21/07/2000

Site Area: 0.66ha

OS MasterMap site plan

Site Area: 0.66ha

1 Past land use

1.1 Historical industrial land uses

Records within 500m	197

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

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

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Steel Works**	**1895**	**1373662**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Unspecified Ground Workings**	**1948**	**1309086**
A	**On site**	**Railway Sidings**	**1940**	**1340600**
A	**On site**	**Steel Works**	**1948**	**1340993**
A	**On site**	**Unspecified Depot**	**1985 - 1992**	**1341494**
A	**On site**	**Steel Works**	**1895**	**1347678**
A	**On site**	**Steel Works**	**1967**	**1348990**
A	**On site**	**Steel Works**	**1940**	**1357595**
A	**On site**	**Brick Works**	**1895 - 1921**	**1379810**
A	**On site**	**Steel Works**	**1921 - 1938**	**1395812**
A	**On site**	**Railway Sidings**	**1921**	**1403614**
A	**On site**	**Brick Works**	**1938**	**1404325**
A	**On site**	**Brick Works**	**1921**	**1406648**
B	**On site**	**Mineral Railway Sidings**	**1921**	**1347722**
B	**On site**	**Railway Sidings**	**1895**	**1361422**
B	**On site**	**Mineral Railway Sidings**	**1921**	**1396456**
B	**On site**	**Railway Sidings**	**1895**	**1398278**
B	**On site**	**Steel Works**	**1921**	**1399139**
B	**On site**	**Mineral Railway Sidings**	**1938**	**1406468**
C	**On site**	**Railway Sidings**	**1921**	**1353137**
B	4m S	Mineral Railway Sidings	1940	1365548
E	4m S	Unspecified Commercial/Industrial	1940	1306914
A	4m N	Unspecified Works	1976	1328656
A	7m N	Unspecified Works	1976 - 1992	1376573
A	20m N	Brick Works	1921	1405293
E	21m S	Unspecified Works	1948	1371556
A	23m NW	Unspecified Ground Workings	1940	1309064
F	24m E	Unspecified Works	1967 - 1985	1368756
A	24m W	Fire Station	1940	1361524

ID	Location	Land use	Dates present	Group ID
A	24m N	Unspecified Works	1967	1328658
A	25m W	Fire Station	1967 - 1976	1353195
A	25m W	Fire Station	1948	1389669
E	28m S	Unspecified Works	1967 - 1976	1403047
A	28m N	Railway Sidings	1859	1355811
A	28m N	Brick Works	1859	1380977
A	33m N	Brick Works	1948	1363981
G	38m SE	Sand Pit	1895	1367169
G	38m SE	Refuse Heap	1976	1372030
G	39m SE	Sand Pit	1895	1372518
H	41m SE	Refuse Heap	1967	1370295
A	49m N	Unspecified Ground Workings	1948	1378025
C	53m SE	Unspecified Ground Workings	1948	1343761
H	55m E	Sand Pit	1921	1339438
G	60m SE	Sand Pit	1859	1340762
H	60m E	Sand Pit	1921	1397374
F	62m E	Unspecified Ground Workings	1921	1345278
A	62m NW	Unspecified Pit	1921 - 1938	1342772
H	65m SE	Sand Pit	1938	1340975
G	70m SE	Unspecified Pit	1940	1352055
I	73m S	Unspecified Commercial/Industrial	1938	1339529
G	73m SE	Unspecified Pit	1921	1389498
F	74m E	Unspecified Ground Workings	1940	1383211
2	75m S	Unspecified Commercial/Industrial	1895	1348052
J	82m S	Railway Sidings	1921	1401731
A	83m NW	Unspecified Ground Workings	1921	1309065
K	86m NE	Unspecified Disused Tip	1976	1314928
G	89m SE	Unspecified Disused Tip	1985	1314929

ID	Location	Land use	Dates present	Group ID
I	89m S	Unspecified Commercial/Industrial	1921	1340803
F	92m E	Refuse Heap	1948	1368806
G	93m SE	Railway Building	1895	1321668
A	93m N	Railway Sidings	1948	1376140
A	99m NE	Unspecified Ground Workings	1967	1364897
A	102m N	Refuse Heap	1976	1344663
L	103m SE	Colliery	1921	1383927
A	114m NW	Unspecified Depot	1976 - 1992	1357958
A	120m NW	Unspecified Pit	1940	1389468
3	121m W	Unspecified Depot	1976 - 1992	1343159
C	128m NE	Refuse Heap	1940	1361155
A	129m N	Unspecified Pit	1940	1335847
A	130m N	Refuse Heap	1948	1393052
4	132m NE	Sand Pit	1921	1369251
M	133m SW	Railway Building	1895	1321669
M	138m S	Railway Sidings	1967 - 1976	1361224
5	150m W	Unspecified Factory	1976 - 1992	1407819
M	153m SW	Railway Sidings	1948	1377331
M	154m SW	Unspecified Commercial/Industrial	1940	1354371
M	154m SW	Mineral Railway Sidings	1940	1365547
A	155m NW	Unspecified Ground Workings	1938 - 1940	1398211
A	155m N	Steel Works	1859	1357658
C	158m SE	Unspecified Disused Tips	1976	1345201
M	159m SW	Disused Gasometer	1895	1355161
N	159m SE	Railway Sidings	1921	1386641
O	176m S	Industrial Estate	1992	1356072
O	176m S	Industrial Estate	1974	1371944
O	176m S	Industrial Estate	1982	1395582

ID	Location	Land use	Dates present	Group ID
J	177m S	Unspecified Works	1974	1374030
J	177m S	Unspecified Works	1982 - 1992	1385472
J	181m S	Unspecified Wharf	1950	1326402
M	182m SW	Unspecified Warehouse	1967	1375587
M	182m SW	Unspecified Warehouse	1948	1394373
M	182m SW	Unspecified Warehouse	1985 - 1992	1395194
M	186m SW	Unspecified Warehouse	1976	1358623
M	190m SW	Unspecified Tank	1976	1325176
P	195m SE	Unspecified Ground Workings	1940	1309087
K	198m E	Unspecified Ground Workings	1940	1370068
P	198m SE	Unspecified Depot	1985 - 1992	1395820
C	203m E	Unspecified Disused Tips	1985 - 1992	1371291
J	208m S	Unspecified Tank	1950	1325174
K	212m NE	Unspecified Pit	1940 - 1948	1392428
J	216m S	Unspecified Tank	1950	1325175
I	218m S	Unspecified Ground Workings	1950	1309093
I	222m S	Unspecified Ground Workings	1967	1397930
M	222m SW	Engineering Works	1948	1316948
M	222m SW	Unspecified Works	1967 - 1992	1390717
A	225m N	Gasometer	1859	1315248
P	232m SE	Unspecified Depot	1976	1354037
Q	243m E	Unspecified Ground Workings	1967 - 1976	1398156
L	244m SE	Colliery	1895	1356465
L	250m SE	Colliery	1938	1354342
O	252m SE	Unspecified Ground Workings	1950	1389426
Q	256m E	Unspecified Ground Workings	1940	1364839
L	260m SE	Colliery	1895	1360417
M	262m SW	Railway Sidings	1940	1349936

ID	Location	Land use	Dates present	Group ID
A	262m NW	Unspecified Ground Workings	1921	1370274
A	271m NW	Unspecified Heap	1895	1311146
O	271m SE	Unspecified Factory	1974 - 1982	1395038
O	271m SE	Unspecified Factory	1992	1405028
A	273m NW	Unspecified Old Pits	1976	1326779
8	278m SW	Unspecified Wharf	1921	1367416
M	283m W	Cuttings	1940	1306172
R	283m S	Unspecified Wharf	1921	1361026
9	283m W	Grave Yard	1859	1405658
R	283m S	Unspecified Wharf	1938	1370760
O	287m SE	Refuse Heap	1921 - 1938	1406619
10	288m W	Grave Yard	1948	1407197
L	288m SE	Unspecified Heap	1967	1347107
L	288m SE	Unspecified Heap	1948	1354042
L	288m SE	Refuse Heap	1976	1378268
L	290m SE	Refuse Heap	1921	1385923
M	290m SW	Unspecified Staith	1921	1319278
L	292m SE	Refuse Heaps	1921 - 1938	1348969
L	292m SE	Colliery	1921	1382061
O	295m SE	Refuse Heap	1921	1388314
L	297m SE	Colliery	1921	1403115
S	301m NW	Old Clay Pit	1921	1374697
S	303m NW	Old Clay Pit	1921	1391936
S	305m NW	Unspecified Pit	1967	1335851
S	306m NW	Old Clay Pit	1921 - 1938	1344945
11	308m SW	Unspecified Staith	1921	1319280
O	310m SE	Unspecified Pit	1950	1335850
S	312m NW	Unspecified Heap	1948	1340781

ID	Location	Land use	Dates present	Group ID
S	312m NW	Unspecified Heap	1967	1369236
12	317m E	Railway Sidings	1948	1361356
S	329m NW	Unspecified Ground Workings	1940 - 1948	1360314
L	344m SE	Refuse Heap	1895	1399855
L	345m SE	Unspecified Heap	1895	1346971
M	347m W	Railway Building	1940 - 1948	1404235
M	350m W	Railway Building	1921	1343806
13	355m N	Unspecified Pit	1976 - 1992	1401161
L	361m SE	Railway Sidings	1967	1362791
T	368m W	Railway Sidings	1895	1350652
N	375m SE	Unspecified Ground Workings	1956	1399937
14	377m E	Unspecified Ground Workings	1985 - 1992	1376027
M	377m W	Railway Building	1940 - 1948	1381162
N	382m SE	Refuse Heap	1950	1405742
N	384m SE	Refuse Heap	1921	1345774
N	387m SE	Refuse Heap	1921	1350026
U	388m SE	Refuse Heap	1921	1347164
N	389m SE	Refuse Heap	1938	1357210
U	392m SE	Refuse Heap	1921	1377813
U	395m SE	Mineral Railway Sidings	1938	1365549
V	402m N	Unspecified Heap	1859	1348880
V	407m N	Unspecified Pit	1895	1365686
W	409m W	Railway Buildings	1940	1331279
V	411m N	Unspecified Pit	1921	1397496
W	412m W	Railway Building	1948	1350140
W	412m W	Railway Building	1967	1367718
V	412m N	Unidentified Pit	1921	1316474
V	413m N	Unspecified Pit	1938	1372487

ID	Location	Land use	Dates present	Group ID
W	426m W	Unspecified Staith	1921	1407335
V	446m N	Refuse Heap	1921	1362941
U	447m SE	Unspecified Works	1974 - 1982	1357464
U	447m SE	Unspecified Works	1992	1378970
L	448m SE	Railway Sidings	1940 - 1950	1345730
L	448m SE	Railway Sidings	1956	1401237
L	449m SE	Unspecified Shaft	1895	1318097
V	454m N	Unspecified Ground Workings	1938	1340217
V	454m N	Unspecified Ground Workings	1921	1356687
T	454m W	Railway Station	1921	1402254
V	456m N	Unspecified Heap	1938	1391049
V	463m NW	Sand Pit	1859	1307268
N	463m SE	Unspecified Ground Workings	1967 - 1982	1344454
N	463m SE	Unspecified Heap	1992	1311145
L	467m SE	Railway Sidings	1967	1391087
L	467m SE	Railway Sidings	1948	1395667
T	467m W	Railway Station	1921	1372643
T	469m W	Railway Station	1921 - 1948	1372195
U	471m SE	Glass Works	1956	1307794
U	474m SE	Unspecified Works	1967	1391818
T	475m W	Railway Station	1967	1347225
T	477m W	Railway Station	1895	1403288
L	479m SE	Refuse Heap	1940 - 1948	1351512
L	485m SE	Colliery	1921	1349255
15	486m SW	Electric Substation	1992	1390483
L	487m SE	Colliery	1940	1367980
16	497m N	Gravel Pit	1859	1314044
17	498m N	Cuttings	1859	1306174

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	38

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, 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 Tank**	**1897**	**201146**
D	**On site**	**Unspecified Tank**	**1898**	**211561**
D	**On site**	**Unspecified Tank**	**1897**	**219596**
A	3m SE	Unspecified Tank	1982 - 1993	215062
A	9m W	Unspecified Tank	1897	201145
B	25m S	Unspecified Tank	1897 - 1898	216827
G	50m SE	Unspecified Tank	1982	201167
A	60m NW	Unspecified Tank	1986 - 1993	220647
A	68m NW	Unspecified Tank	1950	213088
A	83m N	Unspecified Tank	1950	215028
A	83m N	Unspecified Tank	1950	218165
A	99m N	Unspecified Tank	1950	214004
A	99m N	Unspecified Tank	1936	207614
A	99m N	Unspecified Tank	1950	210463
A	105m NW	Unspecified Tank	1897	201143
A	107m N	Unspecified Tank	1950	201144
A	133m N	Unspecified Tank	1950 - 1982	208251
M	157m SW	Disused Gasometer	1897 - 1898	211029
A	169m N	Unspecified Tank	1950 - 1969	221827
A	169m N	Unspecified Tank	1970	219818
A	180m N	Unspecified Tank	1950	219827

ID	Location	Land use	Dates present	Group ID
A	181m N	Unspecified Tank	1969 - 1970	209821
M	182m SW	Unspecified Tank	1936	201147
M	189m SW	Unspecified Tank	1897	201148
M	191m SW	Unspecified Tank	1950 - 1970	215595
J	216m S	Unspecified Tank	1936	201150
J	218m S	Unspecified Tank	1950 - 1957	212670
K	221m NE	Unspecified Tank	1950	221765
K	222m NE	Unspecified Tank	1950	222219
J	222m S	Unspecified Tank	1897 - 1936	211094
A	255m N	Tanks	1897 - 1898	217968
I	263m S	Unspecified Tank	1972 - 1996	218656
M	267m SW	Unspecified Tank	1950	221377
A	269m N	Tanks	1897	213330
A	272m N	Tanks	1898 - 1920	220137
A	277m N	Tanks	1898 - 1920	208971
M	283m W	Unspecified Tank	1950 - 1990	214683
L	406m SE	Unspecified Tank	1950	201166

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**24**

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
D	7m N	Electricity Substation	1982 - 1993	124634

ID	Location	Land use	Dates present	Group ID
A	21m NW	Electricity Substation	1982 - 1990	120765
D	29m N	Gas Meter House	1986 - 1993	126805
B	110m S	Electricity Substation	1986 - 1993	119711
M	157m SW	Disused Gasometer	1897 - 1898	122898
M	160m SW	Electricity Substation	1969 - 1990	127859
A	180m N	Electricity Substation	1972 - 1993	120974
M	217m SW	Electricity Substation	1969 - 1982	119668
6	233m SE	Electricity Substation	1972 - 1996	128310
7	271m NW	Electricity Substation	1969 - 1990	123239
M	300m W	Electricity Substation	1969 - 1990	124230
M	305m W	Electricity Substation	1950	118648
M	305m W	Electricity Substation	1950	118679
O	360m SE	Electricity Substation	1972	116899
O	369m SE	Electricity Substation	1996	116896
L	449m SE	Electricity Substation	1950	116898
V	460m NW	Electricity Substation	1969 - 1993	125159
V	470m NW	Electricity Substation	1950	121314
L	473m SE	Electricity Substation	1950 - 1955	122455
N	480m SE	Electricity Substation	1996	118829
N	481m SE	Electricity Substation	1972	119393
N	484m SE	Electricity Substation	1950	119409
N	484m SE	Electricity Substation	1950 - 1993	127305
N	485m SE	Electricity Substation	1950 - 1990	125889

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	1

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
F	44m NE	Garage	1950	37870

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	261

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 27 >**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Depot**	**1992**	**1341494**
A	**On site**	**Railway Sidings**	**1940**	**1340600**
A	**On site**	**Steel Works**	**1948**	**1340993**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Ground Workings**	**1948**	**1309086**
A	**On site**	**Steel Works**	**1967**	**1348990**
A	**On site**	**Unspecified Depot**	**1985**	**1341494**
A	**On site**	**Brick Works**	**1921**	**1379810**
A	**On site**	**Steel Works**	**1940**	**1357595**
A	**On site**	**Railway Sidings**	**1921**	**1403614**
A	**On site**	**Steel Works**	**1921**	**1395812**
A	**On site**	**Steel Works**	**1938**	**1395812**
A	**On site**	**Brick Works**	**1938**	**1404325**
A	**On site**	**Steel Works**	**1895**	**1347678**
A	**On site**	**Brick Works**	**1895**	**1379810**
A	**On site**	**Brick Works**	**1921**	**1406648**
A	**On site**	**Brick Works**	**1921**	**1406648**
B	**On site**	**Steel Works**	**1921**	**1399139**
B	**On site**	**Railway Sidings**	**1895**	**1398278**
B	**On site**	**Steel Works**	**1895**	**1373662**
B	**On site**	**Mineral Railway Sidings**	**1938**	**1406468**
B	**On site**	**Mineral Railway Sidings**	**1921**	**1347722**
B	**On site**	**Railway Sidings**	**1895**	**1361422**
B	**On site**	**Mineral Railway Sidings**	**1921**	**1396456**
C	**On site**	**Railway Sidings**	**1921**	**1353137**
D	**On site**	**Steel Works**	**1921**	**1399139**
B	4m S	Mineral Railway Sidings	1940	1365548
F	4m S	Unspecified Commercial/Industrial	1940	1306914
A	4m N	Unspecified Works	1976	1328656
A	7m N	Unspecified Works	1992	1376573
A	7m N	Unspecified Works	1985	1376573
A	7m N	Unspecified Works	1976	1376573

ID	Location	Land Use	Date	Group ID
A	10m N	Brick Works	1895	1379810
A	20m N	Brick Works	1921	1405293
F	21m S	Unspecified Works	1948	1371556
A	23m NW	Unspecified Ground Workings	1940	1309064
G	24m E	Unspecified Works	1967	1368756
G	24m E	Unspecified Works	1985	1368756
G	24m E	Unspecified Works	1976	1368756
A	24m W	Fire Station	1940	1361524
A	24m N	Unspecified Works	1967	1328658
A	25m W	Fire Station	1948	1389669
A	25m W	Fire Station	1967	1353195
A	25m W	Fire Station	1976	1353195
F	28m S	Unspecified Works	1967	1403047
F	28m S	Unspecified Works	1976	1403047
A	28m N	Brick Works	1859	1380977
A	28m N	Railway Sidings	1859	1355811
A	33m N	Brick Works	1948	1363981
H	38m SE	Sand Pit	1895	1367169
H	38m SE	Refuse Heap	1976	1372030
H	39m SE	Sand Pit	1895	1372518
I	41m SE	Refuse Heap	1967	1370295
A	49m N	Unspecified Ground Workings	1948	1378025
C	53m SE	Unspecified Ground Workings	1948	1343761
I	55m E	Sand Pit	1921	1339438
H	60m SE	Sand Pit	1859	1340762
I	60m E	Sand Pit	1921	1397374
G	62m E	Unspecified Ground Workings	1921	1345278
A	62m NW	Unspecified Pit	1921	1342772

ID	Location	Land Use	Date	Group ID
A	62m NW	Unspecified Pit	1921	1342772
I	65m SE	Sand Pit	1938	1340975
H	70m SE	Unspecified Pit	1940	1352055
A	72m NW	Unspecified Pit	1938	1342772
A	72m NW	Unspecified Pit	1921	1342772
J	73m S	Unspecified Commercial/Industrial	1938	1339529
H	73m SE	Unspecified Pit	1921	1389498
G	74m E	Unspecified Ground Workings	1940	1383211
1	75m S	Unspecified Commercial/Industrial	1895	1348052
K	82m S	Railway Sidings	1921	1401731
A	83m NW	Unspecified Ground Workings	1921	1309065
L	86m NE	Unspecified Disused Tip	1976	1314928
H	89m SE	Unspecified Disused Tip	1985	1314929
J	89m S	Unspecified Commercial/Industrial	1921	1340803
G	92m E	Refuse Heap	1948	1368806
H	93m SE	Railway Building	1895	1321668
A	93m N	Railway Sidings	1948	1376140
A	99m NE	Unspecified Ground Workings	1967	1364897
A	102m N	Refuse Heap	1976	1344663
M	103m SE	Colliery	1921	1383927
M	103m SE	Colliery	1921	1383927
A	114m NW	Unspecified Depot	1992	1357958
A	114m NW	Unspecified Depot	1985	1357958
A	114m NW	Unspecified Depot	1976	1357958
A	120m NW	Unspecified Pit	1940	1389468
N	121m W	Unspecified Depot	1992	1343159
N	121m W	Unspecified Depot	1985	1343159
N	121m W	Unspecified Depot	1976	1343159

ID	Location	Land Use	Date	Group ID
C	128m NE	Refuse Heap	1940	1361155
A	129m N	Unspecified Pit	1940	1335847
A	130m N	Refuse Heap	1948	1393052
2	132m NE	Sand Pit	1921	1369251
O	133m SW	Railway Building	1895	1321669
O	138m S	Railway Sidings	1967	1361224
O	138m S	Railway Sidings	1976	1361224
P	150m W	Unspecified Factory	1992	1407819
P	150m W	Unspecified Factory	1985	1407819
P	150m W	Unspecified Factory	1976	1407819
O	153m SW	Railway Sidings	1948	1377331
O	154m SW	Mineral Railway Sidings	1940	1365547
O	154m SW	Unspecified Commercial/Industrial	1940	1354371
A	155m NW	Unspecified Ground Workings	1938	1398211
A	155m N	Steel Works	1859	1357658
C	158m SE	Unspecified Disused Tips	1976	1345201
O	159m SW	Disused Gasometer	1895	1355161
Q	159m SE	Railway Sidings	1921	1386641
O	160m SW	Disused Gasometer	1895	1355161
R	176m S	Industrial Estate	1992	1356072
R	176m S	Industrial Estate	1982	1395582
R	176m S	Industrial Estate	1974	1371944
K	177m S	Unspecified Works	1992	1385472
K	177m S	Unspecified Works	1982	1385472
K	177m S	Unspecified Works	1974	1374030
K	181m S	Unspecified Wharf	1950	1326402
O	182m SW	Unspecified Warehouse	1992	1395194
O	182m SW	Unspecified Warehouse	1948	1394373

ID	Location	Land Use	Date	Group ID
O	182m SW	Unspecified Warehouse	1967	1375587
O	182m SW	Unspecified Warehouse	1985	1395194
O	186m SW	Unspecified Warehouse	1976	1358623
O	190m SW	Unspecified Tank	1976	1325176
S	195m SE	Unspecified Ground Workings	1940	1309087
L	198m E	Unspecified Ground Workings	1940	1370068
S	198m SE	Unspecified Depot	1992	1395820
S	198m SE	Unspecified Depot	1985	1395820
C	203m E	Unspecified Disused Tips	1992	1371291
C	203m E	Unspecified Disused Tips	1985	1371291
K	208m S	Unspecified Tank	1950	1325174
L	212m NE	Unspecified Pit	1948	1392428
K	216m S	Unspecified Tank	1950	1325175
J	218m S	Unspecified Ground Workings	1950	1309093
J	222m S	Unspecified Ground Workings	1967	1397930
O	222m SW	Unspecified Works	1992	1390717
O	222m SW	Engineering Works	1948	1316948
O	222m SW	Unspecified Works	1967	1390717
O	222m SW	Unspecified Works	1985	1390717
O	222m SW	Unspecified Works	1976	1390717
A	225m N	Gasometer	1859	1315248
S	232m SE	Unspecified Depot	1976	1354037
L	238m NE	Unspecified Pit	1940	1392428
T	243m E	Unspecified Ground Workings	1967	1398156
T	243m E	Unspecified Ground Workings	1976	1398156
M	244m SE	Colliery	1895	1356465
M	250m SE	Colliery	1938	1354342
R	252m SE	Unspecified Ground Workings	1950	1389426

ID	Location	Land Use	Date	Group ID
T	256m E	Unspecified Ground Workings	1940	1364839
M	260m SE	Colliery	1895	1360417
O	262m SW	Railway Sidings	1940	1349936
A	262m NW	Unspecified Ground Workings	1921	1370274
A	271m NW	Unspecified Ground Workings	1940	1398211
A	271m NW	Unspecified Heap	1895	1311146
R	271m SE	Unspecified Factory	1992	1405028
R	271m SE	Unspecified Factory	1982	1395038
A	273m NW	Unspecified Old Pits	1976	1326779
R	274m SE	Unspecified Factory	1974	1395038
V	278m SW	Unspecified Wharf	1921	1367416
O	283m W	Cuttings	1940	1306172
V	283m S	Unspecified Wharf	1921	1361026
3	283m W	Grave Yard	1859	1405658
V	283m S	Unspecified Wharf	1938	1370760
V	284m S	Unspecified Wharf	1921	1361026
V	284m S	Unspecified Wharf	1921	1361026
R	287m SE	Refuse Heap	1921	1406619
R	287m SE	Refuse Heap	1921	1406619
4	288m W	Grave Yard	1948	1407197
M	288m SE	Unspecified Heap	1948	1354042
M	288m SE	Unspecified Heap	1967	1347107
M	288m SE	Refuse Heap	1976	1378268
M	290m SE	Refuse Heap	1921	1385923
M	290m SE	Refuse Heap	1921	1385923
O	290m SW	Unspecified Staith	1921	1319278
M	292m SE	Refuse Heaps	1921	1348969
M	292m SE	Colliery	1921	1382061

