Appendix C

Desk Study Information: Geological Report

11/2405 Page 38 of 38



EmapSite Masdar House, Eversley, RG27 0RP GroundSure Reference: Your Reference: S EMS-

136132_194246 EMS_136132_194

246

Report Date
Report Delivery
Method:

Aug 22, 2011

Email - pdf

GroundSure GeoInsight

Address: 48 Elsworthy Road, London.

Dear Sir/Madam,

Thank you for placing your order with GroundSure. Please find enclosed the **GroundSure GeoInsight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above GroundSure reference number.

Yours faithfully,

Managing Director Groundsure Limited

Enc.

GroundSure GeoInsight



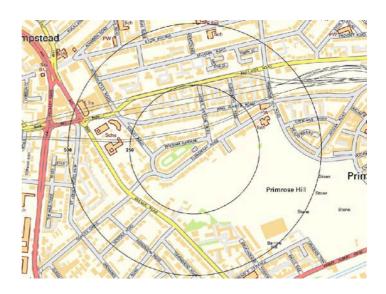
GroundSure GeoInsight

Address: 48 Elsworthy Road, London.

Date: Aug 22, 2011

GroundSure Reference: S EMS-136132_194246

Your Reference: EMS_136132_194246



Brought to you by GroundSure



Aerial Photograph of Study Site



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2003. All Rights Reserved.

Site Name: 48 Elsworthy Road, London.

Grid Reference: 527230,184012

Size of Site: 0.03 ha



Overview of Findings

The GroundSure GeoInsight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Shallow Mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and GroundSure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

1. Geology	Description
1.1 Artificial Ground,	
1.1.1 Is there any Artificial Ground /Made Ground present beneath the study site?* $$	No
1.1.2 Are there any records relating to permeability of artificial ground within the study site* boundary?	No

1.2 Superficial Geology & Landslips

1.2.1	Is there any Superf	icial Ground/Drift Ge	ology present beneat	th the study	
si	te?*				

1.2.2 Are there any records relating to permeability of superficial geology within the study site* boundary?	No
--	----

1.3 Bedrock, Solid Geology & Faults

Report Section

1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.

1.2.3 Are there any records of landslip within 500m of the study site boundary?

- 1.3.2 Are there any records relating to permeability of bedrock within the study site* boundary?
- 1.3.3 Are there any records of faults within 500m of the study site boundary?
- 1.3.4 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?
- 1.3.5 Is the property in an area where Radon Protection Measures are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?

The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level

Yes

No

No

Number of records found within (X) m of the study site

No radon protective measures are necessary

Source:Scale 1:50,000 BGS Sheet No:256

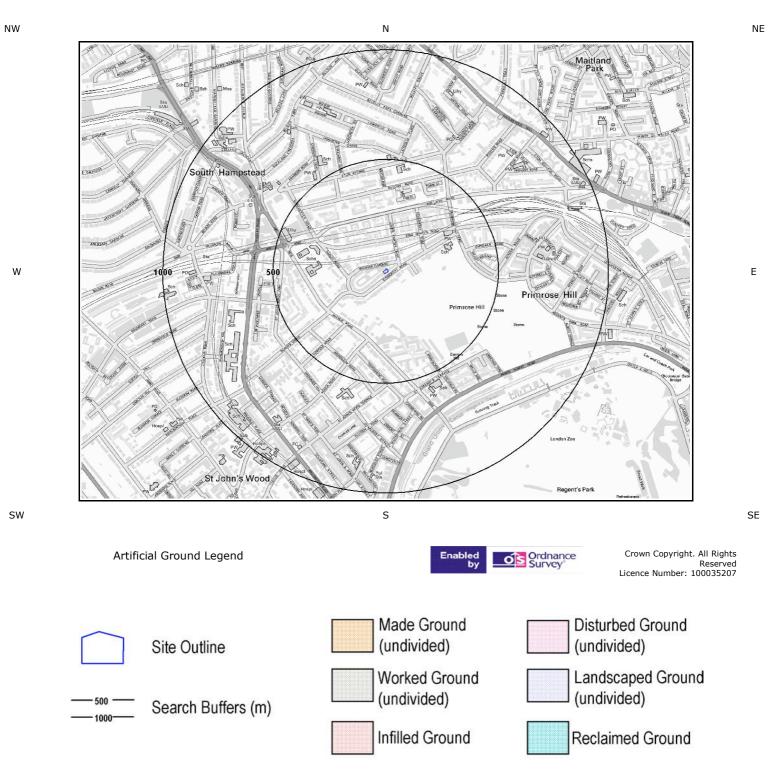
^{*} This includes an automatically generated 50m buffer zone around the site



2. Ground Workings	on-site	0-50	51-250	251-500	501-1000
2.1 Historical Surface Ground Working Features from Small Scale Mapping	0	0	1	-	-
2.2 Historical Underground Workings Features from Small Scale Mapping	0	0	18	5	22
2.3 Current Ground Workings	0	0	0	0	0
3. Mining, Extraction & Natural Cavities	on-site	0-50	51-250	251-500	501-1000
3.1 Historical Mining	0	0	6	5	13
3.2 Coal Mining	0	0	0	0	0
3.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
3.4 Non-Coal Mining*	0	0	0	0	0
3.5 Non–Coal Mining Cavities	0	0	0	0	0
3.6 Natural Cavities	0	0	0	0	0
3.7 Brine Extraction	0	0	0	0	0
3.8 Gypsum Extraction	0	0	0	0	0
3.9 Tin Mining	0	0	0	0	0
3.10 Clay Mining	0	0	0	0	0
*This includes an automatically generated 50m buffer zone around th	ne site				
4. Natural Ground Subsidence	on-site*	0-50	51-250	251-500	501-1000
4.1 Shrink-Swell Clay	Moderate	-	-	-	-
4.2 Landslides	Very Low	-	-	-	-
4.3 Ground Dissolution of Soluble Rocks	Negligible	-	-	-	-
4.4 Compressible Deposits	Negligible	-	-	-	-
4.5 Collapsible Deposits	Very Low	-	-	-	-
4.6 Running Sand	Negligible	-	-	-	-
* This includes an automatically generated 50m buffer zone around t	he site				
5. Borehole Records	on-site	0-50	51-250	251-500	501-1000
5.1 BGS Recorded Boreholes	0	0	6	-	-
6. Estimated Background Soil Chemistry	on-site	0-50	51-250	251-500	501-1000
6.1 Records of Background Soil Chemistry	1	1	0	-	-



1.1 Artificial Ground Map



Geological information represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.



1.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:256

1.1.1 Artificial/Made Ground

Are there any records of Artificial/Made Ground within 500m of the study site boundary?

No

Database searched and no data found.

1.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site* boundary?

No

Database searched and no data found.

 $^{\ ^{*}}$ This includes an automatically generated 50m buffer zone around the site.



