













Envirocheck® Report:

Mining and Ground Stability Datasheet

Order Details:

Order Number:

228564710_1_1

Customer Reference:

BRD3604

National Grid Reference:

513100, 204290

Slice:

Α

Site Area (Ha):

14.

Search Buffer (m):

1000

Site Details:

Chiswell Green Lane Chiswell Green Hertfordshire

Client Details:

Ms A Stratford BRD Environmental Ltd Hawthorne Villa 1 Old Parr Road Banbury Oxfordshire OX16 5HT







Report Section and Details	Page Number
Summary	-

The Summary section provides an overview of the data contained within the report, detailing the number of data set features or the existence of a data set in relation to the buffer selected.

For ease of reference, the report is broken down into 4 sections of data; Mining and Natural Cavities Data, Historical Land Use Information (1:2,500), Historical Land Use Information (1:10,000) and Ground Stability Data (1:50,000).

Mining and Natural Cavities Data

1

The Mining and Natural Cavities Data section features data sets related to the existence of mining areas and their potential hazards; and details of naturally formed cavities.

Data sets within this section are not plotted, with the exception of BGS Recorded Mineral Sites and Potential Mining Areas which feature on the Historical Land Use Information (1:10,000) map.

Historical Land Use Information (1:2,500)

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The Historical Land Use Information (1:2,500) section contains data captured from analysis carried out by Landmark of 1:1,250 and 1:2,500 scale historical Ordnance Survey mapping, identifying areas where, historically, the land uses were potentially contaminative.

For the purpose of this Envirocheck module, only historical data relating to mining and ground stability has been included and plotted on the corresponding Historical Land Use Information (1:2,500) map. This section also includes the Subterranean Features data set, which details various man-made and man-used underground spaces obtained from the Subterranea Britannica society.

Historical Land Use Information (1:10,000)

3

The Historical Land Use (1:10,000) section covers data captured from the systematic analysis carried out by Landmark of 1:10, 560 and 1:10,000 scale historical Ordnance Survey mapping dating back to the mid-19th century, identifying potentially contaminative past industrial land uses.

For the purpose of this Envirocheck module, only data relating to mining and ground stability has been included and plotted on the accompanying Historical Land Use Information (1:10,000) map.

Ground Stability Data (1:50,000)

4

The Ground Stability (1:50,000) section includes the BGS Geosure data suite, reporting features to 250m and plotted onto 3 separate maps. Also reported is brine subsidence, brine mining and salt mining data sets, of which Brine Pumping and Salt Mining Related Features are plotted, and subsidence insurance claims and insurance investigations data, which is not plotted.

Historical Map List 5

The Historical Map List section details the historical mapping that has been analysed for your site, in relation to the Historical Land Use Information sections.

Data Currency	6
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The brine subsidence data relating to the Driotwich area as provided in this report is derived from JPB studies and physical monitoring undertaken annually over more than 35 years. For more detailed interpretation contact enquiries@jpb.co.uk. JPB retain the copyright and intellectual rights to this data and accept no liability for any loss or damage, including in direct or consequential loss, arising from the use of this data.

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Report Version v53.0





Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
Mining and Natural Cavities Data					
BGS Recorded Mineral Sites	pg 1		1		3
Coal Mining Affected Areas			n/a	n/a	n/a
Man Made Mining Cavities	pg 1				1
Mining Instability	pg 1	Yes	n/a	n/a	n/a
Natural Cavities	pg 1				3
Non Coal Mining Areas of Great Britain	pg 2	Yes		n/a	n/a
Potential Mining Areas					
Historical Land Use Information (1:2,500)					
Extractive Industries or Potential Excavations from 1855-1909 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1893-1915 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1906-1937 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1924-1949 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1950-1980 (100m)				n/a	n/a
Subterranean Features (100m)				n/a	n/a
Historical Land Use Information (1:10,000)					
Air Shafts					
Disturbed Ground					
General Quarrying					
Heap, unknown constituents					
Mineral Railway					
Mining & quarrying general					
Mining of coal & lignite					
Quarrying of sand & clay, operation of sand & gravel pits	pg 3		1		2
Former Marshes					
Potentially Infilled Land (Non-Water)	pg 3		2		2
Potentially Infilled Land (Water)	pg 3			3	1
Ground Stability Data (1:50,000)					
CBSCB Compensation District			n/a	n/a	n/a
Brine Pumping Related Features					
Brine Subsidence Solution Area					
Potential for Collapsible Ground Stability Hazards	pg 4	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 4	Yes		n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 4	Yes	Yes	n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 4	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 4	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 4	Yes		n/a	n/a
Salt Mining Related Features					