ID	Location	Land Use	Date	Group ID
R	293m SE	Refuse Heap	1938	1406619
R	293m SE	Refuse Heap	1921	1406619
R	295m SE	Refuse Heap	1921	1388314
M	297m SE	Refuse Heap	1921	1385923
M	297m SE	Colliery	1921	1403115
M	298m SE	Refuse Heaps	1938	1348969
W	301m NW	Old Clay Pit	1921	1374697
W	303m NW	Old Clay Pit	1921	1391936
W	305m NW	Unspecified Pit	1967	1335851
W	306m NW	Old Clay Pit	1938	1344945
W	306m NW	Old Clay Pit	1921	1344945
5	308m SW	Unspecified Staith	1921	1319280
R	310m SE	Unspecified Pit	1950	1335850
W	312m NW	Unspecified Heap	1948	1340781
W	312m NW	Unspecified Heap	1967	1369236
6	317m E	Railway Sidings	1948	1361356
W	329m NW	Unspecified Ground Workings	1940	1360314
W	329m NW	Unspecified Ground Workings	1948	1360314
M	344m SE	Refuse Heap	1895	1399855
M	345m SE	Unspecified Heap	1895	1346971
O	347m W	Railway Building	1948	1404235
O	349m W	Railway Building	1940	1404235
O	350m W	Railway Building	1921	1343806
X	355m N	Unspecified Pit	1992	1401161
X	355m N	Unspecified Pit	1985	1401161
X	355m N	Unspecified Pit	1976	1401161
M	361m SE	Railway Sidings	1967	1362791
Y	368m W	Railway Sidings	1895	1350652

ID	Location	Land Use	Date	Group ID
Q	375m SE	Unspecified Ground Workings	1956	1399937
Z	377m E	Unspecified Ground Workings	1992	1376027
Z	377m E	Unspecified Ground Workings	1985	1376027
O	377m W	Railway Building	1940	1381162
O	377m W	Railway Building	1948	1381162
Q	382m SE	Refuse Heap	1950	1405742
Q	384m SE	Refuse Heap	1921	1345774
Q	387m SE	Refuse Heap	1921	1350026
Q	387m SE	Refuse Heap	1921	1350026
Q	387m SE	Refuse Heap	1921	1350026
AA	388m SE	Refuse Heap	1921	1347164
AA	388m SE	Refuse Heap	1921	1347164
Q	389m SE	Refuse Heap	1938	1357210
AA	392m SE	Refuse Heap	1921	1377813
AA	395m SE	Mineral Railway Sidings	1938	1365549
AA	395m SE	Refuse Heap	1921	1377813
AB	402m N	Unspecified Heap	1859	1348880
AB	407m N	Unspecified Pit	1895	1365686
AC	409m W	Railway Buildings	1940	1331279
AB	411m N	Unspecified Pit	1921	1397496
AB	411m N	Unspecified Pit	1921	1397496
AC	412m W	Railway Building	1948	1350140
AC	412m W	Railway Building	1967	1367718
AB	412m N	Unidentified Pit	1921	1316474
AB	413m N	Unspecified Pit	1938	1372487
AC	426m W	Unspecified Staith	1921	1407335
AC	439m W	Unspecified Staith	1921	1407335
AB	446m N	Refuse Heap	1921	1362941

ID	Location	Land Use	Date	Group ID
AB	446m N	Refuse Heap	1921	1362941
AA	447m SE	Unspecified Works	1992	1378970
AA	447m SE	Unspecified Works	1982	1357464
AA	447m SE	Unspecified Works	1974	1357464
M	448m SE	Railway Sidings	1950	1345730
M	449m SE	Unspecified Shaft	1895	1318097
AB	454m N	Unspecified Ground Workings	1921	1356687
AB	454m N	Unspecified Ground Workings	1938	1340217
Y	454m W	Railway Station	1921	1402254
AB	456m N	Unspecified Heap	1938	1391049
AB	463m NW	Sand Pit	1859	1307268
M	463m SE	Railway Sidings	1956	1401237
Q	463m SE	Unspecified Ground Workings	1967	1344454
Q	463m SE	Unspecified Ground Workings	1982	1344454
Q	463m SE	Unspecified Ground Workings	1974	1344454
Q	463m SE	Unspecified Heap	1992	1311145
M	467m SE	Railway Sidings	1948	1395667
M	467m SE	Railway Sidings	1967	1391087
Y	467m W	Railway Station	1921	1372643
Y	469m W	Railway Station	1938	1372195
Y	469m W	Railway Station	1921	1372195
AA	471m SE	Glass Works	1956	1307794
Y	472m W	Railway Station	1948	1372195
AA	474m SE	Unspecified Works	1967	1391818
Y	475m W	Railway Station	1967	1347225
Y	477m W	Railway Station	1895	1403288
M	479m SE	Refuse Heap	1948	1351512
Y	485m W	Railway Station	1895	1403288

ID	Location	Land Use	Date	Group ID
M	485m SE	Colliery	1921	1349255
7	486m SW	Electric Substation	1992	1390483
M	487m SE	Railway Sidings	1940	1345730
M	487m SE	Colliery	1940	1367980
8	497m N	Gravel Pit	1859	1314044
9	498m N	Cuttings	1859	1306174

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**70**

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 27 >**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Tank**	**1897**	**201146**
E	**On site**	**Unspecified Tank**	**1898**	**211561**
E	**On site**	**Unspecified Tank**	**1897**	**219596**
A	3m SE	Unspecified Tank	1993	215062
A	3m SE	Unspecified Tank	1993	215062
A	4m SE	Unspecified Tank	1986	215062
A	4m SE	Unspecified Tank	1982	215062
A	9m W	Unspecified Tank	1897	201145
B	25m S	Unspecified Tank	1898	216827
B	26m S	Unspecified Tank	1897	216827
H	50m SE	Unspecified Tank	1982	201167
A	60m NW	Unspecified Tank	1993	220647
A	60m NW	Unspecified Tank	1993	220647
A	61m NW	Unspecified Tank	1986	220647

ID	Location	Land Use	Date	Group ID
A	68m NW	Unspecified Tank	1950	213088
A	69m NW	Unspecified Tank	1950	213088
A	83m N	Unspecified Tank	1950	215028
A	83m N	Unspecified Tank	1950	218165
A	99m N	Unspecified Tank	1950	214004
A	99m N	Unspecified Tank	1936	207614
A	99m N	Unspecified Tank	1950	210463
A	105m NW	Unspecified Tank	1897	201143
A	107m N	Unspecified Tank	1950	201144
A	133m N	Unspecified Tank	1963	208251
A	133m N	Unspecified Tank	1970	208251
A	133m N	Unspecified Tank	1950	208251
A	133m N	Unspecified Tank	1950	208251
A	134m N	Unspecified Tank	1982	208251
O	157m SW	Disused Gasometer	1898	211029
O	160m SW	Disused Gasometer	1897	211029
A	169m N	Unspecified Tank	1950	221827
A	169m N	Unspecified Tank	1950	221827
A	169m N	Unspecified Tank	1970	219818
A	169m N	Unspecified Tank	1969	221827
A	180m N	Unspecified Tank	1950	219827
A	181m N	Unspecified Tank	1950	219827
A	181m N	Unspecified Tank	1969	209821
A	182m N	Unspecified Tank	1970	209821
O	182m SW	Unspecified Tank	1936	201147
O	189m SW	Unspecified Tank	1897	201148
O	191m SW	Unspecified Tank	1969	215595
O	191m SW	Unspecified Tank	1950	215595

ID	Location	Land Use	Date	Group ID
O	191m SW	Unspecified Tank	1950	215595
O	191m SW	Unspecified Tank	1970	215595
K	216m S	Unspecified Tank	1936	201150
K	218m S	Unspecified Tank	1950	212670
K	218m S	Unspecified Tank	1957	212670
L	221m NE	Unspecified Tank	1950	221765
L	222m NE	Unspecified Tank	1950	222219
K	222m S	Unspecified Tank	1898	211094
K	222m S	Unspecified Tank	1936	211094
K	225m S	Unspecified Tank	1897	211094
A	255m N	Tanks	1897	217968
A	257m N	Tanks	1898	217968
J	263m S	Unspecified Tank	1996	218656
J	264m S	Unspecified Tank	1972	218656
O	267m SW	Unspecified Tank	1950	221377
O	267m SW	Unspecified Tank	1950	221377
A	269m N	Tanks	1897	213330
A	272m N	Tanks	1898	220137
A	272m N	Tanks	1920	220137
A	277m N	Tanks	1898	208971
A	277m N	Tanks	1920	208971
O	283m W	Unspecified Tank	1990	214683
O	283m W	Unspecified Tank	1982	214683
O	284m W	Unspecified Tank	1950	214683
O	284m W	Unspecified Tank	1970	214683
O	285m W	Unspecified Tank	1969	214683
O	285m W	Unspecified Tank	1950	214683
M	406m SE	Unspecified Tank	1950	201166

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**56**

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 27 >**

ID	Location	Land Use	Date	Group ID
E	7m N	Electricity Substation	1982	124634
E	8m N	Electricity Substation	1986	124634
E	9m N	Electricity Substation	1993	124634
E	9m N	Electricity Substation	1993	124634
A	21m NW	Electricity Substation	1990	120765
A	21m NW	Electricity Substation	1982	120765
E	29m N	Gas Meter House	1993	126805
E	29m N	Gas Meter House	1993	126805
E	29m N	Gas Meter House	1986	126805
B	110m S	Electricity Substation	1986	119711
B	110m S	Electricity Substation	1993	119711
B	110m S	Electricity Substation	1993	119711
O	157m SW	Disused Gasometer	1898	122898
O	160m SW	Electricity Substation	1970	127859
O	160m SW	Disused Gasometer	1897	122898
O	161m SW	Electricity Substation	1990	127859
O	161m SW	Electricity Substation	1982	127859
O	161m SW	Electricity Substation	1969	127859
A	180m N	Electricity Substation	1993	120974
A	180m N	Electricity Substation	1972	120974
O	217m SW	Electricity Substation	1970	119668
O	217m SW	Electricity Substation	1982	119668
O	218m SW	Electricity Substation	1969	119668

ID	Location	Land Use	Date	Group ID
D	233m SE	Electricity Substation	1972	128310
D	233m SE	Electricity Substation	1996	128310
U	271m NW	Electricity Substation	1990	123239
U	271m NW	Electricity Substation	1982	123239
U	271m NW	Electricity Substation	1970	123239
U	271m NW	Electricity Substation	1969	123239
O	300m W	Electricity Substation	1990	124230
O	300m W	Electricity Substation	1982	124230
O	302m W	Electricity Substation	1969	124230
O	302m W	Electricity Substation	1970	124230
O	305m W	Electricity Substation	1950	118648
O	305m W	Electricity Substation	1950	118679
R	360m SE	Electricity Substation	1972	116899
R	369m SE	Electricity Substation	1996	116896
M	449m SE	Electricity Substation	1950	116898
AB	460m NW	Electricity Substation	1993	125159
AB	460m N	Electricity Substation	1979	125159
AB	460m N	Electricity Substation	1969	125159
AB	461m N	Electricity Substation	1970	125159
AB	470m NW	Electricity Substation	1950	121314
AB	470m NW	Electricity Substation	1950	121314
M	473m SE	Electricity Substation	1955	122455
M	473m SE	Electricity Substation	1950	122455
Q	480m SE	Electricity Substation	1996	118829
Q	481m SE	Electricity Substation	1972	119393
Q	484m SE	Electricity Substation	1950	119409
Q	484m SE	Electricity Substation	1950	127305
Q	485m SE	Electricity Substation	1993	127305

ID	Location	Land Use	Date	Group ID
Q	485m SE	Electricity Substation	1993	127305
Q	485m SE	Electricity Substation	1974	125889
Q	485m SE	Electricity Substation	1950	125889
Q	485m SE	Electricity Substation	1990	125889
Q	486m SE	Electricity Substation	1990	127305

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	**1**

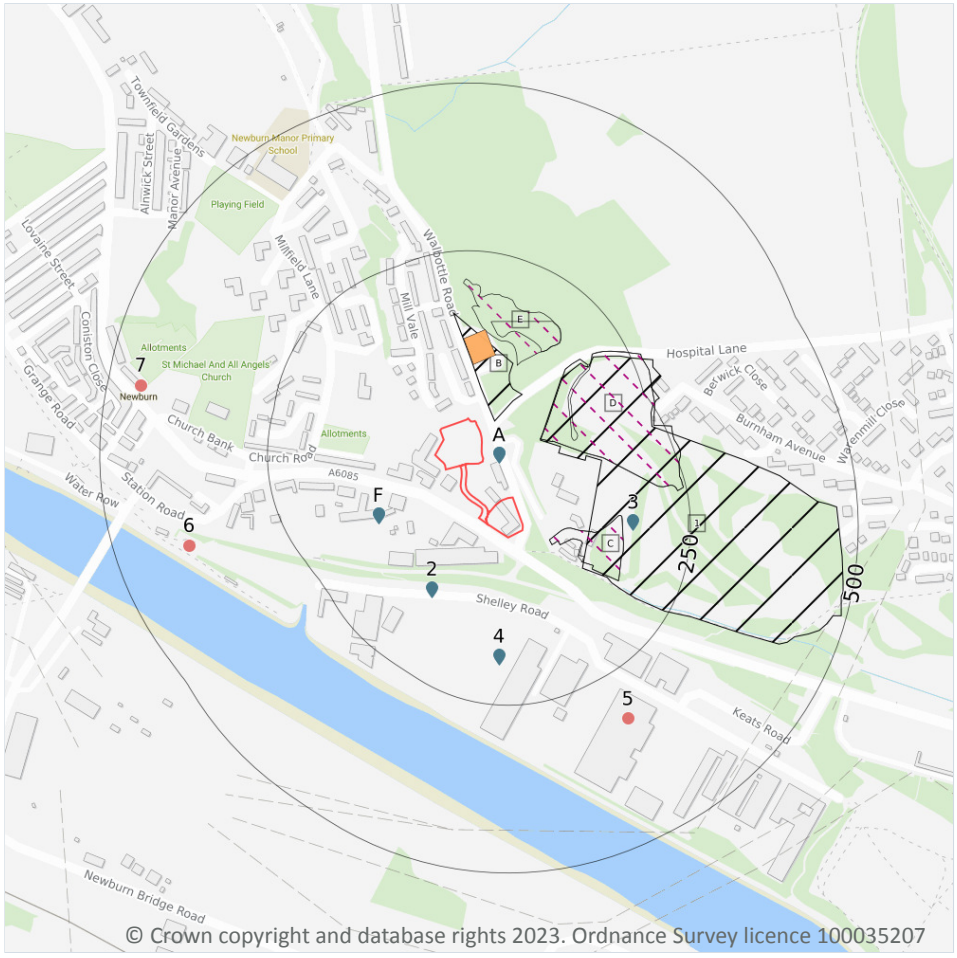
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 27 >**

ID	Location	Land Use	Date	Group ID
G	44m NE	Garage	1950	37870

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical landfill (EA/NRW)

Historical landfill (LA/OS)

Historical waste sites

Licensed waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	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	6

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

Features are displayed on the Waste and landfill map on **page 43 >**

ID	Location	Site address	Source	Data type
C	43m SE	Refuse Tip	1970 mapping	Polygon
C	43m SE	Refuse Tip	1962 mapping	Polygon
D	87m NE	Refuse Tip	1962 mapping	Polygon
D	87m NE	Refuse Tip	1970 mapping	Polygon
E	104m N	Refuse Tip	1970 mapping	Polygon
E	131m N	Refuse Tip	1962 mapping	Polygon

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	2

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

Features are displayed on the Waste and landfill map on **page 43 >**

ID	Location	Details		
B	26m N	Site Address: Old Walbottle Brickworks, Newburn, Newcastle upon Tyne Licence Holder Address: -	Waste Licence: Yes Site Reference: NC 032, TWR 15 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 26/03/1980 Licence Surrender: 28/04/1980	Operator: - Licence Holder: Tyne and Wear County Council First Recorded 26/03/1980 Last Recorded: 26/04/1980
1	87m NE	Site Address: Sandy Banks, Lemington Road, Newburn Licence Holder Address: -	Waste Licence: - Site Reference: NC 016, NC 11 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	2

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 43 >**

ID	Location	Address	Further Details	Date
B	80m N	Site Address: N/A	Type of Site: Waste Disposal Depot Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1993
B	80m N	Site Address: N/A	Type of Site: Waste Disposal Depot Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1993

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

3.6 Licensed waste sites

Records within 500m	9

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

Features are displayed on the Waste and landfill map on **page 43 >**

ID	Location	Details		
A	23m NE	Site Name: Walbottle Waste Reception Site Site Address: ., Walbottle Road, Newburn, Newcastle Upon Tyne, Tyne & Wear, NE15 8HY Correspondence Address: -	Type of Site: Household Waste Amenity Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: NEW008 EPR reference: EA/EPR/JP3797ZM/S004 Operator: Newcastle City Council Waste Management licence No: 67545 Annual Tonnage: 8048	Issue Date: 11/03/1993 Effective Date: - Modified: - Surrendered Date: Oct 1 2003 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered

ID	Location	Details		
A	23m NE	Site Name: Walbottle Road C A Site Site Address: Newcastle City Council, Land/premises At, Walbottle Road, Newburn, Newcastle Upon Tyne, Tyne & Wear, NE15 8HY Correspondence Address: -	Type of Site: Household Waste Amenity Site Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 637839 EPR reference: EA/EPR/PP3294ZA Operator: Newcastle City Council Waste Management licence No: 64060 Annual Tonnage: 24999	Issue Date: 30/09/2003 Effective Date: 30/09/2003 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: 30/09/2003 Status: Issued
A	23m NE	Site Name: Walbottle Waste Reception Site Site Address: Newcastle City Council, ., Walbottle Road, Newburn, Newcastle Upon Tyne, Tyne & Wear, NE15 8HY Correspondence Address: -	Type of Site: Household Waste Amenity Site Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 647942 EPR reference: EA/EPR/JP3797ZM Operator: Newcastle City Council Waste Management licence No: 67545 Annual Tonnage: 8048	Issue Date: 11/03/1993 Effective Date: 11/03/1993 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: 11/03/1993 Status: Surrendered
F	122m SW	Site Name: Old Neolith Works Site Address: Old Neolith Works, High Street, Newburn, Newcastle Upon Tyne, Tyne & Wear, NE15 8LN Correspondence Address: -	Type of Site: 75kte HCI Waste TS + treatment Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TRO002 EPR reference: EA/EPR/HB3202CA/A001 Operator: Trojan Skips Ltd Waste Management licence No: 406079 Annual Tonnage: 74999	Issue Date: 04/12/2019 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
F	122m SW	Site Name: Old Neolith Works Site Address: Old Neolith Works, High Street, Newburn, Newcastle Upon Tyne, Tyne & Wear, NE15 8LN Correspondence Address: -	Type of Site: - Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TRO002 EPR reference: EA/EPR/HB3202CA/A001 Operator: Trojan Skips Ltd Waste Management licence No: 406079 Annual Tonnage: 74999	Issue Date: 04/12/2019 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
F	122m SW	Site Name: Old Neolith Works Site Address: Trojan Skips Limited, Old Neolith Works, High Street, Newburn, Newcastle Upon Tyne, Tyne & Wear, NE15 8LN Correspondence Address: -	Type of Site: 75kte HCI Waste TS + treatment Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 644551 EPR reference: EA/EPR/HB3202CA Operator: Trojan Skips Limited Waste Management licence No: 406079 Annual Tonnage: 74999	Issue Date: 04/12/2019 Effective Date: 04/12/2019 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: 04/12/2019 Status: Issued
2	127m S	Site Name: H Pringle Site Address: H Pringle, Old Neolith Works, High Street, Newburn, Newcastle Upon Tyne, Tyne & Wear, NE15 8LN Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 653261 EPR reference: EA/EPR/AP3297ZT Operator: H Pringle Waste Management licence No: 67501 Annual Tonnage: 0	Issue Date: 16/12/1993 Effective Date: 16/12/1993 Modified: - Surrendered Date: 16/12/1993 Expiry Date: - Cancelled Date: 16/12/1993 Status: Surrendered
3	164m E	Site Name: Sandhills Site Address: Newcastle City Council, Sandhills, Walbottle Road, Newburn, Newcastle Upon Tyne, Tyne & Wear, NE15 9RU Correspondence Address: -	Type of Site: Composting Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 656624 EPR reference: EA/EPR/UP3894ZF Operator: Newcastle City Council Waste Management licence No: 64132 Annual Tonnage: 24999	Issue Date: 15/09/2005 Effective Date: 15/09/2005 Modified: 15/09/2005 Surrendered Date: - Expiry Date: - Cancelled Date: 15/09/2005 Status: Issued
4	178m S	Site Name: Shelley Road Site Address: Norman Marshall Limited, Unit 12 ., Shelley Road, Newburn Industrial Estate, Newcastle Upon Tyne, Tyne & Wear, NE15 9RT Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 657242 EPR reference: EA/EPR/LP3893NC Operator: Norman Marshall Limited Waste Management licence No: 67591 Annual Tonnage: 5200	Issue Date: 03/11/1994 Effective Date: 03/11/1994 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: 03/11/1994 Status: Issued

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

3.7 Waste exemptions

Records within 500m	3

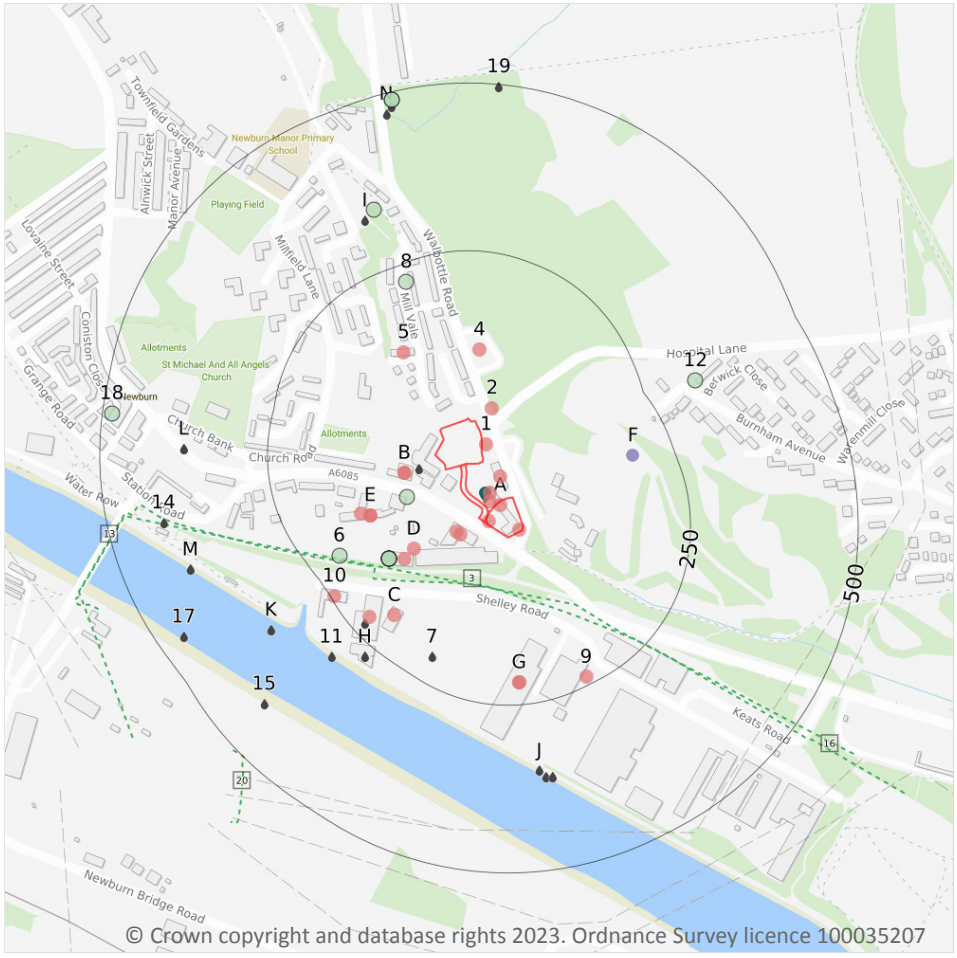
Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 43 >**

ID	Location	Site	Reference	Category	Sub-Category	Description
5	322m SE	UNIT 7 THE PRESERVING WORKS NEWCASTLE UPON TYNE TYNE AND WEAR NE15 9RT	EPR/UF0308EM/A001	Treating waste exemption	Non-Agricultural Waste Only	Treatment of waste toner cartridges by sorting, dismantling, cleaning or refilling
6	391m W	Newburn SPS Station Road NE15 8LR	EPR/DE5785VW/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste in construction
7	451m W	-	WEX356985	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Electricity cables

Historical licensed industrial activities

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

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	25

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 49 >**

ID	Location	Company	Address	Activity	Category
A	**On site**	**Newburn Garage**	**Unit 1 Newburn Enterprise Park, High Street, Newburn, Newcastle-upon-Tyne, Tyne & Wear, NE15 8LE**	**Vehicle Repair, Testing and Servicing**	**Repair and Servicing**
A	**On site**	**Electricity Sub Station**	**Tyne & Wear, NE15**	**Electrical Features**	**Infrastructure and Facilities**

ID	Location	Company	Address	Activity	Category
A	**On site**	**Enterprise Park**	**Tyne & Wear, NE15**	**Business Parks and Industrial Estates**	**Industrial Features**
1	6m N	Electricity Sub Station	Tyne & Wear, NE15	Electrical Features	Infrastructure and Facilities
A	10m SE	Tank	Tyne & Wear, NE15	Tanks (Generic)	Industrial Features
A	19m SE	North East Concrete Ltd	-, High Street, Newburn, Newcastle-upon-Tyne, Tyne & Wear, NE15 8LN	Concrete Products	Industrial Products
2	32m N	Gas Meter House	Tyne & Wear, NE15	Gas Features	Infrastructure and Facilities
A	34m E	Alloypro	Clayton House, Walbottle Road, Newcastle-upon-Tyne, Tyne & Wear, NE15 9RU	Special Purpose Machinery and Equipment	Industrial Products
A	37m S	Works	Tyne & Wear, NE15	Unspecified Works Or Factories	Industrial Features
A	39m S	Walbottle Tyres	Phoenix Works, High Street, Newburn, Newcastle-upon-Tyne, Tyne & Wear, NE15 8LN	Vehicle Parts and Accessories	Motoring
B	53m W	Bespoke Signs	Ground Floor, High Street, Newburn, Newcastle-upon-Tyne, Tyne & Wear, NE15 8LN	Signs	Industrial Products
B	53m W	Walker Bros	-, High Street, Newburn, Newcastle-upon-Tyne, Tyne & Wear, NE15 8LN	Vehicle Components	Industrial Products
4	104m N	Recycling Centre	Tyne & Wear, NE15	Recycling Centres	Infrastructure and Facilities
D	108m SW	Chimney	Tyne & Wear, NE15	Chimneys	Industrial Features
D	126m SW	Works	Tyne & Wear, NE15	Unspecified Works Or Factories	Industrial Features
5	127m NW	Fountain Filters	23, Mill Vale, Newcastle-upon-Tyne, Tyne & Wear, NE15 8HF	Air and Water Filtration	Industrial Products
E	132m W	Azure Business Centre	-, High Street, Newburn, Newcastle-upon-Tyne, Tyne & Wear, NE15 8LN	Business Parks and Industrial Estates	Industrial Features
E	132m W	N M T International Shipping UK Ltd	Office 48-49 Azure Business Centre, High Street, Newburn, Newcastle-upon-Tyne, Tyne & Wear, NE15 8LN	Distribution and Haulage	Transport, Storage and Delivery

ID	Location	Company	Address	Activity	Category
E	141m W	Pullman Chauffeur Services	Office 11 Azure Business Centre, High Street, Newburn, Newcastle-upon-Tyne, Tyne and Wear, Tyne & Wear, NE15 8LN	Vehicle Hire and Rental	Hire Services
C	192m SW	Scot JCB Ltd	-, Shelley Road, Newburn Industrial Estate, Newcastle-upon-Tyne, Tyne & Wear, NE15 9RT	Construction Plant	Construction Services
G	216m S	Warburtons	Units 26-28, Shelley Road, Newburn Industrial Estate, Newcastle-upon-Tyne, Tyne & Wear, NE15 9RT	Baking and Confectionery	Foodstuffs
G	216m S	Buy Metal Online	Units 26-28, Shelley Road, Newburn Industrial Estate, Newcastle-upon-Tyne, Tyne & Wear, NE15 9RT	Metals Manufacturers, Fabricators and Stockholders	Industrial Products
C	220m SW	Millfield G R P	-, Shelley Road, Newburn Industrial Estate, Newcastle-upon-Tyne, Tyne & Wear, NE15 9RT	Glass Fibre Services	Industrial Products
9	238m SE	Electricity Sub Station	Tyne & Wear, NE15	Electrical Features	Infrastructure and Facilities
10	245m SW	Masfix Ltd	-, Shelley Road, Newburn Industrial Estate, Newcastle-upon-Tyne, Tyne & Wear, NE15 9RT	Distribution and Haulage	Transport, Storage and Delivery

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	**5**

High voltage underground electricity transmission cables.