NE

Е

SE

1.2 Superficial Deposits and Landslips Map

Primrose Hill St John's Wood Crown Copyright. All Rights Reserved Licence Number: 100035207 Superficial and Landslips Legend Ordnance Survey Site Outline

Geological information represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

Report Reference: S EMS-136132_194246

Search Buffers (m)

NW

W

SW



1.2Superficial Deposits and Landslips

1.2.1 Superficial Deposits/Drift Geology

Are there any records of Superficial Deposits/Drift Geology within 500m of the study site boundary? No Database searched and no data found.

1.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site* boundary? No Database searched and no data found.

1.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary?

No

No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

1.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site* boundary?

Database searched and no data found.

^{*}This includes an automatically generated 50m buffer zone around the site.



NE

Е

SE

1.3 Bedrock and Faults Map

NW W Primrose Hill St John's Wood SW Bedrock & Faults Deposits Legend



Crown Copyright. All Rights Reserved Licence Number: 100035207





Geological information represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.



1.3Bedrock, Solid Geology & Faults

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:256

1.3.1 Bedrock/Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary:

ID	Distance (m)	Direction	LEX Code	Rock Description	Rock Age	
1	0.0	On Site	LC-CLSS	London Clay Formation - Clay, Silt And Sand	Eocene	

1.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site* boundary?

Yes

Distance (m)	Direction	Flow type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Moderate	Very Low

1.3.3 Faults

Are there any records of Faults within 500m of the study site boundary?

No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as Faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

1.3.4 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?

The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level

1.3.5 Radon Protection

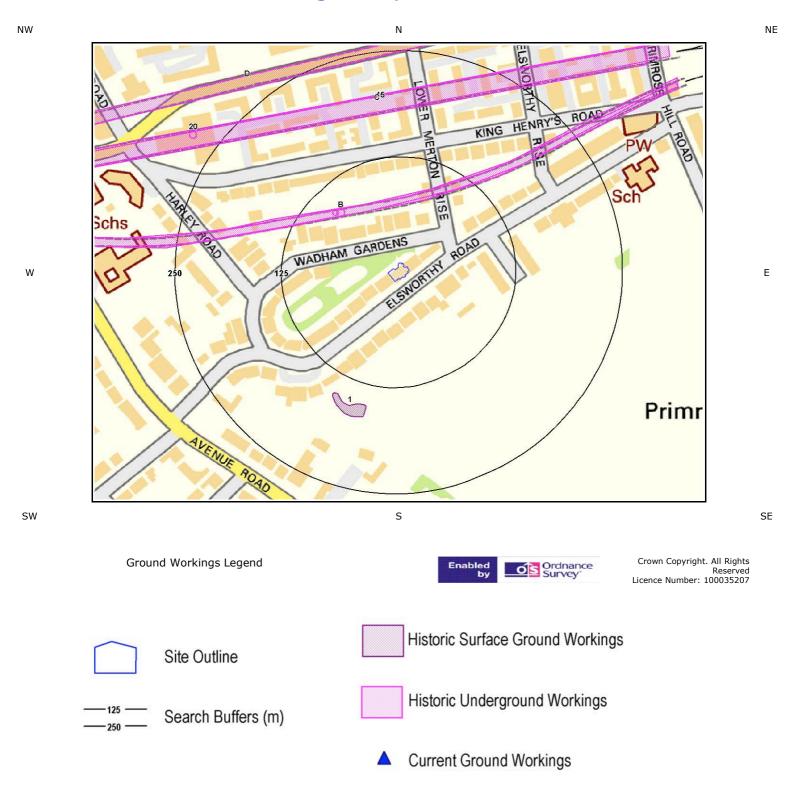
Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?

No radon protective measures are necessary

st This includes an automatically generated 50m buffer zone around the site.



2. Ground Workings Map





2. Ground Workings

2.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on GroundSure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping.

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

The following Historical Surface Ground Working Features are provided by GroundSure:

ID	Distance (m)	Direction	NGR	Use	Date
1	148.0	SW	527163,183856	Ponds	1866
	11010	5 11	3271037103030	ronds	1000

2.2 Historical Underground Workings Features derived from Historical Mapping

This data is derived from the GroundSure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary?

Yes

The following Historical Underground Working Features are provided by GroundSure:

ID	Distance (m)	Direction	NGR	Use	Date
2A	67.0	N	527362,184138	Tunnel	1989
3A	67.0	N	527362,184138	Tunnel	1968
4A	67.0	N	527362,184138	Tunnel	1973
5	68.0	N	527368,184142	Tunnels	1957
6B	85.0	NW	527162,184082	Air Shaft	1894
7B	91.0	NW	527156,184083	Air Shaft	1957
8B	91.0	NW	527156,184083	Air Shaft	1940
9B	91.0	NW	527156,184083	Air Shaft	1989
10B	91.0	NW	527156,184083	Air Shaft	1973
11B	91.0	NW	527156,184083	Air Shaft	1968
12C	177.0	N	527018,184178	Tunnel	1989
13C	177.0	N	527018,184178	Tunnel	1973
14C	177.0	N	527018,184178	Tunnel	1968
15	180.0	N	527028,184182	Tunnels	1957
16D	243.0	N	526978,184220	Tunnel	1957
17D	243.0	N	526978,184220	Tunnel	1989
18D	243.0	N	526978,184220	Tunnel	1973
19D	243.0	N	526978,184220	Tunnel	1968
20	277.0	NW	526989,184174	Air Shaft	1940
Not	436.0	NE	527589,184287	Air Shafts	1989
shown			•		
Not	478.0	NE	527650,184271	Air Shafts	1989
shown					
Not	483.0	W	526740,184111	Air Shaft	1973
shown			•		
Not	483.0	W	526740,184111	Air Shaft	1968
shown			•		
Not	732.0	W	526483,184398	Tunnel	1957
shown			•		
Not	732.0	W	526483,184398	Tunnel	1968
shown			•		



Not shown	732.0	W	526483,184398	Tunnel	1973
Not shown	737.0	W	526471,183522	Tunnel	1957
Not shown	737.0	W	526471,183522	Tunnel	1973
Not shown	737.0	W	526452,183836	Tunnel	1968
Not shown	737.0	W	526471,183522	Tunnel	1989
Not shown	740.0	W	526504,184237	Air Shaft	1957
Not shown	748.0	W	526465,183953	Air Shaft	1920
Not shown	749.0	W	526499,184237	Air Shaft	1920
Not shown	750.0	W	526463,183954	Air Shaft	1940
Not shown	750.0	W	526463,183954	Air Shaft	1957
Not shown	750.0	W	526463,183954	Air Shaft	1968
Not shown	751.0	W	526496,184238	Air Shaft	1940
Not shown	756.0	NE	528256,184173	Tunnel	1989
Not shown	804.0	W	526440,183785	Air Shafts	1940
Not shown	831.0	W	526434,183717	Air Shafts	1940
Not shown	849.0	NW	526471,184430	Air Shaft	1957
Not shown	853.0	SW	526434,183659	Air Shaft	1940
Not shown	854.0	SW	526471,183522	Tunnel	1968
Not shown	858.0	NW	526462,184429	Air Shaft	1940
Not shown	986.0	SW	526830,183092	Air Shaft	1940