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Mining and Natural Cavities Data

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Recorded Mine	eral Sites				
1	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Burston Manor Farm Gravel Pit Chiswell Green, St Albans, Hertfordshire British Geological Survey, National Geoscience Information Service 169695 Opencast Ceased Unknown Operator Not Supplied Quaternary Kesgrave Catchment Subgroup Sand and Gravel Located by supplier to within 10m	A8NE (SE)	158	1	513367 203993
	BGS Recorded Mine	eral Sites				
2	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity:	Bonehill Chalk Pit Chiswell Green, St Albans, Hertfordshire British Geological Survey, National Geoscience Information Service 166090 Opencast Ceased Unknown Operator Not Supplied Cretaceous White Chalk Subgroup Chalk Located by supplier to within 10m	A12NE (NW)	511	1	512424 204625
	BGS Recorded Mine	eral Sites				
3	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Holt Farm Chiswell Green, St Albans, Hertfordshire British Geological Survey, National Geoscience Information Service 2274 Opencast Ceased Balfour Beatty Civil Engineering Ltd Not Supplied Quaternary Ancestral Thames River Terrace Deposits Sand and Gravel Located by supplier to within 10m	A2NE (SW)	608	1	512655 203565
	BGS Recorded Mine	eral Sites				
4	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity:	Daneswick Chalk Pit Chiswell Green, St Albans, Hertfordshire British Geological Survey, National Geoscience Information Service 166089 Opencast Ceased Unknown Operator Not Supplied Cretaceous White Chalk Subgroup Chalk Located by supplier to within 10m	A6NE (W)	833	1	512077 204240
	Coal Mining Affecte	d Areas				
	In an area which may	y not be affected by coal mining				
	Man Made Mining C Cavity Type: Commodity: Solid Geology Detail: Superficial Geology Detail:	Adit Entry Chalk Mining-Exact Details Unknown Chalk : Chalk Group	A12SW (W)	708	2	512200 204300
	Mining Instability Mining Evidence: Source: Boundary Quality:	Conclusive Rock Mining Ove Arup & Partners As Supplied	A13SW (W)	0	3	513000 204292
	Natural Cavities Cavity Type: Solid Geology Detail:	Solution Pipe x 4	A12NW (NW)	522	2	512420 204650
	Natural Cavities Cavity Type: Solid Geology Detail: Superficial Geology Detail:	Sinkhole x 1, Solution Pipe x 1 : Chalk Group Glacial Sand & Gravel	A19SW (NE)	537	2	513500 205000



Mining and Natural Cavities Data

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Natural CavitiesCavity Type:Solution PipeSolid Geology Detail:Chalk GroupSuperficial GeologyGlacial Sand & GravelDetail:Chalk Group	A6NE (W)	829	2	512080 204270
	Non Coal Mining Areas of Great Britain				
	Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	513099 204292



Historical Land Use Information (1:10,000)

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Quarrying of sand	& clay, operation of sand & gravel pits				
5	Use: Date of Mapping:	Not Supplied 1900 - 1960	A8NE (SE)	105	-	513337 204037
	Quarrying of sand	& clay, operation of sand & gravel pits				
6	Use: Date of Mapping:	Not Supplied 1899 - 1925	A12NE (NW)	509	-	512425 204620
	Quarrying of sand	& clay, operation of sand & gravel pits				
7	Use: Date of Mapping:	Not Supplied 1883	A12SW (W)	659	-	512248 204331
	Potentially Infilled	Land (Non-Water)				
8	Use: Date of Mapping:	Unknown Filled Ground (Pit, quarry etc) 1990	A8NE (SE)	105	-	513335 204037
	Potentially Infilled	Land (Non-Water)				
9	Use: Date of Mapping:	Unknown Filled Ground (Pit, quarry etc) 1990	A8NE (SE)	172	-	513408 204009
	Potentially Infilled	Land (Non-Water)				
10	Use: Date of Mapping:	Unknown Filled Ground (Pit, quarry etc) 1990	A12NE (NW)	509	-	512425 204620
	Potentially Infilled	Land (Non-Water)				
11	Use: Date of Mapping:	Unknown Filled Ground (Pit, quarry etc) 1990	A12SW (W)	659	-	512248 204331
	Potentially Infilled	Land (Water)				
12	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1960	A18SE (N)	409	-	513150 204982
	Potentially Infilled	Land (Water)				
13	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1960	A12SE (W)	409	-	512503 204509
	Potentially Infilled	Land (Water)				
14	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1960	A3NE (S)	497	-	513358 203564
	Potentially Infilled	Land (Water)				
15	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1960	A18NE (N)	794	-	513374 205342