Features are displayed on the Current industrial land use map on **page 49 >**

ID	Location	Cable Set	Cable Route	Details	
3	78m S	-	-	Cable Make: - Cable Type: PILOT Operating Voltage (kV): -	Year of installation: Not specified Cable in tunnel? Not specified

ID	Location	Cable Set	Cable Route	Details	
C	79m S	-	-	Cable Make: - Cable Type: PILOT Operating Voltage (kV): -	Year of installation: Not specified Cable in tunnel? Not specified
13	392m W	-	-	Cable Make: - Cable Type: PILOT Operating Voltage (kV): -	Year of installation: Not specified Cable in tunnel? Not specified
16	431m SE	-	-	Cable Make: - Cable Type: PILOT Operating Voltage (kV): -	Year of installation: Not specified Cable in tunnel? Not specified
20	499m SW	STELLA NORTH 3 132KV CABLE	STELLA WEST 275KV S/S	Cable Make: PIRELLI 132KV Cable Type: A/C Operating Voltage (kV): 132	Year of installation: 1965 Cable in tunnel? Not specified

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	2

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

Features are displayed on the Current industrial land use map on **page 49 >**

ID	Location	Details	
F	189m E	Operator: Aes K2 Ltd Address: Aes Tyneside Power Station, Shelley Road, Newburn Industrial Estate, Newcastle Upon Tyne, NE15 9RT Process: Combustion Processes Permit Number: AY0904	Original Permit Number: IPCAPP Date Approved: 18-12-1997 Effective Date: 22-12-1997 Status: Superseded By Variation
F	189m E	Operator: Aes K2 Ltd Address: Aes Tyneside Power Station, Shelley Road, Newburn Industrial Estate, Newcastle Upon Tyne, NE15 9RT Process: Combustion Processes Permit Number: BD8703	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 49 >**

ID	Location	Address	Details	
A	12m S	North East Plant Sales Ltd, High Street, Newburn, Newcastle Upon Tyne, NE15 8LN	Process: Use of Bulk Cement Status: Current 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	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	23

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 49 >**

ID	Location	Address	Details	
B	32m W	HIGH STREET SSO, NEWBURN	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 235/0943 Permit Version: 1 Receiving Water: NEW BURN	Status: REVOKED - UNSPECIFIED Issue date: 21/09/1989 Effective Date: 21/09/1989 Revocation Date: 15/03/1994
7	211m S	LEAZES ESTATE, THROCKLEY, NORTHUMBERLAND	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: 235/B/0005 Permit Version: 1 Receiving Water: TYNE	Status: REVOKED - UNSPECIFIED Issue date: 06/02/1961 Effective Date: 06/02/1961 Revocation Date: 09/04/1997
C	231m SW	JAMES ROSS & SON, STANNERS ESTATE, NEWBURN	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - WATER COMPANY (WTW) Permit Number: 235/B/0040 Permit Version: 1 Receiving Water: TYNE	Status: REVOKED - UNSPECIFIED Issue date: 29/03/1965 Effective Date: 29/03/1965 Revocation Date: 19/05/1992
H	268m SW	OLD MONTAGUE COLLIERY YARD, NEWBURN	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 233/B/0021 Permit Version: 1 Receiving Water: TYNE	Status: REVOKED - UNSPECIFIED Issue date: 05/02/1962 Effective Date: 05/02/1962 Revocation Date: 12/02/1992
H	268m SW	JAMES ROSS & SON, STANNERS ESTATE, NEWBURN	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 233/B/0040 Permit Version: 1 Receiving Water: TYNE	Status: REVOKED - UNSPECIFIED Issue date: 29/03/1965 Effective Date: 29/03/1965 Revocation Date: 01/10/1990
11	302m SW	A1 INDUSTRIAL TRUCKS LTD, NEWBURN IND EST, NEWCASTLE UPON TYNE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 235/1696 Permit Version: 1 Receiving Water: RIVER TYNE SALINE ESTUARY	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 08/04/1999 Effective Date: 08/04/1999 Revocation Date: -
I	330m NW	COUNCIL DEPOT, S OF SSO, NEWBURN	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 235/0927 Permit Version: 1 Receiving Water: NEW BURN	Status: REVOKED - UNSPECIFIED Issue date: 21/09/1989 Effective Date: 21/09/1989 Revocation Date: 28/01/1991

ID	Location	Address	Details	
J	350m S	INDUSTRIAL ESTATE OUTFALL, NEWBURN	Effluent Type: UNSPECIFIED Permit Number: 235/X/0214 Permit Version: 1 Receiving Water: TYNE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: 16/07/1987 Effective Date: 16/07/1987 Revocation Date: 04/12/1992
K	351m SW	NEW BURN OUTFALL, NEWBURN	Effluent Type: SEWAGE DISCHARGES - UNSPECIFIED - WATER COMPANY Permit Number: 233/1001 Permit Version: 1 Receiving Water: TYNE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: 04/12/1992 Effective Date: 04/12/1992 Revocation Date: 05/12/1996
K	351m SW	NEW BURN OUTFALL, NEWBURN	Effluent Type: UNSPECIFIED Permit Number: 235/X/0215 Permit Version: 1 Receiving Water: TYNE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: 16/07/1987 Effective Date: 16/07/1987 Revocation Date: 04/12/1992
J	362m S	NEWBURN INDUSTRIAL ESTATE OUTFALL, NEWBURN, NEWCASTLE UPON TYNE	Effluent Type: SEWAGE DISCHARGES - UNSPECIFIED - WATER COMPANY Permit Number: 233/1000 Permit Version: 1 Receiving Water: TYNE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: 04/12/1992 Effective Date: 04/12/1992 Revocation Date: 24/11/2000
J	363m S	NEWBURN INDUSTRIAL ESTATE P STN, NEWBURN, NEWCASTLE UPON TYNE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 235/1732 Permit Version: 1 Receiving Water: RIVER TYNE SALINE ESTUARY	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 01/02/2000 Effective Date: 01/02/2000 Revocation Date: -
J	363m S	NEWBURN INDUSTRIAL ESTATE P STN, NEWBURN, NEWCASTLE UPON TYNE	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: 235/1732 Permit Version: 1 Receiving Water: RIVER TYNE SALINE ESTUARY	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 01/02/2000 Effective Date: 01/02/2000 Revocation Date: -
L	375m W	NEWBURN PUMPING STATION, NEWBURN, NEWCASTLE UPON TYNE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 233/1163 Permit Version: 1 Receiving Water: RIVER TYNE SALINE ESTUARY	Status: CONSENTS WITHOUT APPLICATION (WRA 91, SCHED 10) Issue date: 21/06/2000 Effective Date: 21/06/2000 Revocation Date: -
L	375m W	NEWBURN PUMPING STATION, NEWBURN, NEWCASTLE UPON TYNE	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: 233/1163 Permit Version: 1 Receiving Water: RIVER TYNE SALINE ESTUARY	Status: CONSENTS WITHOUT APPLICATION (WRA 91, SCHED 10) Issue date: 21/06/2000 Effective Date: 21/06/2000 Revocation Date: -

ID	Location	Address	Details	
M	403m W	NEWBURN SEWAGE PUMPING STATION, NEWBURN, NEWCASTLE UPON TYNE	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: 233/0710 Permit Version: 1 Receiving Water: TYNE	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 07/06/1989 Effective Date: 07/06/1989 Revocation Date: 21/06/2000
M	403m W	NEWBURN SEWAGE PUMPING STATION, NEWBURN, NEWCASTLE UPON TYNE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 233/0710 Permit Version: 1 Receiving Water: TYNE	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 07/06/1989 Effective Date: 07/06/1989 Revocation Date: 21/06/2000
14	417m W	DUMPLING HALL ESTATE HOUSING DEVELO, NEWBURN	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: 233/B/0146 Permit Version: 1 Receiving Water: TYNE	Status: REVOKED - UNSPECIFIED Issue date: 26/11/1971 Effective Date: 26/11/1971 Revocation Date: 09/04/1997
15	423m SW	STELLA WEST SUBSTATION, NEWBURN BRIDGE ROAD, BLAYDON, NEWCASTLE UPON TYNE, NE21 4SN	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: 233/1280 Permit Version: 1 Receiving Water: TYNE (SALINE ESTUARY)	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 08/05/2006 Effective Date: 08/05/2006 Revocation Date: 04/11/2008
17	462m SW	NEWBURN BRIDGE ROAD EAST OUTFALL, RYTON, GATESHEAD, TYNE AND WEAR	Effluent Type: SEWAGE DISCHARGES - UNSPECIFIED - WATER COMPANY Permit Number: 233/1002 Permit Version: 1 Receiving Water: TYNE ESTUARY	Status: REVOKED - UNSPECIFIED Issue date: 12/11/1992 Effective Date: 12/11/1992 Revocation Date: 13/03/2001
N	469m N	CSO 32 WALBOTTLE ROAD, 32 DANE TERRACE, WALBOTTLE, NEWCASTLE UPON TYNE, NE15 8HX	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 235/1876 Permit Version: 2 Receiving Water: NEW BURN	Status: VARIED UNDER EPR 2010 Issue date: 11/02/2019 Effective Date: 11/02/2019 Revocation Date: -
N	478m N	WALBOTTLE ROAD, 32 CSO, NEWBURN	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 235/1557 Permit Version: 1 Receiving Water: NEW BURN (RIVER TYNE)	Status: REVOKED - UNSPECIFIED Issue date: 09/02/1996 Effective Date: 09/05/1996 Revocation Date: 09/03/2004

ID	Location	Address	Details	
19	496m N	NEWBURN SSO, NEWBURN	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 233/G/0210 Permit Version: 1 Receiving Water: NEW BURN, TRIBUTARY OF	Status: REVOKED - UNSPECIFIED Issue date: 07/11/1960 Effective Date: 07/11/1960 Revocation Date: 28/01/1991

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	13

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 49 >**

ID	Location	Details	
B	71m W	Incident Date: 02/09/2002 Incident Identification: 104770 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
D	147m SW	Incident Date: 31/03/2002 Incident Identification: 67853 Pollutant: Atmospheric Pollutants and Effects:Atmospheric Pollutants and Effects:Atmospheric Pollutants and Effects Pollutant Description: Damage to Buildings, Vehicles and Vegetation:Fumes:Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
D	147m SW	Incident Date: 31/03/2002 Incident Identification: 67853 Pollutant: Atmospheric Pollutants and Effects:Atmospheric Pollutants and Effects:Atmospheric Pollutants and Effects Pollutant Description: "Damage to Buildings, Vehicles and Vegetation:Fumes:Smoke"	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
D	147m SW	Incident Date: 31/03/2002 Incident Identification: 67853 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Fumes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
D	147m SW	Incident Date: 31/03/2002 Incident Identification: 67853 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Damage to Buildings Vehicles and Vegetation	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
D	147m SW	Incident Date: 31/03/2002 Incident Identification: 67853 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
6	204m SW	Incident Date: 22/01/2003 Incident Identification: 132643 Pollutant: Oils and Fuel Pollutant Description: Mixed/Waste Oils	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

ID	Location	Details	
8	223m N	Incident Date: 17/07/2002 Incident Identification: 92304 Pollutant: Specific Waste Materials Pollutant Description: Other Specific Waste Material	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
12	323m NE	Incident Date: 27/05/2009 Incident Identification: 682158 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)
I	342m N	Incident Date: 26/02/2002 Incident Identification: 61039 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
18	486m W	Incident Date: 11/09/2003 Incident Identification: 189071 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
N	488m N	Incident Date: 17/06/2001 Incident Identification: 9802 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
N	488m N	Incident Date: 17/06/2001 Incident Identification: 9802 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

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

4.19 Pollution inventory substances

Records within 500m	**0**

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

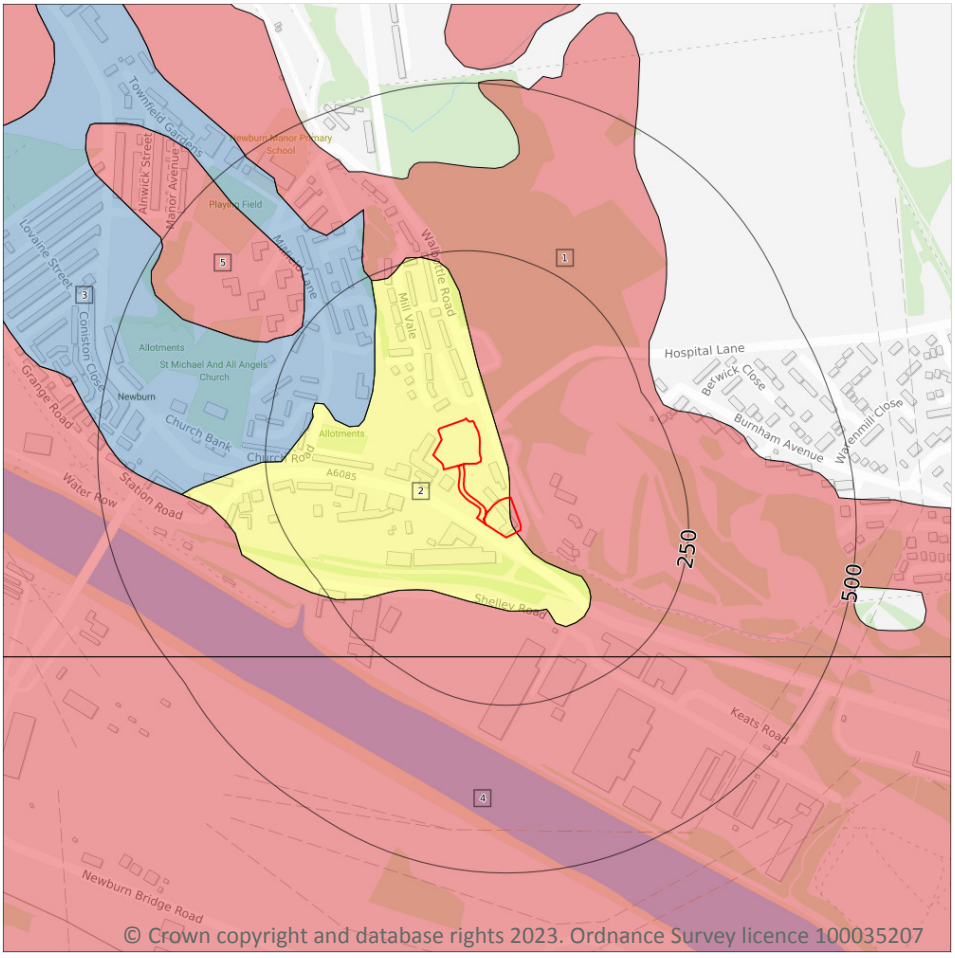
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m	5

Aquifer status of groundwater held within superficial geology.

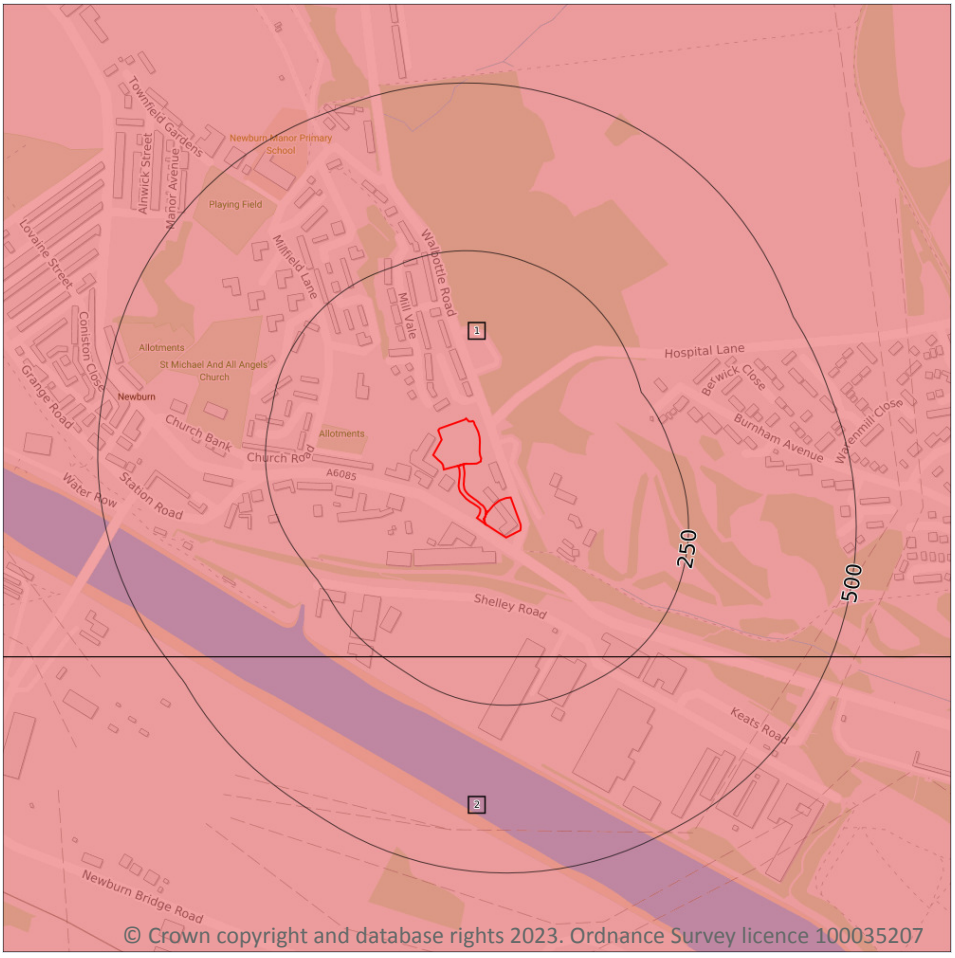
Features are displayed on the Hydrogeology map on **page 62 >**

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

ID	Location	Designation	Description
3	110m NW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
4	178m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	255m NW	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



5.2 Bedrock aquifer

Records within 500m	2

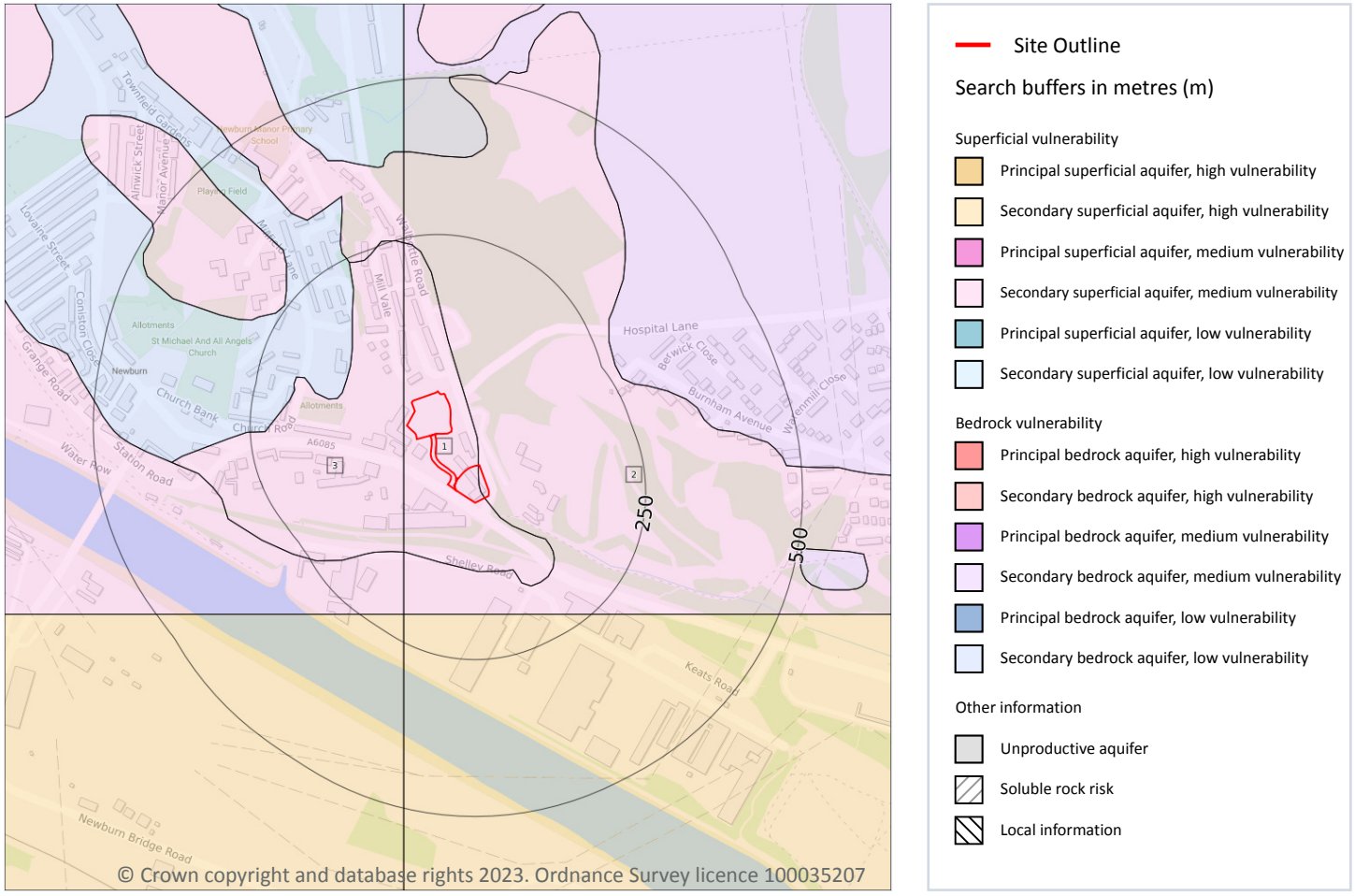
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 64 >**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	178m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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	3

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 66 >**

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

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	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

5.6 Groundwater abstractions

Records within 2000m	0

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.