2.3 Current Ground Workings

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

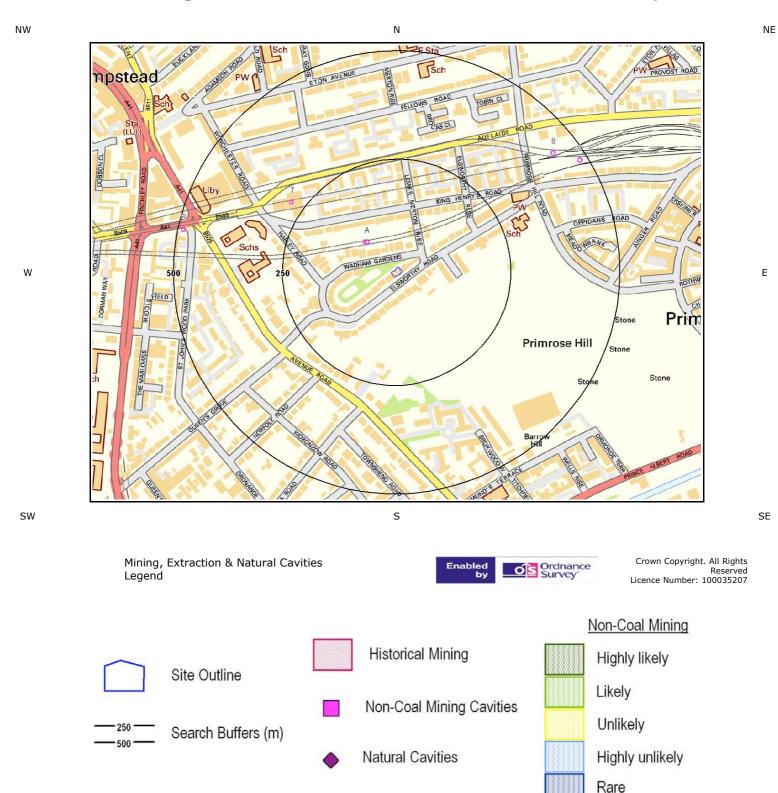
Are there any BGS Current Ground Workings within 1000m of the study site boundary?

No

Database searched and no data found.



3. Mining, Extraction & Natural Cavities Map





3. Mining, Extraction & Natural Cavities

3.1 Historical Mining

This dataset is derived from GroundSure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary?

Yes

The following Historical Mining information is provided by Groundsure:

ID	Distance (m)	Direction	NGR	Details	Date
1A	85.0	NW	527162,184082	Air Shaft	1894
2A	91.0	NW	527156,184083	Air Shaft	1957
3A	91.0	NW	527156,184083	Air Shaft	1973
4A	91.0	NW	527156,184083	Air Shaft	1968
5A	91.0	NW	527156,184083	Air Shaft	1989
6A	91.0	NW	527156,184083	Air Shaft	1940
7	277.0	NW	526989,184174	Air Shaft	1940
8	436.0	NE	527589,184287	Air Shafts	1989
9	478.0	NE	527650,184271	Air Shafts	1989
10B	483.0	W	526740,184111	Air Shaft	1968
11B	483.0	W	526740,184111	Air Shaft	1973
Not	740.0	W	526504,184237	Air Shaft	1957
sho					
wn					
Not	748.0	W	526465,183953	Air Shaft	1920
sho			•		
wn					
Not	749.0	W	526499,184237	Air Shaft	1920
sho			·		
wn					
Not	750.0	W	526463,183954	Air Shaft	1968
sho			·		
wn					
Not	750.0	W	526463,183954	Air Shaft	1957
sho			•		
wn					
Not	750.0	W	526463,183954	Air Shaft	1940
sho			·		
wn					
Not	751.0	W	526496,184238	Air Shaft	1940
sho					
wn					
Not	804.0	W	526440,183785	Air Shafts	1940
sho					
wn					
Not	831.0	W	526434,183717	Air Shafts	1940
sho			•		
wn					
Not	849.0	NW	526471,184430	Air Shaft	1957
sho					
wn					
Not	853.0	SW	526434,183659	Air Shaft	1940
sho					
wn					
Not	858.0	NW	526462,184429	Air Shaft	1940
sho					
wn					
Not	986.0	SW	526830,183092	Air Shaft	1940
sho					
wn					

3.2 Coal Mining



This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.

3.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary?

No

The following information provided by JPB is not represented on Mapping:

Database searched. No results found.

3.4 Non – Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.

3.5 Non - Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled "Review of mining instability in Great Britain, 1990" PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary?

No

Database searched and no data found.

3.6 Natural Cavities

This dataset provides information based on Peter Brett Associates natural cavities database.

Are there any Natural Cavities within 1000m of the study site boundary?

No

Database searched and no data found.

3.7 Brine Extraction



This dataset provides information from the Brine Compensation Board which has been discontinued and is now covered by the Coal Authority.

Are there any Brine Extraction areas within 1000m of the study site boundary?

No

Database searched and no data found.

3.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary?

No

Database searched and no data found.

3.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level. More detailed information on potential Tin Mining may be found in Section 3.4 – Non-Coal Mining Hazards.

Are there any Tin Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.

3.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary?

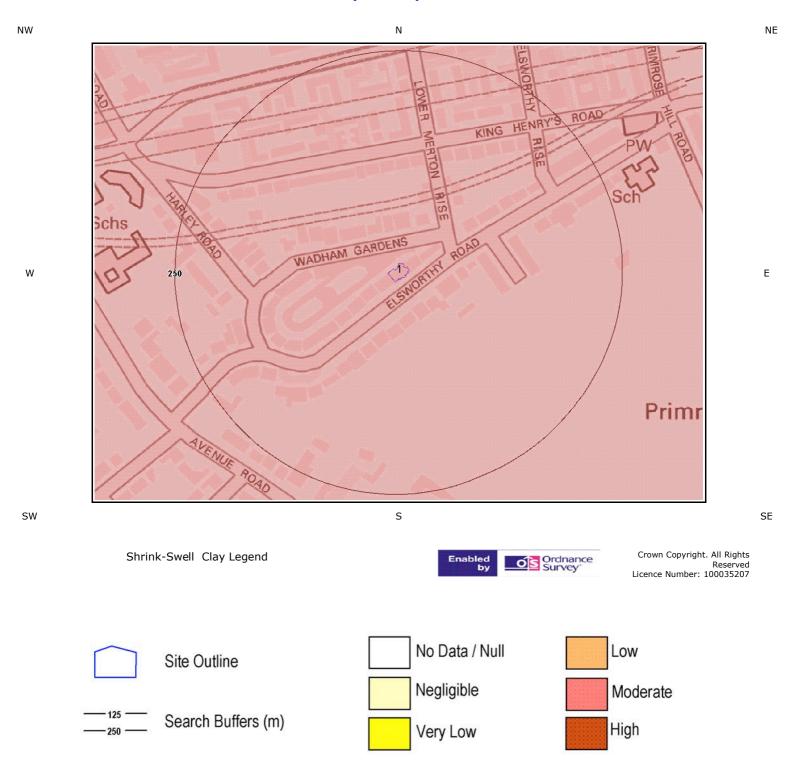
No

Database searched and no data found.