Ground Stability Data (1:50,000)

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	CBSCB Compensa	ation District				
	The site does not fa	Ill within the brine compensation area.				
	Brine Subsidence	Solution Area				
	The site does not fa	Ill within the brine subsidence solution area.				
	Potential for Colla	psible Ground Stability Hazards				
16	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	513099 204292
	Potential for Comp	pressible Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	513099 204292
	Potential for Groun	nd Dissolution Stability Hazards				
17	Hazard Potential: Source:	Moderate British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	1	513063 204355
	Potential for Groun	nd Dissolution Stability Hazards				
18	Hazard Potential: Source:	Moderate British Geological Survey, National Geoscience Information Service	A8NE (SE)	0	1	513157 204206
	Potential for Groun	nd Dissolution Stability Hazards				
19	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	513099 204292
	Potential for Groun	nd Dissolution Stability Hazards				
20	Hazard Potential: Source:	Low British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	1	512999 204428
	Potential for Groun	nd Dissolution Stability Hazards				
21	Hazard Potential: Source:	Low British Geological Survey, National Geoscience Information Service	A8NE (SE)	7	1	513213 204051
	Potential for Lands	slide Ground Stability Hazards				
22	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A8NE (SE)	0	1	513157 204206
	Potential for Lands	slide Ground Stability Hazards				
23	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	1	513063 204355
	Potential for Lands	slide Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	513099 204292
	Potential for Runn	ing Sand Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	513099 204292
	Potential for Shrin	king or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13SE (N)	0	1	513099 204292



Historical Map List

The following mapping has been analysed for Historical Land Use Information (1:2,500):

1:2,500	Mapsheet	Published Date
Hertfordshire	039_03	1872
Hertfordshire	034_15	1880
Hertfordshire	034_15	1880
Hertfordshire	034_15	1898
Hertfordshire	034_15	1898
Hertfordshire	039_03	1898
Hertfordshire	034_15	1924
Hertfordshire	034_15	1924
Hertfordshire	039_03	1924
Hertfordshire	034_15	1937
Hertfordshire	034_15	1937
Ordnance Survey Plan	TL1203	1973
Ordnance Survey Plan	TL1204	1973
Ordnance Survey Plan	TL1204	1973

The following mapping has been analysed for Historical Land Use Information (1:10,000):

1:10,560	Mapsheet	Published Date
Hertfordshire	034_00	1883
Hertfordshire	039_00	1883
Hertfordshire	034_SE	1899
Hertfordshire	034_SW	1899
Hertfordshire	039_NW	1899
Hertfordshire	039_NE	1900
Hertfordshire	034_SE	1925
Hertfordshire	034_SW	1925
Hertfordshire	039_NE	1925
Hertfordshire	039_NW	1925
Hertfordshire	034_SW	1938
Hertfordshire	039_NE	1938
Hertfordshire	039_NW	1939
Hertfordshire	034_SE	1951
Ordnance Survey Plan	TL10NW	1960
Ordnance Survey Plan	TL10SW	1960
1:10,000	Mapsheet	Published Date
Ordnance Survey Plan	TL10SW	1990
Ordnance Survey Plan	TL10NW	1992



Data Currency

Mining and Cavities Data	Version	Update Cycle
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	October 2019	Bi-Annually
Coal Mining Affected Areas		
The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Man Made Mining Cavities		
Peter Brett Associates	July 2019	Bi-Annually
Mining Instability		
Ove Arup & Partners	October 2000	Not Applicable
Natural Cavities		
Peter Brett Associates	July 2019	Bi-Annually
Non Coal Mining Areas of Great Britain		
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Historical Land Use Information (1:2,500)	Version	Update Cycle
Subterranean Features		
Landmark Information Group Limited	March 2019	Bi-Annually
Ground Stability Data (1:50,000)	Version	Update Cycle
CBSCB Compensation District		
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Potential for Collapsible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Compressible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Brine Subsidence Solution Area		



Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
British Geological Survey	British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
The Coal Authority	The Coal Authority
Ove Arup	ARUP
Peter Brett Associates	peterbrett
Wardell Armstrong	wardell armstrong your earth our world
Johnson Poole & Bloomer	JPB



Useful Contacts

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Peter Brett Associates Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN	Telephone: 0118 950 0761 Fax: 0118 959 7498 Email: reading@pba.co.uk Website: www.pba.co.uk
3	Ove Arup & Partners Central Square, Forth Street, Newcastle upon Tyne, Tyne and Wear, NE1 3PL	Telephone: 0191 261 6080 Fax: 0191 261 7879
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk