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	0

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

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

5.9 Source Protection Zones

Records within 500m	0

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

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology

Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	5

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 70 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
4	35m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	New Burn

ID	Location	Type of water feature	Ground level	Permanence	Name
6	60m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	New Burn
A	173m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	227m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	New Burn
B	231m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	New Burn

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 70 >**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	**2**

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

Features are displayed on the Hydrology map on **page 70 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**New Burn (Trib of Tyne)**	**GB103023075740**	**Tyne Lower and Estuary**	**Tyne**
2	**On site**	**Coastal Catchment**	**Not part of a river WB catchment**	**8**	**Tyne Lower and Estuary**	**Tyne**

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 70 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
5	45m W	River	New Burn (Trib of Tyne)	GB103023075740 ↗	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 70 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
3	**On site**	**Tyne Carboniferous Limestone and Coal Measures**	**GB40302G701500 ↗**	**Poor**	**Poor**	**Good**	**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	6

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

Features are displayed on the River and coastal flooding map on **page 73 >**

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

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

7.2 Historical Flood Events

Records within 250m	**0**

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

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

7.3 Flood Defences

Records within 250m	**0**

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	**0**

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

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

7.5 Flood Storage Areas

Records within 250m	**0**

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

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

River and coastal flooding - Flood Zones

Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

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

Features are displayed on the River and coastal flooding map on **page 73 >**

Location	Type
5m 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	1

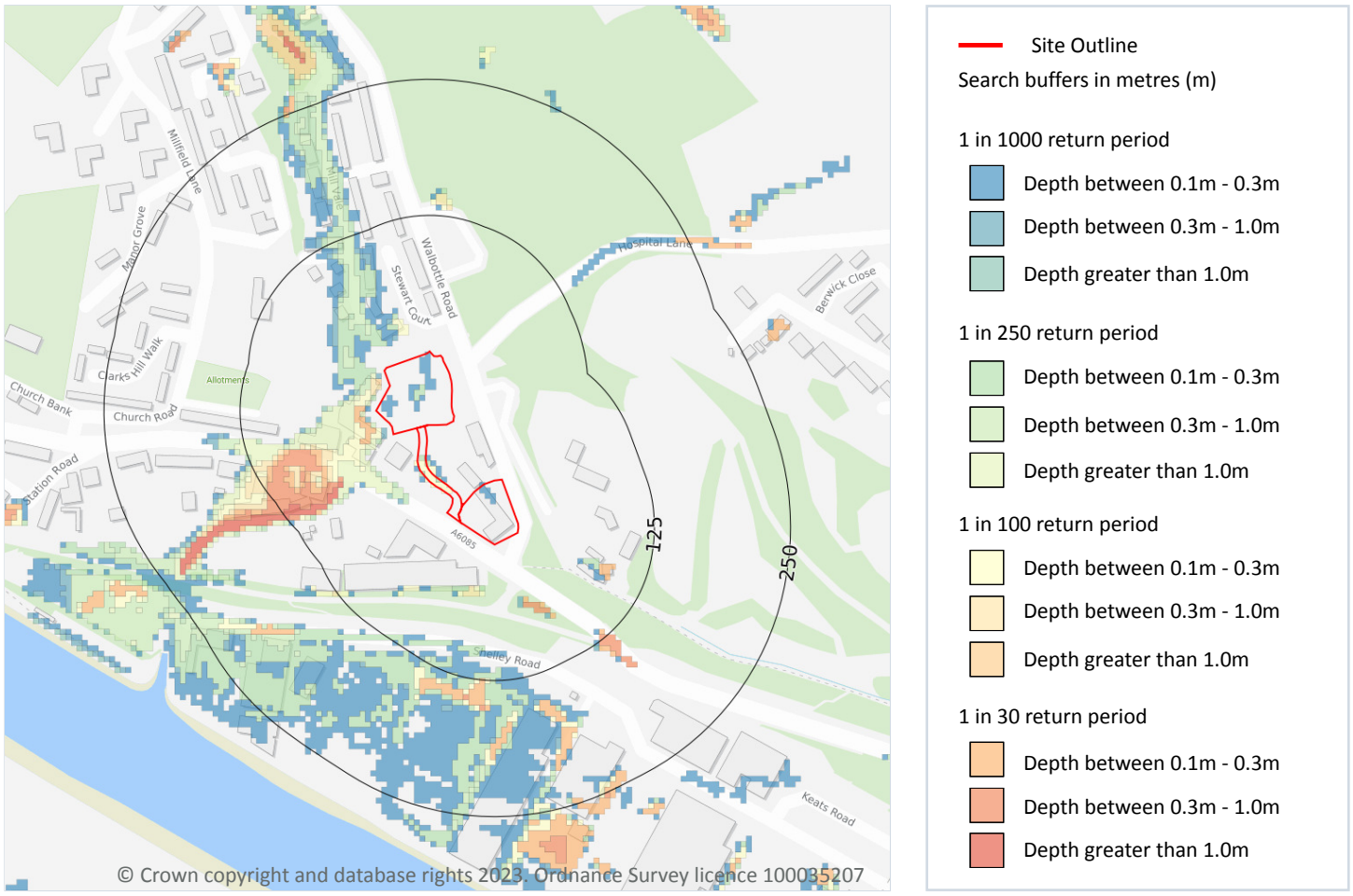
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 73 >**

Location	Type
23m W	Zone 3 - (Fluvial Models)

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

8 Surface water flooding



8.1 Surface water flooding

Highest risk on site	**1 in 100 year, 0.1m - 0.3m**
Highest risk within 50m	**1 in 30 year, 0.1m - 0.3m**

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

Features are displayed on the Surface water flooding map on **page 77 >**

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

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

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

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding

Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

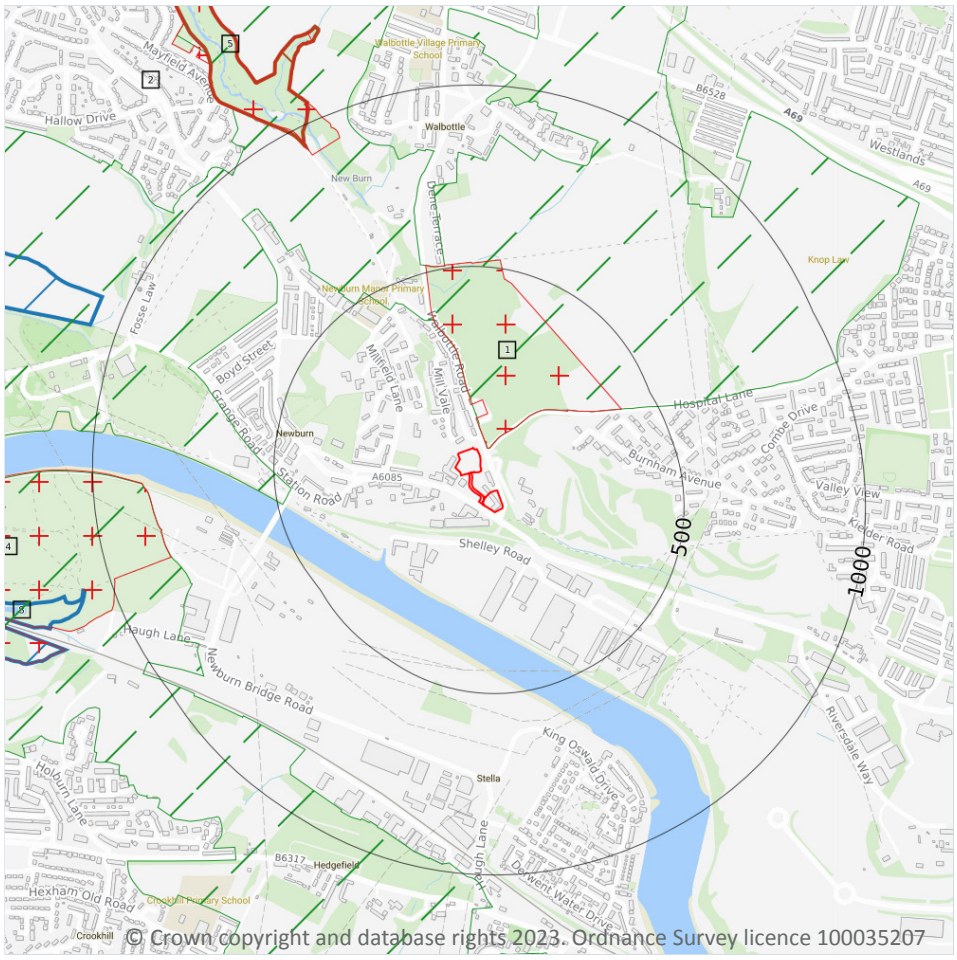
Highest risk on site	**Low**
Highest risk within 50m	**Low**

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

Features are displayed on the Groundwater flooding map on **page 79 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SSSI)

Local Nature Reserves (LNR)

Designated Ancient Woodland

Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	4

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

Features are displayed on the Environmental designations map on **page 80 >**

ID	Location	Name	Data source
7	1073m NW	Hallow Hill	Natural England

ID	Location	Name	Data source
8	1076m W	Ryton Willows	Natural England
A	1186m SW	Ryton Willows	Natural England
-	1704m W	Ryton Willows	Natural England

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	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	8

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

Features are displayed on the Environmental designations map on **page 80 >**

ID	Location	Name	Data source
1	27m N	Walbottle Brickworks	Natural England
4	820m W	Ryton Willows	Natural England
5	916m NW	Walbottle Dene	Natural England
A	1186m SW	Ryton Willows	Natural England
-	1664m NW	Throckley & Walbottle Dene	Natural England
-	1754m E	Sugley Dene	Natural England
-	1894m E	Sugley Dene	Natural England
-	1923m W	Ryton Willows	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	3

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

Features are displayed on the Environmental designations map on **page 80 >**

ID	Location	Name	Woodland Type
6	945m NW	Throckley Dene	Ancient & Semi-Natural Woodland
-	1393m S	Path Head Wood	Ancient Replanted Woodland
-	1702m E	Unknown	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	2

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

Features are displayed on the Environmental designations map on **page 80 >**

ID	Location	Name	Local Authority name
2	27m N	Tyne and Wear	Newcastle upon Tyne
3	793m W	Tyne and Wear	Gateshead

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was

closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

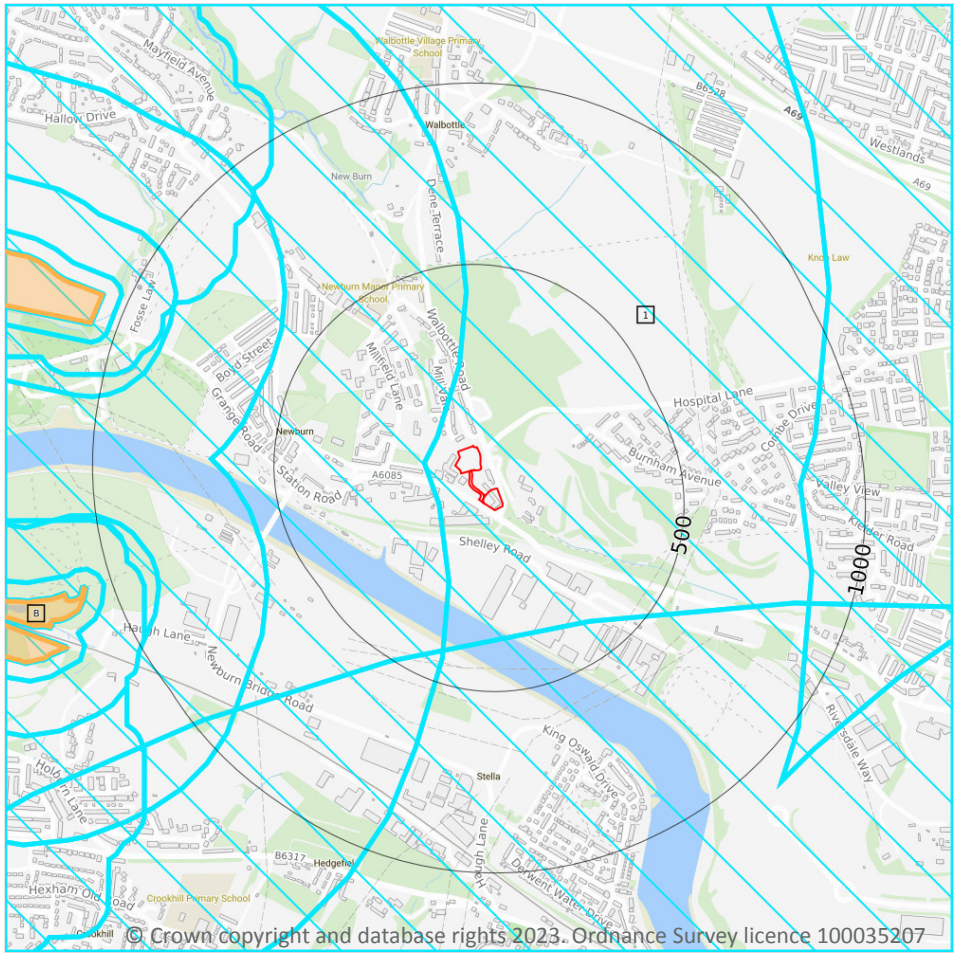
10.16 Nitrate Vulnerable Zones

Records within 2000m	0

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

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

SSSI Impact Zones and Units



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 86 >**

ID	Location	Type of developments requiring consultation
1	On site	**Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t). Combustion - General combustion processes >20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management Water supply - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m² or more.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	**4**

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

Features are displayed on the SSSI Impact Zones and Units map on **page 86 >**

ID: 13
Location: 1073m NW
SSSI name: Hallow Hill
Unit name: 1
Broad habitat: Neutral Grassland - Lowland
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
Lowland neutral grassland (MG5)	Unfavourable - Declining	07/06/2022
Lowland wet neutral grassland (MG11, MG13)	Unfavourable - Declining	07/06/2022
Spring/flush fen (lowland)	Favourable	07/06/2022

ID: B
Location: 1076m W
SSSI name: Ryton Willows
Unit name: 1
Broad habitat: Standing Open Water And Canals
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
Basin fen (lowland)	Unfavourable - Declining	07/08/2012
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	Unfavourable - Declining	07/08/2012
Ponds	Unfavourable - Declining	07/08/2012

ID: 18
Location: 1186m SW
SSSI name: Ryton Willows
Unit name: 1
Broad habitat: Standing Open Water And Canals
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
Basin fen (lowland)	Unfavourable - Declining	07/08/2012
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	Unfavourable - Declining	07/08/2012
Ponds	Unfavourable - Declining	07/08/2012

ID: -
Location: 1704m W
SSSI name: Ryton Willows
Unit name: 1
Broad habitat: Standing Open Water And Canals
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
Basin fen (lowland)	Unfavourable - Declining	07/08/2012

Feature name	Feature condition	Date of assessment
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	Unfavourable - Declining	07/08/2012
Ponds	Unfavourable - Declining	07/08/2012

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	3

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 90 >**

ID	Location	Name	Grade	Reference Number	Listed date
1	99m W	The Duke Of Northumberland's House	II	1024977	04/06/1976
2	140m W	Newburn Almshouses	II	1299402	07/07/1982
3	229m W	Newburn House	II	1024978	30/03/1987

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.

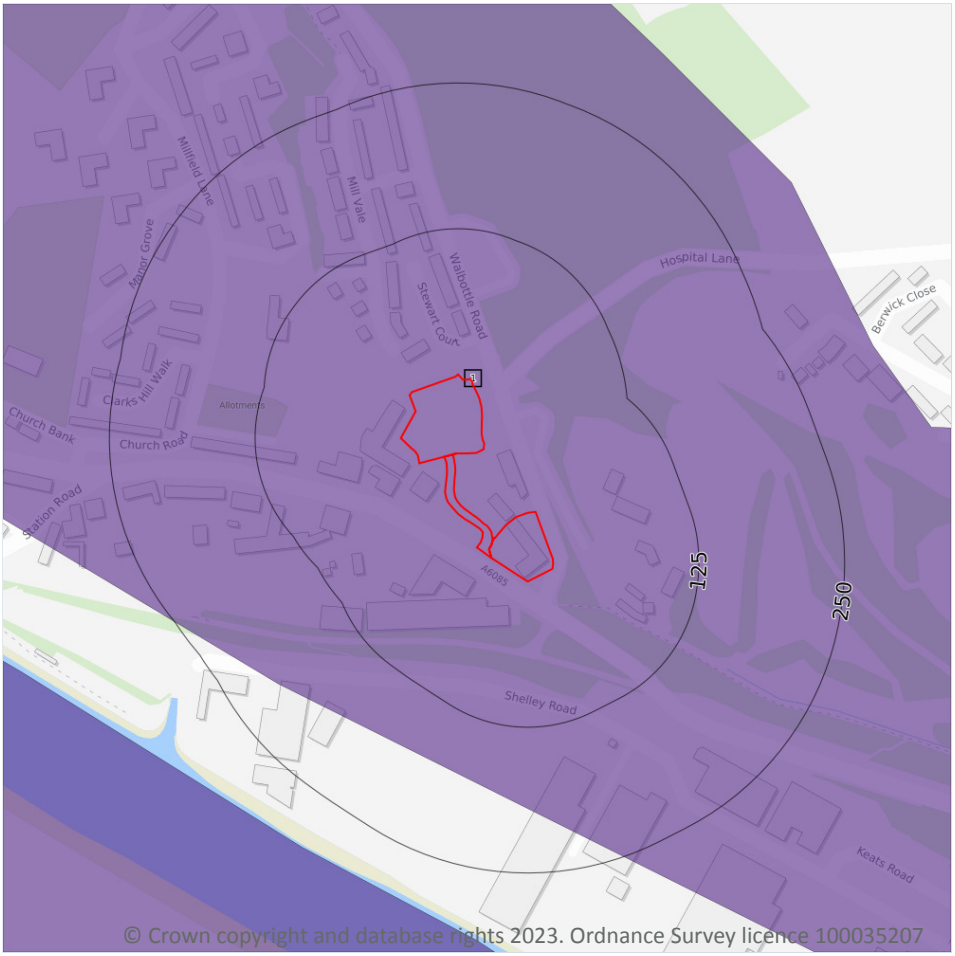
11.7 Registered Parks and Gardens

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 93 >**

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.

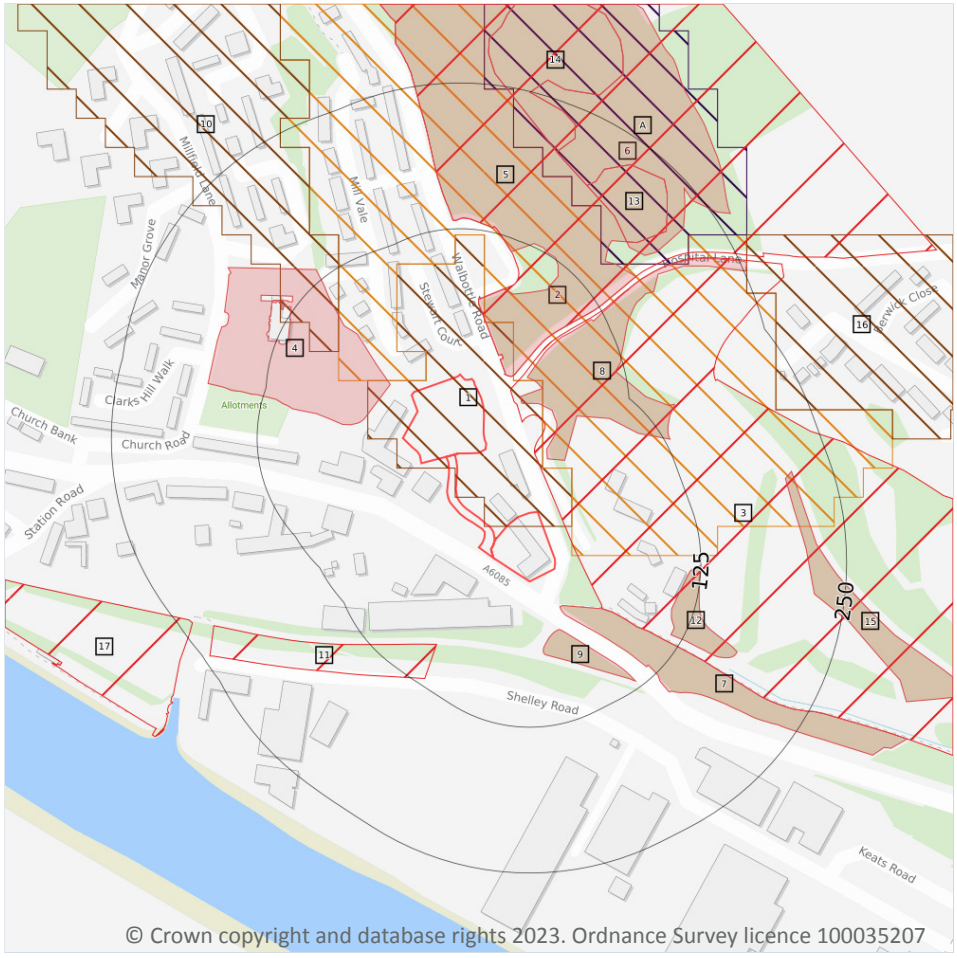
12.5 Countryside Stewardship Schemes

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



13.1 Priority Habitat Inventory

Records within 250m	10

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

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

ID	Location	Main Habitat	Other habitats
4	21m NW	No main habitat but additional habitats present	Main habitat: DWOOD (INV > 50%)
5	27m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	31m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	33m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
9	48m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	106m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	176m NE	Lowland meadows	Main habitat: LMEAD (INV > 50%)
13	177m NE	Lowland meadows	Main habitat: DWOOD (INV > 50%); LMEAD (INV > 50%)
14	208m N	Lowland meadows	Main habitat: DWOOD (INV > 50%); LMEAD (INV > 50%)
15	209m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	**5**

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.

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

ID	Location	Type	Habitat
1	**On site**	**Network Enhancement Zone 2**	**Not specified**
2	6m NW	Network Enhancement Zone 1	Not specified
10	73m NW	Network Enhancement Zone 2	Not specified
A	148m NE	Primary Habitat	Lowland meadows
16	222m E	Network Enhancement Zone 2	Not specified

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	**4**

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

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

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
3	17m SE	PERCY PIT L.N.R. (TYNE and WEAR); BRITPITS ref: 95942	Low	Butterfly Conservation Dingy Skipper data	British Geological Survey BRITPITS database	OMH Survey 2012
6	27m N	WALBOTTLE L.N.R. (TYNE and WEAR); BRITPITS ref: 14345	Medium	Butterfly Conservation Dingy Skipper data	British Geological Survey BRITPITS database	OMH Survey 2012
11	89m S	SHELLY ROAD, NEWCASTLE (TYNE and WEAR)	Low	Butterfly Conservation Dingy Skipper data	UK Perspectives Aerial Photography	-
17	239m SW	NLUD Ref: 451000147	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

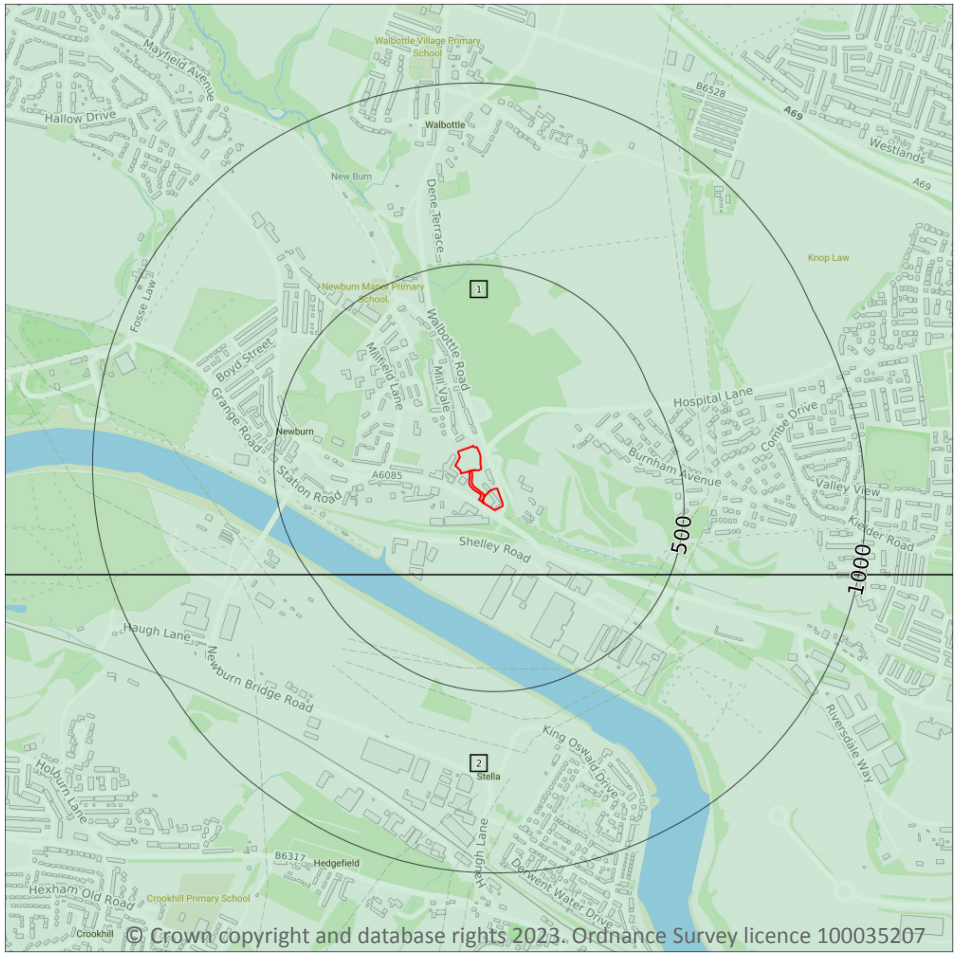
13.4 Limestone Pavement Orders

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



Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m	2

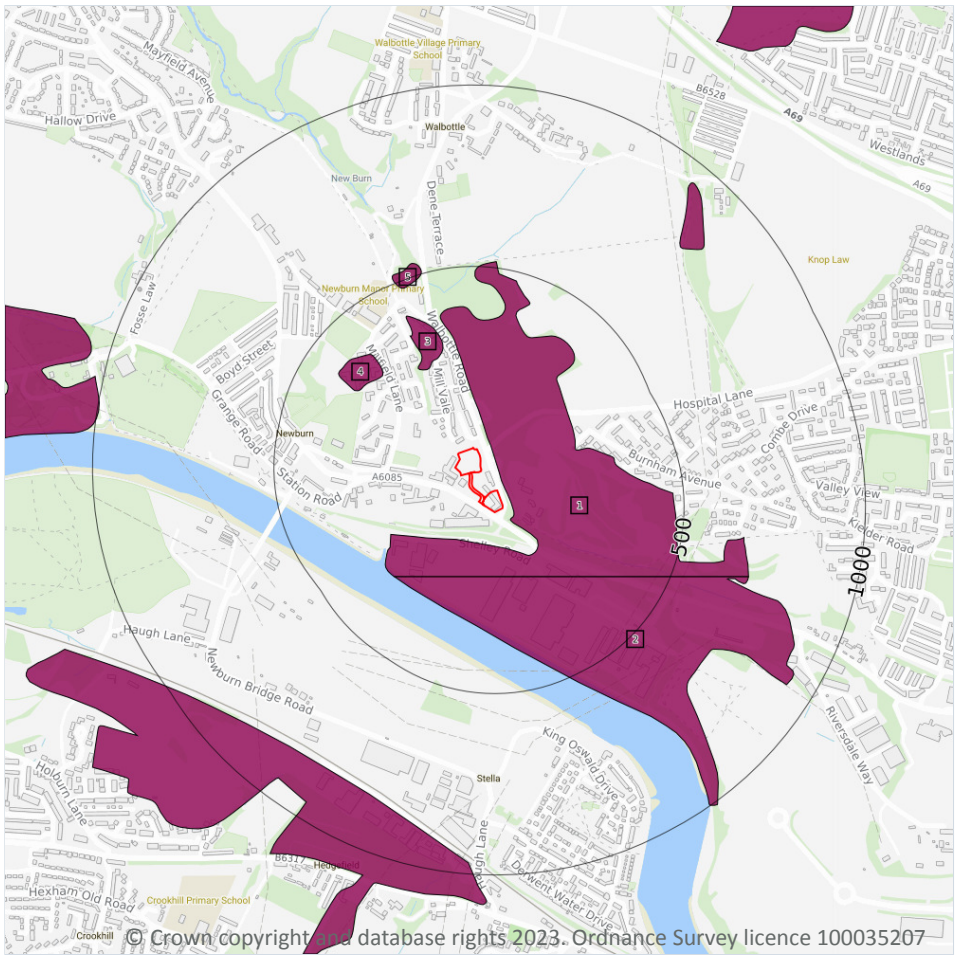
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 98 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**NZ16NE**
2	178m S	Full	Full	Full	Full	NZ16SE

This data is sourced from the British Geological Survey.