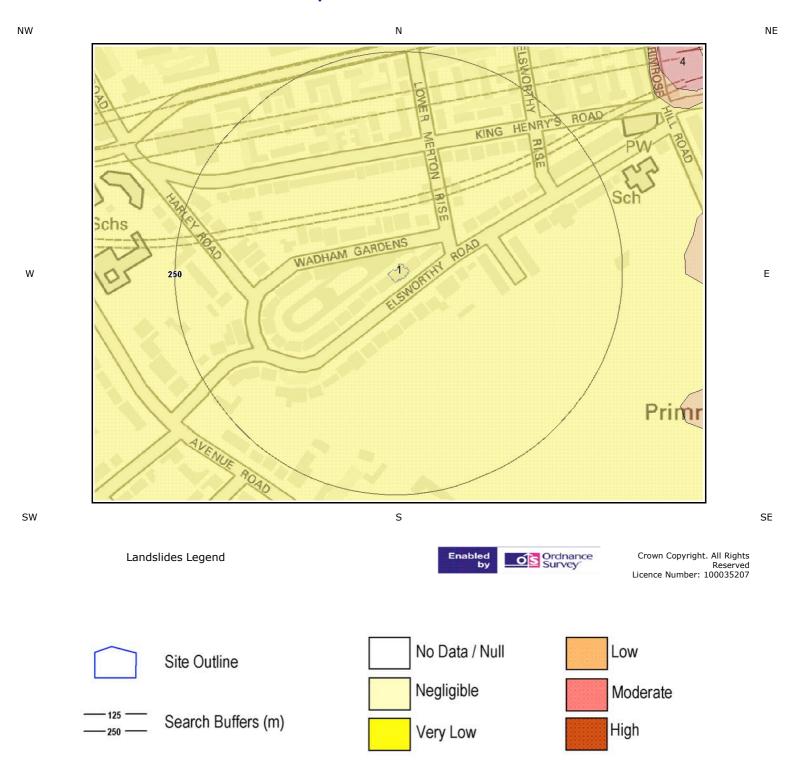
4. Natural Ground Subsidence

4.1 Shrink-Swell Clay Map





4.2 Landslides Map





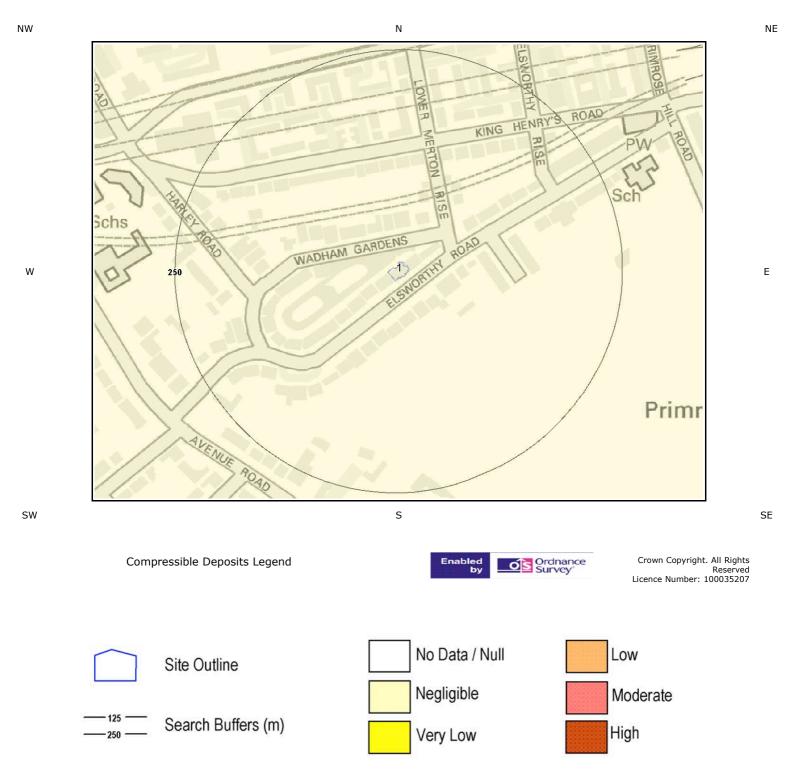
NE

4.3 Ground Dissolution Soluble Rocks Map

NW KING HENRY'S WADHAM GARDENS Е W Primr SW SE Crown Copyright. All Rights Reserved Licence Number: 100035207 Ground Dissolution Soluble Rocks Ordnance Survey Legend No Data / Null Low Site Outline Negligible Moderate Search Buffers (m) High Very Low - 250

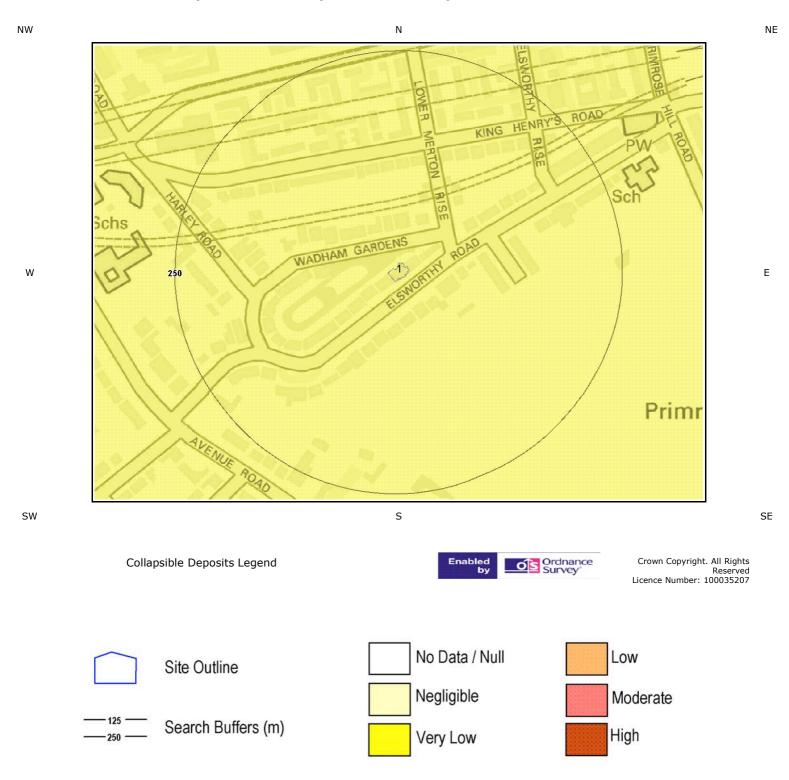


4.4 Compressible Deposits Map



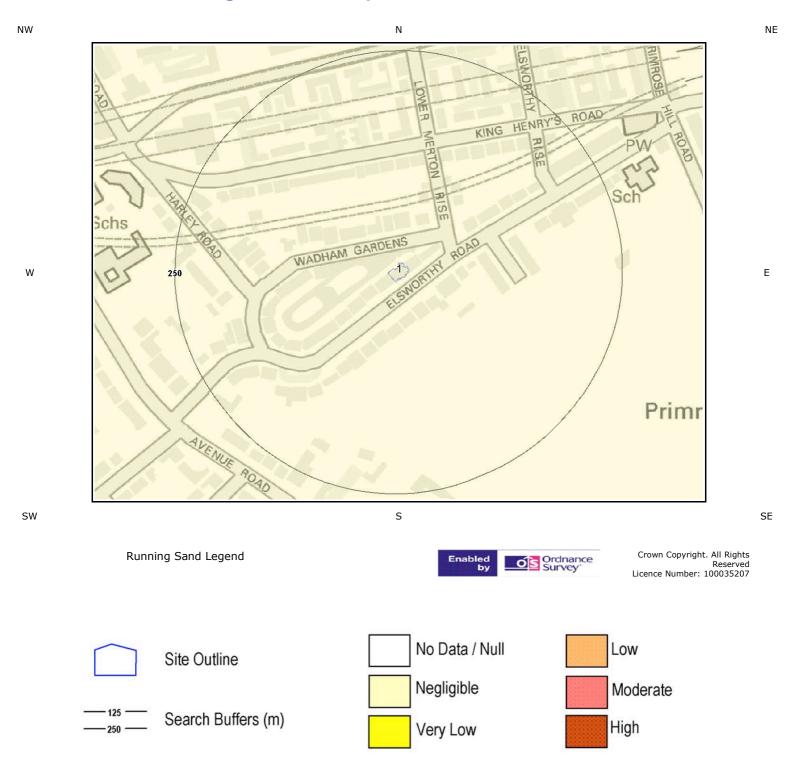


4.5 Collapsible Deposits Map





4.6 Running Sand Map





4. Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site* boundary? Moderate

4.1 Shrink - Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)*	Direction	Hazard Rating	Details
1	0.0	On Site	Moderate	Ground conditions predominantly high plasticity. Do not plant or remove trees or shrubs near to buildings without expert advice about their effect
				and management. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a probable increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a probable increase in insurance risk during droughts or where vegetation with high moisture demands is present.

4.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID Distance (m)	 Direction 	Hazard Rating	Details
1 0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions
		·	required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

4.3 Ground Dissolution of Soluble Rocks

The following Soluble Rocks information provided by the British Geological Survey:

Distance (m)*	Direction	Hazard Rating	Details			
0.0	On site Null-Negligible Soluble rocks are not present in the search area. No special actions					
			to avoid problems due to soluble rocks. No special ground investigation			
			required, and increased construction costs or increased financial risks are			
			unlikely due to potential problems with soluble rocks.			

4.4 Compressible Deposits

The following Compressible Ground information provided by the British Geological Survey:

	ID	Distance (m)*	Direction	Hazard Rating	Details
--	----	---------------	-----------	---------------	---------

*This includes an automatically generated 50m buffer zone around the study site boundary.



1	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required
				to avoid problems due to compressible deposits. No special ground
				investigation required, and increased construction costs or increased financial
				risks are unlikely due to potential problems with compressible deposits.

4.5 Collapsible Deposits

The following Collapsible Rocks information is provided by the British Geological Survey:

ID	Distance (m) *	Direction	Hazard Rating	Details				
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.				

4.6 Running Sands

The following Running Sands information is provided by the British Geological Survey:

ID	Distance (m)*	Direction	Hazard Rating	Details		
1			Negligible	No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.		



NE

Е

5. Borehole Records Map

NW KING HENRY'S ADHAM GARDENS W Primr SW SE Crown Copyright. All Rights Reserved Licence Number: 100035207 Borehole Records Legend Site Outline **Borehole Locations** Search Buffers (m)



5. Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary:

6

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length (m)	Borehole Name
1	174.0	Е	527410,184060	TQ28SE2056	20.0	ELSWORTHY ROAD LONDON NW3 1
2	177.0	Е	527410,184070	TQ28SE2057	14.5	ELSWORTHY ROAD LONDON NW3 2
3	187.0	Е	527420,184070	TQ28SE2058	15.0	ELSWORTHY ROAD LONDON NW3
4	194.0	E	527430,184060	TQ28SE2061	10.0	ELSWORTHY ROAD LONDON NW3 6
5	203.0	E	527430,184090	TQ28SE2060	20.0	ELSWORTHY ROAD LONDON NW3 5
6	206.0	E	527440,184070	TQ28SE2059	20.0	ELSWORTHY ROAD LONDON NW3 4



6.Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary:

2

For further information on how this data is calculated and limitations upon its use, please see the GroundSure GeoInsight User Guide, available on request.

Estimated Geometric Mean Soil Concentrations (mg/kg)

Distance (m)*	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	London	No data	No data	No data	No data	No data
1.0	S	London	No data	No data	No data	No data	No data

^{*}As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.



7. Contacts

GroundSure Helpline

Telephone: 08444 159 000 info @ groundsure.com



British Geological Survey Enquiries

Kingsley Dunham Centre

Keyworth, Nottingham NG12 5GG

Tel: 0115 936 3143. Fax: 0115 936 3276.

Email: enquiries@bgs.ac.uk Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological

enquiries

British Gypsum

British Gypsum Ltd, East Leake, Loughborough, Leicestershire,

LE12 6HX

Tel: www.british-gypsum.com



British

Geological Survey

NATURAL ENVIRONMENT RESEARCH COUNCIL

The Coal Authority

200 Lichfield Lane, Mansfield, Notts NG18 4RG

Tel: 0845 762 6848

DX 716176 Mansfield 5 www.coal.gov.uk



Johnson Poole & Bloomer Limited

Harris and Pearson Building, Brettel Lane, Brierley Hill, West

Midlands DY5 3LH

Tel: +44 (0) 1384 262 000 Email: enquiries.gs@jpb.co.uk Website: www.jpb.co.uk



Ordnance Survey

Romsey Road, Southampton SO16 4GU

Tel: 08456 050505





Getmapping PLC

Virginia Villas, High Street, Hartley Witney, Hampshire RG27 8NW

Tel: 01252 845444



Peter Brett Associates

Caversham Bridge House, Waterman Place, Reading

Berkshire RG1 8DN

Tel: +44 (0)118 950 0761 E-mail: reading@pba.co.uk



Acknowledgements

PointX © Database Right/Copyright, Thomson Directories Limited © Copyright Link Interchange Network Limited © Database Right/Copyright and Ordnance Survey © Crown Copyright and/or Database Right. All Rights Reserved. Licence Number [03421028].