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



Site Outline

Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m	5

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

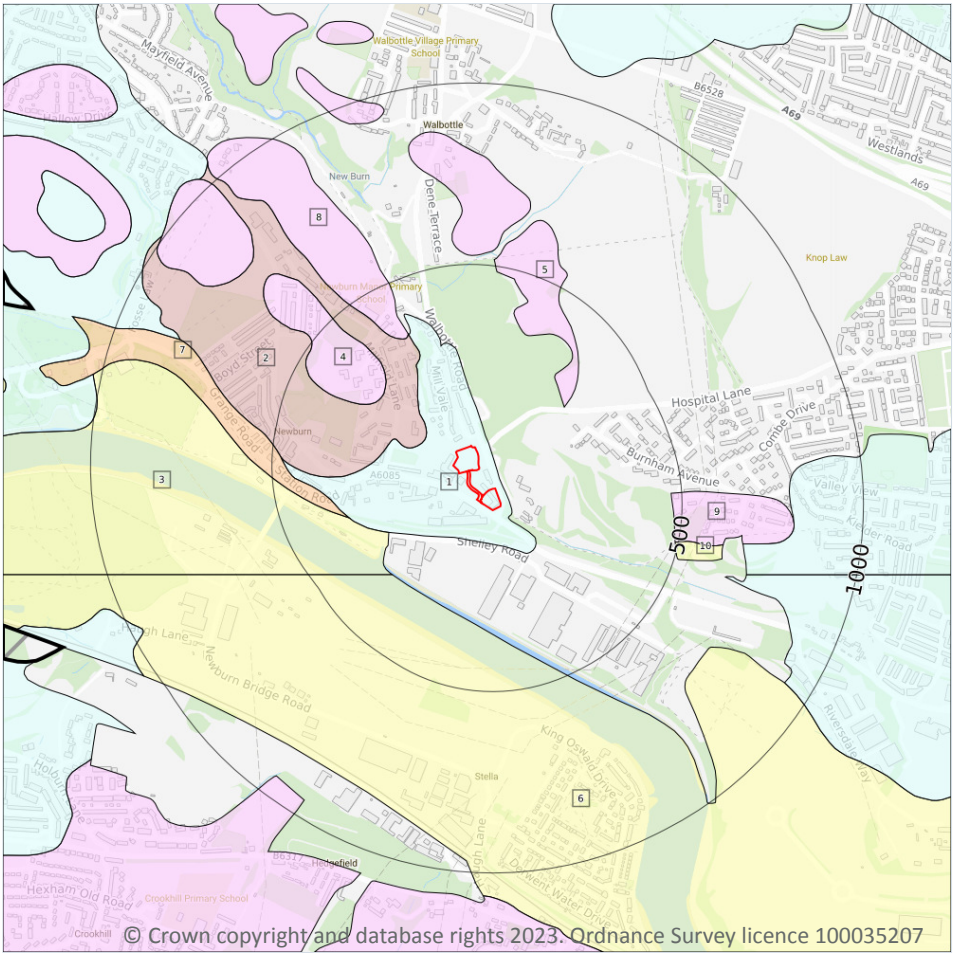
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 99 >**

ID	Location	LEX Code	Description	Rock description
1	21m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	178m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	247m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	300m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

ID	Location	LEX Code	Description	Rock description
5	480m N	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	10

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 101 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**TILL-DMTN**	**Till - Diamicton**	**Diamicton**
2	93m NW	HEAD-DMTN	Head - Diamicton	Diamicton
3	253m SW	ALV-XVSZ	Alluvium - Gravel, Sand And Silt	Gravel, Sand And Silt

ID	Location	LEX Code	Description	Rock description
4	255m NW	GFDU-XVSZ	Glaciofluvial Deposits - Gravel, Sand And Silt	Gravel, Sand And Silt
5	270m NE	GFDU-XVSZ	Glaciofluvial Deposits - Gravel, Sand And Silt	Gravel, Sand And Silt
6	298m S	ALV-XVSZ	Alluvium - Gravel, Sand And Silt	Gravel, Sand And Silt
7	321m W	RTDU-XVSZ	River Terrace Deposits (undifferentiated) - Gravel, Sand And Silt	Gravel, Sand And Silt
8	341m NW	GFDU-XVSZ	Glaciofluvial Deposits - Gravel, Sand And Silt	Gravel, Sand And Silt
9	471m E	GFDU-XVSZ	Glaciofluvial Deposits - Gravel, Sand And Silt	Gravel, Sand And Silt
10	492m E	ALV-XVSZ	Alluvium - Gravel, Sand And Silt	Gravel, Sand And Silt

This data is sourced from the British Geological Survey.

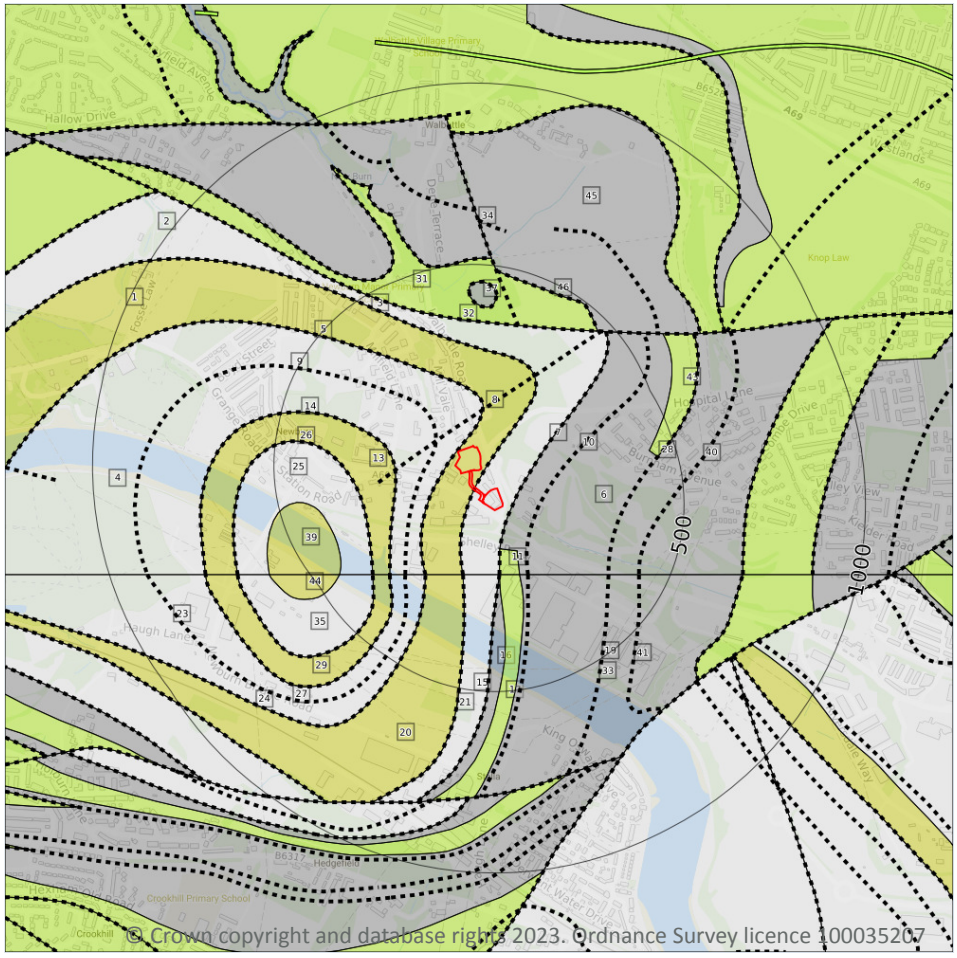
14.4 Landslip (10k)

Records within 500m	**0**

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m	21

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

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

ID	Location	LEX Code	Description	Rock age
1	**On site**	**PLCM-SDST**	**Pennine Lower Coal Measures Formation - Sandstone**	**Langsettian Sub-age**
2	**On site**	**PLCM-MDSS**	**Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone**	**Langsettian Sub-age**
4	4m NW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age

ID	Location	LEX Code	Description	Rock age
6	25m SE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
11	108m S	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
13	166m W	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
15	178m S	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
16	178m S	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
17	178m S	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
19	191m SE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
20	198m S	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
23	254m SW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
25	275m W	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
29	321m SW	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
31	342m N	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
35	358m SW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
37	384m N	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
39	384m W	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
43	430m E	PMCM-SDST	Pennine Middle Coal Measures Formation - Sandstone	Bolsovian Sub-age - Duckmantian Sub-age
44	436m SW	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
45	462m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovian Sub-age - Duckmantian Sub-age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	**25**

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

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

ID	Location	Category	Description
3	**On site**	**ROCK**	**Coal seam, inferred**
5	4m NW	ROCK	Coal seam, inferred
7	25m SE	FOSSIL_HORIZON	Fossil horizon, marine band
8	59m NW	FOLD_AXIS	Axial plane trace of major anticline
9	65m NW	ROCK	Coal seam, inferred
10	93m SE	ROCK	Coal seam, inferred
12	108m S	FOSSIL_HORIZON	Fossil horizon, marine band
14	166m W	ROCK	Coal seam, inferred
18	178m S	FOSSIL_HORIZON	Fossil horizon, marine band coincident with bedrock geology boundary
21	198m S	ROCK	Coal seam, inferred coincident with bedrock geology boundary
22	200m SE	ROCK	Coal seam, inferred
24	254m SW	ROCK	Coal seam, inferred coincident with bedrock geology boundary
26	275m W	ROCK	Coal seam, inferred
27	290m SW	ROCK	Coal seam, inferred
28	316m SE	ROCK	Coal seam, inferred
30	321m SW	ROCK	Coal seam, inferred coincident with bedrock geology boundary
32	342m N	FAULT	Normal fault, inferred
33	348m SE	ROCK	Coal seam, inferred
34	354m N	FAULT	Normal fault, inferred
36	358m SW	ROCK	Coal seam, inferred coincident with bedrock geology boundary
38	384m N	ROCK	Coal seam, inferred
40	404m SE	ROCK	Coal seam, inferred
41	421m SE	ROCK	Coal seam, inferred

ID	Location	Category	Description
42	422m N	ROCK	Coal seam, inferred
46	462m NE	ROCK	Coal seam, inferred

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability

Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

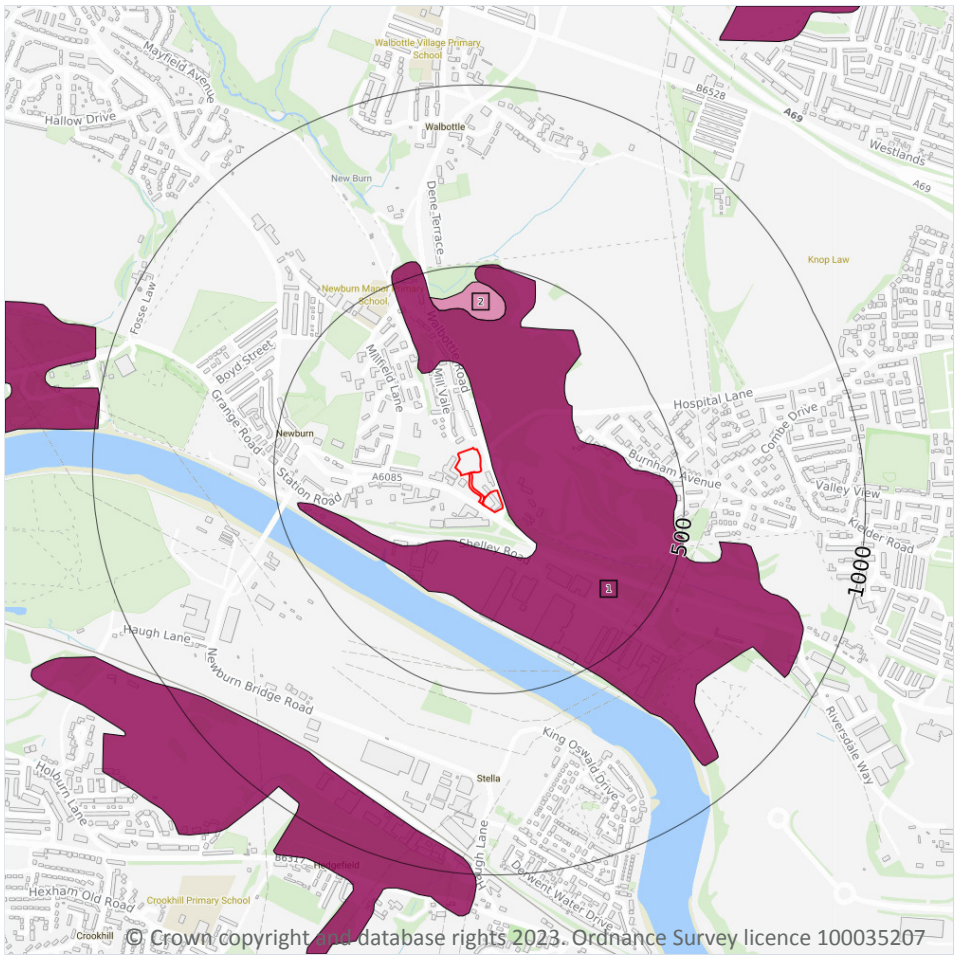
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 107 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW020_newcastle_v4**

This data is sourced from the British Geological Survey.

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



Site Outline

Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m	2

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

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 108 >**

ID	Location	LEX Code	Description	Rock description
1	8m SE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	353m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

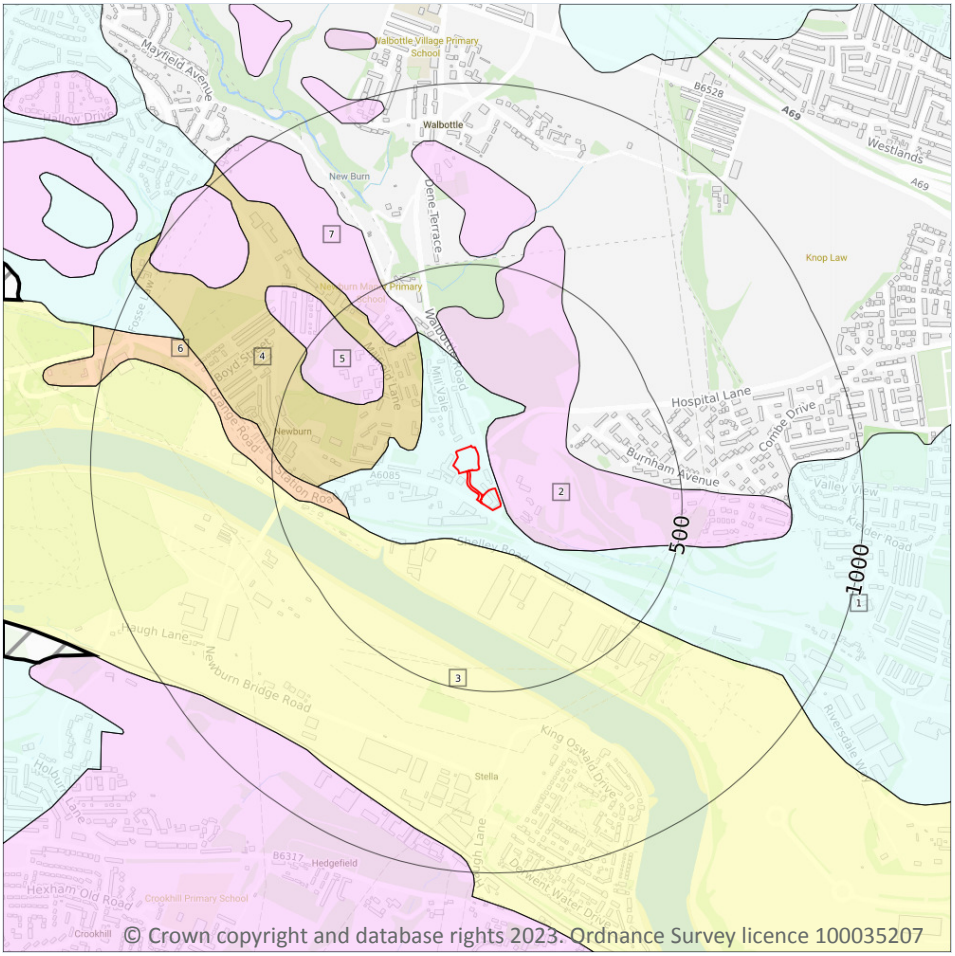
Records within 50m	1

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
8m SE	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 **7**

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 110 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**TILLD-DMTN**	**TILL, DEVENSIAN**	**DIAMICTON**
2	8m SE	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL
3	106m S	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

ID	Location	LEX Code	Description	Rock description
4	110m NW	PELC-C	PELAW CLAY MEMBER	CLAY
5	255m NW	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL
6	317m W	RTDU-XVSZ	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	GRAVEL, SAND AND SILT
7	334m NW	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m **2**

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**High**	**Low**
8m SE	Intergranular	Very High	High

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m **0**

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

This data is sourced from the British Geological Survey.

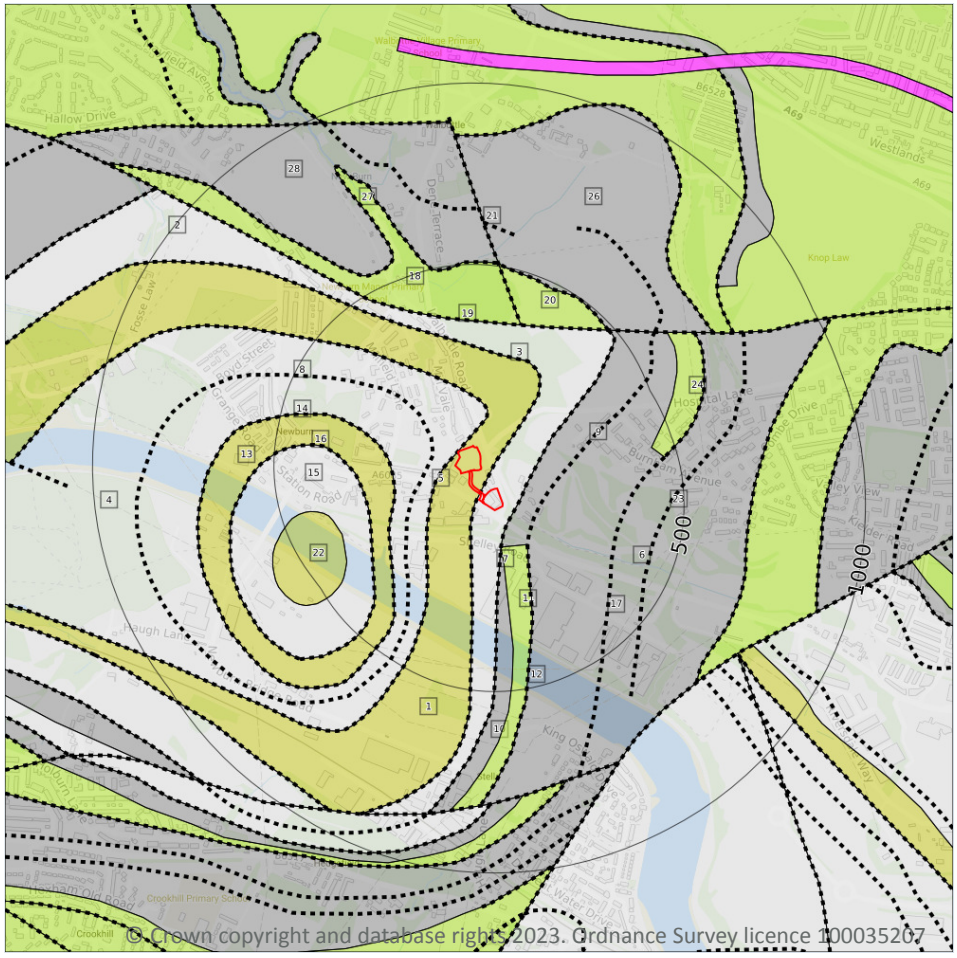
15.7 Landslip permeability (50k)

Records within 50m **0**

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m	14

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 112 >**

ID	Location	LEX Code	Description	Rock age
1	On site	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
2	On site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

ID	Location	LEX Code	Description	Rock age
4	2m NW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
6	34m SE	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
10	103m S	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
11	103m S	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
13	174m W	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
15	263m W	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
18	343m N	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
20	358m N	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
22	365m SW	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
24	439m E	PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
26	483m N	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
28	493m N	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m **3**

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Moderate**	**Low**
On site	**Fracture**	**High**	**Moderate**
34m SE	Fracture	Moderate	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	**14**

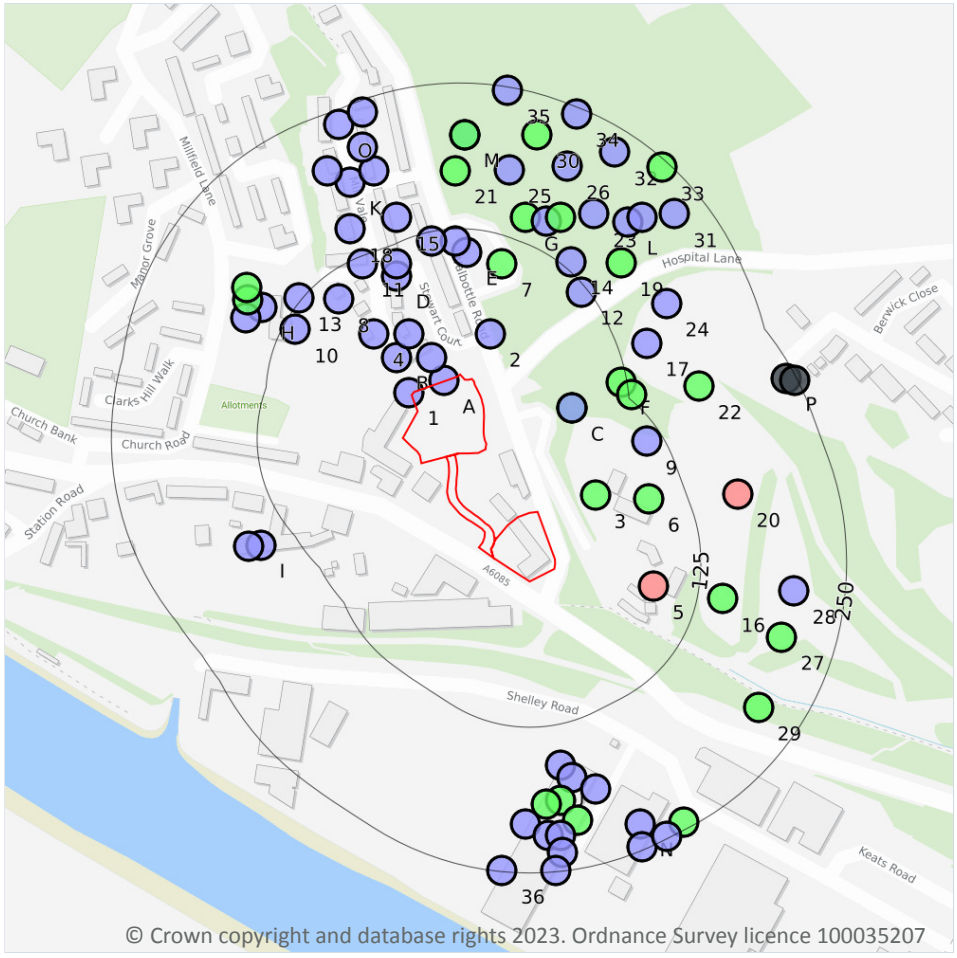
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

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

ID	Location	Category	Description
3	**On site**	**ROCK**	**Coal seam, inferred**
5	2m NW	ROCK	Coal seam, inferred
7	34m SE	FOSSIL_HORIZON	Marine band
8	68m NW	ROCK	Coal seam, inferred
9	93m SE	ROCK	Coal seam, inferred
12	126m SE	ROCK	Coal seam, inferred
14	174m W	ROCK	Coal seam, inferred
16	263m W	ROCK	Coal seam, inferred
17	322m SE	ROCK	Coal seam, inferred
19	343m N	FAULT	Fault, inferred, displacement unknown
21	358m N	FAULT	Fault, inferred, displacement unknown
23	427m E	ROCK	Coal seam, inferred
25	464m E	ROCK	Coal seam, inferred
27	483m N	ROCK	Coal seam, inferred

This data is sourced from the British Geological Survey.