This report has been prepared in accordance with the GroundSure Ltd standard Terms and Conditions of business for work of this nature.



Standard Terms and Conditions

In these conditions
In these conditions unless the context otherwise requires:
"Beneficiary"means the Client or the customer of the Client for whom the Client has procured the Services.
"Commercial"means any building which is not Residential.
"Commission"means an order for Consultancy Services submitted by a Client.
"Consultancy Services" mean consultancy services provided by GroundSure including, without limitation, carrying out interpretation of third party and in-house environmental data, provision of environmental consultancy advice, undertaking environmental audits and assessments, Site investigation, Site monitoring and related items.
"Content" means any data, database or other information contained in a Report or Mapping which is provided to GroundSure by a Data Provider.
"Contract" means the contract between GroundSure and the Client for the performance of the Services which arises upon GroundSure's acceptance of an Order or Commission and which shall incorporate these conditions, the relevant GroundSure User Guide, proposal by GroundSure and the content of any subsequent report, and any agreed amendments in accordance with clause 11. mendments in accordance with clause 11.

- "Client" means the party that submits an Orderor Commission.
 "Client" means the party that submits an Orderor Commission.
 "Data Provider" means any third party providing Content to GroundSure.
 "Data Report" means reports comprising factual data with no professional interpretation in respect of the level of likely risk and/or liability available from GroundSure.
 "GroundSure" means croundSure Limited, a company registered in England and Wales under number 03421028 and whose registered office is at Greater London House, Hampstead Road, London NW1 7E3.

 "Intellectual Property" means any patent, copyright, design rights, service marks, moral rights, data protection rights, know-how, trademark or any other intellectual
- "Mapping" an historical map or a combination of historical maps of various ages, time periods and scales available from GroundSure.
 "Order" means an order form submitted by the Client requiring Services from GroundSure in respect of a specified Site.
 "Order Website" means online platform via which Orders may be placed.
 "Report" means a Risk Screening Report or Data Report for commercial or residential property available from GroundSure relating to the Site prepared in accordance with the
- "Report" means a Kisk Screening Keport or Data Report for commercial or residential property available from GroundSure relating to the Site prepared in accordance with the specifications set out in the relevant User Guide.

 "Residential" means any building used as or suitable for use as an individual dwelling.

 "Risk Screening Report" means one of GroundSure's risk screening reports, comprising factual data with interpretation in respect of the level of likely risk and/or liability, excluding "Consultancy Services".

 "Services" means the provision of any Report, Mapping or Consultancy Services which GroundSure has agreed to carry out for the Client/Beneficiary on these terms and conditions in respect of the Site.

 "Site"means the landsite in respect of which GroundSure provides the Services.

 "User Guida" means the relevant current version of the user guida, available upon request from GroundSure
- - "User Guide" means the relevant current version of the user guide, available upon request from GroundSure.

- 2.2
- Scope of Services
 GroundSure agrees to carry out the Services in accordance with the Contract and to the extent set out therein.
 GroundSure shall exercise all the reasonable skill, care and diligence to be expected of experienced environmental consultants in the performance of the Services.
 The Client acknowledges that it has not relied on any statement or representation made by or on behalf of GroundSure which is not set out and expressly agreed in the

- 2.3 The Client acknowledges that it has not relied on any statement or representation made by or on behalf or Groundsure which is not set out and expressly agreed in the Contract.

 2.4 Terms and conditions appearing on a Client's order form, printed stationery or other communication, including invoices, to GroundSure, its employees, servants, agents or other representatives or any terms implied by custom, practice or course of dealing shall be of no effect and these terms and conditions shall prevail over all others.

 2.5 In the event that a Client/Beneficiary opts to take out insurance in conjunction with or as a result of the Services, such insurance shall be subject solely to the terms of any policy issued to it in that respect and GroundSure will have no liability therefore.

 2.6 GroundSure's quotations/proposals are valid for a period of 30 days only. GroundSure reserves the right to withdraw any quotation at any time before GroundSure accepts an Order or Commission. GroundSure's acceptance of an Order or Commission shall be effective only where such acceptance is in writing and signed by GroundSure's authorised representative or where accepted via GroundSure's Order Website.

- The Client's obligations
 The Client shall ensure the Beneficiary complies with and is bound by the terms and conditions set out in the Contract and shall provide that Groundsure may in its own right enforce such terms and conditions against the Beneficiary pursuant to the Contracts (Rights of Third parties) Act 1999. The Client shall be liable for all breaches of the Contract by the Beneficiary as if they were breaches by the Client. The Client shall be solely responsible for ensuring that the Report/Mapping ordered is appropriate and suitable for the Beneficiary's needs.

 3.2 The Client shall (or shall procure that the Beneficiary shall) supply to GroundSure as soon as practicable and without charge all information necessary and accurate relevant
- data including any specific and/or unusual environmental information relating to the Site known to the Client/Beneficiary which may pertain to the Services and shall give such assistance as GroundSure shall reasonably require in the performance of the Services (including, without limitation, access to a Site, facilities and equipment as agreed in the
- where Client/Beneficiary approval or decision is required, such approval or decision shall be given or procured in reasonable time as not to delay or disrupt the performance of
- any other part of the Services.

 3.4 The Client shall not and shall not knowingly permit the Beneficiary to, save as expressly permitted by these terms and conditions, re-sell, alter, add to, amend or use out of context the content of any Report, Mapping or, in respect of any Services, information given by GroundSure. For the avoidance of doubt, the Client and Beneficiary may make the Report, Mapping or GroundSure's findings available to a third party who is considering acquiring the whole or part of the Site, or providing funding in relation to the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.

 3.5 The Client is responsible for maintaining the confidentiality of its user name and password if using GroundSure's internet ordering service and accepts responsibility for all activity that occurs under such account and password.

 4 Reliance

- A: Reliance

 1.1 Upon full payment of all relevant fees and subject to the provisions of these terms and conditions, the Client and Beneficiary are granted an irrevocable royalty-free licence to access the information contained in a Report, Mapping or in a report prepared by GroundSure in respect of or arising out of Consultancy Services. The Services may only be used for the benefit of the Client and those persons listed in clauses 4.2 and 4.3.

 1.2 In relation to Data Reports, Mapping and Risk Screening Reports, the Client shall be entitled to make Reports available to (i) the Beneficiary, (ii) the Beneficiary's professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate), (iv) the first purchaser or first tenant of the Site (v) the professional advisers and lenders of the first purchaser or tenant of the Site. Accordingly GroundSure shall have the same duties and obligations to those persons in respect of the Services as it has to the Client and those persons shall have the benefit of any of the Client's rights under the Contract as if those persons were parties to the Contract. For the avoidance of doubt, the limitations of GroundSure's liability as set out in clauses 7 and 11.6 shall apply.

 1.3 In relation to Consultancy Services, reliance shall be limited to the Client, Beneficiary and named parties on the Report.

 1.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise agreed in writing with GroundSure, any other party considering the information supplied by GroundSure as part of the Services, including (but not limited to) insurance underwriters, does so at their own risk and GroundSure has no legal obligations to such party unless otherwise agreed in writing.

- the Services, including (but not limited to) insurance underwriters, does so at their own risk and GroundSure has no legal obligations to such party unless otherwise agreed in writing.

 4.5 The Client shall not and shall not knowingly permit any person (including the Beneficiary) who is provided with a copy of any Report, (except as permitted herein or by separate agreement with GroundSure) to,: (a) remove, suppress or modify any trade mark, copyright or other proprietary marking from the Report or Mapping; (b) create any product which is derived directly or indirectly from the data contained in the Report or Mapping; (c) combine the Report or Mapping with, or incorporate the Report or Mapping in on other information data or service; or (d) re-format or otherwise change (whether by modification, addition or enhancement) data or images contained in the Report or Mapping.

 4.6 Notwithstanding clause 4.5, if the Client acts in a professional capacity, it may make reasonable use of a Report and/or findings made as a result of Consultancy Services to advise Beneficiaries. However, GroundSure shall have no liability in respect of any opinion or report given to such Beneficiaries by the Client or a third party.

 5 Fees and Disbursements

- Fees and Disbursements
 5.1 GroundSure shall charge the Client fees at the rate and frequency specified in the Contract together, in the case of Consultancy Services, with all proper disbursements incurred by GroundSure in performing the Services. For the avoidance of doubt, the fees payable for the Services are as set out in GroundSure's written proposal, Order Website or Order acknowledgement form. The Client shall in addition pay all value added tax or other tax payable on such fees and disbursements in relation to the provision of the Services.
 5.2 Unless GroundSure requires prepayment, the Client shall promptly pay all fees disbursements and other monies due to GroundSure in lill without deduction, counterclaim or set off together with such value added tax or other tax as may be required within 30 days from the date of GroundSure's invoice or such other period as may be agreed in writing between GroundSure and the Client ("Payment Date"). GroundSure reserves the right to charge interest which shall accrue on a daily basis from 30 days after the date of Payment Date until the date of payment (whether before or after judgment) at the rate of five per cent per annum above the Bank of England base rate from time to time.
 5.3 In the event that the Client disputes the amount payable in respect of GroundSure's invoice it shall notify GroundSure no later than 28 days after the date thereof that it is in dispute. In default of such notification the Client shall be deemed to have agreed the amount thereof. As soon as reasonably practicable following receipt of a notification in respect of any disputed invoice, a member of the management team at GroundSure shall contact the Client and the parties shall use all reasonable endeavours to resolve the dispute.

 6 Intellectual Property
 6.1 Subject to the provisions of clause 4.1, the Client and the Beneficiary hereby acknowledge that all Intellectual Property in the Services and Content are and shall remain owned

- Intellectual Property
 6.1 Subject to the provisions of clause 4.1, the Client and the Beneficiary hereby acknowledge that all Intellectual Property in the Services and Content are and shall remain owned by either GroundSure or the Data Providers and nothing in these terms purports to transfer or assign any rights to the Client or the Beneficiary in respect of the Intellectual Property.
 6.2 The Client shall acknowledge the ownership of the Content where such Content is incorporated or used in the Client's own documents, reports, systems or services whether or

- 6.2 The Client shall acknowledge the ownership of the Content where such Content is incorporated or used in the Client's own documents, reports, systems or services whether or not these are supplied to a third party.
 6.3 Data Providers may enforce any breach of clauses 6.1 and 6.2 against the Client or Beneficiary.
 6.4 The Client acknowledges that the proprietary rights subsisting in copyright, database rights and any other intellectual property rights in respect of any data and information contained in any Report are and shall remain (subject to clause 11.1) the property of GroundSure and/or any third party that has supplied data or information used to create a Report, and that these conditions do not purport to grant, assign or transfer any such rights in respect thereof to a Client and/or a Beneficiary.
 6.5 The Client and each of the parties set out in clause 4.2 are permitted to make up to 8 (commercial) or 2 (residential) printed copies of the Report only. Further copies of the Report may not be made in whole or in part without the prior written permission of GroundSure who shall be entitled to make a charge for each additional copy.
 6.6 The Client shall (and shall procure that any recipients of the Report as permitted under clause 4.2 shall):

 (1) Post remove supposes or modify any trachemark convigint or other proprietary marking belonging to GroundSure or any third party from the Services:
- (i) not remove, suppress or modify any trademark, copyright or other proprietary marking belonging to GroundSure or any third party from the Services;
 (ii) use the information obtained as part of the Services in respect of the subject Site only, and shall not store or reuse any information obtained as part of the Services provided in respect of adjacent or nearby sites;



- (iii) not create any product or report which is derived directly or indirectly from the data contained in the Services (save that those acting in a professional capacity to
- the Beneficiary may provide advice based upon the Services);
 (iv) not combine the Services with or incorporate such Services into any other information data or service; and
 (v) not reformat or otherwise change (whether by modification, addition or enhancement), data contained in the Services (save that those acting in a professional capacity to the Beneficiary shall not be in breach of this clause 6.6(v) where such reformatting is in the normal course of providing advice based upon the Services),
- in each case of parts (iii) to (v) inclusive, whether or not such product or report is produced for commercial profit or not.

 6.7 The Client and/or Beneficiary shall and shall procure that any party to whom the Services are made available shall notify GroundSure of any request or requirement to disclose, publish or disseminate any information contained in the Services in accordance with the Freedom of Information Act 2000, the Environmental Information Regulations 2004 or any associated legislation or regulations in force from time to time.

Liability

- 7. Liability
 7.1 Nothing in these terms and conditions shall limit GroundSure's liability for causing death or personal injury through negligence or willful default.
 7.2 Save as otherwise set out in these conditions, any information provided by one party ("Disclosing Party") to the other party ("Receiving Party") shall be treated as confidential except so far as authorised by the Disclosing Party to provide such information in whole or in part to a third party.
 7.3 Nothing in these conditions shall affect the statutory rights of a consumer under the applicable consumer protection legislation from time to time.
 7.4 In relation to Data Reports, Mapping and Risk Screening Reports, GroundSure's liability under the Contract shall cease upon the expiry of six years from the date when the Beneficiary became aware that it may have a claim against GroundSure in respect of the Services provided always that there shall be no liability at the expiration of twelve years from the completion of the Contract. For the avoidance of doubt, any claims in respect of which proceedings are notified to GroundSure in writing prior to the expiry of the time periods referred to in this clause shall survive the expiry of those time periods provided any such claim is actually commenced within six months of notification.
 7.5 In relation to Consultancy Services GroundSure's liability under the Contract shall cease upon the expiry of six years from the date the Services were completed.
 7.6 GroundSure shall not be liable to the Client or any person to whom the Client provides a copy of a Data Report, Mapping or Risk Screening Report in any circumstances whatsoever unless arising out of a breach on its part of the obligations set out in the Contract.
 7.7 GroundSure shall not be liable in the Data Reports, Mapping or Risk Screening Report are used otherwise than as provided or referred to in these conditions and the relevant User Guide.