16 Boreholes



16.1 BGS Boreholes

Records within 250m	85

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

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

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	1m N	417040 565350	CAROBEL SITE NEWBURN 4	5.0	N	18853271 ↗
1	4m NW	417010 565340	CAROBEL SITE NEWBURN TPA	4.0	N	18853272 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	23m N	417030 565370	CAROBEL SITE NEWBURN TPB	3.0	N	18853273 ↗
B	33m NW	417000 565370	CAROBEL SITE NEWBURN TPC	1.0	N	18853282 ↗
2	42m N	417080 565390	WALBOTTLE BRICKWORKS NEWCASTLE 12	5.5	N	15936322 ↗
B	49m NW	417010 565390	CAROBEL SITE NEWBURN TPD	3.5	N	18853283 ↗
3	51m E	417170 565252	PERCY PIT PHASE III NEWBURN 4	29.0	N	20293319 ↗
4	61m NW	416980 565390	CAROBEL SITE NEWBURN TPE	1.5	N	18853284 ↗
C	76m NE	417150 565327	PERCY PIT PHASE III NEWBURN 1	28.0	N	818267 ↗
C	76m NE	417150 565327	PERCY PIT PHASE III NEWBURN 2	5.2	N	20293316 ↗
5	86m SE	417220 565174	PERCY PIT PHASE III NEWBURN 6	31.0	N	20293321 ↗
6	94m E	417216 565249	PERCY PIT PHASE III NEWBURN 5	30.0	N	20293320 ↗
D	99m N	417000 565440	CAROBEL SITE NEWBURN TPG	3.5	N	18853286 ↗
7	101m N	417090 565450	WALBOTTLE BRICKWORKS NEWCASTLE 13	10.5	N	15936323 ↗
8	103m NW	416950 565420	CAROBEL SITE NEWBURN TPF	1.6	N	18853285 ↗
E	105m N	417060 565460	PERCY PIT WALBOTTLE BRICKWORK, NEWBURN 10	5.0	N	15936257 ↗
D	108m N	417000 565450	CAROBEL SITE NEWBURN 3	5.0	N	18853270 ↗
9	111m E	417214 565298	PERCY PIT PHASE III NEWBURN 2A	8.1	N	20293317 ↗
10	115m NW	416913 565394	LITTLEDENE HOUSE, MILLFIELD LANE, NEWBURN 6	6.0	N	18275508 ↗
E	115m N	417050 565470	WALBOTTLE BRICKWORKS NEWCASTLE 11	5.5	N	15936321 ↗
E	117m N	417030 565470	CAROBEL SITE NEWBURN TPJ	3.2	N	18853288 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
11	119m NW	416970 565450	CAROBEL SITE NEWBURN TPH	3.1	N	18853287 ↗
12	120m NE	417158 565426	NEWBURN-SITE C PERCY PIT 26	10.0	N	20293394 ↗
F	120m NE	417192 565349	PERCY PIT, NEWBURN E	11.0	N	15936194 ↗
F	127m NE	417201 565338	PERCY PIT, NEWBURN A	14.5	N	15936190 ↗
13	128m NW	416916 565421	LITTLEDENE HOUSE, MILLFIELD LANE, NEWBURN 5	6.0	N	18275507 ↗
14	132m NE	417149 565452	NEWBURN-SITE C PERCY PIT 21	10.0	N	20293399 ↗
15	145m N	417000 565490	CAROBEL SITE NEWBURN TPL	2.8	N	18853290 ↗
G	146m N	417110 565490	PERCY PIT WALBOTTLE BRICKWORK, NEWBURN 8	20.0	N	15936254 ↗
16	146m SE	417279 565163	PERCY PIT PHASE III NEWBURN 7	29.0	N	20293322 ↗
H	149m NW	416884 565413	LITTLEDENE HOUSE, MILLFIELD LANE, NEWBURN 4	6.0	N	18275506 ↗
17	149m NE	417214 565382	PERCY PIT, NEWBURN D	10.0	N	15936193 ↗
G	150m N	417128 565487	NEWBURN-SITE C PERCY PIT 19	10.0	N	20293392 ↗
18	150m NW	416960 565480	CAROBEL SITE NEWBURN TPK	3.0	N	18853289 ↗
I	153m W	416883 565209	WORKSHOP EXTENSION, HIGH STREET, NEWBURN 1	5.0	N	18346780 ↗
H	157m NW	416870 565404	LITTLEDENE HOUSE, MILLFIELD LANE, NEWBURN 3	6.0	N	18275505 ↗
G	158m N	417140 565490	PERCY PIT WALBOTTLE BRICKWORK, NEWBURN 6	26.5	N	15936252 ↗
J	160m S	417140 565020	AVELING, BARFORD NEWBURN 7	9.14	N	15943647 ↗
I	161m W	416873 565208	WORKSHOP EXTENSION, HIGH STREET, NEWBURN 2	5.0	N	18346781 ↗

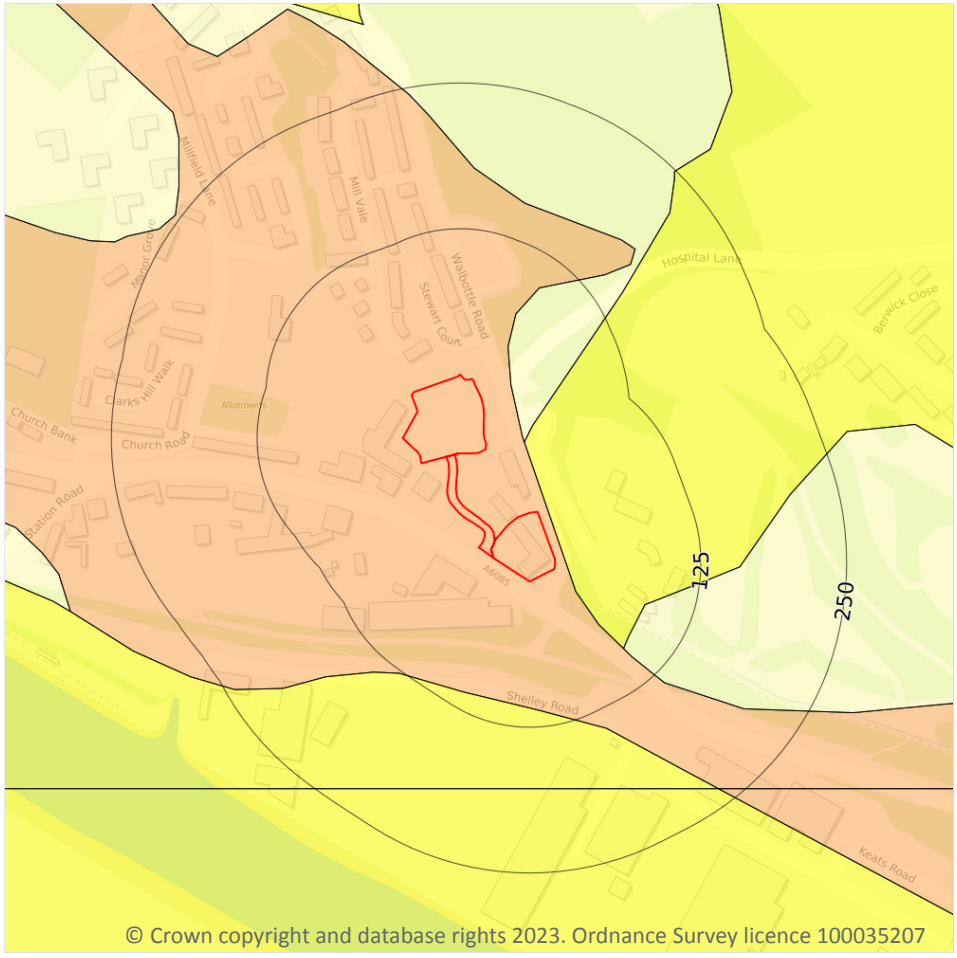
ID	Location	Grid reference	Name	Length	Confidential	Web link
19	162m NE	417192 565451	NEWBURN-SITE C PERCY PIT 6	12.35	N	20293328 ↗
H	163m NW	416872 565419	LITTLEDENE HOUSE, MILLFIELD LANE, NEWBURN 2	11.5	N	18275504 ↗
20	166m E	417292 565253	PERCY PIT PHASE III NEWBURN 3	31.5	N	20293318 ↗
H	169m NW	416871 565430	LITTLEDENE HOUSE, MILLFIELD LANE, NEWBURN 1	13.5	N	18275503 ↗
J	172m S	417150 565010	AVELING, BARFORD NEWBURN 8	9.14	N	15943648 ↗
21	175m N	417050 565530	PERCY PIT WALBOTTLE BRICKWORK, NEWBURN 8A	21.3	N	15936255 ↗
22	175m E	417259 565345	PERCY PIT, NEWBURN B	10.5	N	15936192 ↗
23	176m NE	417169 565493	NEWBURN-SITE C PERCY PIT 5	10.0	N	20293327 ↗
24	178m NE	417231 565416	PERCY PIT, NEWBURN C	7.0	N	15936191 ↗
25	181m N	417096 565531	NEWBURN-SITE C PERCY PIT 9	10.0	N	20293331 ↗
J	186m S	417170 565000	AVELING, BARFORD NEWBURN 1	9.14	N	15943641 ↗
K	188m NW	416960 565520	CAROBEL SITE NEWBURN TPM	3.25	N	18853291 ↗
J	190m S	417140 564990	AVELING, BARFORD NEWBURN 9	12.19	N	15943649 ↗
L	190m NE	417198 565486	NEWBURN-SITE C PERCY PIT 12	10.0	N	20293385 ↗
K	190m N	416980 565530	CAROBEL SITE NEWBURN TPN	1.85	N	18853292 ↗
J	191m S	417128 564987	NEWBURN INDUSTRIAL ESTATE SITE BT 26/28 1	12.3	N	15636229 ↗
26	200m N	417146 565534	NEWBURN-SITE C PERCY PIT 4	10.0	N	20293326 ↗
L	201m NE	417210 565490	PERCY PIT WALBOTTLE BRICKWORK, NEWBURN 7	6.2	N	15936253 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
27	204m SE	417330 565130	PERCY PIT WALBOTTLE BRICKWORK, NEWBURN 5A	19.0	N	15936250 ↗
K	204m NW	416940 565530	CAROBEL SITE NEWBURN TPP	3.4	N	18853293 ↗
28	206m E	417340 565170	PERCY PIT WALBOTTLE BRICKWORK, NEWBURN 5B	10.0	N	15936251 ↗
M	206m N	417058 565561	NEWBURN-SITE C PERCY PIT 1	10.0	N	20293323 ↗
M	206m N	417058 565561	NEWBURN-SITE C PERCY PIT 2	10.7	N	20293324 ↗
J	208m S	417110 564970	AVELING, BARFORD NEWBURN 6	9.14	N	15943645 ↗
J	209m S	417155 564973	NEWBURN INDUSTRIAL ESTATE SITE BT 26/28 2	11.5	N	15636230 ↗
29	211m SE	417310 565070	PERCY PIT WALBOTTLE BRICKWORK, NEWBURN 5	23.0	N	15936249 ↗
K	212m N	416970 565550	CAROBEL SITE NEWBURN TPQ	3.4	N	18853295 ↗
30	216m N	417120 565561	NEWBURN-SITE C PERCY PIT 3	11.0	N	20293325 ↗
J	218m S	417130 564960	AVELING, BARFORD NEWBURN 3	9.14	N	15943643 ↗
J	219m S	417140 564960	AVELING, BARFORD NEWBURN 2	9.14	N	15943642 ↗
31	224m NE	417238 565493	NEWBURN-SITE C PERCY PIT 11	8.0	N	20293384 ↗
N	229m SE	417209 564970	NEWBURN INDUSTRIAL ESTATE - SITE BT 26/26 1	8.55	N	15636246 ↗
32	230m NE	417187 565546	NEWBURN-SITE C PERCY PIT 10	8.0	N	20293332 ↗
J	234m S	417142 564945	WARBURTONS BAKERY, NEWBURN IND EST NEWCASTLE 2A	6.0	N	18164845 ↗
O	238m N	416950 565570	CAROBEL SITE NEWBURN TPR	3.4	N	18853302 ↗
O	240m N	416970 565580	CAROBEL SITE NEWBURN TPS	1.0	N	18853303 ↗
P	242m E	417334 565352	WEST DENTON PARK PHASE 2C TP14	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
33	244m NE	417227 565533	NEWBURN-SITE C PERCY PIT 13	11.5	N	20293386 ↗
N	244m SE	417246 564971	NEWBURN INDUSTRIAL ESTATE - SITE BT 26/24 1	14.63	N	15636233 ↗
34	245m N	417154 565579	NEWBURN-SITE C PERCY PIT 25	8.0	N	20293395 ↗
35	247m N	417095 565599	NEWBURN-SITE C PERCY PIT 8	5.0	N	20293330 ↗
N	247m SE	417210 564950	NEWBURN INDUSTRIAL ESTATE - SITE BT 26/26 5	7.92	N	15636250 ↗
P	247m E	417341 565350	WEST DENTON PARK PHASE 2C 11	-	Y	N/A
N	248m SE	417231 564959	NEWBURN INDUSTRIAL ESTATE - SITE BT 26/26 2	9.44	N	15636247 ↗
J	249m S	417136 564930	WARBURTONS BAKERY, NEWBURN IND EST NEWCASTLE 1A	6.0	N	18164846 ↗
36	249m S	417090 564930	AVELING, BARFORD NEWBURN 5	6.09	N	15943646 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m	3

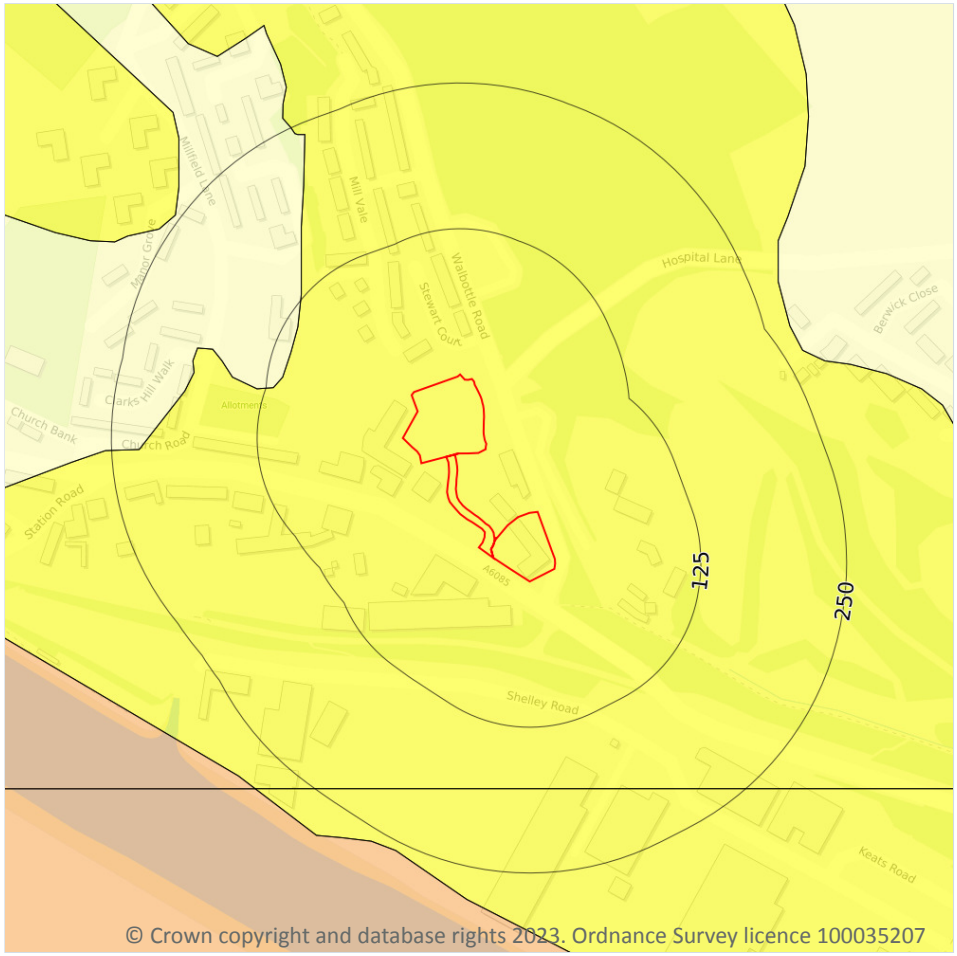
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 121 >**

Location	Hazard rating	Details
On site	**Low**	**Ground conditions predominantly medium plasticity.**
8m SE	Very low	Ground conditions predominantly low plasticity.
27m NE	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m	1

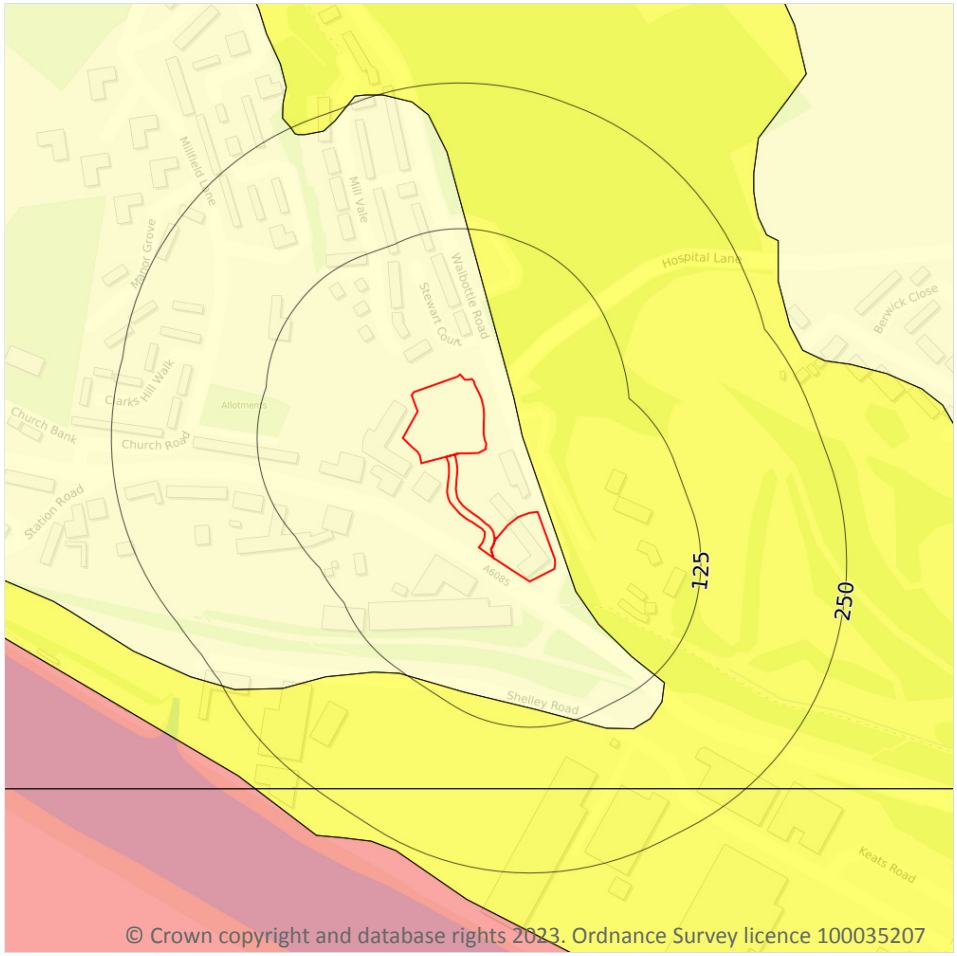
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 123 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m	2

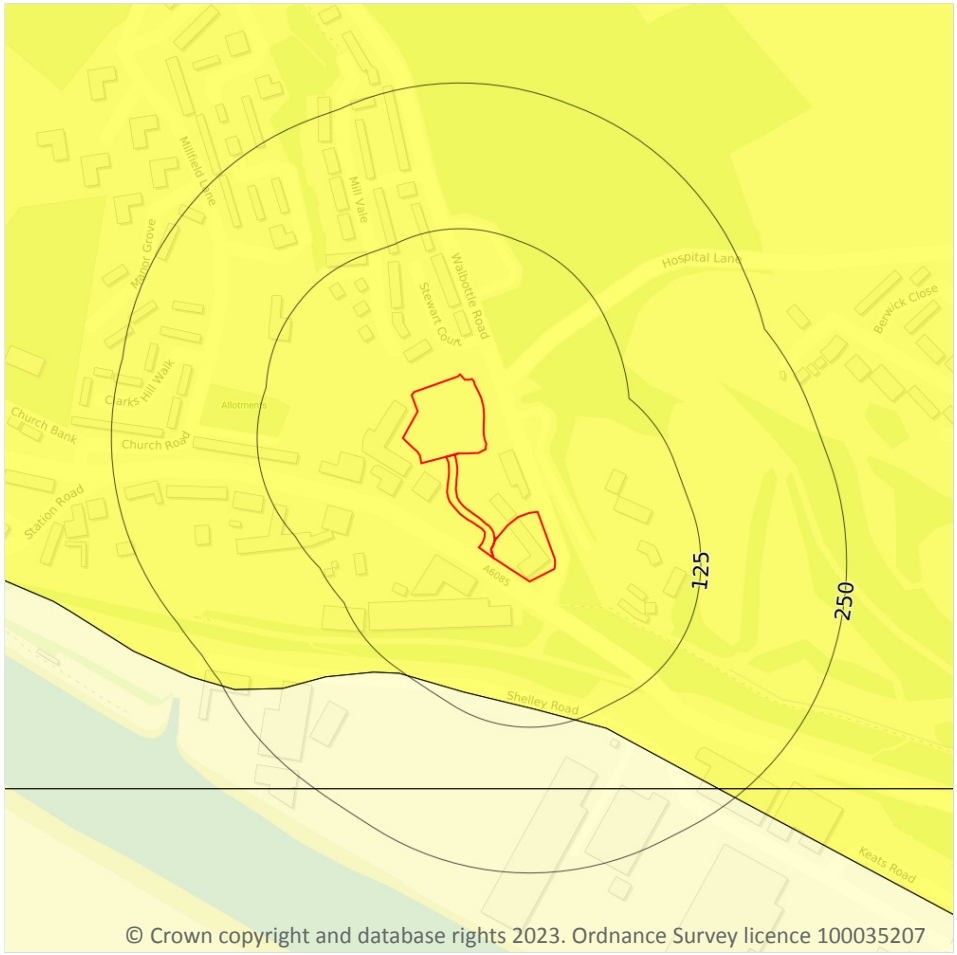
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 124 >**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
8m SE	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m	1

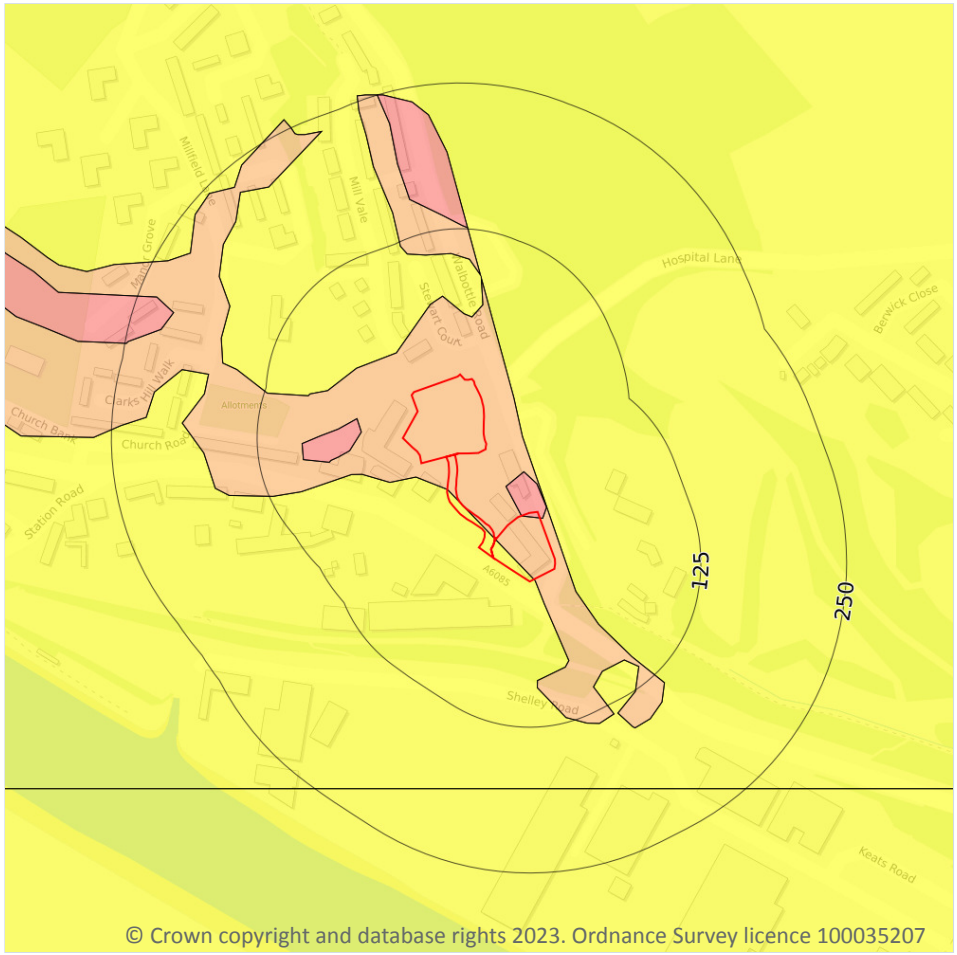
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 126 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m	4