- Subject to the provisions of clause 7.3, GroundSure makes no representation, warranties, express or implied, as to the accuracy, reliability, completeness, validity or fitness for purpose of any Content and shall not be liable for any omission, error or inaccuracy in relation thereto unless GroundSure should reasonably have been alerted to any omission, error or inaccuracy in the Content.
 7.9 Subject to the provisions of clause 7.1 and irrespective of whether multiple parties make use of the same Services the total liability of GroundSure under or in connection with
- the Contract, whether in contract in tort for breach of statutory duty or otherwise shall not exceed £10 million per claim or series of connected claims,
 7.10 Whilst GroundSure will use all reasonable endeavours to maintain operability of its internet ordering service it will not be liable for any loss or damages caused by a delay or
 loss of use of such service. The Client shall use GroundSure's internet ordering service at its own risk. GroundSure shall not be responsible for any damage to a Client or permitted
 assignee's computer, software, modem, telephone or other property resulting from the use of GroundSure's internet ordering service.
- assignees complete, software, induced, including, telephinic of drift projectly resulting from the use of Groundsure's infection services.

 7.11 The Client accepts, and shall use all reasonable endeavours to procure that anyone who is provided with a copy of the Report accepts, that it has no claim or recourse to any Data Provider or to GroundSure in respect of the acts or omissions of such Data Providers including Content supplied by them.

 7.12 GroundSure shall provide the Services using reasonable skill and care, however, GroundSure shall not be liable for any inaccurate statement or risk rating in a Report which resulted from a reasonable interpretation of the Content.

 7.13 Subject to clause 7.1, GroundSure shall not be liable to the Client, the Beneficiary or any third party in contract, tort (including, without limitation, negligence) or for
- misrepresentation or breach of statutory duty or otherwise in respect of any loss of profits, goodwill, revenue or opportunity, or any indirect or consequential loss (even if such loss was reasonably foreseeable).

 7.14 GroundSure undertakes for the duration of the liability periods referred to in clauses 7.4 and 7.5 to maintain professional indemnity insurance in respect of its liabilities under
- this Contract. GroundSure shall produce evidence of such insurance if requested by the Client. A greater level of cover may be available upon request and agreement with the Client

- GroundSure right to suspend or terminate

 In the event that GroundSure reasonably believes that the Client or Beneficiary as applicable has not provided the information or assistance required to enable the proper performance of the Services, GroundSure shall be entitled on fourteen days written notice to suspend all further performance of the Services until such time as any such deficiency
- GroundSure may additionally terminate the Contract immediately on written notice in the event that:
 - the Client shall fail to pay any sum due to GroundSure within 28 days of the Payment Date: or
- (ii) the Client (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an Administration Order made against it or if a Receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Client is struck off the Register of Companies or dissolved; or
- (iii) the Client being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Client shall enter into a composition or arrangement with the Client's creditors or shall suffer distress or execution to be levied on his goods; or

 (iv) the Client or the Beneficiary breaches any material term of the Contract (including, but not limited to, the obligations in clause 4) incapable of remedy or if remediable, is not remedied within 14 days of notice of the breach.

- 9. Client's Right to Terminate and Suspend
 9.1 Subject to clause 10.2, the Client may at any time after commencement of the Services by notice in writing to GroundSure require GroundSure to terminate or suspend immediately performance of all or any of the Services.
- 9.2 The Client waives all and any right of cancellation it may have under the Consumer Protection (Distance Selling) Regulations 2000 (as amended) in respect of the Order of a Report/Mapping. This does not affect the Beneficiary's statutory rights.

 10 Consequences of Withdrawal, Termination or Suspension

- 10.1 Upon termination or any suspension of the Services, GroundSure shall take steps to bring to an end the Services in an orderly manner, vacate any Site with all reasonable speed and shall deliver to the Client/Beneficiary any property of the Client/ Beneficiary in GroundSure's possession or control.

 10.2 In the event of termination/suspension of the Contract under clauses 8 or 9, the Client shall pay to GroundSure all and any fees payable in respect of the performance of the Services up to the date of termination/suspension. In respect of any Consultancy Services provided, the Client shall also pay GroundSure any additional costs incurred in relation to the termination/suspension of the Contract

- 11 General
 11.1 The mapping contained in the Services is protected by Crown copyright and must not be used for any purpose outside the context of the Services or as specifically provided in these terms
- GroundSure reserves the right to amend these terms and conditions. No variation to these terms shall be valid unless signed by an authorised representative of GroundSure
- 11.2 GroundSure reserves the right to amend these terms and conditions. No variation to these terms shall be valid unless signed by an authorised representative of GroundSure.
 11.3 No failure on the part of GroundSure to exercise and no delay in exercising, any right, power or provision under these terms and conditions shall operate as a waiver thereof.
 11.4 Save as expressly provided in clauses 4.2, 4.3, 6.3 and 11.5, no person other than the persons set out therein shall have any right under the Contract (Rights of Third Parties)
 Act 1999 to enforce any terms of the Contract.
 11.5 The Secretary of State for Communities and Local Government acting through Ordnance Survey may enforce breach of clause 6.1 of these terms and conditions against the Client in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.
 11.6 GroundSure shall not be liable to the Client if the provision of the Services is delayed or prevented by one or more of the following circumstances:

 (i) the Client or Beneficiary's failure to provide facilities, access or information;

 (ii) fire storm flood tempes or enidemic:

 (iii) fire storm flood tempes or enidemic:

 (iv) fire storm flood tempes or enidemi
- - (iii) (iv)
 - fire, storm, flood, tempest or epidemic; Acts of God or the public enemy; riot, civil commotion or war; strikes, labour disputes or industrial action;

 - acts or regulations of any governmental or other agency; suspension or delay of services at public registries by Data Providers; or changes in law.
- (viii) changes in law.

 11.7 Any notice provided shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.

 11.8 Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email and on the second working day after the day of posting if sent by first class post.
- 11.1 These terms and conditions shall be governed by and construed in accordance with English law and any proceedings arising out of or connected with these terms and
- conditions shall be subject to the exclusive jurisdiction of the English courts.
- 11.12 If the Client or Beneficiary has a complaint about the Services, notice can be given in any format eg writing, phone, email to the Compliance Officer at GroundSure who will respond in a timely manner.

 ©GroundSure Limited January 2011