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 127 >**

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

Location	Hazard rating	Details
On site	**Low**	**Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.**
On site	**Moderate**	**Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the stability of the site.**
36m W	Moderate	Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the 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

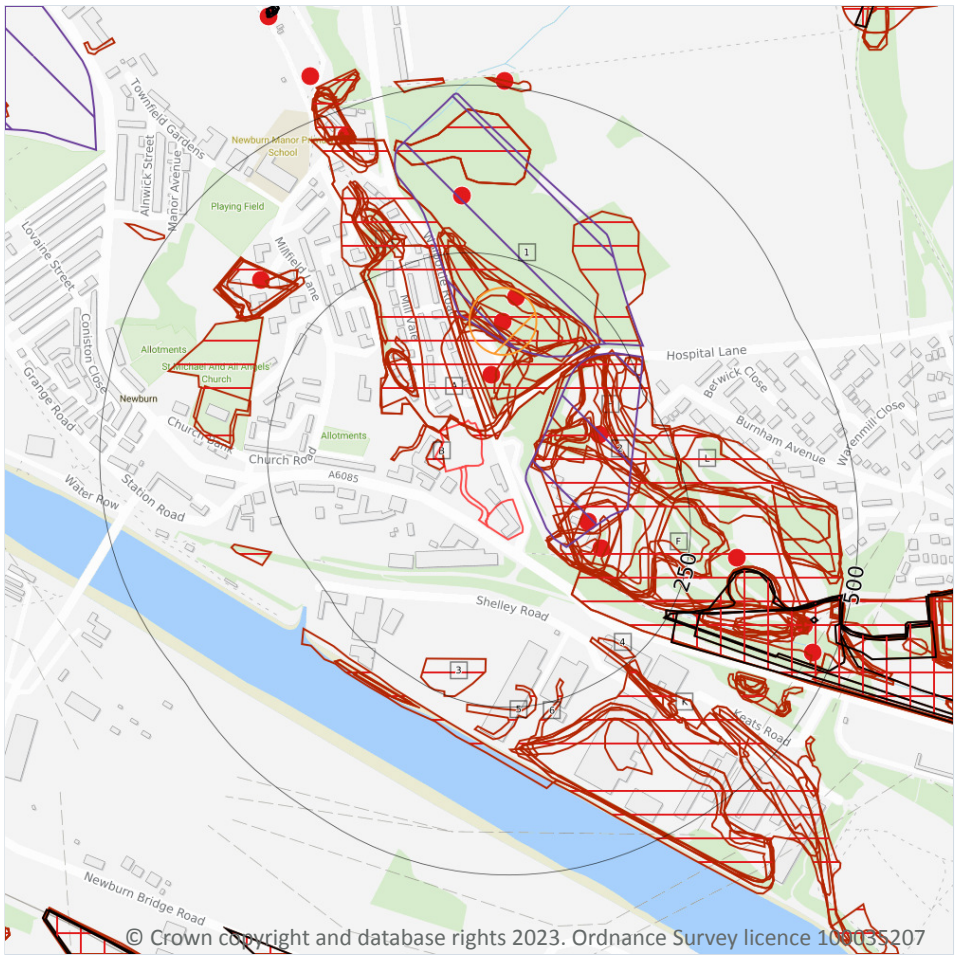
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 129 >**

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

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

BritPits

Surface ground workings

Underground workings

Underground mining extents

Historical mineral planning areas

TCA non-coal mining

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	12

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

Features are displayed on the Mining and ground workings map on **page 131 >**

ID	Location	Details	Description
C	76m N	Name: Union Pit Address: Newburn, NEWCASTLE UPON TYNE, Northumberland Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
E	97m SE	Name: Newburn Hills Sandpit Address: Newburn, NEWCASTLE UPON TYNE, Northumberland Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
E	120m SE	Name: Newburn Hills Sandpit Address: Newburn, NEWCASTLE UPON TYNE, Northumberland Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
C	156m N	Name: Brick Pit Address: Newburn, NEWCASTLE UPON TYNE, Northumberland Commodity: Clay & Shale Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
D	162m E	Name: Newburn Hills Sandpit Address: Newburn, NEWCASTLE-UPON-TYNE, Northumberland Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
C	197m N	Name: Newburn Clay Pit Address: Newburn, NEWCASTLE UPON TYNE, Northumberland Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

ID	Location	Details	Description
G	322m E	Name: Newburn Hills Sandpit Address: Newburn, NEWCASTLE UPON TYNE, Tyne and Wear Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
11	334m N	Name: Newburn Clay Pit Address: Newburn, NEWCASTLE-UPON-TYNE, Northumberland Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
O	351m NW	Name: Newburn Clay Pit Address: Newburn, NEWCASTLE-UPON-TYNE, Northumberland Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
I	442m SE	Name: Walbottle Colliery, George Pit Address: Newburn, NEWCASTLE UPON TYNE, Northumberland Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
T	460m N	Name: Winning Sand Pit Address: Newburn, NEWCASTLE UPON TYNE, Northumberland Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
I	468m SE	Name: Walbottle Colliery, Percy Pit Address: Newburn, NEWCASTLE UPON TYNE, Northumberland Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	58

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 131 >**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Brick Works**	**1895**	**1:10560**
A	**On site**	**Brick Works**	**1921**	**1:10560**
A	**On site**	**Brick Works**	**1921**	**1:10560**
A	**On site**	**Brick Works**	**1938**	**1:10560**
B	**On site**	**Unspecified Ground Workings**	**1957**	**1:10560**
C	**On site**	**Brick Works**	**1921**	**1:10560**
C	10m N	Brick Works	1895	1:10560
C	20m N	Brick Works	1921	1:10560
B	23m NW	Unspecified Ground Workings	1952	1:10560
C	28m N	Brick Works	1859	1:10560
C	33m N	Brick Works	1957	1:10560
E	38m SE	Sand Pit	1895	1:10560
E	38m SE	Refuse Heap	1976	1:10000
E	39m SE	Sand Pit	1895	1:10560
F	41m SE	Refuse Heap	1967	1:10560
C	49m N	Unspecified Ground Workings	1957	1:10560
G	53m SE	Unspecified Ground Workings	1957	1:10560
F	55m E	Sand Pit	1921	1:10560
E	60m SE	Sand Pit	1859	1:10560
F	60m E	Sand Pit	1921	1:10560
D	62m E	Unspecified Ground Workings	1921	1:10560
A	62m NW	Unspecified Pit	1921	1:10560
A	62m NW	Unspecified Pit	1921	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
F	65m SE	Sand Pit	1938	1:10560
E	70m SE	Unspecified Pit	1952	1:10560
A	72m NW	Unspecified Pit	1938	1:10560
A	72m NW	Unspecified Pit	1921	1:10560
E	73m SE	Unspecified Pit	1921	1:10560
D	74m E	Unspecified Ground Workings	1952	1:10560
A	83m NW	Unspecified Ground Workings	1921	1:10560
H	86m NE	Unspecified Disused Tip	1976	1:10000
E	89m SE	Unspecified Disused Tip	1985	1:10000
D	92m E	Refuse Heap	1957	1:10560
C	99m NE	Unspecified Ground Workings	1967	1:10560
C	102m N	Refuse Heap	1976	1:10000
I	103m SE	Colliery	1921	1:10560
I	103m SE	Colliery	1921	1:10560
A	120m NW	Unspecified Pit	1952	1:10560
G	128m NE	Refuse Heap	1952	1:10560
C	129m N	Unspecified Pit	1952	1:10560
C	130m N	Refuse Heap	1957	1:10560
2	132m NE	Sand Pit	1921	1:10560
J	155m NW	Unspecified Ground Workings	1938	1:10560
G	158m SE	Unspecified Disused Tips	1976	1:10000
3	181m S	Unspecified Wharf	1950	1:10560
K	188m SE	Ponds	1895	1:10560
4	195m SE	Unspecified Ground Workings	1952	1:10560
H	198m E	Unspecified Ground Workings	1952	1:10560
G	203m E	Unspecified Disused Tips	1992	1:10000
G	203m E	Unspecified Disused Tips	1985	1:10000
H	212m NE	Unspecified Pit	1957	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
5	218m S	Unspecified Ground Workings	1950	1:10560
6	222m S	Unspecified Ground Workings	1967	1:10560
H	238m NE	Unspecified Pit	1952	1:10560
L	243m E	Unspecified Ground Workings	1967	1:10560
L	243m E	Unspecified Ground Workings	1976	1:10000
I	244m SE	Colliery	1895	1:10560
I	250m SE	Colliery	1938	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	**34**

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 131 >**

ID	Location	Land Use	Year of mapping	Mapping scale
I	244m SE	Colliery	1895	1:10560
I	250m SE	Colliery	1938	1:10560
I	260m SE	Colliery	1895	1:10560
I	292m SE	Colliery	1921	1:10560
I	449m SE	Unspecified Shaft	1895	1:10560
I	487m SE	Colliery	1940	1:10560
V	667m NW	Old Coal Shafts	1921	1:10560
V	668m NW	Old Coal Shafts	1940	1:10560
V	669m NW	Old Coal Shafts	1940	1:10560
V	670m NW	Unspecified Disused Shafts	1992	1:10000
V	671m NW	Unspecified Disused Shafts	1985	1:10000
V	671m NW	Unspecified Disused Shafts	1976	1:10000
V	672m NW	Old Coal Shafts	1938	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
V	672m NW	Unspecified Disused Shafts	1985	1:10000
V	672m NW	Unspecified Disused Shafts	1976	1:10000
V	673m NW	Old Coal Shafts	1938	1:10560
18	695m S	Colliery	1940	1:10560
-	713m N	Colliery	1859	1:10560
-	779m S	Colliery	1947	1:10560
-	811m SW	Colliery	1895	1:10560
-	813m SW	Colliery	1895	1:10560
20	817m SW	Colliery	1938	1:10560
Z	821m SW	Colliery	1921	1:10560
AD	821m NE	Colliery	1859	1:10560
-	854m N	Unspecified Shaft	1967	1:10560
-	854m N	Unspecified Disused Shaft	1976	1:10000
-	859m N	Old Coal Shaft	1921	1:10560
-	859m N	Old Coal Shaft	1940	1:10560
-	859m N	Unspecified Shaft	1948	1:10560
-	864m N	Old Coal Shaft	1938	1:10560
-	888m S	Unspecified Mine	1967	1:10560
-	904m S	Old Coal Pit	1856	1:10560
-	906m NE	Unspecified Disused Mine	1967	1:10560
-	926m SW	Unspecified Drift	1895	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	2

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 131 >**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
D	29m E	Newburn Haughs	Sand and gravel	Surface mineral working	Valid	Not available
1	126m N	Newburn	Brickearth	Surface mineral working	Valid	2/12/48

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 131 >**

ID	Location	Name	Commodity	Class	Likelihood
C	107m N	Not available	Clay and Shale	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 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

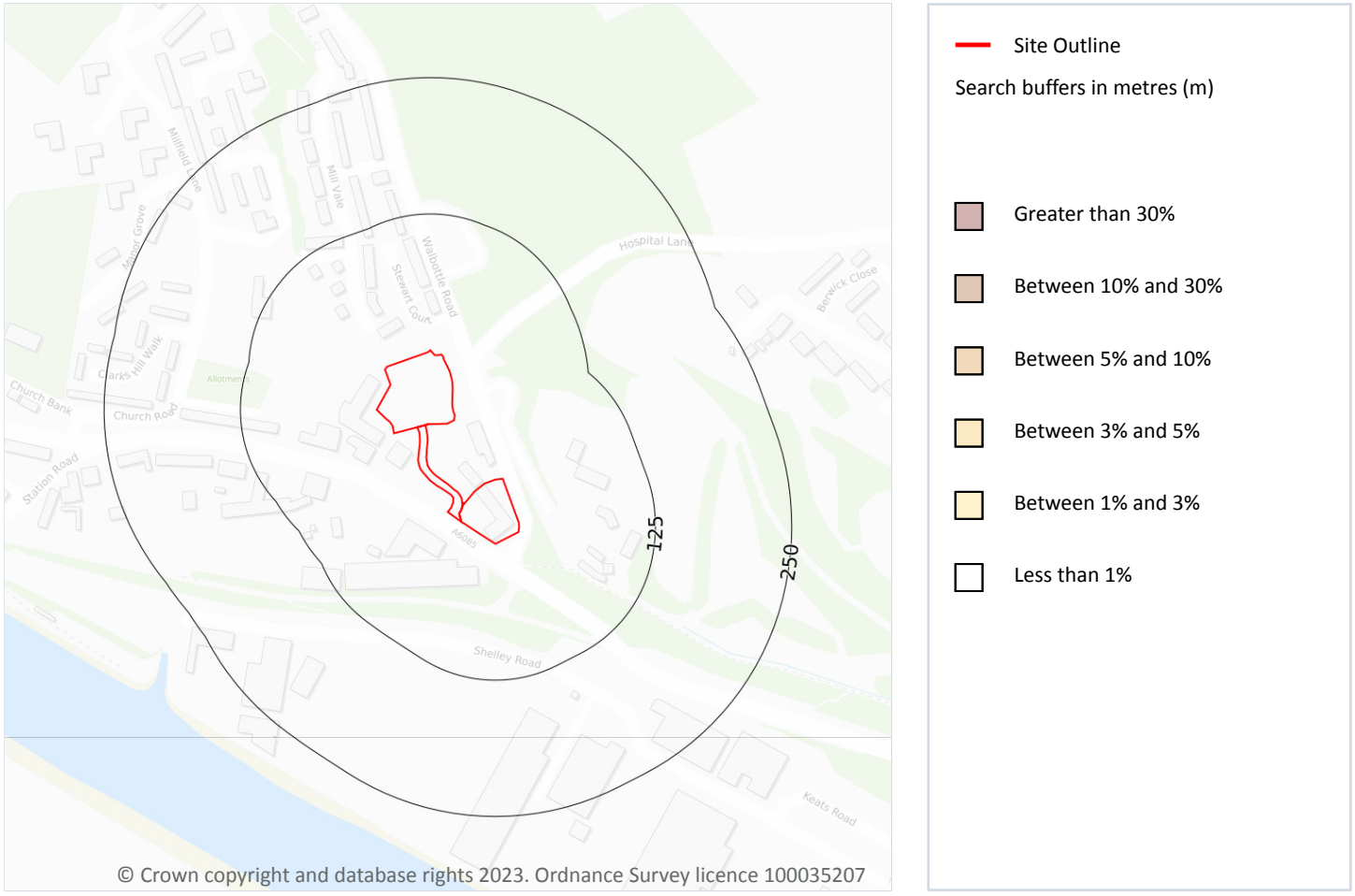
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

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



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 143 >**

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

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

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	11

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 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
1m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
5m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
5m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
13m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
13m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
28m NE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
34m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
40m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

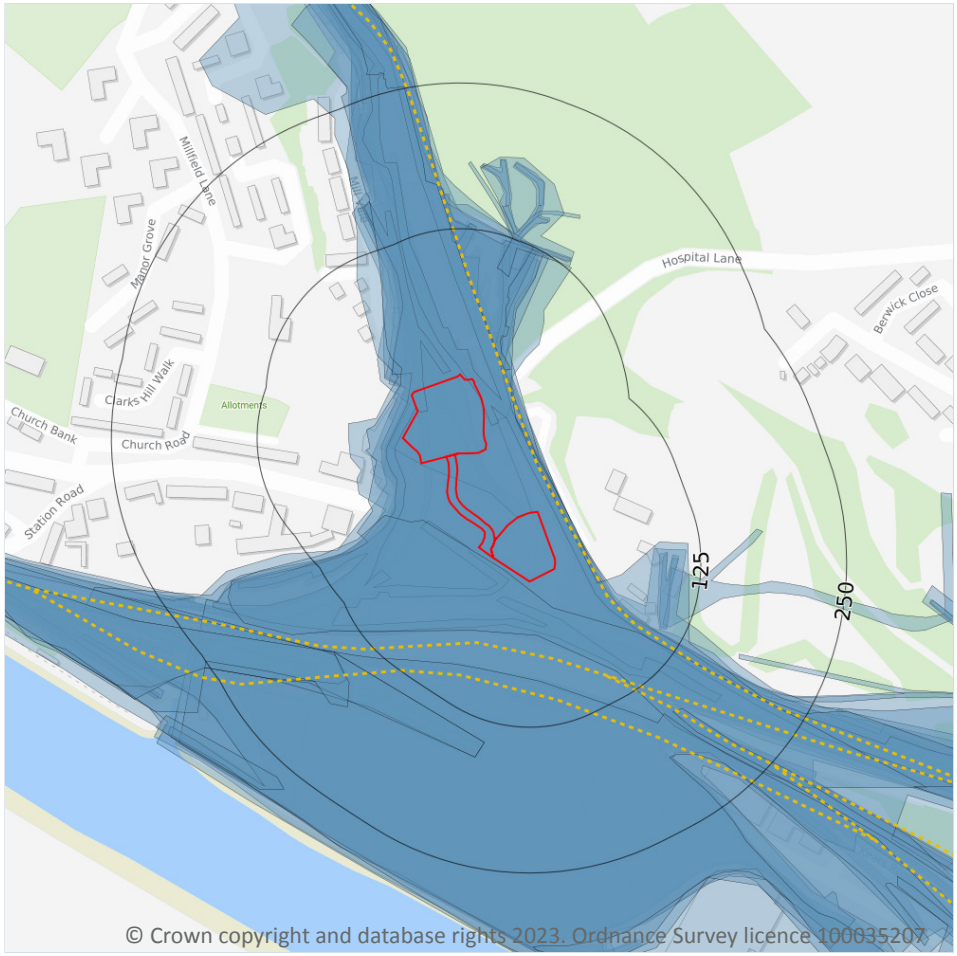
21.3 BGS Measured Urban Soil Chemistry

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



Site Outline

Search buffers in metres (m)

- Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

22.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	45

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 147 >**

Location	Land Use	Year of mapping	Mapping scale
On site	**Mineral Railway Sidings**	**1898**	**2500**
On site	**Mineral Railway Sidings**	**1920**	**2500**
On site	**Mineral Railway Sidings**	**1936**	**2500**
On site	**Railway Sidings**	**1970**	**2500**
On site	**Mineral Railway Sidings**	**1897**	**2500**
On site	**Mineral Railway Sidings**	**1950**	**1250**
On site	**Mineral Railway Sidings**	**1950**	**2500**
On site	**Mineral Railway Sidings**	**1938**	**10560**
On site	**Mineral Railway Sidings**	**1921**	**10560**
On site	**Railway Sidings**	**1952**	**10560**
On site	**Railway Sidings**	**1895**	**10560**
On site	**Railway Sidings**	**1921**	**10560**
2m N	Railway Sidings	1963	1250
2m N	Railway Sidings	1970	2500
4m S	Mineral Railway Sidings	1952	10560
28m N	Railway Sidings	1859	10560
33m NW	Railway Sidings	1963	1250

Location	Land Use	Year of mapping	Mapping scale
51m SW	Mineral Railway Sidings	1950	1250
53m SW	Railway Sidings	1950	2500
74m N	Tramway Sidings	1950	2500
76m N	Tramway Sidings	1950	1250
76m N	Railway Sidings	1936	2500
82m S	Railway Sidings	1921	10560
90m SE	Railway Sidings	1898	2500
92m SE	Railway Sidings	1897	2500
93m N	Railway Sidings	1957	10560
99m SE	Tramway Sidings	1936	2500
106m N	Railway Sidings	1969	1250
106m N	Railway Sidings	1950	1250
131m N	Railway Sidings	1950	2500
138m S	Railway Sidings	1967	10560
138m S	Railway Sidings	1976	10000
145m S	Railway Sidings	1986	1250
145m S	Railway Sidings	1982	1250
145m S	Railway Sidings	1970	2500
146m S	Railway Sidings	1963	1250
150m N	Tramway Sidings	1950	1250
153m SW	Railway Sidings	1957	10560
154m SW	Mineral Railway Sidings	1952	10560
155m N	Railway Sidings	1950	1250
155m SE	Railway Sidings	1936	2500
159m SE	Railway Sidings	1921	10560
160m N	Tramway Sidings	1950	1250
167m SW	Railway Sidings	1950	2500
167m SW	Mineral Railway Sidings	1950	1250

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	5

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 147 >**

Location	Description
19m E	Razed
61m S	Abandoned
93m S	Abandoned
100m SE	Abandoned
249m SE	Abandoned

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

Terms and conditions

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

Zetica UXB risk maps

UNEXPLODED BOMB RISK MAP

zeticauxo

SITE LOCATION

Location: NE15 8HH,
Map Centre: 417055,565401

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**
transport	**dock**	**Luftwaffe targets**
utilities	**Bombing decoy**	**other**

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

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

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

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

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

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

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

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

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

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

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

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

If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

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

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

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

Coal Authority 'Consultants Coal Mining Report'

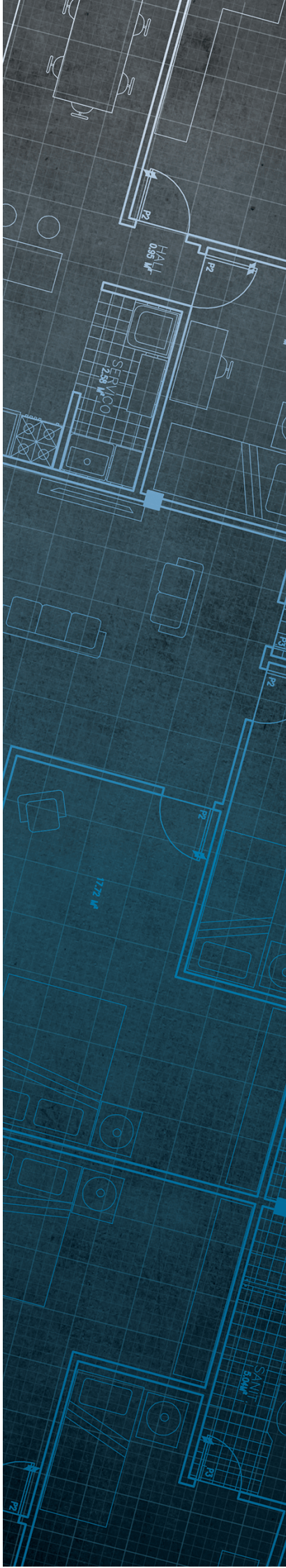
The Coal Authority

Consultants

Coal Mining Report

Walbottle Road, Newcastle Upon
Tyne
Tyne & Wear
NE15 8HH

Date of enquiry:	**21 November 2023**
Date enquiry received:	**21 November 2023**
Issue date:	**21 November 2023**
Our reference:	**51003390770001**
Your reference:	**HYD-6HT-A7V-A2S-ENT**



Consultants

Coal Mining Report

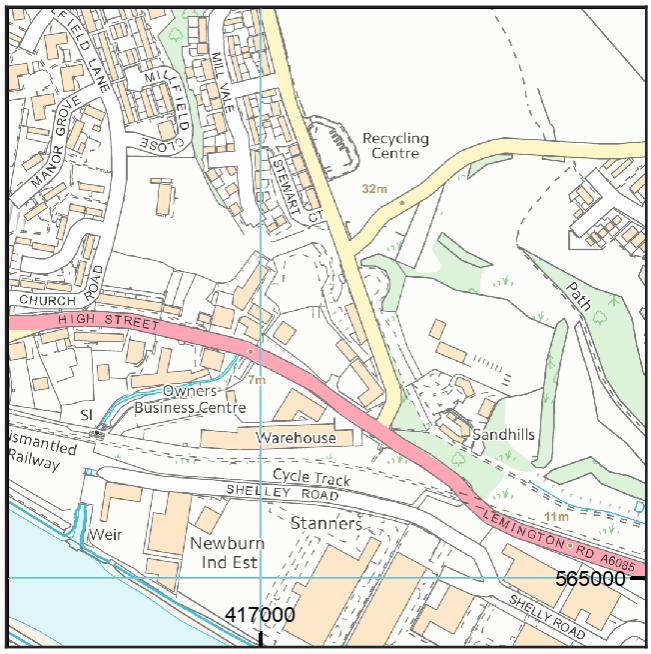
This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

GROUNDSURE LIMITED

Enquiry address

Walbottle Road, Newcastle Upon Tyne
Tyne & Wear
NE15 8HH



Approximate position of property

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

@coalauthority
/company/the-coal-authority
/thecoalauthority
/thecoalauthority

Section 1 – Mining activity and geology

Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
THROCKLEY	TOP BUSTY	Coal	5WVR	20	East	0.0	East	80	1907
WALBOTTLE	HARVEY	Coal	5WSU	21	North	4.7	South-East	117	1888
PERCY	BROCKWELL	Coal	5JMP	52	South-East	11.7	South-East	117	1931
unnamed	BTM. BUSTY	Coal	5FFZ	53	North	2.3	South-West	170	1955
ISABELLA	BROCKWELL	Coal	5JMV	62	Beneath Property	1.6	South-East	135	1949
WALBOTTLE	BROCKWELL	Coal	5JMX	74	North	0.0	East	135	1947
PERCY	TILLEY	Coal	5VPD	89	South-East	4.1	South	91	1947

Probable unrecorded shallow workings

None.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	417565-010	417012 565441		Coal	
Shaft	417565-011	417014 565432		Coal	
Shaft	417565-012	417021 565419		Coal	
Shaft	417565-013	417064 565445	It is believed that the shaft is filled but we have no record of any details.	Coal	
Shaft	417565-014	417094 565399		Coal	
Shaft	417565-017	417050 565324		Coal	
Shaft	417565-018	417028 565283		Coal	
Shaft	417565-019	417190 565229		Coal	
Shaft	417565-020	417041 565214		Coal	
Shaft	417565-021	417049 565183		Coal	

Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

10014	832	NC254
NC194	8920	10132
12028	NC197	R328B

Our records show we have more plans than those shown above which could affect the enquiry boundary.

Please contact us on 0345 762 6848 to determine the exact abandoned mine plans you require based on your needs.

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
HARVEY	Coal	Yes	Within	N/A	24
TILLEY	Coal	Yes	9.1	North-West	206
TILLEY	Coal	Yes	14.1	West	221

Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

Opencast mines

None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations

Distance to site investigation (m)	Direction
2.6	North-East

See Section 4 for further information.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining
None recorded.

Coal mining licensing
None recorded within 200 metres of the enquiry boundary.

Court orders
None recorded.

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

Withdrawal of support notices
The property is in an area where a notice to withdraw support was given in 1945.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land
The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

MINE GAS: Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

Site investigations

The site is within an area of previous interest. It is close to where the Coal Authority has received information relating to past site investigations.

The site requires further investigation and may influence how you approach your risk assessment.

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at groundstability@coal.gov.uk.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk.**

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines
Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips
Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations
Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites
Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence
Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas
Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

Mine water treatment schemes
Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining
Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing
Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders
Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices
Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices
Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

Payment to owners of former copyhold land
Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

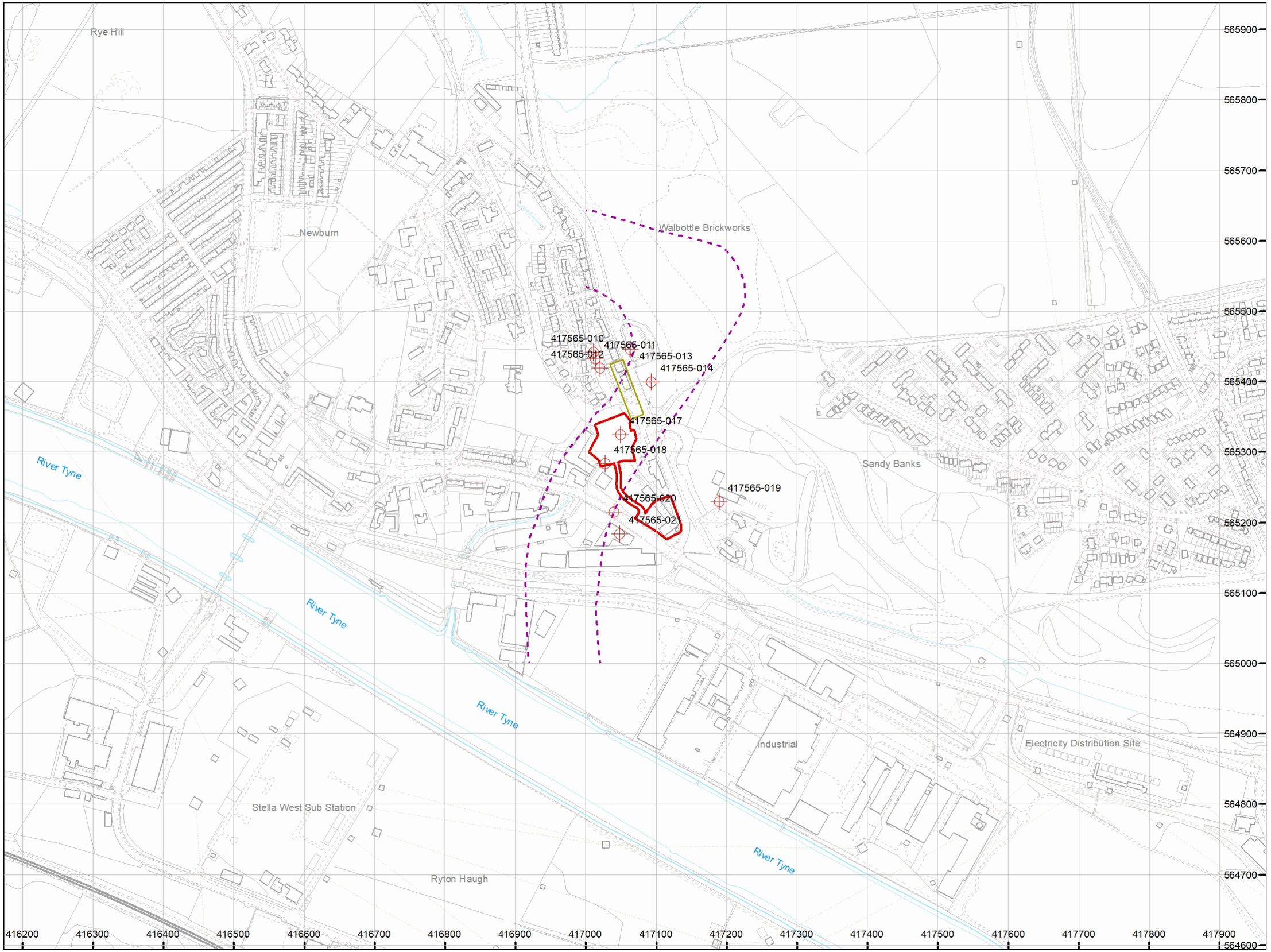
The Coal Authority

Summary of findings

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

Key

- Approximate position of the enquiry boundary shown
- Disused mine shaft
- Outcrop (Conjectured)
- Site investigations



How to contact us
0345 762 6848 (UK)
+44 (0)1623 637 000 (International)
www.groundstability.com

Appendix E Preliminary geotechnical risk register

Geotechnical hazard identification – desk study stage

Potential geotechnical hazards have been assessed in accordance with the general requirements of ICE/DETR Document 'Managing Geotechnical Risk' and the HE documents HD 41/15 and CD 622. The following pages set out the identified geotechnical risks and hazards which are associated with the proposed development and establish the approach which is to be taken to manage the risks including the geotechnical input and analysis.

Table E.1 is a preliminary assessment of possible geotechnical hazards at the site at Desk Study stage. This information is used to assist with ground investigation design.

Table E.1: Possible geotechnical hazards

Hazard	Comment	Hazard status based on desk study	
		Could be present and / or affect site **(i.e. Plausible)**	Unlikely to be present and/or affect site
Uncontrolled Made Ground (variable strength and compressibility).	Variable depths of soft/ loose Made Ground is likely to be present at shallow depth which could lead to settlement that could damage foundations.	✔	-
Soft / loose compressible ground (low strength and high settlement potential).	Potential for low strength clays and sands within the superficial deposits and poorly consolidated Made Ground material.	✔	-
Shrink swell of the clay fraction of soils under the influence of vegetation.	Mature trees are present on the site boundaries which could cause shrink/swell ground movement if shallow cohesive soils are present.	✔	-
Variable lateral and vertical changes in ground conditions.	Potential within the Made Ground and the superficial deposits.	✔	-
High sulphates present in the soils.	Associated with the Made Ground beneath the site	✔	-
Adverse chemical ground conditions, (e.g. expansive slag).	There is the potential for slag, connected with the former steel works requires further investigation	✔	-
Obstructions.	May be present associated with former construction e.g. foundations/ railway sleepers.	✔	-

Hazard	Comment	Hazard status based on desk study	
		Could be present and / or affect site **(i.e. Plausible)**	Unlikely to be present and/or affect site
Existing below ground structures to remain (on or off-site tunnels, foundations, basements, and adjacent sub-structures).	Possible foundations present from former buildings and structures on site.	✔	-
Shallow groundwater.	Perched groundwater may be present on cohesive layers within the Made Ground.	✔	-
Changing groundwater conditions.	Shallow groundwater may vary seasonally post heavy rainfall.	✔	-
Risk from erosion.	Unlikely to pose a risk to the site.	-	✔
Risk from flooding.	Unlikely to pose a risk to the site.	-	✔
Running sands and / or loose Made Ground, leading to difficulty with excavation and collapse of side walls.	If shallow groundwater is present within loose Made Ground or shallow natural sands.	✔	-
Slope stability issues – general slopes.	The site and local area are formed on sidelong ground, with the land falling to the south-west (with steeper slopes and retaining walls to the east and west of the site, slopes). The retaining walls and slopes along the eastern boundary show signs of instability. In addition, there is evidence of a landslip in the north eastern section of the site associated with the steep slopes. A moderate risk of landslides is recorded in the environmental report for a small portion along the northern boundary of the southern section of the site. Consequently, investigations should determine the stability of the retaining walls and slopes associated with the sidelong ground, and specifically the slopes along the northern and eastern site boundaries.	✔	-
Slope stability issues – retaining walls.	Potentially present in the eastern section of the site (and with the retaining walls outside of the red line boundary to the west)..	✔	-

Hazard	Comment	Hazard status based on desk study	
		Could be present and / or affect site **(i.e. Plausible)**	Unlikely to be present and/or affect site
Earthworks – settlement (due to placement of fill on soft / loose ground).	Earthworks may be required for the development.	✔	-
Earthworks – poor bearing capacity of new fill.			
Earthworks – unsuitability of site won material to be reused as fill.			
Solution features in Chalk.	N/A	-	✔
Cavities in the Superficial Deposits due to solution features.	N/A	-	✔
Dissolution (associated with "wet rock head").	N/A	-	✔
Brine extraction.	Unlikely to pose a risk to the site.	-	✔
Mining.	There are worked coal seams beneath the site as well as two recorded mine entries within the boundary with potential for unrecorded mine entries also present. There is a coal seam recorded to sub-crop beneath the site. All of the above will need to be investigated to assess the ground stability. In addition, a Coal Mining Risk Assessment will also be required.	✔	-
Cambered ground with gulls possibly present.	Unlikely to pose a risk to site.	-	✔
Relict Slip Surfaces.	Unlikely to pose a risk to site.	-	✔
Solifluction.	Unlikely to pose a risk to site.	-	✔
Problematic soils (silts and rewetting etc.).	Alluvium may be present along the previous course of the New Burn River in the north-western section of the site and possibly infilled ground.	✔	-

Appendix F Plausible source-pathway-receptor contaminant linkages

Summary of potential contaminant linkages

Table F.2 lists the plausible contaminant linkages which have been identified. These are considered as potentially unacceptable risks in line with guidelines published in LCRM (2023) and additional risk assessment is required.

Source – Pathway – Receptor Linkages have been assessed in general accordance with guidance in CIRIA Report C552 (Rudland *et al* 2001) but modified to add a 'no linkage' category and to remove low/moderate risk (See Table F.1).

It should be noted that whilst the risk assessment process undertaken in this report may identify potential risks to site demolition and redevelopment workers, consideration of occupational health and safety issues is beyond the scope of this report and need to be considered separately in the Construction Phase Health and Safety Plan.

Table F.1: Consequence versus probability assessment.

		Consequence			
Probability		Severe	Medium	Mild	Minor
	High Likelihood	Very high risk	High risk	Moderate risk	Low risk
	Likely	High risk	Moderate risk	Low risk	Very low risk
	Low Likelihood	Moderate risk	Low risk	Low risk	Very low risk
	Unlikely	Low risk	Very low risk	Very low risk	Very low risk
	No Linkage	No risk			

Table F.2: Exposure model – final source-pathway-receptor contaminant linkages

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
Historical and current land use (from the operation of the former Steel works, brick works, rail lines, garage infilled ground, refuse heap, concrete factory, depot, car park and substation): including asbestos containing materials (ACM), metal, slag, ash, hydrocarbon fuels, lubricants, BTEX/ MTBE and solvents including leakage from Underground Storage Tanks (USTs), Above Ground Storage Tanks (ASTs), the pipework between tanks and pumps, and general spillage, together with uncontrolled disposal and spillage from waste receptacles. (S01).	Ingestion, skin contact, inhalation of dust and outdoor air by people	People (neighbours, site end users).	Unlikely	Medium to severe	Very low to Low	The site is currently surfaced in asphalt hardstanding. In addition, the proposed development does not include any soft landscaped areas.
	Migration of contaminant via leachate migration through the unsaturated zone in the Made Ground or Till Deposits	Groundwater: Secondary undifferentiated Aquifer status of the Till Deposits and Secondary A aquifer status of the Pennine Lower Coal Measures Formation	Low likelihood	Medium	Low	The site currently comprises hardstanding across its entirety and the proposed development will be of similar surface coverage. Therefore, infiltration of water through the Made Ground will have been limited. Also, the presence of cohesive silts and clays within the Till Deposits will limit the migration of leachable contaminants into the groundwater. The River Tyne is down hydraulic gradient however is over 350m from the site. Due to the distance it is unlikely to pose a risk. The New Burn river is culverted and located 35m west it is unlikely a pathway is present.
	Migration of contaminant from the perched groundwater within the Till Deposits to the groundwater within the Pennine Lower Coal Measure Formation Aquifer		Low likelihood	Medium	Low	
	Surface run-off	Aquatic ecosystems. Surface water (New Burn River and River Tyne)	Low	Medium	Low	The River Burn is present 35m west, if the culvert is in poor repair it may be susceptible to leachable contaminants from Made Ground on site. The River Tyne is down hydraulic gradient however is over 350m from the site. Due to the distance it is unlikely to pose a risk.
	Base flow from contaminated groundwater					
	Root uptake by plants	Plant life: on-site and off-site	Likely	Mild	Low Risk	Mature and semi-mature trees are present on the steep slopes along the eastern boundary and along the north and western boundaries of the northern section of the site.

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
Hydrocarbon fuels, lubricants, BTEX/ MTBE and solvents from the operation of the former Iron works, brick works and garage on the site including leakage from Underground Storage Tanks (USTs), Above Ground Storage Tanks (ASTs), the pipework between tanks and pumps, and general spillage, together with uncontrolled disposal and spillage from waste receptacles.	Migration, build-up of methane and carbon dioxide via permeable soils and/ or construction gaps	People (neighbours, site end users).	Low likelihood	Medium	Low	Should leakages of tanks have occurred on-site the shallow dissolved phase fuels/ oils will have likely migrated vertically through interconnected granular layers within the Made Ground and granular superficial deposits, from the historical course of the New Burn River. The site is currently surfaced in asphalt hardstanding.
		Development end use (buildings, utilities)	Low likelihood	Severe	Moderate	
	Migration of contaminant via leachate migration through the unsaturated zone in the Made Ground or Till Deposits Migration of contaminant from the perched groundwater within the Till Deposits to the groundwater within the Pennine Lower Coal Measure Formation Aquifer	Groundwater: Secondary undifferentiated Aquifer status of the Till Deposits and Secondary A aquifer status of the Pennine Lower Coal Measures Formation	Likely	Medium	Moderate	Leakage from onsite tanks could lead to the presence of mobile dissolve phase contamination. Should interconnected granular layers within the Made Ground and or Till deposits or potential Alluvium deposits, from the historical course of the New Burn River, be of moderate permeability, migration could occur in the Secondary A Aquifer.
	Surface run-off Base flow from contaminated groundwater	Aquatic ecosystems. Surface water (New Burn River and River Tyne)	Low	Medium	Low	The River Burn is present 35m west, if the culvert is in poor repair it may be susceptible to leachable contaminants from Made Ground on site. The River Tyne is down hydraulic gradient however is over 350m from the site. Due to the distance it is unlikely to pose a risk.

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
Hydrocarbon vapours from potential VOC and petroleum hydrocarbon spillages/leaks	Ingestion, skin contact, inhalation of dust and outdoor air by people	People (neighbours, site end users).	Low	Medium	Low	Tanks are present onsite and have an active fuelling area. Contact with site users is considered likely.
	Migration, build-up of vapours via permeable soils and/ or construction gaps	People (neighbours, site end users).	Low	Medium	Low to moderate	The site is underlain by asphalt hardstanding which will sever any pathway for downward migration into the underlying superficial deposits preventing build-up of methane and carbon dioxide which could lead to potentially explosive limits.
		Development end use (buildings, utilities)		Severe		
Mine gas emissions from coal seams in the Pennine Lower Coal Measures Ground gases (carbon dioxide and methane) from organic materials in the Made Ground, potential alluvial deposits along the historical course of the New Burn and historical refuse tip in the south-eastern section of the site	Migration, build-up of methane and carbon dioxide via permeable soils and/ or construction gaps	People (neighbours, site end users). Development end use (buildings, utilities)	Low	Severe	Medium	Ground gases may be present, either generated from the Made Ground, coal seams or backfill of the historical on-site refuse tip. It is recommended shallow and deep gas and groundwater monitoring wells are installed across the site to assess the risks posed by the Made Ground and Pennine Lower Coal Measures Formation.

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
Calcium oxide, calcium hydroxide, calcium carbonate, hydrated calcium sulphate, manganese dioxide and alkalinity associated with ready mix concrete works on site	Ingestion, skin contact, inhalation of dust and outdoor air by people	People (neighbours, site end users).	Likely	Medium	Moderate	Stockpiles of concrete components, which are exposed to the open air, are likely to be transported/ wind blown onto the site coming into direct contact with people, neighbours and site end users. Dust monitoring should be conducted to check whether dust is at nuisance levels and the chemical composition of the dust present onsite.
	Migration of contaminant via leachate migration through the unsaturated zone in the Made Ground or Till Deposits	Groundwater: Secondary undifferentiated Aquifer status of the Till Deposits and Secondary A aquifer status of the Pennine Lower Coal Measures Formation	Unlikely	Medium	Very Low Risk	The site is underlain by asphalt hardstanding which will sever any pathway for downward migration into the underlying superficial deposits. Chemical testing should be conducted to check if any pathway contamination is occurring.
	Migration of contaminant from the perched groundwater within the Till Deposits to the groundwater within the Pennine Lower Coal Measure Formation Aquifer					
Leachate from landfilled waste of unknown materials which potentially include, commercial and industrial, asbestos, animal processing wastes located beyond the northern and eastern boundaries	Migration of contaminant via leachate migration through the unsaturated zone in the Made Ground or Till Deposits	People (site end users).	Low likelihood	Medium	Low	The site is underlain by asphalt hardstanding which will sever any pathway for downward migration into the underlying superficial deposits. Chemical testing should be conducted to check if any pathway contamination is occurring.

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
Coal tar potentially present in the bituminous bound roads and carparks	Ingestion, skin contact, inhalation of dust and outdoor air by people	People (site end users). Development end use (buildings, utilities)	Likely	Medium	Moderate	The site has been developed since the late 19th century with subsequent development until present day, it is likely that asphalt used contains elevated levels of Coal Tar. This should be investigated as part of the ground investigations.
PFAS (Per-and Polyfluroalkyl Substances) in AFFF (Aqueous Film-Forming Foams) in firefighting foams from the former fire station 24m west	Migration of contaminant via leachate migration through the unsaturated zone in the Made Ground or Till Deposits	People (site end users).	Unlikely	Medium	Very Low	Groundwater is likely to flow south-west towards the River Tyne. The former fire station is down hydraulic gradient from the site to the west. Any contamination to the groundwater will likely not be present on site. The site is currently surfaced in asphalt hardstanding. In addition the proposed development does not include any soft landscaped areas
Hydrocarbon fuels and oils from the unspecified works 4m north including leakage from Underground Storage Tanks (USTs), the pipework between tanks and pumps, and general spillage, together with uncontrolled disposal and spillage from waste receptacles	Ingestion, skin contact, inhalation of dust and outdoor air by people	People (neighbours, site end users).	Low likelihood	Medium	Low	The site is currently surfaced with asphalt hardstanding and no landscaped areas are included within the proposed development therefore exposure to shallow Made Ground is considered unlikely.
	Migration, build-up of methane and carbon dioxide via permeable soils and/ or construction gaps	People (neighbours, site end users).	Likely	Medium	Moderate	Should leakages of tanks have occurred off-site the shallow dissolved phase fuels/ oils will have likely migrated vertically through interconnected granular layers within the Till deposits or potential Alluvium deposits, from the historical course of the New Burn River.
		Development end use (buildings, utilities)	Likely	Medium	Moderate	
Methane and ground gas migration from landfilled waste of unknown materials located beyond the northern and eastern boundaries	Migration, build-up of methane and carbon dioxide via permeable soils and/ or construction gaps	People (neighbours, site end users). Development end use (buildings, utilities)	Likely	Medium	Moderate	Ground gases may be present, generated from the landfill 23m north-east of the site. It is recommended shallow and deep gas and groundwater monitoring wells are installed across the site to assess the risks posed.

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
PCBs and oils from transformers in the electricity sub-station approximately 10m east of the site	Ingestion, skin contact, inhalation of dust and outdoor air by people	People (neighbours, site end users).	Low likelihood	Medium	Low	The electrical substation approximately 10m east was built in the mid 1970's where PCBs and oils were still in use. However, concrete or asphalt hardstanding will have been utilised as a stable foundation during its construction, preventing downward migration of contaminants. To confirm a low risk to human health and controlled water receptors shallow soil samples should be collected and tested for PCB presence.

Appendix G Climate change considerations for CSM

Table G.1 summarises the considerations that have been made in relation the possible implications of predicted climate change. These considerations have been made with reference to prevailing guidance on climate change and land contamination (SoBRA (2022), CL:AIRE)2022), Environment Agency (2010)), and climate change information published by the Met Office and the Environment Agency / NRW / SEPA.

Table G.1: Possible CSM considerations related to climate change.

Climate change type	Potential climate change induced effect	Possible considerations on CSM
Increase in frequency and severity of extreme rainfall events	Temporary increasing in groundwater levels	It is possible that future groundwater level rise could be sufficient to impact identified contaminant linkages. The risk of groundwater flooding is increased but is unlikely to result in a groundwater flooding given no groundwater is recorded on historical boreholes/ trial pits.
	Increased surface run-off	Site is covered in asphalt hardstanding with associated surface water drainage. Surface water run-off will impact drainage network (in terms of volume of water) but is not expected to impact underlying ground conditions.
	Land-based erosion	Potentially relevant given of the proximity of the site to the river New Burn (35m west). River bank erosion caused by extreme river level events or surface erosion caused by the flooding of the culverted stream is plausible.
	River flooding	The site is already located within a Flood Zone 1, risk of flooding (low probability) however Flood Zone 2 and 3 are present within 50m of the site boundary. An increase in frequency and severity of extreme rainfall events is unlikely to change the risk.
Increase in frequency and severity of extreme cold and hot weather events	Soil freezing	Could cause failure of surface water drainage network (requiring repair) due to freeze/thaw action but not evident that this would cause a significant change to identified potential contaminant linkages.
	Soil desiccation/shrinkage	The cohesive nature of superficial deposit (Glacial Till) suggests a risk from shrinkage related subsidence could become plausible.
	Land fires	Not relevant to current nature and location of site.
	Temporary drop in water (GW and/or SW) levels due to increased water abstraction demand	Underlying shallow aquifer does not have any licenced abstractions registered within 1km of the site. Impact of a drop in water levels in the Pennine Lower Coal measure not expected to adversely affect identified contaminant linkages.
	Temporary drop in water levels (GW and/or SW) due to lower rainfall.	Water levels in the shallow aquifer may fall further in drier summer months. This is not expected to adversely affect identified contaminant linkages.
Long-term sea level rise	Coastal erosion	The Environment Agency's national coast erosion risk map suggests a short-term retreat distance of at least 12m. If there is no active intervention in the future the long-term retreat distance is at least 104m, but is limited to 10m. Coastal erosion is unlikely to have an affect to the site.

	Saline intrusion and marine inundation	RCP8.5 predicts a sea level rise of 0.7m by 2100. An increase in sea level could result in an increase in tidally influenced groundwater fluctuation and changes in groundwater flow patterns. The predicted rise in sea level could increase the potential for saline intrusion within the Pennine Lower Coal Measures.
Long-term increase in rainfall	Increase in groundwater levels	The risk of groundwater flooding is currently low and it is unlikely that the risk will increase given the no groundwater was encountered in the historical trial holes.
Long-term decrease in rainfall	Decrease in groundwater levels	See comment above for temporary decrease in groundwater levels above. Whilst it is expected that there will be an increase in winter rainfall it is also expected that there will be a reduction in summer rainfall such that there will be a long-term increase in the expected seasonal fluctuation in shallow groundwater depth.
Long-term change in seasonal temperatures	Change in soil temperature	Worst-case (RCP8.5) prediction for average summer temperatures in 2060-2080 in this area is 6-7 degrees Celsius. Soil temperature at depth below the site (considering the surface cover of buildings and concrete hardstanding) is not expected to rise by this amount and may see a much smaller rise in average temperature as a result of seasonal variation in temperature. A small increase in average soil temperature is not expected to have a significant effect on contaminant fate and transport.